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# AEP Texas North Company 2014 Energy Efficiency Plan and Report Substantive Rules § 25.181 and § 25.183

**April 1, 2014** 

Project No. 42264



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### Introduction

AEP Texas North Company (TNC or Company) presents this Energy Efficiency Plan and Report (EEPR) to comply with Public Utility Commission of Texas (PUCT or Commission) Substantive Rules 25.181 and 25.183 (EE Rule), which implement Public Utility Regulatory Act (PURA) § 39.905. As mandated by this section of PURA, the EE Rule requires that each investor-owned electric transmission and distribution utility (TDU) achieve the following demand reduction goals through market-based standard offer programs (SOPs) and targeted market transformation programs (MTPs). Substantive Rule 25.181(e)(1) provides in pertinent part as follows:

- (e)(1) 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% of 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 and MTPs that control the manner in which TDUs must administer their portfolio of energy efficiency programs in order to achieve their mandated annual demand reduction goals. TNC's plan enables it to meet its statutory goals through implementation of energy efficiency programs in a manner that complies with PURA § 39.905 and the EE Rule. This EEPR covers the periods of time as required

in the EE Rule. The following section describes the information that is contained in each of the subsequent sections and appendices.

### **EEPR Organization**

This EEPR consists of an Executive Summary, thirteen sections, a list of acronyms, and four appendices.

• Executive Summary summarizes TNC's plans for achieving its goals and projected energy efficiency savings for program years 2014 and 2015 and highlights TNC's achievements for Program Year 2013.

### **Energy Efficiency Plan**

- Section I describes TNC's program portfolio. It details how each program will be implemented, presents related informational and outreach activities, and provides an introduction to any programs not included in TNC's 2013 EEPR.
- Section II explains TNC's targeted customer classes, describes the estimated size of each class and the method of determining those class sizes.
- Section III presents TNC's energy and demand goals and projected savings for the prescribed planning period detailed by program for each customer class.
- Section IV describes TNC's proposed energy efficiency budgets for the prescribed planning period detailed by program for each customer class.

### **Energy Efficiency Report**

- Section V documents TNC's demand reduction goal for each of the previous five years (2009-2013) based on its weather-adjusted peak demand and actual savings achieved for those years.
- Section VI compares TNC's projected energy and demand savings to its reported and verified savings by program for calendar years 2012 and 2013.
- Section VII details TNC's incentive and administration expenditures for each of the previous five years (2009-2013) detailed by program for each customer class.
- Section VIII compares TNC's actual 2013 expenditures with its 2013 budget by program
  for each customer class. It identifies funds committed but not expended and funds
  remaining and not committed. It also explains any cost differences of more than 10% from
  TNC's overall program budget and from each program budget.
- Section IX describes the results from TNC's MTPs.
- Section X describes Research and Development activities.
- Section XI documents TNC's most recent Energy Efficiency Cost Recovery Factor (EECRF).
- Section XII documents TNC's Underserved Counties.
- Section XIII describes TNC's Performance Bonus calculation for program year 2013.

### Acronyms

• A list of abbreviations for common terms used within this document.

### **Appendices**

- Appendix A Reported and verified demand and energy reductions by county for each program.
- Appendix B Program Templates for any new or modified programs and programs not included in TNC's previous EEPR.
- Appendix C Existing energy efficiency contracts and obligations.
- Appendix D Data, explanations, or documents supporting other sections of the EEPR.

### Executive Summary – Energy Efficiency Plan (Plan)

TNC plans to achieve its 2014 mandated demand and energy goals of 4,260 kW and 7,464,000 kWh as shown in Table 1 below through residential and non-residential SOPs and MTPs. TNC will utilize a budget of \$2,854,961 to accomplish these goals.

Table 1: Summary of Goals, Projected Savings (at the Meter), and Budgets

Calendar Year	Average Growth in Demand (MW)	Goal Metric: 30% Growth (MW)	Weather Adjusted Peak Demand (MW) previous year	Goal Metric: 0.4% Peak Demand (MW)	Peak Demand Goal (MW)*	Energy Goal (MWh)	Projected Demand Reduction (MW)	Projected Energy Savings (MWh)	Projected Budget (000's)**
2014	16.37	4.91	1,051	4.20	4.26	7,464	6.73	10,316	\$ 2,855
2015	16.37	4.91	NAP	NAP	4.26	7,464	6.73	10,316	\$ 2,956

<sup>\*</sup> Substantive Rule 25.181(e)(1)(E) - Beginning in 2009 a utility's demand reduction goal in megawatts for any year shall not be less than the previous year's goal.

### **Executive Summary – Energy Efficiency Report (Report)**

TNC achieved demand and energy reductions of 6,932 kW and 9,086,799 kWh respectively in 2013. The total energy efficiency cost for achieving these savings was \$2,705,073. TNC's achievement exceeded the 2013 mandated energy efficiency goals of 4,260 kW and 7,464,000 kWh, thus allowing TNC to earn a Performance Bonus.

A broad portfolio of residential and non-residential SOPs and MTPs was used to accomplish these savings.

<sup>\*\*</sup> The 2014 Projected Budget includes costs associated with Evaluation, Measurement and Verification activities.

Average Growth in Demand figures are from Table 4; Projected Savings from Table 5; Projected Budget from Table 6. All kW/MW and kWh/MWh figures in this Table and throughout this EEPR are given "at the Meter."

### **ENERGY EFFICIENCY PLAN**

### I. 2014 Programs

### A. 2014 Program Portfolio

TNC has implemented a variety of programs in 2014 to enable it to meet its goals in a manner that complies with PURA § 39.905 and the EE Rule. These programs target broad market segments and specific market sub-segments with significant opportunities for cost-effective energy savings.

Table 2 summarizes TNC's programs and targeted customer class markets for Program Year 2014. The programs listed in Table 2 are described in further detail in Subsections B and C. TNC maintains a web site containing information on participation and forms required for project submission at <a href="https://www.AEPefficiency.com">www.AEPefficiency.com</a>. This site is the primary method of communication used to provide program updates and information to Retail Electric Providers (REPs), potential Energy Efficiency Service Providers (EESPs), and other interested parties.

### **Implementation Process**

MTPs are implemented by a third-party implementer. These implementers design, market and execute the applicable MTP. Based on the specific MTP, the implementer may perform outreach activities to recruit local contractors and provide participating contractors specialized education, training/certification and tools as necessary. Implementers validate proposed measures/projects, perform quality assurance/quality control, and verify and report savings derived from the program.

SOPs are managed in-house with project sponsors providing eligible program measures. Project sponsors are typically EESPs; however, for commercial projects a TNC end-use customer may serve as its own project sponsor. Eligible project sponsors can submit an application(s) for project(s) meeting the minimum SOP requirements.

TNC monitors the projects being submitted so as to not accept a project that has previously been submitted or is participating in another program with the same measure(s).

