Lloyd Gosselink Rochelle & Townsend, P.C.

Cities Served by AEP Texas Inc AEP Texas 2022 EECRF Docket No. 52199 I.D.3862-11-JLM November 10, 2021 Invoice: 97526845

PROFESSIONAL SERVICES RENDERED

Date	Atty	Description Of Services Rendered	Hours
10/08/21	RFK	Review Order No. 1 granting intervention; correspond with client team regarding	.20
		same (Administration).	
10/08/21	PEM	Review Order No. 1 Granting Intervention in Docket No. 52199; email to J.	.10
		Mauldin regarding same; file management (Administration/Case Management).	
10/11/21	PEM	Review Proposed Order and Memorandum in Docket No. 52199; calendar deadline;	.20
		email to J. Mauldin regarding same; file management (Administration/Case	
		Management).	
10/12/21	PEM	Review Staff's Notice of Change of Counsel; update to service list; file management	.10
		(Administration/Case Management).	
10/14/21	RFK	Correspond with AEP counsel, S. Green, regarding corrections to proposed order;	1.10
		review same and provide suggested revisions; confer with client team and S. Sparks	
		regarding confirmation of rate case expenses (Administration).	
10/15/21	RFK	Correspond with AEP counsel, S. Sparks, regarding proposed corrections to	.20
		proposed order; review correspondence from client team regarding rate case	
		expenses (Administration).	
10/18/21	RFK	Review correspondence regarding additional filings in docket (Administration).	.10
10/18/21	PEM	Review fax Revised Proposed Order in Docket No. 52199; email to J. Mauldin and	.10
		R. Katz regarding same; file management (Administration/Case Management).	
10/19/21	PEM	Review file and prepare status update of rate case expenses (Administration).	.10
10/28/21	RFK	Monitor Open Meeting regarding approval of Order (Administration).	.10

TOTAL PROFESSIONAL SERVICES

\$ 534.50

SUMMARY OF PROFESSIONAL SERVICES

Name	Staff Level	Hours	Rate	Total
Robyn F Katz	Associate	1.70	265.00	450.50
Patricia E Martinez	Paralegal	.60	140.00	84.00
TOTALS		2.30		\$ 534.50

TOTAL THIS INVOICE

\$ 534.50



CITY ATTORNEY'S OFFICE P.O. Box 220 McAllen, Texas 78505-0220 956-681-1090 Office 956-681-1099 Fax www.mcallen.net

April 19, 2022

Ms. Melissa A. Gage American Electric Power Service Corp. 400 West 15th Street, Suite 1500 Austin, Texas 78701-1677

Re: Docket #52199; AEP Texas 2022 EECRF; Lloyd Gosselink; Inv. #97526845 and #97527556

Dear Ms. Gage:

Pursuant to Public Utility Regulatory Act §33.023, please remit to the City of McAllen, Texas the sum of **\$869.50** cover the fees and expenses of attorneys and consultants assisting the Steering Committee of Cities Served by AEP Texas Central Company in the above-referenced ratemaking proceeding.

The requested sum consists of fees and expenses of the following firm:

FIRM	DOCKET	PERIOD	BILL
			AMOUNT
Lloyd Gosselink	52199 - AEP Texas 2022 EECRF	October 2021	\$534.50
Lloyd Gosselink	52199 – AEP Texas 2022 EECRF	(November 2021)	\$335.00
		TOTAL	\$869.50

The billing has been reviewed by Cities and found to be consistent with ratemaking efforts authorized by Cities. The billing is reasonable.

Payment should be made to the City of McAllen immediately. The check should be made payable to the **City of McAllen** and should be addressed as follows:

CITY OF McALLEN – LEGAL DEPARTMENT P. O. BOX 220 – McALLEN, TEXAS 78505-0220

Should you have any questions, please do not hesitate to contact me.

Sincerely, Isaac J. Tawil

City Attorney

IJT:av encls.



816 Congress Avenue, Suite 1900 Austin, Texas 78701 Telephone: (512) 322-5800 Facsimile: (512) 472-0532

www.lglawfirm.com

December 14, 2021

Cities Served by AEP Texas Inc		
c/o City of McAllen		
Attn Isaac Tawil	Invoice: 9	7527556
PO Box 220	Client:	3862
McAllen, TX USA 78505-0220	Matter:	11
	Billing Attorney	: JLM
	Tax ID # 74-	2308445

INVOICE SUMMARY

For professional services and disbursements rendered through November 30, 2021:

RE: AEP Texas 2022 EECRF Docket No. 52199

Total Disbursements	\$ 335.00 \$.00
TOTAL THIS INVOICE	\$ 335.00

Lloyd Gosselink Rochelle & Townsend, P.C.

Cities Served by AEP Texas Inc AEP Texas 2022 EECRF Docket No. 52199 I.D.3862-11-JLM December 14, 2021 Invoice: 97527556

PROFESSIONAL SERVICES RENDERED

Date	Atty	Description Of Services Rendered	Hours
11/02/21	RFK	Prepare draft email for distribution to client regarding final order and settlement;	.20
		provide to T. Brocato to send to clients (Administration).	
11/03/21	RFK	Review correspondence from J. Mauldin, P. Martinez, and L. Melhem regarding	.30
		collection of invoices for AEP Texas (Administration).	
11/04/21	RFK	Review correspondence from P. Martinez regarding collection of invoices for AEP	.10
		Texas (Administration).	
11/04/21	PEM	Review of file for submitted rate case expenses for prior docket (50892); email	.50
		detailed summary to J. Mauldin and R. Katz.	
11/05/21	RFK	Confer with client team and L. Melhem regarding rate case expense invoices	.20
		(Administration).	
11/15/21	RFK	Correspond with L. Melhem regarding invoices for rate case expenses	.20
		(Administration).	

TOTAL PROFESSIONAL SERVICES

\$ 335.00

SUMMARY OF PROFESSIONAL SERVICES

Name	Staff Level	Hours	Rate	Total
Robyn F Katz	Associate	1.00	265.00	265.00
Patricia E Martinez	Paralegal	.50	140.00	70.00
TOTALS		1.50		\$ 335.00

TOTAL THIS INVOICE

\$ 335.00

PUBLIC UTILITY COMMISSION OF TEXAS

APPLICATION OF

AEP TEXAS INC.

TO ADJUST ITS

ENERGY EFFICIENCY COST RECOVERY FACTOR AND RELATED RELIEF

DIRECT TESTIMONY OF

PAMELA D. OSTERLOH

FOR

AEP TEXAS INC.

JUNE 1, 2022

TESTIMONY INDEX

SECTION		PAGE	
I.	INTF	RODUCTION	1
II.	PUR	POSE OF TESTIMONY	
III.	ENE	RGY EFFICIENCY REQUIREMENTS AND OBJECTIVES	4
	A.	Statutory and Regulatory Requirements	4
	Β.	Annual Demand Reduction Goal	6
	C.	Annual Energy Savings Goal	9
	D.	Process to Achieve Savings	9
IV.	ENE	RGY EFFICIENCY COSTS	
	A.	PY 2021	
	Β.	2021 EM&V Costs	
	C.	2023 Projected Energy Efficiency Program Costs	
	D.	2023 EM&V Costs	14
V.	ENERC	GY EFFICIENCY PROGRAMS	
	A.	PY 2021 Programs	
	Β.	PY 2021 Achievements	19
	C.	PY 2023 Programs	

1		I. <u>INTRODUCTION</u>
2	Q.	PLEASE STATE YOUR NAME, POSITION IN THE COMPANY, AND BUSINESS
3		ADDRESS.
4	A.	My name is Pamela D. Osterloh. I am the Energy Efficiency and Consumer Programs
5		Compliance Coordinator Principal for AEP Texas Inc. My business address is 539 N.
6		Carancahua, Corpus Christi, Texas 78401.
7	Q.	PLEASE STATE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND.
8	A.	I received a Bachelor of Science degree from Texas A&M University in 1986. I was
9		first employed by and worked in various capacities and locations for Central Power and
10		Light Company (the predecessor of AEP Texas Central Company) from November
11		1991 through May 1992. In June 1992, I accepted the position of Market Research
12		Analyst with West Texas Utilities Company (the predecessor of AEP Texas North
13		Company). In September 1997, I was appointed Demand Side Management (DSM)
14		Resource Evaluation Coordinator with Central and South West Services, Inc. (the
15		corporate service affiliate of Central and South West Corporation or CSW) located in
16		Austin, Texas. In that role, I was responsible for energy efficiency regulatory activities
17		and compliance for DSM activities for CSW in Texas. In April 1999, I transferred to
18		Corpus Christi with CSW and began work in my current role as Energy Efficiency and
19		Consumer Program Compliance Coordinator Principal for AEP Texas. In my current
20		position, I am responsible for implementing and administering energy efficiency
21		programs in compliance with the Public Utility Regulatory Act ¹ (PURA) provisions

¹ PURA is codified at Tex. Util. Code Ann. §§ 11.001–66.016.

1		and the Public Utility Commission of Texas (Commission) rules for such energy
2		efficiency programs. I hold professional certification from the Association of Energy
3		Engineers (AEE) as a Certified Energy Manager.
4	Q.	HAVE YOU PREVIOUSLY FILED TESTIMONY BEFORE ANY REGULATORY
5		AGENCY?
6	A.	Yes, I have previously filed testimony before the Commission in numerous energy
7		efficiency cost recovery factor (EECRF) dockets: Docket No. 35627; Docket
8		No. 36960; Docket No. 38208; Docket No. 39360; Docket No. 40359; Docket No.
9		41538; Docket No. 42508; Docket No. 44717; Docket No. 45929; Docket No. 47236;
10		Docket No. 48422; Docket No. 49592; Docket No. 50892; and Docket No. 52199.
11	Q.	DO YOU SPONSOR ANY OF THE SCHEDULES ACCOMPANYING AEP
12		TEXAS' FILING?
13	A.	Yes, I sponsor AEP Texas Schedules L through O, and R. In addition, I co-sponsor
14		Schedule A with witnesses Robert Cavazos and Jennifer L. Jackson; Schedule B with
15		witness Jackson; and Schedules J, P, and S with witness Cavazos.

1		II. <u>PURPOSE OF TESTIMONY</u>
2	Q.	WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?
3	A.	The purpose of my testimony is to present information supporting AEP Texas' request
4		to adjust its EECRF for program year (PY) 2023. In my direct testimony, I first outline
5		the energy efficiency goals established by PURA § 39.905. I also discuss the impact of
6		the identification notice provided for in 16 Tex. Admin. Code (TAC) § 25.181(u). I
7		then present the actual energy efficiency expenditures incurred by AEP Texas for its
8		PY 2021 programs, including Evaluation, Measurement and Verification (EM&V)
9		costs incurred in PY 2021. I describe each of the programs AEP Texas implemented
10		during PY 2021. Finally, I present the projected costs and the plans and programs AEP
11		Texas will implement to achieve its energy efficiency objectives for PY 2023.
12	Q.	PLEASE SUMMARIZE YOUR TESTIMONY.
13	A.	My testimony demonstrates the following:
14 15 16 17		• AEP Texas' costs incurred in connection with its PY 2021 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 and 25.182;
18 19 20		• AEP Texas' statutory minimum goals to be achieved in PY 2023 are 21.08 MW of demand reduction and 36,932 MWh of energy reduction and are calculated in compliance with 16 TAC § 25.181; and
21 22 23 24		• The \$18,447,166 that AEP Texas projects it will incur in PY 2023 is a reasonable estimate of the costs (including EM&V) necessary to provide energy efficiency programs designed to meet AEP Texas' energy efficiency objectives for PY 2023 in furtherance of PURA § 39.905 and 16 TAC § 25.181.
25		

1		III. ENERGY EFFICIENCY REQUIREMENTS AND OBJECTIVES
2		A. <u>Statutory and Regulatory Requirements</u>
3	Q.	PLEASE DESCRIBE THE BASIC REQUIREMENTS OF PURA § 39.905 AS
4		RELEVANT TO YOUR TESTIMONY.
5	A.	The requirements of PURA § 39.905 as relevant to my testimony are:
6 7 8 9 10		• A utility must provide incentives adequate for the purpose of acquiring cost-effective energy efficiency equivalent to at least 30% of the electric utility's annual growth in demand of residential and commercial customers beginning with the 2013 program year; but not less than the previous year.
11 12 13 14 15 16		• 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 calendar 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 but not less than the previous year.
17 18		• A utility must provide incentives through market-based standard offer programs (SOPs) or targeted market transformation programs (MTPs).
19 20 21 22		• 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.
23	Q.	HAS THE COMMISSION ADOPTED RULES TO IMPLEMENT PURA § 39.905?
24	A.	Yes, the Commission adopted 16 TAC §§ 25.181 and 25.182 to implement PURA §
25		39.905.
26	Q.	WHAT ARE SOME OF THE KEY COMPONENTS OF 16 TAC §§ 25.181 and
27		25.182?
28	A.	The key components of 16 TAC §§ 25.181 and 25.182 relevant to my testimony are:
29 30		• A utility shall adjust its EECRF to timely recover forecasted annual energy efficiency program costs, the preceding year's over- or under-

1 2		recovery including municipal and utility EECRF proceeding expenses, any performance bonus earned, and EM&V costs assigned to the utility.
3 4		• A utility may use up to 15% of its total program costs for administration of its energy efficiency programs.
5 6 7 8 9		• 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.
10 11		• The cumulative cost of administration and R&D shall not exceed 20% of a utility's total program costs.
12 13 14		• 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.
15 16 17 18 19 20		• 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 nor shall the identified facilities be eligible to participate or receive incentives for a three-year period.
21	Q.	HOW DOES AEP TEXAS IMPLEMENT THESE REQUIREMENTS?
22	A.	AEP Texas develops and offers cost-effective energy efficiency programs to third-party
23		EESPs as defined in 16 TAC § 25.181(c)(17), who in turn market their services to end-
24		use retail residential and commercial customers. These programs offer incentives to
25		encourage third-party EESPs, REPs, and/or eligible commercial customers to
26		participate as project sponsors of energy efficiency measures. The Commission's
27		energy efficiency rule allows commercial customers with a peak demand of 50
28		kilowatts (kW) or greater to act as their own EESP for measures they install for
29		themselves. The EESPs or project sponsors then supply and install the measures at
30		homes or businesses that produce the energy efficiency savings that AEP Texas reports
31		to satisfy its energy efficiency objectives. Energy efficiency objectives and goals are

established annually, so that each year AEP Texas may procure the necessary demand
 reduction and energy savings from participating project sponsors to meet AEP Texas'
 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. AEP Texas pays
 incentives to the project sponsors for peak demand and energy savings resulting from
 the energy efficiency measures installed according to program guidelines.

7 Q. PLEASE DEFINE THE TERM SOP.

A. Pursuant to 16 TAC § 25.181(c)(55), a standard offer program is defined as a program under which a utility administers standard offer contracts between the utility and EESPs. A standard offer contract specifies standard payments based upon the amount of energy and peak demand savings achieved through energy efficiency measures, the applicable measurement and verification (M&V) protocols, and other terms and conditions, consistent with 16 TAC § 25.181.

14 Q. PLEASE DEFINE THE TERM MTP.

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

19

B. Annual Demand Reduction Goal

20 Q. PLEASE DESCRIBE THE DEMAND REDUCTION GOAL REQUIREMENT FOR 21 AEP TEXAS.

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

1		equivalent to at least four-tenths of 1% (the trigger) of AEP Texas summer	
2		weather-adjusted peak demand for the combined residential and commercial customers	
3		for the previous program year. Once that trigger is reached, AEP Texas shall acquire	
4		four-tenths of 1% of its summer weather-adjusted peak demand for the combined	
5		residential and commercial customers for the previous program year. In addition,	
6		16 TAC § 25.181(e)(1)(D) states that, except as adjusted in accordance with subsection	
7		(u) of the rule, a utility's demand reduction goal in any year shall not be lower than its	
8		goal for the prior year, unless the Commission establishes a goal for a utility pursuant	
9		to paragraph (2) of 16 TAC § 25.181(e).	
10	Q.	HAS AEP TEXAS MET THE TRIGGER DESCRIBED IN 16 TAC	
11		§ 25.181(e)(1)(B)?	
12	A.	Yes, AEP Texas has met the trigger.	
13	Q.	PLEASE DESCRIBE THE IDENTIFICATION NOTICE REFERENCED IN 16 TAC	
14		§ 25.181.	
15	A.	16 TAC § 25.181(u) states that an industrial customer taking electric service at	
16		distribution voltage that qualifies under subsection 16 TAC § 25.181(c)(30) may	
17		submit an identification notice to the utility for those metered points of delivery of the	
18		industrial process. The Electric Service Identifier (ESID) number(s) identified under	
19		this section are not to be charged for any costs associated with and will not be able to	
20		participate in energy efficiency programs for three years.	
21	Q.	COULD THE IDENTIFICATION NOTICE REQUIREMENT AFFECT THE	
22		UTILITY'S CALCULATED GOAL FOR ENERGY EFFICIENCY?	

- A. Yes. Pursuant to 16 TAC § 25.181(u) the utility's demand reduction goal must be
 adjusted to remove any load identified as a result of the identification notice provision.
- 3 Q. WILL ANY SUCH NOTICES BE EFFECTIVE IN PY 2023?
- 4 A. Yes. AEP Texas received identification notices prior to February 1, 2022, for 182
 5 ESIDs representing 25.18 MW.
- 6 Q. WHAT IS AEP TEXAS' DEMAND REDUCTION GOAL FOR PY 2023?

7 A. AEP Texas' summer weather-adjusted five-year average peak demand at the meter for 8 residential and commercial customers for the previous five year (2017-2021) is 5,271 9 megawatts (MW), after adjustments under 16 TAC § 25.181(u) for industrial-customer 10 exclusions. AEP Texas' calculated demand reduction goal for PY 2023-i.e., four-11 tenths of one percent of its summer weather-adjusted five-year average peak demand 12 at the meter for residential and commercial customers-is 21.08 MW. The minimum 13 PY 2023 demand reduction goal is set forth in Schedule N. AEP Texas, however, 14 projects it will achieve as much as 48.12 MW of demand reduction from the programs 15 it will implement in PY 2023. As Mr. Cavazos explains in his testimony, AEP Texas interprets PURA § 39.905 and 16 TAC § 25.181 as intending to encourage as much 16 17 cost-effective energy efficiency as can reasonably be achieved.

