

PUC DOCKET NO. _____

APPLICATION OF SOUTHWESTERN § PUBLIC UTILITY COMMISSION
ELECTRIC POWER COMPANY TO §
ADJUST ENERGY EFFICIENCY § OF TEXAS
COST RECOVERY FACTOR AND §
RELATED RELIEF §

SOUTHWESTERN ELECTRIC POWER COMPANY’S APPLICATION

MAY 1, 2017

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ELECTRIC POWER COMPANY TO	§	
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RECOVERY FACTOR AND RELATED	§	
RELIEF	§	OF TEXAS

SOUTHWESTERN ELECTRIC POWER COMPANY’S APPLICATION

TO THE HONORABLE PUBLIC UTILITY COMMISSION OF TEXAS:

Southwestern Electric Power Company (SWEPCO or Applicant) files its Application to Adjust Energy Efficiency Cost Recovery Factor and Related Relief pursuant to PURA¹ §39.905 and 16 Tex. Admin. Code § 25.181(f) (TAC). In support thereof SWEPCO would show the following:

I. Applicant

SWEPCO is an electric utility that provides service in service areas comprising all or parts of 19 counties in northeast Texas and five counties in north Texas. SWEPCO’s business address is 428 Travis Street, Shreveport, Louisiana 71101.

II. Applicant’s Authorized Representatives

SWEPCO’s authorized business representative is:

Shari Zehala
American Electric Power Service Corporation
1 Riverside Plaza
Columbus, Ohio 43215
614.716.1305 (voice)
512.481.4591 (facsimile)
Email: slzehala@aep.com

¹ Public Utility Regulatory Act (PURA), TEX. UTIL. CODE ANN. §§ 11.001-66.016.

SWEPCO's authorized legal representative is:

Melissa Gage
American Electric Power Service Corporation
400 West 15th Street, Suite 1520
Austin, Texas 78701
512.481.3320 (voice)
512.481.4591 (facsimile)
Email: malong@aep.com

AEP Texas requests that all pleadings and other documents filed in this proceeding be served on Melissa Gage using the contact information listed above.

III. Jurisdiction

The Commission has jurisdiction over this application pursuant to PURA §39.905 and 16 TAC § 25.181.

IV. Affected Persons

SWEPCO provides service to approximately 185,000 customers in Texas. SWEPCO proposes to apply the adjusted EECRF requested herein to all of its retail electric customers in its Texas service areas who take service below 69,000 volts, with the exception of industrial distribution customers who filed a notice of intent pursuant to 16 TAC § 25.181(w) and lighting customers, for whom no energy efficiency programs are available.

V. Background

In Docket No. 45824,² the Commission authorized SWEPCO to adjust its EECRF pursuant to PURA §39.905 and 16 TAC 25.181(f)(1) to recover \$5,497,754 in 2017 for energy efficiency. This included \$4,740,144, the amount of its projected energy efficiency costs for its 2017 programs and \$832,620, the amount of SWEPCO's performance bonus achieved by its 2015 energy efficiency results. SWEPCO's approved 2016 EECRF also included a return to customers of \$75,010 for the over-recovery of energy efficiency costs incurred in Program Year 2015.

² Docket No. 45824, *Application of Southwestern Electric Power Company To Adjust Energy Efficiency Cost Recovery Factor (EECRF) and Related Relief* (Final Order August 25, 2016).

16 TAC § 25.181(f)(8) requires a utility such as SWEPCO, which serves in an area in which customer choice is not offered, to apply to adjust its EECRF not later than May 1 of each year.

VI. Request to Adjust the EECRF

By this application, SWEPCO requests the authority to update its EECRF to adjust the cost recovery factors for energy efficiency to collect \$5,613,655 in 2018 to reflect the following three components:

- Recovery of \$4,163,987 in projected energy efficiency program costs for SWEPCO's 2018 programs;
- An adjustment for the under-recovery of \$135,805 in 2016 for program costs;
- EM&V costs of \$125,473; and
- Recovery of \$1,188,390 representing SWEPCO's performance bonus for achieving demand and energy savings that exceeded the goal to be achieved in 2016.

VII. Adjusted EECRF Cost Recovery Factors for 2018

The adjusted Schedule EECRF containing the cost recovery factors for 2018 is attached hereto as Attachment A. SWEPCO requests the Commission to make the adjusted Schedule EECRF effective as of January 1, 2018. The requested adjusted EECRF cost recovery factors to recover the applicable energy efficiency costs during 2018 are as follows:

EECRF Rate Class	kWh Factor
Residential	\$.001294
General Service	\$.000378
Lighting and Power	\$.000936
Municipal Pumping	\$.000225
Municipal Service	\$.002627
Cotton Gin	\$.000025
Large Lighting and Power < 69 kV	\$.000000
Electric Furnace/Metal Melting < 69 kV	\$(.000561)
Oil Field Large Industrial Power	\$(.000292)
Lighting	\$.000000

VIII. Testimony and Schedules Supporting 2018 EECRF

Accompanying this application are the direct testimonies of Paul E. Pratt, Jeffrey D. Thigpen, and Shawna G. Jones and Schedules A through S, which support the relief sought by Applicant. The evidence sponsored by Mr. Pratt, Mr. Thigpen, and Ms. Jones fully supports the relief sought by SWEPCO for 2018 pursuant to PURA §39.905 and 16 TAC § 25.181(f).

IX. Request for Good Cause Exception for Combination of Rate Classes

Pursuant to 16 TAC § 25.191(f)(2), a utility may request a good cause exception to combine rate classes that contain fewer than 20 customers with a similar rate class that receives services under the same energy efficiency programs. SWEPCO had one customer on the Electric Furnace (EFS) tariff that moved to the Metal Melting < 69 kv (MMS) tariff in 2014, leaving no customers on EFS since 2015. As part of this application, SWEPCO requests a good cause exception to combine the EFS and MMS rate classes, which would receive services under the same energy efficiency programs. Ms. Jones discusses this request in her testimony. This same treatment was approved in SWEPCO's last EECRF, Docket No. 45824.³

X. Request for Protective Order

Schedule J contains a listing of all Energy Efficiency Service Providers (EESPs) who received incentive funds and a listing of EESPs who received more than five percent of incentive funds for 2016 along with their contracts with SWEPCO. 16 TAC § 25.181(f)(10)(H) and (K) provide that such information may be treated as confidential. Accordingly, SWEPCO requests entry of the standard Protective Order contained as Attachment B hereto.

XI. Notice

SWEPCO proposes to provide notice by providing a copy of this application by U.S. mail, postage prepaid, to all parties to SWEPCO Docket No. 40443, SWEPCO's most recent completed base rate case; Docket No. 45824, its last EECRF case; and the Texas Department of Housing and Community Affairs.

³ *Id.* at Conclusion of Law 12.

XII. Proposed Schedule

SWEPCO proposes the following schedule for this proceeding:

Staff Approval of Notice	May 5, 2017
Notice Completed	May 12, 2017
Proof of Notice	May 17, 2017
Intervention Deadline	May 31, 2017
Request for a Hearing	May 31, 2017
	<u>If No Hearing Requested</u>
Staff Recommendation	June 16, 2017
Parties' Proposed Order	June 23, 2017
	<u>If Hearing Requested</u>
End of discovery on SWEPCO Direct (if Hearing Requested)	May 30, 2017
Deadline for Intervenor Direct	June 22, 2017
Objections to SWEPCO and Intervenor Direct	June 27, 2017
Deadline for Staff Direct	June 27, 2017
End of Discovery on Intervenor Direct	June 27, 2017
End of Discovery on Staff Direct	June 30, 2017
Replies to Objections to SWEPCO and Intervenor Direct	June 30, 2017
Objections to Staff Direct	June 30, 2017
Discovery Responses on Intervenor Direct	July 5, 2017
Deadline for SWEPCO Rebuttal and Cross-Rebuttal	July 10, 2017
Discovery Responses on Staff Direct	July 10, 2017
Hearing on the Merits	July 18, 2017

XIII. Conclusion and Prayer for Relief

WHEREFORE, PREMISES CONSIDERED, SWEPCO prays that the Commission:

- (i) approve the proposed Protective Order;

- (ii) approve SWEPCO's proposed notice and method of providing notice;
- (iii) approve SWEPCO's proposed tariff schedule;
- (iv) authorize SWEPCO to begin applying the adjusted Schedule EECRF attached hereto as Attachment A as of January 1, 2018;
- (v) grant SWEPCO's application; and
- (vi) grant such other and further relief to which SWEPCO may show itself justly entitled.

Dated: May 1, 2017

RESPECTFULLY SUBMITTED,

American Electric Power Service Corporation
400 West 15th Street, Suite 1520
Austin, Texas 78701
Melissa Gage
State Bar No. 24063949
Telephone: (512) 481-3320
Facsimile: (512) 481-4591

By: 
Melissa Gage
ATTORNEY FOR SOUTHWESTERN ELECTRIC
POWER COMPANY

SOUTHWESTERN ELECTRIC POWER COMPANY

Tariff Manual - Public Utility Commission of Texas

Section Title: Rates, Charges, and Fees

Section No: IV

Applicable: All Areas

Docket No:

Sheet No: IV-35

Effective Date: January 1, 2018

Revision 10

Page 1 of 1

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ENERGY EFFICIENCY COST RECOVERY RIDER

APPLICABILITY

Rider Energy Efficiency Cost Recovery Factor (EECRF) recovers the cost of energy efficiency programs not included in base rates and is applicable to the kWh of Retail Customers taking retail service from the Company. The EECRF does not apply to customers taking service at transmission voltage or exempt industrial distribution customers unless there is a true-up from a prior period. P.U.C. SUBST. R. 25.181(f)(8) provides that no later than May 1 of each year, a utility with an EECRF shall apply to adjust the EECRF in order to adjust for changes in costs and bonuses and to minimize any over- or under-collections of energy efficiency costs resulting from the use of the EECRF. The EECRF filed by May 1 of each year will be calculated in accordance with the following methodology and will be applied to the billing kWh billed by the Company.

AVAILABILITY

The following factors will be applied to the energy usage (metered or unmetered) of retail customers taking service from the Company.

MONTHLY RATE

<u>Rate Schedule¹</u>	<u>Rate Code²</u>	<u>Factor per kWh</u>	
Residential	12,15,16,19,62	\$0.001294	I
General Service ³	200,204,205,207,208, 210,212,215,218,224, 238,282	\$0.000378	R
Municipal Service	544,548	\$0.002627	I
Municipal Pumping	541,543,550,553	\$0.000225	I
Lighting and Power	60,63,66,240,243,246,249, 251,277,292	\$0.000936	I
Cotton Gin	253	\$0.000025	R
Electric Furnace/Metal Melting < 69 kV	312 325 335	\$(0.000561)	R
Oil Field Large Industrial Power	329 330	\$(0.000292)	R
Large Lighting and Power < 69 kV	346, 351	\$0.000000	
Lighting	90-143,203,521,528,529,532,534, 535,538,739	\$0.000000	

¹ Standby, Supplementary, Backup, Maintenance and As-Available Power Service are included with the Rate Schedule under which the customer takes service.

² Rate codes may be added or discontinued during the year. Any new rate code will be billed the EECRF rate based on the customer's applicable Rate Schedule.

³ General Service includes Recreational Lighting.

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PROTECTIVE ORDER

This Protective Order shall govern the use of all information deemed confidential (Protected Materials) or highly confidential (Highly Sensitive Protected Materials), including information whose confidentiality is currently under dispute, by a party providing information to the Public Utility Commission of Texas (Commission) or to any other party to this proceeding.

It is ORDERED that:

1. **Designation of Protected Materials.** Upon producing or filing a document, including, but not limited to, records on a computer disk or other similar electronic storage medium in this proceeding, the producing party may designate that document, or any portion of it, as confidential pursuant to this Protective Order by typing or stamping on its face “PROTECTED PURSUANT TO PROTECTIVE ORDER ISSUED IN DOCKET NO. _____” (or words to this effect) and consecutively Bates Stamping each page. Protected Materials and Highly Sensitive Protected Materials include the documents so designated, as well as the substance of the information contained in the documents and any description, report, summary, or statement about the substance of the information contained in the documents.
2. **Materials Excluded from Protected Materials Designation.** Protected Materials shall not include any information or document contained in the public files of the Commission or any other federal or state agency, court, or local governmental authority subject to the Public Information Act.¹ Protected Materials also shall not include documents or information which at the time of, or prior to disclosure in, a proceeding is or was public knowledge, or which becomes public knowledge other than through disclosure in violation of this Protective Order.

¹ Tex. Gov’t Code Ann. §§ 552.001-552.353 (West 2012 & Supp. 2016).

3. **Reviewing Party.** For the purposes of this Protective Order, a “Reviewing Party” is any party to this docket.
4. **Procedures for Designation of Protected Materials.** On or before the date the Protected Materials or Highly Sensitive Protected Materials are provided to the Commission, the producing party shall file with the Commission and deliver to each party to the proceeding a written statement, which may be in the form of an objection, indicating: (a) any exemptions to the Public Information Act claimed to apply to the alleged Protected Materials; (b) the reasons supporting the producing party’s claim that the responsive information is exempt from public disclosure under the Public Information Act and subject to treatment as protected materials; and (c) that counsel for the producing party has reviewed the information sufficiently to state in good faith that the information is exempt from public disclosure under the Public Information Act and merits the Protected Materials designation.
5. **Persons Permitted Access to Protected Materials.** Except as otherwise provided in this Protective Order, a Reviewing Party may access Protected Materials only through its “Reviewing Representatives” who have signed the Protective Order Certification Form (see Attachment A). Reviewing Representatives of a Reviewing Party include its counsel of record in this proceeding and associated attorneys, paralegals, economists, statisticians, accountants, consultants, or other persons employed or retained by the Reviewing Party and directly engaged in this proceeding. At the request of the PUC Commissioners, copies of Protected Materials may be produced by Commission Staff. The Commissioners and their staff shall be informed of the existence and coverage of this Protective Order and shall observe the restrictions of the Protective Order.
6. **Highly Sensitive Protected Material Described.** The term “Highly Sensitive Protected Materials” is a subset of Protected Materials and refers to documents or information that a producing party claims is of such a highly sensitive nature that making copies of such documents or information or providing access to such documents to employees of the Reviewing Party (except as specified herein) would expose a producing party to unreasonable risk of harm. Highly Sensitive Protected Materials include but are not limited to: (a) customer-specific information protected by § 32.101(c) of the Public

Utility Regulatory Act;² (b) contractual information pertaining to contracts that specify that their terms are confidential or that are confidential pursuant to an order entered in litigation to which the producing party is a party; (c) market-sensitive fuel price forecasts, wholesale transactions information and/or market-sensitive marketing plans; and (d) business operations or financial information that is commercially sensitive. Documents or information so classified by a producing party shall bear the designation “HIGHLY SENSITIVE PROTECTED MATERIALS PROVIDED PURSUANT TO PROTECTIVE ORDER ISSUED IN DOCKET NO. _____” (or words to this effect) and shall be consecutively Bates Stamped. The provisions of this Protective Order pertaining to Protected Materials also apply to Highly Sensitive Protected Materials, except where this Protective Order provides for additional protections for Highly Sensitive Protected Materials. In particular, the procedures herein for challenging the producing party’s designation of information as Protected Materials also apply to information that a producing party designates as Highly Sensitive Protected Materials.

7. **Restrictions on Copying and Inspection of Highly Sensitive Protected Material.**

Except as expressly provided in this Protective Order, one copy of Highly Sensitive Protected Materials may be made and kept in the possession of outside counsel for a Reviewing Party and one copy in the possession of the outside consultants having a need to access the materials, except that additional copies may be made to have sufficient copies for introduction of the material into the evidentiary record if the material is to be offered for admission into the record. The Reviewing Party shall maintain a record of all copies made of Highly Sensitive Protected Material and shall send a duplicate of the record to the producing party when the copy or copies are made. The record shall specify the location and the person possessing the copy. Limited notes may be made of Highly Sensitive Protected Materials, and such notes shall themselves be treated as Highly Sensitive Protected Materials unless such notes are limited to a description of the document and a general characterization of its subject matter in a manner that does not state any substantive information contained in the document.

² Public Utility Regulatory Act, Tex. Util. Code Ann. §§ 11.001-66.016 (West 2007 & Supp. 2016) (PURA).

8. **Restricting Persons Who May Have Access to Highly Sensitive Protected Material.**

With the exception of Commission Staff, the Office of the Attorney General (OAG), and the Office of Public Utility Counsel (OPC), and except as provided herein, the Reviewing Representatives for the purpose of access to Highly Sensitive Protected Materials may be persons who are (a) outside counsel for the Reviewing Party, (b) outside consultants for the Reviewing Party working under the direction of Reviewing Party's counsel or, (c) employees of the Reviewing Party working with and under the direction of Reviewing Party's counsel who have been authorized by the presiding officer to review Highly Sensitive Protected Materials. The Reviewing Party shall limit the number of Reviewing Representatives that review Highly Sensitive Protected Materials to the minimum number of persons necessary. The Reviewing Party is under a good faith obligation to limit access to each portion of any Highly Sensitive Protected Materials to two Reviewing Representatives whenever possible. Reviewing Representatives for Commission Staff, OAG, and OPC, for the purpose of access to Highly Sensitive Protected Materials, shall consist of their respective counsel of record in this proceeding and associated attorneys, paralegals, economists, statisticians, accountants, consultants, or other persons employed or retained by them and directly engaged in these proceedings.

9. **Copies Provided of Highly Sensitive Protected Material.** A producing party shall provide one copy of Highly Sensitive Protected Materials specifically requested by the Reviewing Party to the person designated by the Reviewing Party who must be a person authorized to review Highly Sensitive Protected Material under Paragraph 8. Representatives of the Reviewing Party who are authorized to view Highly Sensitive Protected Material may review the copy of Highly Sensitive Protected Materials at the office of the Reviewing Party's representative designated to receive the information. Any Highly Sensitive Protected Materials provided to a Reviewing Party may not be copied except as provided in Paragraph 7. The restrictions contained herein do not apply to Commission Staff, OPC, and the OAG when the OAG is representing a party to the proceeding.

10. **Procedures in Paragraphs 10-14 Apply to Commission Staff, OPC, and the OAG and Control in the Event of Conflict.** The procedures in Paragraphs 10 through 14 apply to responses to requests for documents or information that the producing party

designates as Highly Sensitive Protected Materials and provides to Commission Staff, OPC, and the OAG in recognition of their purely public functions. To the extent the requirements of Paragraphs 10 through 14 conflict with any requirements contained in other paragraphs of this Protective Order, the requirements of these Paragraphs shall control.

11. **Copy of Highly Sensitive Protected Material to be Provided to Commission Staff, OPC and the OAG.** When, in response to a request for information by a Reviewing Party, the producing party makes available for review documents or information claimed to be Highly Sensitive Protected Materials, the producing party shall also deliver one copy of the Highly Sensitive Protected Materials to the Commission Staff, OPC, and the OAG (if the OAG is representing a party) in Austin, Texas. Provided however, that in the event such Highly Sensitive Protected Materials are voluminous, the materials will be made available for review by Commission Staff, OPC, and the OAG (if the OAG is representing a party) at the designated office in Austin, Texas. The Commission Staff, OPC and the OAG (if the OAG is representing a party) may request such copies as are necessary of such voluminous material under the copying procedures specified herein.
12. **Delivery of the Copy of Highly Sensitive Protected Material to Commission Staff and Outside Consultants.** The Commission Staff, OPC, and the OAG (if the OAG is representing a party) may deliver the copy of Highly Sensitive Protected Materials received by them to the appropriate members of their staff for review, provided such staff members first sign the certification specified by Paragraph 15. After obtaining the agreement of the producing party, Commission Staff, OPC, and the OAG (if the OAG is representing a party) may deliver the copy of Highly Sensitive Protected Materials received by it to the agreed, appropriate members of their outside consultants for review, provided such outside consultants first sign the certification in Attachment A.
13. **Restriction on Copying by Commission Staff, OPC and the OAG.** Except as allowed by Paragraph 7, Commission Staff, OPC and the OAG may not make additional copies of the Highly Sensitive Protected Materials furnished to them unless the producing party agrees in writing otherwise, or, upon a showing of good cause, the presiding officer directs otherwise. Commission Staff, OPC, and the OAG may make limited notes of

Highly Sensitive Protected Materials furnished to them, and all such handwritten notes will be treated as Highly Sensitive Protected Materials as are the materials from which the notes are taken.

14. **Public Information Requests.** In the event of a request for any of the Highly Sensitive Protected Materials under the Public Information Act, an authorized representative of the Commission, OPC, or the OAG may furnish a copy of the requested Highly Sensitive Protected Materials to the Open Records Division at the OAG together with a copy of this Protective Order after notifying the producing party that such documents are being furnished to the OAG. Such notification may be provided simultaneously with the delivery of the Highly Sensitive Protected Materials to the OAG.
15. **Required Certification.** Each person who inspects the Protected Materials shall, before such inspection, agree in writing to the following certification found in Attachment A to this Protective Order:

I certify my understanding that the Protected Materials are provided to me pursuant to the terms and restrictions of the Protective Order in this docket, and that I have been given a copy of it and have read the Protective Order and agree to be bound by it. I understand that the contents of the Protected Materials, any notes, memoranda, or any other form of information regarding or derived from the Protected Materials shall not be disclosed to anyone other than in accordance with the Protective Order and unless I am an employee of the Commission or OPC shall be used only for the purpose of the proceeding in Docket No. _____. I acknowledge that the obligations imposed by this certification are pursuant to such Protective Order. Provided, however, if the information contained in the Protected Materials is obtained from independent public sources, the understanding stated herein shall not apply.

In addition, Reviewing Representatives who are permitted access to Highly Sensitive Protected Material under the terms of this Protective Order shall, before inspection of such material, agree in writing to the following certification found in Attachment A to this Protective Order:

I certify that I am eligible to have access to Highly Sensitive Protected Material under the terms of the Protective Order in this docket.

The Reviewing Party shall provide a copy of each signed certification to Counsel for the

producing party and serve a copy upon all parties of record.

16. **Disclosures between Reviewing Representatives and Continuation of Disclosure Restrictions after a Person is no Longer Engaged in the Proceeding.** Any Reviewing Representative may disclose Protected Materials, other than Highly Sensitive Protected Materials, to any other person who is a Reviewing Representative provided that, if the person to whom disclosure is to be made has not executed and provided for delivery of a signed certification to the party asserting confidentiality, that certification shall be executed prior to any disclosure. A Reviewing Representative may disclose Highly Sensitive Protected Material to other Reviewing Representatives who are permitted access to such material and have executed the additional certification required for persons who receive access to Highly Sensitive Protected Material. In the event that any Reviewing Representative to whom Protected Materials are disclosed ceases to be engaged in these proceedings, access to Protected Materials by that person shall be terminated and all notes, memoranda, or other information derived from the protected material shall either be destroyed or given to another Reviewing Representative of that party who is authorized pursuant to this Protective Order to receive the protected materials. Any person who has agreed to the foregoing certification shall continue to be bound by the provisions of this Protective Order so long as it is in effect, even if no longer engaged in these proceedings.
17. **Producing Party to Provide One Copy of Certain Protected Material and Procedures for Making Additional Copies of Such Materials.** Except for Highly Sensitive Protected Materials, which shall be provided to the Reviewing Parties pursuant to Paragraphs 9, and voluminous Protected Materials, the producing party shall provide a Reviewing Party one copy of the Protected Materials upon receipt of the signed certification described in Paragraph 15. Except for Highly Sensitive Protected Materials, a Reviewing Party may make further copies of Protected Materials for use in this proceeding pursuant to this Protective Order, but a record shall be maintained as to the documents reproduced and the number of copies made, and upon request the Reviewing Party shall provide the party asserting confidentiality with a copy of that record.

18. **Procedures Regarding Voluminous Protected Materials.** 16 Tex. Admin. Code (TAC) § 22.144(h) will govern production of voluminous Protected Materials. Voluminous Protected Materials will be made available in the producing party's voluminous room, in Austin, Texas, or at a mutually agreed upon location, Monday through Friday, 9:00 a.m. to 5:00 p.m. (except on state or Federal holidays), and at other mutually convenient times upon reasonable request.
19. **Reviewing Period Defined.** The Protected Materials may be reviewed only during the Reviewing Period, which shall commence upon entry of this Protective Order and continue until the expiration of the Commission's plenary jurisdiction. The Reviewing Period shall reopen if the Commission regains jurisdiction due to a remand as provided by law. Protected materials that are admitted into the evidentiary record or accompanying the evidentiary record as offers of proof may be reviewed throughout the pendency of this proceeding and any appeals.
20. **Procedures for Making Copies of Voluminous Protected Materials.** Other than Highly Sensitive Protected Materials, Reviewing Parties may take notes regarding the information contained in voluminous Protected Materials made available for inspection or they may make photographic, mechanical or electronic copies of the Protected Materials, subject to the conditions in this Protective Order; provided, however, that before photographic, mechanical or electronic copies may be made, the Reviewing Party seeking photographic, mechanical or electronic copies must provide written confirmation of the receipt of copies listed on Attachment B of this Protective Order identifying each piece of Protected Materials or portions thereof the Reviewing Party will need.
21. **Protected Materials to be Used Solely for the Purposes of These Proceedings.** All Protected Materials shall be made available to the Reviewing Parties and their Reviewing Representatives solely for the purposes of these proceedings. Access to the Protected Materials may not be used in the furtherance of any other purpose, including, without limitation: (a) any other pending or potential proceeding involving any claim, complaint, or other grievance of whatever nature, except appellate review proceedings that may arise from or be subject to these proceedings; or (b) any business or competitive endeavor of

whatever nature. Because of their statutory regulatory obligations, these restrictions do not apply to Commission Staff or OPC.

22. **Procedures for Confidential Treatment of Protected Materials and Information Derived from Those Materials.** Protected Materials, as well as a Reviewing Party's notes, memoranda, or other information regarding or derived from the Protected Materials are to be treated confidentially by the Reviewing Party and shall not be disclosed or used by the Reviewing Party except as permitted and provided in this Protective Order. Information derived from or describing the Protected Materials shall be maintained in a secure place and shall not be placed in the public or general files of the Reviewing Party except in accordance with the provisions of this Protective Order. A Reviewing Party must take all reasonable precautions to insure that the Protected Materials including notes and analyses made from Protected Materials that disclose Protected Materials are not viewed or taken by any person other than a Reviewing Representative of a Reviewing Party.
23. **Procedures for Submission of Protected Materials.** If a Reviewing Party tenders for filing any Protected Materials, including Highly Sensitive Protected Materials, or any written testimony, exhibit, brief, motion or other type of pleading or other submission at the Commission or before any other judicial body that quotes from Protected Materials or discloses the content of Protected Materials, the confidential portion of such submission shall be filed and served in sealed envelopes or other appropriate containers endorsed to the effect that they contain Protected Material or Highly Sensitive Protected Material and are sealed pursuant to this Protective Order. If filed at the Commission, such documents shall be marked "PROTECTED MATERIAL" and shall be filed under seal with the presiding officer and served under seal to the counsel of record for the Reviewing Parties. The presiding officer may subsequently, on his/her own motion or on motion of a party, issue a ruling respecting whether or not the inclusion, incorporation or reference to Protected Materials is such that such submission should remain under seal. If filing before a judicial body, the filing party: (a) shall notify the party which provided the information within sufficient time so that the producing party may seek a temporary sealing order; and (b) shall otherwise follow the procedures in Rule 76a, Texas Rules of Civil Procedure.

