

Control Number: 48146



Item Number: 14

Addendum StartPage: 0

# Texas-New Mexico Power Company 2018 Energy Efficiency Plan and Report 16 Tex. Admin. Code §§ 25.181 and 25.183

Amended May 18, 2018

Project No. 48146



1

18 AM 10: 40

# **Table of Contents**

IN	TRODUCTION
EN	ERGY EFFICIENCY PLAN AND REPORT ORGANIZATION4
EX	ECUTIVE SUMMARY
EN	IERGY EFFICIENCY PLAN6
I.	2018 PROGRAMS
A B C	8. Existing Programs
II.	CUSTOMER CLASSES17
III	. PROJECTED ENERGY EFFICIENCY SAVINGS AND GOALS17
IV.	PROGRAM BUDGETS21
EN	ERGY EFFICIENCY REPORT23
V.	HISTORICAL DEMAND SAVINGS GOALS AND ENERGY TARGETS FOR PREVIOUS FIVE YEARS
VI.	PROJECTED, REPORTED AND VERIFIED DEMAND AND ENERGY SAVINGS24
	I. HISTORICAL PROGRAM EXPENDITURES
VI	II. PROGRAM FUNDING FOR CALENDAR YEAR 201727
IX.	MARKET TRANSFORMATION PROGRAM RESULTS28
X.	RESEARCH & DEVELOPMENT AND ADMINISTRATION COST REPORTING
XI.	CURRENT ENERGY EFFICIENCY COST RECOVERY FACTOR ("EECRF")
XI	I. REVENUE COLLECTED THROUGH EECRF (2017)
	II. OVER/UNDER-RECOVERY OF ENERGY EFFICIENCY PROGRAM COSTS
ΧГ	V. PERFORMANCE INCENTIVE CALCULATION
AC	RONYMS
GL	OSSARY
AP	PENDIX

## 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."

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 2017 and TNMP's plans for achieving its 2018 and 2019 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 (2013-2017).
- Section VI compares TNMP's projected energy and demand savings to its reported and verified savings by program for calendar years 2016 and 2017.
- Section VII documents TNMP's incentive and administration expenditures for the previous five years (2013-2017) broken out by program for each customer class.
- Section VIII compares TNMP's actual program funding for 2017 compared to its 2017 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 2017 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. 47217, by December 31, 2018.

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 5.1 MW, which is less than the amount of energy efficiency to be acquired for the most recent preceding year. Therefore, for 2018, TNMP has planned to achieve a goal of 5.61 MW.

The Plan also addresses the corresponding energy savings goal of 9,829 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 2017 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 10.684 MW in demand savings and 20,763 MWh in energy savings. The 2017 TNMP portfolio included the Residential and Hard-to-Reach Standard Offer Programs, High-Performance Homes Market Transformation Program, Efficiency Connection and CoolSaver Pilot Market Transformation Programs, 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**.

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)
2018	5.1	5.61	9,829	11.183	18,355	\$5,373
2019	5.1	5.53	9,689	10.458	17,524	\$5,394

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

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
- Retail Electric Provider ("REP") Pilot MTP
- Hard-to-Reach SOP
- Low Income Weatherization

# **Energy Efficiency Plan**

## I. 2018 Programs

## A. 2018 Program Portfolio

TNMP plans to implement nine SOPs and MTPs. There is one pilot program planned for 2018, Retail Electric Provider 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>&</sup>lt;sup>1</sup> 0.4% Peak Demand Goal numbers are calculated from Table 4; Peak Demand Goal was established in Docket No.47217; 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>&</sup>lt;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.

2018 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
REP Pilot MTP	Residential	Retrofit
Hard-to-Reach SOP	Residential Income-qualified	Retrofit
Low Income Weatherization	Residential Income-qualified	Retrofit

 Table 2 (a): 2018 Energy Efficiency Program Portfolio

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 <u>TNMPefficiency.com</u>. This website will be the primary method of communication used to provide potential project sponsors ("Project Sponsors") for the energy efficiency projects with program updates and information. **Table 2 (b)**, lists the links for all Program Manuals.

### Table 2 (b): 2018 Energy Efficiency Program Manuals

2018 Programs	Program Manuals
Open for Small Business MTP	http://www.tnmpefficiency.com/downloads/TNMP%20Open%20Progra m%20Manual.pdf
SCORE/CitySmart MTP	http://www.tnmpefficiency.com/downloads/TNMP%20SCORE%20CityS mart%20Program%20Manual.pdf
Commercial Solutions MTP	http://www.tnmpefficiency.com/downloads/TNMP%20ComSol%20Progr am%20Manual.pdf
Load Management SOP	http://tnmpefficiency.com/downloads/TNMP%202018%20LM%20Progra m%20Manual.pdf
High-Performance Homes MTP	http://www.tnmpefficiency.com/downloads/2018-TNMP-HPH-Program- Guide.pdf
Residential SOP	http://www.tnmpefficiency.com/downloads/2018%20TNMP%20Residen tial%20Program%20Manual.pdf
REP Pilot MTP	http://tnmpefficiency.com/downloads/TNMP_EConnect_Program_Manu al.pdf
Hard-to-Reach SOP	http://www.tnmpefficiency.com/downloads/2018%20TNMP%20Residen tial%20Program%20Manual.pdf
Low Income Weatherization	http://tnmpefficiency.com/downloads/2018%20TNMP%20LIW%20Manu al.pdf

## **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 2018 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 (<150kW) 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** Activities

The program targets small commercial customers based on premise demand. All commercial customer premises with a peak annual billing demand less than 150 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 Standard Offer Program

#### **Program Description**

The TNMP Load Management Standard Offer Program ("SOP") 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 2018, 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 five percent (5%) kWh savings over the Texas Baseline Reference Home (TBRH) established by the PUCT in the TRM Version 5.0 for Program Year 2018, Volume 4: Measurement & Verification Protocols. 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 2018, 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.

