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# **Texas-New Mexico Power Company**

## **2017 Energy Efficiency Plan and Report**

**16 Tex. Admin. Code §§ 25.181 and 25.183**

**March 28, 2017**

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Project No. 46907



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## Introduction

Texas-New Mexico Power Company (“TNMP”) presents this Energy Efficiency Plan and Report (“EEPR”) to comply with 16 Tex. Admin. Code §§ 25.181 and 25.183 (“TAC”), 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.”

16 TAC § 25.181(e)(1). 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 Organization**

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

### **Executive Summary**

- The Executive Summary highlights TNMP's reported achievements for 2016 and TNMP's plans for achieving its 2017 and 2018 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 EEPR.
- 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 (2012-2016).
- Section VI compares TNMP's projected energy and demand savings to its reported and verified savings by program for calendar years 2015 and 2016.
- Section VII documents TNMP's incentive and administration expenditures for the previous five years (2012-2016) broken out by program for each customer class.
- Section VIII compares TNMP's actual program funding for 2016 compared to its 2016 budget broken out by program for each customer class.
- Section IX describes the results from TNMP's MTPs.
- Section X reports on Research & Development and Administration Costs.
- Section XI details TNMP's current EECRF, collection, and future filing.
- Section XII reflects TNMP revenue collection through the 2016 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 plan to achieve the required demand savings reduction, as determined by the Final Order in Docket No. 46002, by December 31, 2017.

The annual demand goal for energy efficiency savings pursuant to 16 TAC § 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 by the data in **Table 4**, a four-tenths of 1% goal would be 5.0 MW, which is less than the amount of energy efficiency to be acquired for the most recent preceding year. Therefore, for 2017, TNMP has planned to achieve a goal of 5.68 MW.

The Plan also addresses the corresponding energy savings goal of 9,951 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 Evaluation, Measurement and Verification (“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 2016 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 12,253 MW in demand savings and 21,716 MWh in energy savings. The 2016 TNMP portfolio included the Hard-to-Reach Standard Offer Program, Residential Standard Offer Program, High-Performance Homes Market Transformation Program, and the Efficiency Connection Pilot Market Transformation Program, as well as the SCORE/CitySmart, Commercial Solutions, and Open for Small Business Market Transformation Programs, the Load Management Standard Offer Program and Low Income Weatherization Program.

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

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

Calendar Year	0.4% Peak Demand Goal	Peak Demand (MW) Goal <sup>2</sup>	Energy (MWh) Goal	Projected Demand Savings (MW)	Projected Energy Savings (MWh)	Projected Budget (000's)
2017	5.0	5.68	9,951	10.355	19,021	\$5,542
2018	5.1	5.61	9,828	9.258	17,328	\$5,156

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

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

## Energy Efficiency Plan

### I. 2017 Programs

#### A. 2017 Program Portfolio

TNMP plans to implement ten SOPs and MTPs. There is one pilot program planned for 2017, CoolSaver Pilot MTP.

These programs have been structured to comply with the rules governing program design and evaluation in 16 TAC § 25.181(j), (k), (l), 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

<sup>1</sup> 0.4% Peak Demand Goal numbers are calculated from Table 4; Peak Demand Goal was established in Docket No. 46002; Projected Savings are from Table 5; and Projected Budget from Table 6. All MW and MWh figures in this Table are given “at Meter.”

<sup>2</sup> Includes the effects of industrial opt-outs, as defined in 16 TAC § 25.181(w).

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): 2017 Energy Efficiency Program Portfolio**

2017 Programs	Target Market	Application
Open for Small Business MTP	Commercial <100kW	Retrofit
SCORE/CitySmart MTP	Schools, Government	Retrofit; New Construction
Commercial Solutions MTP	Commercial >100kW	Retrofit; New Construction
Load Management SOP	Commercial	Load Management
High-Performance Homes MTP	Residential	New Construction
Residential SOP	Residential	Retrofit
Efficiency Connection MTP	Residential	Retrofit
CoolSaver Pilot MTP	Residential	Retrofit
Hard-to-Reach SOP	Residential Income-qualified	Retrofit
Low Income Weatherization	Residential 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 [TNMPEfficiency.com](http://TNMPEfficiency.com). This website will be the primary method of communication used to provide potential project sponsors for the energy efficiency projects (Project Sponsors”) with program updates and information. **Table 2 (b)**, lists the links for all Program Manuals.

**Table 2 (b): 2017 Energy Efficiency Program Manuals**

2017 Programs	Program Manuals
Open for Small Business MTP	<a href="http://tnmpefficiency.com/downloads/2017%20TNMP%20Open%20Program%20Manual.pdf">http://tnmpefficiency.com/downloads/2017%20TNMP%20Open%20Program%20Manual.pdf</a>
SCORE/CitySmart MTP	<a href="http://www.tnmpefficiency.com/downloads/2017%20TNMP%20SCORE%20CitySmart%20Program%20Manual.pdf">http://www.tnmpefficiency.com/downloads/2017%20TNMP%20SCORE%20CitySmart%20Program%20Manual.pdf</a>
Commercial Solutions MTP	<a href="http://www.tnmpefficiency.com/downloads/2017_TNMP_ComSol_Program_Manual.pdf">http://www.tnmpefficiency.com/downloads/2017_TNMP_ComSol_Program_Manual.pdf</a>
Load Management SOP	<a href="http://tnmpefficiency.com/downloads/2017_TNMP_Peak_Load_Mgmt_Program_Manual_Final.pdf">http://tnmpefficiency.com/downloads/2017_TNMP_Peak_Load_Mgmt_Program_Manual_Final.pdf</a>
High-Performance Homes MTP	<a href="http://www.tnmpefficiency.com/downloads/2017_TNMP_High-Performance_Homes_Program_Guide.pdf">http://www.tnmpefficiency.com/downloads/2017_TNMP_High-Performance_Homes_Program_Guide.pdf</a>