### **Outreach Activities**

- Promote internet web sites with program information including project eligibility, end-use measures, incentives, procedures, application forms, and in some cases a list of participating project sponsors and the available program budget;
- Utilize mass e-mail notifications to inform and update potential project sponsors on TNC energy efficiency program opportunities;
- Conduct workshops as necessary to explain program elements such as responsibilities of the project participants, program requirements, incentive information and the application and reporting process;
- Conduct specific project sponsor/contractor training sessions as necessary based on the energy efficiency programs being implemented;
- Participate in local, regional, state-wide, and industry-related outreach activities as may be necessary; and
- Facilitate earned media opportunities, spotlighting successful projects and/or interesting stories as applicable.

Table 2: 2014 Energy Efficiency Program Portfolio

Program	Target Market	Application	Link to Program Manual
A/C Distributor Pilot Market Transformation Program	Residential	Retrofit & New Construction	http://www.aepefficiency.com/ACDistributor/
Commercial Solutions Market Transformation Program	Commercial	Retrofit & New Construction	http://www.eeprograms.net/aep/texasnorth/commercial_solutions.php
Commercial Standard Offer Program	Commercial	Retrofit & New Construction	http://www.aepefficiency.com/cisop/downloads/index.htm
Hard-to-Reach Standard Offer Program	Residential Hard-to-Reach	Retrofit	http://www.aephtrsop.com/TexasNorth/index.html
Irrigation Load Management Market Transformation Program	Commercial	Retrofit	http://getmore.enemoc.com/aeptexasilm
Load Management Standard Offer Program	Commercial	Retrofit	http://www.aepefficiency.com/loadmanagement/TNC/index.html
Open Market Transformation Program	Commercial	Retrofit	http://eeprograms.net/aep/texasnorth/open.php
Residential Standard Offer Program	Residential	Retrofit	http://www.aepressop.com/TexasNorth/index.html
SCORE/CitySmart Market Transformation Program	Commercial	Retrofit & New Construction	http://www.eeprograms.net/aep/texasnorth/score.php http://www.eeprograms.net/aep/texasnorth/citysmart.php
SMART Source <sup>SM</sup> Solar PV Market Transformation Program	Commercial; Residential	Retrofit & New Construction	http://www.txreincentives.com/apv/
Targeted Low-Income Energy Efficiency Program	Low-Income Residential	Retrofit	No Website Available

### B. Existing Programs

### A/C Distributor Pilot Market Transformation Program (ACD MTP)

The objective of the ACD MTP is to increase the market penetration of high-efficiency air-conditioning (A/C) equipment for residential customers served by TNC. The program targets a select number of A/C equipment distributors that supply A/C contractors operating in the TNC service territory. Incentives are paid to the distributor for the installation of high-efficiency A/C equipment of up to five tons in cooling capacity.

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

The CS MTP targets commercial customers (other than governmental and educational entities) that do not have the in-house expertise to: 1) identify, evaluate, and undertake energy 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 TNC for eligible energy efficiency measures installed in new or retrofit applications that result in verifiable demand and energy savings.

### Commercial Standard Offer Program (CSOP)

The CSOP targets commercial customers of all sizes. Variable incentives are available to project sponsors based upon deemed and/or verified demand and energy savings for eligible measures installed in new or retrofit applications.

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

The HTR SOP targets residential customers with total annual household incomes at or below 200% of current federal poverty guidelines. Incentives are paid to project sponsors for eligible measures installed in retrofit applications that result in verifiable demand and energy savings. Program incentives are higher for work performed in historically underserved counties and for identified underserved measures to encourage activity. Project comprehensiveness is encouraged and customer education materials regarding energy conservation behavior are distributed by project sponsors.

### Irrigation Load Management Market Transformation Program (ILM MTP)

The ILM MTP targets commercial agricultural customers using electric drive irrigation pumps with at least 25 kW of electric peak demand. Incentive payments are based on measured and verified demand reduction of irrigation pump loads during the summer peak period. Load management events are dispatched by TNC, using a one-hour-ahead notice for curtailment periods of one to four hours duration.

TNC contracts with a third-party program implementer that is responsible for implementing the program. The program implementer installs remote control and communications hardware at each pump to enable shutdown of pumps during load management events.

In addition to outreach activities described in Section A, the program implementer markets the ILM MTP in the following manner:

- Utilizes publicly available agricultural industry data and proprietary databases to identify customer prospects and engage with prospects through a direct-sales model;
- Develops marketing materials such as program brochures, case studies, FAQ documents, and other relevant materials;
- Maintains an internet web site with detailed project eligibility, irrigation load control measures, incentive levels, procedures, and application forms; and
- Participates in appropriate industry-related meetings to generate awareness and interest.

### Load Management Standard Offer Program (LM SOP)

The LM SOP targets commercial customers with a peak electric demand of 500 kW or more. Incentive payments are based upon measured and verified peak demand reduction of curtailed loads during the summer peak period. Load management events are dispatched by TNC, using a one-hour-ahead notice for load reduction periods of one to four hours duration.

### **Open Market Transformation Program (Open MTP)**

The Open MTP targets traditionally underserved small commercial customers who may not employ knowledgeable personnel with a focus on energy efficiency, who are limited in the ability to implement energy efficiency measures, and/or who typically do not actively seek the help of a professional EESP. Small commercial customers with a peak demand not exceeding 100 kW in the previous 12 consecutive billing months may qualify to participate in the program. Available incentives are paid directly to the contractor, thereby reducing a portion of the project cost for the customer. Additionally, customers whose peak demand is less than or equal to 10 kW may qualify for incentives that would offset up to 100% of the cost of their project(s).

The program is intended to overcome market barriers for participating contractors by providing technical support and incentives to implement energy efficiency upgrades and produce demand and energy savings.

In addition to outreach activities described in Section A, the program implementer works with TNC to conduct outreach and planning activities for the Open MTP in the following manner:

• Identifies and recruits contractors who provide services to customers served by TNC to develop a network of participating contractors who will deliver the program directly to customers;

- Develops a recruitment packet with outreach information and enrollment materials, that participating contractors can use when marketing the program to customers; and
- Conducts training as necessary to explain elements of the program, such as responsibilities
  of the participants, project requirements, incentive information, and the application and
  reporting process.

### Residential Standard Offer Program (RSOP)

The RSOP targets residential customers in existing homes. Incentives are paid to project sponsors for eligible measures installed in retrofit applications that result in verified demand and energy savings. Program incentives are higher for work performed in historically underserved counties to encourage activity. Project comprehensiveness is encouraged.

### SCORE/CitySmart Market Transformation Program (SCORE/CS MTP)

The SCORE/CS MTP provides energy efficiency and demand reduction solutions for public and private educational entities grades K-12 as well as colleges and universities. In addition to educational facilities, SCORE/CS MTP provides these same solutions to local, state, county and federal government customers. This 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. Incentives are paid to participating customers for eligible energy efficiency measures that are installed in new or retrofit applications that result in verifiable demand and energy savings.