#### 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.

# 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, but are not limited to:

- Attic insulation
- Central AC replacement
- Infiltration control
- 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.

## **Energy Education Program**

## Program Design

During the fall of 2017, TNMP contracted with The National Theatre for Children ("NTC") to provide education about the conservation of electricity. The program featured live in-school performances, student playbooks, teacher guides, classroom posters and digital games and activities to educate students and the community about the benefits of conserving electricity.

## Implementation process

NTC verifies a list of eligible schools within the TNMP service area and schedules the performance and distribution of materials with each school. NTC also conducts evaluation of the program by teachers and provides feedback to TNMP.

## C. New Programs

## Retail Electric Provider Pilot MTP ("REP Pilot MTP")

TNMP has combined Efficiency Connection with CoolSaver to create a REP Pilot MTP that will offer both measures as options, and will be reporting on the residential offering collectively.

## Program Design

REP Pilot MTP is a partnership between TNMP and Retail Electric Providers ("REPs") that offers energy saving products and services to end use residential customers. Participating REPs market the energy saving measures and services to their customers in the TNMP service territory. REPs are able to participate in any or all of the following options:

- Efficiency Connection
- CoolSaver

#### **Efficiency Connection**

Efficiency Connection is for 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

#### CoolSaver

CoolSaver is a partnership between a third-party implementer and REPs to help promote energy efficiency to TNMP residential customers by offering discounted HVAC tune-ups and A/C replacements. 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 contractors 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 or replacement and then specifically addressing the diagnosed system inefficiencies.

#### Implementation Process

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

#### **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.

Customer Class	Number of Customers
Commercial	42,075
Residential	141,451
Hard to Reach	65,652

Table 3: Summary of Customer Classes

## 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 2019, which is less than the amount of energy efficiency to be acquired for the most recent preceding year. For 2018, TNMP has planned to achieve a goal of 5.61 MW,<sup>3</sup> and for 2019 TNMP has planned to achieve a goal of 5.53 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 2018 and 2019. Projected savings for 2018 and 2019 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. 47217.

<sup>&</sup>lt;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).

		Peak Deman	d (MW) @ S	ource	Energy Consumption (MWh) @ Meter							Peak Demand (MW) For Goal		
	I I OTAL SYSTEM		sidential & Total System		System	Residential & Commercial				Residential & Commercial				
Calendar Year	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)	(I)*	(m)	(n)	
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	
2017	1,737	1,739	1,407	1,408	9,148,760	9,281,843	6,034,732	6,167,815	(129,138)	6,038,677	6.48%	1,317	5.1	

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

\*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.

	201	8 :			
Customer Class and Program	Demand Goal (kW)	Energy Goal (kWh)			
Commercial	7,050	10,155,000			
Open for Small Business MTP	450	2,000,000			
SCORE/CitySmart MTP	600	2,750,000			
Commercial Solutions MTP	1,000	5,400,000			
Load Management SOP	5,000	5,000			
Residential	3,176	6,493,798			
High-Performance Homes MTP	475	1,600,000			
Residential SOP	2,603	4,594,031			
REP Pilot MTP	98	299,767			
Hard-to-Reach	957	1,706,276			
Hard-to-Reach SOP	501	1,009,166			
Low Income Weatherization	456	697,110			
Energy Education Program	0	0			
Total Annual Projected Savings	11,183	18,355,074			
	2019				
Customer Class and Program	Demand Goal (kW)	Energy Goal (kWh)			
Commercial	6,757	9,677,865			
Open for Small Business MTP	339	1,504,088			
SCORE/CitySmart MTP	690	4,465,554			
Commercial Solutions MTP	727	3,703,223			
Load Management SOP	5,000	5,000			
Residential	2,922	6,468,627			
High-Performance Homes MTP	634	2,081,512			
Residential SOP	2,228	4,188,333			
REP Pilot MTP	60	198,782			
Hard-to-Reach	779	1,377,348			
Hard-to-Reach SOP	415	820,706			
Low Income Weatherization	364	556,641			
Energy Education Program	0	0			
Total Annual Projected Savings	10,458	17,523,840			

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

<sup>&</sup>lt;sup>5</sup> The projected savings in Table 5 for 2018 are based on the Statements of Work in place for 2018. The projected savings in Table 5 for 2019 are based on the cost/kW from 2017, 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  $\S$  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  $\S$  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. 47217 while remaining within the required cost caps.