Residential SOP	<a href="http://www.tnmpefficiency.com/downloads/2017_TNMP_Res_HTR_Program_Manual.pdf">http://www.tnmpefficiency.com/downloads/2017_TNMP_Res_HTR_Program_Manual.pdf</a>
Efficiency Connection MTP	<a href="http://tnmpefficiency.com/downloads/TNMP_EConnect_Program_Manual.pdf">http://tnmpefficiency.com/downloads/TNMP_EConnect_Program_Manual.pdf</a>
CoolSaver Pilot MTP	<a href="http://tnmpefficiency.com/downloads/TNMP_EConnect_Program_Manual.pdf">http://tnmpefficiency.com/downloads/TNMP_EConnect_Program_Manual.pdf</a>
Hard-to-Reach SOP	<a href="http://www.tnmpefficiency.com/downloads/2017_TNMP_Res_HTR_Program_Manual.pdf">http://www.tnmpefficiency.com/downloads/2017_TNMP_Res_HTR_Program_Manual.pdf</a>
Low Income Weatherization	<a href="http://tnmpefficiency.com/downloads/2017_TNMP_LIW_Manual_Final.pdf">http://tnmpefficiency.com/downloads/2017_TNMP_LIW_Manual_Final.pdf</a>

## ***B. Existing Programs***

### **Open for Small Business MTP (“Open 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 as the implementer to provide the energy efficiency and demand reduction design and solutions for the Open MTP throughout the 2017 program year. Under this program, TNMP helps 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. The Open MTP 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 on premise demand. All commercial customer premises with a peak annual billing demand less than 100 kW are eligible for the program. TNMP plans to leverage small business associations, government agencies, and service providers to serve these customers.

### **SCORE/CitySmart MTP (“SCORE/CitySmart 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 Public Utility Commission of Texas (“Commission” or “PUCT”).

The SCORE/CitySmart 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 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 MTP (“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 (“TRM”).

### ***Implementation Process***

TNMP continues its contract with CLEAResult 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 launched in 2009 in accordance with 16 TAC § 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 2017, the program will continue to initiate a maximum number of five curtailments, including one annual Scheduled Curtailment of one-to-two hour's duration and a maximum of four Unscheduled Curtailments of one-to-four hour's 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; and
- Maintain program information on the company website.

## **High-Performance Homes MTP (“HPH MTP”)**

### ***Program design***

The High-Performance Homes program promotes the construction and certification of new ENERGY STAR<sup>®</sup> 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. To be eligible for participation, homes must achieve at least a ten percent (10%) savings over Texas Baseline Reference Home requirements that have not adopted 2012 IECC code. For homes in jurisdictions that have adopted the 2012 IECC or later, they will receive a bonus incentive from the tier achieved. The Rater's primary responsibility is to work with

homebuilders to facilitate the construction of ENERGY STAR<sup>®</sup> certified and High-Performance homes that meet the performance requirements for the program. For 2017, the program design has been updated to have incentives paid in tiers to builders for installing certain measures in new construction applications based on the levels of energy efficiency achieved. The program also includes a bonus incentive for ENERGY STAR<sup>®</sup> version 3.0 or 3.1 compliant homes.

### ***Implementation process***

TNMP continues its contract with ICF to implement the HPH MTP, 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, incentives, and process; and
- 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 eligible measures installed in retrofit applications which provide verifiable demand and energy savings. Incentives are paid to Project Sponsors for certain eligible measures installed in retrofit applications as defined in the Texas TRM. RES SOP includes a higher incentive option to Project Sponsors who work in the underserved areas.

### ***Implementation Process***

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

## **Efficiency Connection MTP**

### ***Program Design***

Efficiency Connection MTP is a partnership between TNMP and REPs to help promote energy efficiency to TNMP residential customers by offering discounted LED lamps via an online marketplace. A third-party implementer facilitates REP participation and aids in the selection and management of an online vendor for the program website and order fulfillment. Savings will be calculated using assumptions derived from national statistics and localizing that information to make it relevant to the local market.

### ***Implementation Process***

TNMP has contracted with CLEAResult to implement the program in the TNMP service territory. CLEAResult will recruit REP participants and insure program goals are met. Incentives will be paid to the online vendor for verified demand and energy savings achieved through the program.

## ***Outreach Activities***

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

- Contract with a third-party program implementer to implement outreach and planning activities;

- Rely on REPs to market the program to existing customers via e-mail, phone calls, social media and direct mail; and
- Participate in appropriate industry-related meetings and events to generate awareness and interest.

## **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 eligible measures installed in retrofit applications as defined in the Texas TRM.

### ***Implementation Process***

TNMP continues 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;
- Participates in statewide outreach activities, as may be available; and
- 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 the Department of Energy'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 Texas Department of Housing & Community Affairs' ("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 TRM. Eligible measures include:

- Attic insulation
- Central AC replacement
- Infiltration control
- Refrigerator replacement (in multi-family housing only)
- Solar screens
- Wall insulation

### ***Outreach Activities***

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

## ***C. New Programs***

### **CoolSaver Pilot MTP**

In compliance with 16 TAC § 25.181(i)(4), TNMP has set aside budget in 2017 for a program to be delivered to customers by Retail Electric Providers (“REPs”) and established program rules and schedules that will give REPs sufficient time to plan, advertise, and conduct an energy efficiency program.