24. **Maintenance of Protected Status of Materials during Pendency of Appeal of Order Holding Materials are not Protected Materials.** In the event that the presiding officer at any time in the course of this proceeding finds that all or part of the Protected Materials are not confidential or proprietary, by finding, for example, that such materials have entered the public domain or materials claimed to be Highly Sensitive Protected Materials are only Protected Materials, those materials shall nevertheless be subject to the protection afforded by this Protective Order for three (3) full working days, unless otherwise ordered, from the date the party asserting confidentiality receives notice of the presiding officer's order. Such notification will be by written communication. This provision establishes a deadline for appeal of a presiding officer's order to the Commission. In the event an appeal to the Commissioners is filed within those three (3) working days from notice, the Protected Materials shall be afforded the confidential treatment and status provided in this Protective Order during the pendency of such appeal. Neither the party asserting confidentiality nor any Reviewing Party waives its right to seek additional administrative or judicial remedies after the Commission's denial of any appeal.
25. **Notice of Intent to Use Protected Materials or Change Materials Designation.** Parties intending to use Protected Materials shall notify the other parties prior to offering them into evidence or otherwise disclosing such information into the record of the proceeding. During the pendency of Docket No. _____ at the Commission, in the event that a Reviewing Party wishes to disclose Protected Materials to any person to whom disclosure is not authorized by this Protective Order, or wishes to have changed the designation of certain information or material as Protected Materials by alleging, for example, that such information or material has entered the public domain, such Reviewing Party shall first file and serve on all parties written notice of such proposed disclosure or request for change in designation, identifying with particularity each of such Protected Materials. A Reviewing Party shall at any time be able to file a written motion to challenge the designation of information as Protected Materials.
26. **Procedures to Contest Disclosure or Change in Designation.** In the event that the party asserting confidentiality wishes to contest a proposed disclosure or request for change in designation, the party asserting confidentiality shall file with the appropriate

presiding officer its objection to a proposal, with supporting affidavits, if any, within five (5) working days after receiving such notice of proposed disclosure or change in designation. Failure of the party asserting confidentiality to file such an objection within this period shall be deemed a waiver of objection to the proposed disclosure or request for change in designation. Within five (5) working days after the party asserting confidentiality files its objection and supporting materials, the party challenging confidentiality may respond. Any such response shall include a statement by counsel for the party challenging such confidentiality that he or she has reviewed all portions of the materials in dispute and, without disclosing the Protected Materials, a statement as to why the Protected Materials should not be held to be confidential under current legal standards, or that the party asserting confidentiality for some reason did not allow such counsel to review such materials. If either party wishes to submit the material in question for in camera inspection, it shall do so no later than five (5) working days after the party challenging confidentiality has made its written filing.

27. **Procedures for Presiding Officer Determination Regarding Proposed Disclosure or Change in Designation.** If the party asserting confidentiality files an objection, the appropriate presiding officer will determine whether the proposed disclosure or change in designation is appropriate. Upon the request of either the producing or Reviewing Party or upon the presiding officer's own initiative, the presiding officer may conduct a prehearing conference. The burden is on the party asserting confidentiality to show that such proposed disclosure or change in designation should not be made. If the presiding officer determines that such proposed disclosure or change in designation should be made, disclosure shall not take place earlier than three (3) full working days after such determination unless otherwise ordered. No party waives any right to seek additional administrative or judicial remedies concerning such presiding officer's ruling.
28. **Maintenance of Protected Status during Periods Specified for Challenging Various Orders.** Any party electing to challenge, in the courts of this state, a Commission or presiding officer determination allowing disclosure or a change in designation shall have a period of ten (10) days from: (a) the date of an unfavorable Commission order; or (b) if the Commission does not rule on an appeal of an interim order, the date an appeal of an interim order to the Commission is overruled by operation of law, to obtain a favorable

ruling in state district court. Any party challenging a state district court determination allowing disclosure or a change in designation shall have an additional period of ten (10) days from the date of the order to obtain a favorable ruling from a state appeals court. Finally, any party challenging a determination of a state appeals court allowing disclosure or a change in designation shall have an additional period of ten (10) days from the date of the order to obtain a favorable ruling from the state supreme court, or other appellate court. All Protected Materials shall be afforded the confidential treatment and status provided for in this Protective Order during the periods for challenging the various orders referenced in this paragraph. For purposes of this paragraph, a favorable ruling of a state district court, state appeals court, Supreme Court or other appellate court includes any order extending the deadlines in this paragraph.

29. **Other Grounds for Objection to Use of Protected Materials Remain Applicable.** Nothing in this Protective Order shall be construed as precluding any party from objecting to the use of Protected Materials on grounds other than confidentiality, including the lack of required relevance. Nothing in this Protective Order constitutes a waiver of the right to argue for more disclosure, provided, however, that unless the Commission or a court orders such additional disclosure, all parties will abide by the restrictions imposed by the Protective Order.
30. **Protection of Materials from Unauthorized Disclosure.** All notices, applications, responses or other correspondence shall be made in a manner which protects Protected Materials from unauthorized disclosure.
31. **Return of Copies of Protected Materials and Destruction of Information Derived from Protected Materials.** Following the conclusion of these proceedings, each Reviewing Party must, no later than thirty (30) days following receipt of the notice described below, return to the party asserting confidentiality all copies of the Protected Materials provided by that party pursuant to this Protective Order and all copies reproduced by a Reviewing Party, and counsel for each Reviewing Party must provide to the party asserting confidentiality a letter by counsel that, to the best of his or her knowledge, information, and belief, all copies of notes, memoranda, and other documents regarding or derived from the Protected Materials (including copies of Protected

Materials) that have not been so returned, if any, have been destroyed, other than notes, memoranda, or other documents which contain information in a form which, if made public, would not cause disclosure of the substance of Protected Materials. As used in this Protective Order, “conclusion of these proceedings” refers to the exhaustion of available appeals, or the running of the time for the making of such appeals, as provided by applicable law. If, following any appeal, the Commission conducts a remand proceeding, then the “conclusion of these proceedings” is extended by the remand to the exhaustion of available appeals of the remand, or the running of the time for making such appeals of the remand, as provided by applicable law. Promptly following the conclusion of these proceedings, counsel for the party asserting confidentiality will send a written notice to all other parties, reminding them of their obligations under this Paragraph. Nothing in this Paragraph shall prohibit counsel for each Reviewing Party from retaining two (2) copies of any filed testimony, brief, application for rehearing, hearing exhibit or other pleading which refers to Protected Materials provided that any such Protected Materials retained by counsel shall remain subject to the provisions of this Protective Order.

32. **Applicability of Other Law.** This Protective Order is subject to the requirements of the Public Information Act, the Open Meetings Act,³ the Texas Securities Act⁴ and any other applicable law, provided that parties subject to those acts will notify the party asserting confidentiality, if possible under those acts, prior to disclosure pursuant to those acts. Such notice shall not be required where the Protected Materials are sought by governmental officials authorized to conduct a criminal or civil investigation that relates to or involves the Protected Materials, and those governmental officials aver in writing that such notice could compromise the investigation and that the governmental entity involved will maintain the confidentiality of the Protected Materials.
33. **Procedures for Release of Information under Order.** If required by order of a governmental or judicial body, the Reviewing Party may release to such body the confidential information required by such order; provided, however, that: (a) the

³ Tex. Gov’t Code Ann. § 551.001-551.146 (West 2012 & Supp. 2016).

⁴ Tex. Rev. Civ. Stat. Ann. arts. 581-1 to 581-43 (West 2010 & Supp. 2016).

Reviewing Party shall notify the producing party of the order requiring the release of such information within five (5) calendar days of the date the Reviewing Party has notice of the order; (b) the Reviewing Party shall notify the producing party at least five (5) calendar days in advance of the release of the information to allow the producing party to contest any release of the confidential information; and (c) the Reviewing Party shall use its best efforts to prevent such materials from being disclosed to the public. The terms of this Protective Order do not preclude the Reviewing Party from complying with any valid and enforceable order of a state or federal court with competent jurisdiction specifically requiring disclosure of Protected Materials earlier than contemplated herein. The notice specified in this section shall not be required where the Protected Materials are sought by governmental officials authorized to conduct a criminal or civil investigation that relates to or involves the Protected Materials, and those governmental officials aver in writing that such notice could compromise the investigation and that the governmental entity involved will maintain the confidentiality of the Protected Materials.

34. **Best Efforts Defined.** The term “best efforts” as used in the preceding paragraph requires that the Reviewing Party attempt to ensure that disclosure is not made unless such disclosure is pursuant to a final order of a Texas governmental or Texas judicial body, the written opinion of the Texas Attorney General sought in compliance with the Public Information Act, or the request of governmental officials authorized to conduct a criminal or civil investigation that relates to or involves the Protected Materials. The Reviewing Party is not required to delay compliance with a lawful order to disclose such information but is simply required to timely notify the party asserting confidentiality, or its counsel, that it has received a challenge to the confidentiality of the information and that the Reviewing Party will either proceed under the provisions of §552.301 of the Public Information Act, or intends to comply with the final governmental or court order. Provided, however, that no notice is required where the Protected Materials are sought by governmental officials authorized to conduct a criminal or civil investigation that relates to or involves the Protected Materials, and those governmental officials aver in writing that such notice could compromise the investigation and that the governmental entity involved will maintain the confidentiality of the Protected Materials.

35. **Notify Defined.** “Notify” for purposes of Paragraphs 32, 33 and 34 means written notice to the party asserting confidentiality at least five (5) calendar days prior to release; including when a Reviewing Party receives a request under the Public Information Act. However, the Commission, OAG, or OPC may provide a copy of Protected Materials to the Open Records Division of the OAG as provided herein.

36. **Requests for Non-Disclosure.** If the producing party asserts that the requested information should not be disclosed at all, or should not be disclosed to certain parties under the protection afforded by this Protective Order, the producing party shall tender the information for in camera review to the presiding officer within ten (10) calendar days of the request. At the same time, the producing party shall file and serve on all parties its argument, including any supporting affidavits, in support of its position of non-disclosure. The burden is on the producing party to establish that the material should not be disclosed. The producing party shall serve a copy of the information under the classification of Highly Sensitive Protected Material to all parties requesting the information that the producing party has not alleged should be prohibited from reviewing the information.

Parties wishing to respond to the producing party’s argument for non-disclosure shall do so within five working days. Responding parties should explain why the information should be disclosed to them, including why disclosure is necessary for a fair adjudication of the case if the material is determined to constitute a trade secret. If the presiding officer finds that the information should be disclosed as Protected Material under the terms of this Protective Order, the presiding officer shall stay the order of disclosure for such period of time as the presiding officer deems necessary to allow the producing party to appeal the ruling to the Commission.

37. **Sanctions Available for Abuse of Designation.** If the presiding officer finds that a producing party unreasonably designated material as Protected Material or as Highly Sensitive Protected Material, or unreasonably attempted to prevent disclosure pursuant to Paragraph 36, the presiding officer may sanction the producing party pursuant to 16 TAC § 22.161.

38. **Modification of Protective Order.** Each party shall have the right to seek changes in this Protective Order as appropriate from the presiding officer.

39. **Breach of Protective Order.** In the event of a breach of the provisions of this Protective Order, the producing party, if it sustains its burden of proof required to establish the right to injunctive relief, shall be entitled to an injunction against such breach without any requirements to post bond as a condition of such relief. The producing party shall not be relieved of proof of any element required to establish the right to injunctive relief. In addition to injunctive relief, the producing party shall be entitled to pursue any other form of relief to which it is entitled.

ATTACHMENT A

Protective Order Certification

I certify my understanding that the Protected Materials are provided to me pursuant to the terms and restrictions of the Protective Order in this docket and that I have received a copy of it and have read the Protective Order and agree to be bound by it. I understand that the contents of the Protected Materials, any notes, memoranda, or any other form of information regarding or derived from the Protected Materials shall not be disclosed to anyone other than in accordance with the Protective Order and unless I am an employee of the Commission or OPC shall be used only for the purpose of the proceeding in Docket No. _____. I acknowledge that the obligations imposed by this certification are pursuant to such Protective Order. Provided, however, if the information contained in the Protected Materials is obtained from independent public sources, the understanding stated here shall not apply.

Signature

Party Represented

Printed Name

Date

I certify that I am eligible to have access to Highly Sensitive Protected Material under the terms of the Protective Order in this docket.

Signature

Party Represented

Printed Name

Date

ATTACHMENT B

I request to view/copy the following documents:

Document Requested	# of Copies	Non-Confidential	Protected Materials and/or Highly Sensitive Protected Materials

Signature

Party Represented

Printed Name

Date

PUBLIC UTILITY COMMISSION OF TEXAS

APPLICATION OF
SOUTHWESTERN ELECTRIC POWER COMPANY
TO ADJUST
ENERGY EFFICIENCY COST RECOVERY FACTOR AND RELATED RELIEF

DIRECT TESTIMONY OF
PAUL E. PRATT
FOR
SOUTHWESTERN ELECTRIC POWER COMPANY

MAY 1, 2017

TESTIMONY INDEX

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1 I. INTRODUCTION

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

3 A. My name is Paul E. Pratt. I am Consumer Programs Manager for Southwestern
4 Electric Power Company (SWEPCO). My business address is 428 Travis Street,
5 Shreveport, Louisiana 71101.

6 Q. PLEASE STATE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND.

7 A. I received a Bachelor of Science degree from Louisiana State University-Shreveport
8 in 1997. In addition, I received a Master of Business Administration from Louisiana
9 Tech University in 2002. I began my employment at SWEPCO in October 2006 as an
10 Energy Efficiency and Consumer Programs Coordinator. In that position, I was
11 responsible for implementing and administering energy efficiency programs in
12 compliance with Public Utility Commission of Texas (PUC or Commission) rules for
13 such programs. In 2013 I was named Consumer Programs Manager. In my current
14 position I manage SWEPCO's Energy Efficiency and Consumer Programs
15 department.

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

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

- 19 • Docket No. 38210, Application of Southwestern Electric Power Company for an
20 Energy Efficiency Cost Recovery Factor (EECRF) and Related Relief;
- 21 • Docket No. 39359, Application of Southwestern Electric Power Company to
22 Adjust Energy Efficiency Cost Recovery Factor (EECRF) and Related Relief;
- 23 • Docket No. 40357, Application of Southwestern Electric Power Company to
24 Adjust Energy Efficiency Cost Recovery Factor (EECRF) and Related Relief;

- 1 • Docket No. 41439, Application of Southwestern Electric Power Company to
2 Adjust Energy Efficiency Cost Recovery Factor (EECRF) and Related Relief; and
- 3 • Docket No. 42447, Application of Southwestern Electric Power Company to
4 Adjust Energy Efficiency Cost Recovery Factor (EECRF) and Related Relief.
- 5 • Docket No. 44612, Application of Southwestern Electric Power Company to
6 Adjust Energy Efficiency Cost Recovery Factor (EECRF) and Related Relief.
- 7 • Docket No. 45824, Application of Southwestern Electric Power Company to
8 Adjust Energy Efficiency Cost Recovery Factor (EECRF) and Related Relief.

9 Q. DO YOU SPONSOR ANY OF THE SCHEDULES THAT ACCOMPANY
10 SWEPCO'S FILING?

11 A. Yes, I sponsor Schedules D and K. In addition, I cosponsor Schedules A, page 2 of
12 Schedule A, J, P and S with SWEPCO witness Jeffery D. Thigpen, and Schedules C
13 and page 2 of Schedule A with SWEPCO witness Shawna G. Jones.

14

15 II. PURPOSE OF TESTIMONY AND
16 SUMMARY OF SWEPCO'S FILING

17 Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

18 A. The purpose of my testimony is to:

- 19 • provide a summary of the relief sought by SWEPCO in this proceeding and of its
20 filing;
- 21 • lay out the policy considerations for recovery of SWEPCO's projected costs for
22 its 2018 energy efficiency programs in its adjusted Energy Efficiency Cost
23 Recovery Factor (EECRF) for 2018, as contemplated by Public Utility Regulatory
24 Act (PURA) §39.905 and 16 Tex. Admin. Code § 25.181(f) (TAC);
- 25 • provide information regarding the under-recovery of SWEPCO's energy
26 efficiency revenues for its 2016 costs to be included in its adjusted EECRF in
27 2018;

- 1 • provide information regarding SWEPCO's performance bonus achieved by its
2 2016 energy efficiency results, as contemplated in 16 TAC § 25.181(h), and to be
3 recovered through its adjusted EECRF in 2018; and
- 4 • provide information regarding SWEPCO's projected Evaluation, Measurement,
5 and Verification (EM&V) costs as contemplated in 16 TAC § 25.181(h) and to be
6 recovered through its adjusted EECRF in 2018.

7 Q. PLEASE DESCRIBE SWEPCO'S FILING.

8 A. SWEPCO's filing consists of my direct testimony and the direct testimony of two
9 other witnesses.

10 SWEPCO witness Thigpen's direct testimony addresses:

- 11 • the energy efficiency costs that SWEPCO incurred for its 2016 programs;
- 12 • the energy efficiency results achieved in 2016 through these programs;
- 13 • SWEPCO's energy efficiency goals for 2018 as established by the Commission's
14 rule;
- 15 • the energy efficiency programs that SWEPCO will offer in 2018 to meet the
16 objectives;
- 17 • the costs SWEPCO projects to incur in 2018 in connection with the energy
18 efficiency programs and objectives;
- 19 • the impact of the industrial identification notice provided for in 16 TAC
20 § 25.181(w); and
- 21 • SWEPCO's projected share of the statewide EM&V costs for evaluation of
22 Program Year (PY) 2016 and PY 2017 to be collected through the 2018 EECRF.

23 SWEPCO witness Jones' direct testimony addresses:

- 24 • the design of the adjusted EECRF;
- 25 • the cost assignments among the EECRF rate classes to be recovered through the
26 adjusted EECRF; and
- 27 • the billing determinants used to develop the EECRF.

1 Accompanying the direct testimony of SWEPCO's witnesses are Schedules A
2 through R, which provide information the Commission has specified should be
3 provided in support of a request for an adjusted EECRF. Information demonstrating
4 the reasonableness of costs incurred in 2016 is included in the schedules in this filing.
5 SWEPCO has also included Schedule S, SWEPCO's 2017 Energy Efficiency Plan
6 and Report (EEPR) as filed in Docket 46907.

7 SWEPCO did not have any affiliate costs for energy efficiency in 2016.

8 Q. WHAT RELIEF DOES SWEPCO SEEK IN THIS PROCEEDING?

9 A. 16 TAC § 25.181(f)(8) requires a utility in an area in which customer choice is not
10 offered to apply no later than May 1 of each year to adjust its EECRF in order to
11 reflect changes in costs, performance bonus, and SWEPCO's share of Evaluation,
12 Measurement and Verification (EM&V) costs and to minimize any over- or under-
13 collection in prior years' program costs. Accordingly, by this application, SWEPCO
14 requests the Commission to approve an adjustment to SWEPCO's EECRF to recover
15 \$5,613,655 in 2018. As my testimony and the testimony of SWEPCO witnesses
16 Thigpen and Jones explain, the amount SWEPCO now seeks to recover through its
17 adjusted 2018 EECRF reflects the following components:

- 18 1) recovery of \$4,163,987 in energy efficiency program costs projected to
19 be incurred in 2018;
- 20 2) Under-recovery in the amount of \$135,805, representing SWEPCO's
21 under-recovery of its actual energy efficiency costs in 2016;
- 22 3) recovery of \$1,188,390, representing SWEPCO's performance bonus
23 for achieving demand and energy reductions that exceeded its
24 minimum goals for 2016; and
- 25 4) recovery of \$125,473, SWEPCO's projected share of the statewide
26 EM&V costs for evaluation of PY 2016 and PY 2017.

1 Q. WHAT IS SWEPCO'S PROJECTED 2018 ENERGY EFFICIENCY BUDGET?

2 A. As shown in Schedule A, SWEPCO's projected total 2018 energy efficiency budget
3 to achieve its energy efficiency objectives for 2018 is \$4,163,987. The 2018
4 projected energy efficiency program costs are the amounts necessary for SWEPCO to
5 achieve its energy efficiency objectives for 2018 pursuant to 16 TAC § 25.181(e)(1).
6 These amounts are shown in more detail on Schedule A, which I cosponsor with
7 SWEPCO witness Thigpen.

8 Q. DOES SWEPCO'S 2018 EECRF INCLUDE SWEPCO'S PROJECTED SHARE OF
9 THE STATEWIDE EM&V COSTS?

10 A. Yes. SWEPCO includes those projected EM&V costs in the amount of \$125,473 for
11 evaluating PY 2016 and PY 2017.

12 Q. DID SWEPCO SPEND MORE OR LESS THAN IT BUDGETED ON ITS 2016
13 ENERGY EFFICIENCY PROGRAMS?

14 A. As shown on Schedule B, SWEPCO incurred a total of \$4,156,523 in energy
15 efficiency and EM&V costs in 2016, which is \$85,745 less than its projected 2016
16 budget.

17 Q. DID SWEPCO EXCEED ITS GOALS FOR 2016?

18 A. Yes. SWEPCO exceeded its demand reduction goal of 30% of historic average
19 growth in demand for 2016 and its associated energy goal, and consequently,
20 qualifies for a performance bonus pursuant to 16 TAC § 25.181(h). Schedule D
21 provides the detail for the calculation of the \$1,188,390 performance bonus that
22 SWEPCO earned for achieving its goal.

1 Q. WHAT DOES SWEPCO REQUEST TO BE THE EFFECTIVE DATE OF THE
2 ADJUSTED EECRF FOR 2018?

3 A. SWEPCO requests that the adjusted EECRF be made effective as of January 1, 2018.
4

5 III. POLICY CONSIDERATIONS FOR RECOVERY OF
6 ENERGY EFFICIENCY EXPENDITURES
7

8 A. Statutory Policies

9 Q. WHAT ARE THE POLICY CONSIDERATIONS THAT GOVERN THE
10 RECOVERY OF ENERGY EFFICIENCY COSTS?

11 A. In PURA §39.905, the Texas Legislature established policies that an electric utility
12 such as SWEPCO operating in an area not open to competition:

- 13 • Must provide incentives adequate for the purpose of acquiring cost-effective
14 energy efficiency equivalent to:
- 15 ▪ not less than 30% of the utility's annual growth in demand of
16 residential and commercial customers by December 31 of each year
17 beginning with the 2013 calendar year; however, not less than the
18 preceding year; or
 - 19 ▪ four-tenths of one percent of the utility's summer weather-adjusted
20 peak demand for the combined residential and commercial customers
21 for the previous calendar year; however, not less than the preceding
22 year.
- 23 • Must provide incentives through market-based standard offer programs (SOPs),
24 targeted market transformation programs (MTPs), or programs other than SOPs
25 and MTPs to the extent that they satisfy the same cost-effectiveness requirements.
- 26 • Must provide incentives in such a manner that competitive energy efficiency
27 service providers (EESPs) install the measures that produce the required gains in
28 energy efficiency necessary to meet the utility's mandated annual goal.

29 The Legislature has also recognized that a utility should have access to a
30 mechanism to enable it to fully and timely recover the costs of providing these energy

1 efficiency programs. Specifically, SWEPCO is allowed to recover the increased costs
2 it must incur in order to meet the goals of PURA §39.905, as well as additional cost-
3 effective energy efficiency in excess of the minimum goals. The Legislature also
4 recognized that utilities should be provided an incentive to exceed the goals in the
5 statute and directed the Commission to establish rules to award incentives to the
6 utilities for exceeding their annual goals.

7 B. Commission Rule Pertaining to an EECRF Filing

8 Q. WHAT ARE THE MINIMUM ANNUAL ENERGY EFFICIENCY GOALS?

9 A. 16 TAC § 25.181(e)(1) requires a utility to administer a portfolio of energy efficiency
10 programs to acquire, at a minimum, the following:

11 (B) Beginning with the 2013 program year, until the trigger described in
12 subparagraph (C) is reached, a 30% reduction of its annual growth
13 in demand of residential and commercial customers.

14 (C) If the demand reduction goal to be acquired by a utility under
15 subparagraph (B) is equivalent to at least four-tenths of one percent
16 of its summer weather-adjusted peak demand for the combined
17 residential and commercial customers for the previous program
18 year, the utility must meet the energy efficiency goal described in
19 subparagraph (D) for each subsequent program year.

20 (D) Once the trigger described in subparagraph (C) is reached, the
21 utility must acquire four-tenths of one percent of its summer
22 weather-adjusted peak demand for the combined residential and
23 commercial customers for the previous program year.

24 (E) Except as adjusted in accordance with subsection (w) of the rule, a
25 utility's demand reduction goal in any year must not be lower than
26 its goal for the prior year, unless the Commission establishes a goal
27 for a utility pursuant to paragraph (2) of 16 TAC § 25.181(e).

28 Q. HOW HAS SWEPCO ESTABLISHED ITS ENERGY EFFICIENCY GOAL FOR
29 2018?

1 A. As determined by 16 TAC § 25.181(e)(1), SWEPCO's calculated goal for 2018 was
2 lower than the actual goal for 2016, which was 5.6 megawatts (MW). Therefore,
3 according to 16 TAC § 25.181(e)(1)(E), SWEPCO's goal cannot be lower than 5.6
4 MW.

5 Q. WHY IS SWEPCO FILING THIS REQUEST TO ADJUST ITS EECRF FOR
6 RECOVERY OF ITS ENERGY EFFICIENCY EXPENDITURES?

7 A. The Commission's rule includes provisions for a utility such as SWEPCO to request
8 that an EECRF be adjusted to recover all of its forecasted annual energy efficiency
9 program costs (16 TAC § 25.181(f)(1)). Also, as I stated earlier, 16 TAC
10 § 25.181(f)(8) requires a utility without customer choice to file no later than May 1
11 of each year to adjust its EECRF to reflect changes in program costs and achieved
12 performance bonus, and to minimize any over- or under-collection in prior year
13 program costs.

14 Q. WHAT ARE THE REQUIRED ELEMENTS TO BE COVERED WITHIN THE
15 SCOPE OF THIS PROCEEDING?

16 A. As outlined in the Commission's rule for energy efficiency, an EECRF rate schedule
17 must be included in the utility's tariff to permit the utility to timely recover the
18 reasonable costs of providing energy efficiency programs, including the prior year's
19 over- or under-collection of energy efficiency costs, and any applicable performance
20 bonus (16 TAC § 25.181(h)). The Commission may approve an energy rate for
21 residential customers and commercial rate classes whose base rates do not provide for
22 demand charges (16 TAC § 25.181(f)(6)). For the 2018 program year, the EECRF
23 rates should not exceed the cost caps based on the percentage change in the South

1 urban consumer price index (16 TAC § 25.181(f)(7)(E)). The EECRF must be set at
2 a rate that will give SWEPCO the opportunity to earn revenues equal to the sum of
3 SWEPCO’s forecasted energy efficiency costs, applicable prior year over- or under-
4 collection, applicable performance bonus, and projected EM&V costs.

5 According to the Commission’s rule regarding a proceeding to change an
6 EECRF, a utility must show that the costs to be recovered through the EECRF are
7 reasonable estimates of the costs necessary to provide energy efficiency programs and
8 to meet the utility’s goals (16 TAC § 25.181(f)(12)(A)); the costs assigned or
9 allocated to rate classes are reasonable and consistent with the rule (16 TAC §
10 25.181(f)(12)(D)); the estimate of billing determinants for the period for which the
11 EECRF is to be in effect is reasonable (16 TAC § 25.181(f)(12)(E)); and any
12 calculations or estimates of system losses and line losses used in calculating the
13 charges are reasonable (16 TAC § 25.181(f)(12)(F)).

14

15 IV. SWEPCO’S APPLICATION

16 Q. WHAT ARE THE ESSENTIAL ELEMENTS CONTAINED WITHIN SWEPCO’S
17 APPLICATION REQUESTING EECRF RECOVERY OF ENERGY EFFICIENCY
18 PROGRAM COSTS?

19 A. According to 16 TAC § 25.181(f)(3), a utility’s application to change an EECRF is a
20 ratemaking proceeding and must include witness testimony and schedules by rate
21 class in compliance with 16 TAC § 25.181(f)(10). The testimony and schedules that
22 SWEPCO has included in this filing are comparable to the testimony and schedules
23 that were submitted in Docket Nos. 35625, 36961, 38210, 39359, 40357, 41439,

1 42447, 44612, and 45824 which formed the basis for the Commission’s authorization
2 of the EECRF in those proceedings, as well as additional information as applicable in
3 compliance with 16 TAC § 25.181(f)(11).