### SMART Source<sup>SM</sup> Solar PV Market Transformation Program (PV MTP)

The PV MTP offers incentives to customers for the installation of solar photovoltaic (PV) systems interconnected on the customer's side of the meter. The incentives help offset the initial costs of installing solar PV systems, and encourage service providers to seek more installation opportunities. In addition to demand and energy savings achieved from the installations, the PV MTP aims to transform the solar PV market by increasing the number of qualified companies offering installation services in the TNC service area, and decreasing the average installed cost of PV systems, thereby creating greater market economies of scale.

### Targeted Low-Income Energy Efficiency Program (TLIP)

The TLIP is designed to cost-effectively reduce the energy consumption and energy costs for low-income residential customers in TNC's service territory. Weatherization service providers install eligible weatherization and energy efficiency measures in qualified households that meet the Department of Energy (DOE) income-eligibility guidelines of at or below 200% of the current federal poverty guidelines. A Savings-to-Investment Ratio of 1.0 or higher is required at each serviced dwelling unit.

### C. New Programs for 2014

TNC has no new programs for 2014.

### **D.** Discontinued Programs

TNC has no discontinued programs for 2014.

### E. Existing DSM Contracts or Obligations

TNC has no existing DSM contracts or obligations.

### **II.** Customer Classes

TNC's energy efficiency programs target its Residential and Commercial customer classes. TNC's energy efficiency programs also target customer sub-classes, such as Residential Hard-to-Reach and Low-Income, Public Schools, Agricultural Irrigation, Small Businesses, and Local Governments.

The annual projected savings targets are allocated among these customer classes and sub-classes by examining historical program results and by evaluating economic trends, in compliance with Substantive Rule 25.181(e)(3).

Table 3 summarizes the number of customers in each customer class and the Residential Hard-to-Reach sub-class at TNC. The numbers listed are the actual number of active electric service accounts by class that TNC served for the month of January 2014. These numbers were used to determine goal and budget allocations for each customer class and program. It should be noted however, that the actual distribution of the annual goal and budget required to achieve the

goal must remain flexible based upon the conditions of the marketplace, the potential interest of a customer class, and the overriding objective of meeting TNC's mandated demand and energy reduction goals in total. TNC offers a varied portfolio of SOPs and MTPs such that all eligible customer classes have access to energy efficiency alternatives.

**Table 3: Summary of Customer Classes** 

Customer Class	Number of Customers
Commercial	34,616
Residential	151,705
Hard-to-Reach 2	58,861*

<sup>\*</sup> Hard-to-Reach customer count is a sub-set of the Residential total.

### III. Energy Efficiency Goals and Projected Savings

As prescribed by the EE Rule, TNC's annual demand reduction goal to be achieved is 4.26 MW, which is no less than its prior year goal. TNC calculated its 2014 goal using both methods prescribed by the EE Rule. TNC's 2014 goal calculated at 30% of the most recent five-year average load growth in demand is 4.91 MW. TNC's 2014 goal calculated at four-tenths of 1% the most recent year's summer weather-adjusted peak demand of the combined residential and non-residential customers is 4.20 MW. Since 30% of the most recent five-year average load growth in demand reduction goal (4.91 MW) is equivalent to at least four-tenths of 1% of TNC's most recent year's summer weather-adjusted peak demand of the combined residential and non-residential customers (4.20 MW), TNC has reached the trigger prescribed by the EE Rule. TNC's corresponding 2014 annual energy savings goal is determined by applying a 20% conservation load factor to the 2014 demand reduction goal included in this Plan.

Table 4 presents historical annual growth in demand data for the previous five years that was used to calculate TNC's goals. Table 5 presents the projected demand and energy savings by program for each customer class, and for each of the years 2014 and 2015. Projected savings reflect the estimated demand and energy savings TNC's programs are expected to achieve with fully-deployed program budgets for each of the years shown.

According to the U.S. Census Bureau's Current Population Survey-2013 Annual Social and Economic Supplement, 38.8% of Texas families fall below 200% of the poverty threshold. Applying that percentage to TNC's residential customer base of 151,705, the number of Hard-to-Reach customers is estimated at TNC's residential customer base of 58,861.

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		Peak Deman	and (MW)		E	Energy Consumption (GWh)	mption (G	Wh)		
	Total	Total System	Resid	Residential & Commercial*	Total	Total System	Resid Comr	Residential & Commercial*	Growth (MW)	Average Growth (MW) <sup>3</sup>
Calendar Year	Actual	Actual Weather Adjusted	Actual	Actual Weather Adjusted	Actual	Actual Weather Adjusted	Actual	Actual Weather Adjusted	Actual Weather Adjusted	Actual Weather Adjusted
2008	981	984	996	696	4,704	4,724	4,584	4,604	NAP	NAP
2009	1,013	286	966	970	4,844	4,811	4,722	4,690	1	NAP
2010	1,064	1,062	1,043	1,041	5,042	4,909	4,918	4,785	71	NAP
2011	1,118	1,051	1,099	1,031	5,304	4,963	5,178	4,837	6-	NAP
2012	1,090	1,036	1,075	1,021	5,145	5,055	5,016	4,926	-10	NAP
2013	1,067	1,065	1,053	1,051	5,221	5,131	5,084	4,994	30	NAP
2014	NAP	NAP	NAP	1,060	NAP	NAP	NAP	NAP	6	16.37
2015	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	16.37

\*Does not include transmission customers and customers who have submitted an Industrial Notice (Subst. Rule 25.181(w)).

<sup>&</sup>lt;sup>3</sup> Average historical growth in demand over the prior five years for residential and commercial customers adjusted for weather fluctuations.

Table 5: Projected Demand and Energy Savings by Program for Each Customer Class for 2014 and 2015 (at the Meter)

2014	Projected Savings			
Customer Class and Program	kW	kWh		
Commercial				
Commercial Solutions MTP	340	1,500,000		
Commercial SOP	760	3,009,000		
Irrigation Load Management MTP	800	38,400		
Load Management SOP	2,751	19,282		
Open MTP	340	1,344,000		
SCORE/CitySmart MTP	340	1,500,000		
SMART Source <sup>SM</sup> Solar PV MTP	62	120,000		
Residential				
A/C Distributor Pilot MTP	102	251,201		
Residential SOP	870	1,899,000		
SMART Source <sup>SM</sup> Solar PV MTP	62	120,000		
Hard-to-Reach				
Hard-to-Reach SOP	240	418,000		
Targeted Low-Income Energy Efficiency Program	60	97,000		
Total Annual Projected Savings	6,727	10,315,883		

**Table 5: Continued** 

2015	Pro	Projected Savings		
Customer Class and Program	kw	kWh		
Commercial				
Commercial Solutions MTP	340	1,500,000		
Commercial SOP	760	3,009,000		
Irrigation Load Management MTP	800	38,400		
Load Management SOP	2,751	19,282		
Open MTP	340	1,344,000		
SCORE/CitySmart MTP	340	1,500,000		
SMART Source <sup>SM</sup> Solar PV MTP	62	120,000		
Residential				
A/C Distributor Pilot MTP	102	251,201		
Residential SOP	870	1,899,000		
SMART Source <sup>SM</sup> Solar PV MTP	62	120,000		
Hard-to-Reach				
Hard-to-Reach SOP	240	418,000		
Targeted Low-Income Energy Efficiency Program	60	97,000		
Total Annual Projected Savings	6,727	10,315,883		

### IV. Program Budgets

Table 6 presents total proposed budget allocations required to meet TNC's projected demand and energy savings to be achieved for the Program Years 2014 and 2015. The budget allocations are defined by the overall projected demand and energy savings, the avoided costs of capacity and energy specified in Substantive Rule 25.181, allocation of demand goals, and the incentive levels by customer class. Table 6 budget allocations are detailed by customer class, program, and the following budget categories: incentives, administration, research and development (R&D), and evaluation, measurement and verification (EM&V). In the absence of an estimate for Program Year 2014 EM&V costs, TNC is using the 2013 EM&V budget estimate.