#### ***Program Design***

CoolSaver Pilot MTP is a partnership between TNMP and REPs to help promote energy efficiency to TNMP residential customers by offering discounted HVAC tune-ups. A third-party implementer facilitates REP participation and aids in the selection and management of qualified A/C contractors. CoolSaver focuses on training participating A/C contractors (trade allies) to perform high performance Air Conditioner (A/C) and Heat Pump tune-ups using the program toolkit and applying industry best practices in the marketplace. The program provides incentives, paid to the A/C contractor, to reduce the customer’s upfront cost of system diagnosis and correction. It also provides participating trade allies with training on best practices and discounts on high quality field tools. Energy and demand savings are captured through identifying A/C and heat pump system inefficiencies during the tune-up and then specifically addressing the diagnosed system inefficiencies.

#### ***Implementation Process***

TNMP has contracted with CLEAResult to implement the program in the TNMP service territory. CLEAResult will recruit REP participants and insure program goals are met. Incentives will be paid to program A/C contractors for verified demand and energy savings achieved through the program.

#### ***Outreach Activities***

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



- Contract with a third-party program implementer to implement outreach and planning activities;
- Rely on REPs to market the program to existing customers via e-mail, phone calls, social media and direct mail; and
- Participate in appropriate industry-related meetings and events to generate awareness and interest.

## 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 16 TAC § 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	41,876
Residential	134,313
Hard-to-Reach	70,431

## 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 1% 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 1% 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 the data in **Table 4**, a four-tenths of 1% goal would be 5.1 MW for 2018, which is less than the amount of energy efficiency to be acquired for the most recent preceding year. For 2017, TNMP has planned to achieve a goal of 5.68 MW,<sup>3</sup> and for 2018 TNMP has planned to achieve a goal of 5.61 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 2017 and 2018. Projected savings for 2017 and 2018 reflect the budget allocations designed to meet TNMP's goals required by PURA § 39.905.

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<sup>3</sup> Goal defined in Docket No. 46002.

<sup>4</sup> 16 TAC § 25.181(e)(1)(A) states that a utility's demand goal cannot be lower than its prior year's goal, except as adjusted in accordance with subsection (w).

**Table 4: Annual Growth in Demand and Energy Consumption**

Calendar Year	Peak Demand (MW) @ Source				Energy Consumption (MWh) @ Meter						Peak Demand (MW) For Goal		
	Total System		Residential & Commercial		Total System		Residential & Commercial				Residential & Commercial		
	Actual	Weather Adjusted	Actual	Weather Adjusted	Actual	Weather Adjusted	Actual	Weather Adjusted	Opt-Out	Net	T&D Loss Factor %	Adjusted Load	0.4% Peak Demand
(a)	(b)*	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)*	(m)	(n)
2012	1,739	1,671	1,442	1,374	7,936,888	7,907,039	5,337,487	5,367,336	(55,940)	5,311,396	6.30%	1,287	4.7
2013	1,564	1,603	1,266	1,305	7,910,840	7,920,127	5,434,270	5,443,557	(60,177)	5,383,380	6.16%	1,224	4.8
2014	1,597	1,651	1,314	1,368	8,205,700	8,185,100	5,588,260	5,567,660	(67,155)	5,500,505	6.24%	1,282	4.9
2015	1,675	1,641	1,409	1,376	8,489,769	8,474,260	5,777,472	5,761,963	(97,104)	5,664,860	5.50%	1,300	5.0
2016	1,708	1,717	1,368	1,377	8,741,755	8,829,767	5,859,233	5,947,245	(99,618)	5,847,627	6.30%	1,290	5.1

\*The columns (b) and (l) represent actual ERCOT settlement data for TNMP’s service territory, for the coincident peak for each year that was included in the four coincident peaks approved by the Commission for the ERCOT wholesale transmission matrix.

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

	2017	
Customer Class and Program	Demand Goal (kW)	Energy Goal (kWh)
<b>Commercial</b>	<b>6,000</b>	<b>9,129,000</b>
Open for Small Business MTP	450	2,250,000
SCORE/CitySmart MTP	725	2,750,000
Commercial Solutions MTP	825	4,125,000
Load Management SOP	4,000	4,000
<b>Residential</b>	<b>3,517</b>	<b>8,224,958</b>
High-Performance Homes MTP	567	1,865,806
Residential SOP	2,638	5,540,000
Efficiency Connection MTP	12	55,952
CoolSaver Pilot MTP	300	763,200
<b>Hard-to-Reach</b>	<b>838</b>	<b>1,667,100</b>
Hard-to-Reach SOP	355	857,143
Low Income Weatherization	483	809,957
<b>Total Annual Projected Savings</b>	<b>10,355</b>	<b>19,021,058</b>
	2018	
Customer Class and Program	Demand Goal (kW)	Energy Goal (kWh)
<b>Commercial</b>	<b>5,594</b>	<b>6,936,317</b>
Open for Small Business MTP	335	1,742,403
SCORE/CitySmart MTP	667	1,904,907
Commercial Solutions MTP	591	3,285,007
Load Management SOP	4,000	4,000
<b>Residential</b>	<b>2,645</b>	<b>7,644,957</b>
High-Performance Homes MTP	2,059	6,043,195
Residential SOP	361	1,029,103
CoolSaver MTP	225	572,659
<b>Hard-to-Reach</b>	<b>1,020</b>	<b>2,746,586</b>
Hard-to-Reach SOP	383	668,225
Low Income Weatherization	637	2,078,360
<b>Total Annual Projected Savings</b>	<b>9,258</b>	<b>17,327,860</b>

<sup>5</sup> The projected savings in Table 6 for 2017 are based on the Statements of Work in place for 2017. The projected savings in Table 6 for 2018 are based on the cost/kW from 2016, 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 actuals 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 16 TAC § 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 16 TAC § 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. 16 TAC § 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’s budget is designed to meet or exceed the goal established by Docket No. 46002 while remaining within the required cost caps.