4 SWEPCO’s application includes testimony and schedules showing:

- 5 1. SWEPCO’s forecasted energy efficiency program costs for 2018;
- 6 2. the energy efficiency performance bonus SWEPCO earned for PY
7 2016 energy efficiency achievements;
- 8 3. the amount of SWEPCO’s 2016 actual energy efficiency costs;
- 9 4. information concerning the calculation of billing determinants for
10 2016 and 2018;
- 11 5. the direct assignment and allocation of energy efficiency costs to the
12 utility’s eligible rate classes;
- 13 6. SWEPCO’s administrative costs for 2016;
- 14 7. the incentive payments by program, including a list of each service
15 provider receiving more than five percent of the overall incentive
16 payments and the percentage received;
- 17 8. projected budgets for costs for the year in which the adjusted
18 EECRF is expected to be in effect (2018), including costs for the
19 dissemination of information, outreach and other major
20 administrative costs;
- 21 9. the basis of the projection of costs for 2018 and discussions on the
22 cost cap calculations;
- 23 10. the actual EECRF revenues, by rate class, for the period of under-
24 recovery of 2016 EECRF costs;
- 25 11. SWEPCO’s bidding and engagement process for contracting with
26 EESPs and a list of all EESPs that received EECRF payments during
27 2016;
- 28 12. the estimated useful life used for each measure; and
- 29 13. the estimated EM&V costs for evaluation of PY 2016 and PY 2017.

30 All of these elements of SWEPCO’s application for approval of its 2018 EECRF are
31 required by virtue of 16 TAC § 25.181(f)(10).

1 A. Achievement of Objectives that Exceed the
2 Minimum Goals of the Statute and Rule

3 Q. WHAT DEMAND AND ENERGY SAVINGS DOES SWEPCO PROPOSE TO
4 ACHIEVE THROUGH ITS 2018 PROGRAMS?

5 A. The energy efficiency objectives SWEPCO seeks to achieve through the proposed
6 2018 energy efficiency expenditures include a peak demand reduction of as much as
7 11.66 MW and as much as 16,375 MWh in energy savings.

8 SWEPCO's calculated residential and commercial customer demand
9 reduction goal for 2018 is .77 MW pursuant to 16 TAC § 25.181(e)(1). However,
10 SWEPCO will use a minimum goal of 5.6 MW pursuant to 16 TAC
11 § 25.181(e)(1)(E), which states, "a utility's demand reduction goal in any year shall
12 not be lower than its goal for the prior year." SWEPCO's 2018 energy efficiency
13 savings goal is 9,811 megawatt-hours (MWh) calculated in accordance with 16 TAC
14 § 25.181(e)(4).

15 Q. DO YOU BELIEVE IT IS CONSISTENT WITH THE COMMISSION'S RULE TO
16 PURSUE THE OBJECTIVES SWEPCO HAS ESTABLISHED FOR ITS 2018
17 PROGRAM?

18 A. Yes. I believe the intent of the Commission's rule is for SWEPCO to achieve as
19 much cost-effective energy efficiency savings as is reasonably possible. This intent is
20 manifested in PURA §39.905(b)(2), wherein the Legislature authorized the
21 Commission to provide an incentive to reward "a utility administering programs
22 under this section that exceed the minimum goals established by this section." The
23 express characterization of the goals in PURA §39.905 as "minimum goals" clearly

1 indicates the Legislature's desire that utilities exceed these goals where additional
2 cost-effective energy efficiency savings are reasonably possible.

3 B. Industrial Notice Customers

4 Q. PLEASE EXPLAIN HOW THE COMMISSION DEFINES AN INDUSTRIAL
5 CUSTOMER PURSUANT TO ITS RULE.

6 A. 16 TAC § 25.181(c)(30) and (w) provide that an industrial customer is a for-profit
7 entity engaged in an industrial process taking electric service at transmission voltage,
8 or a for-profit entity engaged in an industrial process taking electric service at
9 distribution voltage that qualifies for a tax exemption under Tax Code §151.317 and
10 has submitted an identification notice pursuant to 16 TAC § 25.181(w).

11 Q. ARE THESE INDUSTRIAL CUSTOMERS EXEMPT FROM PAYING CHARGES
12 IN THE ADJUSTED EECRF FOR 2018?

13 A. 16 TAC § 25.181(w) states that if an identification notice was submitted to the utility
14 no later than February 1 to be effective for the following program year, the identified
15 industrial customer shall not be charged any EECRF costs for a period of three years.

16 Q. HAVE ANY OF SWEPCO'S INDUSTRIAL CUSTOMERS SUBMITTED
17 IDENTIFICATION NOTICES?

18 A. Yes. Please see the testimony of witness Thigpen for discussion.

19 C. Research and Development (R&D) Costs

20 Q. DO SWEPCO'S 2016 ENERGY EFFICIENCY PROGRAM COSTS INCLUDE
21 R&D EXPENDITURES?

22 A. Yes. The 2016 energy efficiency program and EM&V costs of \$4,156,523 shown on
23 Schedule B include \$174,823 in costs for R&D funded by SWEPCO. This includes

1 activities to support existing program refinement and costs related to developing
2 upgrades and enhancements to SWEPCO's electronic energy efficiency program
3 tracking and reporting database. All of these R&D expenditures incurred in 2016
4 were for the purpose of fostering continuous improvement and innovation in the
5 application of energy efficiency technology and energy efficiency program design
6 and implementation.

7 Q. DOES SWEPCO'S PROJECTED 2018 ENERGY EFFICIENCY PROGRAM
8 BUDGET INCLUDE R&D EXPENDITURES?

9 A. Yes. SWEPCO has budgeted \$125,000 to conduct R&D activities in 2018.

10 Q. HAS SWEPCO BUDGETED THE MAXIMUM AMOUNT FOR ENERGY
11 EFFICIENCY R&D EXPENDITURES ALLOWED BY THE COMMISSION'S
12 RULE?

13 A. No, it has not. 16 TAC § 25.181(i) specifies that the maximum amount of energy
14 efficiency R&D costs that SWEPCO can incur is 10% of its total program costs for
15 the previous program year for 2018. However, SWEPCO has budgeted \$125,000, the
16 amount it considers to be reasonable for projected R&D expenditures, considering
17 the whole of its energy efficiency program offerings and the magnitude of its
18 required demand reduction target to be achieved in 2018.

19 D. Under-Recovery of 2016 Costs

20 Q. IS SWEPCO SEEKING TO RECOVER FROM CUSTOMERS THE AMOUNT OF
21 UNDER-RECOVERED ENERGY EFFICIENCY REVENUES NOT COLLECTED
22 THROUGH ITS 2016 EECRF?

1 A. Yes. Please refer to Schedule D, which contains the information from Table 12 in
2 SWEPCO's 2016 EEPR. Schedule D details the calculation of the performance
3 bonus SWEPCO seeks to be awarded based upon its 2016 program year energy
4 efficiency achievements.

5 SWEPCO achieved a demand reduction of 11.94 MW and an energy
6 reduction of 20,648 MWh from its 2016 portfolio of energy efficiency programs.
7 SWEPCO's minimum demand reduction goal to be achieved in 2016 was 5.6 MW
8 and the energy reduction goal to be achieved in 2016 was 9,811 MWh. SWEPCO
9 exceeded both its 2016 demand reduction goal and its energy reduction goal,
10 qualifying SWEPCO for a performance bonus. All of the calculations and
11 requirements regarding the \$1,188,390 performance bonus comply with 16 TAC §
12 25.181(h).

13 V. CONCLUSION

14 Q. PLEASE BRIEFLY SUMMARIZE YOUR TESTIMONY.

15 A. The components included by SWEPCO in its requested adjusted EECRF for 2018
16 have been properly calculated in accordance with the applicable standards and
17 criteria.

- 18 1. The energy efficiency costs projected by SWEPCO for 2018 represent
19 reasonable estimates of the costs necessary to provide energy
20 efficiency programs for 2018 to meet SWEPCO's energy efficiency
21 objectives for 2018.
- 22 2. SWEPCO's assigned portion of the PY 2016 and PY 2017 for the
23 EM&V contractor as required by 16 TAC § 25.181.
- 24 3. The 2016 energy efficiency costs were reasonable and necessary costs
25 to provide energy efficiency programs for 2016. SWEPCO now
26 requests that revenues that were under-recovered in its 2016 EECRF
27 be collected in the adjusted 2018 EECRF.

1 4. The performance bonus, which SWEPCO earned for achievements in
2 2016 and now requests to be included in the adjusted 2018 EECRF,
3 also comports fully with the applicable provisions of the
4 Commission's rules.

5 Q. DOES SWEPCO'S APPLICATION MEET ALL OF THE REQUIREMENTS FOR
6 A UTILITY'S EECRF FILING SET FORTH IN 16 TAC § 25.181(f)?

7 A. Yes, SWEPCO's application meets all of the requirements for approval of the
8 requested adjustment to its 2018 EECRF to recover the components described in my
9 direct testimony and supported by SWEPCO's other witnesses.

10 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

11 A. Yes, it does.

PUBLIC UTILITY COMMISSION OF TEXAS

APPLICATION OF
SOUTHWESTERN ELECTRIC POWER COMPANY
TO ADJUST
ENERGY EFFICIENCY COST RECOVERY FACTOR AND RELATED RELIEF

DIRECT TESTIMONY OF
JEFFERY D. THIGPEN
FOR
SOUTHWESTERN ELECTRIC POWER COMPANY

MAY 1, 2017

TESTIMONY INDEX

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1 I. INTRODUCTION

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

3 A. My name is Jeffery D. Thigpen. I am an Energy Efficiency and Consumer Programs
4 Coordinator for Southwestern Electric Power Company (SWEPCO or Company). My
5 business address is 428 Travis Street, Shreveport, Louisiana 71101.

6 Q. PLEASE STATE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND.

7 A. I received a Bachelor’s degree from Baylor University, Waco Texas in 1985. I began
8 my employment at SWEPCO in January 1993 and worked in a variety of positions
9 and responsibilities from that time until March 2010. I accepted my current position
10 as Energy Efficiency and Consumer Programs Coordinator for SWEPCO’s demand-
11 side management (DSM) programs on April, 1 2010. In this position, I am
12 responsible for implementing and administering energy efficiency programs in
13 compliance with Public Utility Commission of Texas (PUC or Commission) rules for
14 such programs.

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

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

- 18 • Docket No. 45824, Application of Southwestern Electric Power Company for an
19 Energy Efficiency Cost Recovery Factor (EECRF) and Related Relief.

20 Q. DO YOU SPONSOR ANY OF THE SCHEDULES ACCOMPANYING SWEPCO’S
21 FILING?

1 A. Yes, I sponsor Schedules B, L, M, N, O, and R. In addition, I cosponsor Schedules
2 A, page 2 of Schedule A, J, P, and S with SWEPCO witness Paul E. Pratt. I also
3 cosponsor page 2 of Schedules A and B with SWEPCO witness Shawwna G. Jones.

4

5

II. PURPOSE OF TESTIMONY

6

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

7

A. The purpose of my direct testimony is to present information supporting SWEPCO's
8 request to adjust its Energy Efficiency Cost Recovery Factor (EECRF) for 2018.
9 SWEPCO's current EECRF was authorized in Docket No. 45824. As Mr. Pratt
10 discusses in his direct testimony, SWEPCO seeks an adjustment in 2018 to reflect:

11

1) recovery of \$4,163,987 in energy efficiency program costs projected to
12 be incurred in 2018;

13

2) Under-recovery in the amount of \$135,805, representing SWEPCO's
14 under-recovery of its actual energy efficiency costs in 2016;

15

3) recovery of \$1,188,390, representing SWEPCO's performance bonus
16 for achieving demand and energy reductions that exceeded its
17 minimum goals for 2016; and

18

4) recovery of \$125,473, SWEPCO's projected share of the statewide
19 EM&V costs for evaluation of PY 2016 and PY 2017.

20

The total amount that SWEPCO requests be recovered through its adjusted 2018
21 EECRF is \$5,613,655.

22

In my direct testimony, I first outline SWEPCO's compliance with the demand
23 and energy reduction goals set forth by PURA §39.905 and the impact of 16 Tex.
24 Admin. Code § 25.181(w) (TAC) pertaining to Identification Notice. I then present
25 the actual energy efficiency expenditures incurred by SWEPCO to achieve savings
26 through its 2016 programs and describe each of the programs implemented to achieve

27

1 those savings. I also present SWEPCO's projected costs necessary to achieve its
2 energy efficiency objectives for 2018 and the proposed programs to achieve those
3 savings.

4

5 III. ENERGY EFFICIENCY REQUIREMENTS AND OBJECTIVES

6 A. Statutory and Regulatory Requirements

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

9 A. As also discussed by Mr. Pratt in his testimony, the requirements of PURA §39.905
10 relevant to my testimony are:

- 11 • A utility must administer energy efficiency programs as follows:
- 12 ○ Provide incentives adequate for the purpose of acquiring cost-effective
13 energy efficiency equivalent to not less than 30% of the utility's
14 annual growth in demand of residential and commercial customers by
15 December 31 of each year beginning with the 2013 calendar year or
16 four-tenths of one percent of the utility's summer weather-adjusted
17 peak demand in the previous calendar year, but not less than the
18 amount of energy efficiency to be acquired for the most recent
19 preceding year.
 - 20 ○ Provide incentives through market-based standard offer programs
21 (SOPs), targeted market transformation programs (MTPs), or
22 programs other than SOPs and MTPs to the extent that they satisfy the
23 same cost-effectiveness requirements.
 - 24 ○ Provide incentives in such a manner that competitive energy efficiency
25 service providers (EESPs) install the measures that produce the energy
26 efficiency necessary to meet the utility's mandated annual goal.
27
28

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

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

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

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

- 5 • Beginning with the 2013 program year, an electric utility must administer energy
6 efficiency programs to achieve at least a 30% reduction of the utility's annual
7 growth in demand of residential and commercial customers or four-tenths of one
8 percent of the utility's summer weather-adjusted peak demand in the previous
9 calendar year, but not less than the amount of energy efficiency to be acquired for
10 the most recent preceding year.
- 11 • Each utility must administer energy efficiency programs to effectively and
12 efficiently achieve its energy efficiency goals.
- 13 • In order for each utility to achieve these higher goals, 16 TAC § 25.181(f) allows
14 a utility to establish an EECRF.
- 15 • A utility is required to adjust its EECRF to timely recover forecasted annual
16 energy efficiency program costs in excess of the costs recovered through base
17 rates.
- 18 • 16 TAC § 25.181(h) allows a utility exceeding the minimum goal to earn a
19 performance bonus.
- 20 • A utility may use up to 15% of its total program costs for administration of its
21 energy efficiency programs.
- 22 • A utility may use up to 10% of total program costs for the previous program year
23 to perform necessary energy efficiency research and development (R&D) to foster
24 continuous improvement and innovation in the application of energy efficiency
25 technology, program design and implementation.
- 26 • The cumulative cost of administration and R&D cannot exceed 20% of a utility's
27 total program costs.
- 28 • 16 TAC § 25.181(w) allows a distribution for-profit customer who is engaged in
29 an industrial process that qualifies for a tax exemption under Tax Code §151.317
30 to submit a notice identifying itself as an industrial customer with the result that it
31 cannot be charged with any of the costs associated with the EECRF and cannot
32 participate in any of the energy efficiency programs for three years.

1 Q. HOW DOES SWEPCO IMPLEMENT THESE REQUIREMENTS?

2 A. SWEPCO offers cost-effective energy efficiency programs to third-party EESPs as
3 project sponsors who in turn market their services to end-use customers. In order to
4 do so, SWEPCO develops and administers programs that offer incentives to
5 encourage these EESPs to participate as project sponsors of energy efficiency
6 measures. The project sponsors supply and install the measures at homes or
7 businesses that produce the energy efficiency savings that SWEPCO needs to satisfy
8 its energy efficiency objectives. The Commission's energy efficiency rule allows
9 commercial customers with a load of 50 kilowatts (kW) or greater to act as project
10 sponsors of energy efficiency measures they install for themselves. Energy efficiency
11 savings may be in the form of reduction in peak demand (kilowatts or kW), energy
12 usage (kilowatt-hours or kWh), or both. Incentives are paid to the project sponsors
13 for peak demand reduction and energy savings resulting from the energy efficiency
14 measures installed. The energy efficiency objectives and goals are established
15 annually, so that each year SWEPCO must procure the necessary demand reduction
16 and energy savings from participating project sponsors to meet SWEPCO's objectives
17 for that respective year.

18 Q. PLEASE DEFINE THE TERM STANDARD OFFER PROGRAM OR SOP.

19 A. 16 TAC § 25.181(c)(56) defines an SOP as a program pursuant to which a utility
20 administers standard offer contracts between the utility and EESPs. The Commission
21 further addresses the definition of a standard offer contract in 16 TAC
22 § 25.181(c)(55) as the contract between the EESP and the utility that specifies the
23 standard payments based upon the amount of energy and peak demand savings

1 achieved through energy efficiency measures, measurement and verification (M&V)
2 protocols, and other terms and conditions that are standard.

3 Q. PLEASE DEFINE THE TERM MARKET TRANSFORMATION PROGRAM OR
4 MTP.

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

8 B. Annual Demand Reduction Goal

9 Q. PLEASE DESCRIBE HOW A UTILITY'S DEMAND REDUCTION GOAL IS
10 CALCULATED UNDER 16 TAC § 25.181.

11 A. 16 TAC § 25.181(e)(1)(A) determines that the demand reduction goal be calculated
12 based on a "rolling average" of the most recent five years' load growth preceding the
13 year in which the goal is to be achieved. Load growth is based on the growth in
14 residential and commercial retail load in SWEPCO's service area measured at the
15 annual system peak. Each year's historical demand is adjusted for weather
16 fluctuations, using weather data for the most recent ten years. The average growth
17 rate is calculated based on the actual historical peak demand for the previous five
18 years. SWEPCO's demand reduction goal is then calculated by applying the given
19 percentage demand reduction goal to the calculated average growth in demand.

20 Q. WHAT IS SWEPCO'S DEMAND REDUCTION GOAL BASED ON THE 30% OF
21 THE ROLLING FIVE-YEAR AVERAGE?

22 A. The demand reduction goal based on the 30% rolling average of the load growth
23 during years 2012 to 2016 is -2.5 megawatt (MW).

1 Q. DOES THE ENERGY EFFICIENCY RULE HAVE OTHER CRITERIA FOR
2 CALCULATING A UTILITY'S DEMAND REDUCTION GOAL?

3 A. Yes, 16 TAC § 25.181(e)(1)(C) determines that when the demand reduction goal to
4 be acquired by a utility is equivalent to at least four-tenths of one percent of its
5 summer weather-adjusted peak demand for combined residential and commercial
6 customers for the previous program year, the four-tenths of one percent of its summer
7 weather-adjusted peak demand calculation should be used.

8 Q. HAS SWEPCO CALCULATED WHAT ITS DEMAND REDUCTION GOAL
9 WOULD BE AT FOUR-TENTHS OF ONE PERCENT?

10 A. Yes, it is 4.93 MW.

11 Q. HAS SWEPCO REACHED THE FOUR-TENTHS OF ONE PERCENT TRIGGER?

12 A. No, SWEPCO has not.

13 Q. PLEASE DESCRIBE THE IDENTIFICATION NOTICE REFERENCED IN 16
14 TAC § 25.181.

15 A. 16 TAC § 25.181(w) 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 ESID number(s) identified under this section are not to be
19 charged for any costs associated with and will not be able to participate in energy
20 efficiency programs for three years.\

21 Q. COULD THE IDENTIFICATION NOTICE REQUIREMENT AFFECT THE
22 UTILITY'S GOAL?

1 A. Yes, 16 TAC § 25.181(w) requires that the utility’s demand reduction goal be
2 adjusted to remove any load lost as a result of the identification notices.

3 Q. DID SWEPCO RECEIVE ANY SUCH NOTICES TO BE EFFECTIVE FOR 2018?

4 A. Yes, twenty four customers submitted identification notices for 718 metered accounts
5 for a total of 122 MW of peak demand.

6 Q. WHAT IS SWEPCO’S DEMAND REDUCTION GOAL TO BE ACHIEVED IN
7 2018?

8 A. A requirement in 16 TAC § 25.181(e)(1)(E) states that a utility’s demand reduction
9 goal in any year shall not be lower than its goal for the prior year. Therefore,
10 SWEPCO’s demand reduction goal for 2018 is 5.60 MW. The 2018 demand
11 reduction goal is set forth in Schedule N, which I sponsor. However, SWEPCO
12 projects it will achieve 11.66 MW of demand reduction from the programs it will
13 implement in 2018. As Mr. Pratt explains in his testimony, SWEPCO interprets the
14 intent of PURA §39.905 and 16 TAC § 25.181 to encourage utilities to achieve as
15 much cost-effective energy efficiency as can reasonably be achieved under the limits
16 set forth in the statute and rule. In keeping with this interpretation, SWEPCO has
17 established a projected demand reduction objective of 11.66 MW for 2018.

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

20 A. Yes, calculation of the demand reduction goal used the line loss numbers referenced
21 in the report “AEP – SOUTHWESTERN ELECTRIC POWER COMPANY, 2012
22 Analysis of System Losses”. The report was approved for use in Docket No. 40443,

1 Application of Southwestern Electric Power Company for Authority to Change Rates
2 and Reconcile Fuel Costs.

3 C. Annual Energy Savings Goal

4 Q. HOW IS SWEPCO'S ENERGY SAVINGS GOAL CALCULATED UNDER 16
5 TAC § 25.181?

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

8 Q. WHAT IS SWEPCO'S ENERGY SAVINGS GOAL TO BE ACHIEVED IN 2018?

9 A. The energy savings goal for SWEPCO to achieve in 2018 is 9,811 megawatt-hours
10 (MWh) in energy savings. The 2018 energy savings goal is set forth in Schedule N.
11 However, SWEPCO projects to achieve as much as 16,375 MWh of energy savings
12 from the programs it will implement in 2018. As I mentioned above and as Mr. Pratt
13 explains in his testimony, SWEPCO interprets PURA §39.905 and 16 TAC § 25.181
14 as encouraging utilities to achieve as much cost-effective energy efficiency as can
15 reasonably be achieved under the limits set forth in the statute and rule. In keeping
16 with this understanding, SWEPCO has projected its energy savings objective of
17 16,375 MWh for 2018.

18 D. Process to Achieve Savings

19 Q. WILL SWEPCO OFFER PROGRAMS TO ACHIEVE THESE SAVINGS?

20 A. Yes, SWEPCO will offer eight programs in 2018 to achieve these savings. I discuss
21 the programs that SWEPCO will offer in Section V of my testimony. SWEPCO's
22 energy efficiency program portfolio is designed to achieve both its demand reduction
23 and energy savings goals for 2018.

1 Q. WILL ALL RESIDENTIAL AND COMMERCIAL CUSTOMERS HAVE ACCESS
2 TO ENERGY EFFICIENCY PROGRAMS OFFERED BY SWEPCO TO ACHIEVE
3 THESE SAVINGS?

4 A. Yes, all customers in the residential and commercial customer segments will have
5 access to energy efficiency programs offered by SWEPCO with the exception of
6 customers filing industrial identification notices under 16 TAC § 25.181(w) and
7 lighting customers for whom no energy efficiency programs are offered.

8

9 IV. ENERGY EFFICIENCY PROGRAM COSTS

10 A. 2016

11 Q. WHAT COSTS DID SWEPCO INCUR TO IMPLEMENT ITS 2016 ENERGY
12 EFFICIENCY PROGRAMS?

13 A. The costs incurred by SWEPCO to implement its 2016 energy efficiency programs
14 and EM&V costs totaled \$4,156,523 as set forth in Schedule B.

15 Q. WAS THE AMOUNT ACTUALLY INCURRED FOR 2016 ENERGY
16 EFFICIENCY COSTS MORE OR LESS THAN THE AMOUNT COLLECTED
17 PURSUANT TO THE 2015 EECRF ORDER IN DOCKET NO. 44612?

18 A. In 2016, SWEPCO collected \$135,805 less than the actual energy efficiency program
19 costs for 2016.

20 Q. DID SWEPCO SPEND MORE OR LESS THAN IT BUDGETED ON ITS 2016
21 ENERGY EFFICIENCY PROGRAMS?

1 A. SWEPCO incurred a total of \$4,156,523 in energy efficiency and EM&V costs for its
2 2016 programs, which is \$85,745 less than its 2016 budget of \$4,242,268 for energy
3 efficiency.

4 Q. WHY WERE SWEPCO'S ACTUAL ENERGY EFFICIENCY COSTS LESS THAN
5 THE ENERGY EFFICIENCY AMOUNT BUDGETED FOR 2016?

6 A. Several programs did not use their entire projected budget for 2016. Load
7 Management SOP, the Schools COnserving REsources (SCORE) program, the
8 Residential SOP and the Hard-to-Reach programs were under budget due to lower
9 than expected participation by both contractors and customers.

10 Q. WERE SWEPCO'S 2016 PROGRAM PORTFOLIO COSTS LESS THAN OR
11 EQUAL TO THE BENEFITS OF THE PROGRAMS?

12 A. SWEPCO's program portfolio costs were less than the total net benefits that resulted
13 from the savings produced by the 2016 programs, as shown on Schedule P.

14 Q. DID SWEPCO HAVE ANY EXPENSES ASSOCIATED WITH R&D IN 2016?

15 A. Yes, SWEPCO expended \$174,823 for R&D in 2016, as detailed in Schedule B.
16 R&D costs included:

- 17 • Refinements and enhancements were made in the data collection and management
18 systems for existing programs in response to recommendations by the Evaluation,
19 Measurement and Verification team.
- 20 • Participated with the Electric Utility Marketing Managers of Texas organization
21 in activities that included providing technical support for updates to the Technical
22 Resource Manual.
- 23 • Energy efficiency coordinators participated in energy efficiency-related
24 educational opportunities to develop additional knowledge regarding program
25 ideas and how to best implement SWEPCO's energy efficiency programs.

1 reviews the programs and activities that have taken place to plan for the upcoming
2 year. SWEPCO has selected a program portfolio that will maximize its energy
3 efficiency results in 2018 and comply with PUC rules.

4 Q. HOW DID SWEPCO DETERMINE ITS 2018 ENERGY EFFICIENCY
5 OBJECTIVES?

6 A. SWEPCO first determined to achieve greater cost-effective energy efficiency savings
7 than required by the Commission's rule. SWEPCO then allocated portions of its
8 2018 budget among customer classes using criteria such as customer counts,
9 historical budget allocation, and previous programs. SWEPCO next estimated
10 projected impacts from each program based on historical results and previous years'
11 experience. The hard-to-reach program was designed to achieve savings of no less
12 than 5.0% of the total demand reduction goal. The projected impacts from all
13 programs within each customer class were rolled together to formulate customer class
14 projected savings. Finally, all customer class savings were added together to
15 comprise SWEPCO's 2018 energy efficiency objectives.

16 Q. WHAT ARE THE TYPES OF ADMINISTRATIVE COSTS ASSOCIATED WITH
17 THE ENERGY EFFICIENCY PROGRAMS INCLUDED IN THE BUDGET FOR
18 THE 2018 PROGRAMS?

19 A. Administrative costs are incurred for various administrative tasks that include
20 participating in workshop activities to explain the programs to EESPs, conducting
21 outreach for these programs, reviewing M&V plans for projects that do not utilize
22 deemed savings measures, reviewing project applications, awarding contracts,
23 performing site inspections of installed measures, making incentive payments, and

1 corresponding with project sponsors on an as-needed basis. Costs are also associated
2 with administrative duties that include development, review, and selection of new or
3 revised programs that may be considered for successful program implementation.
4 Costs associated with energy efficiency-related work activities that include regulatory
5 reports, such as the filing of this EECRF tariff reconciliation and the Energy
6 Efficiency Plan and Report (EEPR). Since SWEPCO is a fully-regulated utility, costs
7 also include occasional interface with customers.