Table 6: Projected Annual Budget by Program for Each Customer Class for 2014 and 2015

		I TO LACE	Customer	Class IVI	ZVI4 anu ZVIS
2014	Incentives	Admin	-R&D	EM&V	Total Budget
Commercial				ALTERNATION OF THE PROPERTY OF	
Commercial Solutions MTP	\$210,600	\$23,400			\$234,000
Commercial SOP	\$200,000	\$22,222			\$222,222
Irrigation Load Management MTP	\$50,000	\$5,556			\$55,556
Load Management SOP	\$96,300	\$10,700			\$107,000
Open MTP	\$419,241	\$46,582			\$465,823
SCORE/CitySmart MTP	\$210,600	\$23,400			\$234,000
SMART Source <sup>SM</sup> Solar PV MTP	\$81,000	\$9,000			\$90,000
Residential		<del>                                     </del>			
A/C Distributor Pilot MTP	\$150,000	\$16,667			\$166,667
Residential SOP	\$419,610	\$46,623			\$466,233
SMART Source <sup>SM</sup> Solar PV MTP	\$100,000	\$11,111			\$111,111
Hard-to-Reach					
Hard-to-Reach SOP	\$162,719	\$18,080			\$180,799
Targeted Low-Income Energy Efficiency Program	\$251,541	\$27,949			\$279,490
Research and Development (R&D)					
R&D	NAP	NAP	\$182,000	NAP	\$182,000
Evaluation, Measurement & Verification (EM&V)					
EM&V	NAP	NAP	NAP	\$60,060	\$60,060
Total Budget	\$2,351,611	\$261,290	\$182,000	\$60,060	\$2,854,961

Table 6: Continued

2015	Incentives	Admin	R&D	EM&V	Total Budget
Commercial					
Commercial Solutions MTP	\$230,680	\$34,470			\$265,150
Commercial SOP	\$200,000	\$29,885			\$229,885
Irrigation Load Management MTP	\$50,000	\$7,471			\$57,471
Load Management SOP	\$96,300	\$14,390			\$110,690
Open MTP	\$419,241	\$62,645			\$481,886
SCORE/CitySmart MTP	\$230,680	\$34,469			\$265,149
SMART Source <sup>SM</sup> Solar PV MTP	\$81,000	\$12,104			\$93,104
Residential	_				
A/C Distributor Pilot MTP	\$150,000	\$22,414			\$172,414
Residential SOP	\$419,610	\$62,700			\$482,310
SMART Source <sup>SM</sup> Solar PV MTP	\$100,000	\$14,943			\$114,943
Hard-to-Reach					
Hard-to-Reach SOP	\$162,719	\$24,314			\$187,033
Targeted Low-Income Energy Efficiency Program	\$257,145	\$38,424			\$295,569
Research and Development					
R&D	NAP	NAP	\$200,000		\$200,000
Evaluation, Measurement & Verification (EM&V)					
EM&V	NAP	NAP	NAP	\$0	\$0
Total Budget	\$2,397,375	\$358,229	\$200,000	\$0	\$2,955,604

### **ENERGY EFFICIENCY REPORT**

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

Table 7 contains TNC's demand and energy reduction goals and actual savings achieved for the previous five years (2009-2013) calculated in accordance with Substantive Rule 25.181.

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

Calendar Year	Actual Weather Adjusted Demand Goal (MW)	Actual Weather Adjusted Energy Goal (MWh)	Savings Achieved (MW)	Savings Achieved (MWh)
2013	4.26	7,464	6.93	9,087
2012	4.26	7,464	6.02	7,353
2011	(1.82)	(3,194)	4.18	8,801
2010	(1.83)	(3,202)	5.09	14,194
2009	(2.03)	(3,561)	3.26	8,419

<sup>\*</sup> Actual Weather Adjusted MW and MWh Goals as reported in TNC's EEPRs filed in years 2009-2013.

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

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

2013		d Savings	Reported and Verified Savings		
Customer Class and Program	kW	kWh	kW	kWh 🐇	
Commercial				Waster H. J. W.	
Commercial Solutions MTP	340	1,075,000	237	984,202	
Commercial SOP	400	1,752,000	282	1,251,684	
Irrigation Load Management MTP	800	51,200	569	4,554	
Load Management SOP	2,751	19,282	3,543	32,461	
Open MTP	340	1,344,000	285	1,292,355	
SCORE/CitySmart MTP	340	826,000	382	1,569,701	
SMART Source <sup>SM</sup> Solar PV MTP	50	106,000	81	156,016	
Residential					
A/C Distributor Pilot MTP	102	251,201	98	338,769	
Residential SOP	752	2,043,110	962	2,385,466	
SMART Source <sup>SM</sup> Solar PV MTP	50	106,000	33	62,800	
Hard-to-Reach					
Hard-to-Reach SOP	240	653,561	349	767,152	
Targeted Low-Income Energy Efficiency Program	55	221,613	111	241,639	
Total Annual Savings	6,220	8,448,967	6,932	9,086,799	

**Table 8: Continued** 

2012	Projec	Projected Savings		ed and Verified Savings
Customer Class and Program	kW	kWh	kW	kWh
Commercial				
AEP Texas CARE\$ Energy Efficiency for Not-for-Profit Agencies SOP	30	111,000	27	91,837
Commercial Solutions Pilot MTP	420	1,270,000	406	1,641,298
Commercial SOP	320	1,605,000	245	1,031,610
Load Management SOP	1,430	10,000	1,430	10,000
Load Management SOP - Expanded	4,300	30,000	2,282	1,794
SCORE/CitySmart MTP	480	1,115,000	409	1,272,714
SMART Source <sup>SM</sup> Solar PV Pilot MTP	50	89,000	49	94,896
Residential			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
A/C Distributor Pilot MTP	104	259,725	16	48,920
Residential SOP	810	1,938,000	752	2,041,058
SMART Source <sup>SM</sup> Solar PV Pilot MTP	50	89,000	44	85,248
Hard-to-Reach				,
Hard-to-Reach SOP	320	922,000	313	857,690
Targeted Low-Income Energy Efficiency Program	60	205,000	44	175,564
Total Annual Savings	8,374	7,643,725	6,017	7,352,629

VII. Historical Program Expenditures
This section documents TNC's incentive and administration expenditures for the previous five years (2009-2013) detailed by program for each customer class.

