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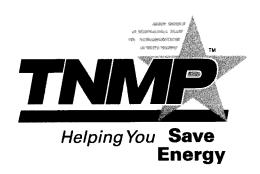
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# Texas-New Mexico Power Company 2014 Energy Efficiency Plan and Report Substantive Rule § 25.181 and § 25.183

**Amended** 

May 30, 2014

Project No. 42264



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### Introduction

Texas-New Mexico Power Company ("TNMP") presents this Energy Efficiency Plan and Report ("EEPR") to comply with P.U.C. SUBST. R. 25.181 and 25.183, which are the sections of the Energy Efficiency Rule ("EE Rule") implementing Public Utility Regulatory Act ("PURA") § 39.905. As mandated by this section of PURA, the EE Rule requires that each investor-owned electric utility achieve the following minimum goals through market-based standard offer programs ("SOPs"), targeted market transformation programs ("MTPs") or utility self-delivered programs:

"An electric utility shall administer a portfolio of energy efficiency programs to acquire, at a minimum, the following:

- (B) Beginning with the 2013 program year, until the trigger described in subparagraph (C) of this paragraph is reached, the utility shall acquire a 30% reduction of its annual growth in demand of residential and commercial customers.
- (C) If the demand reduction goal to be acquired by a utility under subparagraph (B) of this paragraph is equivalent to at least four-tenths of 1 % its summer weather-adjusted peak demand for the combined residential and commercial customers for the previous program year, the utility shall meet the energy efficiency goal described in subparagraph (D) of this paragraph for each subsequent program year.
- (D) Once the trigger described in subparagraph (C) of this paragraph is reached, the utility shall acquire four-tenths of 1% of its summer weather-adjusted peak demand for the combined residential and commercial customers for the previous program year.
- (E) Except as adjusted in accordance with subsection (w) of this section, a utility's demand reduction goal in any year shall not be lower than its goal for the prior year, unless the commission establishes a goal for a utility pursuant to paragraph (2) of this subsection."

P.U.C. SUBST. R. 25.181, the EE Rule, includes specific requirements related to the implementation of SOPs, MTPs, and utility self-delivered programs that control the manner in which investor-owned electric utilities must administer their portfolio of energy efficiency programs in order to achieve their mandated energy efficiency savings goals. TNMP's EEPR is intended to describe how TNMP intends to meet its statutory savings goals through implementation of energy efficiency programs in a manner that complies with PURA 39.905 and

the EE Rule. The following section provides a description of the information contained in each of the subsequent sections and appendix.

### **Energy Efficiency Plan and Report (EEPR) Organization**

This EEPR consists of an executive summary, fourteen sections, and an appendix.

### **Executive Summary**

• The Executive Summary highlights TNMP's reported achievements for 2013 and TNMP's plans for achieving its 2014 and 2015 projected energy efficiency savings goals.

### **Energy Efficiency Plan**

- Section I describes TNMP's program portfolio. It details how each program will be implemented, discusses related informational and outreach activities, and provides an introduction to any programs not included in TNMP's previous EEP.
- Section II explains TNMP's targeted customer classes, specifying the size of each class and the method for determining those sizes.
- Section III presents TNMP's projected energy efficiency savings for the prescribed planning period broken out by program for each customer class.
- Section IV describes TNMP's proposed energy efficiency budgets for the prescribed planning period broken out by program for each customer class.

### **Energy Efficiency Report**

- Section V documents TNMP's actual weather-adjusted demand savings goals and energy targets for the previous five years (2009-2013).
- Section VI compares TNMP's projected energy and demand savings to its reported and verified savings by program for calendar years 2012 & 2013.
- Section VII documents TNMP's incentive and administration expenditures for the previous five years (2009-2013) broken out by program for each customer class.
- Section VIII compares TNMP's actual program funding for 2013 compared to its 2013 budget broken out by program for each customer class.
- Section IX describes the Evaluation, Measurement & Verification process.
- Section X describes the results from TNMP's Market Transformation ("MTP") programs.
- Section XI details TNMP's current EECRF, collection, and future filing.
- Section XII reflects TNMP revenue collection through the 2013 EECRF.
- Section XIII breaks out the over/under-recovery of energy efficiency program costs.
- Section XIV details TNMP's performance incentive calculation.

### **Acronyms**

### Glossary

### **Appendix**

• Reported kW and kWh Savings broken out by county for each program.

### **Executive Summary**

The Energy Efficiency Plan ("The Plan") details TNMP's plans to achieve the required demand savings reduction, as determined by the Final Order in Docket No. 41496, by December 31, 2014. Additionally, TNMP intends to project a portfolio necessary to achieve a reduction of four-tenths of 1% of TNMP's summer weather-adjusted peak demand for the combined residential and commercial customers for the previous program year by December 31, 2015, to comply with PURA § 39.905 and P.U.C. SUBST. R. 25.181.

Once the trigger for calculating the energy efficiency goal in peak demand is reached, the utility shall acquire four-tenths of one percent of its summer weather-adjusted peak demand for the combined residential and commercial customers for the previous program year. The annual demand goal for energy efficiency savings pursuant to paragraph P.U.C. SUBST. R. 25.181 (e)(1)(D) is calculated by applying the percentage goal to the utility's summer weather-adjusted five-year average peak demand for the combined residential and commercial customers. As shown in **Table 4**, TNMP's summer weather-adjusted peak demand for residential and commercial customers in the previous calendar year, less the industrial distribution opt-out, is 1,273 MW. A four-tenths of one percent goal would be 5.09 MW, which is less than the amount of energy efficiency to be acquired for the most recent preceding year. Therefore, for 2015 TNMP has planned to achieve a goal of 5.77<sup>1</sup> MW.

The Plan also addresses the corresponding energy savings goal of 10,109 MWh, which is calculated from the demand savings goal using a 20% conservation load factor.

The goals, budgets, and implementation plans included in The Plan are designed to: 1) comply with requirements of the EE Rule; 2) incorporate results and recommendations included in the Annual Statewide Portfolio Evaluation, Measurement, and Verification Report by the EM&V contractor; 3) consider lessons learned regarding energy efficiency service providers; 4) evaluate other ERCOT distribution utilities results; 5) reflect the effects of economic factors; and 6) enable customer participation in the various energy efficiency programs.

The Energy Efficiency Report ("The Report") demonstrates TNMP's successful 2013 implementation of its energy efficiency portfolio of SOPs and MTPs, as required by PURA § 39.905. These programs met and exceeded TNMP's efficiency savings goals by procuring 10.294 MW in demand savings and 16,981 MWh in energy savings. The 2013 TNMP portfolio included

<sup>&</sup>lt;sup>1</sup> Should the Commission disagree with TNMP's calculation of the 2015 goal, TNMP will need to file for good cause exception in the 2015 EECRF.

the Hard-to-Reach Standard Offer Program, Residential Standard Offer Program, and the ENERGY STAR® New Homes Market Transformation Program, as well as the SCORE/CitySmart, Commercial Solutions, and Open for Small Business Market Transformation Programs and the Load Management Standard Offer Program.

A summary of annual goals and budgets is presented in **Table 1**.

Table 1: Summary of Goals, Projected Savings, and Projected Budgets<sup>2</sup>

| Calendar<br>Year | 0.4% Peak<br>Demand Goal | Peak<br>Demand<br>(MW) Goal | Energy<br>(MWh) Goal | Projected<br>Demand<br>Savings<br>(MW) | Projected<br>Energy<br>Savings<br>(MWh) | Projected<br>Budget<br>(000's) |
|------------------|--------------------------|-----------------------------|----------------------|--|---|--------------------------------|
| 2014             | 5.00                     | 5.8                         | 10,162               | 9.5                                    | 16,467                                  | \$4,748                        |
| 2015             | 5.06                     | 5.77                        | 10,109               | 8.4                                    | 14,700                                  | \$4,236                        |

In order to obtain the goal, TNMP proposes to implement the following standard offer and market transformation programs:

- High-Performance Homes MTP
- Hard-to-Reach SOP
- Low-Income Weatherization
- Residential SOP
- Commercial Solutions MTP
- Load Management SOP
- SCORE/CitySmart MTP
- Open for Small Business MTP

<sup>&</sup>lt;sup>2</sup> 0.4% Peak Demand Goal numbers are calculated from Table 4; Peak Demand Goal was established in Docket No. 41496; Projected Savings are from Table 5; and Projected Budget from Table 6. All MW and MWh figures in this Table are given "at Meter."

### **Energy Efficiency Plan**

### I. 2014 Programs

### A. 2014 Program Portfolio

TNMP plans to implement eight SOPs and MTPs. There are currently no pilot programs planned for 2014. These programs have been structured to comply with the rules governing program design and evaluation in P.U.C. SUBST. R. 25.181(j), (k) and (m).

Each of these programs target both broad market segments and specific market sub-segments that offer significant opportunities for cost-effective savings. TNMP anticipates that such targeted outreach to a broad range of service provider types will be necessary in order to meet the savings goals required by PURA § 39.905 on a continuing basis. **Table 2 (a)** summarizes the programs and target markets.

