I. INTRODUCTION

Q. PLEASE STATE YOUR NAME, POSITION IN THE COMPANY, AND BUSINESS ADDRESS.

A. My name is Rhonda R. Fahrlender. I am an Energy Efficiency and Consumer Programs Coordinator Senior for AEP Texas North Company (TNC). My business address is 910 Energy Drive, Abilene, Texas 79602.

Q. PLEASE STATE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND.

A. I received a Bachelor of Business Administration degree from McMurry University in 1997. I was first employed by West Texas Utilities Company (the predecessor of TNC) in December 1979 in Clyde, Texas as Bookkeeper/Cashier. I then held the position of Customer Service Representative before transferring to Abilene in June 1994. In November of 1996, I transferred to the Customer Accounting department as a Staff Associate and then Senior Staff Associate. In August 2000, I assumed my current duties as Energy Efficiency and Consumer Programs Coordinator Senior for TNC. In my current position, I am responsible for administering programs in compliance with the Public Utility Regulatory Act provisions and the Public Utility Commission of Texas (PUC or Commission) rules for energy efficiency. I hold professional certifications with the Association of Energy Engineers (AEE) as a Certified Energy Manager, Certified Energy Auditor, Certified Measurement and Verification Professional, and Certified Demand-Side Management Professional.

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY BEFORE ANY REGULATORY AGENCY?

A. Yes, I have previously filed testimony before the PUC in the following dockets:

- Docket No. 39361, TNC's Application to Adjust Energy Efficiency Cost Recovery Factor (EECRF) and Related Relief;
- Docket No. 40358, TNC's Application to Adjust Energy Efficiency Cost Recovery Factor and Related Relief;
- Docket No. 41539, TNC's Application to Adjust Energy Efficiency Cost Recovery Factor and Related Relief;
- Docket No. 42509, TNC's Application to Adjust Energy Efficiency Cost Recovery Factor and Related Relief; and
- Docket No. 44718, TNC's Application to Adjust Energy Efficiency Cost Recovery Factor and Related Relief

Q. DO YOU SPONSOR ANY OF THE SCHEDULES ACCOMPANYING TNC'S FILING?

A. Yes, I sponsor Schedules L through O and Schedule R. In addition, I cosponsor Schedule A with TNC witnesses Robert Cavazos and Jennifer L. Jackson. I also cosponsor Schedule B with TNC witness Jackson and Schedules J, P and S with TNC witness Cavazos.

II. PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my testimony is to present information supporting TNC's request to adjust its EECRF for 2017. As Mr. Cavazos discusses in his direct testimony, TNC seeks an adjustment in 2017 to reflect:

- recovery of $1,790,454, which is the amount of TNC's projected 2017 energy efficiency program costs that exceeds the energy efficiency costs expressly

included in TNC's prior base rate order adjusted for 2015 revenue according to 16 Tex. Admin. Code § 25.181(f)(1)(B) (TAC);

- return to customers of $200,114, which is the amount of TNC's over-recovered energy efficiency costs in 2015;
- recovery of $3,517, which is the amount of municipal EECRF proceeding expenses incurred in 2015, as allowed by 16 TAC § 25.181(f)(3)(B); and
- recovery of $186,197, which is the amount of TNC's performance bonus earned from actual energy efficiency achievements in PY 2015.

The total amount that TNC requests be recovered through its adjusted 2017 EECRF is $1,780,055.

In my direct testimony, I first outline the energy efficiency goals established by Public Utility Regulatory Act, Tex. Util. Code Ann. § 39.905 (PURA). I also discuss the impact of the identification notice referenced in 16 TAC § 25.181(w). I then present the actual energy efficiency expenditures incurred by TNC for its PY 2015 programs, 2015 municipal EECRF proceeding expenses, and EM&V costs incurred in PY 2015. I also present TNC's plans and projected costs to achieve its energy efficiency objectives for PY 2017. Finally, I describe the programs TNC implemented during PY 2015 and the plans and programs TNC will implement to achieve its energy efficiency objectives for PY 2017.

III. ENERGY EFFICIENCY REQUIREMENTS AND OBJECTIVES

A. Statutory and Regulatory Requirements

Q. PLEASE DESCRIBE THE BASIC REQUIREMENTS OF PURA §39.905 AS RELEVANT TO YOUR TESTIMONY.

A. As discussed by Mr. Cavazos in his testimony, the requirements of PURA §39.905 as relevant to my testimony are:

- A utility must administer energy efficiency programs.
- A utility must provide incentives adequate for the purpose of acquiring cost-effective energy efficiency equivalent to at least 30% of the utility's annual growth in demand of residential and commercial customers beginning with the 2013 program year, but not less than the previous year.
- Once the utility's demand reduction goal is equivalent to at least four-tenths of one percent of its summer weather-adjusted peak demand for the combined residential and commercial customers for the previous program year, the utility's goal shall be four-tenths of one percent of its summer weather-adjusted peak demand for the combined residential and commercial customers for the previous program year, but not less than the previous year.
- A utility must provide incentives through market-based standard offer programs (SOPs) or targeted market transformation programs (MTPs).
- A utility must provide incentives in such a manner that retail electric providers (REPs) and competitive energy efficiency service providers (EESPs) install the measures that produce the energy efficiency necessary to meet the utility's mandated annual goal.

Q. HAS THE COMMISSION ADOPTED RULES TO IMPLEMENT PURA §39.905?

A. Yes, 16 TAC § 25.181 has been adopted to implement PURA §39.905.

Q. WHAT ARE SOME OF THE KEY COMPONENTS OF 16 TAC § 25.181?

A. Some of the key components of 16 TAC § 25.181 are:

- An electric utility shall administer energy efficiency programs to acquire a 30% reduction of its annual growth in demand of residential and commercial customers until the demand reduction goal to be acquired is 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.
- Once the demand reduction goal to be acquired 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 acquire four-tenths of 1% of its summer weather-adjusted peak demand for the combined residential and commercial customers for the previous program year.
- A utility's demand goal in any year shall not be lower than its goal for the prior year.
- Utilities are encouraged 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 required cost caps.

- A utility shall adjust an EECRF to timely recover forecasted annual energy efficiency program costs in excess of the actual energy efficiency revenues collected from base rates, the preceding year's over- or under-recovery including municipal and utility EECRF proceeding expenses, any performance bonus earned, and EM&V costs assigned to the utility.
- 16 TAC § 25.181(h) allows a utility exceeding its minimum demand and energy reduction goals to earn a performance bonus.
- A utility may use up to 15% of its total program costs for administration of its energy efficiency programs.
- A utility may use up to 10% of the previous program year's costs to perform necessary energy efficiency research and development (R&D) to foster continuous improvement and innovation in the application of energy efficiency technology and energy efficiency program design and implementation.
- The cumulative cost of administration and R&D shall not exceed 20% of a utility's total program costs.
- An EM&V framework is included to evaluate program portfolio performance and to measure and verify estimated demand and energy impacts reported for those programs.
- Qualifying industrial customers taking electric service at distribution voltage may submit a notice to identify metering points for their industrial processes, which allows those metering points to not be charged for any costs associated with programs provided through the EECRF.

Q. HOW DOES TNC IMPLEMENT THESE REQUIREMENTS?

A. TNC develops and offers cost-effective energy efficiency programs to third-party EESPs as defined in 16 TAC § 25.181(c)(17), who in turn market their services to end-use retail residential and commercial customers. These programs offer incentives to encourage third-party EESPs, REPs and/or customers to participate as project sponsors of energy efficiency measures. The project sponsors then supply and install the measures at homes or businesses that produce the energy efficiency savings that TNC reports to satisfy the energy efficiency objectives of its programs. The Commission's energy efficiency rule allows commercial customers with a peak

demand of 50 kilowatts (kW) or greater to act as their own EESP for measures they install for themselves. The energy efficiency objectives and goals are established annually, so that each year TNC must procure the necessary demand reduction and energy savings from participating project sponsors to meet TNC's objectives for that year. The energy efficiency savings may be in the form of reduction in summer or winter peak demand (kW), energy usage (kWh), or both. TNC pays incentives to the project sponsors for peak demand and energy savings resulting from the energy efficiency measures installed according to program guidelines.