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	2013	3	2012	12	2013 2012 2011 2010	11	2010	0	2009	6
	Incent.	Admin	Incent.	Admin	Incent.	Admin	Incent.	Admin	Incent.	Admin
Commercial										
AEP Texas CARE\$ Energy Efficiency for Not-for-Profit Agencies SOP	NAP	NAP	\$52.12	\$14.36	\$82.61	\$17.55	\$67.17	\$11.95	\$89.80	\$13.90
Commercial Solutions MTP	\$177.64	\$20.69	\$231.71	\$29.01	\$210.21	\$20.02	\$239.94	\$18.27	\$172.40	\$19.50
Commercial SOP	\$132.02	\$29.32	\$64.17	\$18.66	\$158.97	\$26.77	\$219.53	\$24.66	\$81.60	\$17.90
Irrigation Load Management MTP	\$140.00	\$18.25	NAP	NAP	NAP	NAP	den	AVN	NAP	NAP
Load Management SOP	\$ 96.30	\$18.30	\$50.00	\$11.27	\$40.03	\$8.12	\$49.04	26.57	\$25.90	\$2.90
Load Management SOP – Expanded	NAP	NAP	\$14.46	\$3.18	NAP	NAP	NAP	NAP	NAP	NAP
Open MTP	\$374.73	\$50.56	NAP	NAP	NAP	NAP	NAP	AAN	NAP	NAP
SCORE/CitySmart MTP	\$230.35	\$26.39	\$184.17	\$24.48	\$226.73	\$19.27	\$236.03	\$26.82	\$53.70	\$10.90
SMART Source <sup>SM</sup> Solar PV MTP	\$ 67.74	\$ 8.90	\$79.44	\$10.76	\$96.41	\$8.02	\$90.90	\$5.61	0\$	80

(Table continued on next page)

Table 9: Continued

Residential										
Appliance Recycling Pilot MTP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	\$4.50	\$4.80
A/C Distributor Pilot MTP	\$133.59	\$22.28	\$41.01	\$9.38	NAP	NAP	NAP	NAP	NAP	NAP
Residential SOP	\$364.19	\$62.57	\$362.49	\$59.73	\$318.35	\$43.28	\$412.13	\$39.82	\$244.40	\$36.50
SMART Source <sup>SM</sup> Solar PV MTP	\$ 68.73	\$ 9.03	\$100.70	\$13.45	\$122.04	\$10.11	\$218.16	\$13.47	\$13.00	\$1.40
Texas Statewide ENERGY STAR Residential Compact Fluorescent Lighting MTP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	Z A Z	838 10	24.30
Hard-to-Reach										
Hard-to-Reach SOP	\$177.12	\$32.97	\$213.45	\$36.82	\$239.01	\$32.63	\$293.43	\$31.10	\$101.70	\$15.20
Targeted Low-Income Energy Efficiency Program	\$251.37	\$37.13	\$199.29	\$40.23	\$198.47	\$34.57	\$118.38	\$20.11	\$282.40	\$29.30
Research and Development (R&D)	NAP	986.56	NAP	\$108.66	NAP	\$106.98	NAP	\$95.01	NAP	\$112.70
Evaluation, Measurement & Verification (EM&V)	NAP	\$68.34	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP
Total Expenditures	2,213.78	491.29	\$1,593.01	\$379.99	\$1,692.83	\$327.32	\$1,944.71	\$293.39	\$1,107.50	\$269.30

### VIII. Program Funding for Calendar Year 2013

As shown in Table 10, the total projected budget in 2013 was \$2,794,901 and the actual total funds expended in 2013 were \$2,705,073, an overall total program expenditure difference of 3% from the amount budgeted. The following program expenditures differed from the respective proposed program budgets by more than 10%. The differences are explained below.

The CS MTP did not expend its entire budget due to lower than expected customer participation. Additionally, rising baselines can be attributed to some of the shortfall.

The CSOP did not expend its entire budget, primarily due to one large project not completing its M&V analysis before the end of the year.

The HTR SOP exceeded its budget by 16% due to greater demand for services in the low-income residential sector.

The residential component of the PV MTP did not fully utilize its incentive budget during the program year due to a slower than expected commitment rate. The commercial component of the PV MTP did not fully utilize its incentive budget due to a number of projects that were unable to be completed by the program year deadline.

TNC's combined 2013 expenditures for the TLIP and the HTR constituted 17.8% of its energy efficiency budget for the 2013 Program Year. TNC's 2013 expenditure for the TLIP constituted 10.3% of its energy efficiency budget for the 2013 Program Year.

Table 10: Program Funding for Calendar Year 2013 (Dollar amounts in 000's)

		<del></del>	т						
	Total Projected Budget <sup>4</sup>	Numbers of Customers Participating	Actual Funds Expended (Incentives)	Actual Funds Expended (Admin)	Research & Development	Evaluation, Measurement & Verification	Total Funds Expended	Funds Committed (Not Expended)	Funds Remaining (Not Committed)
Commercial									
Commercial Solutions MTP	\$234.00	32	\$177.64	\$20.69			\$198.33	\$0	\$35.67
Commercial SOP	\$222.22	22	\$132.02	\$29.32			\$161.34	\$0	\$60.88
Irrigation Load Management MTP	\$155.56	7	\$140.00	\$18.25			\$158.25	\$0	\$0
Load Management SOP	\$107.00	13	\$96.30	\$18.30			\$114.60	\$0	\$0
Open MTP	\$465.82	50	\$374.73	\$50.56			\$425.29	\$0	\$40.53
SCORE/CitySmart MTP	\$234.00	24	\$230.35	\$26.39			\$256.74	\$0	\$0
SMART Source <sup>SM</sup> Solar PV MTP	\$ 90.00	3	\$67.74	\$ 8.90			\$76.64	\$0	\$13.36
Residential						-			
A/C Distributor Pilot MTP	\$166.67	124	\$133.59	\$22.28			\$155.87	\$0	\$10.8
Residential SOP	\$404.73	1,198	\$364.19	\$62.57			\$426.76	\$0	\$0
SMART Source <sup>SM</sup> Solar PV MTP	\$111.11	7	\$68.73	\$ 9.03			\$77.76	\$0	\$33.35
Hard-to-Reach									
Hard-to-Reach SOP	\$180.80	299	\$177.12	\$32.97			\$210.09	\$0	\$0
Targeted Low-Income Energy Efficiency Program	\$279.49	82	\$251.37	\$37.13			\$288.50	\$0	\$0
Research and Development	\$143.50	NAP	NAP	NAP	\$86.56	NAP	\$86.56	\$0	NAP
EM&V									
Statewide EM&V Contractor	\$0	NAP	NAP	NAP	NAP	\$58.46	\$58.46	NAP	NAP
Other Third-Party EM&V Costs	\$0	NAP	NAP	NAP	NAP	\$9.88	\$9.88	NAP	NAP
Total Expenditures	\$2,794.90	NAP	\$2,213.78	\$336.39	\$86.56	\$68.34	\$2,705.07	NAP	NAP

<sup>&</sup>lt;sup>4</sup> Projected Budget from the EEPR filed April 2013, Project No. 41196.