18 Q. WERE LINE LOSSES INCORPORATED IN THE CALCULATION OF THE19 DEMAND REDUCTION GOAL?

A. Yes. Calculation of the demand reduction goal used the line loss numbers derived from
the loss factors determined in AEP Texas' most recent line loss study.

1		C. <u>Annual Energy Savings Goal</u>
2	Q.	HOW IS THE ENERGY SAVINGS GOAL CALCULATED UNDER 16 TAC
3		§ 25.181?
4	A.	The minimum energy savings goal is calculated from the utility's calculated demand
5		goal, using a 20% conservation load factor, as set forth in 16 TAC § 25.181(e)(4).
6	Q.	WHAT IS AEP TEXAS' ENERGY SAVINGS GOAL TO BE ACHIEVED IN
7		PY 2023?
8	A.	The energy savings goal for AEP Texas to achieve in PY 2023 is 36,932 megawatt-
9		hour (MWh). The PY 2023 energy savings goal is set forth in Schedule N. However,
10		AEP Texas projects to achieve as much as 72,434 MWh of energy savings from the
11		programs it will implement in PY 2023. As I mentioned above and as Mr. Cavazos
12		explains in his testimony, AEP Texas interprets PURA \S 39.905 and 16 TAC \S 25.181
13	as intended to encourage utilities to achieve as much cost-effective energy efficiency	
14		as can reasonably be achieved.
15		D. <u>Process to Achieve Savings</u>
16	Q.	WILL AEP TEXAS OFFER PROGRAMS TO ACHIEVE THESE PY 2023
17		SAVINGS?
18	A.	Yes, I discuss the programs that AEP Texas will offer in Section V. of my testimony.
19		AEP Texas' energy efficiency program portfolio is designed to achieve both its demand
20		reduction and energy savings objectives for PY 2023.

1	Q.	WILL ALL ELIGIBLE CUSTOMERS HAVE ACCESS TO ENERGY EFFICIENCY			
2		PROGRAMS OFFERED BY AEP TEXAS?			
3	A.	Yes, except for distribution-served industrial customers who have submitted an			
4		identification notice pursuant to 16 TAC § 25.181(u), all customers in the residential			
5		and commercial customer classes will have access to the energy efficiency programs			
6		offered by AEP Texas.			
7					
8		IV. <u>ENERGY EFFICIENCY COSTS</u>			
9		A. <u>PY 2021</u>			
10	Q.	WHAT COSTS DID AEP TEXAS INCUR TO IMPLEMENT ITS PY 2021 ENERGY			
11		EFFICIENCY PROGRAMS?			
12	A.	The costs incurred by AEP Texas to implement its PY 2021 energy efficiency programs			
13		totaled \$17,163,057, as shown in Schedule B.			
14	Q.	WERE AEP TEXAS' ACTUAL PY 2021 ENERGY EFFICIENCY COSTS LESS			
15		THAN THE ENERGY EFFICIENCY AMOUNT PROJECTED FOR PY 2021?			
16	A.	Yes. AEP Texas' energy efficiency costs were 4.4% (\$791,549) less than the projected			
17		amount in 2021.			
18	Q.	WERE AEP TEXAS' PY 2021 PROGRAM PORTFOLIO COSTS LESS THAN OR			
19		EQUAL TO THE BENEFITS OF THE PROGRAMS?			
20	A.	Yes. AEP Texas program portfolio costs were less than the benefits of the program.			
21		The benefit-cost ratio for AEP Texas' entire PY 2021 program portfolio is shown in			
22		Schedule P. The estimated useful life for each measure is provided in Schedule M.			

1 Q. PLEASE DESCRIBE AEP TEXAS' PY 2021 ADMINISTRATIVE COSTS.

2 A. AEP Texas' PY 2021 administrative costs included costs to review project applications, 3 award contracts, review incentive reports, conduct field inspections of installed 4 measures, review M&V plans for projects that do not utilize deemed savings measures, 5 and interact with project sponsors. Administrative duties also include continuous 6 review and monitoring of programs for successful program implementation. Costs 7 associated with work activities regarding regulatory reporting and special projects are also considered administrative costs and are included in AEP Texas' administrative 8 9 costs.

10 Q. DID AEP TEXAS HAVE ANY EXPENSES ASSOCIATED WITH R&D IN PY11 2021?

12 A. Yes. AEP Texas expended \$177,822 for R&D in PY 2021 as detailed in Schedule B.

13 Q. PLEASE DESCRIBE AEP TEXAS' R&D EFFORTS.

14 AEP Texas' PY 2021 R&D projects included costs related to identifying, developing, A. 15 and implementing necessary enhancements to its electronic data collection and 16 management systems to incorporate updates for new program requirements, regulatory requirements, and deemed savings values; and costs associated with researching new 17 technologies and energy efficiency program ideas. AEP Texas also participated with 18 19 the Electric Utility Marketing Managers of Texas in research activities that included 20 providing technical support for the Texas Technical Reference Manual (TRM). All of 21 the R&D expenditures incurred in PY 2021 were for the purpose of fostering continuous improvement and innovation in the application of energy efficiency 22 23 technology and energy efficiency program design and implementation.

11

- Q. PLEASE DESCRIBE AEP TEXAS' PY 2021 EXPENDITURES FOR ITS
 TARGETED LOW-INCOME PROGRAM.
- A. As required by 16 TAC § 25.181(p), AEP Texas expended \$1,999,936 in PY 2021 for
 the targeted low-income energy efficiency program, which is 12% of AEP Texas'
 PY 2021 energy efficiency budget.
- 6 Q. HAS AEP TEXAS PROVIDED INFORMATION ON THE BIDDING AND
 7 ENGAGEMENT PROCESS USED FOR CONTRACTING WITH EESPS?
- 8 A. Yes. Schedule L describes the process used to select and contract with EESPs.
- 9 Q. DID ANY SINGLE EESP RECEIVE MORE THAN 5% OF AEP TEXAS'
 10 OVERALL INCENTIVE PAYMENTS?
- 11 A. Yes. Please see Highly Sensitive Schedule J for a list of all EESPs that participated in
- 12 the PY 2021 programs, including those EESPs receiving more than 5% of AEP Texas'
- 13 PY 2021 overall incentive payments, as well as a list of all EESPs that participated in
- 14 the PY 2021 programs. Schedule J also includes contracts associated with those
- 15 receiving more than 5% of overall incentive payments.
- 16 Q. DID AEP TEXAS INCUR ANY AFFILIATE COSTS IN PY 2021?
- 17 A. No. AEP Texas did not incur any affiliate costs in PY 2021.
- 18 B. <u>2021 EM&V Costs</u>
- 19 Q. DID AEP TEXAS INCUR ANY EM&V COSTS IN 2021 FOR THE EVALUATION
- 20 OF PY 2020?
- A. Yes, AEP Texas incurred \$206,948 in costs paid to the statewide EM&V contractor
 during 2021 for the evaluation of PY 2020.

1

2023 Projected Energy Efficiency Program Costs

2 Q. WHAT ARE AEP TEXAS' ENERGY EFFICIENCY PLANS FOR PY 2023?

C.

3 As shown in Schedule A, AEP Texas will implement 11 energy efficiency programs in A. 4 PY 2023 for a total projected cost of \$18,447,166, which includes R&D and EM&V 5 activities. The 11 energy efficiency programs are described in Schedule R and are designed to allow AEP Texas to achieve its energy efficiency objectives for PY 2023. 6 7 This portfolio of programs will continue to encourage EESPs to provide energy efficiency services to all qualifying residential and commercial customers. Each year 8 9 AEP Texas reviews the programs and activities that have taken place to improve its 10 plan for the upcoming year. AEP Texas has selected the programs that it believes will achieve its PY 2023 objectives and comply with PURA provisions and the 11 12 Commission's rule.

13 Q. HOW DID AEP TEXAS DETERMINE ITS PY 2023 ENERGY EFFICIENCY 14 OBJECTIVES?

15 A. AEP Texas first determined to achieve even greater cost-effective energy efficiency 16 savings than required by the Commission's rule. AEP Texas then allocated portions of 17 its PY 2023 projected program costs among customer classes using criteria such as 18 customer counts, historical cost allocation, and previous program success. The Hard-19 to-Reach SOP and the Targeted Low-Income Energy Efficiency Program were 20 designed to comply with PURA provisions and the Commission's rule. AEP Texas then 21 estimated projected impacts from each program based on historical results and previous 22 years' experience. Projected impacts from all programs within each customer class 23 were then combined to formulate customer class projected savings. Finally, all

- projected customer class savings were added together to produce AEP Texas' PY 2023
 projected energy efficiency savings as shown in Schedule O.
- 3 Q. ARE THERE SPECIFIC TYPES OF ADMINISTRATIVE COSTS ASSOCIATED
 4 WITH THE PY 2023 ENERGY EFFICIENCY PROGRAMS?
- 5 A. Yes. Administrative costs for PY 2023 will include costs for reviewing project 6 applications, awarding contracts, reviewing M&V plans for some projects that do not 7 utilize deemed savings measures, performing field inspections of installed measures, processing incentive payments, and interacting with project sponsors. Administrative 8 9 costs also include development, review and selection of new or revised programs that 10 may be considered for successful program implementation. Costs associated with work activities regarding regulatory reporting, EECRF filing, and other energy efficiency-11 12 related projects are also considered administrative costs and are included as shown in 13 Schedule A.

14 Q. DOES AEP TEXAS PROJECT ANY R&D COSTS FOR PY 2023?

15 A. Yes, AEP Texas PY 2023 projected R&D costs include \$353,646 or about 2% of its
16 total projected program costs as shown in Schedule A.

- 17 D. <u>2023 EM&V Costs</u>
- 18 Q. DOES AEP TEXAS INCLUDE ANY EM&V COSTS IN THIS FILING?
- A. Yes. AEP Texas is including \$232,708 as its apportioned EM&V costs to be incurred
 in 2023 for the evaluation of PY 2022.

1		V. <u>ENERGY EFFICIENCY PROGRAMS</u>
2		A. <u>PY 2021 Programs</u>
3	Q.	WHAT PROGRAMS DID AEP TEXAS OFFER IN PY 2021 TO ACHIEVE ITS
4		ENERGY EFFICIENCY OBJECTIVES?
5	A.	AEP Texas offered the following programs in PY 2021:
6 7		Commercial Solutions MTPCommercial SOP
8		• CoolSaver sm A/C Tune-up MTP
9		Hard-to-Reach SOP
10		High Performance New Homes MTP
11		Load Management SOP
12		Open MTP
13		Residential SOP
14		SCORE/CitySmart MTP
15		• SMART Source SM Solar PV MTP
16		Targeted Low-Income Energy Efficiency Program
17	Q.	PLEASE DESCRIBE THE COMMERCIAL SOLUTIONS MTP.
18	A.	The Commercial Solutions MTP identifies a variety of commercial customers having
19		a high likelihood of installing energy efficiency measures within their facilities. These
20		customers may have delayed making such improvements for a number of reasons,
21		including an inability to identify appropriate actions to take or lack of understanding of
22		energy efficiency project funding. The Commercial Solutions MTP provides education
23		and information to such customers, and provides monetary incentives to encourage
24		them to take action to improve their facilities' energy efficiency.

1 Q. PLEASE DESCRIBE THE COMMERCIAL SOP.

2 A. The Commercial SOP provides incentives for the installation of a wide range of 3 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, 4 5 schools, manufacturing facilities, restaurants, and larger grocery and retail stores. 6 These types of customers have installed eligible measures such as lighting systems, 7 new or replacement chiller systems, high-efficiency pumping systems, and other similar efficient technologies. Incentives are paid to project sponsors on the basis of 8 9 deemed savings or, if deemed savings have not been established for a particular 10 qualifying energy efficiency measure, incentives may be paid on the basis of verified peak demand and/or energy savings using the International Performance Measurement 11 12 & Verification Protocol.

13 Q. PLEASE DESCRIBE THE COOLSAVERSM A/C TUNE-UP MTP.

A. The CoolSaver SM A/C Tune-Up MTP is designed to overcome market barriers that
 prevent residential and small business customers from receiving high-performance A/C
 system tune-ups. This program works with local A/C distributor networks to train and
 certify A/C technicians on tune-up and air flow correction services and protocols.

18 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 household income is at or below 200% of federal poverty guidelines. The program provides incentives for the installation of a wide range of measures that reduce residential customer energy costs and reduce 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.

6

Q. PLEASE DESCRIBE THE HIGH PERFORMANCE NEW HOMES MTP.

A. The High Performance New Homes MTP targets homebuilders and residential
consumers. The program's goal is to create conditions where consumers demand high
performance built homes, and homebuilders supply these energy-efficient homes.
Incentives are paid to homebuilders who construct high performance built homes.

11 Q. PLEASE DESCRIBE THE LOAD MANAGEMENT SOP.

A. The Load Management SOP targets commercial customers that have a minimum
 demand of 500 kW or more. Incentives are paid to project sponsors that identify
 interruptible load and provide curtailment of this electric load on short notice. These
 payments are based on the verified demand savings methodology identified in the
 Texas TRM.

17 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 150 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.

3 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. 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.

11 Q. PLEASE DESCRIBE THE SCORE/CITYSMART MTP.

12 A. The Schools COnserving REsources/CitySmart MTP (SCORE/CitySmart) provides 13 energy efficiency and demand reduction solutions for government and educational 14 customers. SCORE/CitySmart facilitates the examination of actual demand and energy 15 savings, operating characteristics, program design, long-range energy efficiency 16 planning and overall measure and program acceptance by the targeted cities and 17 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, 18 19 budgeting and operational practices. Incentives are paid to participants for certain 20 qualifying measures installed in new or retrofit applications that result in verifiable 21 demand and energy savings.

- 22 Q.
- PLEASE DESCRIBE THE SMART SOURCESM SOLAR PV MTP.

18

The SMART SourceSM Solar PV MTP offers residential and commercial installations 1 A. 2 a financial incentive for installations of solar electric (photovoltaic) systems interconnected on the customer's side of the electric service meter. The goal of this 3 4 program is to transform the market by increasing the number of qualified companies 5 offering installation services and by decreasing the average installed cost of systems, 6 creating economies of scale. 7 Q. PLEASE DESCRIBE THE TARGETED LOW-INCOME ENERGY EFFICIENCY 8 PROGRAM. 9 A. AEP Texas' Targeted Low-Income Energy Efficiency Program is designed to 10 cost-effectively reduce the energy consumption and energy costs of AEP Texas' low-income residential customers. The program provides eligible residential customers 11

12 with appropriate weatherization measures and basic on-site energy education.

13 B. <u>PY 2021 Achievements</u>

14 Q. PLEASE DESCRIBE THE AEP TEXAS REQUIRED DEMAND REDUCTION

15 GOAL FOR PY 2021 AND THE RESULTS THAT WERE ACHIEVED IN 2021.

A. The AEP Texas required demand reduction goal to be achieved in PY 2021 was 20.6
 MW. The AEP Texas actual demand reduction achieved was 45.3 MW of peak demand
 savings from its PY 2021 energy efficiency programs.

19 Q. PLEASE DESCRIBE THE AEP TEXAS REQUIRED ENERGY REDUCTION

- 20 GOAL FOR PY 2021 AND THE RESULTS THAT WERE ACHIEVED IN PY 2021.
- A. The AEP Texas required energy reduction goal to be achieved in PY 2021 was 36,091

22 MWh. The AEP Texas actual energy reduction achieved was 83,701 MWh from its PY

23 2021 energy efficiency programs.

1	Q.	PLEASE DESCRIBE THE AMOUNT OF DEMAND REDUCTION THAT AEP		
2		TEXAS ACHIEVED FROM ITS HARD-TO-REACH PROGRAMS.		
3	A.	AEP Texas achieved a total demand reduction of 3.59 MW from its hard-to-reach		
4		programs (2.28 MW from its Hard-To-Reach SOP and 1.31 MW from its Targeted		
5		Low Income Energy Efficiency Program).		
6	Q.	DID AEP TEXAS ACHIEVE MORE THAN 5% OF ITS STATUTORY DEMAND		
7		REDUCTION GOAL FROM ITS HARD-TO-REACH PROGRAMS?		
8	A.	Yes, AEP Texas achieved 17% of its PY 2021 statutory demand reduction goal from		
9		its hard-to-reach programs.		
10	Q.	DID AEP TEXAS EARN A PERFORMANCE BONUS FOR PY 2021?		
11	A.	Yes. Mr. Cavazos discusses the \$7,933,862 performance bonus earned by AEP Texas		
12		for its PY 2021 results.		
13	Q.	SHOULD AEP TEXAS BE GRANTED ITS PERFORMANCE BONUS?		
14	A.	Yes, AEP Texas should be granted its performance bonus set forth in Schedule D.		
15		C. <u>PY 2023 Programs</u>		
16	Q.	WHAT PROGRAMS WILL AEP TEXAS OFFER IN PY 2023 TO ACHIEVE THE		
17		ENERGY EFFICIENCY OBJECTIVES?		
18	A.	AEP Texas will offer the following programs in PY 2023:		
19		Commercial Solutions MTP		
20		Commercial SOP		
21		• CoolSaver sM A/C Tune-up MTP		
22		Hard-to-Reach SOP		
23		• High Performance New Homes MTP		
24		Load Management SOP		

1		Open MTP	
2		Residential SOP	
3		SCORE/CitySmart MTP	
4		• SMART Source SM Solar PV MTP	
5		Targeted Low Income Energy Efficiency Program	
6	Q.	WHAT IS THE PY 2023 PROJECTED COST FOR EACH PROGRAM?	
7	A.	Schedule A contains details of the PY 2023 projected cost for each of AEP Texas'	
8		programs.	
9	Q.	WHAT ARE THE PROJECTED SAVINGS FROM EACH PROGRAM?	
10	A.	Schedule O contains the PY 2023 projected savings from each program.	
11	Q.	DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?	
12	A.	Yes, it does.	

PUBLIC UTILITY COMMISSION OF TEXAS

APPLICATION OF

AEP TEXAS INC.

TO ADJUST ITS

ENERGY EFFICIENCY COST RECOVERY FACTOR AND RELATED RELIEF

DIRECT TESTIMONY OF

JENNIFER L. JACKSON

FOR

AEP TEXAS INC.