8 Q. WHAT DOES SWEPCO PROJECT FOR R&D COSTS FOR 2018?

9 A. SWEPCO has included \$125,000 for R&D costs. This will include any database and
10 informational tracking expenses and costs involved with improving current programs
11 and planning for future programs.

12 Q. DID SWEPCO INCLUDE ANY PROJECTED EVALUATION, MEASUREMENT
13 AND VERIFICATION (EM&V) EXPENSES IN ITS 2018 ENERGY EFFICIENCY
14 COSTS?

15 A. Yes, for program year 2018, SWEPCO is including \$125,473 of EM&V costs, which
16 is SWEPCO's projected share of the statewide EM&V costs for the evaluation of PY
17 2016 and PY 2017.

18

19 V. ENERGY EFFICIENCY PROGRAMS

20 A. 2016 Programs

21 Q. WHAT PROGRAMS DID SWEPCO OFFER IN 2016 TO ACHIEVE ITS ENERGY
22 EFFICIENCY OBJECTIVES?

23 A. SWEPCO offered the following programs in 2016:

- 1 • Commercial Solutions MTP
- 2 • Commercial SOP
- 3 • Hard-to-Reach SOP
- 4 • Load Management SOP
- 5 • Residential SOP
- 6 • SCORESM MTP
- 7 • Open MTP

8 Q. PLEASE DESCRIBE THE COMMERCIAL SOLUTIONS MTP.

9 A. The Commercial Solutions MTP identifies a variety of commercial customers having
10 a high likelihood of needing energy efficiency improvements within their facilities.
11 These customers may have delayed making such improvements for a number of
12 reasons, including an inability to identify appropriate actions to take or a lack of
13 understanding of energy efficiency project funding. The Commercial Solutions MTP
14 provides education and information to such customers, and provides monetary
15 incentives to encourage them to take action to improve their facilities' energy
16 efficiency.

17 Q. PLEASE DESCRIBE THE COMMERCIAL SOP.

18 A. The Commercial SOP provides incentives for the retrofit installation of a wide range
19 of measures that reduce customer energy costs and peak demand and/or save energy
20 in non-residential facilities. Customer sites include hotels, schools, manufacturing
21 facilities, restaurants, and larger grocery stores. These customers install such eligible
22 measures as lighting retrofits, new or replacement chiller systems, high efficiency
23 pumping systems, and other similar technologies. Incentives are paid to project

1 sponsors on the basis of deemed savings. If deemed savings have not been
2 established for a particular qualifying energy efficiency measure, then incentives are
3 paid on the basis of verified peak demand and/or energy savings using the
4 International Performance Measurement and Verification Protocol.

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

6 A. The Hard-to-Reach SOP targets a specific subset of residential customers defined by
7 16 TAC § 25.181(c)(27). The hard-to-reach customer has a total household income
8 that is at or below 200% of federal poverty guidelines. The program provides
9 incentives for the installation of a wide range of measures that reduce residential
10 customer energy costs and peak demand. It is designed to provide energy efficiency
11 improvements to individual households at no or very low cost. Incentives are paid to
12 project sponsors for eligible measures installed in retrofit applications on the basis of
13 deemed savings. Eligible measures include replacement air conditioners, wall and
14 ceiling insulation, infiltration measures, and air distribution duct improvements.

15 Q. PLEASE DESCRIBE THE LOAD MANAGEMENT SOP.

16 A. The Load Management SOP targets commercial customers that have a minimum
17 demand of 500 kW or more. Incentives are paid to project sponsors that can identify
18 interruptible load and provide curtailment of this electric load on one-hour-ahead
19 notice for a period of 1-4 hours duration. These payments are based on the delivery
20 of metered peak demand reduction, as called for by SWEPCO.

21 Q. PLEASE DESCRIBE THE RESIDENTIAL SOP.

22 A. The Residential SOP provides incentives for the installation of a wide range of
23 measures that reduce residential customer energy costs and peak demand. It also

1 encourages private sector delivery of energy efficiency products and services.
2 Incentives are paid to project sponsors for eligible measures installed in retrofit
3 applications on the basis of deemed savings. Eligible measures include replacement
4 air conditioners, wall and ceiling insulation, air infiltration, and air distribution duct
5 improvements.

6 Q. PLEASE DESCRIBE THE SCORESM MTP.

7 A. The Schools COnserving REsources (SCORE) MTP provides energy efficiency and
8 demand reduction solutions for public schools. This program identifies actual
9 demand and energy savings opportunities, participant facility operating
10 characteristics, program design, long-range energy efficiency planning and overall
11 measure and program acceptance by the targeted schools. Incentives are paid to
12 public school participants served by SWEPCO for certain qualifying measures
13 installed in new or retrofit applications that result in verifiable demand and energy
14 savings.

15 Q. PLEASE DESCRIBE THE OPEN MTP.

16 A. The Open MTP is designed to overcome barriers unique to small commercial
17 customers that prevent them from participating in energy efficiency programs proven
18 to be successful for larger business owners. The program offers a “turnkey” approach
19 in which marketing, energy education, site-specific energy analysis, financial
20 incentives, equipment procurement, and installation is provided.

21 B. 2016 Achievements

22 Q. DID SWEPCO ACHIEVE ITS REQUIRED DEMAND REDUCTION GOAL IN
23 2016?

1 A. Yes, SWEPCO exceeded its required demand reduction of 5.6 MW with an
2 achievement of 11.94 MW of peak demand reduction from its 2016 energy efficiency
3 programs.

4 Q. DID SWEPCO ACHIEVE ITS REQUIRED ENERGY REDUCTION GOAL IN
5 2016?

6 A. Yes, SWEPCO exceeded its required energy reduction goal of 9,811 MWh by
7 achieving 20,648 MWh of energy savings from its 2016 energy efficiency programs.

8 Q. PLEASE DESCRIBE THE AMOUNT OF DEMAND REDUCTION THAT
9 SWEPCO ACHIEVED FROM ITS HARD-TO-REACH PROGRAM IN 2016.

10 A. SWEPCO achieved 1,217 kW in demand reduction from its hard-to-reach customers.

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

13 A. Yes, SWEPCO achieved 21.7% of its demand reduction goal from its hard-to-reach
14 programs in 2016.

15 Q. DOES SWEPCO REQUEST A PERFORMANCE BONUS FOR HAVING
16 ACHIEVED A DEMAND REDUCTION THAT EXCEEDED ITS GOAL FOR
17 2016?

18 A. Yes, it does. Mr. Pratt discusses the \$1,188,390 performance bonus requested by
19 SWEPCO for its 2016 results.

20 C. 2018 Programs

21 Q. WHAT PROGRAMS WILL SWEPCO OFFER IN 2018 TO ACHIEVE ITS
22 ENERGY EFFICIENCY OBJECTIVES?

23 A. SWEPCO will offer the following programs in 2018:

- 1 • Commercial Solutions MTP
- 2 • Commercial SOP
- 3 • Hard-to-Reach SOP
- 4 • Load Management SOP
- 5 • On-Line Home Energy Checkup
- 6 • Open MTP
- 7 • Residential Pilot
- 8 • Residential SOP
- 9 • SCORE MTP

10 These programs are described in Schedule R.

11 Q. WILL SWEPCO BE OFFERING ANY NEW PROGRAMS IN 2018?

12 A. Yes. For 2018, SWEPCO will add a residential LED point of purchase program,
13 which is referenced above as a Residential Pilot.

14 Q. WHAT ARE THE PROJECTED COSTS FOR EACH PROGRAM IN 2018?

15 A. Schedule A details the projected costs for each of SWEPCO's programs in 2018.

16 Q. WHAT ARE THE PROJECTED SAVINGS FOR EACH PROGRAM IN 2018?

17 A. Schedule O contains the projected savings for each program in 2018.

18

19

VI. CONCLUSION

20 Q. IS THE EXPENDED AMOUNT FOR 2016 CONSISTENT WITH THE
21 APPLICABLE COMMISSION RULE?

1 A. Yes, it is. The costs of \$4,156,523 incurred in connection with the 2016 energy
2 efficiency programs, including EM&V costs were reasonable and necessary to
3 provide energy efficiency services to residential and commercial customers.

4 Q. IS THE PROJECTED AMOUNT FOR 2018 CONSISTENT WITH THE
5 APPLICABLE COMMISSION RULE?

6 A. SWEPCO's calculation of its goals and projected energy efficiency costs to be
7 incurred in 2018 and included in the EECRF comply with the Commission's rules.
8 The minimum goals for SWEPCO to achieve in 2018 are a demand reduction of 5.6
9 MW and energy savings of 9,811 MWh. These energy efficiency goals are calculated
10 in accordance with the Commission's rules. As discussed above, PURA §39.905 and
11 the Commission's rule encourage utilities to achieve as much energy efficiency
12 savings as reasonably possible within the limitations in the statute and the rule.
13 Therefore, SWEPCO has established energy efficiency objectives for 2018 that
14 exceed the minimum goals contained in the rule. SWEPCO projects that \$4,163,987
15 is a reasonable estimate of the costs necessary to provide an adequate portfolio of
16 energy efficiency programs to meet SWEPCO's demand reduction objectives for
17 2018 in furtherance of PURA §39.905 and 16 TAC § 25.181.

18 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

19 A. Yes, it does.

PUBLIC UTILITY COMMISSION OF TEXAS

APPLICATION OF
SOUTHWESTERN ELECTRIC POWER COMPANY
TO ADJUST
ENERGY EFFICIENCY COST RECOVERY FACTOR AND RELATED RELIEF

DIRECT TESTIMONY OF
SHAWNNA G. JONES
FOR
SOUTHWESTERN ELECTRIC POWER COMPANY

MAY 1, 2017

TESTIMONY INDEX

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1 I. INTRODUCTION

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

3 A. My name is Shawna Jones. I am employed as a Staff Regulatory Consultant in the
4 Regulatory Services Department of American Electric Power Service Corporation
5 (AEPSC). AEPSC is a subsidiary of American Electric Power Company, Inc. (AEP)
6 that provides corporate support services to the operating subsidiaries of AEP,
7 including Southwestern Electric Power Company (SWEPCO). My business address
8 is 212 East Sixth Street, Tulsa, Oklahoma 74119-1295.

9 Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL
10 BACKGROUND.

11 A. I received a B.A. in Economics in 1988 from the University of Mississippi and a
12 M.A. in Economics in 2002 from the University of Oklahoma. I also have an A.S. in
13 Mathematics from Tulsa Community College. In addition to graduate courses in
14 economics that include Advanced Public Utility Regulation from the University of
15 Oklahoma, I have attended workshops sponsored by New Mexico State University's
16 Center for Public Utilities that include the Basics of Regulation and Pricing
17 Workshops and Edison Electric Institute's (EEI's) Electric Rate Advanced Course.

18 In 1989, I began employment with Public Service Company of Oklahoma as a
19 Customer Service Representative. In 1996, I accepted the position of Pricing and
20 Costing Analyst with Central and South West Services, Inc. In 2000, I accepted the
21 position of Regulatory Consultant with AEPSC. Since 2000, I have progressed
22 through levels of regulatory consultant and in April 2015, I was promoted to Staff
23 Regulatory Consultant.

1 Q. HAVE YOU PREVIOUSLY SPONSORED TESTIMONY BEFORE THIS
2 COMMISSION?

3 A. Yes, I have previously sponsored testimony before the Public Utility Commission of
4 Texas (PUC or Commission) in SWEPCO's 2016 EECRF filing in Docket No. 45824
5 and the following dockets: 46449, 46000, 44612, 45712, 43675, 42563, 42447,
6 41982, 41533, 41439, 40898, 40444, 40357, 39869, 39448, 38853, 38315, 37364,
7 37057, 37604, 35105, 36326, 34961, 33440, 31960, 30360, 28822, and 26870. I have
8 also sponsored testimony before the Arkansas Public Service Commission, the
9 Oklahoma Corporation Commission and the Louisiana Public Service Commission.

10

11

II. PURPOSE OF TESTIMONY

12 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

13 A. 16 Tex. Admin. Code § 25.181(f) (TAC) provides for a cost recovery factor to allow
14 a utility to recover its reasonable expenditures on energy efficiency programs as well
15 as a performance bonus for exceeding its minimum goals and recovery of Evaluation,
16 Measurement and Verification (EM&V) costs. The purpose of my testimony is to:
17 (1) support the calculation of the annual redetermination of SWEPCO's Energy
18 Efficiency Cost Recovery Factor (EECRF) rates, and (2) support the revised tariff
19 (Rider EECRF) accompanying this filing to be effective January 1, 2018.

20 Q. WHAT SCHEDULES IN THIS FILING DO YOU SPONSOR?

21 A. I sponsor Schedule E (Calculation of the Revised EECRF Factors), Schedule F
22 (Updated Energy Efficiency Cost Recovery Rider), Schedule H (Development of
23 Forecasted Billing Units) and Schedule I (Amount of Energy Efficiency Costs

1 Recovered Through Base Rates). The 2018 factors are calculated by dividing energy
2 efficiency costs for each EECRF rate class by the forecasted 2018 billing units for
3 each class. Energy efficiency costs include projected 2018 energy efficiency program
4 costs, a true-up adjustment for the under-recovery of 2016 program costs, and the
5 2016 performance bonus.

6 Schedule H includes the development of the forecasted kilowatt-hour (kWh)
7 billing units for January through December 2018, the effective period for the revised
8 EECRF factors. The 2018 kWh forecast is assigned to EECRF rate classes based on
9 billed kWh from January through December 2016.

10 I also sponsor Schedule G, which includes the calculation of the 2018 cost
11 caps and Schedule Q includes line losses used in the EECRF calculation. I cosponsor
12 page 2 of Schedules A and B and all of Schedule C (2016 Under Recovery) with
13 witness Paul E. Pratt. In addition, I cosponsor page 2 of Schedule A and B with
14 witness Jeffery D. Thigpen.

15

16 III. ADJUSTED ENERGY EFFICIENCY COST
17 RECOVERY REVENUE REQUIREMENT

18 Q. WHY IS SWEPCO REQUESTING APPROVAL OF REVISED EECRF FACTORS?

19 A. 16 TAC § 25.181(f)(8) requires a bundled utility with an EECRF to apply no later
20 than May 1 of each year to adjust its EECRF in order to reflect changes in costs and
21 performance bonuses and minimize any over- or under-collection in prior years'
22 program costs. SWEPCO is currently billing its customers the 2017 EECRF factors
23 approved in Docket No. 45824. SWEPCO is requesting that the EECRF factors be

1 revised for 2018 to include projected 2018 energy efficiency program costs to be
2 recovered in 2018, an under-recovery of 2016 EECRF revenue compared to actual
3 2016 costs, projected EM&V costs for the evaluation of 2016 and 2017, and
4 SWEPCO's 2016 performance bonus for demand and energy reduction that exceeded
5 the 2016 minimum goal. The updated Rider EECRF with revised factors is proposed
6 to be effective January 1, 2018.

7 Q. DO SWEPCO'S CURRENT BASE RATES INCLUDE ANY AMOUNT THAT IS
8 EXPRESSLY SPECIFIED AS ENERGY EFFICIENCY COSTS?

9 A. No. In establishing SWEPCO's base rates, the Commission orders in Docket No.
10 40443 did not expressly include energy efficiency program costs to be recovered in
11 base rates.

12 Q. WHAT IS THE REVENUE REQUIREMENT SWEPCO IS REQUESTING
13 THROUGH THE REVISED EECRF?

14 A. SWEPCO is requesting \$5,613,655 to be recovered in 2018 through its revised
15 EECRF Rider pursuant to 16 TAC § 25.181(f)(1) and supported by SWEPCO
16 witnesses Pratt and Thigpen. The \$5,613,655 includes \$4,163,987 in projected 2018
17 energy efficiency program costs, a \$1,188,390 performance bonus for 2016, \$125,473
18 in projected EM&V costs (\$62,733 for the evaluation of PY 2016 and \$62,740 for the
19 evaluation of PY 2017), plus an under-recovery of \$135,805 of EECRF revenues
20 compared to actual costs in 2016.

1 Q. HOW ARE 2018 PROGRAM COSTS ASSIGNED TO EACH EECRF RATE
2 CLASS?

3 A. 2018 program costs are assigned to EECRF rate classes on a program-by-program
4 basis following the methodology from SWEPCO's 2017 EECRF approved in Docket
5 No. 45824. The EECRF rate classes in the EECRF tariff are: Residential, General
6 Service, Lighting and Power, Municipal Service, Municipal Pumping, Cotton Gin,
7 Large Lighting and Power < 69 kV, Electric Furnace/Metal Melting < 69 kV, Oil
8 Field Large Industrial Power, and Lighting. When a program is directly associated
9 with a specific EECRF rate class, the cost of the program is directly assigned to that
10 class, otherwise an allocation is made to eligible rate classes.

11 Q. HOW ARE COSTS ALLOCATED THAT ARE NOT SPECIFICALLY ASSIGNED
12 TO EECRF RATE CLASSES?

13 A. If a program is available to more than one EECRF rate class, an allocator is used to
14 distribute costs among applicable rate classes. Residential program costs are directly
15 assigned to the residential rate class; however, 2018 program costs for the non-
16 residential classes are allocated to all eligible rate classes using the 2018 adjusted
17 production demand allocation factor. Certain research and development (R&D) costs
18 not directly attributable to specific rate classes and projected EM&V costs are
19 allocated to rate classes using the same allocator.

1 Q. PLEASE DESCRIBE THE 2018 ADJUSTED PRODUCTION DEMAND
2 ALLOCATION FACTOR USED TO ALLOCATE COSTS THAT ARE NOT
3 DIRECTLY ASSIGNED TO RATE CLASSES.

4 A. The production demand allocator from SWEPCO's most recent rate case in Docket
5 No. 40443 is adjusted using 2018 projected kWh and also adjusted to remove
6 transmission customers at or above 69 kV along with other exempt distribution
7 industrial customers and lighting customers, all of which are not eligible for energy
8 efficiency programs at this time. This adjustment is shown in the Schedule E
9 workpapers.

10 Q. HOW IS THE 2016 TRUE-UP DETERMINED?

11 A. The true-up in Schedule C includes 2016 EECRF revenues by rate class compared to
12 actual 2016 program costs including 2016 actual EM&V costs, the 2014 bonus and
13 2014 over-recovery by rate class. Program costs are directly assigned to rate classes
14 based on the participation of customers in a rate class in a given program. A portion
15 of 2016 administrative and R&D costs as well as 2016 EM&V is allocated to rate
16 classes using the 2016 program cost allocator. The 2016 true-up shows an overall
17 under-collection of \$135,805.

18 Q. HOW IS THE 2016 PERFORMANCE BONUS ALLOCATED TO EECRF RATE
19 CLASSES?

20 A. The 2016 performance bonus of \$1,188,390 in Schedule D and included in Schedule
21 E is allocated to EECRF rate classes using the 2016 program cost allocator, which
22 complies with 16 TAC § 25.181(h)(6).

1 Q. ARE SOME RATE CLASSES EXCLUDED FROM PAYING EECRF CHARGES?

2 A. Yes, customers taking service at 69 kV and above are not eligible for participation in
3 energy efficiency programs in 2018; therefore, they are not assigned or allocated
4 2018 projected program costs. Exempt distribution industrial customers, as discussed
5 in the testimony of SWEPCO witnesses Thigpen and Pratt, are excluded from paying
6 EECRF charges. The lighting class has not been assigned or allocated any 2018 costs
7 since there are no programs currently available to lighting customers.

8

9 IV. DEVELOPMENT OF REVISED ENERGY
10 EFFICIENCY COST RECOVERY FACTORS

11 Q. HOW ARE THE EECRF FACTORS DETERMINED?

12 A. Once the EECRF class revenue requirement is developed and assigned to rate classes,
13 the EECRF factors are calculated by dividing the revenue requirement for each
14 EECRF rate class by the 2018 projected billing units for each rate class. The EECRF
15 factors will be applied to each month's billed kWh of each retail customer eligible to
16 participate in energy efficiency programs. The 2018 EECRF factors are shown in
17 Schedule E and the revised tariff, Rider EECRF, is contained in Schedule F.

18 Q. PLEASE DESCRIBE THE 2018 FORECASTED BILLING UNITS USED IN THE
19 DEVELOPMENT OF THE EECRF RATES.

20 A. As part of the normal course of business, AEP projects monthly kWh sales and
21 demand growth factors for each of its operating companies, including SWEPCO. The
22 AEPSC Economic Forecasting Department provided monthly sales forecasts for the
23 projected energy efficiency budget year of January through December 2018. Because

1 the monthly kWh sales are projected on a total retail and revenue class basis, rate
 2 class forecasted kWh sales had to be established by first determining each rate class's
 3 percentage of total retail sales based on historical kWh sales data for the twelve
 4 months ending December 2016. 2018 forecasted kWh sales by rate class were then
 5 determined by multiplying total retail 2018 forecasted kWh sales by each rate class's
 6 percentage of 2016 total retail kWh sales. Adjusted annual class projected kWh sales
 7 were used to develop the adjusted 2018 EECRF factors. For allocation purposes, the
 8 adjusted forecast excludes kWh associated with industrial customers exempt from
 9 EECRF charges and lighting customers to which no programs apply. Schedule H
 10 determines the projected kWh sales by class.

11 Q. WHAT ARE THE REVISED 2018 EECRF FACTORS?

12 A. The revised 2018 EECRF factors by rate class are:

EECRF Rate Class	kWh Factor
Residential	\$.001294
General Service	\$.000378
Lighting and Power	\$.000936
Municipal Pumping	\$.000225
Municipal Service	\$.002627
Cotton Gin	\$.000025
Large Lighting and Power < 69 kV	\$.000000
Electric Furnace/Metal Melting < 69 kV	\$(.000561)
Oil Field Large Industrial Power	\$(.000292)
Lighting	\$.000000

13 Q. HAVE ANY EECRF RATE CLASSES BEEN COMBINED INTO A SINGLE
 14 RATE CLASS IN THE RATE CALCULATION IN SCHEDULE E?

15 A. Yes. The Electric Furnace Service (EFS) and Metal Melting Service < 69 kV (MMS)
 16 rate classes have been combined into a single rate class. One customer on the EFS

1 tariff moved to MMS in 2014, leaving no customers on EFS since 2015. The revenue
2 requirements for EFS and MMS are combined in the rate calculation in Schedule E
3 which results in one EECRF rate for the combined EFS/MMS rate class for 2018. No
4 other rate classes are impacted. The combined rate class is reflected in the revised
5 rider in Schedule F. The same combined rate class was approved in the 2016 EECRF
6 filing in Docket No. 45824.

7 Q. DOES THE RULE PROVIDE FOR COMBINING RATE CLASSES?

8 A. Yes. 16 TAC § 25.181(f)(2) allows a utility to request a good cause exception to
9 combine one or more rate classes, each containing fewer than 20 customers with a
10 similar rate class that receives services under the same energy efficiency programs.

11 Q. IS SWEPCO REQUESTING A GOOD CAUSE EXCEPTION FOR ITS PROPOSED
12 COMBINATION OF THE EFS AND MMS RATE CLASSES?

13 A. Yes, as noted in the Application. Because there are no customers currently taking
14 service under the EFS tariff and nine customers currently taking service under the
15 MMS tariff, both rate classes are below the 20 customer criteria for combining rate
16 classes contained in the rule. They are similar rate classes because both tariffs require
17 customers to operate electric furnaces or metal melting furnaces with demands of not
18 less than 500 kW. However, the EFS tariff provides for time-of-use pricing
19 compared to the MMS tariff which offers standard pricing which could lead to
20 possible customer movement between the two tariffs. Although both rate classes
21 would be eligible for the same energy efficiency programs, the EFS class has not
22 been allocated energy efficiency program costs for 2018 because there are no

1 customers. For all these reasons, SWEPCO requests that the EFS and MMS rate
2 classes be combined into a single class as reflected in the revised rider in Schedule F.

3 Q. HAVE ANY OF THE PROPOSED 2018 EECRF RATES BEEN SET TO ZERO IN
4 THE RATE CALCULATION IN SCHEDULE E?

5 A. Yes. The EECRF rates for the Lighting class and the Large Lighting and Power < 69
6 kV rate classes have each been set to zero. The Lighting rate class has not been
7 allocated energy efficiency costs in several years due to no energy efficiency
8 programs for that class. Since the rate calculation for that class contains only a small
9 true-up amount because of a kWh forecast variance, the EECRF rate for the Lighting
10 class has been set to zero for 2018. The Large Lighting and Power < 69 kV rate class
11 includes three customers that have each opted out of energy efficiency programs,
12 therefore that class has not been allocated energy efficiency program costs. Since the
13 rate calculation contains a relatively small true-up amount, the EECRF rate for the
14 Large Lighting and Power < 69 kV class has also been set to zero for 2018.

15 Q. WHAT ARE THE EECRF COST CAP RATES FOR 2018?

16 A. The 2018 residential cap is \$.001277 and commercial cap is \$.000799. The cost cap
17 calculation is included in Schedule G.

18 Q. HOW HAS SWEPCO TREATED EM&V COSTS WHEN DETERMINING
19 WHETHER EECRF FACTORS EXCEED THE LIMITATIONS DETAILED IN 16
20 TAC § 25.181(f)(7)?

21 A. SWEPCO has not included EM&V in its determination of the EECRF rate limitations
22 based on 16 TAC § 25.181(f)(7), which states that the EM&V shall not count against
23 the utility's cost caps.

1 Q. DO THE REVISED 2018 EECRF FACTORS LESS EM&V COSTS EXCEED THE
2 MAXIMUM PRICE PER KWH FOR RESIDENTIAL AND COMMERCIAL
3 CUSTOMERS SPECIFIED IN 16 TAC § 25.181(f)(7) AS AMENDED MARCH 30,
4 2017?

5 A. No, they do not. SWEPCO's revised residential factor is \$.001274 per kWh, which
6 does not exceed the residential maximum price of \$.001277 per kWh for 2018 as
7 calculated pursuant to 16 TAC § 25.181(f)(7). The maximum commercial rate per
8 kWh for 2018 is \$.000799 per kWh as calculated pursuant to 16 TAC § 25.181(f)(7).
9 The updated commercial class factor is \$.000798 per kWh, which does not exceed the
10 2018 cap for the commercial class.

11 Q. WERE ACTUAL 2016 PROGRAM COSTS BELOW THE 2016 COST CAPS?

12 A. Yes, as shown in Schedule G, the residential rate of spending in 2016 was \$.001209
13 per kWh, which is below the residential cap of \$.001266. The commercial rate of
14 spending in 2016 was \$.000701 per kWh, which is below the commercial cap of
15 \$.000791.

16 Q. HAVE YOU PROVIDED THE REVISED TARIFF REFLECTING UPDATED
17 EECRF FACTORS?

18 A. Yes. The proposed Rider EECRF shown in Schedule F includes the changes from the
19 current tariff. SWEPCO requests that the Commission approve an adjusted Rider
20 EECRF containing the proposed rate class kWh factors to be effective January 1,
21 2018.

1 V. CONCLUSION

2 Q. PLEASE SUMMARIZE YOUR TESTIMONY.

3 A. SWEPCO is requesting recovery of \$5,613,655 through its adjusted EECRF, which
4 includes projected 2018 energy efficiency program costs of \$4,163,987, an
5 adjustment for the under-recovery of \$135,805 in 2016 program costs, projected
6 EM&V costs of \$125,473 and SWEPCO's 2016 performance bonus of \$1,188,390.