Q. PLEASE DEFINE THE TERM SOP.

A. Pursuant to 16 TAC § 25.181(c)(56), an SOP is defined as a program under which a utility administers standard offer contracts between the utility and the EESP. A standard offer contract specifies standard payments based upon the amount of energy and peak demand savings achieved through energy efficiency measures, the measurement and verification (M&V) protocols, and other terms and conditions, consistent with 16 TAC § 25.181.

Q. PLEASE DEFINE THE TERM MTP.

A. Pursuant to 16 TAC § 25.181(c)(37), an MTP is defined as a strategic program intended to induce lasting structural or behavioral changes in a market that result in increased adoption of energy efficiency technologies, services, and practices.

B. Annual Demand Reduction Goal

Q. PLEASE DESCRIBE TNC's DEMAND REDUCTION GOAL REQUIREMENT.

A. Pursuant to 16 TAC § 25.181(e)(1) TNC is required to acquire a 30% reduction of its annual growth in demand of residential and commercial customers until that goal is

equivalent to at least four-tenths of 1% (the trigger) of TNC's summer weather-adjusted peak demand for the combined residential and commercial customers for the previous program year. Once that trigger is reached, TNC 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. In addition, 16 TAC § 25.181(e)(1)(E) also states that, except as adjusted in accordance with subsection (w) of the rule, 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 16 TAC § 25.181(e).

Q. HAS TNC MET THE TRIGGER DESCRIBED IN 16 TAC § 25.181(e)(1)(C)?

A. Yes. TNC met the trigger when calculating its goal for PY 2015.

Q. PLEASE DESCRIBE HOW TNC'S FOUR-TENTHS OF 1% DEMAND REDUCTION GOAL IS CALCULATED.

A. TNC's summer weather-adjusted five-year average peak demand for its combined residential and commercial customers for 2011 to 2015 was 998 MW; therefore its four-tenths of 1% goal is 3.99 MW.

Q. COULD THE IDENTIFICATION NOTICE REQUIREMENT AFFECT THE UTILITY'S CALCULATED GOAL FOR ENERGY EFFICIENCY?

A. Yes. Pursuant to 16 TAC § 25.181(w) the utility's demand reduction goal is required to be adjusted to remove any load identified as a result of the identification notice provision.

Q. ARE ANY SUCH NOTICES TO BE EFFECTIVE IN PY 2017?

A. Yes. TNC received identification notices prior to February 1, 2016 for 654 ESIDs representing 27,193 kW.

Q. WHAT IS TNC'S DEMAND REDUCTION GOAL TO BE ACHIEVED IN PY 2017?

A. The demand reduction goal for TNC to achieve in PY 2017 is 4.26 MW, based on the requirements in 16 TAC § 25.181(e)(1)(E) and as adjusted in accordance with subsection (w). The minimum PY 2017 demand reduction goal is set forth in Schedule N that I sponsor. TNC, however, projects it will achieve as much as 5.77 MW of demand reduction from the programs it will implement in PY 2017. As Mr. Cavazos explains in his testimony, TNC interprets PURA §39.905 and 16 TAC § 25.181 as intended to encourage as much cost-effective energy efficiency as can reasonably be achieved under the limits set forth in the statute and rule.

Q. WERE LINE LOSSES INCORPORATED IN THE CALCULATION OF THE DEMAND REDUCTION GOAL?

A. Yes. Calculation of the demand reduction goal used the line loss numbers referenced in Table 4 of its 2016 Energy Efficiency Plan and Report. Line losses are derived from the loss factors determined in TNC's most recent line loss study.

C. Annual Energy Savings Goal

Q. HOW IS THE ENERGY SAVINGS GOAL CALCULATED UNDER 16 TAC § 25.181?

A. The minimum energy savings goal is calculated from the utility's calculated demand goal, using a 20% conservation load factor, as set forth in 16 TAC § 25.181(e)(4).

Q. WHAT IS TNC'S ENERGY SAVINGS GOAL TO BE ACHIEVED IN PY 2017?

A. The energy savings goal for TNC to achieve in PY 2017 is 7,464 Megawatt-hour (MWh). The PY 2017 energy savings goal is set forth in Schedule N. TNC projects, however, to achieve as much as 13,244 MWh of energy savings from the programs it will implement in PY 2017. As I mentioned above and as Mr. Cavazos explains in his testimony, TNC interprets PURA §39.905 and 16 TAC § 25.181 as intended to encourage utilities to achieve as much cost-effective energy efficiency as can reasonably be achieved under the limits set forth in the statute and rule.

D. Process to Achieve Savings

Q. WILL TNC OFFER PROGRAMS TO ACHIEVE THESE PY 2017 SAVINGS?

A. Yes, I discuss the programs that TNC will offer in Section V of my testimony. TNC's energy efficiency program portfolio is designed to achieve both its demand reduction and energy savings objectives for PY 2017.

Q. WILL ALL ELIGIBLE CUSTOMERS HAVE ACCESS TO ENERGY EFFICIENCY PROGRAMS OFFERED BY TNC?

A. Yes, except for industrial customers who have submitted an identification notice, all customers in the residential and commercial customer classes will have access to the energy efficiency programs offered by TNC.

IV. ENERGY EFFICIENCY COSTS

A. PY 2015

Q. WHAT COSTS DID TNC INCUR WITH ITS PY 2015 ENERGY EFFICIENCY PROGRAMS?

A. The costs incurred by TNC to implement its PY 2015 energy efficiency programs totaled $2,766,474, as shown in Schedule B.

Q. WERE TNC'S ACTUAL PY 2015 ENERGY EFFICIENCY COSTS LESS THAN THE ENERGY EFFICIENCY AMOUNT PROJECTED FOR PY 2015?

A. Yes. TNC's total energy efficiency costs for PY 2015 were about 8% ($244,373) less than the $3,010,847 projected amount.

Q. WERE TNC'S PY 2015 PROGRAM PORTFOLIO COSTS LESS THAN OR EQUAL TO THE BENEFITS OF THE PROGRAMS?

A. Yes. The benefit-cost ratio for TNC's entire PY 2015 program portfolio is shown in Schedule P. The estimated useful life for each measure in each program is provided in Schedule M.

Q. PLEASE DESCRIBE TNC'S PY 2015 ADMINISTRATIVE COSTS.

A. TNC's PY 2015 administrative costs included costs to conduct outreach and workshops to explain programs to EESPs and REPs and costs to review incentive reports and conduct field site inspections of installed measures. Administrative duties also included continuous review and monitoring of all programs for successful program implementation. Costs associated with work activities regarding regulatory reporting and special projects are considered administrative costs and are included in TNC's administrative costs.

Q. DID TNC'S PY 2015 ADMINISTRATIVE COSTS INCLUDE ANY AFFILIATE COSTS?

A. Yes. Affiliate costs are discussed by TNC witnesses Cavazos and Brian Frantz.

Q. DID TNC HAVE ANY EXPENSES ASSOCIATED WITH R&D IN PY 2015?

A. Yes. TNC expended $86,353 for R&D in PY 2015, as shown in Schedule B.

Q. PLEASE DESCRIBE TNC'S R&D EFFORTS.

A. TNC's PY 2015 R&D projects included costs related to identifying, developing and implementing necessary enhancements to its electronic data collection and management systems to incorporate updates for new program requirements, regulatory requirements, and deemed savings values; and costs associated with researching new technologies and energy efficiency program ideas. TNC also participated with the Electric Utility Marketing Managers of Texas (EUMMOT) in research activities that included providing technical support for the Texas Technical Reference Manual.

All of the R&D expenditures incurred in PY 2015 were for the purpose of fostering continuous improvement and innovation in the application of energy efficiency technology and energy efficiency program design and implementation.