JUNE 1, 2022

TESTIMONY INDEX

<u>SUBJECT</u>		PAGE
I.	INTRODUCTION AND PURPOSE	
II.	ADJUSTED EECRF REVENUE REQUIREMENT FOR PY 2023	6
III.	DEVELOPMENT OF EECRF CLASS FACTORS	

1		I. <u>INTRODUCTION AND PURPOSE</u>
2	Q.	PLEASE STATE YOUR NAME, POSITION, AND BUSINESS ADDRESS.
3	A.	My name is Jennifer L. Jackson. I am a Regulatory Pricing and Analysis Manager in
4		Regulated Services, Pricing and Analysis, part of the American Electric Power Service
5		Corporation (AEPSC) Regulatory Services Department, 212 East Sixth Street, Tulsa,
6		Oklahoma 74119-1295.
7	Q.	PLEASE BRIEFLY DESCRIBE THE AEPSC REGULATORY SERVICES
8		DEPARTMENT, YOUR CURRENT JOB RESPONSIBILITIES, AND
9		EDUCATION.
10	A.	AEPSC Regulated Pricing and Analysis reports through Regulatory Services, which is
11		part of the AEPSC's External Affairs Group. Among its activities, Regulated Pricing
12		and Analysis provides cost-of-service, rate design, pricing analysis and tariff-related
13		services to the AEP operating companies, including AEP Texas Inc. My job duties
14		include providing testimony, rate review analysis and support, pricing design,
15		implementation of pricing programs, and regulatory compliance for the AEP operating
16		companies. I have been involved in regulatory rate review and pricing design
17		proceedings since 1991 in all four of the AEP west state jurisdictions including Texas,
18		Arkansas, Louisiana, and Oklahoma. I received a Bachelor of Business Administration
19		Degree with an emphasis in Marketing from Texas Tech University.

Q. HAVE YOU PREVIOUSLY SPONSORED TESTIMONY BEFORE THIS COMMISSION?

3	Α.	Yes, I have previously sponsored testimony before the Public Utility Commission of
4		Texas (PUCT or Commission) in the following dockets: 20545, 28520, 28840, 31251,
5		31461, 32758, 33309, 33310, 35625, 35627, 36422, 36928, 36949, 36961, 36960,
6		36959, 38208, 38209, 38210, 39359, 39360, 39361, 40358, 40359, 40443, 41538,
7		41539, 41879, 41970, 42370, 42508, 42509, 44717, 44718, 45787, 45788, 45928,
8		45929, 47015, 47236, 48110, 48422, 49163, 49494, 49592, 51415, and 52199. I have
9		also sponsored testimony before the Arkansas Public Service Commission and the
10		Oklahoma Corporation Commission.

11 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. 16 Tex. Admin. Code (TAC) § 25.182, permits a utility to establish an energy efficiency cost recovery factor (EECRF) to recover its reasonable expenditures on energy efficiency programs, a performance bonus for exceeding its minimum goals, Evaluation, Measurement and Verification (EM&V) costs allocated to the utility, and proceeding expenses.

The purpose of my testimony is to: (1) support the calculation of the annual redetermination of AEP Texas' EECRF; and (2) present the revised tariff (Rider EECRF), included as Schedule F to AEP Texas' filing, proposed to be effective March 1, 2023.

21 Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. AEP Texas is requesting recovery of \$25,583,391 through its Rider EECRF, which
 includes: projected program year (PY) 2023 energy efficiency program costs; EM&V

1		costs; the return to customers of an over-recovery of PY 2021 program costs, including	
2		interest; EECRF proceeding expenses-including expenses necessary to reimburse	
3		intervening municipalities-incurred in Docket No. 52199. The class assignment of	
4		these costs has been performed consistent with 16 TAC § 25.182(d) and AEP Texas'	
5		last EECRF proceeding. The proposed EECRF factors, which are designed to recover	
6		the PY 2023 EECRF revenue requirement, are calculated based on projected 2023 kWh	
7		sales for all EECRF classes eligible for the EECRF. AEP Texas' proposed EECRF	
8		factors comply with the requirements for cost caps under 16 TAC § 25.182(d)(7).	
9	Q.	WHAT SCHEDULES THAT ACCOMPANY THE AEP TEXAS FILING DO YOU	

- 10 SPONSOR?
- 11 A. I sponsor the following schedules:

Schedule	Description
Schedule E	Calculation of the 2022 AEP Texas EECRF Factors
Schedule F	AEP Texas Rider EECRF
Schedule G	Calculation of Cost Caps
Schedule H	Development of Forecasted Billing Units
Schedule Q	System and Line Losses

- 12 I also sponsor the workpapers supporting these schedules.
- 13 Q. WHAT SCHEDULES ARE YOU CO-SPONSORING?
- 14 A. I am co-sponsoring Schedule A with AEP Texas witnesses Robert Cavazos and Pamela
- 15 D. Osterloh; Schedule B with AEP Texas witness Osterloh; and Schedule C with AEP
- 16 Texas witness Cavazos.
- Schedule A provides the requested program budget year proposed incentives and administrative costs, research and development (R&D) and EM&V costs in total and by EECRF rate class.

1 2 3		• Schedule B provides the historical program budget year actual incentives and administrative costs, and R&D and EM&V costs in total and by EECRF rate class.
4 5		• Schedule C provides the actual results from the PY 2021 by EECRF rate class, including EECRF revenues.
6		II. ADJUSTED EECRF REVENUE REQUIREMENT FOR PY 2023
7	Q.	WHY IS AEP TEXAS REQUESTING APPROVAL OF AN ADJUSTED EECRF?
8	A.	16 TAC § 25.182(d)(8) requires a bundled utility with an EECRF to apply no later than
9		June 1 of each year to adjust its EECRF effective March 1 of the following year. AEP
10		Texas currently billing its customers the 2022 EECRF factors approved in Docket No.
11		52199. In this case, AEP Texas is requesting Commission approval of an adjusted Rider
12		EECRF with factors to be effective March 1, 2023.
13	Q.	WHAT IS THE REVENUE REQUIREMENT THAT AEP TEXAS IS TO RECOVER
14		THROUGH ITS PROPOSED ADJUSTED EECRF?
15	A.	AEP Texas is requesting to recover \$ 25,583,391 through its adjusted Rider EECRF in
16		PY 2023. This revenue requirement reflects the following:
17 18		 recovery of \$18,214,458; in energy efficiency program costs projected to be incurred in PY 2023;
19 20 21 22		• an adjustment of \$835,899 to account for the over-recovery of EECRF revenues above actual energy efficiency program expenditures incurred for its PY 2021 programs, including the recovery of 2021 EM&V costs and interest in the amount of \$7,792;
23 24		 recovery of \$7,933,862 representing AEP Texas' earned performance bonus;
25 26 27 28		 recovery of EECRF proceeding expenses from Docket No. 52199 in the amount of \$38,262—including \$15,013 in reimbursed proceeding expenses incurred by municipal intervenors and \$23,249 for AEP Texas' legal expenses; and
29		• recovery of EM&V costs in the amount of \$232,708.

- 1 Q. HOW ARE THE PY 2023 PROGRAM COSTS ASSIGNED TO EACH CLASS?
- A. PY 2023 program costs are assigned to EECRF rate classes on a program-by-program
 basis following the methodology employed in AEP Texas' 2022 EECRF approved in
 Docket No. 52199. The class assignment of the PY 2023 program costs, including
 administrative costs, is based on the direct assignment to the EECRF rate classes
 eligible for specific programs where possible.
- 7 Q. HOW ARE THE PY 2023 PROGRAM COSTS THAT ARE NOT DIRECTLY
 8 ASSIGNED TO A CLASS ALLOCATED?
- 9 A. Where more than one EECRF rate class is eligible to participate in a specific program,
 10 AEP Texas has employed an adjusted and weighted demand allocator to assign
 11 program costs across the eligible classes based on allocators approved in its most recent
 12 base-rate case, Docket No. 49494.
- PY 2023 R&D costs are allocated across the eligible classes using the weighted
 and adjusted demand allocators.
- 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 AEP Texas' PY 2023 energy efficiency programs.
- 19 Q. PLEASE DESCRIBE THE ADJUSTED DEMAND ALLOCATION FACTORS
 20 USED TO ALLOCATE PY 2023 COSTS THAT ARE NOT DIRECTLY ASSIGNED
 21 TO RATE CLASSES.
- A. The class distribution function demand allocators from Docket No. 49494 have been
 weighted to remove the lighting class and transmission customers at or above 69 kV

1 and adjusted using 2023 projected kWh. The 2023 kWh projection also accounts for 2 industrial customers identifying themselves under 16 TAC § 25.181(c)(30) and (u). Under 16 TAC § 25.181(c)(30) and (u), distribution voltage industrial customers that 3 qualify for a tax exemption under Tex. Tax Code Ann. § 151.317 and submit an 4 5 identification notice by February 1 characterizing the account as such, are not eligible 6 for participation in energy efficiency programs through the EECRF beginning with the 7 next calendar year. AEP Texas has therefore removed kWh associated with those customers from the 2023 kWh projection. The removal of the identification notice 8 9 customers affects the adjusted demand allocators and the calculation of the proposed 10 class EECRF factors for 2023. The kWh associated with the identification notice 11 customers and the resulting 2023 kWh projection are shown in Schedule H and the 12 adjusted demand allocators and supporting data are shown in the rate design 13 workpapers supporting Schedule E; WP Schedule E (Adj Allocators).

14 Q. HOW WAS THE 2021 OVER-RECOVERY DETERMINED?

15 The over-recovery was determined by comparing AEP Texas' PY 2021 Rider EECRF A. 16 revenues with actual PY 2021 expenditures-including EM&V costs and excluding rate-case expenses for Docket No. 52199 and financially based incentive 17 18 compensation. This comparison resulted in an over-recovery for PY 2021 in the 19 amount of \$827,052. This amount includes a trailing under-recovery of \$1,054 from 20 the Transmission Class that has continued since base-rate energy efficiency recovery 21 existed for that class. AEP Texas has determined to forego the recovery of this small 22 amount. The resulting adjusted PY 2021 over-recovery is \$828,106. Interest on the

1 over-recovery balance is required per 16 TAC 25.182(d)(10)(D). Interest on the over-2 recovery balance is \$7,792, for a total over-recovery with interest of \$835,899. The over-recovery with interest is shown on Schedule C (2021) and is 3 4 summarized in WP Schedule C (Summary). 5 HOW IS AEP TEXAS ASSIGNING THE 2021 OVER-RECOVERY TO THE Q. 6 CLASSES? 7 A. The over-recovery assignment to each class is based on a comparison of the total 2021 8 energy efficiency revenues and EECRF Rider revenues by EECRF rate class, to actual 9 2021 program costs assigned to each EECRF rate class. The actual 2021 energy 10 efficiency program costs have been directly assigned to the individual EECRF rate 11 classes that actually participated in each program using a direct, program-by-program 12 assignment. The 2021 administrative costs follow the assignment of the incentive costs 13 and the R&D costs have been either directly assigned to the rate classes or allocated to 14 the classes based on the 2021 class program cost assignment. The specifics of the class 15 assignment of the over-recovery are shown in the workpapers supporting Schedule C. 16 Q. HOW IS AEP TEXAS ASSIGNING THE PY 2021 EARNED PERFORMANCE 17 **BONUS TO THE CLASSES?** AEP Texas has assigned the PY 2021 earned performance bonus to all EECRF rate 18 A.

19 AL Texas has assigned the TT 2021 cannot performance bonds to an ELECRT rate
 19 classes eligible for participation in the PY 2021 energy efficiency programs using an
 20 allocator based on the direct assignment of the PY 2021 program incentives to the
 21 EECRF rate classes. AEP Texas' allocation is in accordance with 16 TAC
 22 § 25.182(e)(6), which states that the bonus shall be allocated in proportion to the
 23 program costs associated with meeting the demand and energy goals and allocated to
1		the eligible customers on a rate class basis. The detail for the earned performance
2		bonus allocation is shown in WP Schedule E (2021 Bonus).
3	Q.	ARE THERE EECRF PROCEEDING EXPENSES INCLUDED IN THE 2023
4		TOTAL REVENUE REQUIREMENT?
5	A.	Yes. AEP Texas has included in EECRF proceeding expenses that it incurred in Docket
6		No. 52199 as well expenses to reimburse intervening municipalities for their
7		participation in Docket No. 52199. The detail of the municipal and AEP legal counsel
8		EECRF proceeding expenses are shown in WP Schedule E (Proceeding Expenses).
9		The support for those expenses is included in Exhibit RC-1 to the testimony of Mr.
10		Cavazos.
11	Q.	HOW IS AEP TEXAS ASSIGNING THE EECRF PROCEEDING EXPENSES TO
12		THE CLASSES?
13	A.	AEP Texas has assigned the total requested EECRF proceeding expenses to the classes
14		using an allocator developed using the assignment of the PY 2023 program cost to the
15		EECRF rate classes.
16	Q.	HAS AEP TEXAS INCLUDED EM&V COSTS IN THE PY 2023 REVENUE
17		REQUIREMENT?
18	A.	Yes. AEP Texas has included its allocated share of statewide EM&V contractor costs
19		for evaluating PY 2022 in the PY 2023 revenue requirement to be recovered through
20		the 2023 EECRF. The statewide EM&V contractor costs are shown in WP Schedule E
21		(EMV).

T OF EECRF CLASS	FACTORS	
ACTORS DETERM	INED ONCE	ALL THE
ED?		
ue requirement is devel	loped and assigne	d to EECRF
or by using the approp	riate allocators, E	ECRF class
the revenue requireme	nt for each EECF	RF rate class
for each EECRF rate cl	ass. The 2023 EE	CRF factors
dule E and the revised	AEP Texas Ride	er EECRF is
EXAS PROPOSING	FO USE TO REC	OVER THE
)		
nue to use an energy c	harge (kWh) for	recovery of
classes of customers	included in the	EECRF, as
l)(6). AEP Texas' kW	h proposal is cor	sistent with
ethodologies and is i	n compliance wi	th 16 TAC
upplied forecasted 202	23 kWh data for a	Ill classes in
2023 FORECASTED	BILLING UNIT	'S USED IN
EECRF FACTORS F	OR PROGRAM `	YEAR 2023
siness, AEPSC project	s monthly kWh sa	ales for each
ing AEP Texas. The A	EPSC Economic	Forecasting
l kWh sales forecasts b	by revenue class.	Because the
i	l kWh sales forecasts b	1 kWh sales forecasts by revenue class.

1		kWh sales are projected on a revenue class basis kWh data must be converted to
2		EECRF rate class forecasted kWh sales. Forecasted kWh sales by EECRF rate class
3		were established by first determining each EECRF rate class's percentage of total retail
4		sales based on twelve months of historical kWh sales data. Forecasted kWh sales by
5		rate class were then calculated by multiplying each rate class's percentage of total retail
6		kWh sales by the total retail forecasted kWh sales. As discussed above, the projection
7		of the 2023 kWh reflects the removal of the identification notice customer kWh. The
8		annual class projected kWh sales less the customer identification notice kWh for each
9		EECRF rate class was used to determine the adjusted 2023 EECRF class factors.
10		Schedule H specifies the process for determining the projected kWh sales by EECRF
11		rate class.
12	Q.	WERE SYSTEM AND LINE LOSSES USED TO DEVELOP THE EECRF
13		FACTORS?
14	A.	No. AEP Texas' kWh sales forecast for 2023 is based on energy delivered at the meter,

15 so it was not necessary to adjust the EECRF factors to reflect system and line losses.

16 Q. WHAT ARE THE PROPOSED 2023 EECRF RATE CLASS FACTORS?

17 A. The proposed 2023 factors by EECRF rate class as shown in Schedule F are:

AEP Texas		
	Proposed	Billing Unit
Rate Class	kWh Factor	Per Rate
Residential	\$0.001023	kWh
Secondary <= 10 kW	\$0.000856	kWh
Secondary > 10 kW	\$0.000964	kWh
Primary	\$0.000450	kWh
Transmission	\$0.000000	kW

18

- Q. HAS AEP TEXAS CALCULATED THE EECRF FACTORS IN A MANNER
 CONSISTENT WITH 16 TAC § 25.182?
- 3 A. Yes.

4 Q. DO THE 2023 EECRF FACTORS, EXCLUDING MUNICIPAL EECRF
5 PROCEEDING EXPENSES AND STATEWIDE EM&V CONTRACTOR COSTS,
6 EXCEED THE MAXIMUM PRICE PER KWH FOR RESIDENTIAL AND
7 COMMERCIAL CUSTOMERS AS SPECIFIED IN 16 TAC § 25.182(d)(7)?

- 8 A. No, they do not. 16 TAC § 25.182(d)(7) recognizes two groups of customers for the
 9 purposes of setting cost caps, residential and commercial. Neither class factor exceeds
 10 the PY 2023 cost cap.
- 11 Q. HOW ARE THE 2023 EECRF COST CAPS DETERMINED?
- A. The method of calculating the 2023 cost caps is described in 16 TAC
 § 25.182(d)(7)(C). The most recently available calendar year's percentage change in
 the South urban consumer price index is calendar year 2021. The percentage change
 for calendar year 2023 is 5.08%. AEP Texas has evaluated the cap based on the
 adjusted 2023 per kWh residential cap of \$.001433 and commercial cap of \$.000896.
 The 2023 cost cap calculation is included in Schedule G of the combined AEP Texas
 EECRF filing schedules.

19 Q. HOW DO THE PROPOSED FACTORS FOR RESIDENTIAL AND COMMERCIAL 20 COMPARE TO THE 2023 COST CAPS?

A. The revised residential factor excluding municipal EECRF proceeding expenses,
 EM&V statewide contractor costs, and interest on the over-recovery is \$0.001013 per

kWh, which does not exceed the residential maximum of \$0.001433 per kWh. The
maximum commercial rate per kWh for 2023 is \$0.000896 per kWh as explained
above. The updated commercial class factor excluding the municipal EECRF
proceeding expenses, statewide EM&V contractor cost, and interest on the overrecovery is \$0.000795 per kWh, which does not exceed the cap for the commercial
class. Schedule G details the 2023 cost cap comparison.