Table 2 (a): 2014 Energy Efficiency Program Portfolio

| 2014 Programs               | Target Market                   | Application                   |
|-----------------------------|---------------------------------|-------------------------------|
| Open for Small Business MTP | Commercial<br><100kW            | Retrofit                      |
| SCORE/CitySmart MTP         | Schools,<br>Government          | Retrofit; New<br>Construction |
| Commercial Solutions MTP    | Commercial >100kW               | Retrofit; New<br>Construction |
| Load Management SOP         | Commercial                      | Load<br>Management            |
| High-Performance Homes MTP  | Residential                     | New<br>Construction           |
| Residential SOP             | Residential                     | Retrofit                      |
| Hard-to-Reach SOP           | Residential Income-qualified    | Retrofit                      |
| Low-Income Weatherization   | Residential<br>Income-qualified | Retrofit                      |

TNMP maintains a website containing the requirements for project participation, forms required for project submission, and the links to databases containing the current available funding at <a href="mailto:TNMPefficiency.com">TNMPefficiency.com</a>. This website will be the primary method of communication used to provide potential Project Sponsors with program updates and information. Table 2 (b), lists the links for all Program Manuals.

Table 2 (b): 2014 Energy Efficiency Program Manuals

| 2014 Programs                       | Program Manuals                                    |  |  |  |  |  |
|-------------------------------------|--|--|--|--|--|--|
| Open for Small Business MTP         | http://www.tnmpefficiency.com/downloads/           |  |  |  |  |  |
| Open for Small Business Wiff        | TNMP_OPEN_Program_Manual_2014.pdf                  |  |  |  |  |  |
|                                     | http://www.tnmpefficiency.com/downloads/           |  |  |  |  |  |
| SCORE/CitySmart MTP                 | TNMP_SCORE_Program_Manual.pdf                      |  |  |  |  |  |
| Score/citySmart Wife                | http://www.tnmpefficiency.com/downloads/           |  |  |  |  |  |
|                                     | TNMP_CitySmart_Program_Manual.pdf                  |  |  |  |  |  |
| Commercial Solutions MTP            | http://www.tnmpefficiency.com/downloads/           |  |  |  |  |  |
| Commercial Solutions Wife           | 2014TNMPComSolProgramManual.pdf                    |  |  |  |  |  |
| Load Management SOP                 | http://www.tnmpefficiency.com/downloads/           |  |  |  |  |  |
| Load Wallagelliefft 30F             | Load_Management_Program_Manual.pdf                 |  |  |  |  |  |
| High-Performance Homes MTP          | http://tnmpefficiency.com/downloads/               |  |  |  |  |  |
| Tilgilli citorillance floriles with | 2014_TNMP_High-Performance_Homes_Program_Guide.pdf |  |  |  |  |  |
| Residential SOP                     | http://www.tnmpefficiency.com/downloads/           |  |  |  |  |  |
| Residential SOF                     | 2014_TNMP_Res-HTR_Program_Manual.pdf               |  |  |  |  |  |
| Hard-to-Reach SOP                   | http://www.tnmpefficiency.com/downloads/           |  |  |  |  |  |
| Hard-to-Reach 30P                   | 2014_TNMP_Res-HTR_Program_Manual.pdf               |  |  |  |  |  |
| Low-Income Weatherization           | http://tnmpefficiency.com/downloads/               |  |  |  |  |  |
| Low-income weatherization           | TNMP_2014_LIW_Program_Manual.pdf                   |  |  |  |  |  |

### **B.** Existing Programs

### **Open for Small Business MTP**

### Program Design

Although TNMP's existing Commercial Solutions program has successfully engaged larger customers and contractors to install energy efficiency projects, the program has encountered additional barriers for small business customer participation. Since these customers do not typically engage in energy efficiency projects, the contractor community does not market to them as actively as larger customers. As a result, many small commercial customers do not participate in programs, and thus do not benefit from energy efficiency programs.

### Implementation Process

TNMP continues to contract with CLEAResult Consulting as the implementer to provide the energy efficiency and demand reduction design and solutions for the Open for Small Business program throughout the 2014 program year. Under this program, TNMP will help small commercial customers that do not have the in-house capacity or expertise to: 1) identify, evaluate, and undertake efficiency improvements to their completion; 2) properly evaluate energy efficiency proposals from vendors; and/or 3) understand how to leverage energy savings to finance projects within their financial planning processes. Small-sized customers (<100kW) tend to implement

smaller projects with lower savings which creates program cost-effectiveness challenges to providing one-on-one technical assistance to this market. Lastly, the program will provide the direct support, tools, and training necessary to contractors to pursue small commercial customers.

### Outreach and Research activities

The program targets small commercial customers based upon two tiers of premise demand. All commercial customer premises with a peak annual billing demand less than 100 kW will be eligible for the program, with extra cash incentives for very small sites which have 10 kW or less demand. TNMP plans to leverage Small Business Associations, Government Agencies, and Service providers to serve these customers.

### **SCORE/CitySmart Program (SCORE MTP)**

### Program design

TNMP implemented the energy-smart schools and cities market transformation program in 2008, as envisioned by Texas 79th Legislature's Senate Bill 712 and approved by the PUCT.

The SCORE MTP provides energy efficiency and demand reduction solutions for schools and local government customers. The Program is designed to help educate and assist these customers in lowering their energy use by facilitating the integration of energy efficiency into their short and long term planning, budgeting, and operational practices.

### Implementation process

TNMP continues its contract with CLEAResult Consulting as the implementer to offer participation to school districts and government entities in its service territory. The Program facilitates the identification of potential demand and energy savings opportunities, general operating characteristics, long-range energy efficiency planning, and overall measure and program acceptance by the targeted customer participants.

### **Outreach Activities**

TNMP markets the availability of this program in the following manner:

- Contracts with a third-party implementer to conduct outreach and planning activities;
- Targets a number of customer participants;
- Conducts workshops for program participants and industry professionals as necessary to explain elements of the program, such as responsibilities of the participants, project requirements, incentive information, and the application and reporting process;

- Participates in regional outreach activities as may be necessary; and
- Attends appropriate industry-related meetings to generate awareness and interest.

### **Commercial Solutions Market Transformation Program (CS MTP)**

### Program Design

TNMP began implementing the CS MTP in 2010 as part of the SCORE/CitySmart MTP, as envisioned by Texas 79th Legislature's Senate Bill 712 and approved by the PUCT. TNMP's CS MTP targets commercial customers (other than local government entities and schools) who do not have the in-house capacity or expertise to: 1) identify, evaluate, and undertake efficiency improvements; 2) properly evaluate energy efficiency proposals from vendors; and/or, 3) understand how to leverage their energy savings to finance projects. Incentives are paid to customers served by TNMP for certain eligible energy efficiency measures that are installed in new or retrofit applications resulting in savings as defined by the Texas Technical Reference Manual.

### Implementation Process

TNMP continues its contract with CLEAResult Consulting as implementer to target a number of commercial customers meeting the program participation parameters. The CS MTP facilitates the identification of demand and energy savings opportunities, general operating characteristics, long-range energy efficiency planning, and overall measure and program acceptance by the targeted customer participants.

The CS MTP provides energy efficiency and demand reduction solutions to TNMP's larger commercial customers.

### **Outreach Activities**

TNMP markets the availability of this program in the following manner:

- Contracts with a third-party implementer to conduct outreach and planning activities;
- Targets a number of customer participants;
- Conducts workshops for program participants and industry professionals as necessary to
  explain elements of the program, such as responsibilities of the participants, project
  requirements, incentive information, and the application and reporting process;
- Participates in regional outreach activities as may be necessary; and,

• Attends appropriate industry-related meetings to generate awareness and interest.

### **Load Management Program SOP**

### Program Description

The TNMP Load Management Program was developed in 2009 in accordance with P.U.C. SUBST. R. 25.181, which authorizes participating Project Sponsors (customers or third-party sponsors) to provide on-call, voluntary curtailment of electric consumption during peak demand periods in return for incentive payments. Incentives are based on verified demand savings that occur at TNMP distribution sites, or at eligible institutional customers' sites, as a result of calls for curtailment. Customers are not required to produce a specific level of curtailed load but will only receive payments for the lesser of the amount of curtailed load produced or contracted.

### Implementation process

Implementation of this program will be directly through customers and third-party entities representing customers at distribution level within the TNMP service territory. In 2014, the program will continue to initiate a maximum number of five curtailments, including one annual Scheduled Curtailment of one-to-two hours duration and a maximum of four annual Unscheduled Curtailments of one-to-four hours duration each.

### **Outreach Activities**

TNMP plans to market the availability of the program in the following manner:

- Utilizes mass electronic mail (e-mail) notifications to keep potential participants interested and informed;
- Maintain program information on the company website.