	• • •		1	Total	•
2018	Incentives	Admin	R&D	Budget	EM&V
Commercial	1,748,295	327,805	57,209	2,133,310	29,705
Open for Small Business MTP	475,000	89,063	15,543	579,606	6,090
SCORE/CitySmart MTP	402,630	75,493	13,175	491,298	7,262
Commercial Solutions MTP	670,665	125,750	21,946	818,361	11,402
Load Management SOP	200,000	37,500	6,545	244,045	4,951
Residential	1,725,316	323,497	56,457	2,105,270	21,020
High-Performance Homes MTP	299,640	56,183	9,805	365,628	7,443
Residential SOP	1,300,000	243,750	42,540	1,586,290	10,143
REP Pilot MTP	125,676	23,564	4,112	153,353	3,434
Hard-to-Reach	825,000	154,688	26,996	1,006,684	6,621
Hard-to-Reach SOP	350,000	65,625	11,453	427,078	4,543
Low Income Weatherization	475,000	89,063	15,543	579,606	2,078
Energy Education Program			128,000	128,000	
Total Budgets by Category	4,298,611	805,990	268,663	5,373,264	57,346
				Total	
2019	Incentives	Admin	R&D	Budget	EM&V
Commercial	1,740,000	198,210	45,384	1,983,594	26,689
Open for Small Business MTP	513,333	46,148.71	10,741.52	570,224	3,554
SCORE/CitySmart MTP	513,333	59,274.52	13,796.62	586,404	10,586
Commercial Solutions MTP	513,333	71,243.46	16,582.53	601,159	9,327
Load Management SOP	200,000	21,543.18	4,263.56	225,807	3,222
Residential	1,750,000	396,237	50,201	2,196,438	22,463
High-Performance Homes MTP	300,000	46,815.24	10,896.65	357,712	8,793
Residential SOP	1,300,000	345,584.56	38,411.25	1,683,996	10,128
REP Pilot MTP	150,000	3 <i>,</i> 837.29	893.16	154,730	3,542
Hard-to-Reach	825,000	214,616	24,102	1,063,718	8,702
Hard-to-Reach SOP	350,000	65,625.84	8,755.76	424,382	4,569
Low Income Weatherization	475,000	148,989.70	15,346.45	639,336	4,133
Energy Education Program	-	-	150,000	150,000	

## Table 6: Proposed Annual Budget Broken Out by Program for Each Customer Class<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> EM&V cost allocations provided by the EM&V contractor.

# **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(2013-2017).

Calendar Year	Actual Demand Goal (MW)	Actual Energy Goal (MWh)	Actual Demand Reduction (MW)	Actual Energy Savings (MWh)
2017	5.68	9,951	10.684	20,763
2016	5.74	10,056	12.253	21,716
2015	5.77	10,109	8.662	17,452
2014	5.8	10,161	9.602	17,119
2013	5.108	8,949	10.294	16,981

Table 7: Historical Demand and Energy	Savings Goals and Achievements (at the Meter)
strand it satisfies a strand with Birth Bi	Surings Gouss and Henrey ements (at the Meter)