Q. PLEASE DESCRIBE TNC'S PY 2015 EXPENDITURES FOR ITS TARGETED LOW-INCOME PROGRAM.

A. As required by 16 TAC § 25.181(r), TNC expended $283,094 in PY 2015 for the targeted low-income energy efficiency program, which is 9.4% of TNC's PY 2015 energy efficiency budget.

Q. HAS TNC PROVIDED INFORMATION REGARDING THE BIDDING AND ENGAGEMENT PROCESS USED FOR CONTRACTING WITH EESPs?

A. Yes. Schedule L describes the process TNC used to select and contract with EESPs.

Q. DID ANY SINGLE EESP RECEIVE MORE THAN 5% OF TNC'S OVERALL PY 2015 INCENTIVE PAYMENTS?

A. Yes. Please see Confidential Schedule J for a list of EESPs receiving more than 5% of TNC's PY 2015 overall incentive payments.

B. 2015 EECRF Proceeding Expenses

Q. DOES TNC REQUEST RECOVERY OF ANY COSTS RELATED TO THE 2015 EECRF PROCEEDING?

A. Yes. TNC requests recovery of $3,517 for municipal rate case expenses incurred as a result of its 2015 EECRF proceeding, Docket No. 44718.

Q. WHY DID TNC INCLUDE MUNICIPAL RATE CASE EXPENSES?

A. 16 TAC § 25.181(f)(3) states that an EECRF proceeding is a ratemaking proceeding for the purposes of PURA §33.023 and that EECRF proceeding expenses are to be included in the EECRF. TNC has included municipal expenses incurred for the 2015 EECRF proceeding, as allowed by 16 TAC § 25.181(f)(3)(B).

C. 2015 EM&V Costs

Q. DID TNC INCUR ANY COSTS IN 2015 FOR EM&V FOR THE EVALUATION OF PY 2014?

A. Yes. TNC incurred $39,211 in costs paid to the statewide EM&V contractor for the evaluation of PY 2014.

D. 2017 Projected Energy Efficiency Program Costs

Q. WHAT ARE TNC'S ENERGY EFFICIENCY PLANS FOR PY 2017?

A. As shown in Schedule A, TNC will implement 11 energy efficiency programs in PY 2017 with a total projected cost of $3,277,000, which includes R&D activities. The 11 energy efficiency programs are described in Schedule R and are designed to allow TNC to achieve its energy efficiency objectives for PY 2017. This portfolio of programs will continue to encourage EESPs and REPs to provide energy efficiency services to all qualifying residential and commercial customers. Each year TNC reviews the programs and activities that have taken place to improve its plan for the upcoming year. TNC has selected the programs that it believes will achieve its PY 2017 objectives and comply with PURA provisions and the PUC rules.

Q. HOW DID TNC DETERMINE ITS PY 2017 ENERGY EFFICIENCY OBJECTIVES?

A. TNC first determined to achieve even greater cost-effective energy efficiency savings than required. TNC then allocated portions of its PY 2017 projected program costs among customer classes using criteria such as customer counts, historical cost allocation, and previous program success. The Hard-to-Reach SOP and the Targeted Low-Income Energy Efficiency Program were designed to comply with PURA provisions and the Commission rule. TNC then estimated projected impacts from each program based on historical results and previous years' experience. Projected impacts from all programs within each customer class were then combined to formulate customer class projected savings. Finally, all projected customer class

savings were added together to produce TNC's PY 2017 energy efficiency objectives, as shown in Schedule O.

Q. ARE THERE SPECIFIC TYPES OF ADMINISTRATIVE COSTS ASSOCIATED WITH THE PY 2017 ENERGY EFFICIENCY PROGRAMS?

A. Yes. Administrative costs for PY 2017 will include conducting workshops to explain programs to EESPs and REPs, conducting program outreach and marketing, reviewing M&V plans for some projects that do not utilize deemed savings measures, and performing field site inspections of installed measures. Administrative costs also include the development, review and selection of new or revised programs that may be considered for successful program implementation. Costs associated with work activities regarding energy efficiency regulatory reporting and special projects are also considered administrative costs and are included as shown in Schedule A.

Q. DOES TNC INCLUDE ANY R&D ACTIVITIES IN ITS PROJECTED COSTS FOR PY 2017?

A. Yes. TNC's PY 2017 projected costs include $200,000, or about 6% of its total projected program costs, for R&D activities, as referenced in Schedule A.

E. 2017 EM&V Costs

Q. DOES TNC INCLUDE ANY EM&V COSTS AS PART OF ITS PROJECTED PY 2017 COSTS?

A. No.

Q. PLEASE EXPLAIN WHY TNC DOES NOT INCLUDE EM&V COSTS IN ITS 2017 PROJECTED ENERGY EFFICIENCY COSTS.

A. The current EM&V contract expires at the end of program year 2016; therefore TNC does not have any projected EM&V expenses to be included for recovery in 2017.

V. ENERGY EFFICIENCY PROGRAMS

A. PY 2015 Programs

Q. WHAT PROGRAMS DID TNC OFFER IN PY 2015 TO ACHIEVE ITS ENERGY EFFICIENCY OBJECTIVES?

A. TNC offered the following programs in PY 2015:

- Commercial Solutions MTP
- Commercial SOP
- Efficiency Connection Pilot MTP
- Hard-to-Reach SOP
- Load Management SOP
- Open MTP
- Residential SOP
- SCORE/CitySmart MTP
- SMART Source^{SM} Solar PV MTP
- Targeted Low-Income Energy Efficiency Program

Q. PLEASE DESCRIBE THE COMMERCIAL SOLUTIONS MTP.

A. The Commercial Solutions MTP identifies a variety of commercial customers having a high likelihood of needing energy efficiency improvements within their facilities. These customers may have delayed making such improvements for a number of reasons including an inability to identify appropriate actions to take, or a lack of understanding of energy efficiency project funding. The Commercial Solutions MTP provides education and information to such customers, and provides monetary

incentives to encourage them to take action to improve the energy efficiency of their facilities.

Q. PLEASE DESCRIBE THE COMMERCIAL SOP.

A. The Commercial SOP provides incentives for the installation of a wide range of measures that reduce customer energy costs and reduce peak demand and/or save energy in non-residential facilities. Examples of eligible customer sites include hotels, schools, manufacturing facilities, restaurants, and larger grocery and retail stores. These types of customers install eligible measures such as lighting systems, new or replacement chiller systems, high efficiency pumping systems, and other energy efficiency technologies. Incentives are paid to project sponsors on the basis of deemed savings, or if deemed savings have not been established for a particular qualifying energy efficiency measure, incentives are paid on the basis of verified peak demand and/or energy savings using the International Performance Measurement and Verification Protocol.

Q. PLEASE DESCRIBE THE EFFICIENCY CONNECTION PILOT MTP.

A. The Efficiency Connection Pilot MTP is a partnership with Retail Electric Providers (REPs) to help promote energy efficiency to TNC residential customers by offering discounted LED lamps via an online marketplace. A third-party implementer facilitates customer/REP participation and aids in the selection and management of an online retailer/vendor for the program website and order fulfillment.

Q. PLEASE DESCRIBE THE HARD-TO-REACH SOP.

A. The Hard-to-Reach SOP targets a specific subset of residential customers defined by 16 TAC § 25.181(c)(27). The hard-to-reach customer is one whose total annual

household income is at or below 200% of the federal poverty guidelines. The program provides incentives for the installation of a wide range of measures that reduce residential customer energy costs and peak demand. It is designed to cost-effectively provide energy efficiency improvements to individual households at no or very low cost. Incentives are paid to project sponsors for eligible measures installed in retrofit applications on the basis of deemed savings. Eligible measures include replacement air conditioners, wall and ceiling insulation, and air distribution duct improvements, among others.

Q. PLEASE DESCRIBE THE LOAD MANAGEMENT SOP.

A. The Load Management SOP targets commercial customers that have a minimum demand of 500 kW. Incentives are paid to project sponsors that can identify interruptible load and provide curtailment of this electric load on short notice. These payments are based on the delivery of metered demand reduction.