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

2017	Incentives	Admin	R&D	Total Budget	EM&V
<b>Commercial</b>	<b>1,756,050</b>	<b>329,259</b>	<b>109,753</b>	<b>2,195,063</b>	
Open for Small Business MTP	520,050	97,509	32,503	650,063	
SCORE/CitySmart MTP	466,750	87,516	29,172	583,438	
Commercial Solutions MTP	569,250	106,734	35,578	711,563	
Load Management SOP	200,000	37,500	12,500	250,000	
<b>Residential</b>	<b>1,903,022</b>	<b>356,817</b>	<b>118,939</b>	<b>2,378,778</b>	
High-Performance Homes MTP	300,000	56,250	18,750	375,000	
Residential SOP	1,385,000	259,688	86,563	1,731,250	
Efficiency Connection MTP	22,022	4,129	1,376	27,528	
CoolSaver Pilot MTP	196,000	36,750	12,250	245,000	
<b>Hard-to-Reach</b>	<b>775,000</b>	<b>145,313</b>	<b>48,438</b>	<b>968,750</b>	
Hard-to-Reach SOP	300,000	56,250	18,750	375,000	
Low Income Weatherization	475,000	89,063	29,688	593,750	
<b>Total Budgets by Category</b>	<b>4,434,072</b>	<b>831,389</b>	<b>277,130</b>	<b>5,542,590</b>	<b>56,308</b>
2018	Incentives	Admin	R&D	Total Budget	EM&V
<b>Commercial</b>	<b>1,550,000</b>	<b>290,625</b>	<b>96,875</b>	<b>1,937,500</b>	
Open for Small Business MTP	450,000	84,375	28,125	562,500	
SCORE/CitySmart MTP	450,000	84,375	28,125	562,500	
Commercial Solutions MTP	450,000	84,375	28,125	\$ 562,500	
Load Management SOP	200,000	37,500	12,500	250,000	
<b>Residential</b>	<b>1,750,000</b>	<b>328,125</b>	<b>109,375</b>	<b>2,187,500</b>	
High-Performance Homes MTP	1,300,000	243,750	81,250	1,625,000	
Residential SOP	300,000	56,250	18,750	375,000	
CoolSaver MTP	150,000	28,125	9,375	187,500	
<b>Hard-to-Reach</b>	<b>825,000</b>	<b>154,688</b>	<b>51,563</b>	<b>1,031,250</b>	
Hard-to-Reach SOP	475,000	89,063	29,688	593,750	
Low Income Weatherization	350,000	65,625	21,875	437,500	
<b>Total Budgets by Category</b>	<b>4,125,000</b>	<b>773,438</b>	<b>257,813</b>	<b>5,156,250</b>	<b>56,314</b>

## 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 (2012-2016).

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

Calendar Year	Actual Demand Goal (MW)	Actual Energy Goal (MWh)	Actual Demand Reduction (MW)	Actual Energy Savings (MWh)
<b>2016</b>	5.74	10,056	12.253	21,716
<b>2015</b>	5.77	10,109	8.662	17,452
<b>2014</b>	5.8	10,161	9.602	17,119
<b>2013</b>	5.108	8,949	10.294	16,981
<b>2012</b>	4.8	8,410	7.144	12,839

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

**Table 8: Projected versus Reported and Verified Savings for 2016 and 2015 (at Meter)**

2016	Projected Savings <sup>6</sup>		Reported and Verified Savings	
Customer Class and Program	MW	MWh	MW	MWh
<b>Commercial</b>	<b>5.925</b>	<b>8,478</b>	<b>7.997</b>	<b>9,486</b>
Open for Small Business MTP	0.425	2,083	0.432	2,247
SCORE/CitySmart MTP	0.725	2,900	0.801	2,287
Commercial Solutions MTP	0.775	3,487	0.891	4,947
Load Management SOP	4.0	8	5.873	6
<b>Residential</b>	<b>3.232</b>	<b>7,118</b>	<b>3.355</b>	<b>10,145</b>
High-Performance Homes MTP	1.501	1,783	0.808	2,638
Residential SOP	1.714	5,242	2.487	7,302
Efficiency Connection Pilot MTP	0.018	93	0.008	40
Education Kits			0.051	165
<b>Hard-to-Reach</b>	<b>0.471</b>	<b>1,187</b>	<b>0.901</b>	<b>2,084</b>
Hard-to-Reach SOP	0.256	821	0.463	1,320
Low Income Weatherization	0.215	366	0.438	765
<b>Total Annual Goals</b>	<b>9.628</b>	<b>16,783</b>	<b>12.253</b>	<b>21,716</b>
2015	Projected Savings <sup>7</sup>		Reported and Verified Savings	
Customer Class and Program	MW	MWh	MW	MWh
<b>Commercial</b>	<b>5.917</b>	<b>7,240</b>	<b>5.746</b>	<b>9,208</b>
Open for Small Business MTP	0.432	1,750	0.434	2,189
SCORE/CitySmart MTP	0.700	2,457	0.923	3,225
Commercial Solutions MTP	0.700	3,024	0.648	3,790
Load Management SOP	4.085	9,450	3.742	3,742
<b>Residential</b>	<b>2.702</b>	<b>6,415</b>	<b>2.227</b>	<b>6,528</b>
High-Performance Homes MTP	1.093	1,328	0.783	1,840
Residential SOP	1.609	5,087	1.445	4,688
<b>Hard-to-Reach</b>	<b>0.678</b>	<b>1,696</b>	<b>0.689</b>	<b>1,716</b>
Hard-to-Reach SOP	0.433	1,279	0.431	1,222
Low Income Weatherization	0.245	417	0.258	494
<b>Total Annual Goals</b>	<b>9.297</b>	<b>15,351</b>	<b>8.662</b>	<b>17,452</b>

<sup>6</sup> Projected Savings for 2016 as reported in the EEPR filed in Project No. 45675.