### **High-Performance Homes MTP**

### Program design

TNMP has updated the ENERGY STAR® New Homes program to the High-Performance Homes program, along with expanding the territories served. The High-Performance Homes program promotes the construction and certification of new ENERGY STAR certified and High-Performance qualified homes. This voluntary program provides financial incentives and other types of assistance to production and custom homebuilders who commit to construct homes within the TNMP service territory that meet high-performance specifications. It is the homebuilder's

primary responsibility to design, build, and market homes that comply with program requirements and achieve a 10% kWh savings or greater. The Rater's primary responsibility is to work with homebuilders to facilitate the construction of ENERGY STAR certified and High-Performance homes that meet the performance requirements for the High program. Incentives are paid to builders for installing certain measures in new construction applications, as defined in the Texas Technical Reference Manual. The program includes a bonus incentive for ENERGY STAR version 3.0 compliant homes.

### Implementation process

TNMP has contracted with ICF International to implement the High-Performance Homes program, whereby any eligible builder may submit an application for a home meeting the requirements. The program information on TNMP's website reflects eligibility requirements.

### **Outreach Activities**

TNMP markets the availability of its programs in the following manner:

- Contracts with third-party implementer to conduct outreach and planning activities:
- Utilizes mass electronic mail (e-mail) notifications to keep potential builders interested and informed;
- Maintains a website with detailed builder eligibility, end-use measures, incentives, and procedures;
- Participates in statewide outreach activities, as may be available.

### Residential Standard Offer Program (RES SOP)

### Program Design

The RES SOP targets residential customers whose maximum demand is less than 100 kW. Incentives are paid to Project Sponsors for certain measures installed in new or retrofit applications which provide verifiable demand and energy savings. RES SOP includes a higher incentive option to Project Sponsors who work in the underserved areas.

### Implementation Process

TNMP will continue implementation of its RES SOP whereby any eligible Project Sponsor may submit an application for a project meeting the minimum requirements. The program information on TNMP's website is updated to reflect participating Project Sponsors and incentive amounts that are available.

### **Outreach Activities**

TNMP markets the availability of its programs in the following manner:

- Utilizes mass electronic mail (e-mail) notifications to keep potential Project Sponsors interested and informed;
- Maintains a website with detailed project eligibility, end-use measures, incentives, procedures, and application forms;
- Attends appropriate industry-related meetings to generate awareness and interest;
- Participates in statewide outreach activities as may be available;
- Conducts workshops as necessary to explain elements such as responsibilities of the Project Sponsor, project requirements, incentive information, and the application and reporting process.

### Hard-To-Reach Standard Offer Program (HTR SOP)

### Program design

The HTR SOP targets low income customers, defined as a household income at or below 200% of the federal poverty guidelines, or who meet certain other qualifications. Incentives are paid to Project Sponsors for certain measures installed in retrofit applications as defined in the Texas Technical Reference Manual.

### Implementation process

TNMP will continue implementation of its HTR SOP, whereby any eligible Project Sponsor may submit an application for a project meeting the minimum requirements. The program information on TNMP's website is updated annually to reflect participating Project Sponsors and the program database reflects incentive amounts that are available.

### **Outreach Activities**

TNMP markets the availability of its programs in the following manner:

- Utilizes mass electronic mail (e-mail) notifications to keep potential Project Sponsors interested and informed;
- Maintains a website with detailed project eligibility, end-use measures, incentives, procedures and application forms;
- Attends appropriate industry-related meetings to generate awareness and interest;

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• Participates in statewide outreach activities, as may be available;

 Conducts workshops as necessary to explain elements such as responsibilities of the Project Sponsor, project requirements, incentive information, and the application and reporting process.

### Low Income Weatherization Program

### Program design

Each unbundled transmission and distribution utility shall include in its energy efficiency plan a targeted low-income energy efficiency program as described by PURA § 39.903(f)(2). The Low Income Weatherization Program targets TNMP's low income residential customers who: a) meet DOE's income eligibility guidelines, defined as at or below 200% of the federal poverty level; b) are connected to TNMP's electric system; and, c) have been qualified through the Service Providers guidelines. Effective in 2011, S.B. 1434 required that no less than 10% of the total energy efficiency portfolio budget be allocated to Low Income Weatherization. The program has been designed to identify non-traditional agencies to reach a broader audience.

### Implementation process

TNMP continues to contract with Frontier Associates (Implementer) to provide marketing and education to local government organizations and not-for-profit agencies. The Implementer contracts with the TDHCA sub-recipients and other not-for-profit community action and government agencies (i.e. low-income advocates) to provide weatherization services to eligible residential TNMP customers.

The agencies select measures to be installed based on the savings-to-investment (SIR) ratio, which evaluates cost-effectiveness using the present value of the measure's lifetime energy savings divided by the installation costs. Agencies receive payment for the measure installation costs, plus an administrative fee of 8%, and up to the maximum allowable expenditure of \$6,500 per home. Energy savings are defined in the Texas Technical Reference Manual. Eligible measures include:

- Attic insulation
- Central AC replacement
- Compact fluorescent lamps (CFLs)
- Electric water heater measures (water heater jacket, pipe insulation, and showerheads)
- Infiltration control
- Refrigerator replacement
- Solar screens

- Wall insulation
- Window AC replacement

### **Outreach Activities**

Low-income advocates throughout TNMP's service territory will be called upon to participate. Workshops and database training will take place and updates to policies and procedures will take place annually, or as needed.

### **II.** Customer Classes

Customer classes targeted by TNMP's energy efficiency programs are the Commercial, Hard-to-Reach, and Residential classes.

The annual demand goal will be allocated to customer classes by examining historical program results, evaluating economic trends, and taking into account P.U.C. SUBST. R. 25.181, which states that no less than 5% of the utility's total demand goal should be achieved through programs for hard-to-reach customers. **Table 3** summarizes the number of customers in each of the eligible customer classes, which was used to allocate funding on an equitable basis.

It should be noted, however, that the actual distribution of the goal and budget must remain flexible based upon the response of the marketplace, the potential interest that a customer class may have toward a specific program, and the overriding objective of meeting the legislative goal. TNMP will offer a portfolio of Standard Offer and Market Transformation Programs that will be available to all customer classes.

**Table 3: Summary of Customer Classes** 

| Customer Class | Number of Customers |
|----------------|---------------------|
| Commercial     | 39,600              |
| Residential    | 129,494             |
| Hard-to-Reach  | 67,305              |

### III. Projected Energy Efficiency Savings and Goals

The modified PURA § 39.905, effective September 1, 2011, changed the calculation used to determine TNMP's goal, stating that for an electric utility whose amount of energy efficiency to be acquired under this subsection is equivalent to at least four-tenths of one percent of the electric utility's summer weather-adjusted peak demand for residential and commercial customers in the previous calendar year, the minimum goal shall not be less than four-tenths of one percent of the utility's summer weather-adjusted peak demand for residential and commercial customers, adjusted for distribution industrial opt-out, by December 31 of each subsequent year; and the amount of energy efficiency to be acquired for the utility's residential and commercial customers for the most recent preceding year.

As shown in **Table 4**, TNMP's summer weather-adjusted peak demand for residential and commercial customers in the previous calendar year is 1,273 MW. A four-tenths of one percent goal would be 5.09 MW, which is less than the amount of energy efficiency to be acquired for the most recent preceding year. For 2014 TNMP has planned to achieve a goal of 5.8 MW<sup>3</sup>, and for 2015 TNMP has planned to achieve a goal of 5.77 MW<sup>4</sup>.

**Table 4** presents historical annual growth in demand for the previous five years that is used to calculate demand and energy goals. **Table 5** presents the projected demand and energy savings broken out by program for each customer class for 2014 and 2015. Projected savings for 2014 and 2015 reflect the budget allocations designed to meet TNMP's goals required by PURA § 39.905.

<sup>&</sup>lt;sup>3</sup> Goal defined in Docket No. 41496.

<sup>&</sup>lt;sup>4</sup> P.U.C. SUBST. R. 25.181(e)(1)(A) states that a utility demand goal cannot be lower than its prior year's goal, except as adjusted in accordance with subsection (w). Should the Commission disagree with TNMP's calculation of the 2015 goal, TNMP will need to file for good cause exception in the 2015 EECRF.