### IX. Market Transformation Program Results

### A/C Distributor Pilot MTP

The goal for the ACD MTP was to acquire 102 kW demand savings in 2013. A total of 98 kW was actually achieved.

### **Commercial Solutions MTP**

For 2013, TNC projected to acquire 340 kW demand savings from CS MTP. TNC's verified and reported results are 237 kW. This included participation by 32 customers in 15 counties.

### Irrigation Load Management MTP

The ILM MTP was implemented in the spring of 2013. The program goal was to enable a total of eight sites with an expected average load reduction per site of 100 kW. A total of eight sites were enrolled in 2013 and seven sites were fully enabled and ready to respond by the end of September. By December 31, 2013, eight sites were enrolled and enabled. The ILM MTP was utilized three times for a total of eight hours. This resulted in a total energy savings of 4,554 kWh and an average hourly load reduction of 569 kW.

### **Open MTP**

The Open MTP goal was to acquire 340 kW demand savings and 1,344,000 in energy savings its first year. A total of 285 kW and 1,292,355 kWh were achieved in 2013. Reported savings included 50 small commercial customers and nine participating contractors across seven counties.

### **SCORE/CitySmart MTP**

For 2013, TNC projected to acquire 340 kW demand savings from this program. TNC verified and reported 382 kW. This included participation by 24 customers in six counties.

### SMART Source<sup>SM</sup> Solar PV MTP

The 2013 PV MTP projected to acquire a 100 kW in demand savings and 212,000 kWh in energy savings from the residential and non-residential components. A total of 10 residential and non-residential solar PV projects were completed in six counties within the program, resulting in a peak demand reduction of 114 kW and 218,816 kWh of energy savings.

### X. Research and Development

In 2013, R&D activities and projects accounted for 3% of TNC's total program expenses. R&D activities are intended to help TNC meet future energy efficiency goals by researching new technologies, program options and developing better, more efficient ways to administer current programs. The following is a summary of TNC's R&D activities for 2013:

### Center for Commercialization of Electric Technologies (CCET)

TNC is a member of CCET, whose purpose is to enhance the safety, reliability, security, and efficiency of the Texas electric transmission and distribution system through research, development and commercialization of emerging technologies. Activities undertaken in 2013 include participation in a DOE American Reinvestment and Recovery Act (ARRA) Smart Grid Demonstration project supporting wind integration in ERCOT.

### SMART View<sup>SM</sup> In-Home Device R&D Project

TNC continued its AEP Texas SMART View<sup>SM</sup> In-home Device Project in 2013 with the following objectives:

- 1. To enable a sampling of TNC's end-use residential customers to receive energy use data from their dwelling premises, and to use that data to make informed decisions regarding timing and magnitude of electric energy use.
- To enable TNC's Energy Efficiency/Demand Response function to capture, measure, and verify energy and demand savings and to determine if the in-home monitors could be a measure that produces savings that could be used toward its annual energy efficiency goal requirements.
- 3. To present positive customer information regarding the value and benefits available through the use of TNC's Advanced Meter System, Smart Meter Texas web portal, and in-home monitors available in the market.
- 4. To enlist REP engagement in providing additional customer energy efficiency education, time-of-use pricing programs, and other retail activities to encourage customer energy efficiency.
- 5. To test in-home monitors from various technology vendors and manufacturers, and evaluate their ease of use and acceptability by customers.

Following distribution of In-Home Devices (IHD) to all participants in late 2012, the provisioning phase began in the first quarter of 2013. The final IHD was provisioned on March 1 and the research phase began. TNC began monitoring the energy consumption of participants, as well as a control group. Monitoring is expected to continue over a period of approximately 12 months.

In 2014, energy consumption patterns will be analyzed to assess the impact of the displays. The study will assess both immediate and sustained impacts of the displays with and without supplemental energy efficiency communications.

### **Program Research and Development**

In 2013, TNC dedicated resources to further develop and enhance its electronic data collection and management systems for current programs. In addition, TNC participated with Electric Utility Marketing Managers of Texas (EUMMOT) in researching potentially new deemed savings measures for various programs.

### **Informational Activities**

TNC continues its best efforts to encourage and facilitate the involvement of REPs and EESPs in the delivery of its programs to customers. TNC utilizes local, regional and national conferences, trade shows, and other events for outreach and information exchange with participating REPs and EESPs. TNC again presented detailed program information at its annual AEP Texas Competitive REP workshop in October 2013. TNC also provides new and existing energy efficiency program information to the REPs and EESPs throughout the year on a timely basis via e-mail distribution and the <a href="https://www.AEPefficiency.com">www.AEPefficiency.com</a> web site.

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

The total amount requested to be collected through TNC's 2014 EECRF is \$1,153,204, which consists of the following components:

recovery of \$1,411,326 in energy efficiency expenses budgeted for 2014; (TNC's actual projected budget for energy efficiency expenses for 2014 is \$2,794,901, which is reduced by \$1,294,430 in energy efficiency costs expressly included in base rates and \$89,145 of load growth);

- return to customers in the amount of \$229,331 in energy efficiency program costs overcollected through TNC's EECRF in 2012;
- return to customers in the amount of \$133,604 as a result of the November 26, 2012 revision to the April 2012 EEPR filed in Project No. 40194;
- recovery of \$100,100 in EM&V costs for evaluation of 2012 and 2013; and
- recovery of \$4,713 for 2012 EECRF proceeding expenses incurred in Docket No. 40358 by municipalities as authorized by P.U.C Subst. R. 25.181(f)(3)(B).

**Table 11: 2014 EECRF** 

### **Customer Class**

### **EECRF**

Residential Service	\$0.000319 per kWh
Secondary Service (less than or equal to 10 kW)	\$0.000284 per kWh
Secondary Service (greater than 10 kW)	\$0.000405 per kWh
Primary Service	(\$0.000107) per kWh
Transmission Service	(\$0.000142) per kWh

### 2013 Collections for Energy Efficiency

TNC collected \$1,413,466 through its 2013 base rates and \$1,550,455 through its 2013 EECRF for a total of \$2,963,921. A performance bonus of \$96,351 for exceeding its 2012 energy efficiency goals and \$59,883 returned to customers are reflected in the total amount collected in 2013.

### **Energy Efficiency Program Costs Expended**

TNC expended a total of \$2,705,073 for its 2013 energy efficiency programs. The amount expended is \$89,828 less than TNC's 2013 projected budget of \$2,794,901 for energy efficiency programs.