Q. PLEASE DESCRIBE THE OPEN MTP.

A. 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. 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.

Q. PLEASE DESCRIBE THE RESIDENTIAL SOP.

A. The Residential SOP provides incentives for the installation of a wide range of measures that reduce residential customer energy costs and reduce peak demand. It is also designed to encourage private sector delivery of energy efficiency products and services by REPs and EESPs. Incentives are paid to project sponsors for eligible measures installed in retrofit applications on the basis of deemed savings. Eligible measures include replacement air conditioners, wall and ceiling insulation and air distribution duct improvements, among others.

Q. PLEASE DESCRIBE THE SCORE/CITYSMART MTP.

A. The Schools COnserving REsources/CitySmart (SCORE/CitySmart) MTP provides energy efficiency and demand reduction solutions for cities and public schools. In 2015, SCORE/CitySmart facilitated the examination of actual demand and energy savings, operating characteristics, program design, long-range energy efficiency planning and overall measure and program acceptance by the targeted cities and schools. This program is designed to help educate and assist these customers to lower energy use by integrating energy efficiency into their short- and long-term planning, budgeting and operational practices. Incentives are paid to participants for certain qualifying measures installed in new or retrofit applications that result in verifiable demand and energy savings.

Q. PLEASE DESCRIBE THE SMART SOURCE^{SM} SOLAR PV MTP.

A. The SMART Source^{SM} Solar PV MTP offers a financial incentive for residential and commercial installations of solar electric (photovoltaic) systems interconnected on the customer's side of the electric service meter. The goal of this program is to transform

the market by increasing the number of qualified companies offering installation services and by decreasing the average installed cost of systems, creating economies of scale.

Q. PLEASE DESCRIBE THE TARGETED LOW-INCOME ENERGY EFFICIENCY PROGRAM.

A. TNC's Targeted Low-Income Energy Efficiency Program is designed to cost-effectively reduce the energy consumption and energy costs of TNC's low-income customers. The program provides eligible residential customers with appropriate weatherization measures and basic on-site energy education.

B. PY 2015 Achievements

Q. PLEASE DESCRIBE TNC'S REQUIRED DEMAND REDUCTION GOAL AND THE RESULTS THAT WERE ACHIEVED IN PY 2015.

A. TNC's required demand reduction goal to be achieved in PY 2015 was 4.26 MW. TNC's actual 2015 demand reduction achieved was 4.54 MW of peak demand savings.

Q. PLEASE DESCRIBE TNC'S REQUIRED ENERGY REDUCTION GOAL AND THE RESULTS THAT WERE ACHIEVED IN PY 2015.

A. TNC's required energy reduction goal to be achieved in PY 2015 was 7,464 MWh. TNC's actual energy reduction achieved was 12,289 MWh.

Q. PLEASE DESCRIBE THE AMOUNT OF DEMAND REDUCTION THAT TNC ACHIEVED FROM ITS HARD-TO-REACH PROGRAMS.

A. TNC achieved demand reductions of 228 kW (0.228 MW) from its Hard-to-Reach SOP and 88 kW (0.088 MW) from its Targeted Low-Income Energy Efficiency

Program. The total demand reduction from both hard-to-reach programs was 316 kW (0.32 MW).

Q. DID TNC ACHIEVE MORE THAN 5% OF ITS 2015 STATUTORY DEMAND REDUCTION GOAL FROM ITS HARD-TO-REACH PROGRAMS?

A. Yes, TNC achieved 7% of its PY 2015 statutory demand reduction goal from its hard-to-reach programs.

Q. DOES TNC REQUEST A PERFORMANCE BONUS FOR PY 2015?

A. Yes, it does. Mr. Cavazos discusses in more detail the $186,197 performance bonus requested by TNC for its PY 2015 results.

Q. SHOULD TNC BE GRANTED ITS REQUESTED PERFORMANCE BONUS?

A. Yes, TNC should be granted its performance bonus set forth in Schedule D.

C. PY 2017 Programs

Q. WHAT PROGRAMS WILL TNC OFFER IN PY 2017 TO ACHIEVE ITS ENERGY EFFICIENCY OBJECTIVES?

A. TNC will offer the following programs in PY 2017:

- Commercial Solutions MTP
- Commercial SOP
- Earth Networks Residential Thermostat Demand Response Pilot Program
- Efficiency Connection Pilot MTP
- Hard-to-Reach SOP
- Load Management SOP
- Open MTP
- Residential SOP
- SCORE/CitySmart MTP
- SMART Source^{SM} Solar PV MTP

- Targeted Low-Income Energy Efficiency Program

Q. WHAT IS THE PY 2017 PROJECTED COST FOR EACH PROGRAM?

A. Please refer to Schedule A, which details the PY 2017 projected cost for each of TNC's programs and its total PY 2017 projections.

Q. WHAT ARE THE PROJECTED SAVINGS FROM EACH PROGRAM?

A. Please refer to Schedule O, which contains the PY 2017 projected savings to be achieved by each program.

VI. CONCLUSION

Q. DO TNC'S ENERGY EFFICIENCY COSTS INCURRED IN PY 2015 COMPLY WITH THE COMMISSION RULE?

A. Yes. The costs incurred in connection with the PY 2015 energy efficiency programs were reasonable and necessary to provide energy efficiency to residential and commercial customers and were properly incurred consistent with 16 TAC § 25.181(f).

Q. DO TNC's CALCULATIONS OF ITS ENERGY EFFICIENCY GOALS, OBJECTIVES, AND PROJECTED COSTS TO BE INCURRED IN PY 2017 AND INCLUDED IN THE ADJUSTED 2017 EECRF COMPLY WITH THE COMMISSION RULE?

A. Yes. TNC's statutory minimum goals to be achieved in PY 2017 are 4.26 MW of demand reduction and 7,464 MWh of energy reduction, and are in compliance with the Commission rule. As discussed above and in Mr. Cavazos' testimony, in order to satisfy PURA §39.905 and the Commission rule that utilities achieve as much energy

efficiency savings as reasonably possible within the limitations in the statute and the rule, TNC has established energy efficiency objectives for PY 2017 above the minimum goals in the statute and rule. The $3,277,000 that TNC projects it will incur in PY 2017 is a reasonable estimate of the costs necessary to provide energy efficiency programs to meet TNC's energy efficiency objectives for PY 2017 in furtherance of PURA §39.905 and 16 TAC § 25.181.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

PUC DOCKET NO. 45928

PUBLIC UTILITY COMMISSION OF TEXAS

APPLICATION OF

AEP TEXAS NORTH COMPANY

TO ADJUST

ENERGY EFFICIENCY COST RECOVERY FACTOR AND RELATED RELIEF

DIRECT TESTIMONY OF

BRIAN J. FRANTZ

FOR

AEP TEXAS NORTH COMPANY

JUNE 1, 2016

TESTIMONY INDEX

EXHIBITS

EXHIBIT	DESCRIPTION
EXHIBIT BJF-1	TNC Affiliate Costs – 2015
EXHIBIT BJF-2	TNC Affiliate Costs – 2015 by Benefiting Location and Allocation Factor

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION.

A. My name is Brian J. Frantz. My business address is 1 Riverside Plaza, Columbus, Ohio 43215. I am currently Manager, Regulated Accounting, of American Electric Power Service Corporation (AEPSC), a wholly-owned subsidiary of American Electric Power, Inc. (AEP).

Q. WHAT ARE YOUR PRINCIPAL AREAS OF RESPONSIBILITY WITH AEPSC?

A. I am responsible for maintaining the accounting books and records, and regulatory reporting for AEPSC. I am also responsible for AEPSC's monthly service billings to its affiliates. My responsibilities for AEPSC also include compliance with the Federal Energy Regulatory Commission's (FERC) Uniform System of Accounts accounting and reporting requirements.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND.