7 The adjusted energy efficiency revenue requirement has been assigned to the
8 EECRF classes on a direct program-by-program assignment when possible;
9 otherwise, an appropriate allocation factor is used to allocate the costs. The direct
10 assignment and allocation of energy efficiency costs to SWEPCO's rate classes is
11 reasonable. Recovery of the revenue requirement is based on projected 2018 kWh
12 sales for all rate classes eligible to participate in energy efficiency programs.

13 Q. WHAT RELIEF IS SWEPCO REQUESTING IN THIS PROCEEDING?

14 A. SWEPCO is requesting that Rider EECRF contained in Schedule F be approved
15 effective January 1, 2018.

16 Q. HAVE THE REQUESTED EECRF FACTORS BEEN CALCULATED IN A
17 MANNER CONSISTENT WITH 16 TAC § 25.181 AND THE METHODOLOGY
18 FROM DOCKET NO. 45824?

19 A. Yes, they have.

20 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

21 A. Yes, it does.

**Southwestern Electric Power Company
Energy Efficiency Cost Recovery Factor**

SCHEDULE A

2018 Projected Energy Efficiency Costs

Customer Class and Program	2018				
	Incentives	Administrative Costs	R&D	EM&V	Total Budget
Commercial					
Commercial Solutions MTP	\$310,000	\$57,353			\$367,353
Commercial SOP	\$520,000	\$100,888			\$620,888
Load Management SOP	\$225,000	\$39,706			\$264,706
Open MTP	\$250,000	\$27,778			\$277,778
SCORE MTP	\$310,000	\$57,353			\$367,353
Residential					
Residential Pilot	\$300,000	\$40,909			\$340,909
On-Line Home Energy Checkup	\$55,000	\$9,706			\$64,706
Residential SOP	\$775,000	\$136,765			\$911,765
Hard-to-Reach					
Hard-to-Reach SOP	\$700,000	\$123,529			\$823,529
Research & Development (R&D)			\$125,000		\$125,000
Total Program Budget	\$3,445,000	\$593,987	\$125,000		\$4,163,987
Evaluation, Measurement & Verification (EM&V)					
	EM&V			\$125,473	\$125,473
Total Projected Energy Efficiency Costs (including EM&V)					\$4,289,460

Southwestern Electric Power Company
Energy Efficiency Cost Recovery Factor

SCHEDULE A
2018 Projected Energy Efficiency Costs

Customer Class and Program	ELIGIBILITY BY RETAIL RATE CLASS											Total					
	Residential	General Service	Lighting & Power	Municipal Pumping	Municipal Service	Cotton Gin	Large Lighting & Power less than 69kV	Interruptible less than 69kV	Electric Furnace	Metal Melting	Oil Field Large Industrial						
Commercial																	
Commercial Solutions MTP		\$ 53,392	\$ 289,786	\$ 5,071	\$ 2,341	\$ 393								\$ 7,539	\$ 8,830	\$ 367,353	
Commercial SOP		\$ 90,242	\$ 489,787	\$ 8,571	\$ 3,958	\$ 665								\$ 12,742	\$ 14,924	\$ 620,888	
Load Management SOP		\$ 38,473	\$ 208,813	\$ 3,654	\$ 1,687	\$ 284								\$ 5,432	\$ 6,362	\$ 264,706	
SCORE MTP		\$ 57,153	\$ 310,200	\$ -	\$ -	\$ -								\$ -	\$ -	\$ 367,353	
Open MTP		\$ 42,303	\$ 229,601	\$ 4,018	\$ 1,855	\$ -								\$ -	\$ -	\$ 277,778	
Total Commercial Budgets		\$ 281,563	\$ 1,528,188	\$ 21,315	\$ 9,841	\$ 1,342								\$ 25,713	\$ 30,116	\$ 1,898,078	
Residential																	
Residential Pilot	\$ 340,909																\$ 340,909
Residential SOP	\$ 911,765																\$ 911,765
On-Line Home Energy Checkup	\$ 64,706																\$ 64,706
Hard-to-Reach SOP	\$ 823,529																\$ 823,529
Total Residential Budgets	\$ 2,140,909																\$ 2,140,909
EM&V	\$ 42,604	\$ 12,268	\$ 66,583	\$ 911	\$ 421	\$ 63	\$ -	\$ -	\$ -	\$ 1,208	\$ 1,415	\$ 125,473		\$ 1,208	\$ 1,415	\$ 125,473	
Research and Development (R&D)	\$ 66,258	\$ 8,714	\$ 47,295	\$ 660	\$ 305	\$ 42	\$ -	\$ -	\$ -	\$ 796	\$ 932	\$ 125,000		\$ 796	\$ 932	\$ 125,000	
TOTAL	\$ 2,249,771	\$ 302,545	\$ 1,642,065	\$ 22,886	\$ 10,567	\$ 1,447	\$ -	\$ -	\$ -	\$ 27,717	\$ 32,463	\$ 4,289,460		\$ 27,717	\$ 32,463	\$ 4,289,460	

Note: 2018 projected program costs are allocated to eligible rate classes using the adjusted 2018 production demand allocation factor.

**Southwestern Electric Power Company
Energy Efficiency Cost Recovery Factor**

SCHEDULE B

2016 Actual Energy Efficiency Expenditures

2016				
	Incentives Paid	Administrative Costs	EM&V	Total Funds Expended
Commercial				
Commercial Solutions MTP	\$307,772	\$43,713		\$351,485
Commercial SOP	\$622,510	\$118,225		\$740,735
Load Management SOP	\$187,785	\$31,004		\$218,789
Open MTP	\$249,985	\$28,427		\$278,412
SCORE MTP	\$284,577	\$44,182		\$328,759
Residential				
Residential SOP	\$989,963	\$80,520		\$1,070,484
Hard-to-Reach				
Hard-to-Reach SOP	\$864,974	\$70,948		\$935,922
Research & Development				
Research & Development		\$174,823		\$174,823
Evaluation, Measurement and Evaluation (EM&V)			\$57,114	\$57,114
Totals	\$3,507,567	\$591,842	\$57,114	\$4,156,523

Southwestern Electric Power Company
Energy Efficiency Cost Recovery Factor

SCHEDULE B
2016 Actual Energy Efficiency Expenditures

Customer Class and Program		PROGRAM COSTS BY RETAIL RATE CLASS										
	Residential	General Service	Lighting & Power	Municipal Pumping	Municipal Service	Cotton Gin	Large Lighting & Power less than 69kV	Interruptible less than 69kV	Electric Furnace	Metal Melting	Oil Field Large Industrial	Total
SWEPCO												
Commercial												
Commercial Solutions MTP		\$ 23,456	\$ 326,626		\$ 1,403							\$ 351,485
Commercial SOP			\$ 705,577		\$ 35,158							\$ 740,735
Load Management SOP			\$ 190,233	\$ 6,641	\$ 21,846				\$ 70			\$ 218,789
Open MTP		\$ 42,201	\$ 232,431	\$ 3,166	\$ 614							\$ 278,412
SCORE MTP		\$ 2,351	\$ 326,408									\$ 328,759
Residential												
Residential SOP	\$ 1,070,484											\$ 1,070,484
Hard-to-Reach SOP	\$ 935,922											\$ 935,922
Sub-total	\$ 2,006,405	\$ 68,008	\$ 1,781,275	\$ 9,807	\$ 59,021					\$ 70		\$ 3,924,586
R&D Commercial SOP		\$ 946	\$ 23,985	\$ 134	\$ 783					\$ 1		\$ 25,849
R&D Load Management		\$ 899	\$ 22,808	\$ 127	\$ 745					\$ 1		\$ 24,580
R&D SCORE		\$ 81	\$ 2,052									\$ 2,133
R&D Commercial Solutions		\$ 72	\$ 1,823	\$ 10	\$ 60					\$ 0		\$ 1,964
R&D Residential SOP	\$ 41,262											\$ 41,262
R&D Hard to Reach SOP	\$ 38,013											\$ 38,013
R&D Nonspecific and New/existing	\$ 13,785	\$ 515	\$ 13,069	\$ 73	\$ 427				\$ 1			\$ 27,869
R&D Online tool	\$ 13,153											\$ 13,153
Sub-total	\$ 106,213	\$ 2,513	\$ 63,736	\$ 344	\$ 2,014	\$ -	\$ -	\$ -	\$ -	\$ 2	\$ -	\$ 174,823
EM&V	\$ 30,204	\$ 985	\$ 24,970	\$ 139	\$ 815					\$ 1		\$ 57,114
Total Expenditures	\$ 2,142,823	\$ 71,505	\$ 1,869,981	\$ 10,290	\$ 61,850	\$ -	\$ -	\$ -	\$ -	\$ 73	\$ -	\$ 4,156,523

Note: 2016 program costs are direct-assigned to participating rate classes and include administrative costs. R&D is allocated to rate classes using the 2016 program cost allocator.

SWEPCO 2018 EECRF
Schedule C 2016 Over-/Under-Calculation

SWEPCO 2016 EECRF Over- and Under-Collections by Retail Rate Class

<u>Retail Rate Class</u>	2016 Program Costs a	2016 EM&V b	2014 Bonus c	2014 O/U d	2016 EE Costs e=a+b+c+d	2016 EECRF Collections f	2016 (Over)/Under- Collection g=e-f
Residential	\$2,112,619	\$30,204	\$360,612	(\$8,099)	\$2,495,335	\$2,474,340	\$20,995
General Service	\$70,521	\$985	\$21,361	(\$176,030)	(\$83,164)	\$126,309	(\$209,473)
Lighting & Power Secondary	\$1,623,806	\$21,976	\$326,140	\$272,854	\$2,244,775	\$1,545,448	\$699,328
Lighting & Power Primary	\$221,205	\$2,994	\$80,808	(\$253,910)	\$51,096	\$341,140	(\$290,044)
Municipal Pumping	\$10,151	\$139	\$0	(\$33,092)	(\$22,802)	(\$11,472)	(\$11,330)
Municipal Service	\$61,035	\$815	\$4,577	\$6,203	\$72,630	\$23,695	\$48,935
Cotton Gin	\$0	\$0	\$0	(\$983)	(\$983)	\$295	(\$1,278)
Large Lighting & Power less than 69kV	\$0	\$0	\$0	\$9,898	\$9,898	\$8,671	\$1,226
Electric Furnace	\$0	\$0	\$0	(\$85)	(\$85)	\$0	(\$85)
Metal Melting less than 69kV	\$72	\$1	\$26,025	(\$164,454)	(\$138,356)	(\$82,844)	(\$55,512)
Oil Field Large Industrial Power	\$0	\$0	\$0	(\$5,505)	(\$5,505)	\$61,213	(\$66,719)
Lighting Major Rate Class	\$0	\$0	\$0	(\$642)	(\$642)	(\$402)	(\$239)
Total	\$4,099,409	\$57,114	\$819,522	(\$353,847)	\$4,622,198	\$4,486,393	\$135,805

**Southwestern Electric Power Company
Energy Efficiency Cost Recovery Factor**

Schedule D

2016 Goal Achievement and Performance Bonus Calculation

SWEPCO achieved 11,939 kW in demand savings and 20,648,106 kWh in energy savings by December 31, 2016. The total present value of the avoided cost associated with these demand reductions and energy savings is \$16,032,886. SWEPCO's total program cost for the 2016 program year was \$4,148,989. The resulting net benefits are \$11,883,897. SWEPCO's demand reduction goal (DRG) was 5,600 kW and its energy savings goal was 9,811,200 kWh. SWEPCO achieved 213% of its DRG and qualifies for a performance bonus as calculated under Substantive Rule § 25.181(h).

SWEPCO's calculated bonus is \$1,188,390 which is 10% of its net benefits. The following tables summarize SWEPCO's 2016 energy efficiency goal achievement and performance bonus calculation.

	kW	kWh
2016 Goals	5,600	9,811,000
2016 Savings	11,939	20,648,105
<i>Reported/Verified Hard-to-Reach</i>	1,217	
2016 Program Costs	\$4,148,989	
2016 Performance Bonus	\$1,188,390	

Performance Bonus Calculation

213%	Percentage of Demand Reduction Goal Met (Reported kW/Goal kW)
210%	Percentage of Energy Reduction Goal Met (Reported kWh/Goal kWh)
TRUE	Met Requirements for Performance Bonus?
\$16,032,886	Total Avoided Costs
\$4,148,989	Total Program Costs
\$11,883,897	Net Benefits (Total Avoided Cost - Total Expenses)

Bonus Calculation

\$6,726,371	Calculated Bonus $((\text{Achieved Demand Reduction}/\text{Demand Goal} - 100\%) / 2) * \text{Net Benefits}$
\$1,188,390	Maximum Bonus Allowed (10% of Net Benefits)
\$1,188,390	<i>Bonus (Minimum of Calculated Bonus and Bonus Limit)</i>

SWEPCO 2018 EECRF Rates Schedule E

EECRF Customer Class	Rate Codes	2018		2016		2018		2018	
		Budget a	EM&V b	Bonus c	O/U d	EECRF Rev Req e=a+b+c+d	Forecasted Billing Units f	EECRF g=e/f	per kWh
Residential	12 15 16 19 62	\$2,207,167	\$42,604	\$612,433	\$20,995	\$2,883,199	2,227,623,311	\$0.001294	per kWh
General Service	200 204 205 207 208 210 212 215 218 224 238 282	\$290,277	\$12,268	\$20,444	(\$209,473)	\$113,516	299,980,068	\$0.000378	per kWh
Lighting & Power	60 63 66 240 243 246 249 251 277 292	\$1,575,483	\$66,583	\$534,856	\$409,284	\$2,586,205	2,764,308,478	\$0.000936	per kWh
Municipal Pumping	541 543 550 553	\$21,974	\$911	\$2,943	(\$11,330)	\$14,499	64,461,609	\$0.000225	per kWh
Municipal Service	544 548	\$10,146	\$421	\$17,694	\$48,935	\$77,195	29,382,399	\$0.002627	per kWh
Cotton Gin	253	\$1,384	\$63	\$0	(\$1,278)	\$169	6,877,839	\$0.000025	per kWh
Large Lighting & Power < 69kV	346 351	\$0	\$0	\$0	\$1,226	\$1,226	231,283,313	\$0.000000	per kWh
Electric Furnace/Metal Melting < 69kV	312 325 335	\$26,509	\$1,208	\$21	(\$55,596)	(\$27,859)	49,628,363	(\$0.000561)	per kWh
Oil Field Large Industrial Power	329 330	\$31,048	\$1,415	\$0	(\$66,719)	(\$34,256)	117,270,315	(\$0.000292)	per kWh
Lighting	90-143 203 521 528 529 532 534 535 538 739	\$0	\$0	\$0	(\$239)	(\$239)	83,825,096	\$0.000000	per kWh
TOTAL		\$4,163,987	\$125,473	\$1,188,390	\$135,805	\$5,613,655	5,874,640,791		

SOUTHWESTERN ELECTRIC POWER COMPANY

Tariff Manual - Public Utility Commission of Texas

Section Title: Rates, Charges, and Fees

Section No: IV

Applicable: All Areas

Docket No:

Sheet No: IV-35

Effective Date: January 1, 2018

Revision 10

Page 1 of 1

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ENERGY EFFICIENCY COST RECOVERY RIDER

APPLICABILITY

Rider Energy Efficiency Cost Recovery Factor (EECRF) recovers the cost of energy efficiency programs not included in base rates and is applicable to the kWh of Retail Customers taking retail service from the Company. The EECRF does not apply to customers taking service at transmission voltage or exempt industrial distribution customers unless there is a true-up from a prior period. P.U.C. SUBST. R. 25.181(f)(8) provides that no later than May 1 of each year, a utility with an EECRF shall apply to adjust the EECRF in order to adjust for changes in costs and bonuses and to minimize any over- or under-collections of energy efficiency costs resulting from the use of the EECRF. The EECRF filed by May 1 of each year will be calculated in accordance with the following methodology and will be applied to the billing kWh billed by the Company.

AVAILABILITY

The following factors will be applied to the energy usage (metered or unmetered) of retail customers taking service from the Company.

MONTHLY RATE

<u>Rate Schedule¹</u>	<u>Rate Code²</u>	<u>Factor per kWh</u>	
Residential	12,15,16,19,62	\$0.001294	I
General Service ³	200,204,205,207,208, 210,212,215,218,224, 238,282	\$0.000378	R
Municipal Service	544,548	\$0.002627	I
Municipal Pumping	541,543,550,553	\$0.000225	I
Lighting and Power	60,63,66,240,243,246,249, 251,277,292	\$0.000936	I
Cotton Gin	253	\$0.000025	R
Electric Furnace/Metal Melting < 69 kV	312 325 335	\$(0.000561)	R
Oil Field Large Industrial Power	329 330	\$(0.000292)	R
Large Lighting and Power < 69 kV	346, 351	\$0.000000	
Lighting	90-143,203,521,528,529,532,534, 535,538,739	\$0.000000	

¹ Standby, Supplementary, Backup, Maintenance and As-Available Power Service are included with the Rate Schedule under which the customer takes service.

² Rate codes may be added or discontinued during the year. Any new rate code will be billed the EECRF rate based on the customer's applicable Rate Schedule.

³ General Service includes Recreational Lighting.

SWEPCO 2018 EECRF
Schedule G Calculation of Cost Caps and Comparison to SWEPCO 2018 EECRF less EM&V

2018 Cost Cap Rate Calculation	2017 Cost Cap Rate	CPI Factor	Unadjusted 2018 Cap Rate	2018 Cost Cap Rate
Classes for Cost Cap Determination	a	b	c	d=e+c*b
Residential	\$ 0.001266	1.11%	\$ 0.001263	\$ 0.001277
Commercial	\$ 0.000791	1.11%	\$ 0.000790	\$ 0.000799

2018 CAP STATUS	2018 SWEPCO		2018 SWEPCO EECRF		2018 SWEPCO		2018 SWEPCO		2018 SWEPCO	
	EECRF Rev Req Schedule E	EM&V in 2017/18 and 2016 O/U	Rev Req less EM&V for Cost Cap Comparison	Forecasted Billing Units Schedule E	EECRF Rate less EM&V for Cost Comparison	2016 Energy Efficiency Spend Rate	2016 Billing Units	2016 Costs less EM&V for Cost Cap Comparison	2016 Energy Efficiency Spend Rate	2016 Billing Units
SWEPCO Classes for Cost Cap Comparison	d	e	f=d-e	g	h=f/g	i=c	j=h-i	2016 Energy Efficiency Spend Rate	2016 Billing Units	2016 Costs less EM&V for Cost Cap Comparison
Residential	\$ 2,883,199	\$ 44,812	\$ 2,838,387	2,227,623,311	\$ 0.001274	\$ 0.001277	\$ (0.000003)	\$ 0.001209	2,075,793,304	\$ 2,510,219
Non-Residential	\$ 2,730,455	\$ 72,954	\$ 2,657,501	3,331,909,071	\$ 0.000798	\$ 0.000799	\$ (0.000001)	\$ 0.000701	3,066,162,360	\$ 2,149,319
Total	\$ 5,613,655	\$ 117,767	\$ 5,495,888	5,559,532,382	\$	\$	\$	\$	5,141,955,664	\$ 4,659,538

2016 CAP STATUS	2016 Energy Efficiency Costs		2016 EM&V in 2016 and 2014 O/U		2016 Billing Units		2016 Costs less EM&V for Cost Cap Comparison		2016 Energy Efficiency Spend Rate	
	Residential	Non-Residential	Total	2016 Energy Efficiency Costs	2016 EM&V in 2016 and 2014 O/U	2016 Billing Units	2016 Costs less EM&V for Cost Cap Comparison	2016 Energy Efficiency Spend Rate	2016 Billing Units	2016 Costs less EM&V for Cost Cap Comparison
Residential	\$ 2,495,335	\$ (14,884)	\$ 2,480,451	\$ 2,495,335	\$ (14,884)	2,075,793,304	\$ 2,510,219	\$ 0.001209	2,075,793,304	\$ 2,510,219
Non-Residential	\$ 2,126,863	\$ (22,456)	\$ 2,104,407	\$ 2,126,863	\$ (22,456)	3,066,162,360	\$ 2,149,319	\$ 0.000701	3,066,162,360	\$ 2,149,319
Total	\$ 4,622,198	\$ (37,340)	\$ 4,584,858	\$ 4,622,198	\$ (37,340)	5,141,955,664	\$ 4,659,538	\$	5,141,955,664	\$ 4,659,538

Note: 2016, 2017 and unadjusted 2018 cap rates per 3/2017 amendment to 16 TAC \$25.181 (f)(7)(E) per Project No. 463388.

**Southwestern Electric Power Company
Adjusted Energy Efficiency Cost Recovery Factor Filing**

Schedule H

Schedule H

**SWEPKO 2018 EECRF
Schedule H Forecasted Billing Units**

SWEPKO Texas Projected 2018 Retail kWh Sales	7,510,286,530
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Development of Forecasted Billing Units

Rate Classes	2016 Historical Billing Units	Percent of Class kWh	Percent of Total kWh	2018 Forecasted Billing Unit	Unit	Customer kWh Adjustment (2018 Opt Out Forecast)	2018 Adjusted kWh (Excludes Opt Out, Trans., Lights)	Docket No. 40443 Test Year Adjusted kWh
Total Residential Rate Class	2,075,793,304	100.00%	29.66%	2,227,623,311			2,227,623,311	2,247,975,852
Commercial Rate Class								
General Service	273,852,934	8.51%	3.91%	293,883,393	kWh	561,032	293,322,361	293,672,646
Lighting & Power Service Secondary	2,244,908,215	69.75%	32.08%	2,409,107,815	kWh	156,700,951	2,252,406,864	2,499,832,706
Lighting & Power Service Primary	599,622,116	18.63%	8.57%	643,480,351	kWh	131,578,737	511,901,614	888,799,575
Municipal Pumping Service	60,068,045	1.87%	0.86%	64,461,609	kWh		64,461,609	65,836,955
Municipal Service	27,379,758	0.85%	0.39%	29,382,399	kWh		29,382,399	24,280,905
NT Commercial Service	0	0.00%	0.00%	-	kWh		-	included in GS
Recreational Lighting	6,203,932	0.19%	0.09%	6,657,707	kWh		6,657,707	included in GS
NT Cotton Gin Service	6,409,060	0.20%	0.09%	6,877,839	kWh		6,877,839	3,800,267
Total Commercial Rate Class	3,218,444,060	100.00%	45.99%	3,453,851,113		288,840,720	3,165,010,393	3,776,223,054
Industrial Rate Class								
Large Lighting & Power Service - Pri	36,134,400	5.73%	0.52%	38,777,383	kWh	38,777,383	-	241,661,354
Large Lighting & Power Service - Pri Sub	179,385,140	28.46%	2.56%	192,505,930	kWh	192,505,930	-	included in LP Pri
Interruptible Power Service	0	0.00%	0.00%	-	kWh		-	0
Metal Melting Service Distribution	47,864,970	7.59%	0.68%	51,365,963	kWh	1,737,600	49,628,363	8,976,561
Oil Field Large Power Service	366,933,537	58.21%	5.24%	393,772,202	kWh	276,501,887	117,270,315	40,386,534
NT Large Power Service Sub	0	0.00%	0.00%	-	kWh		-	included in LP Pri
NT Electric Furnace Service	0	0.00%	0.00%	-	kWh		-	443,987
Total Industrial Rate Class	630,318,047	100.00%	9.01%	676,421,478		509,522,800	166,898,678	291,468,436
Industrial 69 kV & Above								
Metal Melting Service 69 kV & Above	24,185,374	2.43%	0.35%	25,954,368	kWh	25,954,368	-	55,307,787
Large Lighting & Power Service - 69 kV	137,868,869	13.85%	1.97%	147,953,029	kWh	147,953,029	-	1,063,505,021
Large Lighting & Power Service - 138 kV	684,038,766	68.70%	9.77%	734,071,498	kWh	734,071,498	-	included in LLP Trans
Lighting & Power Service Transmission	35,579,718	3.57%	0.51%	38,182,130	kWh	38,182,130	-	34,311,343
Interruptible Power Service	56,488,000	5.67%	0.81%	60,619,709	kWh	60,619,709	-	included in non-firm
Contract with Lone Star Steel	57,573,680	5.78%	0.82%	61,784,799	kWh	61,784,799	-	included in LLP Trans
Total Industrial Excluding 69 kV & Above	995,734,407	100.00%	14.23%	1,068,565,533	kWh	1,068,565,533	-	1,153,124,151
Lighting Rate Class								
Total Lighting Rate Class	78,111,758	100.00%	1.12%	83,825,096	kWh	83,825,096	-	79,865,134
Total SWEPKO	6,998,401,576		100.00%	7,510,286,531		1,950,754,149	5,559,532,382	7,548,656,627

**Southwestern Electric Power Company
Energy Efficiency Cost Recovery Factor**

Schedule I

**2018 SWEPCO EECRF
Amount of Energy Efficiency Costs Recovered Through Base Rates**

The amount of energy efficiency program costs recovered through SWEPCO's base rates is zero.

**Southwestern Electric Power Company
Energy Efficiency Cost Recovery Factor**

SCHEDULE J

A list of the energy service providers, those receiving more than 5% of the total incentive funds for 2016 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.

**Southwestern Electric Power Company
Energy Efficiency Cost Recovery Factor**

SCHEDULE K

**2016 Energy Efficiency Administrative & Research & Development (R&D)
Affiliate Costs**

For 2016 SWEPCO does not have any affiliate costs for energy efficiency administration or R&D.

**Southwestern Electric Power Company
Energy Efficiency Cost Recovery Factor**

Schedule L

Bidding and Engagement Process

SWEPCO has several procedural paths through which it contracts with energy efficiency service providers (EESPs) for the purpose of implementing energy efficiency (EE) programs. The procedures and processes SWEPCO uses differ according to the program type, as shown in more detail below.

Standard Offer Program (SOP) Process

SWEPCO posts its program manuals, including specific application procedures and timelines, on the SWEPCOGridSmart.com web site. In accordance with the published schedule, EESPs may submit their project applications and all supplemental documentation required for the program.

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

SWEPCO reviews each Project Application on a first-come, first-served basis. SWEPCO awards contracts based upon each EESP's qualifications, history and appropriate reference information, and meeting the timely and complete application requirements. SWEPCO may request clarification of, or additional information about, any item submitted as part of the Project Application. SWEPCO may reject any Project Application for failure to meet the required procedures or deadlines.

SWEPCO notifies each EESP of its application status according to program procedures and, if approved as a Project Sponsor, of the associated incentive budget. For any programs that may require a Project Sponsor security deposit, the security deposit must be provided to SWEPCO within the published timeline.

SWEPCO and the Residential Project Sponsor enter into a standard offer agreement. When the contract is fully executed and the security deposit is received, the Project Sponsor can solicit and engage customers to implement eligible EE measures.

**Southwestern Electric Power Company
Energy Efficiency Cost Recovery Factor**

Schedule L

Bidding and Engagement Process

Market Transformation Program (MTP) Process

Before implementing MTP programs, SWEPCO may implement a limited pilot of the program. 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 SWEPCO deems viable, SWEPCO selects the initiating EESP to implement the program on a limited pilot basis for a period typically not longer than one year.

When a pilot program has been deemed successful by SWEPCO and a baseline study has been completed, SWEPCO implements a competitive solicitation process. A Request for Proposals (RFP) is developed and sent to EESPs who have notified SWEPCO of a desire to implement programs in the Texas market and have also posted on industry-related websites.

Interested EESPs submit program proposals according to the published requirements and schedule. SWEPCO 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.