Table 4: Annual Growth in Demand and Energy Consumption<sup>5</sup>

| ige 0.4%<br>nh Peak              | /) Demand                | her Weather<br>ted Adjusted                        |           |           |           |           | A/N/A     | 5.0       | 5.06      |
|----------------------------------|--------------------------|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Average                          |                          | r Weather<br>d Adjusted                            |           |           |           | Τ         | N/A       | 36        | 17        |
| Grandh                           | (MW)                     | Weather<br>Adjusted                                | N/A       | 30        | 38        | -70       | 99        | 117       | -67       |
|                                  |                          | Net<br>Net   | 4,964,077 | 4,960,522 | 5,015,600 | 5,255,286 | 5,187,083 | 5,257,500 | 5,383,380 |
| /leter                           | Commercial               | Opt-Out  | Ą         | (40,665)  | (42,953)  | (41,806)  | (45,858)  | (50,138)  | (60,177)  |
| n (MWh) @ N                      | Residential & Commercial | Weather<br>Adjusted                                | NAV       | NAV       | NA        | N         | 5,232,941 | 5,307,638 | 5,443,557 |
| Energy Consumption (MWh) @ Meter |                          | Actual   | 4,964,077 | 5,001,187 | 5,058,553 | 5,297,092 | 5,482,026 | 5,337,487 | 5,434,270 |
| Energ                            | ystem                    | Weather<br>Adjusted                                | NAV       | NAV       | ΝΑ        | NA        | 7,649,246 | 7,907,039 | 7,920,127 |
|                                  | Total System             | Actual   | 6,702,077 | 6,908,762 | 6,878,236 | 7,375,690 | 7,898,331 | 7,936,888 | 7,910,840 |
|                                  | - 5                      | Net  | 1,181     | 1,211     | 1,250     | 1,179     | 1,245     | 1,361     | 1,294     |
|                                  | ommerci                  | Opt-<br>Out  | N/A       | 9         | <b>မှ</b> | φ         | φ         | -2        | -11       |
| nd (MW)                          | Residential & Commercial | Weather<br>Adjusted                                | 1,181     | 1,217     | 1,255     | 1,185     | 1,253     | 1,368     | 1,305     |
| Peak Demand (MW)                 | Re                       | Actual   | 1,274     | 1,216     | 1,245     | 1,315     | 1,354     | 1,436     | 1,266     |
| ů.                               | Total System             | Weather Weather<br>Actual Adjusted Actual Adjusted | 1,384     | 1,429     | 1,471     | 1,427     | 1,549     | 1,671     | 1,603     |
|                                  | Total                    | Actual   | 1,477     | 1,428     | 1,461     | 1,557     | 1,650     | 1,739     | 1,564     |
|                                  |                          | Calendar<br>Year                                   | 2007      | 2008      | 2009      | 2010      | 2011      | 2012      | 2013      |

<sup>5</sup> "NAV" - Not Available, "NA" - Not Applicable; Averages from 2007-2013 are not applicable to any of the calculations or goals in this EEPR. Energy efficiency goals are calculated based upon the actual historical weather-adjusted growth in demand for the ten most recent years.

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Table 5: Projected Demand and Energy Savings Broken Out by Program for Each Customer Class (at Meter)<sup>6</sup>

|                                | 201              | 4                 |
|--------------------------------|------------------|-------------------|
| Customer Class and Program     | Demand Goal (MW) | Energy Goal (MWh) |
| Commercial                     | 5.249            | 6,456             |
| Open for Small Business MTP    | 0.312            | 1,501             |
| SCORE/CitySmart MTP            | 0.445            | 1,221             |
| Commercial Solutions MTP       | 0.882            | 3,728             |
| Load Management SOP            | 3.610            | 7.278             |
| Residential                    | 3.479            | 8,699             |
| High-Performance Homes MTP     | 0.493            | 1,462             |
| Residential SOP                | 2.986            | 7,238             |
| Hard-to-Reach                  | 0.812            | 1,270             |
| Hard-to-Reach SOP              | 0.525            | 780               |
| Low Income Weatherization      | 0.287            | 490               |
| Total Annual Projected Savings | 9.540            | 16,426            |
|                                | 201              | 5                 |
| Customer Class and Program     | Demand Goal (MW) | Energy Goal (MWh) |
| Commercial                     | 5.350            | 7,269             |
| Open for Small Business MTP    | 0.384            | 1,816             |
| SCORE/CitySmart MTP            | 0.500            | 1,362             |
| Commercial Solutions MTP       | 0.948            | 4,085             |
| Load Management SOP            | 3.518            | 7.090             |
| Residential                    | 2.518            | 6,532             |
| High-Performance Homes MTP     | 0.721            | 2,091             |
| Residential SOP                | 1.796            | 4,441             |
| Hard-to-Reach                  | 0.568            | 899               |
| Hard-to-Reach SOP              | 0.245            | 417               |
| Low Income Weatherization      | 0.323            | 482               |
| Total Annual Projected Savings | 8.436            | 14,700            |

<sup>&</sup>lt;sup>6</sup> The projected savings in Table 6 are presuming stability in the cost/kW from 2013 as used to estimate future achievement inclusive of a 2% inflation rate, and assuming achievement of the savings precisely as allocated from the exact same measure-mix. Historically, program funds are evaluated and reallocated as necessary among programs throughout the year, so it is highly likely that the outcome will differ from the projection.

### IV. Program Budgets

**Table 6** presents total proposed budget allocations required to achieve the projected demand and energy savings shown in **Table 5**. The budget allocations are defined by the overall projected demand and energy savings, the avoided costs of capacity and energy in P.U.C. SUBST. R. 25.181, allocation of demand goals among customer classes, and the incentive levels by customer class. The budget allocations presented in **Table 6** below are broken down by customer class, program, and the different budget categories: incentive payments, administration, research and development (R&D) and EM&V.

TNMP's budget projections are designed to exceed the goal as encouraged by P.U.C. SUBST. R. 25.181 (d), while staying within the cost caps established in subsection (f)(7). TNMP uses a historical estimate to project achievements, which does not account for other variables that would lower savings, in an attempt to still meet the goal. P.U.C. SUBST. R. 25.181 (d) encourages TNMP to achieve demand reduction and energy savings through a portfolio of cost-effective programs that exceed each utility's energy efficiency goals while staying within the cost caps. TNMP budget is designed to meet the 0.4% peak demand goal and the goal established by Docket No. 41496 while remaining within the required cost caps.

Table 6: Proposed Annual Budget Broken Out by Program for Each Customer Class

| 2014                        | Incentives | Admin   | R&D     | Total<br>Budget | EM&V   |
|-----------------------------|------------|---------|---------|-----------------|--------|
| Commercial                  | 1,441,000  | 270,188 |         | 1,801,250       |        |
| Open for Small Business MTP | 398,000    | 74,625  |         | 497,500         |        |
| SCORE/CitySmart MTP         | 435,730    | 81,699  |         | 544,663         |        |
| Commercial Solutions MTP    | 456,280    | 85,553  |         | 570,350         |        |
| Load Management SOP         | 150,990    | 28,311  |         | 188,738         |        |
| Residential                 | 1,455,000  | 272,813 |         | 1,818,750       |        |
| High-Performance Homes MTP  | 200,000    | 37,500  |         | 250,000         |        |
| Residential SOP             | 1,255,000  | 235,313 |         | 1,568,750       |        |
| Hard-to-Reach               | 902,500    | 169,219 |         | 1,128,125       |        |
| Hard-to-Reach SOP           | 477,500    | 89,531  |         | 596,875         |        |
| Low Income Weatherization   | 425,000    | 79,688  |         | 531,250         |        |
| Research & Development      |            |         |         |                 |        |
| General                     |            |         | 237,406 |                 |        |
| Total Budgets by Category   | 3,798,500  | 712,219 | 237,406 | 4,748,125       | 41,857 |
| 2015                        | Incentives | Admin   | R&D     | Total<br>Budget | EM&V   |
| Commercial                  | 1,650,060  | 309,386 |         | 2,062,575       |        |
| Open for Small Business MTP | 500,000    | 93,750  |         | 625,000         |        |
| SCORE/CitySmart MTP         | 500,000    | 93,750  |         | 625,000         |        |
| Commercial Solutions MTP    | 500,000    | 93,750  |         | 625,000         |        |
| Load Management SOP         | 150,060    | 28,136  |         | 187,575         |        |
| Residential                 | 1,068,641  | 200,370 |         | 1,335,801       |        |
| High-Performance Homes MTP  | 298,641    | 55,995  |         | 373,301         |        |
| Residential SOP             | 770,000    | 144,375 |         | 962,500         |        |
| Hard-to-Reach               | 670,000    | 125,625 |         | 837,500         |        |
| Hard-to-Reach SOP           | 370,000    | 69,375  |         | 462,500         |        |
| Low Income Weatherization   | 300,000    | 56,250  |         | 375,000         | -      |
| Research & Development      |            |         |         |                 |        |
| General                     |            |         | 211,794 |                 |        |
| - Ocheral                   |            |         | 211,734 |                 | Į.     |

### **Energy Efficiency Report**

# V. Historical Demand Savings Goals and Energy Targets for Previous Five Years

**Table 7** documents TNMP's actual demand goals and energy targets for the previous five years (2009-2013), reflecting estimates by the UCOS Stipulation budget of \$1.1million for 2009.