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

2017	Proiecte	d Savings <sup>7</sup>		and Verified ings <sup>8</sup>
Customer Class and Program	kW	kWh	kW	kWh
Commercial	6,000	9,129,000	5,972	10,687,901
Open for Small Business MTP	450	2,250,000	278	1,234,498
SCORE/CitySmart MTP	725	2,750,000	737	4,759,679
Commercial Solutions MTP	825	4,125,000	927	4,689,694
Load Management SOP	4,000	4,000	4,030	4,030
Residential	3,517	8,224,958	3,775	8,461,853
High-Performance Homes MTP	567	1,865,806	904	2,970,734
Residential SOP	2,638	5,540,000	2,804	5,271,688
Efficiency Connection MTP	12	55,952	15	72,051
CoolSaver Pilot MTP	300	763,200	52	132,380
Hard-to-Reach	838	1,667,100	940	1,632,017
Hard-to-Reach SOP	355	857,143	435	859,167
Low Income Weatherization	483	809,957	505	772,850
Total Annual Goals	10,355	19,021,058	10,688	20,766,772
	10,333	19,021,090	10,000	20,700,772
			Reported a	nd Verified
2016	Projected	d Savings <sup>9</sup>	Reported a Savi	nd Verified ings
2016 Customer Class and Program	Projecteo kW	l Savings <sup>9</sup> kWh	Reported a Sav kW	nd Verified ings kWh
2016 Customer Class and Program Commercial	Projected kW 5,925	l Savings <sup>9</sup> kWh 8,478,000	Reported a Sav kW 7,997	nd Verified ings kWh 9,486,447
2016 Customer Class and Program Commercial Open for Small Business MTP	<b>Projected</b> <b>kW</b> <b>5,925</b> 425	Savings <sup>9</sup> kWh 8,478,000 2,082,500	Reported a Sav kW 7,997 432	nd Verified ings kWh 9,486,447 2,246,750
2016 Customer Class and Program Commercial Open for Small Business MTP SCORE/CitySmart MTP	<b>Projected</b> <b>kW</b> <b>5,925</b> 425 725	Savings <sup>9</sup> kWh 8,478,000 2,082,500 2,900,000	Reported a           Savi           kW           7,997           432           801	nd Verified ings kWh 9,486,447 2,246,750 2,286,567
2016 Customer Class and Program Commercial Open for Small Business MTP SCORE/CitySmart MTP Commercial Solutions MTP	Projected kW 5,925 425 725 775	Savings <sup>9</sup> kWh 8,478,000 2,082,500 2,900,000 3,487,500	Reported a           Savi           kW           7,997           432           801           891	nd Verified ings kWh 9,486,447 2,246,750 2,286,567 4,947,257
2016 Customer Class and Program Commercial Open for Small Business MTP SCORE/CitySmart MTP Commercial Solutions MTP Load Management SOP	Projected kW 5,925 425 725 775 4,000	Savings <sup>9</sup> kWh 8,478,000 2,082,500 2,900,000 3,487,500 8,000	Reported a           Savi           kW           7,997           432           801           891           5,873	nd Verified ings kWh 9,486,447 2,246,750 2,286,567 4,947,257 5,873
2016 Customer Class and Program Commercial Open for Small Business MTP SCORE/CitySmart MTP Commercial Solutions MTP Load Management SOP Residential	Projected kW 5,925 425 725 775 4,000 3,232	Savings <sup>9</sup> kWh 8,478,000 2,082,500 2,900,000 3,487,500 8,000 7,117,093	Reported a           Savi           kW           7,997           432           801           891           5,873           3,355	nd Verified ings kWh 9,486,447 2,246,750 2,286,567 4,947,257 5,873 10,145,318
2016 Customer Class and Program Commercial Open for Small Business MTP SCORE/CitySmart MTP Commercial Solutions MTP Load Management SOP Residential High-Performance Homes MTP	Projected kW 5,925 425 725 775 4,000 3,232 1,501	Savings <sup>9</sup> kWh 8,478,000 2,082,500 2,900,000 3,487,500 8,000 7,117,093 1,782,531	Reported a           Savi           kW           7,997           432           801           891           5,873           3,355           808	nd Verified ings kWh 9,486,447 2,246,750 2,286,567 4,947,257 5,873 10,145,318 2,638,239
2016 Customer Class and Program Commercial Open for Small Business MTP SCORE/CitySmart MTP Commercial Solutions MTP Load Management SOP Residential High-Performance Homes MTP Residential SOP	Projected kW 5,925 425 725 775 4,000 3,232 1,501 1,714	Savings <sup>9</sup> kWh         8,478,000         2,082,500         2,900,000         3,487,500         8,000         7,117,093         1,782,531         5,241,939	Reported a           Savi           kW           7,997           432           801           891           5,873           3,355           808           2,487	nd Verified ings kWh 9,486,447 2,246,750 2,286,567 4,947,257 5,873 10,145,318 2,638,239 7,302,157
2016 Customer Class and Program Commercial Open for Small Business MTP SCORE/CitySmart MTP Commercial Solutions MTP Load Management SOP Residential High-Performance Homes MTP Residential SOP Efficiency Connection Pilot MTP	Projected kW 5,925 425 725 775 4,000 3,232 1,501	Savings <sup>9</sup> kWh 8,478,000 2,082,500 2,900,000 3,487,500 8,000 7,117,093 1,782,531	Reported a           Savi           kW           7,997           432           801           891           5,873           3,355           808           2,487           8	nd Verified ings kWh 9,486,447 2,246,750 2,286,567 4,947,257 5,873 10,145,318 2,638,239 7,302,157 39,717
2016 Customer Class and Program Commercial Open for Small Business MTP SCORE/CitySmart MTP Commercial Solutions MTP Commercial Solutions MTP Load Management SOP Residential High-Performance Homes MTP Residential SOP Efficiency Connection Pilot MTP	Projected kW 5,925 425 725 775 4,000 3,232 1,501 1,714 18	Savings <sup>9</sup> kWh 8,478,000 2,082,500 2,900,000 3,487,500 8,000 7,117,093 1,782,531 5,241,939 92,623	Reported a         Savi         kW         7,997         432         801         891         5,873         3,355         808         2,487         8         51	nd Verified ings kWh 9,486,447 2,246,750 2,286,567 4,947,257 5,873 10,145,318 2,638,239 7,302,157 39,717 165,206
2016 Customer Class and Program Commercial Open for Small Business MTP SCORE/CitySmart MTP Commercial Solutions MTP Commercial Solutions MTP Load Management SOP Residential High-Performance Homes MTP Residential SOP Efficiency Connection Pilot MTP Education Kits Hard-to-Reach	Projected kW 5,925 425 725 775 4,000 3,232 1,501 1,714 18 471	Savings <sup>9</sup> kWh         8,478,000         2,082,500         2,900,000         3,487,500         8,000         7,117,093         1,782,531         5,241,939         92,623         1,187,366	Reported a         Savi         kW         7,997         432         801         891         5,873         3,355         808         2,487         8         51         901	nd Verified ings kWh 9,486,447 2,246,750 2,286,567 4,947,257 5,873 10,145,318 2,638,239 7,302,157 39,717 165,206 2,084,396
2016 Customer Class and Program Commercial Open for Small Business MTP SCORE/CitySmart MTP Commercial Solutions MTP Load Management SOP Residential High-Performance Homes MTP Residential SOP Efficiency Connection Pilot MTP Education Kits Hard-to-Reach	Projected kW 5,925 425 725 775 4,000 3,232 1,501 1,714 18 471 256	Savings <sup>9</sup> kWh 8,478,000 2,082,500 2,900,000 3,487,500 8,000 7,117,093 1,782,531 5,241,939 92,623 1,187,366 821,410	Reported a         Savi         kW         7,997         432         801         891         5,873         3,355         808         2,487         8         51         901         463	nd Verified ings kWh 9,486,447 2,246,750 2,286,567 4,947,257 5,873 10,145,318 2,638,239 7,302,157 39,717 165,206 2,084,396 1,319,595
2016 Customer Class and Program Commercial Open for Small Business MTP SCORE/CitySmart MTP Commercial Solutions MTP Commercial Solutions MTP Load Management SOP Residential High-Performance Homes MTP Residential SOP Efficiency Connection Pilot MTP Education Kits Hard-to-Reach	Projected kW 5,925 425 725 775 4,000 3,232 1,501 1,714 18 471	Savings <sup>9</sup> kWh         8,478,000         2,082,500         2,900,000         3,487,500         8,000         7,117,093         1,782,531         5,241,939         92,623         1,187,366	Reported a         Savi         kW         7,997         432         801         891         5,873         3,355         808         2,487         8         51         901	nd Verified ings kWh 9,486,447 2,246,750 2,286,567 4,947,257 5,873 10,145,318 2,638,239 7,302,157 39,717 165,206 2,084,396