<sup>7</sup> Projected Savings for 2015 as reported in the EEPR filed in Project No. 45675.



## VII. Historical Program Expenditures

This section documents TNMP’s incentive, administration, R&D, and EM&V expenditures for the previous five years (2012-2016) broken out by program for each customer class.

**Table 9: Historical Program Incentive and Administration Expenditures for 2012 through 2016<sup>8</sup>**

	2016				2015				2014			
	Incent.	Admin	R&D	EM&V	Incent.	Admin	R&D	EM&V	Incent.	Admin	R&D	EM&V <sup>9</sup>
<b>Commercial</b>	<b>1,833,623</b>	<b>168,492</b>	<b>34,586</b>	<b>22,338</b>	<b>1,599,573</b>	<b>169,439</b>	<b>39,150</b>	<b>30,517</b>	<b>1,403,224</b>	<b>129,315</b>	<b>23,851</b>	<b>38,078</b>
Large Commercial SOP												
Small Business MTP	508,604	46,047	9,593	4,203	516,884	54,280	12,651	4,663	390,500	34,621	6,637	10,123
Commercial Solutions MTP	588,470	53,278	11,100	8,892	451,727	47,437	11,056	8,512	409,649	36,319	6,963	16,762
SCORE/CitySmart MTP	470,019	42,554	8,865	7,946	495,812	52,067	12,135	13,179	419,194	37,165	7,125	5,521
Load Management SOP	266,530	26,613	5,027	1,297	135,150	15,655	3,308	4,163	183,880	21,211	3,125	5,671
<b>Residential</b>	<b>1,782,381</b>	<b>284,744</b>	<b>33,619</b>	<b>18,397</b>	<b>1,091,408</b>	<b>234,204</b>	<b>36,712</b>	<b>32,095</b>	<b>1,502,143</b>	<b>279,280</b>	<b>80,092</b>	<b>40,998</b>
Small Residential SOP												
High-Performance Homes MTP	387,858	35,328	7,316	3,498	305,814	35,736	17,485	7,700	201,173	41,089	43,419	10,007
Large Residential SOP	1,267,249	237,892	23,903	14,899	785,594	198,468	19,227	24,395	1,300,971	238,192	36,673	30,990
Residential SOP – HVAC												
Small DRG Solar PV Pilot												
Efficiency Connection Pilot MTP	19,035	1,723	359									
Education Kits	108,238	9,799	2,042									
<b>Hard-to-Reach</b>	<b>744,102</b>	<b>145,734</b>	<b>14,035</b>	<b>10,519</b>	<b>669,222</b>	<b>155,541</b>	<b>16,379</b>	<b>15,037</b>	<b>897,828</b>	<b>171,393</b>	<b>20,604</b>	<b>18,853</b>
Small Hard-to-Reach SOP												
Large Hard-to-Reach SOP	309,685	58,135	5,841	7,103	298,709	75,464	7,311	6,719	477,475	87,420	13,459	7,975
Low Income Weatherization	434,417	87,599	8,194	3,416	370,513	80,077	9,068	8,318	420,353	83,974	7,145	10,877
<b>Research &amp; Development</b>												
Energy Education Project												
General												
<b>Total Annual Expenditures</b>	<b>4,360,106</b>	<b>598,970</b>	<b>82,240</b>	<b>51,254</b>	<b>3,360,203</b>	<b>559,183</b>	<b>92,241</b>	<b>77,649</b>	<b>3,803,195</b>	<b>579,989</b>	<b>124,547</b>	<b>97,928</b>

<sup>8</sup> 2016 budget found at Table 10 in the current EEPR; 2015 budget defined in Project No. 45675; 2014 budget defined in Project No. 44480; 2013 budget defined in Project No. 42264; 2012 budget defined in Project No. 41196.

<sup>9</sup> EM&V actual expenditures were allocated based on allocation factors provided by the EM&V contractor.

**Table 9 Continued**

	2013				2012		
	Incent.	Admin	R&D	EM&V <sup>10</sup>	Incent.	Admin	R&D
<b>Commercial</b>	<b>1,445,795</b>	<b>158,846</b>	<b>4,864</b>	<b>38,504</b>	<b>1,067,742</b>	<b>150,086</b>	<b>60,000</b>
Large Commercial SOP					41,418	27,597	
Small Business MTP	393,750	40,395	874	6,668			60,000
Commercial Solutions MTP	548,882	56,309	1,218	15,981	352,694	28,548	
SCORE/CitySmart MTP	353,103	36,225	784	14,430	549,148	44,449	
Load Management SOP	150,060	25,918	1,988	1,425	124,482	49,492	
<b>Residential</b>	<b>1,372,654</b>	<b>329,131</b>	<b>22,005</b>	<b>46,178</b>	<b>957,514</b>	<b>178,824</b>	<b>935</b>
Small Residential SOP	470,802	123,279	7,548	7,230	145,681	29,630	
High-Performance Homes MTP	190,240	19,517	3,050	9,327	135,840	13,810	
Large Residential SOP	675,211	176,803	10,824	20,753	567,791	109,382	
Residential SOP – HVAC	36,401	9,532	584	8,868			
Small DRG Solar PV Pilot					108,202	26,001	935
Efficiency Connection Pilot MTP							
Education Kits							
<b>Hard-to-Reach</b>	<b>949,136</b>	<b>229,308</b>	<b>14,106</b>	<b>20,784</b>	<b>722,401</b>	<b>149,907</b>	
Small Hard-to-Reach SOP	133,500	34,957	2,140	5,930	87,567	17,810	
Large Hard-to-Reach SOP	416,402	109,035	6,675	9,518	317,684	64,614	
Low Income Weatherization	399,234	85,316	5,290	5,336	317,150	67,482	
<b>Research &amp; Development</b>			<b>177,254</b>				<b>104,250</b>
Energy Education Project			177,254				101,250
General							3,000
<b>Total Annual Expenditures</b>	<b>3,767,585</b>	<b>717,285</b>	<b>218,229</b>	<b>105,466</b>	<b>2,747,658</b>	<b>478,816</b>	<b>165,185</b>