A. I attended Ohio University and received a Bachelor of Business Administration degree, with an emphasis in Accounting in 1999. I have been employed by AEPSC since March 2005, when I was hired as a Staff Accountant in the Wholesale Commodity Accounting group. In May 2010, I was promoted to Supervisor of the Fuel and Contract Accounting group. In August 2013, I was promoted to Administrator of Regulated Accounting. In December 2013, I was promoted to Manager Regulated Accounting where I was responsible for the books and records for four operating companies (Indiana Michigan Power Company, Kentucky Power

Company, Kingsport Power Company and AEP Generating Company). I moved to my present position in November 2014. Prior to my employment with AEP, I spent approximately one year in a financial reporting role and five years in various roles in public accounting.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE ANY REGULATORY COMMISSIONS?

A. Yes, I have testified before the Corporation Commission of the State of Oklahoma (OCC) in Cause No. PUD201500208. In addition, I submitted written testimony with the Public Utility Commission of Texas (PUCT) in Docket Nos. 44717 and 44718.

II. PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. My testimony addresses several areas relating to the affiliate services provided in support of TNC's energy efficiency programs, including:

- An explanation of how affiliate services related to energy efficiency activities are assigned to TNC;
- A discussion of the workings of the affiliate billing systems for the services provided to TNC and the other AEP utility operating companies;
- A demonstration that the work order billing system ensures that TNC's charges are no higher than those of other AEP affiliates for the same services or types of services;
- The Texas standards governing recovery of affiliate costs; and
- A review of the affiliate costs included in this filing.

Q. DO YOU SPONSOR ANY SCHEDULES IN THE FILING?

A. Yes, I co-sponsor Schedule K with TNC witness Robert Cavazos.

Q. WHAT EXHIBITS DO YOU SPONSOR?

A. I sponsor EXHIBITs BJF-1 and BJF-2 as listed in the index to my testimony.

III. AFFILIATE COST ACCOUNTING AND OVERSIGHT

A. Assignment of Affiliate Costs to TNC

Q. HOW ARE AFFILIATE SERVICES RELATED TO ENERGY EFFICIENCY ACTIVITIES ASSIGNED TO TNC?

A. AEPSC uses a work order system designed for the express purpose of meeting the FERC requirements to fairly allocate common charges among AEP affiliates and to do so at cost. By using a work order system, the expenses for specific projects are identified and the work orders are assigned specific and approved benefiting locations and allocation factors. Common costs are allocated based on the factor that best matches the charge with the cost driver related to the service, and that same factor is applied to all companies in proportion to the benefit they received from the service.

The costs for services benefiting only one company are directly assigned and are billed 100% to that company. AEPSC and operating company employees directly assign costs to the maximum extent practicable by coding their time to unique work orders. Unique work orders have also been established for billing of certain affiliate support services exclusively performed for the TNC energy efficiency programs, which allow the associated costs billed to energy efficiency programs to be tracked and readily identified.

Q. HOW DOES AEPSC BILL FOR THE SERVICES IT PROVIDES TO TNC AND OTHER AFFILIATES?

A. Services are billed by AEPSC at cost, without any profit. Included in the billings for AEPSC labor are overheads for benefits (i.e. medical, dental, pension), payroll taxes, nonproductive time (sick time, vacation time, jury duty, etc.), and departmental charges for certain costs, such as personal computers and the maintenance of automated accounting systems required to provide a service. To the extent third-party labor under a contract with AEPSC is involved, the contract labor charges are at the contract employee's hourly rate paid by AEPSC to the contractor providing the services, without any profit to AEPSC.

Q. HOW DOES THE WORK ORDER SYSTEM ENSURE THAT AEPSC'S CHARGES TO TNC ARE NO HIGHER THAN THE CHARGES TO OTHER AFFLIATES FOR THE SAME OR SIMILAR SERVICES, AND THAT THE CHARGES REASONABLY REFLECT THE ACTUAL COST OF PROVIDING THE SERVICE TO TNC?

A. Through the use of the AEPSC work order system, TNC and every other affiliate included in the benefiting locations receiving a shared service is charged the same unit price that is its appropriate share of the actual cost of the service. Accordingly, consistent with the requirements of the Public Utility Regulatory Act, Tex.Util.Code Ann. § 36.058(c)(2) (West 2007 & Supp. 2014) (PURA), the price charged to TNC for the service (AEPSC's actual cost) is no higher than the price charged to the other affiliates receiving the same service (AEPSC's actual cost).

Q. ARE TNC'S AFFILIATE CHARGES REASONABLE AND NECESSARY?

A. Yes, the affiliate services provided by AEPSC and TCC are reasonable and necessary costs of TNC's provision of energy efficiency programs. These services have been reasonably and necessarily incurred to support the energy efficiency programs as set forth in EXHIBITs BJF-1 and BJF-2 and within the testimonies of Mr. Cavazos and Ms. Rhonda R. Fahrlender.

B. Standards Governing Recovery of Affiliate Costs

Q. ARE AFFILIATE EXPENSES ADDRESSED IN PURA?

A. Yes, affiliate expenses are addressed by PURA § 36.058. PURA § 36.058 allows an electric utility to include in its revenue requirement payments to affiliates that meet the requirements of PURA § 36.058(b). PURA § 36.058(b), in turn, directs the Commission to allow recovery of affiliate payments "only to the extent that the regulatory authority finds the payment is reasonable and necessary for each item or class of items..." In addition, PURA § 36.058(c) requires that the Commission find that "the price to the electric utility [for the affiliate service] is not higher than the prices charged by the supplying affiliate for the same item or class of items" to other affiliates or to non-affiliated persons. Because the billings of AEPSC and other AEP utility operating companies to TNC are affiliate charges, the requirements of PURA § 36.058 apply to those billings. PURA § 36.058(f) provides:

> (f) If the regulatory authority finds that an affiliate expense for the test period is unreasonable, the regulatory authority shall:
>
> (1) determine the reasonable level of the expense; and
>
> (2) include that expense in determining the electric utility's service.

Q. DOES THE COMMISSION ALSO HAVE RULES PERTINENT TO THE REVIEW OF AFFILIATE TRANSACTIONS?

A. Yes. 16 Tex. Admin. Code § 25.272 (TAC) discusses the code of conduct with which electric utilities and their affiliates must comply. Specifically, 16 TAC § 25.272(e)(1) states:

> ...In accordance with PURA and the commission's rules, a utility and its affiliates shall fully allocate costs for any shared services, including corporate support services, offices, employees, property, equipment, computer systems, information systems, and any other shared assets, services, or products.

Q. HOW ARE CORPORATE SUPPORT SERVICES DEFINED IN THE SUBSTANTIVE RULES?

A. 16 TAC § 25.272(c)(4) defines corporate support services as those "joint corporate oversight, governance, support systems and personnel," "shared by a utility, its parent holding company, or a separate affiliate created to perform corporate support services...." AEPSC is such an affiliate. This section of the rule further provides examples of the types of support services that may be shared, including accounting, human resources, procurement, information technology, regulatory services, legal services, environmental services, research and development, internal audit, community relations, and corporate services, among others. The services provided to TNC by AEPSC are of the same type referenced in the Commission's rule.

Q. DO THE AFFILIATE COSTS INCLUDED IN TNC'S FILING COMPLY WITH APPLICABLE STANDARDS IN TEXAS STATUTES AND RULES?

A. Yes, they do. Other witnesses and I will discuss how the costs meet the tests for being reasonable and necessary, and that these costs are no higher than prices charged by the affiliate to others.

IV. ENERGY EFFICIENCY AFFILIATE COSTS

Q. WERE ANY AFFILIATE SERVICES PROVIDED IN SUPPORT OF TNC'S ENERGY EFFICIENCY PROGRAMS IN 2015?

A. Yes. TNC received affiliate services in 2015.

Q. PLEASE DESCRIBE THE AFFILIATE SERVICES RECEIVED BY THE COMPANY IN 2015.

A. As shown by department and project on EXHIBIT BJF-1, TNC incurred costs for services from the following affiliates:

Table 1

TNC Affiliate Costs - 2015

Affiliate	2015 ($)
American Electric Power Service Corporation	501
AEP Texas Central Company	71,433
Total Affiliate Services Provided	71,934

Source: EXHIBIT BJF-1

The affiliate services shown above were provided primarily by the Energy Efficiency/Demand Response Programs department as detailed on EXHIBIT BJF-1. This department is comprised of employees of TCC and TNC and is responsible for the overall design and implementation of the programs discussed throughout the testimonies of witnesses Cavazos and Fahrlender. Additional services are provided

by the legal department in support of compliance with Texas legal requirements related to energy efficiency programs.