**Southwestern Electric Power Company
Energy Efficiency Cost Recovery Factor**

SCHEDULE M

Sector	TRM Measure	Energy Efficiency Measure	EUL (years)	TRM Version
Custom	NA	Custom	NA	NA
Residential	2.1.1	Res Standard Compact Fluorescent Lamps (10,000 to 11,000 hour Rated Measure Life)	11.0	3.1
Residential	2.1.1	Res Standard Compact Fluorescent Lamps (11,001 to 13,500 hour Rated Measure Life)	13.0	3.1
Residential	2.1.1	Res Standard Compact Fluorescent Lamps (13,501 to 17,500 hour Rated Measure Life)	16.0	3.1
Residential	2.1.1	Res Standard Compact Fluorescent Lamps (≥ 17,501 hour Rated Measure Life)	20.0	3.1
Residential	2.1.2	Res Specialty Compact Fluorescent Lamps (10,000 to 11,000 hour Rated Measure Life)	11.0	3.1
Residential	2.1.2	Res Specialty Compact Fluorescent Lamps (11,001 to 13,500 hour Rated Measure Life)	13.0	3.1
Residential	2.1.2	Res Specialty Compact Fluorescent Lamps (13,501 to 17,500 hour Rated Measure Life)	16.0	3.1
Residential	2.1.2	Res Specialty Compact Fluorescent Lamps (≥ 17,501 hour Rated Measure Life)	20.0	3.1
Residential	2.1.3	Res Energy Star Omni-Directional LED Lamps	20.0	3.1
Residential	2.1.4	Res Energy Star Specialty and Directional LED Lamps	20.0	3.1
Residential	2.2.1	Res Duct Efficiency Improvement	18.0	3.1
Residential	2.2.2	Res Central AC	18.0	3.1
Residential	2.2.3	Res Ground Source Heat Pump	20.0	3.1
Residential	2.2.4	Res Central Heat Pump	15.0	3.1
Residential	2.2.5	Res Room (Window) Air Conditioner	8.0	3.1
Residential	2.3.1	Res Air Infiltration	11.0	3.1
Residential	2.3.2	Res Ceiling Insulation	25.0	3.1
Residential	2.3.3	Res Wall Insulation	25.0	3.1
Residential	2.3.4	Res Floor Insulation	25.0	3.1
Residential	2.3.5	Res Energy Star Windows	25.0	3.1
Residential	2.3.6	Res Solar Screens	10.0	3.1
Residential	2.4.1	Res Faucet Aerators	10.0	3.1
Residential	2.4.2	Res Low-Flow Showerheads	10.0	3.1
Residential	2.4.3	Res Water Heater Pipe Insulation	13.0	3.1
Residential	2.4.4	Res Water Heater Tank Insulation	7.0	3.1
Residential	2.4.5	Res Water Heater Installation-Electric Tankless	20.0	3.1
Residential	2.4.5	Res Water Heater Installation-Fuel Substitution	11.0	3.1
Residential	2.4.6	Res Heat Pump Water Heater	13.0	3.1
Residential	2.4.7	Res Water Heater Replacement-Solar Water Heating	15.0	3.1
Residential	2.5.1	Res Energy Star Ceiling Fans	10.0	3.1
Residential	2.5.2	Res Energy Star Clothes Washer	11.0	3.1
Residential	2.5.3	Res Energy Star Dishwashers	15.0	3.1
Residential	2.5.4	Res Energy Star Refrigerators	16.0	3.1
Residential	2.6.1	Res Solar Photovoltaic (PV)	30.0	3.1
Residential	2.7.1	Res Direct Load Control of Outdoor Compressor Units	1.0	3.1
Residential	2.7.2	Res Direct Load Control of Swimming Pool Pump Motors	1.0	3.1
Residential	2.8.1	Res Refrigerator/Freezer Recycling	8.0	3.1
Residential	TRM v4	Residential New Homes	23.0	3.1
Commercial	2.1.1	Comm Lamps and Fixtures: Halogen Lamps	1.5	3.1
Commercial	2.1.1	Comm Lamps and Fixtures: High Intensity Discharge Lamps	15.5	3.1
Commercial	2.1.1	Comm Lamps and Fixtures: Integrated-ballast CCFL Lamps	4.5	3.1
Commercial	2.1.1	Comm Lamps and Fixtures: Integrated-ballast CFL Lamps	2.5	3.1
Commercial	2.1.1	Comm Lamps and Fixtures: Integral LED Lamps	9.0	3.1
Commercial	2.1.1	Comm Lamps and Fixtures: Light Emitting Diode	15.0	3.1
Commercial	2.1.1	Comm Lamps and Fixtures: Modular CFL and CCFL Fixtures	16.0	3.1
Commercial	2.1.1	Comm Lamps and Fixtures: T8 and T5 Linear Fluorescents	15.5	3.1
Commercial	2.1.1	Comm Lamps and Fixtures: LEDs or T8 and T5 Linear Fluorescents replacing T12s with magnetic ballasts	8.5	3.1
Commercial	2.1.2	Comm Lighting Controls: Occupancy Sensor	10.0	3.1
Commercial	2.1.2	Comm Lighting Controls: Photocell (Daylighting Control)	10.0	3.1
Commercial	2.1.2	Comm Lighting Controls: Timeclock	10.0	3.1
Commercial	2.1.2	Comm Lighting Controls: Tuning Control	10.0	3.1
Commercial	2.2.1	Comm Split System/Single Packaged Heat Pumps and Air Conditioners	15.0	3.1

**Southwestern Electric Power Company
Energy Efficiency Cost Recovery Factor**

SCHEDULE M

Commercial	2.2.2	Comm HVAC Chillers: Screw / Scroll / Reciprocating Chillers	20.0	3.1
Commercial	2.2.2	Comm HVAC Chillers: Centrifugal Chillers	25.0	3.1
Commercial	2.2.3	Comm Packaged Terminal Air Conditioners, Heat Pumps	15.0	3.1
Commercial	2.2.3	Comm Room Air Conditioners	11.0	3.1
Commercial	2.2.4	Comm HVAC VFD on AHU Supply Fans	15.0	3.1
Commercial	2.3.1	Comm Energy Star Roofs	15.0	3.1
Commercial	2.3.2	Comm Window Film	10.0	3.1
Commercial	2.4.1	Comm High Efficiency Combination Ovens	12.0	3.1
Commercial	2.4.2	Comm High Efficiency Electric Convection Ovens	12.0	3.1
Commercial	2.4.3	Comm Energy Star Commercial Dishwashers	11.0	3.1
Commercial	2.4.4	Comm Hot Food Holding Cabinets	12.0	3.1
Commercial	2.4.5	Comm Energy Star Electric Fryers	12.0	3.1
Commercial	2.4.6	Comm Pre-Rinse Spray Valves	5.0	3.1
Commercial	2.4.7	Comm Energy Star Electric Steam Cookers	12.0	3.1
Commercial	2.5.1	Comm Door Heater Controls	12.0	3.1
Commercial	2.5.2	Comm ECM Evaporator Fan Motor	15.0	3.1
Commercial	2.5.3	Comm Electronic Defrost Controls	10.0	3.1
Commercial	2.5.4	Comm Evaporator Fan Controls	16.0	3.1
Commercial	2.5.5	Comm Night Covers for Open Refrigerated Display Cases	5.0	3.1
Commercial	2.5.6	Comm Solid and Glass Door Reach-Ins	12.0	3.1
Commercial	2.5.7	Comm Strip Curtains for Walk-In Refrigerated Storage	4.0	3.1
Commercial	2.5.8	Comm Zero Energy Doors for Refrigerated Cases	12.0	3.1
Commercial	2.6.1	Comm Vending Machine Controls	5.0	3.1
Commercial	2.6.2	Comm Lodging Guest Room Occupancy Sensor Controls	10.0	3.1
Commercial	2.6.3	Comm Pump-Off Controller	15.0	3.1
Commercial	2.7.1	Comm Solar Photovoltaic (PV)	30.0	3.1
Commercial	2.8.1	Comm Load Curtailment	1.0	3.1

**Southwestern Electric Power Company
Energy Efficiency Cost Recovery Factor**

Schedule N

2018 Projected Energy Efficiency Goals and Objectives

Calendar Year	Average Growth in Demand (MW)	Average Peak Demand (MW)	Goal Metric: 30% Growth (MW)	Goal Metric: 0.4 of 1% Peak Demand (MW)	Peak Demand Goal (MW)¹	Energy Savings Goal (MWh)	Projected Demand Reduction (MW)²	Projected Energy Savings (MWh)²
2018	2.56	1,235	0.77	4.94	5.60	9,811	11.66	16,375

¹ SWEPCO's 2018 Demand Reduction Goal is based on 16 TAC § 25.181 (e)(1)(E) which states that, except as adjusted in accordance with subsection (w) of this section, a utility's demand reduction goal in any year shall not be lower than its goal for the prior year.

² Please see p. 8-11 of Mr. Thigpen's testimony for an explanation of how the Projected Demand Reduction and Energy Savings Targets were determined.

**Southwestern Electric Power Company
Energy Efficiency Cost Recovery Factor**

SCHEDULE O

2018 Projected Energy Efficiency Objectives

2018		
Customer Class and Program	Projected Demand Reduction (MW)	Projected Energy Savings (MWh)
Commercial		
Commercial Solutions MTP	0.44	2,043
Commercial SOP	0.70	4,522
Load Management SOP	6.68	80
Open MTP	0.25	1,029
SCORE MTP	0.54	2,213
Residential		
Residential Pilot	0.20	1,588
Residential SOP	1.63	2,763
Hard-to-Reach		
Hard-to-Reach SOP	1.21	2,137
Total Annual Projected Savings		
	11.66	16,375

**Southwestern Electric Power Company
Energy Efficiency Cost Recovery Factor**

SCHEDULE P

2016 Energy Efficiency Programs' Cost - Net Benefit Ratio

2016 Customer Class and Program	Savings		Total Program Costs	Benefits				Benefit- Cost Ratio
	kW	kWh		Avoided Capacity Costs	Avoided Energy Costs	Total Avoided Cost	Net Benefits	
Commercial	8,953.1	11,299,351	\$ 2,429,927	\$ 2,110,334	\$ 5,608,460	\$ 7,718,794	\$ 5,288,867	3.18
Commercial Solutions MTP	456.2	2,489,513	\$ 438,005	\$ 358,032	\$ 1,242,658	\$ 1,600,690	\$ 1,162,685	3.65
Commercial SOP	841.8	5,413,907	\$ 940,794	\$ 663,753	\$ 2,713,579	\$ 3,377,332	\$ 2,436,538	3.59
Load Management SOP	6,935.0	83,251	\$ 300,732	\$ 525,096	\$ 4,009	\$ 529,105	\$ 228,373	1.76
Open MTP	235.9	1,082,679	\$ 340,084	\$ 170,186	\$ 501,302	\$ 671,488	\$ 331,404	1.97
SCORE MTP	484.2	2,230,001	\$ 410,312	\$ 393,267	\$ 1,146,912	\$ 1,540,179	\$ 1,129,867	3.75
Residential	1,769.5	5,412,215	\$ 1,352,404	\$ 1,677,781	\$ 3,236,145	\$ 4,913,926	\$ 3,561,522	3.63
Residential SOP	1,769.5	5,412,215	\$ 1,352,404	\$ 1,677,781	\$ 3,236,145	\$ 4,913,926	\$ 3,561,522	3.63
Hard-to-Reach	1,216.6	3,936,540	\$ 1,183,591	\$ 1,112,096	\$ 2,288,071	\$ 3,400,167	\$ 2,216,576	2.87
Hard-to-Reach SOP	1,216.6	3,936,540	\$ 1,183,591	\$ 1,112,096	\$ 2,288,071	\$ 3,400,167	\$ 2,216,576	2.87
Total	11,939.2	20,648,106	\$ 4,965,922	\$ 4,900,211	\$ 11,132,676	\$16,032,887	\$11,066,965	3.23

**Southwestern Electric Power Company
Energy Efficiency Cost Recovery Factor**

Schedule Q

**2018 SWEPCO EECRF
Line Losses Used in the EECRF Calculation**

2010 SWEPCO Line Loss Study used in Docket 40443

Energy (kWh)

Voltage

Factor

Transmission

1.011337

Subtransmission

1.022192

Primary Sub

1.021753

Primary

1.034907

Secondary

1.063818

**Southwestern Electric Power Company
Energy Efficiency Cost Recovery Factor**

SCHEDULE R

2018 Energy Efficiency Programs

PROGRAM	CUSTOMER CLASS	DESCRIPTION
Commercial Solutions Market Transformation Program	Commercial	Provides energy efficiency and demand reduction solutions for commercial customers identified as having a need for energy efficiency improvements but needing support from an outside source. Facilitates the identification of actual demand and energy savings, opportunities, general operating characteristics; long-range energy efficiency planning, and overall measure acceptance by the targeted customers. Incentives are paid to customer participants for certain measures installed in new or retrofit applications, which provide verifiable demand and energy savings.
Commercial Standard Offer Program	Commercial	Provides incentives for new construction and retrofit installation of measures that reduce customer energy costs, reduce peak demand and save energy in non-residential facilities. Customers have installed such eligible measures as lighting retrofits, new or replacement HVAC systems, high efficiency commercial refrigeration measures, and other similar technologies. Incentives are paid to third-party project sponsors on the basis of deemed savings or verified peak demand and energy savings using the International Performance Measurement and Verification Protocol.
Hard-to-Reach Standard Offer Program	Residential	Targets a specific subset of residential customers as defined by P.U.C. SUBST. R. §25.181(c)(27). The hard-to-reach customer has a total household income that is less than 200% of the federal poverty guidelines. Provides incentives to project sponsors for the installation of eligible measures that result in verifiable demand and energy savings. Eligible measures include replacement air conditioners, wall and ceiling insulation and air distribution duct improvements in existing homes.
Load Management Standard Offer Program	Commercial	Targets commercial customers that have a minimum demand of 500 kW or more. Incentives are paid to project sponsors to reduce peak electric load on one-hour-ahead notice for load reduction periods of one to four hours duration. These payments are based on the delivery of metered demand reduction.

**Southwestern Electric Power Company
Energy Efficiency Cost Recovery Factor**

SCHEDULE R

2018 Energy Efficiency Programs

On-Line Home Energy Checkup	Residential	Designed to provide a web-based, do-it-yourself home energy audit that equips residential customers with valuable information to help them manage their energy use and cost. At this time, it is not anticipated that SWEPCO will report savings from this On-Line Audit Tool.
Open MTP	Commercial	Targets small commercial customers with peak demands less than 100 kW. Designed to overcome barriers that prevent them from participating in energy efficiency programs proven to be successful for larger business owners. The program will offer a “turnkey” approach in which marketing, energy education, site-specific energy analyses, financial incentives, equipment procurement, and installation can be provided.
Residential Standard Offer Program	Residential	Provides incentives for the installation of a wide range of measures that reduce residential customer energy costs and reduce peak demand and to encourage private sector delivery of energy efficient 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.

Southwestern Electric Power Company

2017 Energy Efficiency Plan and Report

16 Tex. Admin. Code §§ 25.181 and 25.183

March 31, 2017

Project No. 46907



An **AEP** Company

BOUNDLESS ENERGY™

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INTRODUCTION

Southwestern Electric Power Company (SWEPCO or Company) presents this Energy Efficiency Plan and Report (EEPR) to comply with 16 Tex. Admin. Code §§ 25.181 and 25.183 (TAC) (EE Rule), implementing Public Utility Regulatory Act (PURA) § 39.905. As mandated by this section of PURA, the EE Rule requires that each investor-owned electric utility achieve the following minimum goals through market-based standard offer programs (SOPs), targeted market transformation programs (MTPs) or other utility self-delivered programs. 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:
 - (B) Beginning with the 2013 program year, until the trigger described in subparagraph (C) of this paragraph is reached, the utility shall acquire a 30% reduction of its annual growth in demand of residential and commercial customers.
 - (C) If the demand reduction goal to be acquired by a utility under subparagraph (B) of this paragraph is equivalent to at least four-tenths of 1% its summer weather-adjusted peak demand for the combined residential and commercial customers for the previous program year, the utility shall meet the energy efficiency goal described in subparagraph (D) of this paragraph for each subsequent program year.
 - (D) Once the trigger described in subparagraph (C) of this paragraph is reached, the utility shall acquire four-tenths of 1% of its summer weather-adjusted peak demand for the combined residential and commercial customers for the previous program year.
 - (E) Except as adjusted in accordance with subsection (w) of this section, a utility's demand reduction goal in any year shall not be lower than its goal for the prior year, unless the commission establishes a goal for a utility pursuant to paragraph (2) of this subsection.

The EE Rule includes specific requirements related to the implementation of SOPs and MTPs that control the manner in which electric utilities must administer their portfolio of energy efficiency programs in order to achieve their mandated annual demand reduction goals. SWEPCO's Plan enables it to meet its statutory goals through implementation of energy efficiency programs in a manner that complies with PURA §39.905 and the EE Rule. This EEPR covers the periods of time as required in the EE Rule. The following section describes the information that is contained in each of the subsequent sections and appendices.

EEPR ORGANIZATION

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

Executive Summary

- Summarizes SWEPCO's plans for achieving its goals and projected energy efficiency savings for Program Years 2017 and 2018 and highlights SWEPCO's achievements for Program Year 2016.

Energy Efficiency Plan

- Section I describes SWEPCO's program portfolio. It details how each program will be implemented and presents related informational and outreach activities.
- Section II explains SWEPCO's targeted customer classes and describes the estimated size of each class and the method used in determining those class sizes.
- Section III presents SWEPCO's demand and energy goals and projected savings for the prescribed planning period detailed by program for each customer class.
- Section IV describes SWEPCO's proposed energy efficiency budgets for the prescribed planning period detailed by program for each customer class.

Energy Efficiency Report

- Section V documents SWEPCO's demand reduction goal for each of the previous five years (2012-2016) based on its weather-adjusted peak demand.
- Section VI compares SWEPCO's projected energy and demand savings to its reported and verified savings by program for calendar years 2015 and 2016.
- Section VII details SWEPCO's incentive and administration expenditures for each of the previous five years (2012-2016) detailed by program for each customer class.
- Section VIII compares SWEPCO's actual 2016 expenditures with its 2016 budget by program for each customer class. It identifies funds committed but not expended and funds remaining and not committed. It also explains any cost deviations of more than 10% from SWEPCO's overall program budget.
- Section IX describes the results from SWEPCO's MTPs.
- Section X documents SWEPCO's Research and Development activities.
- Section XI documents SWEPCO's 2017 Energy Efficiency Cost Recovery Factor (EECRF).
- Section XII provides a summary of the 2016 EECRF.
- Section XIII documents SWEPCO's Underserved Counties.
- Section XIV describes SWEPCO's Performance Bonus calculation for Program Year 2016.

Acronyms

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

Appendices

- Appendix A – Reported and Verified Demand and Energy Reduction by County.
- Appendix B – Program Templates.
- Appendix C – Existing Contracts or Obligations.
- Appendix D – Optional Supporting Documentation.

EXECUTIVE SUMMARY

The Energy Efficiency Plan (Plan) portion of this EEPR discusses how SWEPCO intends to achieve savings of at least a 30% reduction in its annual growth in demand of residential and commercial customers by December 31, 2017. SWEPCO's Plan addresses achieving the corresponding calculated energy savings goal, which is derived from its demand savings goal each year using a 20% conservation load factor [16 TAC § 25.181(e)(4)]. The goals, budgets, and implementation procedures that are included in this Plan are consistent with the requirements of the EE Rule, using lessons learned from past experience and customer participation in the various historical energy efficiency programs. A summary of SWEPCO's projected annual goals and budgets is presented in Table 1.

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

Calendar Year	Average Growth in Demand (MW)	Average Peak Demand (MW)	Goal Metric: 30% Growth (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)
2017	-8.33	1,232	-2.50	4.93	5.6	9,811	15.30	18,797	\$4,803
2018	2.56	1,235	0.77	4.94	5.6	9,811	11.66	16,375	\$4,227

* The 2017 and 2018 Projected Budget includes costs associated with Evaluation, Measurement & Verification costs.

The Energy Efficiency Report portion demonstrates that in 2016 SWEPCO cost-effectively implemented SOPs and MTPs as provided for by PURA §39.905. SWEPCO exceeded its demand reduction goal to be achieved by December 31, 2016 by procuring 11,939 kW of peak demand savings at a total cost of \$4,156,523. Programs in 2016 included the Commercial Solutions MTP, Commercial SOP, Hard-to-Reach SOP, Load Management SOP, On-Line Home Energy Checkup, Residential SOP, Schools Conserving Resources MTP, and the Open MTP.

¹ Average Growth in Demand figures are from Table 4; Projected Savings from Table 5; Projected Budgets from Table 6.

ENERGY EFFICIENCY PLAN

I. 2017 PROGRAMS

A. 2017 Program Portfolio

SWEPCO has implemented a variety of programs in 2017 to enable the Company 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 below summarizes SWEPCO’s programs and targeted customer class markets for Program Year 2017. The programs are described in further detail in Subsections B through E. SWEPCO maintains a web site containing all of the requirements for energy efficiency service provider (EESP) or project sponsor participation, forms required for project submission, and links to the program manuals at www.swepcogridsmart.com. This site is the primary method of communication to provide program updates and information to customers, potential EESPs, and other interested parties.

Table 2: 2017 Energy Efficiency Program Portfolio

Program	Target Market	Application	Link to Program Manual
Commercial Solutions Market Transformation Program	Commercial	Retrofit New Construction	http://www.swepcogridsmart.com/texas/contractor-center.html
Commercial Standard Offer Program	Commercial	Retrofit New Construction	http://www.swepcogridsmart.com/texas/contractor-center.html
Hard-to-Reach Standard Offer Program	Residential Income-Qualified	Retrofit	http://www.swepcogridsmart.com/texas/contractor-center.html
LED Retail Pilot Program	Residential	Retrofit	http://www.swepcogridsmart.com/texas/residential-overview.html
Load Management Standard Offer Program	Commercial	Retrofit	http://www.swepcogridsmart.com/texas/contractor-center.html
On-Line Home Energy Checkup	Residential	Education	https://www.swepco.com/save/residential/calculate/OnlineEnergyCheckup.aspx
Open Market Transformation Program	Commercial	Retrofit	http://www.swepcogridsmart.com/texas/contractor-center.html
Residential Standard Offer Program	Residential	Retrofit	http://www.swepcogridsmart.com/texas/contractor-center.html
Schools Conserving Resources Market Transformation Program	Commercial	Retrofit New Construction	http://www.swepcogridsmart.com/texas/contractor-center.html

B. Implementation Process

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

Standard Offer Programs (SOPs) are administered by utility with project sponsors providing eligible program measures. Project sponsors are usually EESPs or SWEPCO customers. A SWEPCO customer can act as an EESP if it is a commercial customer with a peak load equal to or greater than 50 kW. SWEPCO monitors projects being submitted so as to not accept duplicate enrollments.

C. Outreach Activities

Various outreach activities are conducted, depending on the targeted program. Many of these activities are the same for several programs. For this reason, SWEPCO's outreach activities are grouped together below.

- Maintain internet web site with detailed project eligibility, end-use measures, incentives, procedures, and application forms;
- Utilize mass e-mail notifications to inform and update potential project sponsors on SWEPCO energy efficiency program opportunities;
- Participate in local, regional, and industry-related outreach activities as may be necessary;
- Target SWEPCO customers with demand and energy savings opportunities;
- Conduct workshops, as necessary, to explain the program, project sponsor implementation, reporting requirements, and incentive information;
- Contract with a third-party implementer to conduct outreach, planning activities and recruit additional subcontractors;
- Conduct specific project sponsor training sessions, as necessary, based on the energy efficiency programs being implemented; and
- Facilitate media opportunities to spotlight successful projects and/or interesting stories as applicable.

Additional outreach activities occur as the opportunity arises.

D. Description of Existing Programs

Commercial Solutions Market Transformation Program (CS MTP)

SWEPCO's CS MTP targets commercial customers (other than public schools) served by SWEPCO that do not have the in-house capability or 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. The CS MTP facilitates the identification of demand and energy savings opportunities, general operating characteristics, long-range energy efficiency planning, and overall measure acceptance by the targeted customers. Incentives are paid to EESPs or 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 (other than public schools) of all sizes, providing incentives for new construction and retrofit installation of measures that reduce demand and save energy in non-residential facilities. The CSOP encourages electric energy efficiency improvements that go above and beyond the efficiency gains typically achieved in retrofit or replacement projects. Energy and demand savings credit will be based only on reductions that exceed current state and federal minimum efficiency standards, if such standards apply. Incentives are paid to EESPs or customers on the basis of deemed savings or verified demand and energy savings.

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

The HTR SOP targets residential customers in existing homes with total annual household incomes at or below 200% of current federal poverty guidelines and who have properly completed a Public Utility Commission of Texas (PUCT) approved income verification form, or who have been designated as HTR-eligible through another PUCT-approved verification methodology. Incentives are paid to project sponsors for eligible measures installed in retrofit applications that result in verifiable demand and energy savings. Project comprehensiveness is encouraged and customer education regarding energy conservation behavior is provided by materials distributed by project sponsors.

Load Management Standard Offer Program (LM SOP)

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

On-Line Home Energy Checkup (Home Energy Checkup)

The Home Energy Checkup is designed to provide a web-based, do-it-yourself home energy audit that equips residential customers with valuable information to help them manage their energy use and cost. Internet access and a valid SWEPCO Texas account number are required. The tool provides functionality that produces a printer-friendly report that:

- Factors in weather and local electricity prices;
- Uses the customer's actual historic energy usage in savings calculations;
- Estimates monthly and annual energy usage and costs; and
- Provides customized energy saving recommendations and potential savings for implemented measures.

At this time, it is not anticipated that SWEPCO will report savings associated with the use of this Home Energy Checkup.

Open Market Transformation Program (Open MTP)

The Open MTP has been developed to offer energy efficiency services to small commercial customers with peak demands less than 100 kW. This customer group is the segment least served by SWEPCO's SOPs or MTPs. The Open MTP is designed to overcome barriers unique to small commercial customers that prevent them from participating in energy efficiency programs proven to be successful for larger business owners. These barriers include:

- Minimal technical knowledge among small business owners;
- Concerns about performance uncertainty and hidden costs;
- Owner/tenant challenges;
- Lack of capital, expertise, and staff; and
- Adequate information or the ability to research costs.

To overcome these barriers, the program offers a "turnkey" approach in which marketing, energy education, site-specific energy analysis, financial incentives, equipment procurement, and installation can be provided.

Residential Standard Offer Program (RSOP)

The RSOP targets residential customers in existing single and multi-family homes that are over two years old. Incentives are paid to project sponsors for eligible measures installed in retrofit applications that result in verified demand and energy savings.

Schools Conserving Resources Market Transformation Program (SCORE MTP)

The SCORE MTP provides energy efficiency and demand reduction solutions for public and private educational entities grades K-12 as well as colleges and universities. This program is designed to help educate and assist these customers in lowering their energy use by integrating energy efficiency into their short- and long-term planning, budgeting, and operational practices. The program assists with the

identification of demand and energy savings opportunities, provides detailed energy use, detailed building operational characteristics, and provides long-range energy efficiency planning. Incentives are paid to participating customers for eligible energy efficiency measures that are installed in new or retrofit applications that provide verifiable demand and energy savings.

E. New Programs for 2017

For 2017, SWEPCO will add a residential LED point of purchase program. The Residential Lighting Pilot program is an Upstream LED Lighting Markdown program designed to achieve residential energy savings. The program increases awareness and sales of ENERGY STAR® qualified LEDs through financial incentives delivered directly to customers via a reduction in cost at the retailers' point of purchase. This program delivery model aims to minimize market and partner confusion, decrease overall costs, increase cost-effectiveness and improve customer experience.

F. Discontinued Programs

SWEPCO has no discontinued programs for 2017.

II. CUSTOMER CLASSES

SWEPCO’s energy efficiency programs target residential and commercial customer classes. SWEPCO’s energy efficiency programs also target customer sub-classes, including Low-Income and Schools. 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)(A). Table 3 summarizes the number of active customers in each eligible customer class at SWEPCO in the month of January 2017. It should be noted that the actual distribution of the annual goal to be achieved 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 SWEPCO’s mandated demand reduction goal in total. SWEPCO offers a varied portfolio of SOPs and MTPs such that all eligible customer classes have access to energy efficiency alternatives.