<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 2016

As shown in **Table 10**, TNMP spent a total of \$5,041,315, not including EM&V costs, on all of its energy efficiency programs in 2016 to meet the Commission & PURA's mandated budget. The total forecasted budget for 2016 was \$5,305,000 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 2016**

	Total Projected Budget	Numbers of Customers Participating	Actual Funds Expended (Incentives)	Actual Funds Expended (Admin) <sup>11</sup>	Actual Funds Expended (R&D)	Total Funds Expended	Funds Committed (Not Expended)	Funds Remaining	% change <sup>12</sup>
<b>Commercial</b>	2,128,125	235	1,833,623	185,633	34,586	2,053,842	0	74,283	
Open for Small Business MTP	637,500	107	508,604	50,802	9,593	568,999		68,501	11%
Commercial Solutions MTP	644,219	21	588,470	58,779	11,100	658,349		-14,130	-2%
SCORE/CitySmart MTP	596,406	12	470,019	46,948	8,865	525,833		70,573	12%
Load Management	250,000	95	266,530	29,104	5,027	300,661		-50,661	-20%
<b>Residential</b>	2,248,125	4,472	1,782,381	301,406	33,619	2,117,406	0	130,719	
High-Performance Homes	750,000	735	387,858	38,954	7,316	434,128		315,872	42%
Residential SOP	1,470,364	1,519	1,267,249	249,739	23,903	1,540,891		-70,527	-5%
Efficiency Connection Pilot MTP	27,761	119	19,035	1,901	359	21,296		6,465	23%
Education Kits	0	2,099	108,238	10,811	2,042	121,091		-121,091	100%
<b>Hard-to-Reach</b>	928,750	460	744,102	152,691	14,035	910,828	0	17,922	
Hard-to-Reach SOP	387,500	295	309,685	61,030	5,841	376,557		10,943	3%
Low Income Weatherization	541,250	165	434,417	91,660	8,194	534,271		6,979	1%
<b>Total Annual Expenditures</b>	5,305,000	5,167	4,360,106	639,730	82,240	5,082,076	0	222,924	
EM&V						51,254			

<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>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 10%, the funds not spent in other programs in the same customer class were reallocated so they could be spent to reach TNMP's savings goal.

TNMP’s 2016 targeted low income program met the requirements in the EE Rule, whereby “annual expenditures for the targeted low income energy efficiency program are not less than 10% of the utilities energy efficiency budget for the program year.” as detailed in **Table 11** below:

**Table 11: Meeting Low Income Weatherization Expenditure Requirement**

2016 Total Expenditures	LIW Expenditures	% of Expenditures
\$5,041,315	\$530,210	10.5%

## **IX. Market Transformation Program Results**

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

TNMP retained CLEAResult in 2013 to broaden participation in the commercial sector to include more small business customers. Open MTP is a 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 ( $\leq 100$  kW peak demand) 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 MTP connects customers with participating contractors that are qualified to provide design and installation services for energy efficient technologies and any additional technical support as needed to make the customer 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 2016, TNMP projected acquisition of 425 kW demand savings from this program. TNMP verified and is reporting 432.13 kW. This included 1,509 projects in nine counties.

## **SCORE/CitySmart MTP**

TNMP retained CLEAResult to offer the SCORE/CitySmart MTP in 2009 to 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 2016 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 MTP 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 MTP 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 16 TAC § 25.181, as part of the 2009 Texas SCORE/CitySmart 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 2016, TNMP projected acquisition of 725 kW demand savings from this program. TNMP verified and is reporting 801.43 kW, including participation by 54 projects in seven counties.

## **Commercial Solutions MTP**

TNMP retained CLEAResult to offer the Commercial Solutions component in 2009 to broaden program participation in commercial sectors. In 2012, TNMP separated the CS MTP from the SCORE/CitySmart MTP. 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 2016 CS MTP provided non-cash incentives such as technical assistance and communications support as well as monetary incentives for the installation of documented energy efficiency measures that reduce peak demand and energy use.

## **Tracking Success**

The CS MTP 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 CS MTP 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 16 TAC § 25.181, as part of the 2011 CS 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 2016, TNMP projected acquisition of 775 kW demand savings from this program. TNMP verified and is reporting 890.87 kW. This included 40 projects in four counties.

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

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

Pursuant with 16 TAC § 25.181, as part of the 2015 HPH MTP, TNMP completed a baseline study of the residential new construction market. The primary objective of this study was to analyze and demonstrate standard construction practices do not meet the current statewide energy code. The results of the study augmented the HPH MTP by quantifying the current new home construction market, and results have been used to generate a Texas Baseline Reference Home to be used in conjunction with the 2012 IECC code to incentivize builders to comply with higher efficiency baseline.

ENERGY STAR<sup>®</sup> has recognized TNMP's accomplishments in the ENERGY STAR<sup>®</sup> Homes Program by awarding it the ES Outstanding Achievement Award in 2004-2008 and the Leadership in Housing Award for 2010, 2011, 2012, 2013, 2014, 2015, and 2016. TNMP was also recognized by ENERGY STAR by becoming a Partner of the Year award winner for program year 2015.

In 2016, TNMP certified 735 homes, resulting in 808 kW of reduced demand and 2,638,239 kWh of energy savings. In order to adapt to changes in the market, TNMP will continue the High-Performance Homes program update made in 2015 to incentivize energy efficiency savings that meet High-Performance specifications as well as ENERGY STAR<sup>®</sup> qualifications in 2017.