Q. WERE THE SERVICES PROVIDED BY THESE AFFILIATES IN 2015 REASONABLY ALLOCATED?

A. Yes, they were. As shown on EXHIBIT BJF-2, 73% of the affiliate costs were allocated between TCC and TNC, who both participate in energy efficiency programs. These services were performed in a manner to benefit TCC and TNC and were primarily shared among each company using its relative number of customers as the allocation methodology, which is an appropriate manner in which to share the cost of such services. In addition, certain administrative activities shared among TCC and TNC were allocated based upon their relative asset bases. This allocation factor is a reasonable methodology in which to share the cost of administrative services.

The remaining 27% of the affiliate costs were directly assigned to TNC for those services that were performed solely for the benefit of TNC.

Q. HOW DO THE 2015 AFFILIATE COSTS COMPARE TO TOTAL ENERGY EFFICIENCY COSTS DURING THIS PERIOD?

A. As shown in the table below, costs for affiliate services received by TNC are 3% of total energy efficiency costs during the year. The remaining cost, 97%, is incurred directly by TNC and not through an affiliate.

Table 2

TNC Affiliate Costs as Percentage of Total Costs - 2015

Category	**2015 ($)**
Affiliate Cost	71,934
Total Cost	2,766,474
Percentage of Total Cost	3%

Source: EXHIBIT BJF-1 and Schedule B

V. CONCLUSION

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. My testimony describes and supports TNC's compliance with the rules governing affiliate costs. My testimony also addresses the overall reasonableness and necessity of affiliate costs, as well as the work order system utilized to ensure that TNC pays no more than any other AEP company for the comparable services it receives from affiliates.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

TNC Affiliate Costs - 2015

Years	2015
To BU grouping	TNC

Sum of Act $					
Cost Type	**From Department**	**To Project**		**From BU Grouping**	**Total**
Administrative Costs	10329 TX EE/DR Programs	EON100551	EE/DR EECRF	TCC	89
		EON100551	**EE/DR EECRF Total**		**89**
		TXDSMANDA	Texas DSM Admin & General	TCC	48,426
		TXDSMANDA	**Texas DSM Admin & General Total**		**48,426**
	10329 TX EE/DR Programs Total				**48,515**
	10764 Legal GC/Administration	TXDSMANDA	Texas DSM Admin & General	AEPSC	55
		TXDSMANDA	**Texas DSM Admin & General Total**		**55**
	10764 Legal GC/Administration Total				**55**
	13168 Legal Reg Services West	TXDSMANDA	Texas DSM Admin & General	AEPSC	446
		TXDSMANDA	**Texas DSM Admin & General Total**		**446**
	13168 Legal Reg Services West Total				**446**
Administrative Costs Total					**49,017**
Program Direct Costs	10329 TX EE/DR Programs	EON100508	Dsm-Res Standard Offer	TCC	122
		EON100508	**Dsm-Res Standard Offer Total**		**122**
		EON100547	DSM - EM&V	TCC	10,245
		EON100547	**DSM - EM&V Total**		**10,245**
		EON100555	EE/DR EfficiencyConnection MTP	TCC	4,877
		EON100555	**EE/DR EfficiencyConnection MTP Total**		**4,877**
	10329 TX EE/DR Programs Total				**15,245**
Program Direct Costs Total					**15,245**
R&D Costs	10329 TX EE/DR Programs	EON100535	EE/DR R&D	TCC	7,672
		EON100535	**EE/DR R&D Total**		**7,672**
	10329 TX EE/DR Programs Total				**7,672**
R&D Costs Total					**7,672**
Grand Total					**71,934**

TNC Affiliate Costs - 2015 by Benefiting Location and Allocation Factor

Benefiting Location	Allocation Factor	Total	%
1397 Distribution - TCC/TNC	08 - Number of Customers	52,309	72.7%
	58 - Total Assets	502	0.7%
1397 Distribution - TCC/TNC Total		52,811	73.4%
119 100% TNC	39 - Direct	19,123	26.6%
119 100% TNC Total		19,123	26.6%
Grand Total		71,934	100.0%

PUC DOCKET NO. 45928

PUBLIC UTILITY COMMISSION OF TEXAS

APPLICATION OF

AEP TEXAS NORTH COMPANY

TO ADJUST

ENERGY EFFICIENCY COST RECOVERY FACTOR AND RELATED RELIEF

DIRECT TESTIMONY OF

JENNIFER L. JACKSON

FOR

AEP TEXAS NORTH COMPANY

JUNE 1, 2016

TESTIMONY INDEX

I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.

A. My name is Jennifer L. Jackson. I am a Regulatory Consultant in Regulated Pricing and Analysis, part of the American Electric Power Service Corporation (AEPSC) Regulatory Services Department, 212 East Sixth Street, Tulsa, Oklahoma 74119-1295.

Q. PLEASE BRIEFLY DESCRIBE THE AEPSC REGULATORY SERVICES DEPARTMENT, YOUR CURRENT JOB RESPONSIBILITIES, AND YOUR EDUCATION.

A. AEPSC Regulatory Services is part of the American Electric Power Company, Inc. (AEP) Utilities Business Group. Among its activities, Regulatory Services provides coordination and tariff-related services to the eleven AEP operating companies, including AEP Texas North Company (TNC). As a Regulatory Consultant for AEPSC, my job duties include providing testimony, rate review analysis and support, pricing design, implementation of pricing programs, and regulatory compliance for the AEP operating companies. I have been involved in regulatory rate review and pricing design proceedings since 1991 in all four of the AEP west state jurisdictions: Arkansas, Louisiana, Oklahoma, and Texas. I have a Bachelor of Business Administration Degree with an emphasis in Marketing from Texas Tech University.

Q. HAVE YOU PREVIOUSLY SPONSORED TESTIMONY BEFORE THIS COMMISSION?

A. Yes, I have previously sponsored testimony before the Public Utility Commission of Texas (PUC or Commission) in the following dockets: 20545, 28520, 28840, 31251,

31461, 32758, 33309, 33310, 35625, 35627, 36422, 36928, 36949, 36961, 36960, 36959, 38208, 38209, 38210, 39359, 39360, 39361, 40358, 40359, 40443, 41538, 41539, 41879, 41970, 42370, 42508, 42509, 44717, 44718, 45787, and 45788. I have also sponsored testimony before the Arkansas Public Service Commission and the Oklahoma Corporation Commission.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to support the calculation of the annual re-determination of TNC's Rider EECRF - Energy Efficiency Cost Recovery Factors and to support the revised tariff (Rider EECRF) accompanying this filing, proposed to be effective March 1, 2017. The adjusted factors are proposed based on 16 Tex. Admin. Code § 25.181(f) (TAC), which among other things provides for a cost recovery factor to allow a utility to recover reasonable expenditures on energy efficiency as well as a performance bonus for exceeding its goals, recover municipal EECRF proceeding expenses, and recover Evaluation, Measurement and Verification (EM&V) costs.

Q. WHAT SCHEDULES THAT ACCOMPANY TNC'S FILING DO YOU SPONSOR?

A. I sponsor the following schedules:

Schedule	**Description**
Schedule E	Calculation of the 2017 Revised EECRF Factors
Schedule F	Updated Energy Efficiency Cost Recovery Factor Rider
Schedule G	Calculation of Cost Caps
Schedule H	Development of Forecasted Billing Units
Schedule I	Energy Efficiency Costs Recovered Through Base Rates
Schedule Q	System and Line Losses

I also sponsor the workpapers supporting those schedules.