Table 3: Summary of Customer Classes

Customer Class	Number of Customers
Commercial	35,087
Residential	149,482
Hard-to-Reach ²	52,319*

* The Hard-to-Reach customer count is a subset of the Residential total.

² According to the U.S. Census Bureau’s 2015 Current Population Survey, 35% of Texas families fall below 200% of the poverty threshold. Applying that percentage to SWEPCO’s residential customer base of 149,382, the number of HTR customers is estimated to be 52,319.

III. ENERGY EFFICIENCY GOALS AND PROJECTED SAVINGS

As prescribed by the EE Rule, SWEPCO's annual demand reduction goal is specified as a percent of its historical, weather-normalized, five-year average growth in demand. SWEPCO's 2017 goal is calculated based upon the average annual growth in peak demand for the years 2011 through 2015, inclusive (the most recent historical load growth data available). SWEPCO's 2018 goal is calculated based upon the average annual growth in peak demand for the years 2012 through 2016, inclusive (the most recent historical load growth data available).

SWEPCO's demand reduction goal to be achieved is prescribed by the EE Rule to be at least 30% of this calculated annual growth in demand of residential and commercial customers. The corresponding annual energy savings goal is determined by applying a 20% conservation load factor to the applicable demand reduction goal for the Program Year. A utility's demand reduction goal in megawatts for any year cannot be less than the previous year's goal.

Table 4 presents the actual historical annual growth in demand for the previous five years used to calculate SWEPCO's goals.

Table 4: Annual Growth in Demand and Energy Consumption

Calendar Year	Peak Demand (MW) @ Source					Energy Consumption (MWh) @ Meter				Energy Efficiency Goal Calculations @ Meter				
	Total System		Residential & Commercial			Total System		Residential & Commercial		Peak Demand at Meter	Load Growth at Meter	5 year Average Growth at Meter	30% Growth at Meter	
	Actual	Weather Adjusted	Actual	Weather Adjusted	Opt-Out	Peak Demand at Source Net Opt-outs	Actual	Weather Adjusted	Actual					Weather Adjusted
2011	1,636	1,557	1,531	1,452	-109	1,343	7,544	7,335	5,855	5,647	1,241	15.70	NA	NA
2012	1,696	1,631	1,556	1,491	-109	1,382	7,521	7,457	5,527	5,462	1,277	36.02	NA	NA
2013	1,567	1,603	1,396	1,432	-104	1,328	7,588	7,572	5,503	5,486	1,227	-49.88	NA	NA
2014	1,511	1,626	1,328	1,442	-106	1,336	7,798	7,823	5,505	5,530	1,234	7.39	NA	NA
2015	1,607	1,579	1,428	1,399	-118	1,281	7,893	7,844	5,896	5,847	1,183	-50.86	NA	NA
2016	1,488	1,543	1,411	1,466	-109	1,357	7,076	7,067	5,302	5,294	1,253	70.15	NA	NA
2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-8.33	-2.50
2018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.56	0.77

*Line losses are derived from the loss factors determined in SWEPCO's most recent line loss study.

Table 5 presents the projected demand reduction and energy savings, by program, for each customer class and for each of the years 2017 and 2018. Projected savings reflect the estimated demand and energy savings that SWEPCO's programs are expected to achieve with fully-developed program budgets for each of the years shown.

**Table 5: Projected Demand and Energy Savings by Program for Each Customer Class
For 2017 and 2018 (at the Meter)**

2017	Projected Savings	
Customer Class and Program	Demand (kW)	Energy (kWh)
Commercial	11,844	11,575,108
Commercial Solutions MTP	441	2,042,664
Commercial SOP	960	6,174,799
Load Management SOP	9,653	115,658
Open MTP	251	1,029,100
SCORE MTP	539	2,212,886
Residential	1,997	4,636,121
LED Retail Pilot	203	1,588,000
Residential SOP	1,794	3,048,121
Hard-to-Reach Residential	1,465	2,586,260
Hard-to-Reach SOP	1,465	2,586,260
Total Annual Projected Savings	15,305	18,797,489

2018	Projected Savings	
Customer Class and Program	Demand (kW)	Energy (kWh)
Commercial	8,617	9,887,109
Commercial Solutions MTP	441	2,042,664
Commercial SOP	703	4,522,388
Load Management SOP	6,683	80,071
Open MTP	251	1,029,100
SCORE MTP	539	2,212,886
Residential	1,829	4,350,917
LED Retail Pilot	203	1,588,000
Residential SOP	1,626	2,762,917
Hard-to-Reach Residential	1,210	2,137,405
Hard-to-Reach SOP	1,210	2,137,405
Total Annual Projected Savings	11,656	16,375,431

IV. PROGRAM BUDGETS

Table 6 presents total projected budget allocations required to meet SWEPCO's projected demand and energy savings to be achieved for the Program Years 2017 and 2018. 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 among customer classes, and the incentive levels by customer class. Table 6 budget allocations are detailed by customer class, program, and in the following budget categories: incentive payments; administration; research and development (R&D); and evaluation, measurement and verification (EM&V).

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

2017	Incentives	Admin	R&D & EM&V	Total
Commercial	\$1,935,000	\$286,026	\$0	\$2,221,026
Commercial Solutions MTP	\$325,000	\$44,318		\$369,318
Commercial SOP	\$710,000	\$125,294		\$835,294
Load Management SOP	\$325,000	\$44,318		\$369,318
SCORE MTP	\$325,000	\$44,318		\$369,318
Open MTP	\$250,000	\$27,778		\$277,778
Residential	\$1,220,500	\$176,930	\$0	\$1,397,430
On-Line Home Energy Checkup	\$55,000	\$9,706		\$64,706
LED Retail Pilot	\$310,500	\$16,342		\$326,842
Residential SOP	\$855,000	\$150,882		\$1,005,882
Hard-to-Reach Residential	\$847,000	\$149,688	\$0	\$996,688
Hard-to-Reach SOP	\$847,000	\$149,688		\$996,688
Research & Development			\$125,000	\$125,000
TOTAL PROGRAM BUDGET	\$4,002,500	\$612,644	\$125,000	\$4,740,144
EM&V			\$62,733	\$62,733
TOTAL BUDGET	\$4,002,500	\$612,644	\$187,733	\$4,802,877

2018	Incentives	Admin	R&D & EM&V	Total
Commercial	\$1,615,000	\$283,078	\$0	\$1,898,078
Commercial Solutions MTP	\$310,000	\$57,353		\$367,353
Commercial SOP	\$520,000	\$100,888		\$620,888
Load Management SOP	\$225,000	\$39,706		\$264,706
SCORE MTP	\$310,000	\$57,353		\$367,353
Open MTP	\$250,000	\$27,778		\$277,778
Residential	\$1,130,000	\$187,380	\$0	\$1,317,380
On-Line Home Energy Checkup	\$55,000	\$9,706		\$64,706
Residential Pilot	\$300,000	\$40,909		\$340,909
Residential SOP	\$775,000	\$136,765		\$911,765
Hard-to-Reach Residential	\$700,000	\$123,529	\$0	\$823,529
Hard-to-Reach SOP	\$700,000	\$123,529		\$823,529
Research & Development			\$125,000	\$125,000
TOTAL PROGRAM BUDGET	\$3,445,000	\$593,987	\$125,000	\$4,163,987
EM&V			\$62,740	\$62,740
TOTAL BUDGET	\$3,445,000	\$593,987	\$187,740	\$4,226,727

ENERGY EFFICIENCY REPORT

V. HISTORICAL DEMAND AND ENERGY SAVINGS GOALS FOR THE PREVIOUS FIVE YEARS

Table 7 contains SWEPCO's actual demand and energy goals and actual savings achieved for the previous five years (2012-2016) calculated in accordance with the EE Rule.

Table 7: Historical Demand and Energy Goals* and Savings Achieved

Calendar Year	Actual Weather Adjusted Demand Goal (MW)	Actual Weather Adjusted Energy Goal (MWh)	Actual Demand Reduction (MW)	Actual Energy Savings (MWh)
2012	5.60	9,811	13.33	19,078
2013	5.60	9,811	14.07	18,778
2014	5.60	9,811	12.58	17,494
2015	5.60	9,811	9.88	15,262
2016	5.60	9,811	11.94	20,648

* Actual weather-adjusted MW and MWh goals as reported in SWEPCO's EEPs filed in years 2012-2016.

VI. PROJECTED, REPORTED AND VERIFIED DEMAND AND ENERGY SAVINGS

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

2016 Customer Class and Program	Projected Savings		Reported and Verified Savings	
	kW	kWh	kW	kWh
Commercial	8,636	11,518,596	8,953	11,299,350
Commercial Solutions MTP	423	2,077,826	456	2,489,513
Commercial SOP	1,200	6,307,200	842	5,413,907
Load Management SOP	6,250	68,989	6,935	83,251
Open MTP	231	1,355,775	236	1,082,679
SCORE MTP	532	1,708,806	484	2,230,001
Residential	1,611	4,232,708	1,769	5,412,215
Residential SOP	1,611	4,232,708	1,769	5,412,215
Hard-to-Reach Residential	1,208	3,173,815	1,217	3,936,540
Hard-to-Reach SOP	1,208	3,173,815	1,217	3,936,540
Total Annual Savings	11,455	18,925,119	11,939	20,648,105

2015 Customer Class and Program	Projected Savings		Reported and Verified Savings	
	kW	kWh	kW	kWh
Commercial	6,869	7,517,157	7,345	7,939,404
Commercial Solutions MTP	353	1,731,522	313	2,138,986
Commercial SOP	842	2,950,737	625	3,794,817
Load Management SOP	5,000	55,118	5,883	60,392
Open MTP	231	1,355,775	215	893,807
SCORE MTP	443	1,424,005	310	1,051,403
Residential	1,640	2,943,967	1,694	4,857,599
CoolSaver MTP	241	493,754	242	567,174
Residential SOP	1,399	2,450,213	1,452	4,290,425
Hard-to-Reach Residential	773	1,354,754	837	2,464,948
Hard-to-Reach SOP	773	1,354,754	837	2,464,948
Total Annual Savings	9,282	11,815,878	9,876	15,261,951

VII. HISTORICAL PROGRAM EXPENDITURES

This section documents SWEPCO's incentive and administration expenditures for the previous five years (2012-2016) detailed by program for each customer class.

Table 9: Historical Program Incentive and Administrative Expenditures for 2012 through 2016 (\$000's)

Commercial	2016		2015		2014		2013		2012	
	Incent	Admin	Incent	Admin	Incent	Admin	Incent	Admin	Incent	Admin
CS MTP	\$307.77	\$43.71	\$237.46	\$40.72	\$523.45	\$59.24	\$263.40	\$48.20	\$165.50	\$27.20
CSOP	\$622.51	\$118.23	\$329.17	\$85.75	\$331.42	\$87.27	\$469.50	\$110.40	\$337.80	\$56.00
CoolSaverSM MTP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP
LED Lighting Pilot MTP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP	NAP
Load Management SOP	\$187.79	\$31.00	\$145.26	\$25.42	\$256.11	\$42.39	\$229.50	\$37.00	\$250.90	\$32.00
Open MTP	\$249.99	\$28.43	\$249.67	\$33.12	\$380.25	\$47.74	\$409.90	\$38.50	\$270.20	\$31.80
SCORE MTP	\$284.58	\$44.18	\$209.54	\$37.76	\$251.38	\$34.11	\$344.10	\$51.80	\$306.40	\$39.00
SMART SourceSM MTP	NAP	NAP	NAP	NAP	NAP	NAP	\$151.80	\$14.50	NAP	NAP
SWEPCO Care\$	NAP	NAP	NAP	NAP	NAP	NAP	\$7.20	\$0.80	\$88.10	\$12.10
Residential										
Appliance Rebate Pilot MTP	NAP	NAP	NAP	NAP	\$9.74	\$0.89	\$89.60	\$9.80	NAP	NAP
CoolSaverSM MTP	NAP	NAP	\$151.03	\$13.38	\$152.65	\$19.02	\$164.40	\$17.00	\$222.70	\$26.00
Home Energy Checkup	NAP	NAP	NAP	NAP	\$7.80	\$0.71	\$8.50	\$0.70	\$7.80	\$1.40
RSOP	\$989.96	\$80.52	\$809.46	\$85.07	\$630.76	\$92.54	\$765.10	\$102.90	880.6	\$123.50
SMART SourceSM MTP	NAP	NAP	NAP	NAP	NAP	NAP	\$84.80	\$8.10	\$132.90	\$14.50
Hard-to-Reach Residential										
HTR SOP	\$864.97	\$70.95	\$584.98	\$65.07	\$562.36	\$80.54	\$605.30	\$86.20	\$899.20	\$123.30
Home Savers	NAP	NAP	NAP	NAP	NAP	NAP	\$386.50	\$37.00	\$371.60	\$33.90
R & D	NAP	\$174.82	NAP	\$108.17	NAP	\$112.06	NAP	\$101.80	NAP	\$52.70
Evaluation, Measurement & Verification	NAP	\$57.11	NAP	\$78.82	NAP	\$108.18	NAP	\$120.50	NAP	NAP
Total Expenditures	\$3,507.57	\$648.95	\$2,716.57	\$573.26	\$3,105.90	\$684.68	\$3,979.60	\$785.20	\$3,946.90	\$574.40

VIII. PROGRAM FUNDING FOR CALENDAR YEAR 2016

As shown in Table 10, the Total Projected Budget for 2016 was \$4,242,268. Total Funds Expended for 2016 were \$4,156,523. The LMSOP was under budget by more than 10% due to lower than expected participation levels.

Table 10: Program Funding for Calendar Year 2016

2016	Number of Participating ESI ID Accounts	Total Projected Budget	Actual funds Expended (Incentives)	Admin	EM&V	Total funds Expended
Commercial	137	\$ 1,928,104	\$ 1,652,629	\$ 265,551		\$ 1,918,180
Commercial Solutions MTP	22	333,333	307,772	43,713		\$ 351,485
Commercial SOP	30	705,882	622,510	118,225		\$ 740,735
Load Management SOP	7	277,778	187,785	31,004		\$ 218,789
Open MTP	62	277,778	249,985	28,427		\$ 278,412
SCORE MTP	16	333,333	284,577	44,182		\$ 328,759
Residential	1,214	\$ 1,161,695	\$ 989,963	\$ 80,520		\$ 1,070,484
Residential SOP	1,214	1,161,695	989,963	80,520		\$ 1,070,484
Hard-to-Reach Residential	982	\$ 1,014,240	\$ 864,974	\$ 70,948		\$ 935,922
Hard-to-Reach SOP	982	1,014,240	864,974	70,948		\$ 935,922
Total Program Expenditures		\$ 4,104,039	\$ 3,507,567	\$ 417,019		\$ 3,924,586
Research & Development		73,409		174,823		\$ 174,823
EM&V		64,820			57,114	\$ 57,114
Total Expenditures	2,333	\$ 4,242,268	\$ 3,507,567	\$ 591,842	\$ 57,114	\$ 4,156,523

IX. MARKET TRANSFORMATION PROGRAM RESULTS

SCORE MTP

The SCORE MTP that is implemented by a third party contractor provided non-cash incentives, such as building energy analyses, technical assistance, communications support, and monetary incentives for the installation of documented energy efficiency measures that reduce peak demand and energy use. In 2016, SWEPCO projected to acquire 532 kW in demand savings from this program. SWEPCO has verified and reported savings of 484 kW. This included participation by 16 customers in ten counties.

Commercial Solutions MTP

SWEPCO contracted with a third-party program implementer for the Commercial Solutions MTP to provide commercial facilities non-cash incentives, such as technical assistance to identify energy efficiency opportunities, education in promoting best practices, and communication support services. Program participants received cash incentives for the installation of documented energy efficiency measures that reduced peak demand and energy consumption. For 2016, SWEPCO projected to acquire 423 kW of demand savings from this program. SWEPCO's verified and reported results are 456 kW. This included participation by 22 customers in eleven different counties.

Open MTP

The Open MTP contractor provided small commercial customers with less than 100 kW demand non-cash incentives such as technical assistance to identify energy efficiency opportunities and education in promoting best practices. The direct install program provided a turn-key approach providing participants cash incentives for the installation of documented energy efficiency measures that reduced peak demand and energy consumption. For 2016, SWEPCO projected 231 kW of demand savings from this program. SWEPCO's verified and reported results are 236 kW. This included participation by 62 customers in eleven different counties.

X. ADMINISTRATIVE AND RESEARCH AND DEVELOPMENT COSTS

Administrative Costs

Administrative costs incurred by SWEPCO to meet its energy efficiency goals and objectives include, but may not be limited to, energy efficiency employees' payroll, marketing, 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 which 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 SWEPCO meet future energy efficiency goals by researching new technologies, program options and developing better, more efficient ways to administer current programs. In 2016 SWEPCO dedicated resources to enhance electronic data collection and management system for current programs. In addition, SWEPCO participated with EUMMOT in researching potentially new deemed savings measures for various programs. SWEPCO also used resources in 2016 to update its energy efficiency website www.swepcogridsmart.com.

XI. 2017 ENERGY EFFICIENCY COST RECOVERY FACTOR (EECRF)

In PUCT Docket 45824, SWEPCO received approval to recover the following:

- \$4,740,144 Cost of SWEPCO’s Energy Efficiency programs projected for 2017
- \$832,620 Performance bonus for 2015 savings achievement
- \$75,010 SWEPCO’s over-recovery of its actual energy efficiency program costs for 2015

Approval was granted for a total revenue requirement of \$5,497,754.

The adjusted rates, as given in Table 11, went into effect on January 1, 2017.

Table 11: 2017 EECRF

Customer Class	Factor per kWh
Residential	\$0.001225
General Service	\$0.000588
Lighting & Power	\$0.000815
Municipal Pumping	\$0.000145
Municipal Service	\$0.000751
Cotton Gin	\$0.000238
Large L & P< 69kV	\$0.000000
Electric Furnace/Metal Melting < 69kV	\$0.002057
Oil Field Large Industrial Power	\$0.000013
Lighting	\$0.000000

XII. 2016 EECRF SUMMARY

Revenue Collected Through EECRF

Table 12 below outlines a summary of SWEPCO's 2016 EECRF including costs, performance bonus, prior year's over recovery and current years under recovery.

Table 12: Under-Recovery of Energy Efficiency Costs in 2016

	Authorized per Docket No. 44612	Actual Expenses
2016 Program Costs	\$ 4,177,448	\$ 4,099,409
2016 EM&V costs	\$ 64,820	\$ 57,114
2014 (Over)/Under Recovery	\$ (353,847)	\$ (353,847)
2014 Bonus	\$ 819,522	\$ 819,522
2016 Total Costs & Bonus	\$ 5,494,570	\$ 4,622,198
2016 EECRF Revenue		\$ 4,486,393
2016 (Over)/Under		\$ 135,805

XIII. UNDERSERVED COUNTIES

An underserved county is defined by SWEPCO as any county that has been historically underserved by the utility's energy efficiency programs or for other appropriate reasons. SWEPCO has no counties that are considered underserved at this time.

XIV. PERFORMANCE BONUS

SWEPCO achieved a 11,939 kW reduction in peak demand from its energy efficiency programs offered in 2016. SWEPCO's demand reduction goal for 2016 was 5,600 kW. This achievement represents 213% of its 2016 demand reduction goal. SWEPCO also achieved energy savings of 20,648,105 kWh, which represents 210% of its 2016 energy goal of 9,811,200 kWh. These results qualify SWEPCO for a Performance Bonus. Per 16 TAC § 25.181(h), SWEPCO is eligible for a Performance Bonus of \$1,188,390 which it will request within its May 1, 2017 EECRF filing for recovery in 2018.

In 2016, SWEPCO's total spending on energy efficiency programs was \$4,156,523. This includes actual EM&V expenditures to the EM&V team of \$57,114. Per the PUCT, the total program costs to be used in the performance bonus calculation should include the EM&V cost allocation provided by the EM&V team for the program year 2016, instead of the actual EM&V team expenditures. As a result, the total program expenditures for the bonus calculation will not match the actual total program expenditures exhibited in the

applicable tables in this EEPR. For the purposes of the bonus calculation, SWEPCO's total program costs equaled \$4,148,989.

Table 13: Energy Efficiency Performance Bonus Calculation for 2016

	kW	kWh
2016 Goals	5,600	9,811,000
2016 Savings	11,939	20,648,105
<i>Reported/Verified Hard-to-Reach</i>	1,217	
2016 Program Costs	\$4,148,989	
2016 Performance Bonus	\$1,188,390	

Performance Bonus Calculation

213%	Percentage of Demand Reduction Goal Met (Reported kW/Goal kW)
210%	Percentage of Energy Reduction Goal Met (Reported kWh/Goal kWh)
TRUE	Met Requirements for Performance Bonus?
\$16,032,886	Total Avoided Cost ((Reported kW * PV(Avoided Capacity Cost) + Reported kWh *PV(Avoided Energy Cost))
\$4,148,989	Total Program Costs
\$11,883,897	Net Benefits (Total Avoided Cost - Total Expenses)

Bonus Calculation

\$6,726,371	Calculated Bonus ((Achieved Demand Reduction/Demand Goal - 100%) / 2) * Net Benefits
\$1,188,390	Maximum Bonus Allowed (10% of Net Benefits)
\$1,188,390	Bonus (Minimum of Calculated Bonus and Bonus Limit)

ACRONYMS

A/C	Air Conditioning
CS MTP	Commercial Solutions Market Transformation Program
CSOP	Commercial Standard Offer Program
EE Rule	Energy Efficiency Rule, 16 TAC §§ 25.181 and 25.183
EECRF	Energy Efficiency Cost Recovery Factor
EEPR	Energy Efficiency Plan and Report
EESP	Energy Efficiency Service Provider
EM&V	Evaluation, Measurement & Verification
HTR SOP	Hard-to-Reach Standard Offer Program
LM SOP	Load Management Standard Offer Program
MTP	Market Transformation Program
NAP	Not Applicable
PLAN	Energy Efficiency Plan
PUCT	Public Utility Commission of Texas
PURA	Public Utility Regulatory Act
R&D	Research and Development
REPORT	Energy Efficiency Report
RSOP	Residential Standard Offer Program
SCORE MTP	Schools Conserving Resources Market Transformation Program
SOP	Standard Offer Program
SWEPCO	Southwestern Electric Power Company

**APPENDIX A:
REPORTED AND VERIFIED DEMAND AND ENERGY REDUCTION
BY COUNTY**

COMMERCIAL SOLUTIONS

County	Reported and Verified Savings	
	kW	kWh
Bowie	168	536,823
Camp	21	163,246
Cass	2	16,160
Gregg	156	1,116,595
Harrison	11	62,021
Morris	5	19,993
Panola	2	10,222
Rusk	14	79,423
Titus	64	426,356
Upshur	5	30,174
Wood	7	28,500
Total	456	2,489,513

COMMERCIAL STANDARD OFFER

County	Reported and Verified Savings	
	kW	kWh
Bowie	483	3,039,828
Cass	5	30,911
Gregg	270	1,814,157
Harrison	38	254,108
Panola	10	58,666
Rusk	32	188,409
Wheeler	4	27,828
Total	842	5,413,907

LOAD MANAGEMENT

County	Reported and Verified Savings	
	kW	kWh
Bowie	1,227	20,766
Camp	517	8,686
Gregg	4,566	43,417
Harrison	625	10,382
Total	6,935	83,251

OPEN

County	Reported and Verified Savings	
	kW	kWh
Bowie	163	734,299
Camp	2	10,961
Cass	9	35,124
Franklin	4	27,040
Gregg	13	54,032
Morris	1	8,761
Smith	2	12,491
Titus	8.06	44,550
Upshur	16.95	69,495
Van Zandt	6.77	39,002
Wood	9.4	46,924
Total	236	1,082,679

SCORE

County	Reported and Verified Savings	
	kW	kWh
Bowie	33	129,526
Donley	26	124,062
Gregg	144	559,896
Hall	48	244,433
Harrison	27	180,500
Panola	38	55,917
Rusk	11	49,997
Titus	11	62,712
VanZandt	35	204,636
Wood	112	618,322
Total	484	2,230,001

RESIDENTIAL STANDARD OFFER

County	Reported and Verified Savings	
	kW	kWh
Bowie	69	360,089
Camp	102	336,987
Cass	0	1,726
Franklin	57	164,945
Gregg	702	2,332,927
Harrison	92	308,466
Marion	1	1,694
Morris	65	154,583
Panola	3	3,583
Rains	1	5,583
Red River	4	5,908
Rusk	44	132,302
Smith	1	6,929
Titus	427	1,017,528
Upshur	78	193,373
Van Zandt	4	11,260
Wood	118	374,332
Total	1,769	5,412,215

HARD TO REACH

County	Reported and Verified Savings	
	kW	kWh
Bowie	29	52,653
Camp	15	101,853
Cass	13	40,881
Franklin	37	96,397
Gregg	459	1,575,392
Harrison	112	318,908
Morris	63	170,669
Rusk	18	48,637
Titus	204	565,667
Upshur	220	818,680
Van Zandt	2	2,299
Wood	45	144,503
Total	1,217	3,936,540

APPENDIX B:

PROGRAM TEMPLATES

SWEPCO TX Residential Lighting Pilot Program

Program Design

The Residential Lighting Pilot program is an Upstream Lighting Markdown program designed to achieve residential energy savings. The program increases awareness and sales of ENERGY STAR® qualified LEDs through financial incentives delivered directly to customers via a reduction in cost at the retailers' point of purchase. This program delivery model aims to minimize market and partner confusion, decrease overall costs, increase cost-effectiveness and improve customer experience.

Implementation Process

SWEPCO and a third part implementation firm will partner with select retailers based on a previously demonstrated ability to execute programs nationally. This mix of retail partners enables a wide offering of incentives to a wide range of customers in select markets for the purpose of this pilot. Retailers are enrolled in the program with Program Participation Agreements (PPA) which define the products to be incentivized, the incentive levels, budget and program duration.

Through its pilot phase the program will offer incentives on select LED products. The product mix selected is intended to enable achievement of savings goals and increase program affirmation in the retailers throughout the year.

Outreach and Research Activities

The approach combines existing, national industry partnerships with, comprehensive support provided by field staff who will service the participating retail locations. Through hands-on retail staff training, customer education and store-level relationship building, we will drive the sale of qualified products while attributing customer purchases to SWEPCO.

Once the program has been launched our field staff will verify that the pricing in the participating retailers is correct per the PPA and will place Point of Purchase signage in the stores to identify that the products are being incentivized by the utility.

Industry partners will provide monthly sales data from the Retailers electronic point of sales system, and will invoice monthly for the associated incentive dollars. Incentive dollars are then paid directly to the manufacturers.

APPENDIX C:

EXISTING CONTRACTS OR OBLIGATIONS

SWEPCO does not have any Existing Contracts or Obligation documentation to provide.

APPENDIX D

OPTIONAL SUPPORTING DOCUMENTATION

SWEPSCO has no Optional Supporting Documentation to provide.