7 Q. HAS AEP TEXAS INCLUDED A CALCULATION OF THE 2021 CAP BASED ON

8 ACTUAL PROGRAM COSTS AND ACTUAL 2021 BILLING UNITS?

- 9 A. Yes, AEP Texas has included a 2021 cap calculation based on actual 2021 program
 10 costs and billing units as part of Schedule G.
- 11 Q. DID AEP TEXAS EXCEED THE 2021 CAPS BASED ON ACTUAL DATA?
- 12 A. No. Neither EECRF rate class exceeded the 2021 caps.

13 Q. HOW WERE THE 2021 CAPS CALCULATED?

A. The 2021 caps were calculated by removing the statewide EM&V contractor's costs
and the municipal EECRF proceeding expenses paid in 2021 from the total 2021
Energy Efficiency actual costs and dividing that total amount by the class 2021 EECRF
billing units less any customer ID notice kWh. This calculation yields the following
results for the classes:

Class	2021 Cost per kWh	2021 Cap	
Residential	\$0.000842	\$0.001351	
Commercial	\$0.000618	\$0.000845	
			-

1 Q. ARE SOME CUSTOMERS EXCLUDED FROM EECRF CHARGES?

- 2 A. Yes, in addition to transmission customers taking service at 69 kV, distribution industrial customers meeting the definition and fulfilling the requirements as outlined 3 4 in 16 TAC § 25.181(c)(30) and (u) (ID Notice Customers) are excluded from EECRF 5 charges. Also, the lighting class has not been assigned or allocated any 2023 costs. 6 Q. HAVE YOU PROVIDED THE REVISED TARIFF REFLECTING 2023 EECRF 7 FACTORS FOR AEP TEXAS? 8 Yes. The proposed Rider EECRF is shown in the Schedule F. AEP Texas requests A. 9 that the Commission approve Rider EECRF to be effective March 1, 2023.
- 10 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?
- 11 A. Yes, it does.

SCHEDULE A

2023 Projected Energy Efficiency Program Costs

					Total Projected
			Research &		Energy Efficiency
	Incentives	Administrative	Development	EM&V	Costs
Commercial					
Commercial Solutions MTP	\$903,248	\$115,485			\$1,018,733
Commercial SOP	\$2,075,762	\$218,467			\$2,294,229
CoolSaver© A/C Tune-Up MTP	\$796,700	\$88,522			\$885,222
Load Management SOP	\$737,700	\$85,300			\$823,000
Open MTP	\$1,213,041	\$150,959			\$1,364,000
SCORE/CitySmart MTP	\$1,192,300	\$141,884			\$1,334,184
SMART Source SM Solar PV MTP	\$287,310	\$35,017			\$322,327
Residential					
CoolSaver© A/C Tune-Up MTP	\$825,000	\$91,667			\$916,667
High Performance New Homes MTP	\$965,000	\$107,222			\$1,072,222
Residential SOP	\$3,164,657	\$359,868			\$3,524,525
SMART Source SM Solar PV MTP	\$670,941	\$79,059			\$750,000
Hard-to-Reach					
Hard-to-Reach SOP	\$1,412,560	\$156,840			\$1,569,400
Targeted Low-Income Energy Efficiency Program	\$1,799,159	\$187,144			\$1,986,303
Research and Development					
R&D Programs	NAP	NAP	\$353,646		\$353,646
Total Projected Program Costs	\$16,043,378	\$1,817,434	\$353,646	\$0	\$18,214,458
Evaluation Measurement & Verification (EM&V)					
				* 0	¢222 700
EM& V	£1 (0.42 2 7 9	¢1 017 424	\$2 5 2 (4(\$0	\$232,708
Total Flojected Energy Efficiency costs	\$10,043,578	\$1,817,434	\$ 353,046	50	\$18,447,166

AEP Texas Inc. Adjusted Energy Efficiency Cost Recovery Factor Filing Schedule A

2023 AEP Texas	Res	Sec < 10	$\mathbf{Sec} > 10$	Primary	Total
Commercial					
Commercial Solutions MTP		\$53,720	\$730,230	\$234,782	\$1,018,733
Commercial SOP		\$120,981	\$1,644,508	\$528,740	\$2,294,229
CoolSaver© A/C Tune-Up MTP		\$46,680	\$634,529	\$204,013	\$885,222
Load Management SOP			\$622,768	\$200,232	\$823,000
Open MTP		\$93,468	\$1,270,532		\$1,364,000
SCORE/CitySmart MTP		\$70,355	\$956,346	\$307,483	\$1,334,184
SMART SourceSM Solar PV MTP		\$16,997	\$231,045	\$74,285	\$322,327
Residential					
CoolSaver© A/C Tune-Up MTP	\$916,667				\$916,667
High Performance New Homes MTP	\$1,072,222				\$1,072,222
Residential SOP	\$3,524,525				\$3,524,525
SMART SourceSM Solar PV MTP	\$750,000				\$750,000
Hard-to-Reach					
Hard-to-Reach SOP	\$1,569,400				\$1,569,400
Targeted Low-Income Energy Efficiency Program	\$1,986,303				\$1,986,303
Research and Development (R&D)					
R&D Programs	\$198,862.22	\$8,162.15	\$110,949.36	\$35,672.27	\$353,646
EM&V	\$127,990	\$5,243	\$79,223	\$20,253	\$232,708
Total Energy Efficiency Program Revenue Requirement	\$10,145,969	\$415,607	\$6,280,131	\$1,605,460	\$18,447,166

Schedule B

2021 Actual Energy Efficiency Expenditures

Customer Class and Program		2021							
							Eva	aluation,	
						Research &	Meas	urement &	Total Funds
		Incentives	A	dministrative		Development	Ver	rification	Expended
Commercial									
Commercial Solutions MTP	\$	900,631	\$	103,879					\$1,004,510
Commercial SOP	\$	2,000,120	\$	230,863					\$2,230,983
CoolSaver© A/C Tune-Up MTP	\$	595,480	\$	49,876					\$645,356
Load Management SOP	\$	573,383	\$	64,448					\$637,831
Open MTP	\$	1,199,150	\$	124,511					\$1,323,661
SCORE/CitySmart MTP	\$	1,127,973	\$	110,452					\$1,238,425
SMART Source SM Solar PV MTP	\$	197,024	\$	19,658					\$216,682
Residential									
CoolSaver© A/C Tune-Up MTP	\$	677,927	\$	56,781					\$734,708
High Performance New Homes MTP	\$	947,262	\$	90,059					\$1,037,321
Residential Pool Pump Pilot MTP	\$	73,663	\$	10,881					\$84,544
Residential SOP	\$	3,365,278	\$	329,413					\$3,694,691
SMART Source SM Solar PV MTP	\$	307,751	\$	32,765					\$340,516
Hard-to-Reach									
Hard-to-Reach SOP	\$	1,412,439	\$	176,684					\$1,589,123
Targeted Low Income Energy Efficiency									
Program	\$	1,826,488	\$	173,448					\$1,999,936
Research & Development						155.000			
Research & Development		NAP		NAP	\$	177,822			\$177,822
Evaluation, Measurement & Verification									
PY 2019 Statewide EM&V Contractor		NAP		NAP		NAP	\$	206,948	\$206,948
TOTAL		\$15,204 <u>,</u> 570		\$1,573,717		\$177,822		\$206,948	\$17,163,057

2021 AEP Texas	Res	Sec < 10	Sec > 10	Primary	Total
Commercial Programs					
ComSol MTP		14,146.12	990,364.17	0.00	\$1,004,510.29
Commercial SOP		35,708.64	1,318,099.50	877,174.55	\$2,230,982.70
CoolSaver© A/C Tune-Up MTP		96,731.80	544,085.72	4,538.20	\$645,355.72
Load Management SOP		0.00	370,010.04	267,820.97	\$637,831.01
Open MTP		77,263.51	1,236,390.70	10,006.57	\$1,323,660.78
SCORE/CitySmart MTP		184,771.90	930,735.40	122,917.90	\$1,238,425.20
SMART Source SM Solar PV MTP		28,335.47	176,476.44	0.00	\$204,811.91
Total Commercial		\$436,957.45	\$5,566,161.97	\$1,282,458.19	\$7,285,577.61
Residential Programs					
CoolSaver© A/C Tune-Up MTP	734.707.91				\$734,707,91
High Performance New Homes MTP	493,878.69				\$493,878.69
SMART Source SM Solar PV MTP	108,119.51				\$108,119.51
Residential SOP	3,694,691.34				\$3,694,691.34
Residential Pool Pumps Pilot MTP	239,414.03				\$239,414.03
Total Residential	\$5,270,811.48				\$5,270,811.48
Hard-to-Reach Programs					
Hard-To-Reach SOP	1,589,123.27				\$1,589,123.27
Targeted Low Income Energy Efficiency Program	1,999,935.75				\$1,999,935.75
Total HTR	\$3,589,059.02				\$3,589,059.02
Total Programs	\$8,859,870.50	\$436,957.45	\$5,566,161.97	\$1,282,458.19	\$16,145,448.12
Research & Development	100,543.47	4,658.65	58,782.53	13,837.84	\$177,822.49
EM&V -statewide contr	113,697.54	5,600.36	70,633.81	17,016.47	\$206,948.18
Total R&D	\$214,241.01	\$10,259.01	\$129,416.34	\$30,854.31	\$384,770.67
Total 2021	\$9.074.111.52	\$447.216.45	\$5.695.578.31	\$1.313.312.50	\$16.530.218.79

AEP Texas, Inc. Adjusted Energy Efficiency Cost Recovery Factor Filing

AEP Texas Combined Schedule C Calculation of 2021 Over/Under Recovery Class Factor

2021 Residential Energy Efficiency Expenditures + R&D +EM&V- Municipal EECRF Expenses -Financially-Based incentives	\$9,035,098
2021 Actual Residential Energy Efficiency Factor Revenues	\$9,779,997
2021 Residential Over Recovery	(\$744,899)
2021 Commercial Energy Efficiency Expenditures + R&D + EM&V- Municipal EECRF Expenses -Financially-Based incentives	\$7,424,169
2021 Actual Commercial Energy Efficiency Factor Revenues	\$7,507,376
2021 Commercial Over Recovery	(\$83,207)
2021 Total Energy Efficiency Expenditures + R&D + EM&V- Municipal EECRF Expenses -Financially-Based incentives	\$16.459.267
2021 Actual Total Energy Efficiency Factor Revenues	\$17,286,319
2021 Over Recovery	(\$827,052)
less Transmision Class trailing under-recovery	(\$1,054)
Interest on 2021 Over Recovery	(\$7,792)
Total Over Recovery With Interest	(\$835,899)

	2021 Program Costs		2023 Over/Under
Class	Over/Under Recovery Allocation	2023 Forecasted Billing Unit	Recovery Factor Unit
Residential	(\$751,909)	13,456,447,713	(\$0.000056) kWh
Secondary <= 10 kW	\$77,519	751,553,780	\$0.000103 kWh
Secondary > 10 kW	\$159,189	9,519,343,301	\$0.000017 kWh
Primary	(\$320,697)	4,447,864,497	(\$0.000072) kWh
Transmission	\$0	21,248,422	\$0.000000 kW
Lighting	\$0	273,395,973	\$0.000000 kWh
Total	(\$835,899)	28,469,853,686	

Over-Recovery Without Interest for 2023 Cap Purposes						
	2021 Program Costs					
Class	Over/Under Recovery Allocation					
Residential	(\$744,899)					
Secondary <= 10 kW	\$76,796					
Secondary > 10 kW	\$157,705					
Primary	(\$317,708)					
Transmission	\$0					
Total Without Interest	(\$828,106)					

Schedule D 2021 Goal Achievement and Performance Bonus Calculation

AEP Texas achieved 45,311 kW in demand savings and 83,701,112 kWh in energy savings by January 1, 2022. The total present value of the avoided costs associated with these demand reductions and energy savings is \$99,980,439. AEP Texas' total costs for purposes of calculating the bonus for the 2021 program year were \$17,166,145. The resulting net benefits are \$79,338,618. AEP Texas' demand reduction goal (DRG) was 20,600 kW and its energy savings goal was 36,091,000 kWh. AEP Texas achieved 220% of its DRG and 232% of its energy savings goal, qualifying it for a performance bonus as calculated under 16 TAC § 25.182(e).

AEP Texas' calculated bonus is \$47,585,056; however, its maximum bonus allowed is \$7,933,862, which is 10% of its total net benefits (16 TAC § 25.182(e) (3)).

	kW (Demand)	kWh (Energy)		
2021 Goals	20,600	36,091,000		
2021 Savings	45,311	83,701,112		
Reported/Verified HTR	3,585			
2021 Program Costs (excluding bonus)	\$17,166	,145		
2021 Performance Bonus	\$7,933,862			

Performance Bonus Calculation

220%	Percentage of Demand Reduction Goal Met (Reported kW/Goal kW)
232%	Percentage of Energy Reduction Goal Met (Reported kWh/Goal kWh)
TRUE	Met Requirements for Performance Bonus?
\$99,980,439	Total Avoided Cost
\$3,475,676	Docket No. 48297 requirement (add previous bonus to current year bonus calculation)
\$20,641,821	Total Program Costs (including bonus)
\$79,338,618	Net Benefits

Bonus Calculation

\$47,585,056	Calculated Bonus [(Achieved Demand Reduction/Demand Goal - 100%) / 2 * Net Benefits]
\$7,933,862	Maximum Bonus Allowed (10% of Net Benefits)
\$7,933,862	Bonus (Minimum of Calculated Bonus and Bonus Limit)

Schedule E

Calculation of Requested EECRF by Customer Class Using Direct Assignment of EECRF Program Costs

AEP Texas Inc.		
2023 Program Costs	\$18,214,458	71.20%
EM&V Evaluation of PY 2022	\$232,708	0.91%
2021 Over Recovery	(\$828,106)	-3.24%
2021 Interest	(\$7,792)	-0.03%
Calculated Performance Bonus for 2021	\$7,933,862	31.01%
EECRF Proceeding Expenses DN 52199	\$38,261	0.15%
Adjusted EECRF Revenue Requirement	\$25,583,391	100.00%

	Total Adjusted 2023 EECR			
	Revenue	2023 Forecasted	2023 EECR	
Class	Requirement	Billing Unit	Factor RVSD	Unit
Residential	\$13,764,231	13,456,447,713	\$0.001023	kWh
Secondary <= 10 kW	\$643,701	751,553,780	\$0.000856	kWh
Secondary > 10 kW	\$9,174,683	9,519,343,301	\$0.000964	kWh
Primary	\$2,000,776	4,447,864,497	\$0.000450	kWh
Transmission	\$0	21,248,422	\$0.000000	kW
Lighting	\$0	273,395,973	\$0.00000	kWh
Total	\$25,583,390.62			

				EECRF				
	2023 EECRF			Proceeding	Total 2023			
	Program Costs	2021 Over/Under		Expenses DN	EECRF Revenue	2023 Forecasted		
Class	with EM&V	With Interest	2021 Bonus	52199	Requirement	Billing Unit	2023 EECR Factor	Unit
Residential	\$10,145,969	(\$751,909)	\$4,349,126	\$21,044	\$13,764,231	13,456,447,713	\$0.001023	kWh
Secondary <= 10 kW	\$415,607	\$77,519	\$149,714	\$862	\$643,701	751,553,780	\$0.000856	kWh
Secondary > 10 kW	\$6,280,131	\$159,189	\$2,722,339	\$13,026	\$9,174,683	9,519,343,301	\$0.000964	kWh
Primary	\$1,605,460	(\$320,697)	\$712,683	\$3,330	\$2,000,776	4,447,864,497	\$0.000450	kWh
Transmission	\$0	\$0	\$0	\$0	\$0	21,248,422	\$0.00000	kW
Lighting	\$0	\$0	\$0	\$0	\$0	273,395,973	\$0.00000	kWh
Total	\$18,447,166	(\$835,899)	\$7,933,862	\$38,261	\$25,583,391			

AEP TEXAS				Schedule F	
TARIFF FOR	ELECTRIC D	ELIVERY SERVICE			
Applicable:	Certified Serv	vice Area			
Chapter:	6	Section: 6.1.1			
Section Title:	Delivery Syst	em Charges			
Revision:	Third	Effective Date:	March 1, 2023		Т

6.1.1.4.2 Rider EECRF – Energy Efficiency Cost Recovery Factors

AVAILABILITY

Rider EECRF recovers the cost of energy efficiency programs not already included in base distribution service rates and is applicable to the kWh sales of Retail Customers taking retail electric delivery service from the Company.

APPLICABILITY

The Rider EECRF is applicable to the current month's billed kWh of each Retail Customer taking electric delivery service from the Company.

MONTHLY RATE

Rate Schedule	Factor	
Residential Service	\$0.001023 per kWh	R
Secondary Service Less than or Equal to 10 kW	\$0.000856 per kWh	R
Secondary Service Greater than 10 kW	\$0.000964 per kWh	R
Primary Service	\$0.000450 per kWh	R
Transmission Service	\$0.000000 per kW	R

NOTICE

This Rate Schedule is subject to the Company's Tariff and Applicable Legal Authorities.