## **Low Income Weatherization**

In 2016, 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 the American Recovery and Reinvestment Act (“ARRA”).

The 2016 program spent 10.5% of the total energy efficiency budget, resulting in 165 homes weatherized, producing a savings of 438 kW and 764,801 kWh. The kW and kWh achievements were largely due to the 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 Bosque, Somervell and Galveston counties. In addition to other improvements, 14 SEER / 8.2 HSPF heat pumps were installed in these units.

## **Efficiency Connection Pilot MTP**

In 2016, TNMP partnered with CLEAResult to pilot a REP program that offers discounted LED bulbs to customers through an online website. CLEAResult worked diligently to recruit and manage six participating REPs in this program. The Efficiency Connection Pilot MTP sold a total of 1,972 bulbs while also acquiring a total of 8 kW in demand savings and 39,717 kWh in energy savings in 2016.

## **X. Research & Development and Administration Cost Reporting**

### ***Research & Development (“R&D”)***

R&D costs for the 2016 portfolio include development of a new tracking system. TNMP is investing in the development of a new electronic reporting and tracking system to manage TNMP’s energy efficiency portfolio and simplify reporting.



### ***Administration Costs***

Administration costs for the 2016 portfolio include, but are not limited to, outsourced program administration, marketing, energy efficiency employees' payroll, EUMMOT, costs associated with regulatory filings, and EM&V admin outside of the actual cost associated with the EM&V contractor.

Generally, such costs benefit the entire portfolio with costs being directly assigned, where possible, to the specific program requiring such costs. Any costs (or portions thereof) which are not directly assignable to a specific program are allocated among the programs in proportion to the program incentive costs.

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

TNMP filed its Application for Approval of an Energy Efficiency Cost Recovery Factor on May 27, 2016. The application and supporting documents are available for download from the PUCT Interchange under Docket No. 46002. Rates charged per class are billed per kWh monthly:

- Residential Service = \$0.001232
- Secondary Service Less than or Equal to 5kW = \$(0.009022)
- Secondary Service Greater than 5kW = \$0.001271
- Primary Service = \$0.000050
- Lighting = \$0.000400

The EECRF was filed, approved, and is being collected from Jan 1 – Dec 31, 2017. Rates went into effect March 1, 2017. TNMP will be filing for 2018 EECRF recovery by June 1, 2017.

## **XII. Revenue Collected through EECRF (2016)**

### **Revenue Collected**

TNMP collected \$ 6,065,138.84 from January 1, 2016 through December 31, 2016.

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

TNMP had an over-recovery of \$356,393<sup>13</sup> for the 2016 program year, including its rate case expenses of \$45,435 for processing Docket No. 46002. TNMP will true-up this amount, by rate class, in the 2017 EECRF filing.

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<sup>13</sup> Over-recovery amount includes a true-up to the EM&V projected costs collected through rates as approved in Docket No. 44778.

#### **XIV. Performance Incentive Calculation**

As directed by the PUCT Staff, the total program costs to be used in the performance bonus calculation should include the EM&V cost allocation of \$56,308 provided by the EM&V team for the program year, 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 2016 total program costs equaled \$5,097,623.

Accordingly, for the purposes of calculating the cost caps, TNMP's 2016 total program costs equaled \$5,030,822, exclusive of EM&V costs and municipal rate case expenses.

Because TNMP exceeded the 2016 goals by 213% for kW and 216% for kWh savings, TNMP will request a performance incentive of \$1,083,774 as part of the 2018 EECRF filing.

**Table 12: Performance Incentive Calculation**

	kW	kWh
<b>Demand and Energy Goals</b>	5,740	10,056,000
<b>Demand and Energy Savings</b>	12,253	21,716,161
<i>Reported/Verified Total (including HTR, measures with 10yr EUL, and measures with EULs &lt; or &gt; 10 years)</i>		
<i>Reported/Verified Hard-to-Reach</i>	463	
<b>Avoided Cost</b>		
<i>per kW</i>	\$80	
<i>per kWh</i>	\$0.05088	
<i>Inflation Rate</i>	2.00%	
<i>Discount Rate</i>	9.90225%	
<b>Total Avoided Cost</b>		<b>\$15,935,368</b>
<b>2016 Program Costs</b>		<b>\$5,097,623</b>
<b>Net Benefits</b>		<b>\$10,837,745</b>
<b>Performance Incentive</b>		<b>\$1,083,774</b>

## Acronyms

<b>C&amp;I</b>	Commercial and Industrial
<b>CCET</b>	Center for the Commercialization of Electric Technologies
<b>DR</b>	Demand Response
<b>DSM</b>	Demand Side Management
<b>EEP</b>	Energy Efficiency Plan, which was filed as a separate document prior to April 2009
<b>EEPR</b>	Energy Efficiency Plan and Report
<b>EER</b>	Energy Efficiency Report, which was filed as a separate document prior to April 2009
<b>EE Rule</b>	Energy Efficiency Rule, 16 Tex. Admin. Code § 25.181 and § 25.183
<b>EM&amp;V</b>	Evaluation, Measurement and Verification
<b>ERCOT</b>	Electric Reliability Council of Texas
<b>HTR</b>	Hard-To-Reach
<b>M&amp;V</b>	Measurement and Verification
<b>MTP</b>	Market Transformation Program
<b>PUCT</b>	Public Utility Commission of Texas
<b>REP</b>	Retail Electrical Provider
<b>RES</b>	Residential
<b>SCORE</b>	Schools Conserving Resources
<b>SOP</b>	Standard Offer Program

## **Glossary**

Please refer to 16 TAC § 25.181(c) for a full list of definitions.