Table 7: Historical Demand and Energy Savings Goals and Achievements (at the Meter)

| Calendar Year | Actual Weather<br>Adjusted Demand<br>Goal (MW) | Actual Weather<br>Adjusted Energy<br>Goal (MWh) | Actual Demand<br>Reduction (MW) |        |
|---------------|--|---|---------------------------------|--------|
| 2013          | 5.108  | 8,949   | 10.294                          | 16,981 |
| 2012          | 4.8  | 8,410   | 7.144                           | 12,839 |
| 2011          | 4.8  | 8,266   | 4.960                           | 13,416 |
| 2010          | 4.8  | 8,410   | 5.366                           | 12,096 |
| 2009*         | 1.9  | 6,480   | 4.110                           | 11,407 |

<sup>\*</sup> Pursuant to Article VI, Energy Efficiency Expenditures and Funding, in PUC Docket No. 22349, TNMP's Unbundled Cost of Service Rate filing.

### VI. Projected, Reported and Verified Demand and Energy Savings

Table 8: Projected versus Reported and Verified Savings for 2013 and 2012 (at Meter)

| 2013 Customer Class and Program | Projected<br>MW | Savings <sup>7</sup><br>MWh | Reported and V | erified Savings<br>MWh |
|---------------------------------|-----------------|-----------------------------|----------------|------------------------|
| Commercial                      | 4.79            | 5,368                       | 5.467          | 7,051                  |
| Small Business Pilot MTP        | 0.314           | 600                         | 0.315          | 1,507                  |
| Load Management                 | 2.727           |                             | 3.702          | 7.376                  |
| SCORE/CitySmart MTP             | 0.672           | 1,832                       | 0.367          | 1,012                  |
| Commercial Solutions MTP        | 1.077           | 2,936                       | 1.083          | 4,525                  |
| Residential                     | 2.738           | 5,863                       | 3.807          | 7,664                  |
| ENERGY STAR Homes MTP           | 0.485           | 1,267                       | 0.988          | 1,012                  |
| Large Residential SOP           | 1.644           | 3,418                       | 1.635          | 3,642                  |
| Residential HVAC                | 0.226           | 437                         | 0.041          | 122                    |
| Small Residential SOP           | 0.383           | 741                         | 1.143          | 2,888                  |
| Hard-to-Reach                   | .733            | 1,996                       | 1.021          | 2,265                  |
| Large Hard-to-Reach SOP         | 0.486           | 1,315                       | 0.567          | 1,320                  |
| Low Income Weatherization       | 0.094           | 266                         | 0.275          | 468                    |
| Small Hard-to-Reach SOP         | 0.153           | 415                         | 0.179          | 477                    |
| Total Annual Goals              | 8.261           | 13,227                      | 10.294         | 16,981                 |
| 2012                            | Projected       | Savings <sup>8</sup>        | Reported and V | erified Savings        |
| Customer Class and Program      | MW              | MWh                         | MW             | MWh                    |
| Commercial                      | 6.792           | 5,763                       | 4.771          | 6,202                  |
| Large Commercial SOP            | 0.202           | 870                         | 0.113          | 678                    |
| Small Commercial SOP            | 0.019           | 90                          | 0.000          | 0                      |
| Load Management                 | 4.809           |                             | 2.923          | 0                      |
| SCORE/CitySmart MTP             | 1.057           | 2,882                       | 1.060          | 3,275                  |
| Commercial Solutions MTP        | 0.705           | 1,921                       | 0.676          | 2,249                  |
| Residential                     | 1.623           | 3,702                       | 1.813          | 4,938                  |
| ENERGY STAR Homes MTP           | 0.676           | 1,766                       | 0.436          | 1,035                  |
| Large Residential SOP           | 0.712           | 1,482                       | 1.022          | 2,994                  |
| Small DRG (Solar PV) Pilot      | 0.057           | 110                         | 0.053          | 102                    |
| Small Residential SOP           | 0.178           | 344                         | 0.303          | 808                    |
| Hard-to-Reach                   | 0.570           | 1,553                       | 0.559          | 1,698                  |
| Large Hard-to-Reach SOP         | 0.360           | 973                         | 0.369          | 1,125                  |
| Low Income Weatherization       | 0.105           | 296                         | 0.080          | 297                    |
| Small Hard-to-Reach SOP         | 0.105           | 284                         | 0.111          | 276                    |
| Total Annual Goals              | 8.985           | 11,018                      | 7.144          | 12,839                 |

<sup>&</sup>lt;sup>7</sup> Projected Savings for 2013 as reported in the EEPR filed April 1, 2013 (Project No. 41196)

<sup>&</sup>lt;sup>8</sup> Projected Savings for 2012 as reported in the EEPR filed April 1, 2012 (Project No. 40194)

# VII. Historical Program Expenditures

This section documents TNMP's incentive, administration, R&D and EM&V expenditures for the previous five years (2009-2013) broken out by program for each customer class.

Table 9: Historical Program Incentive and Administration Expenditures for 2009 through 2013<sup>9</sup>

|                            |           | 2013    |         |                    |           | 2012    |                       | 2011      |         | 14        | 2010    | 2009*         |             |
|----------------------------|-----------|---------|---------|--------------------|-----------|---------|-----------------------|-----------|---------|-----------|---------|---------------|-------------|
|                            |           |         |         |                    |           |         | and the second second |           | Admin&  |           |         |               |             |
|                            | Incent    | Admin   | ନଝତ     | EM&V <sup>10</sup> | Incent.   | Admin   | R&D                   | Incent,   | R&D     | Incent.   | Admin   | Incent.       | Admin       |
| Commercial                 | 1,445,795 | 158,846 | 4,864   | 38,504             | 1,067,742 | 150,086 | 000'09                | 1,033,323 | 78,438  | 877,695   | 65,220  | 748,207       | 23,203      |
| Large Commercial SOP       |           |         |         |                    | 41,418    | 27,597  |                       | 67,735    | 29,087  | 14,597    | 4,068   | 11,136        | 23,203      |
| Small Commercial SOP       |           |         |         |                    |           |         |                       | 7,181     | 3,084   | 2,523     | 746     | See Res SOP   | See Res SOP |
| SCORE/CitySmart & Comm     |           |         |         |                    |           |         |                       |           |         |           |         |               |             |
| Sol MTP                    | 353,103   | 36,225  | 784     | 14,430             | 549,148   | 44,449  |                       | 948,855   | 39,627  | 852,385   | 31,500  | 737,071       |             |
| Commercial Solutions MTP   | 548,882   | 56,309  | 1,218   | 15,981             | 352,694   | 28,548  |                       |           |         |           |         |               |             |
| Small Business Pilot MTP   | 393,750   | 40,395  | 874     | 6,668              |           |         | 00009                 |           |         |           |         |               |             |
| Load Management Pilot      | 150,060   | 25,918  | 1,988   | 1,425              | 124,482   | 49,492  |                       | 9,552     | 6,640   | 8,190     | 28,906  |               |             |
| Residential                | 1,372,654 | 329,131 | 22,005  | 46,178             | 957,514   | 178,824 | 935                   | 879,601   | 131,041 | 1,030,724 | 161,194 | 823,254       | 113,281     |
| Large Residential SOP      | 675,211   | 176,803 | 10,824  | 20,753             | 567,791   | 109,382 |                       | 314,608   | 41,131  | 632,214   | 125,245 | 279,779       | 47,297      |
| Small Residential SOP      | 470,802   | 123,279 | 7,548   | 7,230              | 145,681   | 29,630  |                       | 46,538    | 6,084   |           |         |               |             |
| ENERGY STAR New Homes      |           |         |         |                    |           |         |                       |           |         |           | •       |               |             |
| MTP                        | 190,240   | 19,517  | 3,050   | 9,327              | 135,840   | 13,810  |                       | 139,875   | 17,992  | 149,050   |         | 133,650       |             |
| Residential SOP – HVAC     | 36,401    | 9,532   | 584     | 8,868              |           |         |                       |           |         |           |         |               |             |
| Small DRG Solar PV Pilot   |           |         |         |                    | 108,202   | 26,001  | 935                   | 107,540   | 30,339  | 88,488    | 10,783  | 88,484        | 14,502      |
| CFL program MTP            |           |         |         |                    |           |         |                       |           |         |           |         | 67,503        | 10,876      |
| Underserved Area Pilot SOP |           |         |         |                    |           |         |                       | 271,039   | 35,435  | 160,972   | 25,167  | 253,858       | 40,606      |
| Hard-to-Reach              | 949,136   | 229,308 | 14,106  | 20,784             | 722,401   | 149,907 |                       | 678,773   | 115,012 | 553,250   | 66,658  | 229,171       | 59,117      |
| Large Hard-to-Reach SOP    | 416,402   | 109,035 | 6,675   | 9,518              | 317,684   | 64,614  |                       | 331,088   | 43,285  | 392,348   | 45,545  | 229,171       | 33,739      |
| Small Hard-to-Reach SOP    | 133,500   | 34,957  | 2,140   | 5,930              | 87,567    | 17,810  |                       | 79,313    | 10,369  |           |         |               |             |
| Low Income Weatherization  | 399,234   | 85,316  | 5,290   | 5,336              | 317,150   | 67,482  |                       | 268,372   | 61,358  | 160,902   | 21,113  | 423,590**     | 25,378      |
| Research & Development     |           |         | 177,254 |                    |           |         | 104,250               |           | 50,000  |           |         |               |             |
| Energy Education Project   |           |         | 177,254 |                    |           |         | 101,250               |           | 50,000  |           |         |               |             |
| General                    |           |         |         |                    |           |         | 3,000                 |           |         |           |         |               |             |
| Total Annual Expenditures  | 3,767,585 | 717,285 | 218,229 | 105,466            | 2,747,658 | 478,816 | 165,185               | 2,591,697 | 374,491 | 2,461,669 | 293,072 | \$2,224,221** | 195,602     |

<sup>\*</sup> Pursuant to Article VI, Energy Efficiency Expenditures and Funding, in PUC Docket No. 22349, TNMP's Unbundled Cost of Service Rate filing.