Schedule G Cap Calculation

AEP Texas	
2023 Program Costs (no EM&V cost)	\$18,214,458
2021 Over/Under Recovery without Interest	(\$828,106)
Calculated Performance Bonus - 2021	\$7,933,862
AEP Texas EECRF Proceeding Expenses	\$23,249
Adjusted EECR Revenue Requirement*	\$25,343,462

*no municipal EECRF proceeding expenses or EM&V costs or interest on the over/under recovery are included in the cap calculation

	<u> </u>				·			Sou	th Urban CPI	5.08%
	Total Adjusted 2023 EECRF Revenue		2023 EECR				2023 EECR			
	Requirement (no EM&V	2023 Forecasted	Factor (no			Base Rate Including	Factor (no			
Class	cost)	Billing Unit	EM&V)	Unit	Class	Revenue Adjustment	EM&V)	2023 Total	2022 Cap	2023 Cap
Residential	\$13,634,993	13,456,447,713	\$0.001013	kWh	Residential	\$0.00000	\$0.001013	\$0.001013	\$0.001364	\$0.001433
					Non-Residential	\$0.00000	\$0.000795	\$0.000795	\$0.000853	\$0.000896
Secondary <= 10 kW	\$637,397	751,553,780	\$0.000848	kWh						
Secondary > 10 kW	\$9,088,866	9,519,343,301	\$0.000955	kVVh						
					Calculation of Non-Resi	dential per kWh Rate				
Primary	\$1,982,206	4,447,864,497	\$0.000446	kWh	2023 Rev Req	\$11,708,469				
					2023 kWh	14,718,761,578				
Transmission	\$0	21,248,422	\$0.00000	kW	Combined per kWh	\$0.000795				
Total (no EM&V cost)	25,343,462	28,175,209,291								

2021 Cap Analysis						
		2019	2019 (O)/U (less			
	Actual 2021 Program	Performance	EM&V and	2021 Billing kWh	2021 Cost Cap	2021 Cap As Prescribed
Class	Costs*	Bonus	interest)	(less ID Notice)	Based on Actuals	in §25.181(f)(8)(B)
Residential	\$8,929,186	\$1,935,862	(\$529,714)	12,268,774,529	\$0.000842	\$0.001351
Non-Residential	\$7,337,275	\$1,539,814	(\$590,592)	13,401,371,499	\$0.000618	\$0.000845
Total	\$16,266,462	\$3,475,676	(\$1,120,306)	25,670,146,028		

*less TetraTech EM&V costs & muni expenses

AEP Texas Inc. Adjusted Energy Efficiency Cost Recovery Factor Filing

Schedule H

AEP Texas Projected 2023 Retail kWh Sales 36,093,640,658

Rate Classes	2021 Historical Billing Units	Percent of Total kWh	Customer ID Notice kWh	2023 Forecasted Billing Unit Less ID Notice Customers	Unit
Residential	12,268,774,529	37.28%		13,456,447,713	kWh
Secondary <= 10 kW	686,637,569	2.09%	1,553,387	751,553,780	kWh
Secondary > 10 kW	8,682,637,850	26.38%	3,813,637	9,519,343,301	kWh
Primary	4,239,484,944	12.88%	202,021,840	4,447,864,497	kWh
Transmission	6,781,195,630	20.61%		7,437,646,168	kWh
Lighting	249,265,970	0.76%		273,395,973	kWh
Total	32,907,996,492	100.00%	207,388,864	35,886,251,432	
			ID Notice kWh	207,388,864	
			Total 2023 kWh	36,093,640,296	

Schedule I

Schedule I, EE Base Rate Revenue Adjustment, is no longer applicable.

As of June 2020, AEP Texas does not recover energy efficiency costs through its base rates, per Docket No. 49494.

Schedule J

2021 Energy Efficiency Service Providers Who Received Incentives from the Energy Efficiency Programs in 2021

A list of the energy service provides, those receiving more than 5% of the total incentive funds for 2021 and the associated contracts are provided.

The information provided in Schedule J is voluminous. The information is also CONFIDENTIAL, under the terms of the Protective Order. The Confidential information is available for review at the Austin offices of American Electric Power Company (AEP), 400 West 15th Street, Suite 1520, Austin, Texas, 78701, (512) 481-4562, during normal business hours, by parties to this case who have agreed to be bound by the Protective Order.

Schedule K

There are no affiliate costs in the AEP Texas filing.

Schedule L Bidding and Engagement Process

AEP Texas has several procedural paths through which it contracts with energy efficiency service providers (EESPs) for the purpose of implementing energy efficiency and demand response (EE/DR) programs to achieve its goals. The procedures and processes AEP Texas uses differs according to the program type, as shown in more detail below.

Standard Offer Program (SOP) Process

AEP Texas posts specific program application procedures and timelines along with program manuals on its web site (aeptexas.com/save). In accordance with the published schedule, EESPs may submit their project applications and all supplemental documentation required for participation in a program.

As part of the application process, EESPs describe the project measures to be installed, including applicable measurement and verification methods (M&V). As required, the M&V plan may include approved deemed savings values or the appropriate International Performance Measurement and Verification Protocol (IPMVP) to be utilized.

AEP Texas reviews each Project Application on a first-come, first-served basis. AEP Texas awards contracts based upon each EESP's timely and complete submission of qualifications, history and appropriate reference information, and potential ability to help meet program goals. AEP Texas may request clarification of, or additional information about any item submitted as part of the Project Application. A Project Application may be rejected for failure to meet the required procedures or deadlines.

Each EESP is notified of its application status according to program procedures and, if approved as a Project Sponsor, the associated incentive budget.

For residential projects, AEP Texas and the approved Project Sponsor enter into a standard offer agreement contract. When the SOP agreement is fully executed, the Project Sponsors may begin to solicit and engage residential customers to implement eligible EE measures.

EESPs or qualified commercial customers identify and submit applications for the installation of EE measures at commercial customer sites. Applications are reviewed as described above. AEP Texas and the approved Project Sponsor enter into a standard offer agreement for the implementation of the EE measures or projects at commercial customer sites.

Schedule L Bidding and Engagement Process

Market Transformation Program (MTP) Process

AEP Texas may implement an MTP as a full program or as a limited MTP pilot. Programs may be selected based on a concept presented by an EESP or from observation of successful programs already implemented at another utility. For programs proposed by an EESP that are deemed viable, A may contract with the initiating EESP to implement the program on a limited pilot basis for a period typically no longer than two years.

When a pilot program has been deemed successful by AEP Texas and a baseline study has been completed, a competitive solicitation process is implemented. A Request for Proposals (RFP) is developed and may be posted on industry-related websites and/or may be sent electronically to all EESPs who have contacted AEP Texas and expressed an interest in implementing such programs in the Texas market.

Interested EESPs submit program proposals according to the published requirements and schedule. AEP Texas forms an internal proposal evaluation and scoring team, and all proposals are individually evaluated according to standard scoring criteria. References submitted by EESPs are contacted and interviewed. Scoring and reference results are consolidated and the EESP proposal with the highest score is selected for further negotiation as the program implementer.

SCHEDULE M

Residential & Commercial EULs

Sector	TRM Measure	Energy Efficiency Measure	EUL (years)	TRM Version
Custom	NA	Custom	NA	NA
Residential	2.1.1	Res Energy Star Omni-Directional LED Lamps (Standard Baseline)	8.0	8.0
Residential	2.1.1	Res Energy Star Omni-Directional LED Lamps (Low Income Baseline)	10.0	8.0
Residential	2.1.2	Res Energy Star Specialty and Directional LED Lamps (EISA Compliant, Standard Baseline)	8.0	8.0
Residential	2.1.2	Res Energy Star Specialty and Directional LED Lamps (EISA Compliant, Low Income Baseline)	10.0	8.0
Residential	2.1.2	Res Energy Star Specialty and Directional LED Lamps (Non-EISA Compliant, 15,000 hour Rated Measure Life)	16.0	8.0
Residential	2.1.2	Res Energy Star Specialty and Directional LED Lamps (Non-EISA Compliant, 20,000 hour Rated Measure Life)	20.0	8.0
Residential	2.2.1	Res AC or HP Tune-Ups	5.0	8.0
Residential	2.2.2	Res Duct Efficiency Improvement	18.0	8.0
Residential	2.2.3	Res Ground Source Heat Pumps	20.0	8.0
Residential	2.2.4	Res Central Hart Dumps	16.0	0.0
Residential	2.2.4	Res Central Heat Pumps Res Mini-Split Air Conditioners	18.0	8.0
Residential	2.2.5	Res Mini-Split Heat Pumps	15.0	8.0
Residential	2.2.6	Res Large Capacity Split System and Single-Package AC	18.0	8.0
Residential	2.2.6	Res Large Capacity Split System and Single-Package HP	15.0	8.0
Residential	2.2.7	Res PTHPs	15.0	8.0
Residential	2.2.8	Res Room Air Conditioners	10.0	8.0
Residential	2.2.9	Res Connected Thermostats	11.0	8.0
Residential	2.2.10	Res Smart Thermostat Load Management	1.0	8.0
Residential	2.2.11	Res Evaporative Cooling	15.0	8.0
Residential	2.3.1	Res Air Infiltration	11.0	8.0
Residential	2.3.2	Res Ceiling Insulation	25.0	8.0
Residential	2.3.3	Res Attic Encapsulation	25.0	8.0
Residential	2.3.4	Res Wall Insulation	25.0	8.0
Residential	2.3.5	Res Floor Insulation	25.0	8.0
Residential	2.3.6	Res Windows	25.0	8.0
Residential	2.3.7	Res Solar Screens	10.0	8.0
Residential	2.3.8	Res Cool Roots	15.0	8.0
Residential	2.4.1	Res Faucel Aerators	10.0	8.0
Residential	2.4.2	Res Low-Flow Showel needs	13.0	0.U
Residential	2.4.5	Res DHW File Insulation Res DHW Tank Insulation	7.0	8.0
Residential	2.4.4	Res DHW Installation: Electric Tankless	20.0	8.0
Residential	2.4.5	Res DHW Installation: Cas (Fuel Substitution)	11.0	8.0
Residential	2.4.6	Res Heat Pump Water Heater	13.0	8.0
Residential	2.4.7	Res DHW Replacement: Solar	15.0	8.0
Residential	2.4.8	Res Showerhead TSRVs	10.0	8.0
Residential	2.4.9	Res Tub Spout/Showerhead TSRVs	10.0	8.0
Residential	2.5.1	Res Ceiling Fans	10.0	8.0
Residential	2.5.2	Res Clothes Washer	11.0	8.0
Residential	2.5.3	Res Clothes Dryers	16.0	8.0
Residential	2.5.5	Res Refrigerators	16.0	8.0
Residential	2.5.6	Res Freezers	22.0	8.0
Residential	2.5.7	Res Pool Pumps	10.0	8.0
Residential	2.5.8	Res Air Purifiers	9.0	8.0
Residential	2.5.9	Res Advanced Power Strips	10.0	8.0
Residential	2.5.10	Res Electric Vehicle Supply Equipment	10.0	8.0
Residential	2.5.11	Res Refrigerator/Freezer Recycling	8.0	8.0
Commercial	2.1.1	Com Lamps and Fixtures: Halogen Lamps	1.5	8.0
Commercial	2.1.1	Com Lamps and Fixtures: High Intensity Discharge Lamps	15.0	8.0
Commercial	2.1.1	Com Lamps and Fixtures: Integrated-ballast CCFL Lamps	4.5	8.0
Commercial	2.1.1	Com Lamps and Fixtures: Integrated balast of E Lamps	9.0	8.0
Commercial	211	Com Lamps and Fixtures: LED Eixtures	15.0	8.0
Commercial	2.1.1	Com Lamps and Fixtures: LED Corn Cobs	15.0	8.0
Commercial	2.1.1	Com Lamps and Fixtures: LED Tubes	15.0	8.0
Commercial	2.1.1	Com Lamps and Fixtures: Modular CFL/CCFL Fixtures	15.0	8.0
Commercial	2.1.1	Com Lamps and Fixtures: T8/T5 Linear Fluorescents	15.0	8.0
	2.1.1	Com New Construction Interior Fixtures/Controls	14.0	8.0
	2.1.1	Com New Construction Exterior Fixtures	15.0	8.0
Commercial	2.1.2	Com Lighting Controls (Occupancy Sensor)	10.0	8.0
	2.1.2	Com Lighting Controls (Daylighting Control)	10.0	8.0
	2.1.2	Com Lighting Controls (Time Clock)	10.0	8.0
	2.1.2	Com Lighting Controls (Tuning Control)	10.0	8.0
	2.1.2	Com Lighting Controls (New Construction)	14.0	8.0
Commercial	2.1.3	ICom LED Trattic Signals: 8" and 12" Red. Green, and Yellow Ball	6.0	8.0

SCHEDULE M

Residential & Commercial EULs

Commercial	2.1.3	Com LED Traffic Signals: 8" and 12" Red, Green, and Yellow Arrow	6.0	8.0
Commercial	2.1.3	Com LED Traffic Signals: Large (16"x18") Pedestrian Signal		8.0
Commercial	2.1.3	Com LED Traffic Signals: Small (12"x12") Pedestrian Signal		8.0
Commercial	2.2.1	Com AC/HP Tune-Up	5.0	8.0
Commercial	2.2.2	Com Split/Packaged ACs and HPs	15.0	8.0
Commercial	2.2.3	Com HVAC Chillers: Screw/Scroll/Reciprocating		8.0
Commercial	2.2.3	Com HVAC Chillers: Centrifugal		8.0
Commercial	2.2.4	Com PTAC/PTHPs		8.0
Commercial	2.2.4	Com Room Air Conditioners	10.0	8.0
	2.2.5	Com Computer Room Air Conditioners	15.0	8.0
	2.2.6	Com Computer Room Air Handler Motor Efficiency	15.0	8.0
Commercial	2.2.7	Com HVAC VFDs		8.0
Commercial	2.2.8	Com Condenser Air Evaporative Pre-Cooling	10.0	8.0
Commercial	2.2.9	Com High-Volume Low-Speed Fans	9.0	8.0
Commercial	2.3.1	Com Cool Roofs	15.0	8.0
Commercial	2.3.2	Com Window Film	10.0	8.0
Commercial	2.3.3	Com Entrance/Exit Door Air Infiltration	11.0	8.0
Commercial	2.4.1	Com Combination Ovens	12.0	8.0
Commercial	2.4.2	Com Electric Convention Ovens	12.0	8.0
Commercial	2.4.3	Com Dishwashers (Under Counter)	10.0	8.0
	2.4.3	Com Dishwashers (Stationary Single Tank Door)	15.0	8.0
	2.4.3	Com Dishwashers (Single Tank Conveyor)	20.0	8.0
	2.4.3	Com Dishwashers (Multiple Tank Conveyor)	20.0	8.0
-	2.4.3	Com Dishwashers (Pot, Pan, and Utensil)	10.0	8.0
Commercial	2.4.4	Com Hot Food Holding Cabinets	12.0	8.0
Commercial	2.4.5	Com Electric Fryers	12.0	8.0
	2.4.6	Com Electric Steam Cookers	12.0	8.0
	2.4.7	Com Ice Makers	8.5	8.0
	2.4.8	Com Demand Controlled Kitchen Ventilation	15.0	8.0
Commercial	2.4.9	Jom Pre-Rinse Spray Valves		8.0
Commercial	2.4.10	Jom Vacuum-Sealing and Packaging Machines		8.0
Commercial	2.5.1	Com Door Heater Controls		8.0
Commercial	2.5.2	Com European Controls		8.0
Commercial	2.5.3	Com Electronic Derrost Controls		8.0
Commercial	2.5.4	Com Evaporator Fan Controls		0.0
Commercial	2.5.5	Jom Night Covers		0.0
Commercial	2.5.0	Jom Solid/Glass Door Reach-Ins		8.0
Commercial	2.5.7	Com Zoro Energy Doors	4.0	8.0
Commercial	2.5.0	om Door Coskets		8.0
Commercial	2.5.9	Tom High Speed Doors for Cold Storage		8.0
Commercial	2.5.10	Com Vending Machine Controls	5.0	8.0
Commercial	2.0.1	Com Lodging Guest Room Occupancy Sensors	10.0	8.0
Commercial	2.6.2	Com Pump-Off Controllers	15.0	8.0
Commercial	2.6.0	Com Pool Pumps	10.0	8.0
Commercial	2.65	Com PC Power Management	30	8.0
Commercial	266	Com Premium Efficiency Motors	15.0	8.0
Commercial	2.0.0	Com Central DHW Controls	15.0	8.0
	2.6.8	Com Showerhead TSRVs	10.0	8.0
	2.6.9	Com Tub Spout/Showerhead TSRVs	10.0	8.0
	2.6.9	Com Electric Vehicle Supply Equipment	10.0	8.0
Measurement and V	2.1.1	M&V AC Tune-Ups	5.0	8.0
Measurement and V	2.1.2	M&V Ground Source Heat Pumps	15.0	8.0
Measurement and V	2.1.3	M&V Variable Refrigerant Flow Systems	15.0	8.0
Measurement and V	2.2.1	M&V Res New Construction	23.0	8.0
Measurement and V	2.3.1	M&V Non-Res Solar PV	30.0	8.0
Measurement and V	2.3.2	M&V Res Solar PV	30.0	8.0
Measurement and V	2.3.3	M&V Solar Shingles	N/A	8.0
Measurement and V	2.4.1	M&V Behavioral	1.0	8.0
Measurement and V	2.4.2	M&V Air Compressors	10.0	8.0
Measurement and V	2.4.3	M&V Com Retro-Comissioning	5.0	8.0
Measurement and V	2.4.4	M&V Thermal Energy Storage	15.0	8.0
Measurement and V	2.5.1	M&V Res Load Curtailment	1.0	8.0
Measurement and V	2.5.2	M&V Non-Res Load Curtailment	1.0	8.0

Schedule N

2023 Projected Energy Efficiency Goals and Objectives

Average Peak Demand at Meter (MW)	Goal Metric: 0.4% Peak Demand (MW)	Peak Demand Goal (MW)	Energy Goal (MWh)	Projected Demand Reduction (MW)	Projected Energy Savings (MWh)
5,271	21.08	21.08	36,932	48.12	72,433.8

Schedule O

2023 Projected Energy Efficiency Program Savings

	2023		
Customer Class and Program	Demand Reduction Target	Energy Savings	
Commercial			
Commercial Solutions MTP	1,664	7,458,262	
Commercial SOP	2,554	13,452,356	
CoolSaver© A/C Tune-Up MTP	3,466	8,047,475	
Load Management SOP	26,507	24,387	
Open MTP	1,215	5,234,159	
SCORE/CitySmart MTP	2,463	8,259,385	
SMART Source SM Solar PV MTP	278	901,737	
Residential			
CoolSaver© A/C Tune-Up MTP	1,594	6,250,000	
High-Performance New Homes MTP	2,353	3,917,476	
Residential SOP	2,191	9,477,974	
SMART Source SM Solar PV MTP	615	2,101,421	
Hard-to-Reach			
Hard-to-Reach SOP	1,930	3,845,156	
Targeted Low-Income Energy Efficiency Program	966	1,517,843	
Total Annual Projected Savings	47,797	70,487,631	