### **Over-Recovery of Energy Efficiency Costs**

Pursuant to the final order in Docket No. 40358, TNC was authorized to recover \$1,500,471 through its 2013 EECRF. TNC's actual 2013 EECRF program costs were \$2,705,073 and actual EECRF program revenues were \$2,963,921. These associated 2013 costs and revenues result in an over-recovery of energy efficiency costs of \$258,848. This is the amount that TNC will request be returned to customers within its 2015 EECRF.

### **XII.** Underserved Counties

TNC has defined Underserved Counties as any county in the TNC service territory for which TNC reported no demand or energy savings through any of its 2013 SOPs or MTPs. Per Substantive Rule 25.181(n) (2) (U), a list of the Underserved Counties is as follows:

Baylor	Donley	Hall	Motley
Briscoe	Edwards	King	Nolan
Brown	Foard	Mason	Stephens
Crane	Gillespie	McCullough	Wheeler

### XIII. Performance Bonus

TNC achieved a 6,932 kW reduction in peak demand from its energy efficiency programs offered in 2013. This achievement represents 163% of its 2013 demand reduction goal of 4,260 kW. TNC also achieved 9,086,799 kWh, which represents 122%, of its energy reduction goal of 7,464,000. These results qualify TNC for a Performance Bonus. Per Substantive Rule 25.181(h), TNC is eligible for a Performance Bonus of \$901,009, which it will request within its May 30, 2014 EECRF Filing for recovery in 2015.

In 2013, TNC's total spending on energy efficiency programs was \$2,705,073. This includes actual EM&V expenditures to the EM&V team of \$58,462. Per the PUCT, the total program costs to be used in the Performance Bonus calculation should include the EM&V cost allocation provided by the EM&V team for Program Year 2013, instead of the actual EM&V team expenditures. As a result, the total program expenditures for the bonus calculation will not match the actual total program expenditures exhibited in the applicable tables in this EEPR. For the purposes of the Performance Bonus calculation, TNC's 2013 total program costs equaled \$2,706,671.

**Table 12: Energy Efficiency Performance Bonus Calculation for 2013** 

	kW	kWh
2013 Goals	4,260	7,464,000
2013 Savings		
Reported/Verified Total (including HTR and measures with <10yr EUL)	6,932	9,086,799
Reported/Verified Hard-to-Reach	460	
2013 Program Costs	\$2,7	06,671
2013 Performance Bonus	\$90	01,009

### **Performance Bonus Calculation**

163%	Percentage of Demand Reduction Goal Met (Reported kW/Goal kW)
122%	Percentage of Energy Reduction Goal Met (Reported kWh/Goal kWh)
TRUE	Met Requirements for Performance Bonus?
\$11,716,757	Total Avoided Cost (Reported kW * PV (Avoided Capacity Cost) + Reported kWh * PV(Avoided Energy Cost))
\$2,706,671	Total Program Costs
\$9,010,086	Net Benefits (Total Avoided Cost - Total Expenses)

### **Bonus Calculation**

\$2,825,798	Calculated Bonus ((Achieved Demand Reduction/Demand Goal - 100%) / 2) * Net Benefits
\$901,009	Maximum Bonus Allowed (10% of Net Benefits)
\$901,009	Bonus (Minimum of Calculated Bonus and Bonus Limit)

### **Acronyms**

ACD MTP A/C Distributor Pilot Market Transformation Program

ARRA American Reinvestment and Recovery Act

CARE\$ SOP AEP Texas CARE\$ Energy Efficiency for Not-for-Profit Agencies Standard

Offer Program

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

**CSOP** Commercial Standard Offer Program

CS MTP Commercial Solutions Market Transformation Program

**DR** Demand Response

**DSM** Demand Side Management

**EECRF** Energy Efficiency Cost Recovery Factor

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

April 2008

**EEPR** Energy Efficiency Plan and Report

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

April 2008

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

**EESP** Energy Efficiency Service Providers

**ERCOT** Electric Reliability Council of Texas

**EUMMOT** Electric Utility Marketing Managers of Texas

HTR Hard-To-Reach

HTR SOP Hard-to-Reach Standard Offer Program

ILM MTP Irrigation Load Management Market Transformation Program

LM SOP Load Management Standard Offer Program

MTP Market Transformation Program

### Acronyms (Continued)

NAP Not Applicable

**NFP** Not-for-Profit

**Open MTP** Open Market Transformation Program

PEV Plug-in Electric Vehicle

PUCT Public Utility Commission of Texas

PURA Public Utility Regulatory Act

**PV** Photovoltaic

PV MTP SMART Source SM Solar PV Market Transformation Program

**R&D** Research and Development

**REP** Retail Electric Provider

**RES** Residential

**RSOP** Residential Standard Offer Program

SCORE Schools Conserving Resources

SCORE/CS MTP SCORE/CitySmart Market Transformation Program

**SOP** Standard Offer Program

**TDU** Transmission and Distribution Utility

**TLIP** Targeted Low-Income Energy Efficiency Program

TNC AEP Texas North Company

### **APPENDIX A:**

# REPORTED AND VERIFIED DEMAND AND ENERGY REDUCTION BY COUNTY

### **CALENDAR YEAR 2013**

### A/C DISTRIBUTOR PILOT MTP

County	Reported Savings			
County	kW	kWh		
Brewster	13.99	47,659		
Callahan	1.72	6,598		
Shackelford	1.72	5,175		
Sutton	3.53	12,911		
Taylor	68.52	239,385		
Tom Green	8.95	27,041		
Total	98	338,769		

### **COMMERCIAL SOLUTIONS MTP**

Country	Reported Savings		
County	kW	kWh	
Brewster	2.45	11,340	
Coke	1.41	6,567	
Concho	1.72	7,950	
Crockett	3.88	21,587	
Fisher	3.23	14,981	
Jones	2.52	11,666	
Kimble	0.87	4,059	
Menard	3.39	15,622	
Pecos	2.66	12,337	
Runnels	8.62	57,655	
Shackelford	2.31	10,737	
Sutton	2.77	12,269	
Taylor	144.49	507,049	
Throckmorton	2.02	9,362	
Tom Green	54.3	281,021	
Total	237	984,202	

### **COMMERCIAL SOP**

County	Reported Savings	
County	kW	kWh
Callahan	18.19	121,950
Dickens	1.19	21,001
Haskell	1.70	33,573
Jones	3.23	65,141
Knox	2.00	45,269
Runnels	1.89	38,841
Stonewall	0.89	17,890
Taylor	234.03	812,925
Tom Green	19.06	95,094
Total	282	1,251,684

### **HARD-TO-REACH SOP**

County	Reported Savings	
County	kW	kWh
Callahan	4.53	14,466
Coleman	4.27	8,727
Fisher	1.47	1,747
Jones	43.53	91,804
Runnels	6.01	16,600
Taylor	123.31	228,399
Tom Green	165.43	405,409
Total	349	767,152

### IRRIGATION LOAD MANAGEMENT MTP

County	Reported Savings	
	kW	kWh
Reeves	569.00	4,554
Total	569	4,554

### LOAD MANAGEMENT SOP

County	Reported Savings	
	kW	kWh
Taylor	3449.00	32,128
Tom Green	89.00	288
Wilbarger	5.00	45
Total	3,543	32,461