Q. WHAT SCHEDULES ARE YOU CO-SPONSORING?

A. I am co-sponsoring Schedule A with TNC witnesses Robert Cavazos and Rhonda R. Fahrlender, Schedule B with TNC witness Fahrlender, and Schedule C with TNC witness Cavazos.

Q. PLEASE DESCRIBE THE SCHEDULES THAT YOU ARE SPONSORING.

A. Schedule E provides the calculation of the proposed 2017 EECRF class factors. Schedule F contains the adjusted Rider EECRF, which sets forth the adjusted 2017 EECRF factors by EECRF rate class. Schedule G provides the 2017 cost cap calculation for the requested program budget year and the 2015 actual cap calculated on 2015 actual costs and class kWh. Schedule H details the development of the forecasted EECRF class kWh for program year 2017, including historical kWh for the most recent calendar year, January through December 2015. Schedule I shows the determination of the energy efficiency costs included in base rates and the adjustment to the base rate revenues using 2015 actual billing units. Schedule Q indicates that system and line losses are not applicable in the TNC EECRF filing.

II. ADJUSTED ENERGY EFFICIENCY COST RECOVERY REVENUE REQUIREMENT

Q. WHY IS TNC REQUESTING APPROVAL OF AN ADJUSTED EECRF?

A. TNC is requesting approval of an adjusted EECRF based on 16 TAC § 25.181(f). TNC filed for and received approval for its initial Schedule EECRF in Docket No. 36959. TNC also filed for an adjustment to its EECRF in Docket Nos. 38209, 39361, 40358, 41539, 42509, and 44718. In this adjustment request, TNC is requesting: 1)

recovery of the 2017 projected energy efficiency program costs in excess of the amount expressly included in TNC's prior base rate order, adjusted to account for changes in billing determinants from the test year billing determinants used to set rates in the last base rate proceeding; 2) an adjustment to the EECRF factors for the over-recovery of actual energy efficiency program costs in 2015; 3) recovery of TNC's 2015 performance bonus for demand and energy reduction that exceeded the minimum goal to be achieved in 2015; and 4) recovery of municipal EECRF proceeding expenses from Docket No. 44718. For program year 2017, there are no projected EM&V costs included because TNC was advised by PUC Staff that the current EM&V contract expires at the end of program year 2016. TNC is requesting Commission approval of an adjusted Rider EECRF with revised factors to be effective March 1, 2017.

Q. WHAT AMOUNT EXPRESSLY SPECIFIED AS ENERGY EFFICIENCY COSTS IS INCLUDED IN TNC'S BASE RATES?

A. The Commission's final order in Docket No. 33310 expressly included $1,294,430 of energy efficiency program funding in base rates.

Q. HOW WERE THE ENERGY EFFICIENCY COSTS THAT ARE EXPRESSLY INCLUDED IN TNC'S BASE RATES ALLOCATED TO THE CLASSES?

A. The total energy efficiency program costs approved to be recovered through base rates were functionalized to both the distribution function and the customer service function. The majority (99%) of the energy efficiency program costs recovered in TNC's base rates is included in the base distribution rates. Only a small portion of the total costs is recovered through the customer service function. The energy

efficiency costs included in TNC's current distribution base rates were allocated to the classes based on each class's average 4 coincident peak (4CP) demand, the allocator used and approved in Docket No. 33310 to allocate transmission expenses to the classes. The energy efficiency costs included in the customer service function were allocated to the classes based upon total customers. Schedule I shows the allocation factors by function and the amounts included in base rates for each function by class.

Q. HAS TNC MADE AN ADJUSTMENT TO THE ENERGY EFFICIENCY REVENUES INCLUDED IN BASE RATES?

A. Yes. 16 TAC § 25.181(f)(2) states that:

> where a utility collects energy efficiency costs in its base rates, actual energy efficiency revenues collected from base rates consist of the amount of energy efficiency costs expressly included in base rates, adjusted for changes in billing determinants from the test year billing determinants used to set rates in the last base rate proceeding.

TNC has increased actual energy efficiency base revenues by $192,116 to account for changes in test year billing determinants as determined in Docket No. 33310. Total energy efficiency base revenues are adjusted to be $1,486,546 as shown in Table 1 below.

Table 1			
EECRF Rate Class	Total Energy Efficiency Costs Expressly Included In Base Rates	Adjustment to Base Revenue	Total Adj. EE Base Revenue per 16 TAC § 25.181
Residential	$602,913	$41,518.43	$644,431
Secondary <= 10 kW	$37,620	($1,165.84)	$36,454
Secondary > 10 kW	$476,869	$45,977.87	$522,847
Primary	$169,274	$103,935.35	$273,209
Transmission	$7,754	$1,851.23	$9,605
Lighting	$1	($1)	$0
Total	$1,294,430	$192,116	$1,486,546

The revenue adjustment is used in the base rate revenue adjustment determination for both the 2015 actual and 2017 forecasted program years. The base rate energy efficiency adjustment is represented in the determination of 2015 over-/under-recovery (Schedule C 2015 and WP Schedule C 2015) and in the 2017 EECRF (Schedule E and WP Schedule E). Schedule I details the calculation of the base revenue adjustment, including the base rate billing determinants and the 2015 billing determinants by class.

Q. WHAT IS TNC REQUESTING THROUGH THE ADJUSTED EECRF?

A. TNC, through this application, is requesting to adjust the EECRF cost recovery factors to reflect:

- recovery of $1,790,454 in energy efficiency program costs projected to be incurred in 2017 that exceed costs for energy efficiency included in its prior base rate order, including the revenue adjustment;
- return of $200,114 to account for the over-recovery of EECRF revenues in excess of actual energy efficiency program expenditures incurred for its 2015 programs;
- recovery of $186,197 representing earned TNC's performance bonus; and
- recovery of municipal EECRF proceeding expenses from Docket No. 44718 in the amount of $3,517.

In sum, TNC requests Commission approval of the adjusted EECRF cost recovery factors as provided for in 16 TAC § 25.181(f)(1) to recover $1,780,055 in energy efficiency costs in 2017.

Q. HOW ARE THE 2017 PROGRAM COSTS SOUGHT TO BE RECOVERED THROUGH THE EECRF ASSIGNED TO EACH CLASS?

A. TNC has assigned the 2017 program costs, including the administrative portion of each program cost, to each EECRF rate class based on each class's eligibility to participate in the proposed 2017 programs. Where more than one EECRF rate class is eligible to participate in a specific program, TNC has employed an adjusted and weighted demand allocator to assign program costs across the eligible classes. TNC has employed the weighted and adjusted demand allocator to assign R&D costs across the eligible classes.

The transmission service class of customers is not allocated energy efficiency program costs through the EECRF because those customers taking service at 69 kilovolts (kV) and above are not eligible for participation in the 2017 energy efficiency programs.

Q. PLEASE DESCRIBE THE 2017 ADJUSTED DEMAND ALLOCATION FACTORS USED TO ALLOCATE COSTS THAT ARE NOT DIRECTLY ASSIGNED TO RATE CLASSES.

A. The class demand allocators from TNC's last rate case in Docket No. 33310 have been weighted to remove the lighting class and transmission customers at or above 69 kV and adjusted using 2017 projected kWh. The 2017 kWh projection has accounted for industrial customers identifying themselves under 16 TAC § 25.181(c)(30) and

(w). Under 16 TAC § 25.181(c)(30) and (w), distribution voltage industrial customers that qualify for a tax exemption under Texas Tax Code §151.317 and submit an identification notice by February 1 characterizing the account as such, are not eligible for participation in energy efficiency programs through the EECRF beginning with the next calendar year. TNC has therefore removed kWh associated with those customers from the 2017 kWh projection. The removal of the identification notice customers affects the adjusted demand allocators and the calculation of the proposed class EECRF factors for 2017. The kWh associated with the identification notice customers and the resulting 2017 kWh projection are shown in Schedule H and the adjusted demand allocators are shown in the rate design workpapers supporting Schedule E.