<sup>\*\*</sup> Inclusive of \$248,590 in previous years' roll-over funds.

<sup>&</sup>lt;sup>9</sup> 2013 budget found at Table 10 in the current EEPR; 2012 budget defined in Project No 40194; 2011 budget defined in Project No. 40194; 2010 budget defined in Project No. 39105, 2009 budget defined in Project No. 37982.

 $<sup>^{10}</sup>$  EM&V actual expenditures were allocated based on allocation factors provided by the EM&V contractor.

### VIII. Program Funding for Calendar Year 2013

As shown in **Table 10**, TNMP spent a total of \$4,703,099 million, not including EM&V costs, on all of its energy efficiency programs in 2013 to meet the Commission & PURA's mandated budget. The total forecasted budget for 2013 was \$4.773 million.

Funds for achieving the energy efficiency goal will be collected in each utility's EECRF. Each utility shall track its energy efficiency expenditures separately from other expenditures and report these in their annual energy efficiency report. Funds not spent within a given year shall be considered as a source of funding for the following year, and the Commission shall consider utilities' requests to roll over unspent funds on a case-by-case basis in connection with the utilities' annual energy efficiency report.

Table 10: Program Funding for Calendar Year 2013

| Commercial                | 7 Total Projected<br>808 Budget | Numbers of<br>Customers<br>Participating | 445's<br>Expended<br>46's (Incentives) | Actual Funds<br>'88 Expended<br>89 (Admin) <sup>11</sup> | Actual Funds be Expended (R&D) | 1,609,1<br>Expended | Funds Committed (Not Expended) | Funds<br>665<br>768<br>868<br>869<br>869<br>869<br>869<br>869<br>869<br>869<br>869<br>8 | % change <sup>12</sup> |
|---------------------------|---------------------------------|--|--|--|--------------------------------|---------------------|--------------------------------|---|------------------------|
| Small Business Pilot MTP  | 471,397                         | 62                                       | 393,750                                | 40,395   | 874                            | 435,018             |                                | 36,379  | -8%                    |
| Load Management           | 187,500                         | 43                                       | 150,060                                | 25,918   | 1,988                          | 177,966             |                                | 9,534   | -5%                    |
| SCORE/CitySmart MTP       | 500,000                         | 21                                       | 353,103                                | 36,225   | 784                            | 390,111             |                                | 109,889   | -22%                   |
| Commercial Solutions MTP  | 750,000                         | 29                                       | 548,882                                | 56,309   | 1,218                          | 606,409             |                                | 143,591   | -19%                   |
| Residential               | 1,681,458                       | 3,772                                    | 1,372,654                              | 329,131  | 22,005                         | 1,723,790           | 0                              | -42,332   |                        |
| ENERGY STAR New Homes     | 200,000                         | 548                                      | 190,240                                | 19,517   | 3,050                          | 212,806             |                                | -12,806   | 6%                     |
| Residential SOP Large     | 1,092,029                       | 2,163                                    | 675,211                                | 176,803  | 10,824                         | 862,839             |                                | 229,190   | -21%                   |
| Residential SOP Small     | 239,533                         | 988                                      | 470,802                                | 123,279  | 7,548                          | 601,629             |                                | -362,096  | 151%                   |
| Residential SOP HVAC      | 149,896                         | 73                                       | 36,401                                 | 9,532  | 584                            | 46,516              |                                | 103,380   | -69%                   |
| Hard-to-Reach             | 1,181,250                       | 926                                      | 949,136                                | 229,308  | 14,106                         | 1,192,550           | 0                              | -11,300   |                        |
| HTR SOP Large             | 531,250                         | 624                                      | 416,402                                | 109,035  | 6,675                          | 532,113             |                                | -863  | 0%                     |
| HTR SOP Small             | 156,250                         | 154                                      | 133,500                                | 34,957   | 2,140                          | 170,597             |                                | -14,347   | 9%                     |
| Low Income Weatherization | 493,750                         | 148                                      | 399,234                                | 85,316   | 5,290                          | 489,840             |                                | 3,910   | -1%                    |
| Research & Development    | 238,580                         |  |  |  | 177,254                        | 177,254             | 0                              | 20,351  |                        |
| Energy Education Project  | 177,254                         | 70                                       |  |  | 177,254                        | 177,254             |                                | 0   | 0%                     |
| General                   | 61,326                          | Art Manual Angeler (Albert               |  |  |                                | 0                   | MANAGARINA AT CARRESTON        | 20,351  | -33%                   |
| Total Annual Expenditures | 4,771,605                       | 4,853                                    | 3,767,585                              | 717,285  | 218,229                        | 4,703,099           | 0                              | 266,111   | -6%                    |
| EM&V                      | 108,341                         |  |  |  |                                | 105,465             |                                | 2,876   | -3%                    |

<sup>&</sup>lt;sup>11</sup> Excludes EM&V because it is listed separately, but includes municipal rate case expenses, as also applies to Total Funds Expended.

<sup>&</sup>lt;sup>12</sup> For all program expenditures that decreased from the total projected budget by more than 10%, the funds were not fully subscribed in the program. For all program expenditures that increased from the total projected budget by more than 10%, the funds not spent in other programs in the same customer class were reallocated so they could be spent in attempt to reach TNMP's savings goal.

TNMP's 2013 targeted low income program met these requirements, as detailed in **Table 11** below:

Table 11: Meeting Low Income Weatherization Expenditure Requirement

| 2013 Budget | Required Expenditures | Actual Expenditures | % of requirement met |
|-------------|-----------------------|---------------------|----------------------|
| 493,750     | 477,160               | 495,322             | 104%                 |

### IX. Evaluation, Measurement, and Verification (EM&V)

Pursuant to P.U.C. Subst. R. 25.181(q), the Commission issued a Request for Proposals ("RFP") in Project No. 40981 for an entity to provide services as an Evaluation, Measurement, and Verification ("EM&V") Contractor to assist the Commission in documenting the following:

- gross and net energy and demand impacts of utilities' individual energy efficiency and load management portfolios;
- determine cost effectiveness of utilities' programs;
- prepare and maintain a statewide Technical Reference Manual (TRM);
- provide feedback for the PUCT, utilities, and other stakeholders on program portfolio performance;
- provide input into the utilities' and ERCOT's planning activities.

On March 5<sup>th</sup> 2013, the PUCT awarded notice of proposal to Tetra Tech to implement their (EM&V) program. Tetra Tech shall develop an EM&V program that promotes effective program design, and consistent and streamlined reporting. Tetra Tech operates under the supervision and oversight of the PUCT.

An estimated cost of the above referenced services has been incorporated into this EEPR filing for 2014 and is noted in **Table 6.** 

### X. Market Transformation Program Results

### Small Business Pilot MTP (Open for Small Business MTP)

TNMP retained CLEAResult in 2013 to broaden participation in the commercial sector to include more small business customers. Open is a market transformation program designed to offer contractor and customer education on energy efficiency technologies, equip participating

contractors with the tools they need to succeed in generating revenue from projects in the small business market, and offer substantial incentive rates needed to move small (>10 and  $\leq$ 100 kW) and very small ( $\leq$ 10 kW) businesses to install energy efficient products such as high efficiency lighting and refrigeration measures. The program overcomes market barriers by providing incentives to help pay for energy efficiency upgrades. In addition, Open connects customers with participating contractors that are qualified to provide design and installation services for energy efficient technologies, and give customers any additional technical support to make them comfortable with the implementation of efficiency measures in their facilities.

The program design is a contractor direct install model enabling market transformation at the contractor and customer level. The program is based on contractor engagement and furthermore provides a Proposal Generation Software Application ("Proposal App") to empower participating contractors and to streamline program participation. The Proposal App enables participating contractors to perform facility surveys for eligible measures, generate and submit Customer Proposals and obtain electronic customer signature. The program focuses on educating and training participating contractors to provide customer support and will provide direct customer assistance as needed.

In 2013, TNMP projected acquisition of 315 kW demand savings from this program. TNMP verified and is reporting 314.94 kW. This included 433 projects in eight (8) counties.