Table 8: Projected versus Reported and Verified Savings for 2017 and 2016 (at Meter)

<sup>7</sup> Projected Savings for 2017 as reported in the EEPR filed in Project No. 46907.

<sup>8</sup>Program savings have been verified with EM&V through Q4 2017, except Open for Small Business,

SCORE/CitySmart, Commercial Solutions, Efficiency Connection, and CoolSaver which have been verified through Q3 2017.

<sup>9</sup> Projected Savings for 2016 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 (2013-2017) broken out by program for each customer class.

	2017					2016				2015		
	incent.	Admin	R&D	EM&V	Incent.	Admin	R&D	EM&V	Incent.	Admin	R&D	EM&V11
Commercial	1,553,697	143,283	34,510	24,583	1,833,623	168,492	34,586	22,338	1,599,573	169,439	39,150	30,517
Small Business MTP	367,728	33,375	8,168	3,647	508,604	46,047	9,593	4,203	516,884	54,280	12,651	4,663
SCORE/CitySmart MTP	472,319	42,868	10,491	8,550	470,019	42,554	8,865	7,946	495,812	52,067	12,135	13,179
Commercial Solutions MTP	567,691	51,524	12,609	9,736	588,470	53,278	11,100	8,892	451,727	47,437	11,056	8,512
Load Management SOP	145,960	15,515	3,242	2,650	266,530	26,613	5,027	1,297	135,150	15,655	3,308	4,163
Residential	1,833,197	293,285	40,718	22,618	1,782,381	284,744	33,619	18,397	1,091,408	234,204	36,712	32,095
Small Residential SOP												
High-Performance Homes MTP	373,039	33,858	8,286	4,438	387,858	35,328	7,316	3,498	305,814	35,736	17,485	7,700
Large Residential SOP	1,314,981	246,251	29,208	13,359	1,267,249	237,892	23,903	14,899	785,594	198,468	19,227	24,395
Residential SOP – HVAC												
Small DRG Solar PV Pilot												
Efficiency Connection MTP	30,577	2,775	783	1,074	19,035	1,723	359					
CoolSaver Pilot MTP	114,600	10,401	2,442	3,747								
Education Kits					108,238	9,799	2,042					
Hard-to-Reach	825,122	152,950	18,327	9,090	744,102	145,734	14,035	10,519	669,222	155,541	16,379	15,037
Small Hard-to-Reach SOP												
Large Hard-to-Reach SOP	299,747	46,891	6,658	5,732	309,685	58,135	5,841	7,103	298,709	75,464	7,311	6,719
Low Income Weatherization	525,375	106,059	11,669	3,358	434,417	87,599	8,194	3,416	370,513	80,077	9,068	8,318
Research & Development	-	-	128,000									
Energy Education Program			128,000									
General												
Total Annual Expenditures	4,212,016	589,518	221,555	56,291	4,360,106	598,970	82,240	51,254	3,360,203	559,183	92,241	77,649

<b>Table 9: Historical Program</b>	Incentive and Administration	n Expenditures for 20	13 through 2017 <sup>10</sup>
0		1	0

<sup>&</sup>lt;sup>10</sup> 2017 budget found at Table 10 in the current EEPR; 2016 budget defined in Project No. 46907; 2015 budget defined in Project No. 45675; 2014 budget defined in Project No. 44480; 2013 budget defined in Project No. 42264;.

<sup>&</sup>lt;sup>11</sup> EM&V actual expenditures were allocated based on allocation factors provided by the EM&V contractor.