Q. HOW IS THE 2015 OVER-RECOVERY DETERMINED?

A. The over-recovery is determined by first assessing the total energy efficiency costs incurred in program year 2015. TNC incurred total energy efficiency costs of $2,766,474, including municipal rate case expenses and EM&V in program year 2015. After rate case expenses paid in program year 2015 are removed, the total incurred cost equals $2,762,342.

Next, the total energy efficiency program revenue is recognized. TNC recovered energy efficiency program costs through its base rates, including a base rate adjustment, and through the EECRF rider. TNC recovered $1,486,546 through base rates and $1,475,910 in program costs through the EECRF rider for a total program cost recovery of $2,962,456. The difference between total costs incurred,

less municipal rate case expenses, and total program revenue determines the 2015 over-recovery amount of $200,114.

Q. HOW IS TNC ASSIGNING THE 2015 PROGRAM YEAR OVER-RECOVERY TO THE CLASSES?

A. The over-recovery assignment to each class is based on a comparison of the total program year 2015 energy efficiency revenues, including the adjusted base rate and EECRF Rider revenues by EECRF rate class, to actual 2015 program costs assigned to each EECRF rate class. The municipal rate case expenses that were included in the total program expenses in 2015 have been removed from the total 2015 program expenses and are therefore not included in the over-recovery determination for program year 2015. TNC's actual 2015 energy efficiency program costs have been directly assigned to the individual EECRF rate classes that actually participated in each program using a direct, program-by-program assignment. The 2015 administrative costs follow the assignment of the incentive costs and the R&D costs have been either directly assigned to the rate classes or allocated to the classes based on class program cost assignment. The specifics of the class assignment of the over-recovery are shown on filed Schedule C and the workpaper supporting Schedule C.

Q. HOW IS TNC ASSIGNING THE PROGRAM YEAR 2015 EARNED PERFORMANCE BONUS TO THE CLASSES?

A. TNC has assigned the program year 2015 earned performance bonus to all EECRF rate classes eligible for participation in the 2015 energy efficiency program year using an allocator based on the direct assignment of the 2015 program incentives to the EECRF rate classes. TNC's allocation is in accordance with 16 TAC § 25.181(h)(6),

which states that the bonus shall be allocated in proportion to the program costs associated with meeting the demand and energy goals and allocated to the eligible customers on a rate class basis.

Q. ARE THERE MUNICIPAL RATE CASE EXPENSES INCLUDED IN THE 2017 TOTAL REVENUE REQUIREMENT?

A. Yes. TNC was billed by the municipal entities who took part in the EECRF proceeding in Docket No. 44718 in 2015 and TNC paid those bills even though the expenses have not been included for recovery in any program year. As stated above, the Docket No. 44718 municipal EECRF case expenses have been removed from the over-recovery of the 2015 program expenses and included for recovery in program year 2017.

Q. HOW IS TNC ASSIGNING THE MUNICIPAL EECRF PROCEEDING EXPENSES TO THE CLASSES?

A. TNC has proposed to assign the municipal EECRF proceeding expenses to the classes using an allocator developed using the assignment of the 2017 program cost to the classes.

Q. HAS TNC INCLUDED EM&V COSTS IN THE 2017 REVENUE REQUIREMENT?

A. No. TNC has not included any statewide EM&V contractor costs for evaluating program year 2016 to be recovered in the 2017 revenue requirement. PUC Staff has advised TNC that the current EM&V contract expires at the end of program year 2016 and a projection of 2016 EM&V costs has not been made.

III. DEVELOPMENT OF CLASS ENERGY EFFICIENCY COST RECOVERY FACTORS

Q. WHAT ARE THE COMPONENTS NEEDED TO DEVELOP TNC'S ADJUSTED ENERGY EFFICIENCY COST RECOVERY FACTORS?

A. The components needed to develop the EECRF cost recovery factors include:

1) the amount of energy efficiency revenue requirement included in base rates, including the base rate adjustment;
2) the projected 2017 energy efficiency program cost provided in Schedule A;
3) the over- or under-recovery associated with the 2015 energy efficiency programs;
4) TNC's performance bonus achieved for 2015 performance;
5) the 2015 actual program direct assignment to the EECRF rate classes based on actual 2015 participation and assignment of the 2017 energy efficiency program costs to the EECRF rate classes;
6) the adjusted class demand allocation factors;
7) the identification notice customers and related kWh;
8) the forecasted billing units by EECRF rate class for 2017; and
9) the municipal rate case expenses from the immediately preceding EECRF docket.

Q. HOW ARE THE EECRF FACTORS DETERMINED ONCE ALL THE COMPONENTS ARE ASSEMBLED?

A. Once the total EECRF class revenue requirement based on the components listed above has been assigned to EECRF rate classes by direct assignment or by using the appropriate allocators, the EECRF factors are calculated by dividing the revenue requirement for each EECRF rate class by the 2017 projected billing units for each EECRF rate class. The 2017 EECRF factors are shown in Schedule E and the revised Rider EECRF is contained in Schedule F.

Q. WHAT BILLING UNIT IS TNC PROPOSING TO USE TO RECOVER THE ENERGY EFFICIENCY COSTS?

A. As was approved in Docket Nos. 36959, 38209, 39361, 40358, 41539, 42509, and 44718, TNC is proposing to continue to use an energy charge (kWh) for recovery of energy efficiency costs for all classes of customers included in the EECRF, as authorized by 16 TAC § 25.181(f)(6). TNC's kWh proposal is consistent with past approved EECRF billing methodologies and is in compliance with 16 TAC § 25.181(f)(6). TNC has supplied forecasted 2017 kWh data for all classes in Schedule H.

Q. PLEASE DESCRIBE HOW THE 2017 FORECASTED BILLING UNITS USED IN THE DEVELOPMENT OF THE EECRF FACTORS FOR PROGRAM YEAR 2017 WERE DETERMINED.

A. As part of the normal course of business, AEP projects monthly kWh sales for each of its operating companies, including TNC. The AEPSC Economic Forecasting Department provides the total retail sales forecasts by revenue class for the projected energy efficiency program year. Because the kWh sales are projected on a revenue class basis, kWh data must be converted to EECRF rate class forecasted kWh sales. Forecasted kWh sales by EECRF rate class were established by first determining each EECRF rate class's percentage of total retail sales based on twelve months of historical kWh sales data. Forecasted kWh sales by rate class were then calculated by multiplying each rate class's percentage of total retail kWh sales by the total retail forecasted kWh sales. As discussed above, the projection of the 2017 kWh accounts for the removal of the identification notice customer kWh. The annual class projected kWh sales less the customer identification notice kWh were used to determine the

adjusted 2017 EECRF class factors. Schedule H specifies the process for determining the projected kWh sales by EECRF rate class.

Q. WERE SYSTEM AND LINE LOSSES USED TO DEVELOP THE EECRF FACTORS?

A. No. TNC's kWh sales forecast for 2017 is based on energy delivered at the meter, so it was not necessary to adjust the EECRF factors to reflect system and line losses.

Q. WHAT ARE THE PROPOSED 2017 EECRF RATE CLASS FACTORS?

A. The proposed 2017 factors by EECRF rate class are:

Rate Class	Proposed kWh Factor
Residential	$0.000455
Secondary <= 10 kW	($0.000150)
Secondary > 10 kW	$0.000489
Primary	($0.000004)
Transmission	($0.000059)

Q. DO THE REVISED EECRF FACTORS INCLUDING BASE RATE AMOUNTS AND EXCLUDING MUNICIPAL EECRF PROCEEDING EXPENSES AND STATEWIDE EM&V CONTRACTOR COSTS EXCEED THE MAXIMUM PRICE PER KWH FOR RESIDENTIAL AND COMMERCIAL CUSTOMERS AS SPECIFIED IN 16 TAC § 25.181(f)(7)?

A. No, they do not. 16 TAC § 25.181(f)(7) recognizes two groups of customers for the purposes of setting cost caps, residential and commercial. Neither class factor exceeds the 2017 cost cap.