SCHEDULE P

2021 Energy Efficiency Programs' Cost - Net Benefit Ratio

Program Cost-effectiveness Summary								
Year	S	avings	Costs		Benei	Benefit-Cost		
Customer Class and Program	kW	kWh	Total Program Costs	Avoided Capacity Costs	Avoided Energy Costs	Total Avoided Cost	Net Benefits	Ben-Cost Ratio
Commercial	34,715.1	50,706,883.5	9,024,636.6	10,522,376.4	49,558,277.9	60,080,654.3	51,056,017.7	
Commercial Solutions MTP	1,650	7,631,163	\$ 1,254,063	\$ 1,318,048	\$ 7,717,983	\$ 9,036,031	\$ 7,781,968	7.21
Commercial SOP	3,184	18,413,777	\$ 2,754,941	\$ 2,790,533	\$ 20,774,149	\$ 23,564,682	\$ 20,809,741	8.55
CoolSaver - Commercial	4,497	9,015,723	\$ 796,827	\$ 1,585,570	\$ 4,037,032	\$ 5,622,601	\$ 4,825,775	7.06
Load Management SOP	21,647	21,647	\$ 783,557	\$ 1,659,398	\$ 2,108	\$ 1,661,505	\$ 877,948	2.12
Open MTP	1,216	5,117,184	\$ 1,626,519	\$ 1,026,354	\$ 5,506,359	\$ 6,532,713	\$ 4,906,194	4.02
SCORE/CitySmart MTP	2,284	9,645,175	\$ 1,540,856	\$ 1,828,320	\$ 10,070,251	\$ 11,898,572	\$ 10,357,716	7.72
Solar Program - Commercial	237	862,214	\$ 267,875	\$ 314,155	\$ 1,450,396	\$ 1,764,550	\$ 1,496,676	6.59
Residential	7,010	25,666,635	7,205,589	6,178,098	22,995,492	29,173,590	21,968,001	
CoolSaver - Residential	1,299	6,540,544	\$ 902,746	\$ 515,087	\$ 3,143,498	\$ 3,658,586	\$ 2,755,839	4.05
High Performance Homes Program	2,266	3,248,011	\$ 1,266,922	\$ 2,597,859	\$ 4,614,207	\$ 7,212,066	\$ 5,945,144	5.69
Pool Pump Program	14	180,186	\$ 107,967	\$ 9,195	\$ 145,854	\$ 155,049	\$ 47,083	1.44
Residential SOP	2,963	14,095,317	\$ 4,509,972	\$ 2,435,884	\$ 12,396,114	\$ 14,831,998	\$ 10,322,026	3.29
Solar Program - Residential	468	1,602,578	\$ 417,981	\$ 620,072	\$ 2,695,818	\$ 3,315,890	\$ 2,897,909	7.93
Hard-to-Reach	3,586	7,327,593	4,396,583	3,054,533	7,671,662	10,726,195	6,329,612	
Hard to Reach SOP	2,277	4,931,719	\$ 1,949,640	\$ 1,891,841	\$ 5,055,415	\$ 6,947,256	\$ 4,997,616	3.56
Low Income Weatherization	1,309	2,395,874	\$ 2,446,944	\$ 1,162,692	\$ 2,616,247	\$ 3,778,939	\$ 1,331,996	1.54
Portfolio Total	45,311	83,701,112	S 20,626,809	\$ 19,755,007	\$ 80,225,432	\$ 99,980,439	\$ 79,353,630	4.85

Schedule Q System and Line Losses

The AEP Texas kWh sales forecast for 2023 is based on energy delivered at the meter so it was not necessary to adjust the EECRF factors for system and line losses.

Schedule R

2023 Energy Efficiency Programs

Program	Customer Class	Description
Commercial Solutions	Commercial	Provides energy efficiency and demand reduction solutions for commercial customers identified as having a need for energy
MTP		efficiency improvements and needing support from an outside source. Facilitates the identification of demand and energy
		savings opportunities, operating characteristics, program design, long-range energy efficiency planning and overall measure
		and program acceptance by the targeted customers. Incentives are paid to participating customers for eligible measures
		installed in new or retrofit applications, which provide verifiable demand and energy savings.
Commercial SOP	Commercial	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. Customer sites may include hotels, schools, manufacturing
		facilities, restaurants, and larger grocery stores. Eligible measures as lighting, new or replacement chiller systems, high
		efficiency pumping systems, and other similar technologies. Incentives are paid to project sponsors based on deemed
		savings or on verified peak demand and/or energy savings using the international Performance Measurement and Varification Protocol
		vernication Protocol.
CoolSaver A/C Tune-	Commercial &	Offers assistance to contractors in obtaining the tools and expertise that will allow them to develop quantitative savings
up MTP	Residential	information for comprehensive tune-ups. This program targets contractors that provide air conditioning system tune-up
		services to residential and commercial customers. The program also provides incentives for residential high enforced an
		networks and organizations by phone and site visits to gauge their interest in the program.
		networks and organizations of phone and one visits to gauge area interesting are program.
Hard-to-Reach SOP	Hard-to-Reach	Targets a specific subset of residential customers defined by 16 TAC § 25.181(c)(27) as customers with a total household
		income that is less than 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. Eligible measures include
		replacement air conditioners, wall and ceiling insulation and air distribution duct improvements in existing nomes.
		Incentives are paid to Energy Efficiency Service Providers (EESrs) for engine measures on the basis of deemed savings.
High Performance New	Residential	Targets homebuilders and residential consumers. The program's goal is to create conditions where consumers are demand
Homes MTP		ENERGY STAR qualified homes. Incentives are paid to homebuilders who construct homes to strict energy efficient
		building guidelines that are at least 10% above the local building code.
Load Management	Commercial	Targets commercial customers that have a minimum demand of 500 kW or more. Incentives are paid to project sponsors
SOP		that can identify and interrupt electric load on short notice. These payments are based on the verified demand savings
		methodology identified in the Texas TRM.
Open MTP	Commercial	
		Targets small commercial customers (peak demands not exceeding 100 kW in the previous 12 consecutive billings months)
		with limited ability to implement energy efficiency measures or to actively seek the help of a professional EESP. Available
Devidential COD	Desidential	incentives are paid directly to the contractor, thereby reducing a portion of the project cost for the customer.
Residential SOP	Residential	Provides incentives for the installation of a wide range of measures that reduce residential customer energy costs and cost-
		services. Fligible measures include replacement air conditioners, wall and ceiling insulation and air distribution duct
		improvements. Incentives are paid to Project Sponsors for eligible measures installed in retrofit applications on the basis of
		deemed savings.
SCORE/CitySmart	Commercial	Provides energy efficiency and demand reduction solutions for governmental and educational customers.
MTP		SCORE/CitySmart will facilitate the identification of demand and energy savings opportunities, operating characteristics,
		long-range energy efficiency planning and overall measure and program acceptance by the targeted customers. Incentives
		are paid to governmental and educational customers for certain measures installed in new or retrofit applications, which
		provide verifiable demand and energy savings.
SMART Source SM	Commercial &	Provides incentives for residential and commercial customers that install solar electric (photovoltaic) systems interconnected
Solar PV MTP	Residential	on the customer's side of the electric service meter.
Targeted Low-Income	Low-Income	D. 1. 1. Continuous de concernation and anance parts of martinimating law income system on The
Energy Efficiency	Residential	Designed to cost-effectively reduce the energy consumption and energy costs of participating low-income customers. The program provides eligible residential customers with appropriate weatherization measures and basic on-site energy
Program		Inducation. This program enhances and supplements the federally funded Weatherization Assistance Program.

AEP Texas Inc.

2022 Energy Efficiency Plan and Report 16 Tex. Admin. Code §§ 25.181, 28.182 and 25.183

Amended May 31, 2022

Project No. 52949



An AEP Company

BOUNDLESS ENERGY"

Sponsored by: Robert Cavazos and Pam Osterloh

TABLE OF CONTENTS

INTRO	DUCTION
EEPR (DRGANIZATION4
EXECU	TIVE SUMMARY – ENERGY EFFICIENCY PLAN (PLAN)
EXECU	TIVE SUMMARY – ENERGY EFFICIENCY REPORT (REPORT)
ENERG	Y EFFICIENCY PLAN
I.	2022 PROGRAMS
	A. 2022 Program Portfolio6B. Existing Programs8C. New Programs for 202211D. Discontinued Programs11
П.	CUSTOMER CLASSES11
III.	ENERGY EFFICIENCY GOALS AND PROJECTED SAVINGS13
IV.	PROGRAM BUDGETS15
ENERG	Y EFFICIENCY REPORT18
V.	HISTORICAL DEMAND AND ENERGY GOALS AND SAVINGS ACHIEVED FOR THE PREVIOUS FIVE YEARS
VI.	PROJECTED, REPORTED AND VERIFIED DEMAND AND ENERGY SAVINGS
VII.	HISTORICAL PROGRAM EXPENDITURES
VIII.	PROGRAM FUNDING FOR PROGRAM YEAR 202122
IX.	MARKET TRANSFORMATION PROGRAM RESULTS 202124
Х.	ADMINISTRATIVE COSTS AND RESEARCH AND DEVELOPMENT26
XI.	2022 ENERGY EFFICIENCY COST RECOVERY FACTOR (EECRF)27
XII.	2021 EECRF SUMMARY27
XIII.	UNDERSERVED COUNTIES
ACRON	NYMS 29
APPEN	DIX A: REPORTED AND VERIFIED DEMAND AND ENERGY REDUCTION BY COUNTY
APPEN	DIX B: PROGRAM TEMPLATES
APPEN	DIX C: OPTIONAL SUPPORTING DOCUMENTATION

INTRODUCTION

AEP Texas Inc. (AEP Texas or Company) presents this Energy Efficiency Plan and Report (EEPR) to comply with Public Utility Commission of Texas (Commission) 16 Tex. Admin. Code §§ 25.181, 25.182 and 25.183 (TAC) (EE Rule), which implement the Public Utility Regulatory Act (PURA) § 39.905.

As mandated by PURA § 39.905, 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). 16 TAC § 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:
 - (A) Beginning with the 2013 program year, until the trigger described in subparagraph
 (B) of this paragraph is reached, the utility shall acquire a 30% reduction of its annual growth in demand of residential and commercial customers.
 - (B) If the demand reduction goal to be acquired by a utility under subparagraph (A) of this paragraph is equivalent to at least four-tenths of 1% of its summer weatheradjusted 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 (C) of this paragraph for each subsequent program year.
 - (C) Once the trigger described in subparagraph (B) 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.
 - (D) Except as adjusted in accordance with subsection (u) 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. AEP Texas' plans enable 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 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 three appendices.

Executive Summary

• Summarizes AEP Texas' plans for achieving its goals and projected energy efficiency savings for program years 2022 and 2023 and highlights AEP Texas' achievements for Program Year (PY) 2021.

Energy Efficiency Plan

- Section I describes the program portfolio. It details how programs will be implemented, presents related informational and outreach activities, and provides an introduction to any programs not included in the 2021 EEPR.
- Section II describes the targeted customer classes, the estimated size of each class and the method of determining those class sizes.
- Section III presents the energy and demand goals and projected savings for the prescribed planning period detailed by program for each customer class.
- Section IV describes the proposed energy efficiency budgets for the prescribed planning period detailed by program for each customer class.

Energy Efficiency Report

- Section V documents the demand reduction goal for each of the previous five years (2017-2021) based on its weather-adjusted peak demand and actual savings achieved for those years.
- Section VI compares the projected energy and demand savings to its reported and verified savings by program for PY 2020 and 2021.
- Section VII details the incentive and administration expenditures for each of the previous five years (2017-2021) detailed by program for each customer class.
- Section VIII compares the actual 2021 expenditures with the 2021 budget by program for each customer class. It also explains any cost differences of more than 10% from the overall program budget and from each program budget.
- Section IX describes the results from the MTPs.
- Section X describes Administrative costs and Research and Development activities.
- Section XI documents the 2022 EECRF.
- Section XII documents the 2021 EECRF Summary.
- Section XIII documents the Underserved Counties.

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 significantly modified programs and programs not included in the previous EEPR.
- Appendix C Data, explanations, or documents supporting other sections of the EEPR.

EXECUTIVE SUMMARY – ENERGY EFFICIENCY PLAN (PLAN)

AEP Texas plans to achieve its 2022 mandated demand and energy goals of 20.83 MW and 36,494 MWh as shown in Table 1 below through residential and non-residential SOPs and MTPs. AEP Texas will utilize a budget of \$17,959,017 to accomplish these goals.

Calendar Year	Average Peak Demand at Meter (MW)	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)*
2022	5,207	20.83	20.83	36,494	48	70,488	\$17,959
2023	5,271	21.08	21.08	36,932	48	72,434	\$18,447

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

* The Projected Budgets include costs associated with Evaluation, Measurement & Verification activities.

EXECUTIVE SUMMARY – ENERGY EFFICIENCY REPORT (REPORT)

AEP Texas achieved demand and energy reductions of 45,311 kW and 83,701,112 kWh in 2021. The total energy efficiency cost for achieving these savings was \$17,163,057. This achievement exceeded the 2021 mandated energy efficiency goals of 20,600 kW and 36,091,000 kWh.

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

5

¹ Average Peak Demand figures are from Table 4; Projected Savings from Table 5; Projected Budgets from Tables 6 and 7.

ENERGY EFFICIENCY PLAN

I. 2022 Programs

A. 2022 Program Portfolio

AEP Texas has implemented a variety of programs in 2022 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 the programs and targeted customer class markets for Program Year 2022. The programs listed in Table 2 are described in further detail in Subsection B. AEP Texas maintains a web site containing information on participation, forms required for project submission, and program manuals at <u>www.AEPTexasEfficiency.com</u>. 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 third-party implementers. These implementers design, market and execute the applicable MTPs. 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 an AEP Texas 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.

AEP Texas monitors projects being submitted so as to not accept duplicate enrollments for the same measures in multiple programs.

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 AEP Texas 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.

Program	Target Market	Application		
Commercial Solutions MTP	Commercial	Retrofit & New Construction		
Commercial SOP	Commercial	Retrofit & New Construction		
CoolSaver SM A/C Tune-Up MTP	Commercial & Residential	Retrofit		
Hard-to-Reach SOP	Residential Hard-to- Reach	Retrofit & New Construction		
High-Performance New Homes MTP	Residential	New Construction		
Load Management SOP	Commercial	Retrofit		
Open MTP	Commercial	Retrofit		
Residential SOP	Residential	Retrofit & New Construction		
SCORE/CitySmart MTP	Commercial	Retrofit & New Construction		
SMART Source SM Solar PV MTP	Commercial & Residential	Retrofit & New Construction		
Targeted Low-Income Energy Efficiency Program	Low-Income Residential	Retrofit		

Table 2: 2022 Energy Efficiency Program Portfolio

B. Existing Programs

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 for eligible energy efficiency measures that are 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 verified demand and energy savings for eligible measures installed in new or retrofit applications.

CoolSaverSM A/C Tune-Up Market Transformation Program (CoolSaverSM MTP)

The CoolSaverSM MTP is designed to overcome market barriers that prevent residential and small commercial customers from receiving high performance air conditioning (A/C) system tune-ups. The program works through local A/C networks to offer key program components, including:

- Training and certifying A/C technicians on the tune-up and air flow correction services and protocols.
- Paying incentives to A/C contactors for the successful implementation of A/C tune-up and air flow correction services.
- Paying incentives to A/C contractors who replace existing residential air conditioners and/or heat pumps with new high efficiency units of 16 SEER or higher. Additional incentives are paid for early retirement of operational equipment and for "right-sizing" replacement units.

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 new and retrofit applications that result in verifiable demand and energy savings. Project comprehensiveness is encouraged and customer education materials regarding energy conservation behavior are distributed by project sponsors.
High-Performance New Homes Market Transformation Program (New Homes MTP)

The New Homes MTP targets several market participants, primarily homebuilders and consumers. The program's goal is to create conditions in which consumers demand energy-efficient homes, and homebuilders supply them. Incentives are paid to homebuilders who construct homes to strict energy-efficient building guidelines and that are at least 5% above the Texas Baseline Reference Home and meet all minimum energy code requirements. The program has a tiered design that uses a combination of mandatory, additional elective, and innovative measures to promote market transformation and drive deep energy savings. ENERGY STAR[®] and complete foam encapsulated homes are offered as alternative pathways to Tiers. Bonus incentives are offered for installed ENERGY STAR connected thermostats and to builders who switch from electric resistance furnaces to heat pumps. Each home results in verifiable demand and energy savings. In addition to homebuilder and consumer outreach, the New Homes MTP targets key market actors in the homebuilding production and sales cycle: home energy raters, homebuilder sales agents, real estate agents, HVAC contractors, mortgage lenders, product manufacturers, homebuilder associations, and media outlets.

Load Management Standard Offer Program (LM SOP)

The LM SOP targets commercial customers with a peak electric demand of 500 kW or more; but any non-residential customer that can deliver at least 50 kW of peak demand savings is eligible to participate. Incentive payments are based on measured and verified load (demand) curtailment reduction during the summer peak period. Load management events are dispatched by AEP Texas, providing a 30 minute advance notification or load reduction periods of one to four hours in duration. Customer, or Market Actors initiate and implement the load curtailments as called upon to do so by AEP Texas.

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 150 kW in the previous twelve 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.

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.

Residential Standard Offer Program (RSOP)

The RSOP targets all residential customers, paying incentives to project sponsors for eligible measures installed in new and retrofit applications that result in verified demand and energy savings. 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^{ss} Solar PV Market Transformation Program (PV MTP)

The PV MTP offers incentives to residential and commercial 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 technicians and installers 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 lowincome residential customers in the AEP Texas 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 federal poverty guidelines. A Savings-to-Investment Ratio of 1.0 or higher is required of each serviced dwelling unit.

C. New Programs for 2022

There are no new programs for 2022.

D. Discontinued Programs

The Residential Pool Pump Program Pilot MTP (Central Division) was discontinued for 2022.

II. Customer Classes

The AEP Texas energy efficiency programs target its Residential and Commercial customer classes. The programs also target customer sub-classes, such as Residential Hard-to-Reach and Low-Income, Schools, 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 16 TAC 25.181(e)(3).

Table 3 summarizes the number of customers in each customer class and the Residential Hard-to-Reach sub-class. The numbers listed are the actual number of active electric service accounts by class served for the month of January 2022. 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 a customer class may have in a specific program, and the overriding objective of meeting the mandated demand and energy reduction goals in total. AEP Texas offers a varied portfolio of SOPs and MTPs such that all eligible customer classes have access to energy efficiency alternatives.