## **Table 9 Continued**

	2014			2013				
	Incent.	Admin	R&D	EM&V12	Incent.	Admin	R&D	EM&V <sup>13</sup>
Commercial	1,403,224	129,315	23,851	38,078	1,445,795	158,846	4,864	38,504
Small Business MTP	390,500	34,621	6,637	10,123	393,750	40,395	874	6,668
SCORE/CitySmart MTP	419,194	37,165	7,125	5,521	353,103	36,225	784	14,430
Commercial Solutions MTP	409,649	36,319	6,963	16,762	548,882	56,309	1,218	15,981
Load Management SOP	183,880	21,211	3,125	5,671	150,060	25,918	1,988	1,425
Residential	1,502,143	279,280	80,092	40,998	1,372,654	329,131	22,005	46,178
Small Residential SOP					470,802	123,279	7,548	7,230
High-Performance Homes MTP	201,173	41,089	43,419	10,007	190,240	19,517	3,050	9,327
Large Residential SOP	1,300,971	238,192	36,673	30,990	675,211	176,803	10,824	20,753
Residential SOP – HVAC					36,401	9,532	584	8,868
Small DRG Solar PV Pilot								
Efficiency Connection MTP								
CoolSaver Pilot MTP								
Education Kits								
Hard-to-Reach	897,828	171,393	20,604	18,853	949,136	229,308	14,106	20,784
Small Hard-to-Reach SOP					133,500	34,957	2,140	5,930
Large Hard-to-Reach SOP	477,475	87,420	13,459	7,975	416,402	109,035	6,675	9,518
Low Income Weatherization	420,353	83,974	7,145	10,877	399,234	85,316	5,290	5,336
Research & Development			1				177,254	
Energy Education Program							177,254	
General								
Total Annual Expenditures	3,803,195	579,989	124,547	97,928	3,767,585	717,285	218,229	105,466

 <sup>&</sup>lt;sup>12</sup> EM&V actual expenditures were allocated based on allocation factors provided by the EM&V contractor.
 <sup>13</sup> EM&V actual expenditures were allocated based on allocation factors provided by the EM&V contractor.

## VIII. Program Funding for Calendar Year 2017

As shown in **Table 10**, TNMP spent a total of \$5,023,087.97, not including EM&V costs, on all of its energy efficiency programs in 2017 to meet the Commission & PURA's mandated budget. The total forecasted budget for 2017 was \$5,656,250.

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.

	Total Projected Budget	Numbers of Customers Participating	Actual Funds Expended (Incentives)	Actual Funds Expended (Admin) <sup>14</sup>	Actual Funds Expended (R&D)	Total Funds Expended	Funds Remaining	% change <sup>15</sup>
Commercial	2,281,250	777	1,553,697	143,283	34,510	1,731,490	549,774	
Open for Small Business MTP	656,250	540	367,728	33,375	8,168	409,271	246,979	38%
SCORE/CitySmart MTP	656,250	79	472,319	42,868	10,491	525,678	130,572	20%
Commercial Solutions MTP	656,250	71	567,691	51,524	12,609	631,824	24,426	4%
Load Management	312,500	87	145,960	15,515	3,242	164,717	147,783	47%
Residential	2,406,250	2,281	1,833,197	293,285	40,718	2,167,199	239,051	÷
High-Performance Homes	625,000	709	373,039	33,858	8,286	415,182	209,818	34%
Residential SOP	1,731,250	1,153	1,314,981	246,251	29,208	1,590,439	140,811	8%
Efficiency Connection MTP	50,000	312	30,577	2,775	679	34,031	15,969	32%
CoolSaver Pilot MTP		107	114,600	10,401	2,545	127,547	(127,547)	#DIV/0!
Hard-to-Reach	968,750	422	825,122	152,950	18,327	996,399	(27,649)	
Hard-to-Reach SOP	375,000	207	299,747	46,891	6,658	353,296	21,704	6%
Low Income Weatherization	593,750	215	525,375	106,059	11,669	643,103	(49,353)	-8%
R&D		41			128,000	128,000	(128,000)	
Energy Education Program		41			128,000	128,000	(128,000)	
Total Annual Expenditures	5,656,250	3,521	4,212,016	589,518	221,555	5,023,088	633,162	-
EM&V						56,291		

#### Table 10: Program Funding for Calendar Year 2017

<sup>&</sup>lt;sup>14</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>15</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 2017 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

2017 Total Expenditures	LIW Expenditures	% of Expenditures
\$5,023,088	\$643,103	12.8%

## 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 ( $\leq$ 150 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 2017, TNMP projected acquisition of 450 kW demand savings from this program. TNMP is reporting 278.2 kW. This included 540 projects in eight 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 2017 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.

In 2017, TNMP projected acquisition of 73 kW demand savings from this program. TNMP is reporting 736.76 kW, including participation by 79 projects in ten 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 2017 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.

In 2017, TNMP projected acquisition of 825 kW demand savings from this program. TNMP is reporting 927.44 kW. This included 71 projects in nine 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 TBRH to be used in conjunction with the 2015 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, 2016, and 2017. TNMP was also recognized by ENERGY STAR by becoming a Partner of the Year award winner for program years 2015 and 2016.

In 2017, TNMP certified 709 homes, resulting in 903.89 kW of reduced demand and 2,970,734 kWh of energy savings. In order to adapt to changes in the market, TNMP will use the TBRH to be used in conjunction with the 2015 IECC code to incentivize energy efficiency savings that meet High-Performance specifications as well as ENERGY STAR<sup>®</sup> qualifications in 2018.