### **SCORE/CitySmart MTP**

TNMP retained CLEAResult to offer the SCORE Market Transformation Program in 2008 and added the CitySmart component in 2009 to broaden program participation in schools and local government sectors. The Program was designed to overcome obstacles to energy efficiency projects such as the institutional disconnect between the finance and facilities departments, the lack of firsthand experience with efficiency measures, limited budgets, and the lack of management decision-making processes necessary for identifying, prioritizing, and completing projects that will improve energy performance and reduce operating costs. The 2013 SCORE/CitySmart MTP continued to provide non-cash incentives such as building energy analysis (benchmarking), energy master planning seminars, technical assistance, communications support, and monetary incentives for the installation of documented energy efficiency measures that reduce peak demand and energy use.

The SCORE/CitySmart program has created change that can be tracked among partners, service providers, engineers, designers, and architects. This change has been achieved by assisting participants to identify energy efficiency opportunities, make informed financial decisions, successfully install energy-saving projects in their facilities and provide Press Releases to promote accomplishments. In fact, many of the program partners have not previously considered improving their facilities' energy performance. Furthermore, the SCORE/CitySmart program has enrolled participants that had previously been unable to participate due to various barriers including lack of time, resources, and knowledge to complete the application process. The program has been effective in educating local contractors, architects, and engineers about newer, more cost-effective and energy efficient technologies for their customers. This is noteworthy as a number of these service providers represent new projects and savings for TNMP. The service provider component has been an integral part of developing long-term relationships and impact in the marketplace.

### **Tracking Success**

Pursuant to P.U.C. Subst. R. 25.181, as part of the 2009 Texas SCORE MTP, TNMP completed a baseline study of Texas schools and local governments. The primary objective of this study was to document the current status of energy use, key equipment, practices, and management within school and local government participants in TNMP's service territory. While the study confirmed that energy efficiency interest may not be a significant market barrier, financing, internal management and lack of energy efficiency education are all significant barriers. Many respondents noted they lack the time and procurement process to implement efficiency improvements, as well as the awareness of and familiarity with energy efficient technologies. Given the significant monetary and non-monetary barriers present in the marketplace, both resource acquisition and market transformation programs are needed.

### **Barriers to Entry**

In 2013, TNMP projected acquisition of 752 kW demand savings from this program. In the fourth quarter of 2013, TNMP offered increased cash incentive rates for SCORE/CitySmart participants in order to motivate additional projects that could be completed within the program year. Unfortunately, participants were not able to complete enough projects by year end in order to achieve the savings targeted. TNMP verified and is reporting only 367.4 kW, including participation by one hundred and seven (107) projects in ten (10) counties.

### **Commercial Solutions MTP**

TNMP retained CLEAResult to offer the Commercial Solutions component in 2010 to broaden program participation in commercial sectors. In 2012, TNMP separated the Commercial Solutions from the SCORE/CitySmart and Commercial Solutions MTP program. The Program was designed to overcome obstacles to energy efficiency projects such as the institutional disconnect between the finance and facilities departments, the lack of firsthand experience with efficiency measures, limited budgets, and the lack of management decision-making processes necessary for identifying, prioritizing, and completing projects that will improve energy performance and reduce operating costs. The 2013 Commercial Solutions MTP provided non-cash incentives such as technical assistance, communications support, and monetary incentives for the installation of documented energy efficiency measures that reduce peak demand and energy use.

### **Tracking Success**

The Commercial Solutions program has created change that can be tracked among partners, service providers, engineers, designers, and architects. This change has been achieved by assisting participants to identify energy efficiency opportunities, make informed financial decisions, successfully install energy-saving projects in their facilities and provide Press Releases to promote accomplishments. In fact, many of the program partners had not previously considered improving their facilities' energy performance. Furthermore, the Commercial Solutions program has enrolled participants that had previously been unable to participate due to various barriers including lack of time, resources and knowledge to complete the application process. The program has been effective in educating local contractors, architects, and engineers about newer, more cost-effective and energy efficient technologies for their participants. This is noteworthy as a number of these service providers represent new projects and savings for TNMP. The service provider component has been an integral part of developing long-term relationships and impact in the marketplace.

### **Barriers to Entry**

Pursuant with P.U.C. Subst. R. 25.181, as part of the 2011 Commercial Solutions MTP, TNMP completed a baseline study of the commercial market. The primary objective of this study was to document the status of energy use, key equipment, practices, and management within commercial customers in TNMP's service territory. While the study identified that respondents are interested in finding ways to save energy, it confirmed they lack the understanding of the benefits and

drawbacks of energy efficiency improvements. In addition, they reported encountering financing constraints, internal management restrictions, and lack of energy efficiency education. Many respondents noted they lack the time and procurement process to implement efficiency improvements, as well as the awareness of and familiarity with energy efficient technologies.

In 2013, TNMP projected acquisition of 1.077 MW demand savings from this program. TNMP verified and is reporting 1.083 MW. This included one hundred and thirty five (135) projects in seven (7) counties.

### **ENERGY STAR®** New Homes

The primary objective of the ENERGY STAR® program has been to achieve peak demand reductions and/or energy savings through increased sales of ENERGY STAR® homes and products. Additionally, the program is designed to condition the market so that consumers are aware of and demand ENERGY STAR® homes and products, and that builders have the technical capacity to supply them.

ENERGY STAR® recognized TNMP's accomplishments in the ENERGY STAR® Homes Program by awarding it the ES Outstanding Achievement Award in 2004-2008 and the Leadership in Housing Award for 2010, 2011, 2012, and 2013.

In 2013, TNMP certified 548 homes, resulting in 987.78 kW of reduced demand and 1,011,521 kWh of energy savings. In order to adapt to changes in the market, TNMP is updating the ENERGY STAR New Homes program to the High-Performance Homes program to incentivize energy efficiency savings that meet High-Performance specifications as well as ENERGY STAR qualifications.

### Low Income Weatherization

In 2013, TNMP partnered with five TDHCA sub-recipients and one not-for-profit agency to provide services under the Program. Collectively, these agencies covered each region in Texas served by TNMP. Two of the sub-recipient agencies that signed participation agreements were not able to compete homes due to staffing cuts related to the end of the weatherization funding available under ARRA.

The 2013 program achieved 104% of its spending goals, resulting in 148 homes weatherized, producing a savings of 274.76 kW and 467,813.50 kWh. The kW and kWh achievements were significantly higher than in 2012, largely due to an increased effort to target homes with electric resistance heating and replace these systems with high-efficiency heat pumps. Many of the affordable housing developments built in the 1970s and 1980s have HVAC system components that have not been replaced since the projects were built. Participating agencies were able to identify and conduct assessments on multifamily properties in Glen Rose and Galveston County. In addition to other improvements, 14 SEER / 8/2 HSPF heat pumps were installed in these units.

### XI. Current Energy Efficiency Cost Recovery Factor (EECRF)

TNMP filed its Application for Approval of an Energy Efficiency Cost Recovery Factor ("EECRF") on May 15, 2013. The application and supporting documents are available for download from the PUC Interchange under Control Number 41496. Rates charged per class are billed per kWh monthly:

- Residential Service = \$0.001259
- Secondary Service Less than or Equal to 5kW = \$0.008816
- Secondary Service Greater than 5kW = \$0.000619
- Primary Service = \$0.000113
- Lighting = \$0.000330

The EECRF was filed, approved, and is to be collected from Jan 1 - Dec 31, 2014. Rates went into effect March 1, 2014. TNMP will be filing for 2015 recovery by June 1, 2014.

### XII. Revenue Collected through EECRF (2013)

### **Revenue Collected**

TNMP collected \$5,195,600 from January 1, 2013 through December 31, 2013.

### XIII. Over/Under-recovery of Energy Efficiency Program Costs

TNMP had an over-recovery of \$190,738<sup>13</sup> for the 2013 program year, excluding the \$129,168 legal fees for processing Docket No. 41496 and the EM&V cost allocation of \$108,341. TNMP will true-up this amount, by rate class, in the 2015 EECRF filing.

### XIV. Performance Incentive Calculation

Per the PUCT Staff, the total program costs to be used in the performance bonus calculation should include the EM&V cost allocation of \$108,341 provided by the EM&V team for the program year, instead of the actual EM&V expenditures of \$105,465, as well as all rate case expenses. As a result, the total program expenditures for the bonus calculation will not match the actual total program expenditures exhibited in the applicable tables above.

For the purposes of the performance bonus calculation, TNMP's 2013 total program costs equaled \$4,811,441.

For the purposes of calculating the cost caps, TNMP's 2013 total program costs equaled \$4,682,532, exclusive of EM&V costs and municipal rate case expenses.

Because TNMP exceeded the 2013 goals by 202% for kW and 190% for kWh savings, TNMP will request a performance incentive of \$1,491,442 as part of the 2015 EECRF filing.

<sup>&</sup>lt;sup>13</sup> Over-recovery amount does not include the EM&V costs because they are already being collected through rates as approved in Docket No. 41496.