Customer Class	Number of Customers
Commercial	202,103
Residential	977,836
Hard-to-Reach ²	307,041

Table 3: Summary of Customer Classes

* Hard-to-Reach customer count is a sub-set of the Residential total.

² According to the U.S. Census Bureau's 2020 Current Population Survey, 31.4% of Texas families fell below 200% of the poverty threshold in 2020. Applying that percentage to AEP Texas' residential customer base of 977,836, the number of HTR customers is estimated to be 307,041.

III. Energy Efficiency Goals and Projected Savings

AEP Texas' 2022 annual demand and energy reduction goals to be achieved are 20.83 MW and 36,494 MWh. AEP Texas' 2023 annual goals are 21.08 MW and 36,932 MWh. These goals have been calculated as prescribed by the EE Rule.

The 2022 goal was calculated by applying four-tenths of 1% (0.004) of the summer weather-adjusted peak demand for its residential and commercial customers to the five year average (2016-2020) peak demand at the meter of 5,207 MW. This resulted in a calculated goal of 20.83 MW.

The 2023 demand goal is calculated by applying four-tenths of 1% (0.004) of the summer weatheradjusted peak demand for its residential and commercial customers to the five year average (2017-2021) peak demand at the meter of 5,271 MW. This results in a calculated goal of 21.08 MW. As stated in 16 TAC § 25.181(e)(4), a utility's energy savings goal is calculated from its demand savings goal, using a 20% conservation load factor.

Table 4 presents historical annual growth in demand data for the previous five years that was used to calculate AEP Texas' goals. Table 5 presents the projected demand and energy savings for Program Years 2022 and 2023 by program, for each customer class with fully-deployed program budgets.

Peak Demand (MW) @ Source					Energy	Consumption	on (GWh)	Energy Efficiency Goal						
	Total	System	R	esidential &	Commer	cial	Total System Residential & Commercial			Residential & Commercial		Calculations		
Calendar Year	Actual	Weather Adjusted	Actual	Weather Adjusted	Opt- Out	Peak Demand at Source Net Opt- outs	Actual	Weather Adjusted	Actual	Weathe r Adjuste d	Peak Demand at Meter*	5 year Average Peak Demand at Meter	Goal Metric: 0.4% Peak Demand at Meter	
2016	6,412	6,270	5,910	5,768	-75	5,693	31,604	31,224	25,791	25,411	5,134	NA	NA	
2017	6,391	6,234	5,879	5,722	-101	5,621	31,553	31,334	25,072	24,853	5,069	4,956	NA	
2018	6,339	6,349	5,817	5,827	-109	5,718	32,020	31,680	25,693	25,353	5,265	5,002	NA	
2019	6,501	6,364	5,945	5,807	-106	5,701	31,962	31,564	25,675	25,277	5,248	5,043	NA	
2020	6,451	6,417	5,875	5,841	-75	5,766	31,746	31,767	25,194	25,214	5,317	5,112	NA	
2021	6,451	6,580	5,814	5,943	-25	5,918	32,975	33,004	26,253	26,282	5,457	5,150	NA	
2022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5,207	20.83	
2023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5,271	21.08	

Table 4: Annual Growth in Demand and Energy Consumption – AEP Texas

*Line losses are derived from the loss factors determined in the most recent line loss studies for AEP Texas (Central Division and North Division).

Customer Class and Program	Projected S	avings 2022	Projected Savings 2023		
Customer Class and Frogram	kW	kWh	kW	kWh	
Commercial	38,148	43,377,761	38,415	44,815,960	
Commercial Solutions MTP	1,664	7,458,262	1,664	7,458,262	
Commercial SOP	2,554	13,452,356	2,822	14,890,555	
CoolSaverSM A/C Tune-Up MTP	3,466	8,047,475	3466	8047475	
Load Management SOP	26,507	24,387	26,507	24,387	
Open MTP	1,215	5,234,159	1,215	5,234,159	
SCORE/CitySmart MTP	2,463	8,259,385	2,463	8,259,385	
SMART SourceSM Solar PV MTP	278	901,737	278	901,737	
Residential	6,754	21,746,871	6,813	22,254,798	
CoolSaverSM A/C Tune-Up MTP	1,594	6,250,000	1594	6250000	
High-Performance New Homes MTP	2,353	3,917,476	2215	3703316	
Residential SOP	2,191	9,477,974	2,389	10,200,061	
SMART SourceSM Solar PV MTP	615	2,101,421	615	2,101,421	
Hard-to-Reach	2,896	5,362,999	2,896	5,362,999	
Hard-to-Reach SOP	1,930	3,845,156	1,930	3,845,156	
TLI EE Program	966	1,517,843	966	1,517,843	
Total Annual Projected Savings	47,797	70,487,631	48,124	72,433,757	

Table 5: Projected Demand and Energy Savings by Program for Each Customer Class for2022 and 2023 (at the Meter) – AEP Texas

IV. Program Budgets

Tables 6 and 7 present total proposed budget allocations required to meet AEP Texas' projected demand and energy savings to be achieved for Program Year 2022 and 2023. The budget allocations are defined by the overall projected demand and energy savings, the avoided costs of capacity and energy specified in the EE Rule, allocation of demand goals, and the incentive levels by customer class. The budget allocations are detailed by customer class, program, and in the following budget categories: incentives, administration, research and development (R&D), and evaluation, measurement and verification (EM&V).

Table 6: Projected Annual Budget by Program for Each Customer Classfor 2022 AEP Texas

2022	Incentives	Admin	R&D	EM&V	Total Budget
Commercial					
Commercial Solutions MTP	\$903,248	\$115,485			\$1,018,733
Commercial SOP	\$1,875,762	\$218,467			\$2,094,229
CoolSaver SM A/C Tune-Up MTP	\$796,700	\$88,522			\$885,222
Load Management SOP	\$737,700	\$85,300			\$823,000
Open MTP	\$1,213,041	\$150,959			\$1,364,000
SCORE/CitySmart MTP	\$1,192,300	\$141,884			\$1,334,184
SMART Source SM Solar PV MTP	\$287,310	\$35,017			\$322,327
Residential					
CoolSaver SM A/C Tune-Up MTP	\$825,000	\$91,667			\$916,667
High-Performance New Homes MTP	\$965,000	\$107,222			\$1,072,222
Residential SOP	\$2,914,657	\$343,068			\$3,257,725
SMART Source SM Solar PV MTP	\$670,941	\$79,059			\$750,000
Hard-to-Reach					
Hard-to-Reach SOP	\$1,412,560	\$156,840			\$1,569,400
Targeted Low-Income Energy Efficiency Program	\$1,799,159	\$187,144			\$1,986,304
Research and Development					
R&D			\$353,646		\$353,646
Evaluation, Measurement & Verification (EM&V)					
EM&V				\$211,359	\$211,359
Total Budget	\$15,593,378	\$1,800,634	\$353,646	\$211,359	\$17,959,017

2023	Incentives	Admin	R&D	EM&V	Total Budget
Commercial					
Commercial Solutions MTP	\$903,248	\$115,485			\$1,018,733
Commercial SOP	\$2,075,762	\$218,467			\$2,294,229
CoolSaver SM A/C Tune-Up MTP	\$796,700	\$88,522			\$885,222
Load Management SOP	\$737,700	\$85,300			\$823,000
Open MTP	\$1,213,041	\$150,959			\$1,364,000
SCORE/CitySmart MTP	\$1,192,300	\$141,884			\$1,334,184
SMART Source SM Solar PV MTP	\$287,310	\$35,017			\$322,327
Residential					
CoolSaver SM A/C Tune-Up MTP	\$825,000	\$91,667			\$916,667
High-Performance New Homes MTP	\$965,000	\$107,222			\$1,072,222
Residential SOP	\$3,164,657	\$359,868			\$3,524,525
SMART Source SM Solar PV MTP	\$670,941	\$79,059			\$750,000
Hard-to-Reach					
Hard-to-Reach SOP	\$1,412,560	\$156,840			\$1,569,400
Targeted Low-Income Energy Efficiency Program	\$1,799,159	\$187,144			\$1,986,303
Research and Development					
R&D			\$353,646		\$353,646
Evaluation, Measurement & Verification (EM&V)					
EM&V				\$232,708	\$232,708
Total Budget	\$16,043,378	\$1,817,434	\$353,646	\$232,708	\$18,447,166

Table 7: Projected Annual Budget by Program for Each Customer Classfor 2023 AEP Texas

ENERGY EFFICIENCY REPORT

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

Table 8 contains the demand and energy reduction goals and actual savings achieved for the previous five years (2017-2021) calculated in accordance with the EE Rule.

Calendar Year	Actual Weather Adjusted Demand Goal (MW)	Actual Weather Adjusted Energy Goal (MWh)	Savings Achieved (MW)	Savings Achieved (MWh)
AEP Texas				
2021	20.60	36,091	45.31**	83,701
Central				
2020	16.38	28,698	50.45	59,259
2019	16.14	28,277	39.70	58,398
2018	15.99	28,014	43.81	62,417
2017	15.83	27,734	45.87	64,971
North				
2020	4.26	7,464	5.79	12,768
2019	4.26	7,464	6.58	11,968
2018	4.26	7,464	8.95	12,669
2017	4.26	7,464	6.79	12,038

 Table 8: Historical Demand and Energy Goals* and Savings Achieved (at the Meter)

* Actual Weather Adjusted MW and MWh Goals as reported in the EEPRs filed in years 2017-2020.

**Central and North divisions are combined. Reported savings achieved at the source are 39.51 MW (39.51 x 1/(1-7.284%)) = 42.61 MW for Central division and 5.8 MW (5.8 x 1/(1-9.957%)) = 6.44 MW for North division.

VI. Projected, Reported and Verified Demand and Energy Savings

2021 **Projected Savings Reported and Verified Savings Customer Class and Program** kW kWh kW kWh Commercial **Commercial Solutions MTP** 1,433 8,709,280 1.650 7,631,163 3,184 18,413,777 **Commercial SOP** 3.067 13,639,318 4.497 9,015,723 CoolSaverSM A/C Tune-Up MTP 1,393 4,376,124 Load Management SOP 22,261 20,480 21,647 21,647 1.216 5.117.184 **Open MTP** 1,184 4,660,806 SCORE/CitySmart MTP 9,645,175 2,061 9,680,000 2,284 237 862,214 SMART SourceSM Solar PV MTP 380 1.187.409 Residential CoolSaverSM A/C Tune-Up MTP 3.223.609 1,299 6,540,544 1.017 High-Performance New Homes MTP 3,394 4,366,339 2,266 3,248,011 2.963 14,095,317 **Residential SOP** 2,134 3,520,650 **Residential Pool Pump Pilot MTP** 14 180,186 173 1,203,872 SMART SourceSM Solar PV MTP 468 1,602,578 301 925,735 Hard-to-Reach 2,277 4,931,719 Hard-to-Reach SOP 1,551 2,418,835 1.309 2.395.875 TLI EE Program 917 1,392,896 45,311 83,701,112 **Total Annual Savings** 59,325,352 41,267 2020 **Projected Savings Reported and Verified Savings Customer Class and Program** kW kWh kW kWh Commercial **Commercial Solutions MTP** 1,433 8,709,280 1,606 7,172,233 **Commercial SOP** 3.256 13,635,785 3,173 15,226,742 CoolSaverSM A/C Tune-Up MTP 1,393 4,376,124 3,025 6,017,714 29,651 Load Management SOP 21,697 119,126 29,651 **Open MTP** 1.184 4,660,806 5,196,221 1.207 SCORE/CitySmart MTP 2,061 9,680,000 2,318 7,745,432 SMART SourceSM Solar PV MTP 541 787,477 353 1,203,055 Residential CoolSaverSM A/C Tune-Up MTP 1,017 3,223,609 1,511 5,082,376 539 1.936 High-Performance New Homes MTP 1,631,874 2,706,448 1,017,810 22 162,577 **Residential Pool Pump Pilot MTP** 127 **Residential SOP** 6,301 9,772,251 7,242 12,916,672 SMART SourceSM Solar PV MTP 995,914 265 696,076 298 Hard-to-Reach Hard-to-Reach SOP 3,293,212 2,927 4,986,366 2,236 Targeted Low-Income Energy 910 972 1,604,664 Efficiency Program 1,314,508 **Total Annual Savings** 42,960 62,917,938 56,240 71,046,066

Table 9: Projected versus Reported and Verified Savings for 2021 and 2020 (at the Meter)

VII. Historical Program Expenditures

This section documents the Central and North Division's incentive and administration expenditures for the previous five years (2017-

2021) detailed by program for each customer class.

	2021		202	2020		2019		18	2017	
	Incent.	Admin								
Commercial										
Commercial Solutions MTP	\$900.63	\$103.88	\$869.07	\$97.15	\$900.31	\$107.09	\$946.24	\$89.56	\$795.36	\$80.64
Commercial SOP	\$2,000.12	\$230.86	\$1,798.52	\$216.04	\$1,974.48	\$232.53	\$2,143.87	\$247.80	\$1,930.52	\$257.17
CoolSaver SM A/C Tune-Up MTP	\$595.48	\$49.88	\$595.50	\$49.42	\$647.82	\$53.34	\$604.06	\$45.81	\$597.57	\$41.72
Load Management SOP	\$573.38	\$64.45	\$828.41	\$61.74	\$584.63	\$50.03	\$689.19	\$86.07	\$698.07	\$94.98
Open MTP	\$1,199.15	\$124.51	\$1,205.48	\$134.37	\$1,195.60	\$144.59	\$1,211.80	\$108.26	\$1,211.84	\$93.50
SCORE/CitySmart MTP	\$1,127.97	\$110.45	\$1,121.97	\$106.35	\$1,111.64	\$113.42	\$1,075.94	\$108.22	\$1,163.57	\$97.44
SMART Source SM Solar PV MTP	\$197.02	\$19.66	\$254.47	\$27.80	\$284.99	\$22.66	\$274.76	\$20.29	\$120.82	\$9.06

T 11 10 II' 4 ' 1D	T	E	7 1	
Lable IV: Historical Program	Incentive and Administrativ	e Expenditures for 201	l / through 2021	(UUU'S) - AEP I exas
		- I		

(Table continued on next page)

Table 10: Historical Program Incentive and Administrative Expenditures for 2017 through 2021 (000's) – AEP Texas
(Continued)

	202	21	2020		2019		2018		2017	
	Incent.	Admin								
Residential										
CoolSaver SM A/C Tune-Up MTP	\$677.93	\$56.78	\$673.00	\$55.85	\$696.41	\$57.31	\$667.18	\$50.61	\$638.96	\$44.83
High-Performance New Homes MTP	\$947.26	\$90.06	\$909.56	\$78.92	\$807.36	\$73.92	\$750.25	\$88.73	\$753.15	\$94.84
Residential Pool Pump Pilot MTP	\$73.66	\$10.88	\$65.90	\$13.11	\$76.70	\$9.68	NAP	NAP	NAP	NAP
Residential SOP	\$3,365.28	\$329.41	\$3,445.80	\$326.30	\$3,260.74	\$363.80	\$3,284.20	\$355.40	\$3,029.28	\$338.85
SMART Source SM Solar PV MTP	\$307.75	\$32.77	\$293.18	\$31.04	\$300.25	\$24.11	\$316.97	\$23.23	\$308.55	\$23.75
Whisker Labs* Res DR Pilot MTP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	\$164.56	\$9.83
Hard-to-Reach										
Hard-to-Reach SOP	\$1,412.44	\$176.68	\$1,624.91	\$175.96	\$1,453.44	\$127.71	\$1,456.26	\$160.66	\$1,284.69	\$146.25
Targeted Low-Income Energy Efficiency Program	\$1,826.49	\$173.45	\$1,771.13	\$142.18	\$1,813.52	\$183.16	\$1,596.78	\$141.97	\$1,687.61	\$148.16
Research and Development (R&D)	NAP	\$177.82	NAP	\$280.10	NAP	\$386.96	NAP	\$235.76	NAP	\$187.50
Evaluation and Measurement Verification (EM&V)	NAP	\$206.95	NAP	\$215.60	NAP	\$211.99	NAP	\$208.09	NAP	\$208.09
Total Expenditures	\$15,204.57	\$1,958.49	\$15,456.90	\$2,011.93	\$15,107.89	\$2,162.30	\$15,017.50	\$1,970.46	\$14,384.55	\$1,876.61

*Previously Earth Networks

VIII. Program Funding for Program Year 2021

Throughout the year AEP Texas monitors each program's success status and transfers funds as necessary to maximize participation in each of our programs. Programs were monitored even more closely in 2021 due to the ongoing impacts of the COVID-19 pandemic. Funding was reallocated as necessary to ensure overall energy efficiency savings goals were achieved.

As shown in Table 11 the total projected budget for AEP Texas in 2021 was \$17,954,606 and the actual total funds expended were \$17,163,067. This is an overall total program expenditure difference of less than 3% from the amount budgeted.

The following individual program expenditures differed from their respective proposed budgets by more than 10% as explained below.

The AEP Texas Load Management Program was under budget by more than 10% because fewer participants enrolled in the program this year. Furthermore, some participants overestimated their project load reduction. They were only able to reduce a portion of their projected load since the time of the curtailment event coincided with necessary business operations.

The High Performance New Homes MTP budget was increased as funding was reallocated to gain additional residential savings and ensure overall energy efficiency savings goals were met. The home construction industry was not impacted by the COVID-19 pandemic as much as other trades; and due to a strong environment for building energy efficient homes, builders were able to increase their participation in this program.

The Residential Pool Pump Pilot MTP was under budget due to supply chain impacts caused by the COVID-19 pandemic. The unavailability and backlog of pumps and parts resulted in fewer installations than projected.

The SMART Source^{ss} Solar PV MTP commercial class was under budget due to a smaller volume of projects participating in the program.

The combined 2021 expenditures for the TLIP and the HTR SOP constituted 20% of the energy efficiency budget. The 2021 expenditure for the TLIP constituted 11% of the energy efficiency budget.