## Low Income Weatherization

In 2017, 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 2017 program spent 12.8% of the total energy efficiency budget, resulting in 215 homes weatherized, producing a savings of 504.71 kW and 772,850 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 Brazoria and Galveston counties.

## **Efficiency Connection MTP**

In 2017, TNMP continued the partnership with CLEAResult to provide a program that offers residents discounted LED bulbs through an online website for the second year of the program. The participating REPs included:

- Amigo Energy
- Bounce Energy
- Champion Energy Services
- Direct Energy
- First Choice Power
- Infinite Energy
- Just Energy
- StarTex Power
- Tara Energy
- TriEagle Energy

As a result, the Efficiency Connection MTP sold a total of 3,737 bulbs while also acquiring a total of 15.28 kW in demand savings and 72,051 kWh in energy savings in 2017. However, since the program proved not to be cost-effective, TNMP has effectively discontinued it as a stand-alone program and merged it with CoolSaver to form the REP Pilot for 2018.

## **CoolSaver Pilot MTP**

In 2017, TNMP brought in a new element to the portfolio by offering CoolSaver A/C Tune-Up. The CoolSaver Pilot MTP program provided free comprehensive air conditioning tune-ups to residential customers in the TNMP Gulf Coast service territory. The program was marketed by twelve participating REPs. The tune-ups were performed by eight specially trained A/C contractor companies. The participating REPs include:

- Amigo Energy
- Bounce Energy
- Champion Energy Services
- Direct Energy
- Entrust Energy
- First Choice Power
- Gexa
- Infinite Energy
- Just Energy
- Spark Energy
- StarTex Power
- TriEagle Energy

As a result, 134 A/C tune-ups were completed at 107 residential homes while also acquiring a total of 52.16 kW in demand savings and 132,380 kWh in energy savings in 2017. However, since the program proved not to be cost-effective, TNMP has effectively discontinued it as a stand-alone program and merged it with Efficiency Connection to form the REP Pilot for 2018.

## **Energy Education Program**

During the fall of 2017, TNMP contracted with The National Theatre for Children ("NTC") to reach 15,281 students and 984 teachers at 41 schools within its service area. The program featured live inschool performances, student playbooks, teacher guides, classroom posters and digital games and activities to educate students and the community about the benefits of conserving electricity.

## X. Research & Development and Administration Cost Reporting

## Research & Development ("R&D")

R&D costs for the 2017 portfolio include development of a new tracking system and an Energy Education Program. 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 2017 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 26, 2017. The application and supporting documents are available for download from the PUCT Interchange under Docket No. 47217. Rates charged per class are billed per kWh monthly:

- Residential Service = \$0.001268
- Secondary Service Less than or Equal to 5kW = (0.003898)
- Secondary Service Greater than 5kW =\$0.001063
- Primary Service = \$0.000030
- Lighting = \$0.000165

The EECRF was filed, approved, and is being collected from Jan 1 - Dec 31, 2018. Rates went into effect March 1, 2018. TNMP will be filing for 2019 EECRF recovery by June 1, 2018.

## XII. Revenue Collected through EECRF (2017)

## **Revenue Collected**

TNMP collected \$6,054,225 from January 1, 2017 through December 31, 2017.

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

TNMP had an over-recovery of \$628,527<sup>16</sup> for the 2017 program year, including its rate case expenses of \$40,669 for processing Docket No. 47217. TNMP will true-up this amount, by rate class, in the 2018 EECRF filing.

# 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 \$56,291 provided by the EM&V team for the program year,

<sup>&</sup>lt;sup>16</sup> Over-recovery amount includes a true-up to the EM&V projected costs collected through rates as approved in Docket No. 47217.

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 2017 total program costs equaled \$5,079,379.

Accordingly, for the purposes of calculating the cost caps, TNMP's 2017 total program costs equaled \$5,886,066, exclusive of EM&V costs and municipal rate case expenses.

Because TNMP exceeded the 2017 goals by 188% for kW and 209% for kWh savings, TNMP will request a performance incentive of \$857,845 as part of the 2019 EECRF filing.

## Table 12: Performance Incentive Calculation

		,
	kW	kWh
Demand and Energy Goals	5,680	9,951,000
Demand and Energy Savings	10,684	20,766,772
Reported/Verified Total (including HTR, measures with 10yr EUL, and measures with EULs < or > 10 years)	935	
Reported/Verified Hard-to-Reach		
Avoided Cost		
per kW	\$80	
per kWh	\$0.03989	9
Inflation Rate	2.00%	
Discount Rate	9.902259	%
Total Avoided Cost		\$13,657,830
2017 Program Costs		\$5,079,379
Net Benefits		\$8,578,451
Performance Incentive		\$857,845

# 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, 16 Tex. Admin. Code § 25.181 and § 25.183
EM&V	Evaluation, Measurement and Verification
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 16 TAC § 25.181(c) for a full list of definitions.