## Appendix

### Reported Demand and Energy Reduction by County 2016

Open for Small Business MTP			
County	Participants	kW	kWh
Brazoria	20	56.27	289,916
Collin	2	11.07	72,535
Coryell	2	21.81	94,290
Denton	28	127.13	631,953
Fannin	1	7.29	28,437
Galveston	51	196.28	1,068,598
Montague	1	8.26	36,014
Red River	1	1.06	7,266
Somervell	1	2.96	17,741
<b>TOTAL</b>	<b>107</b>	<b>432.13</b>	<b>2,246,750</b>

Commercial Solutions MTP			
County	Participants	kW	kWh
Brazoria	1	17.25	112,995
Collin	1	177.09	1,075,936
Denton	12	456.42	2,292,307
Galveston	8	240.11	1,466,019
<b>TOTAL</b>	<b>22</b>	<b>890.87</b>	<b>4,947,257</b>

SCORE/CitySmart MTP			
County	Participants	kW	kWh
Brazoria	4	303.19	911,783
Collin	1	34.07	84,222
Coryell	1	1.03	5,817
Denton	2	169.44	523,763
Galveston	3	281.51	725,117
Hill	1	3.87	25,335
Palo Pinto	1	8.32	10,530
<b>TOTALS</b>	<b>13</b>	<b>801.43</b>	<b>2,286,567</b>

Load Management SOP			
County	# of Sites	kW	kWh
Bosque	8	1,858	1,858
Brazoria	26	2,840	2,840
Collin	2	9	9
Coryell	2	43	43
Denton	12	485	485
Fannin	1	4	4
Galveston	17	96	96
Grayson	1	17	17
Hamilton	2	13	13
Hunt	1	6	6
Johnson	1	-	-
Lamar	1	12	12
Montague	1	16	16
Pecos	5	257	257
Rains	1	-	-
Red River	1	1	1
Reeves	3	29	29
Valley Mills	1	-	-
Whitewright	1	12	12
Winkler	8	175	175
<b>Total</b>	<b>95</b>	<b>5,873</b>	<b>5,873</b>

High-Performance Homes MTP			
County	Homes	kW	kWh
Anderson	5	5.7	15,255
Archer	2	1.69	6,167
Brazoria	106	94.28	340,203
Denton	1	0.47	2,428
Franklin	1	0.73	3,039
Galveston	618	702.59	2,262,563
Harris	1	1.51	5,448
Montgomery	1	0.99	3,136
<b>TOTAL</b>	<b>735</b>	<b>807.96</b>	<b>2,638,239</b>

Residential SOP			
County	Participants	kW	kWh
Bosque	3	1.73	10,187
Brazoria	426	531.9	1,443,153
Collin	60	84.99	381,007
Coryell	101	208.44	484,431
Denton	39	83	209,272
Fannin	253	704.70	2,028,087
Galveston	273	222.02	669,819
Grayson	3	4.67	11,375
Hamilton	8	21.29	48,401
Hunt	79	245.72	662,512
Lamar	26	55.77	158,767
Rains	90	201.68	585,697
Red River	12	30.96	86,245
Reeves	138	67.95	473,003
Somervell	3	6.19	13,155
Titus	5	16.33	37,044
<b>TOTAL</b>	<b>1,519</b>	<b>2,487.31</b>	<b>7,302,157</b>

Hard-to-Reach SOP			
County	Participants	kW	kWh
Bosque	10	18.831	41,675
Brazoria	66	110.005	328,628
Collin	6	5.749	45,887
Denton	69	146.301	339,482
Fannin	28	89.597	250,567
Galveston	109	79.733	288,529
Hill	3	3.583	6,589
Hunt	2	5.767	10,378
Rains	1	1.234	3,323
Somervell	1	1.962	4,536
<b>TOTAL</b>	<b>295</b>	<b>462.762</b>	<b>1,319,595</b>



Low Income Weatherization			
County	Participants	kW	kWh
Bosque	1	3.44	7,288.80
Galveston	58	214.02	332,605.64
Lamar	4	2.7	4,422.82
Polk	1	0.66	821.28
Rains	3	4.17	9,306.84
Red River	45	31.29	79,845.52
Reeves	48	177	310,416.61
Titus	4	2.62	9,452.65
Winkler	1	2.39	10,641.14
<b>Total</b>	<b>165</b>	<b>438.29</b>	<b>764,801.28</b>

Efficiency Connection Pilot MTP			
County	Participants	kW	kWh
Bosque	2	0.30	1,282
Brazoria	22	1.70	8,621
Coryell	2	0.11	472
Dallas	4	0.47	2,098
Denton	22	1.04	4,501
Galveston	48	3.19	15,969
Grayson	1	0.17	741
Hamilton	2	0.08	355
Hill	1	0.05	233
Johnson	2	0.29	1,242
Lamar	3	0.25	1,089
Montague	2	0.13	560
Palo Pinto	1	0.09	457
Pecos	3	0.27	1,220
Rains	1	0.14	598
Reeves	3	0.06	278
<b>TOTAL</b>	<b>119</b>	<b>8.36</b>	<b>39,717</b>

<b>Education Kits</b>			
<b>County</b>	<b># Kits</b>	<b>kW</b>	<b>kWh</b>
Hamilton	59	1.50	4,740
Galveston	561	13.01	43,253
Brazoria	496	11.50	38,241
Bosque	135	3.43	10,846
Coryell	45	1.14	3,615
Somervell	132	3.36	10,605
Collin	245	6.23	19,683
Denton	327	8.32	26,270
Young	56	1.42	4,499
Montague	34	0.86	2,731
Palo Pinto	9	0.23	723
<b>Total</b>	<b>2,099</b>	<b>51.02</b>	<b>165,206</b>