**Table 12: Performance Incentive Calculation** 

|                                     | kW                    | kWh          |
|-------------------------------------|-----------------------|--------------|
| Demand and Energy Goals             | 5,108                 | 8,949,000    |
| Demand and Energy Savings           | 10,294                | 16,980,657   |
|                                     |                       |              |
| Reported/Verified Total (including  |                       |              |
| HTR, measures with 10yr EUL, and    |                       |              |
| measures with EULs < or > 10 years) | 10,294                | 16,980,657   |
| Reported/Verified Hard-to-Reach     | 1,020                 | 20%          |
|                                     |                       |              |
| Avoided Cost                        |                       |              |
| per kW                              | \$80                  |              |
| per kWh                             | \$0.104 <sup>14</sup> |              |
| Inflation Rate                      | 2.00%                 |              |
| Discount Rate                       | 9.902259              | %            |
|                                     |                       |              |
| Total Avoided Cost                  |                       | \$19,725,860 |
|                                     |                       |              |
| 2013 Program Costs                  |                       | \$4,811,441  |
|                                     |                       |              |
| Net Benefits                        |                       | \$14,914,419 |
|                                     |                       |              |
| Performance Incentive               |                       | \$1,491,442  |
|                                     |                       |              |

<sup>&</sup>lt;sup>14</sup> PUC Subst. R. 25.181(d)(3) instructs that the commission revise the avoided cost of demand and energy annually. The bonus achieved as reflected above includes a per kWh calculation that is heavily impacted by an avoided cost of savings that will fluctuate in future years.

### Acronyms

**C&I** Commercial and Industrial

**CCET** Center for the Commercialization of Electric Technologies

**DR** Demand Response

**DSM** Demand Side Management

**EEP** Energy Efficiency Plan, which was filed as a separate document prior to April 2009

**EEPR** Energy Efficiency Plan and Report

**EER** Energy Efficiency Report, which was filed as a separate document prior to April

2009

**EE Rule** Energy Efficiency Rule, PUCT Substantive Rules § 25.181 and § 25.183

**ERCOT** Electric Reliability Council of Texas

HTR Hard-To-Reach

**M&V** Measurement and Verification

MTP Market Transformation Program

**PUCT** Public Utility Commission of Texas

**REP** Retail Electrical Provider

**RES** Residential

**SCORE** Schools Conserving Resources

**SOP** Standard Offer Program

## Glossary

Please refer to P.U.C. SUBST. R. 25.181 (c) for a full list of definitions.

# Appendix

# Reported Demand and Energy Reduction by County 2013

| Open for Small Business MTP |                     |        |           |  |
|-----------------------------|---------------------|--------|-----------|--|
| County                      | <b>Participants</b> | kW     | kWh       |  |
| Bosque                      | 15                  | 44.33  | 184,775   |  |
| Coryell                     | 3                   | 10.61  | 39,875    |  |
| Dallas                      | 2                   | 15.78  | 103,360   |  |
| Denton                      | 32                  | 209.18 | 1,002,150 |  |
| Fannin                      | 2                   | 10.19  | 66,726    |  |
| Lamar                       | 5                   | 12.00  | 60,819    |  |
| Rains                       | 2                   | 9.31   | 38,305    |  |
| Red River                   | 1                   | 3.54   | 11,644    |  |
| TOTAL                       | 62                  | 314.94 | 1,507,654 |  |

| SCORE/City | Smart MTP    |        |           |
|------------|--------------|--------|-----------|
| County     | Participants | kW     | kWh       |
| Bosque     | 3            | 19.09  | 76,061    |
| Brazoria   | 3            | 79.68  | 182,425   |
| Collin     | 1            | 1.84   | 6,128     |
| Coryell    | 1            | 10.24  | 26,548    |
| Denton     | 1            | 25.72  | 94,232    |
| Galveston  | 5            | 79.37  | 249,806   |
| Hamilton   | 3            | 16.94  | 76,172    |
| Hill       | 2            | 59.06  | 195,659   |
| Lamar      | 1            | 3.98   | 17,913    |
| Red River  | 1            | 71.39  | 86,921    |
| TOTAL      | 21           | 367.31 | 1,011,864 |

| Commercial Solutions MTP |                     |         |           |
|--------------------------|---------------------|---------|-----------|
| County                   | <b>Participants</b> | kW      | kWh       |
| Bosque                   | 2                   | 35.88   | 237,679   |
| Brazoria                 | 4                   | 238.76  | 1,257,382 |
| Coryell                  | 1                   | 1.67    | 9,035     |
| Denton                   | 10                  | 488.06  | 1,381,871 |
| Galveston                | 8                   | 308.22  | 1,593,544 |
| Pecos                    | 2                   | 5.14    | 20,620    |
| Reeves                   | 2                   | 5.66    | 24,898    |
| TOTAL                    | 29                  | 1083.39 | 4,525,029 |

| Load Management Program SOP |                     |       |       |
|-----------------------------|---------------------|-------|-------|
| County                      | <b>Participants</b> | kW    | kWh   |
| Brazoria                    | 14                  | 2,619 | 5,231 |
| Collin                      | 1                   | 0     | 0     |
| Coryell                     | 1                   | 10    | 19    |
| Denton                      | 3                   | 255   | 509   |
| Galveston                   | 13                  | 534   | 1,059 |
| Pecos                       | 7                   | 276   | 550   |
| Winkler                     | 4                   | 8     | 8     |
| TOTAL                       | 43                  | 3,702 | 7,376 |

| ENERGY STAF | R® New Homes | MTP    |           |
|-------------|--------------|--------|-----------|
| County      | Customers    | kW     | kWh       |
| Brazoria    | 9            | 14.96  | 18,794    |
| Galveston   | 539          | 972.81 | 992,727   |
| Total       | 548          | 987.77 | 1,011,521 |

| Residential SOP |           |          |           |
|-----------------|-----------|----------|-----------|
| County          | Customers | kW       | kWh       |
| Bosque          | 1         | 0.58     | 1,641     |
| Brazoria        | 636       | 352.90   | 820,376   |
| Collin          | 118       | 155.76   | 631,935   |
| Denton          | 1,008     | 1,037.95 | 2,492,783 |
| Galveston       | 1,198     | 781.02   | 1,457,341 |
| Grayson         | 1         | 1.64     | 5,146     |
| Hamilton        | 84        | 47.64    | 103,444   |
| Hill            | 7         | 3.96     | 11,190    |
| Hood            | 2         | 2.55     | 3,016     |
| Palo Pinto      | 23        | 13.55    | 28,157    |
| Red River       | 32        | 33.29    | 34,858    |
| Reeves          | 21        | 53.14    | 101,170   |
| Somervell       | 8         | 5.49     | 15,251    |
| Winkler         | 12        | 29.09    | 53,024    |
| Total           | 3,151     | 2,518.56 | 5,759,332 |

| Residential H | HVAC SOP  |       |         |
|---------------|-----------|-------|---------|
| County        | Customers | kW    | kWh     |
| Brazoria      | 3         | 1.99  | 6,918   |
| Galveston     | 70        | 38.81 | 114,683 |
| Total         | 73        | 40.8  | 121,601 |

| Hard-to-Rea | ach SOP   |        |           |
|-------------|-----------|--------|-----------|
| County      | Customers | kW     | kWh       |
| Brazoria    | 143       | 147.20 | 335,163   |
| Denton      | 288       | 247.79 | 733,869   |
| Galveston   | 302       | 242.38 | 504,585   |
| Hill        | 6         | 7.02   | 18,013    |
| Reeves      | 25        | 73.05  | 152,560   |
| Winkler     | 14        | 27.69  | 52,834    |
| Total       | 778       | 745.12 | 1,797,024 |

| Low Income Weatherization |           |        |         |
|---------------------------|-----------|--------|---------|
| County                    | Customers | kW     | kWh     |
| Bosque                    | 16        | 33.92  | 58,063  |
| Franklin                  | 1         | 0.35   | 910     |
| Galveston                 | 26        | 83.17  | 113,506 |
| Hill                      | 1         | 0.39   | 753     |
| Lamar                     | 32        | 10.9   | 28,106  |
| Red River                 | 14        | 8.89   | 24,359  |
| Somervell                 | 55        | 136.07 | 238,735 |
| Titus                     | 3         | 1.07   | 3,383   |
| Total                     | 148       | 274.76 | 467,814 |

| Underserved Co | unties      |           |
|----------------|-------------|-----------|
| Archer         | Holiday     | Matagorda |
| Clay           | Hunt        | McLennan  |
| Comanche       | Iredell     | Montague  |
| Cooke          | Jack        | Stephens  |
| Dickinson      | Jean        | Terrell   |
| Erath          | Jermyn      | Van       |
| Friendswood    | Johnson     | Ward      |
| Fullbright     | Krugerville | Winkler   |
| Hillcrest      | Leonard     | Young     |