	Total Projected Budget ³	Numbers of Customers Participating	Actual Funds Expended (Incentives)	Actual Funds Expended (Admin)	Research and Development (R&D)	Evaluation and Measurement Verification (EM&V)	Total Funds Expended
Commercial							
Commercial Solutions MTP	\$1,018,733	148	\$900,631	\$103,879			\$1,004,510
Commercial SOP	\$2,302,657	105	\$2,000,120	\$230,863			\$2,230,983
CoolSaver sM A/C Tune-Up MTP	\$663,000	449	\$595,480	\$49,876			\$645,356
Load Management SOP	\$823,000	89	\$573,383	\$64,448			\$637,831
Open MTP	\$1,364,000	216	\$1,199,150	\$124,511			\$1,323,661
SCORE/CitySmart MTP	\$1,267,610	101	\$1,127,973	\$110,452			\$1,238,425
SMART Source SM Solar PV MTP	\$322,327	10	\$197,024	\$19,658			\$216,682
Residential							
CoolSaver sM A/C Tune-Up MTP	\$750,000	2,749	\$677,927	\$56,781			\$734,708
High-Performance New Homes MTP	\$850,000	943	\$947,262	\$90,059			\$1,037,321
Residential Pool Pump Pilot MTP	\$167,000	27	\$73,663	\$10,881			\$84,544
Residential SOP	\$3,754,496	5,229	\$3,365,278	\$329,413			\$3,694,691
SMART Source SM Solar PV MTP	\$364,007	90	\$307,751	\$32,765			\$340,516
Hard-to-Reach							
Hard-to-Reach SOP	\$1,569,400	2,715	\$1,412,439	\$176,684			\$1,589,123
Targeted Low-Income Energy Efficiency	\$1,986,303	522	\$1,826,488	\$173,448			\$1,999,936
Research and Development	\$545,125				\$177,822		\$177,822
EM&V							
Statewide EM&V Contractor	\$206,948					\$206,948	\$206,948
Total	\$17,954,606	13,393	\$15,204,570	\$1,573,717	\$177,822	\$206,948	\$17,163,057

Table 11: Program Funding for Program Year 2021- AEP Texas

³ Projected Budget from the revised EEPR filed May 2021 Project No. 51672.

IX. Market Transformation Program Results 2021

Commercial Solutions MTP

The Commercial Solutions MTP goal was to acquire 1,433 kW demand savings. A total of 1,650 kW was achieved by participation of 148 customers.

CoolSaversm MTP (Central Division Only)

The CoolSaver[™] MTP verified and reported 5,796 kW. This included participation by 3,198 residential and commercial customers.

High-Performance New Homes MTP (New Homes) (Central Division Only)

In 2021, 943 high-performance homes were constructed in the New Homes program with a savings of 2,266 kW. The favorable home construction environment in 2021 increased the number of program homes and customers learning about and benefiting from energy efficient homes. The program provided continuing education courses and other training opportunities for contractors, homebuilders, home energy raters, HVAC contractors and other market actors on the advantages of High-Performance and ENERGY STAR homes and building practices. Training for HVAC market actors focused on Manual J training to re-emphasize the importance of performing load calculations for correctly sizing HVAC systems. AEP Texas continued their partnership with the Environmental Protection Agency's (EPA) ENERGY STAR program and received the ENERGY STAR Partner of the Year Sustained Excellence award.

Open MTP

The Open MTP goal was to acquire 1,184 kW demand savings. A total of 1,216 kW was achieved with 216 small commercial customers and 10 participating contractors.

Residential Pool Pump Pilot MTP

The Residential Pool Pump Pilot MTP was projected to acquire 127 kW demand savings for Central Division. A total of 14 kW was achieved. This included participation by 27 customers.

SCORE/CitySmart MTP

The SCORE/CitySmart MTP was projected to acquire 2,364 kW demand savings A total of 2,284 kW was achieved. This included participation by 101 customers.

SMART SourceSM Solar PV MTP

The PV MTP projected to acquire 806 kW in demand savings and 1,483,553 kWh in energy savings from the residential and non-residential components. A total of 100 residential and non-residential solar PV projects were completed within the program, resulting in a peak demand reduction of 705 kW and 2,464,792 kWh of energy savings.

X. Administrative Costs and Research and Development

Administrative Costs

Administrative costs incurred to meet the energy efficiency goals and objectives include, but may not be limited to, energy efficiency employees' payroll, costs associated with regulatory filings, and EM&V costs outside of the actual cost associated with the EM&V contractor. Any portion of these costs that are not directly assignable to a specific program are allocated among the programs in proportion to the program incentive costs.

Program Research and Development

R&D activities are intended to help AEP Texas meet future energy efficiency goals by researching new technologies and program options and developing better, more efficient ways to administer current programs. In 2021 AEP Texas dedicated resources to enhance data collection and management systems for current programs. In addition, AEP Texas participated with Electric Utility Marketing Managers of Texas (EUMMOT) in researching potentially new deemed savings measures for various programs.

Informational Activities

AEP Texas continues its best effort to encourage and facilitate the involvement of REPs and EESPs in the delivery of its programs to customers.

XI. 2022 Energy Efficiency Cost Recovery Factor (EECRF)

AEP Texas' 2022 EECRF was approved by the Commission in Docket No. 52199 and includes \$26,921,197 for AEP Texas as shown in Table 12. The adjusted factors are shown in Table 13.

2022 Projected Costs	\$17,647,659
Performance Bonus for 2020 results	\$8,673,275
Under-recovery, collected from customers with interest	\$361,935
EECRF proceeding expenses	\$37,822
Projected EM&V costs	\$211,359
Total EECRF	\$26,921,197

Table 12: 2022 EECRF

Table 13: 2022 EECRF Factors

Customer Class	AEP Texas
Residential Service	\$0.001201 per kWh
Secondary Service (less than or equal to 10 kW)	\$0.001042 per kWh
Secondary Service (greater than 10 kW)	\$0.001142 per kWh
Primary Service	\$0.000255 per kWh
Transmission Service	\$0.000323 per kW

XII. 2021 EECRF Summary

2021 Collections for Energy Efficiency

AEP Texas collected \$19,813,832 through its 2021 EECRF. A performance bonus of \$3,475,676 for exceeding its 2019 energy efficiency goals and \$948,163 returned to customers are reflected in the total amount collected for energy efficiency in 2021.

Energy Efficiency Program Costs Expended

AEP Texas expended a total of \$17,163,057 for its 2021 energy efficiency programs. The amount expended is \$791,549 less than the 2021 projected budget of \$17,954,606 for energy efficiency programs.

Over-Recovery of Energy Efficiency Costs

AEP Texas' actual 2021 energy efficiency program costs (including EM&V costs) less municipal rate case expenses are \$16,516,076. AEP Texas also removed financially based incentives of \$56,809 for a total program cost for the determination of the over/under-recovery of \$16,459,267;

and actual energy efficiency program revenues are \$17,286,319. These associated 2021 costs and revenues result in a total over-recovery of energy efficiency costs of \$827,052. Included in that number is a small amount of trailing under-recovery, \$1,054, from the Transmission Class that has continued since base rate energy efficiency recovery existed for that class. AEP Texas has determined to forego the recovery of this small amount. The adjusted PY 2021 over-recovery is \$828,106. Including interest of \$7,792 the over-recovery is \$835,899. This is the amount that the AEP Texas will request be returned to customers within its 2023 EECRF.

XIII. Underserved Counties

AEP Texas has defined Underserved Counties as any county in the service territory for which no demand or energy savings were reported through any of its 2021 SOPs or MTPs. Per 16 TAC § 25.181(1)(2)(U), a list of the Underserved Counties is shown in Table 14:

Atascosa	Donley	Kenedy	Motley
Baylor	Edwards	Kent	Nolan
Briscoe	Foard	Kimble	Pecos
Brown	Gillespie	King	Real
Caldwell	Goliad	Kinney	Stephens
Collingsworth	Guadalupe	Knox	Throckmorton
Crane	Irion	Mason	Upton
DeWitt	Jeff Davis	McCulloch	Wheeler
Dickens	Jim Hogg	McMullen	Wilson

Table 14: Underserved Counties

ACRONYMS

COMMISSION	Public Utility Commission of Texas
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
EEPR	Energy Efficiency Plan and Report
EE Rule	Energy Efficiency Rule, 16 TAC §§ 25.181, 25.182 and 25.183
EESP	Energy Efficiency Service Providers
EPA	Environmental Protection Agency
EUMMOT	Electric Utility Marketing Managers of Texas
HTR	Hard-To-Reach
HTR SOP	Hard-to-Reach Standard Offer Program
LM SOP	Load Management Standard Offer Program
МТР	Market Transformation Program
NAP	Not Applicable
New Homes	High-Performance New Home Market Transformation Program
Open MTP	Open Market Transformation Program

Acronyms (Continued)

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
ТСС	AEP Texas Central Company (now the Central Division of AEP Texas)
TDU	Transmission and Distribution Utility
TLIP	Targeted Low-Income Energy Efficiency Program
TRM	Texas Technical Reference Manual

APPENDIX A:

REPORTED AND VERIFIED DEMAND AND ENERGY REDUCTION BY COUNTY

Reported and Verified Demand and Energy Reduction by County: Central														
Commercial County Solutions MTP		Comme	ercial SOP	CoolSaverSM A/C Tune-Up MTP (Commercial)		CoolSaverSM A/C Tune-Up MTP (Residential)		Hard-to-Reach SOP		High Performance New Homes MTP		Load Management SOP		
	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh
Aransas									0.8	1,243	121.7	170,003		
Bee			3.4	17,908			0.3	1,193	1.2	2,654	1.3	2,668		
Brooks									5.7	12,592				
Calhoun	8.6	47,494									10.4	17,873	118.0	118
Cameron	118.6	409,446	398.8	1,857,282	690.1	1,341,111	43.8	222,280	104.8	216,874			3,823.5	3,824
Coleman														
Colorado											1.3	3,464	22.2	22
Dimmit			23.4	119,007									29.1	29
Duval														
Frio													35.5	35
Gonzales														
Hidalgo	391.8	1,665,613	1,141.5	5,992,737	2,153.2	4,303,724	501.5	2,407,386	1,232.0	3,061,537	393.8	555,869	2,584.7	2,585
Jackson	8.6	47,494												
Jim Wells									6.5	16,205	3.8	4,882	106.1	106
Karnes													80.7	81
Kleberg									15.9	42,819	1.8	2,109	104.9	105
La Salle	5.3	36,669												
Live Oak			2.5	13,341					2.5	3,619				
Matagorda									1.0	1,283			0.0	0
Maverick			112.7	550,625									159.2	159
Medina													112.4	112
Nueces	207.3	903,517	797.8	4,264,540	1,446.6	2,968,679	522.2	2,710,871	240.7	487,038	1,366.7	1,910,026	2,225.6	2,226
Refugio											18.2	21,709	0.8	1
San Patricio	15.3	59,515	399.8	4,033,214	34.2	71,004	30.0	155,655	20.1	42,749	255.2	379,499	5,922.5	5,923
Starr	14.2	57,245			173.4	331,205	4.7	24,345	76.3	180,676			193.8	194
Uvalde	9.1	35,460											165.1	165
Val Verde			12.9	50,261					1.1	1,964			102.3	102
Victoria	7.9	30,896	5.6	34,854					45.0	58,172	11.8	27,021	154.7	155
Webb	113.4	591,010	52.3	290, 248			151.6	786,953	30.3	52,893	79.7	152,888	2,217.5	2,217
Wharton	71.1	359,955											101.5	101
Willacy							44.7	231,861	1.2	2,240			1,094.2	1,094
Zapata														
Zavala														

Reported and Verified Demand and Energy Reduction by County: AEP Texas

Reported and Verified Demand and Energy Reduction by County: AEP Texas (Continued)

Reported and Verified Demand and Energy Reduction by County: Central (Continued)																
County	Op	en MTP	Reside	ntial SOP	Residential Pool Pump Pilot MTP		SCORE/Ci	SCORE/CitySmart MTP		SMART SourceSM Solar PV MTP (Commercial)		T SourceSM r PV MTP sidential)	Targeted Low- Income Energy Efficiency Program		Total	
	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh
Aransas			7.4	17,647	8.7	108,318									138.5	297,211
Bee			1.8	8,445											8.0	32,868
Brooks	4.2	18,932	10.6	29,126											20.5	60,650
Calhoun															137.0	65,485
Cameron	91.8	359,446	478.0	2,990,833	0.6	7,317			140.0	465,530			59.9	102,359	5,949.9	7,976,301
Coleman							13.9	52,819							13.9	52,819
Colorado															23.6	3,486
Dimmit													83.6	134,490	136.1	253,526
Duval			0.4	2,901			74.5	304,925							74.9	307,826
Frio							0.6	2,219							36.0	2,254
Gonzales											3.6	10,175			3.6	10,175
Hidalgo	417.1	1,683,805	1,314.5	6,638,874			253.7	1,100,863	41.6	229,893	99.2	348,725	252.8	421,691	10,777.3	28,413,301
Jackson															8.6	47,494
Jim Wells			31.6	215,705											148.0	236,898
Karnes															80.7	81
Kleberg			11.0	61,756							7.1	22,224			140.7	129,014
La Salle											15.0	40,761	10.0	14,542	30.2	91,972
Live Oak															5.0	16,960
Matagorda							127.1	374,344							128.1	375,627
Maverick											6.7	23,847	67.1	115,892	345.8	690,523
Medina															112.4	112
Nueces	207.5	974,738	187.6	1,129,177	1.7	20,649	493.6	2,223,876			53.7	202,074	82.5	194,066	7,833.3	17,991,476
Refugio											8.8	23,293			27.8	45,003
San Patricio			21.8	108,593	3.5	43,902	317.9	1,453,605			4.0	13,135			7,024.3	6,366,794
Starr			271.2	1,526,130							15.4	46,150			749.0	2,165,945
Uvalde													42.0	71,563	216.2	107,188
Val Verde													125.7	175,041	242.1	227,369
Victoria			2.8	6,382			43.0	154,038							270.8	311,518
Webb	105.5	454,457					21.9	69,914			116.6	409,430	80.1	117,978	2,968.8	2,927,988
Wharton							120.9	1,076,414							293.4	1,436,470
Willacy			3.6	7,818			383.1	1,259,400							1,526.9	1,502,413
Zapata	16.7	83,291													16.7	83,291
Zavala											5.9	21,503	15.3	26,777	21.2	48,281

Reported and Verified Demand and E	nergy Reduction by Co	ounty: AEP Texas ((Continued)
---	-----------------------	--------------------	-------------

Reported and Verified Demand and Energy Reduction by County: North												
County	Com Soluti	mercial ons MTP	Commercial SOP		Hard-to-Reach SOP		Load Management SOP		Оре	en MTP	Residential SOP	
	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh
Brewster												
Callahan					1.1	1,135			8.7	50,487	9.9	15,596
Childress			1.6	6,590	14.3	22,974			3.9	16,292	4.0	6,709
Coke	3.9	18,077										
Concho									9.1	42,889	0.4	870
Cottle												
Crockett	59.4	307,762	0.9	4,775								
Eastland												
Fisher	1.7	7,236										
Hall											5.7	16,394
Hardeman					9.5	12,988					6.3	8,944
Haskell	17.0	87,932					14.9	15				
Jones	1.2	5,325			1.9	3,496					7.6	12,953
Menard									1.2	4,672		
Presidio					1.1	3,365					71.8	341,227
Reagan			0.9	4,775								
Reeves												
Runnels	1.0	5,810					33.2	33	7.1	30,056		
Schleicher									2.3	8,143		
Shackelford											4.5	10,420
Sterling	4.4	19,772							1.4	5,627		
Stonewall	17.0	87 <i>,</i> 932										
Sutton	2.9	13,255	1.7	9,550								
Taylor	438.7	2,228,227	164.8	836,258	151.1	264,754	1,799.5	1,800	202.3	794,911	364.6	624,886
Tom Green	131.4	605,521	63.5	327,812	312.9	438,449	357.9	358	137.1	589,441	111.0	213,420
Wilbarger							87.6	88			34.7	100,513

the ported and termina and include of by county the terms (continued)

Reported and Verified Demand and Energy Reduction by County: North (Continued)										
County	score/CitySmart ty MTP		SMART Solar (Com	SourceSM PV MTP mercial)	SMART Sou PV MTP (R	rceSM Solar esidential)	Targeted Energy Pro	Low-Income Efficiency ogram	Total	
	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh
Brewster					3.8	12,363			3.8	12,363
Callahan	28.6	218,072							48.3	285,289
Childress									23.9	52 <i>,</i> 565
Coke	11.7	45,449							15.6	63,526
Concho									9.5	43,759
Cottle							0.3	239	0.3	239
Crockett									60.2	312,537
Eastland							42.9	89,704	42.9	89,704
Fisher									1.7	7,236
Hall									5.7	16,394
Hardeman									15.9	21,932
Haskell									31.9	87,947
Jones	6.5	18,495							17.2	40,268
Menard									1.2	4,672
Presidio					9.9	36,847			82.9	381,438
Reagan									0.9	4,775
Reeves					5.0	17,742			5.0	17,742
Runnels	102.5	504,321							143.8	540,221
Schleicher									2.3	8,143
Shackelford									4.5	10,420
Sterling									5.8	25,399
Stonewall									17.0	87,932
Sutton									4.6	22,805
Taylor	31.8	174,905			44.8	155,033	446.3	931,532	3,643.9	6,012,304
Tom Green	252.6	611,516	19.9	55,725	64.2	201,548			1,450.5	3,043,789
Wilbarger			35.7	111,066	4.6	17,728			162.5	229,394

APPENDIX B:

PROGRAM TEMPLATES

AEP Texas does not have any Program Templates to report this year.

APPENDIX C:

OPTIONAL SUPPORTING DOCUMENTATION

The following files are not convertible:

	AEP Texas 2023 EECRF Sch A-B-J-K-M-N-O-
P-R Final.xlsx	AEP Texas ID Notice workpaper EECRF
2023.xlsx	AEP TX 2022 EEPR Tables v12 (EM&V
Adjusted) clean.xlsx	AEP TX 2022 Sch C-E-G-H-I-Q-WPA-WPC-
WFE-WFG WFN 2023 Rates.Alsa	AEP TX Schedule A Page 2.xlsx AEP TX Schedule B Page 2.xlsx Central Division Sch C WP.xlsx North Division Sch C WP.xlsx

Please see the ZIP file for this Filing on the PUC Interchange in order to access these files.

Contact centralrecords@puc.texas.gov if you have any questions.