# Appendix

# **Reported Demand and Energy Reduction by County 2018**

Open for Small Business MTP						
County	Participants	kW	kWh			
Brazoria	47	50.73	213,311			
Collin	13	2.84	10,793			
Coryell	34	9.09	46,792			
Denton	209	82.09	386,931			
Fannin	67	14.42	49,262			
Galveston	143	106.84	453,948			
Grayson	2	4.91	32,143			
Montague	25	7.28	41,317			
TOTAL	540	278.20	1,234,498			

Commercial Solutions MTP						
County	Participants	kW	kWh			
Bosque	3	11.87	39,623			
Brazoria	13	288.53	1,643,140			
Coryell	3	14.41	76,174			
Denton	18	387.55	1,924,126			
Galveston	24	185.30	779,035			
Hamilton	2	29.06	181,650			
Hill	1	6.04	12,795			
Pecos	4	3.91	20,375			
Reeves	3	0.77	12,776			
TOTAL	71	927.44	4,689,694			

SCORE/CitySmart MTP					
County	Participants	kW	kWh		
Brazoria	9	136.63	569,366		
Collin	1	23.65	66,687		
Coryell	27	44.88	244,516		
Denton	8	154.08	684,797		
Galveston	12	266.02	2,649,937		
Montague	5	7.40	37,183		
Pecos	3	11.82	39,260		
Rains	1	8.01	37,202		
Reeves	3	10.97	37,164		
Somervell	10	73.30	393,567		
TOTALS	79	736.76	4,759,679		

Load Management SOP						
County	# of Sites	kW	kWh			
Bosque	8	1,369	1,369			
Brazoria	19	1,268	1,268			
Collin	2	11	11			
Coryell	4	133	133			
Denton	10	305	305			
Fannin	1					
Galveston	18	341	341			
Grayson	1	17	17			
Hamilton	2	14	14			
Hunt	1	1	1			
Johnson	1	7	7			
Lamar	1	4	4			
Montague	1	-	-			
Pecos	5	286	286			
Rains	1	9	9			
Red River	1	2	2			
Reeves	3	51	51			
Valley Mills	1	-	-			
Whitewright	1	10	10			
Winkler	6	202	202			
Total	87	4,030	4,030			

High-Performanc	e Homes MTP			
County	Homes	kW	kWh	
Brazoria	56	55.50	198,579	
Galveston	649	842.61	2,578,491	
Harris	4	5.78	13,664	
TOTAL	709	903.89	2,970,734	

<b>Residential SOP</b>			
County	Participants	kW	kWh
Bosque	221	685.46	1,095,548
Brazoria	129	180.21	427,787
Collin	39	82.01	163,200
Coryell	179	477.27	1,017,189
Denton	5	8.66	21,808
Erath	2	9.59	17,826
Fannin	7	14.29	39,706
Galveston	137	172.31	311,988
Grayson	6	12.00	34,412
Hamilton	210	561.31	948,220
Hill	53	148.90	299,519
Hunt	13	35.78	66,576
Lamar	6	8.20	13,648
McLennan	1	3.71	6,889
Palo Pinto	133	374.69	718,023
Pecos	1	4.97	16,513
Rains	9	16.99	49,647
Red River	1	2.54	5,801
Reeves	1	5.20	17,386
TOTAL	1,153	2,804.09	5,271,688

Hard-to-Reach SOP				
County	Participants	kW	kWh	
Bosque	10	24.44	47,094	
Brazoria	36	51.23	90,219	
Collin	33	51.19	114,216	
Coryell	31	65.03	108,481	
Denton	7	15.50	26,305	
Fannin	9	16.01	35,092	
Grayson	1	9.05	21,696	
Hamilton	10	24.94	41,165	
Hill	7	20.48	35,115	
Hunt	6	10.74	35,736	
Lamar	16	45.90	89,675	
Palo Pinto	17	51.84	90,760	
Rains	24	48.65	123,615	
TOTAL	207	434.99	859,167	

Low Income Weatherization					
County	Participants	kW	kWh		
Brazoria	78	236.86	352,042		
Galveston	64	219.32	337,409		
Lamar	30	16.26	26,022		
Rains	1	5.72	8,893		
Red River	37	21.45	38,327		
Titus	5	5.11	10,157		
Total	215	504.71	772,850		

Efficiency Connection MTP				
County	Participants	kW	kWh	
Bosque	11	0.27	1,157	
Brazoria	58	2.15	10,934	
Collin	6	0.15	636	
Cooke	1	0.22	957	
Coryell	5	0.34	1,450	
Denton	56	2.70	11,583	
Erath	1	0.10	425	
Fannin	3	0.11	484	
Franklin	2	0.04	170	
Galveston	110	5.88	29,848	
Hamilton	4	0.28	1,208	
Harris	3	0.13	678	
Hill	2	0.37	1,575	
Hood	2	0.14	580	
Hunt	1	0.16	674	
Lamar	1	0.02	87	
Montague	4	0.31	1,322	
Palo Pinto	3	0.18	763	
Pecos	18	0.49	2,107	
Rains	1	0.21	909	
Red River	2	0.23	1,004	
Reeves	9	0.23	994	
Somervell	4	0.38	1,623	
Winkler	2	0.04	180	
Young	3	0.16	704	
TOTAL	312	15.28	72,051	

CoolSaver A/C Tune-up Pilot MTP					
County	Participants	kW	kWh		
Brazoria	25	10.59	26,869		
Galveston	70	34.96	88,741		
Harris	12	6.61	16,770		
TOTAL	107	52.16	132,380		