### **OPEN MTP**

County	Reported Savings	
County	kW	kWh
Callahan	12.18	17,479
Concho	1.49	8,043
Irion	3.53	19,825
Runnels	2.17	11,245
Schleicher	18.20	92,659
Taylor	103.48	472,725
Tom Green	144.42	670,379
Total	285	1,292,355

### **RESIDENTIAL SOP**

Country	Reported Savings	
County	kW	kWh
Callahan	7.93	17,080
Coke	0.86	2,901
Coleman	5.98	17,382
Crockett	1.17	4,640
Fisher	12.50	17,909
Jones	61.48	108,621
Reagan	0.63	1,574
Runnels	10.56	20,058
Sterling	0.98	2,733
Sutton	0.60	2,031
Taylor	331.22	879,247
Tom Green	477.64	1,137,609
Wilbarger	50.53	173,681
Total	962	2,385,466

### **SCORE/CITYSMART MTP**

Country	Reported Savings	
County	kW	kWh
Callahan	14.54	40,545
Jones	1.09	1,390
Runnels	29.83	125,772
Taylor	159.37	956,518
Tom Green	162.53	358,386
Upton	14.74	87,094
Total	382	1,569,701

### SMART SOURCE $^{SM}$ SOLAR PV MTP

Country	Reported Savings	
County	kW	kWh
Brewster	10.58	20,400
Callahan	8.37	16,128
Eastland	4.65	8,960
Jeff Davis	5.61	10,816
Presidio	61.63	118,800
Tom Green	22.68	43,712
Total	114	218,816

## TARGETED LOW-INCOME ENERGY EFFICIENCY PROGRAM

County	Reported Savings	
County	kW	kWh
Callahan	3.84	8,673
Childress	3.39	8,730
Coke	1.27	3,659
Cottle	8.28	26,652
Eastland	2.36	3,371
Hardeman	3.73	3,780
Jeff Davis	0.41	2,260
Jones	<b>8.</b> 71	11,423
Kent	0.86	4,159
Menard	1.99	5,333
Presidio	7.26	18,868
Runnels	5.78	12,549
Schleicher	0.81	5,677
Shackelford	4.33	9,214
Taylor	20.12	44,100
Throckmorton	2.28	2,920
Tom Green	32.31	64,183
Upton	3.38	6,088
Total	111	241,639

### **APPENDIX B:**

### **PROGRAM TEMPLATES**

TNC does not have any Program Templates to report this year.

### **APPENDIX C:**

### **EXISTING CONTRACTS OR OBLIGATIONS**

TNC has no Existing Contracts or Obligations documentation to provide.

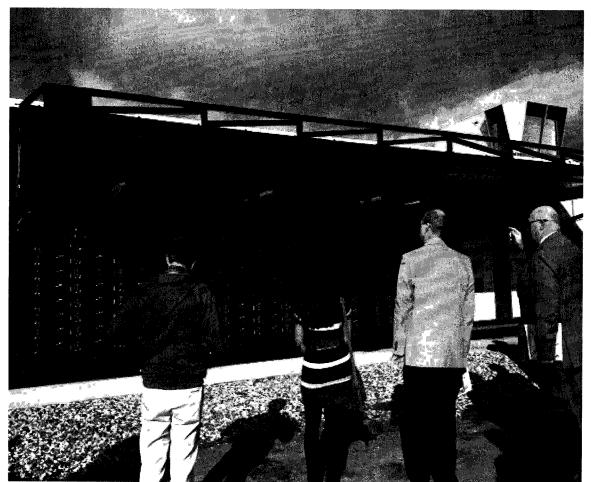
### **APPENDIX D:**

### **OPTIONAL SUPPORT DOCUMENTATION**

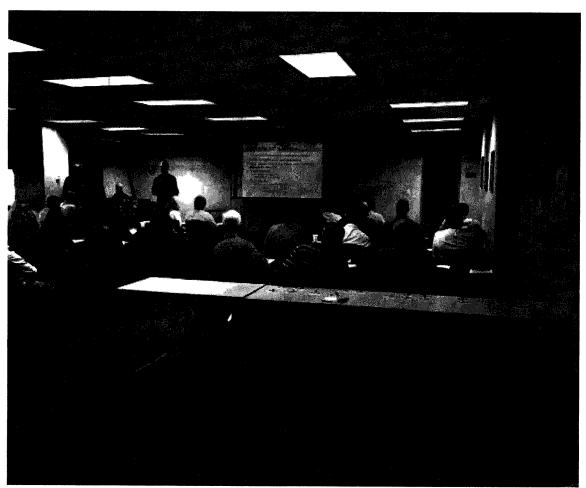
TNC provides the following Optional Supporting Documentation.



TNC presented an incentive check to Goodfellow Air Force Base (AFB) in San Angelo for a variety of energy efficiency projects. These energy efficiency improvements earned Goodfellow AFB incentives totaling \$53,324 through the SCORE/CS MTP in 2013.



Lithim-Ion based battery energy storage system dedication in October, 2013 at the Reese Technology Center in Lubbock, Texas for CCET as part of a Smart Grid Demonstration Project analyzing the benefits of using energy storage for wind energy integration.



A workshop for Energy Efficiency Service Providers was held on October 23, 2013 at the AEP Texas home office in Corpus Christi. The 2014 Residential and Hard-to-Reach Standard Offer Programs were the primary focus of the workshop, which described the programs and changes for the 2014 program year. The workshop featured approximately attendees.

AEP Texas Irrigation Load

Management Program

Mid-Program Market Assessment 8.19.13

# **AEP Irrigation Load Management Market Assessment**

- Market Assessment Process
- Regional Characteristics
  - Challenges
- Summary

2014 Energy Efficiency Plan and Report

## **Market Assessment Process**

Our view of the market evolved as we gathered more information

> Market Outreach	identified tit-for program incough conversations with 112 farmers	Farmer contacts identified by AEP customer ceps. Highesty expents, and public lead sources.	Market polaridal is first of the polaridal is first good firs for kM Additional tactics needed to fully market potential
Expert Interviews	Gatherad information on regional characteristics based on conversations with 65 industry experts	USDA / NRCS Agricultural Coops Extension Agents Groundwater Consenvations Districts Irrigation Equipment Suppliers	AEP's impation had is concentrated in 5 regions 4 of the 5 regions appear to have ILM potential based on farmer characteristics.
Initial Data Analysis	Condusted infited  market string based on n  oxternal data sources	USDA Impanon     Survey database     Toxas Groundwater     Database     AEP Sorvice Tentiony     Maps	There is a large amount of trigation load in Taxas  A large portion of the impelian load appears to be served by AEP
	<b>A</b> ctivities	Sources	Conclusions

Assessment ILM Market

- Unique regional
- characteristics
   Estimated Market
  Potential
  - Keys to Success

**●** BAEMOC