INCENTIVE PAYMENTS	DIRECTLY ASSIGNED												Total	
	General Service	Lighting & Power Secondary	Lighting & Power Primary	Municipal Pumping	Municipal Service	Cotton Gin	Large Lighting & Power less than 69KV	Interruptible less than 69KV	Electric Furnace	Metal Melting < 69KV	Oil Field Large Industrial			
Commercial														
Commercial Solutions MTP		\$ 307,772												
Commercial SOP		\$ 622,510												
Load Management SOP		\$ 187,785												
SCORE MTP		\$ 284,577												
Open MTP		\$ 249,985												
Residential														
COOLSaver MTP- Res	\$ 0													
Online Home Energy Check-up Tool	\$ 0													
Residential SOP	\$ 989,963													
Energy Star Appliance Rebate MTP	\$ 0													
Hard-to-Reach SOP	\$ 864,974													
Total Incentive Expenditure	\$ 3,507,567													\$ 3,507,567

ADMINISTRATIVE COSTS	Total Admin	Admin. Allocated to Rate Classes												Total
		General Service	Lighting & Power Secondary	Lighting & Power Primary	Municipal Pumping	Municipal Service	Cotton Gin	Large Lighting & Power less than 69KV	Interruptible less than 69KV	Electric Furnace	Metal Melting < 69KV	Oil Field Large Industrial		
Commercial														
Commercial Solutions MTP	\$ 43,713	\$ 2,917	\$ 35,459	\$ 5,162	\$ 174	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 43,713
Commercial SOP	\$ 118,225	\$ 0	\$ 111,015	\$ 1,599	\$ 0	\$ 5,611	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 118,225
Load Management SOP	\$ 31,004	\$ 0	\$ 4,573	\$ 23,385	\$ 941	\$ 3,096	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 31,004
SCORE MTP	\$ 44,182	\$ 316	\$ 43,319	\$ 547	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 44,182
Open MTP	\$ 28,427	\$ 4,309	\$ 23,732	\$ 0	\$ 323	\$ 63	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 28,427
Residential														
COOLSaver MTP- Res	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Online Home Energy Check-up Tool	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Residential SOP	\$ 80,520	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 80,520
Energy Star Appliance Rebate MTP	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Hard-to-Reach SOP	\$ 70,948	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 70,948
Total Admin	\$ 417,019	\$ 7,542	\$ 218,097	\$ 29,695	\$ 1,264	\$ 8,944	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 417,019

RESEARCH & DEVELOPMENT	2016 R&D Allocated to Rate Classes											
	R&D	R&D NonSpec-Res	R&D NonSpec-Com	R&D NonSpec-Gen	EM&V	Grand Total	2016 EM&V	Grand Total	Incentive PMTs	Admin.	R&D	Grand Total
R&D Commercial SOP	\$ 25,849				\$ 946	\$ 21,109	\$ 2,876	\$ 134	\$ 783	\$ -	\$ -	\$ -
R&D Load Management	\$ 24,580				\$ 899	\$ 20,073	\$ 2,735	\$ 127	\$ 745	\$ -	\$ -	\$ -
R&D SCORE	\$ 2,133				\$ 81	\$ 1,806	\$ 246	\$ -	\$ -	\$ -	\$ -	\$ -
R&D Commercial Solutions	\$ 1,964				\$ 72	\$ 1,604	\$ 219	\$ 10	\$ 60	\$ -	\$ -	\$ -
R&D Residential SOP	\$ 41,262				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
R&D Hard to Reach SOP	\$ 38,013				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
R&D Non-specific and New/Existing	\$ 27,869	\$ 7,223	\$ 8,238	\$ 12,407	\$ 15,785	\$ 11,502	\$ 1,567	\$ 73	\$ 427	\$ -	\$ -	\$ -
R&D Online Tool	\$ 13,153				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total R&D	\$ 174,823	\$ 7,223	\$ 8,238	\$ 12,407	\$ 13,153	\$ 56,094	\$ 7,642	\$ 344	\$ 2,014	\$ -	\$ -	\$ 174,823
EM&V	\$ 30,204	\$ 985	\$ 21,976	\$ 2,994	\$ 815	\$ 224,199	\$ 164,578	\$ 10,290	\$ 61,850	\$ -	\$ -	\$ 224,199
Grand Total	\$ 2,142,823	\$ 71,505	\$ 1,645,781	\$ 224,199	\$ 10,290	\$ 61,850	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,142,823

2016 EM&V												
Totals	Incentive PMTs	Admin.	R&D	Grand Total	EM&V	Grand Total	Total with EM&V	Oil Field Large Industrial	Metal Melting < 69KV	Interruptible less than 69KV	Large Lighting & Power less than 69KV	General Service
Residential	\$ 1,854,938	\$ 151,468	\$ 106,213	\$ 2,112,619	\$ 30,204	\$ 2,142,823	\$ 2,142,823	\$ -	\$ -	\$ -	\$ -	\$ -
Commercial	\$ 60,466	\$ 7,542	\$ 2,513	\$ 70,521	\$ 985	\$ 71,505	\$ 71,505	\$ -	\$ -	\$ -	\$ -	\$ -
Lighting & Power - Secondary	\$ 1,349,614	\$ 218,097	\$ 56,094	\$ 1,623,806	\$ 21,976	\$ 1,645,781	\$ 1,645,781	\$ -	\$ -	\$ -	\$ -	\$ -
Lighting & Power - Primary	\$ 183,870	\$ 29,693	\$ 7,642	\$ 221,205	\$ 2,994	\$ 224,199	\$ 224,199	\$ -	\$ -	\$ -	\$ -	\$ -
Municipal Pumping	\$ 8,543	\$ 1,264	\$ 344	\$ 10,151	\$ 139	\$ 10,290	\$ 10,290	\$ -	\$ -	\$ -	\$ -	\$ -
Municipal Service	\$ 50,076	\$ 8,944	\$ 2,014	\$ 61,035	\$ 815	\$ 61,850	\$ 61,850	\$ -	\$ -	\$ -	\$ -	\$ -
Cotton Gin	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ -	\$ -	\$ -	\$ -	\$ -
Large Lighting & Power less than 69KV	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ -	\$ -	\$ -	\$ -	\$ -
Interruptible less than 69KV	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ -	\$ -	\$ -	\$ -	\$ -
Electric Furnace	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ -	\$ -	\$ -	\$ -	\$ -
Metal Melting less than 69KV	\$ 60	\$ 10	\$ 73	\$ 143	\$ 1	\$ 144	\$ 144	\$ -	\$ -	\$ -	\$ -	\$ -
Oil Field Large Industrial Power	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 3,507,567	\$ 417,019	\$ 174,823	\$ 4,099,409	\$ 57,114	\$ 4,156,523	\$ 4,156,523	\$ -	\$ -	\$ -	\$ -	\$ -

SWPCO 2016 EECRF ALLOCATORS
Schedule C Workpaper

Retail Rate Class	2016 Adjusted 4CP A&E													2016 Program Costs								
	DN40443 Base Period kWh @ meter	a	2016 Billed kWh at Meter	2016 Opt Out kWh at Meter	b	2016 Adj. kWh @ Meter	Delivery Voltage	c	Base Period kWh @ plant	d=axc	2016 Energy Factor	e=bd	2016 kWh @ plant	e=bx	Base Period 4CP A&E	g	Adjusted Base Period 4CP A&E	h=gxf	Adjusted 4CP A&E	i=j/Sj	2016 Program Incentive Costs	2016 Program Costs Allocator
Residential	2,247,975,852	2,075,793,304	2,075,793,304	561,032	2,075,793,304	sec	1.06382	2,391,438,232	2,208,267,257	0.92	0.92	41.10106%	2,208,267,257	2,208,267,257	41.10106%	37.9529%	37.9529%	50.185%	50.185%	\$1,854,938	52,884%	
General Service	293,672,646	280,056,866	280,056,866	561,032	279,495,834	sec	1.06382	312,414,385	297,332,831	0.95	0.95	5.80966%	297,332,831	297,332,831	5.80966%	5.5292%	5.5292%	7.311%	7.311%	\$60,466	1.724%	
Lighting & Power	3,388,632,281	2,844,530,331	2,844,530,331	288,279,688	2,556,250,643	sec	1.06382	3,579,193,486	2,705,855,026	0.76	0.76	38.78605%	2,705,855,026	2,705,855,026	38.78605%	29.3221%	29.3221%	38.773%	38.773%	\$1,533,484	43.719%	
Lighting & Power - Secondary	2,499,832,706	2,244,908,215	2,244,908,215	156,700,951	2,088,207,264	sec	1.06382	2,659,368,205	2,221,473,457	0.84	0.84	30.36374%	2,221,473,457	2,221,473,457	30.36374%	25.3640%	25.3640%	33.539%	33.539%	\$1,349,614	38.477%	
Municipal Pumping	888,799,575	599,622,116	599,622,116	131,578,737	468,043,379	pri	1.03491	919,825,282	484,381,569	0.53	0.53	8.42231%	484,381,569	484,381,569	8.42231%	4.4352%	4.4352%	5.865%	5.865%	\$183,870	5.242%	
Municipal Service	65,836,955	60,068,045	60,068,045	60,068,045	60,068,045	sec	1.06382	70,038,569	63,901,496	0.91	0.91	0.57569%	63,901,496	63,901,496	0.57569%	0.5252%	0.5252%	0.695%	0.695%	\$8,543	0.244%	
Cotton Gin	24,280,905	27,379,758	27,379,758	27,379,758	27,379,758	sec	1.06382	25,830,475	29,127,092	1.13	1.13	0.21507%	29,127,092	29,127,092	0.21507%	0.2425%	0.2425%	0.321%	0.321%	\$50,076	1.428%	
Large Lighting & Power less than 69KV	241,661,354	215,519,540	215,519,540	215,519,540	215,519,540	sec	1.06382	4,042,794	6,818,076	1.69	1.69	0.02416%	6,818,076	6,818,076	0.02416%	0.0408%	0.0408%	0.054%	0.054%	\$0	0.000%	
Interruptible less than 69KV	0	0	0	0	0	pri	1.03491	250,097,130	0	0.00	0.00	2.80378%	0	0	2.80378%	0.0000%	0.0000%	0.000%	0.000%	\$0	0.000%	
Electric Furnace	443,987	0	0	0	0	pri	1.03491	0	0	0.00	0.00	0.00000%	0	0	0.00000%	0.0000%	0.0000%	0.000%	0.000%	\$0	0.000%	
Metal Melting less than 69KV	8,976,561	47,864,970	47,864,970	1,737,600	46,127,370	pri	1.03491	9,289,910	47,737,558	5.14	5.14	0.15156%	47,737,558	47,737,558	0.15156%	0.00342%	0.00342%	1.030%	1.030%	\$60	0.002%	
Oil Field Large Industrial Power	40,386,534	366,933,537	366,933,537	276,501,887	90,431,650	pri	1.03491	41,796,324	93,588,386	2.24	2.24	0.33799%	93,588,386	93,588,386	0.33799%	0.7568%	0.7568%	1.001%	1.001%	\$0	0.000%	
Subtotal	6,315,667,342	5,924,555,411	5,924,555,411	782,599,747	5,141,955,664			6,684,613,626	5,452,627,722			75.6255%	5,452,627,722	5,452,627,722	75.6255%	75.6255%	75.6255%	75.6255%	100.00%	100.00%	\$3,507,567	100.000%

Schedule C Worksheet
SWEPCO 2016 EECRF Collections by Rate Class

	Rate Codes	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	TOTAL
Residential	12 15 16 19 62	\$ 237,891	\$ 207,186	\$ 156,471	\$ 143,183	\$ 147,951	\$ 202,321	\$ 285,454	\$ 292,008	\$ 252,664	\$ 203,531	\$ 153,677	\$ 192,003	\$ 2,474,340
General Service	200 204 205 207 208 210 212 215 218 224 238 282	10,368	9,962	8,176	7,914	8,280	10,321	14,562	14,438	12,761	11,280	9,026	9,222	126,309
Lighting & Power Secondary	60 63 240 243 292	120,232	114,826	109,554	113,326	119,361	135,419	148,779	153,189	150,496	137,744	124,265	118,256	1,545,448
Municipal Service	544 548	1,993	1,720	1,557	1,610	1,610	1,915	2,464	2,473	2,236	2,077	1,954	2,084	23,695
Cotton Gin	253	83	54	4	0	0	0	0	0	0	3	37	112	295
Municipal Pumping	541 543 550 553	(1,128)	(845)	(823)	(916)	(926)	(916)	(985)	(925)	(1,020)	(999)	(1,085)	(905)	(11,472)
Lighting & Power Primary	66 246 249 251 277	27,482	29,490	27,261	25,652	26,527	30,459	29,186	29,491	30,820	27,454	28,439	28,879	341,140
Large Lighting & Power less than 69KV	346 351	733	458	830	450	908	722	703	938	783	738	707	700	8,671
Electric Furnace	312	0	0	0	0	0	0	0	0	0	0	0	0	0
Metal Melting less than 69KV	325 335	(7,031)	(7,855)	(7,511)	(7,254)	(6,582)	(6,056)	(7,552)	(6,510)	(6,712)	(6,991)	(6,383)	(6,408)	(82,844)
Oil Field Large Industrial Power	329 330	6,037	4,772	3,164	4,131	4,794	5,112	4,986	6,434	5,300	5,256	9,362	1,867	61,213
Lighting	90-143 203 521 528 529 532 534 535 538 739	(34)	(34)	(34)	(34)	(34)	(31)	(34)	(34)	(32)	(34)	(34)	(34)	(402)
Total		\$ 396,625	\$ 359,735	\$ 298,649	\$ 288,065	\$ 301,889	\$ 379,267	\$ 477,564	\$ 491,501	\$ 447,297	\$ 380,060	\$ 319,964	\$ 345,776	\$ 4,486,393

Schedule C Workpaper

2014 Awarded Bonus and (Over)/Under Collection by Retail Rate Class

Awarded Bonus <u>Retail Rate Class</u>	Docket No. 44612	Docket No. 44612
	2014 <u>Bonus</u>	2014 <u>O/U</u>
Residential	\$360,612	(\$8,099)
General Service	21,361	(176,030)
Lighting & Power Secondary	\$326,140	\$272,854
Lighting & Power Primary	\$80,808	(\$253,910)
Municipal Pumping	\$0	(\$33,092)
Municipal Service	\$4,577	\$6,203
Electric Furnace	\$0	(85)
Cotton Gin	\$0	(983)
Large Lighting & Power less than 69kV	\$0	9,898
Metal Melting less than 69kV	\$26,025	(164,454)
Oil Field Large Industrial Power	\$0	(5,505)
Lighting	\$0	(642)
Total	\$819,522	(\$353,847)

Schedule E Workpaper

ELIGIBILITY BY RETAIL RATE CLASS												
2018 BUDGET												
	Residential	General Service	Lighting & Power Secondary	Lighting & Power Primary	Municipal Pumping	Municipal Service	Cotton Gin	Large Lighting & Power less than 69kV	Interruptible less than 69kV	Electric Furnace	Metal Melting < 69kV	Oil Field Large Industrial
Commercial												
Commercial Solutions MTP			X	X	X	X	X			X	X	X
Commercial SOP		X	X	X	X	X	X			X	X	X
Load Management SOP		X	X	X	X	X	X			X	X	X
SCORE MTP		X	X	X	X	X	X			X	X	X
Open MTP		X	X	X	X	X	X					
Total Commercial Budgets												
Residential												
Residential Pilot	X											
Residential SOP	X											
On-Line Home Energy Checkup	X											
Hard-to-Reach SOP	X											
Total Residential Budgets												
Research and Development (R&D)												
General	X	X	X	X	X	X	X			X	X	X
TOTAL												

EVALUATION, MEASUREMENT & VERIFICATION										
2016/2017										
	Incentives	Admin	Total							
Commercial Solutions MTP	Nonresidential	\$57,353	\$367,353							
Commercial SOP	Nonresidential	\$100,888	\$620,888							
Load Management SOP	Nonresidential	\$39,706	\$264,706							
SCORE MTP	Nonresidential	\$57,353	\$367,353							
Open MTP	Nonresidential	\$27,778	\$277,778							
SMART Source Solar PV MTP	Nonresidential	\$283,078	\$1,898,078							
Residential Pilot	Residential	\$40,909	\$340,909							
Residential SOP	Residential	\$136,765	\$911,765							
On-Line Home Energy Checkup	Residential	\$9,706	\$64,706							
Hard-to-Reach SOP	Residential	\$123,529	\$823,529							
Total Residential Budgets	Residential	\$310,909	\$2,140,909							
Research and Development (R&D)	General	\$125,000	\$125,000							
TOTAL		\$593,987	\$4,163,987							

Schedule E Workpaper

PROGRAM COST ALLOCATOR FOR ELIGIBLE CLASSES												
Residential	General Service	Lighting & Power Secondary	Lighting & Power Primary	Municipal Pumping	Municipal Service	Cotton Gin	Large Lighting & Power less than 69KV	Interruptible less than 69KV	Electric Furnace	Metal Melting < 69kV	Oil Field Large Industrial	Total Relevant
49.938%	7.276%	33.544%	5.948%	0.691%	0.319%	0.054%	0.000%	0.000%	0.000%	1.027%	1.203%	100.0%
0.0%	14.5%	67.0%	11.9%	1.4%	0.6%	0.1%	0.0%	0.0%	0.0%	2.1%	2.4%	50.1%
0.0%	14.5%	67.0%	11.9%	1.4%	0.6%	0.1%	0.0%	0.0%	0.0%	2.1%	2.4%	50.1%
0.0%	14.5%	67.0%	11.9%	1.4%	0.6%	0.1%	0.0%	0.0%	0.0%	2.1%	2.4%	50.1%
0.0%	15.6%	71.7%	12.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	46.8%
0.0%	15.2%	70.2%	12.4%	1.4%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	47.8%
100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	49.9%
100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	49.9%
100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	49.9%
100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	49.9%
53.0%	7.0%	32.1%	5.7%	0.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.6%	0.7%	100.0%
TOTAL												

EVALUATION, MEASUREMENT &													
2016/2017	Commercial Solutions MTP	Commercial SOP	Load Management SOP	SCORE MTP	Open MTP	SMART Source Solar PV MTP	Residential Pilot	Online Home Energy Checkup	Residential SOP	ENERGY STAR Appliance Rebate	SMART Source Solar PV MTP	Hard-to-Reach SOP	HomeSavers
0.0%	14.5%	67.0%	11.9%	1.4%	0.6%	0.1%	0.0%	0.0%	0.0%	2.1%	2.4%	50.1%	
0.0%	14.5%	67.0%	11.9%	1.4%	0.6%	0.1%	0.0%	0.0%	0.0%	2.1%	2.4%	50.1%	
0.0%	15.6%	71.7%	12.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	46.8%	
0.0%	15.2%	70.2%	12.4%	1.4%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	47.8%	
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	49.9%	
100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	49.9%	
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	49.9%	
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Grand Total													

Schedule E Workpaper

2018 BUDGET												
ALLOCATED BUDGET TO ELIGIBLE CLASSES												
Residential	General Service	Lighting & Power Secondary	Lighting & Power Primary	Municipal Pumping	Municipal Service	Cotton Gin	Large Lighting & Power less than 69kV	Interruptible less than 69kV	Electric Furnace	Metal Melting < 69kV	Oil Field Large Industrial	Total
53.01%	6.97%	32.14%	5.70%	0.53%	0.24%	0.03%	0.00%	0.00%	0.00%	0.64%	0.75%	100.00%
\$0	\$53,392	\$246,144	\$43,643	\$5,071	\$2,341	\$393	\$0	\$0	\$0	\$7,539	\$8,830	\$367,353
\$0	\$90,242	\$416,024	\$73,763	\$8,571	\$3,958	\$665	\$0	\$0	\$0	\$12,742	\$14,924	\$620,888
\$0	\$38,473	\$177,365	\$31,448	\$3,654	\$1,687	\$284	\$0	\$0	\$0	\$5,432	\$6,362	\$264,706
\$0	\$57,153	\$263,483	\$46,717	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$367,353
\$0	\$42,303	\$195,023	\$34,579	\$4,018	\$1,855	\$0	\$0	\$0	\$0	\$0	\$0	\$277,778
\$0	\$281,563	\$1,298,038	\$230,149	\$21,315	\$9,841	\$1,342	\$0	\$0	\$0	\$25,713	\$30,116	\$1,898,078
\$340,909	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$340,909
\$911,765	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$911,765
\$64,706	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$64,706
\$823,529	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$823,529
\$2,140,909	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,140,909
\$66,258	\$8,714	\$40,172	\$7,123	\$660	\$305	\$42	\$0	\$0	\$0	\$796	\$932	\$125,000
\$2,207,167	\$290,277	\$1,338,210	\$237,272	\$21,974	\$10,146	\$1,384	\$0	\$0	\$0	\$26,509	\$31,048	\$4,163,987
TOTAL												
EVALUATION, MEASUREMENT &												
2016/2017	Commercial Solutions MTP	\$0	\$2,680	\$12,357	\$2,191	\$118	\$255	\$118	\$0	\$378	\$443	\$18,442
Commercial SOP	\$0	\$4,456	\$20,544	\$3,643	\$195	\$33	\$423	\$195	\$0	\$629	\$737	\$30,661
Load Management SOP	\$0	\$1,420	\$6,548	\$1,161	\$62	\$10	\$135	\$62	\$0	\$201	\$235	\$9,773
SCORE MTP	\$0	\$2,674	\$12,327	\$2,186	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$17,187
Open MTP	\$0	\$1,036	\$4,778	\$847	\$45	\$0	\$98	\$45	\$0	\$0	\$0	\$6,806
SMART Source Solar PV MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Residential Pilot	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Online Home Energy Checkup	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Residential SOP	\$23,171	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$23,171
ENERGY STAR Appliance Rebate	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SMART Source Solar PV MTP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Hard-to-Reach SOP	\$19,433	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$19,433
HomeSavers	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$42,604	\$12,268	\$56,555	\$10,028	\$911	\$421	\$63	\$911	\$421	\$0	\$1,208	\$1,415	\$125,473
\$2,249,771	\$302,545	\$1,394,766	\$247,300	\$22,886	\$10,567	\$1,447	\$0	\$0	\$0	\$27,717	\$32,463	\$4,289,460

**Schedule E Workpaper
 SWEPCO 2018 EECRF ALLOCATORS**

2018 Adjusted 4CP A&E											
Retail Rate Class	DN40443			DN40443			2018			DN40443	
	Base Period kWh @ meter	Forecasted Adj. kWh @ Meter	Delivery Voltage	Line Loss Factor	Base Period kWh @ plant	Forecasted kWh @ plant	Energy Factor	Base Period	Forecasted	Adjusted Base Period	Adjusted
	a	b		c	d=abc	e=bcx	f=e/d	g	h=exf	i=j/Σj	
Residential	2,247,975,852	2,227,623,311	sec	1.063818	2,391,438,232	2,369,786,822	0.99	41.10106%	40.7289%	49.938%	
General Service	293,672,646	299,980,068	sec	1.063818	312,414,385	319,124,337	1.02	5.80966%	5.9344%	7.276%	
Lighting & Power - Secondary	2,499,832,706	2,252,406,864	sec	1.063818	2,659,368,205	2,396,152,024	0.90	30.36374%	27.3584%	33.544%	
Lighting & Power - Primary	888,799,575	511,901,614	pri	1.034907	919,825,282	529,770,782	0.58	8.42231%	4.8508%	5.948%	
Municipal Pumping	65,836,955	64,461,609	sec	1.063818	70,038,569	68,575,450	0.98	0.57569%	0.5637%	0.691%	
Municipal Service	24,280,905	29,382,399	sec	1.063818	25,830,475	31,257,539	1.21	0.21507%	0.2603%	0.319%	
Cotton Gin	3,800,267	6,877,839	sec	1.063818	4,042,794	7,316,772	1.81	0.02416%	0.0437%	0.054%	
Large Lighting & Power less than 69kV	241,661,354	0	pri	1.034907	250,097,130	0	0.00	2.80378%	0.0000%	0.000%	
Interruptible less than 69kV	0	0	pri	1.034907	0	0	0.00	0.00000%	0.0000%	0.000%	
Electric Furnace	443,987	0	sec	1.063818	472,322	0	0.00	0.00342%	0.0000%	0.000%	
Metal Melting less than 69kV	8,976,561	49,628,363	pri	1.034907	9,289,910	51,360,761	5.53	0.15156%	0.8379%	1.027%	
Oil Field Large Industrial Power	40,386,534	117,270,315	pri	1.034907	41,796,324	121,363,920	2.90	0.33799%	0.9814%	1.203%	
Subtotal	6,315,667,342	5,559,532,382			6,684,613,626	5,894,708,409			81.5596%	100.0%	

2018 INCENTIVES ALLOCATOR

Residential	\$2,140,909	53.0%
General Service	\$281,563	7.0%
Lighting & Power - Secondary	\$1,298,038	32.1%
Lighting & Power - Primary	\$230,149	5.7%
Municipal Pumping	\$21,315	0.5%
Municipal Service	\$9,841	0.2%
Cotton Gin	\$1,342	0.0%
Large Lighting & Power less than 69kV	\$0	0.0%
Interruptible less than 69kV	\$0	0.0%
Electric Furnace	\$0	0.0%
Metal Melting less than 69kV	\$25,713	0.6%
Oil Field Large Industrial Power	\$30,116	0.7%
Total	\$4,038,987	100.0%

**Schedule E Workpaper
2016 Requested Bonus**

2016 Requested Bonus \$1,188,390

<u>2016 Participating Rate Classes</u>	2016 Total Program Costs w/o EM&V	2016 Program Cost Allocator	Allocated 2016 Bonus
Residential	\$2,112,619	51.535%	\$612,433
General Service	\$70,521	1.720%	\$20,444
Lighting & Power - Secondary	\$1,623,806	39.611%	\$470,730
Lighting & Power - Primary	\$221,205	5.396%	\$64,126
Municipal Pumping	\$10,151	0.248%	\$2,943
Municipal Service	\$61,035	1.489%	\$17,694
Cotton Gin	\$0	0.000%	\$0
Large Lighting & Power less than 69kV	\$0	0.000%	\$0
Interruptible less than 69kV	\$0	0.000%	\$0
Electric Furnace	\$0	0.000%	\$0
Metal Melting less than 69kV	\$72	0.002%	\$21
Oil Field Large Industrial Power	\$0	0.000%	\$0
TOTAL	\$4,099,409		\$1,188,390

SWEPSCO Projected EM&V Costs in 2018 EECRF

Program	2017	2018	Total
Commercial Solutions MTP	\$ 10,055	\$ 8,387	\$ 18,442
Commercial SOP	14,496	16,165	30,661
Load Management SOP	6,398	3,375	9,773
Open MTP	3,739	3,067	6,806
SCORE MTP	9,660	7,527	17,187
CoolSaver MTP	-	\$ -	-
Residential SOP	10,312	12,859	23,171
Hard-to-Reach SOP	8,073	11,360	19,433
Total	\$62,733	\$62,740	\$ 125,473

Schedule G Workpaper

Bureau of Labor Statistics - Consumer Price Index All Urban Consumers
 Original Data Value

Series Id: CUUR0300SA0
 Not Seasonally Adjusted
 Area: South urban
 Item: All items
 Base Period: 1982-84=100
 Years: 2007 to 2016

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Increase over prior year	% Increase
2007	195.021	195.950	197.904	199.618	200.804	201.675	201.571	201.041	201.697	202.155	203.437	203.457	200.361		
2008	204.510	205.060	206.676	208.085	210.006	212.324	213.304	212.387	212.650	210.108	205.559	203.501	208.681	8.320	4.15%
2009	204.288	205.343	206.001	206.657	207.265	209.343	208.819	209.000	208.912	209.292	209.738	209.476	207.845	-0.836	-0.40%
2010	210.056	210.020	211.216	211.528	211.423	211.232	210.988	211.308	211.775	212.026	211.996	212.488	211.338	3.493	1.68%
2011	213.589	214.735	217.214	218.820	219.820	219.318	219.682	220.471	220.371	219.969	219.961	219.469	218.618	7.280	3.44%
2012	220.497	221.802	223.314	224.275	223.356	223.004	222.667	223.919	225.052	224.504	223.404	223.109	223.242	4.624	2.12%
2013	223.933	225.874	226.628	226.202	226.289	227.148	227.548	227.837	227.876	227.420	226.811	227.082	226.721	3.479	1.56%
2014	227.673	228.664	230.095	231.346	231.762	232.269	232.013	231.611	231.762	231.131	229.845	228.451	230.552	3.831	1.69%
2015	226.855	227.944	229.337	229.957	230.886	232.026	231.719	231.260	230.913	230.860	230.422	229.581	230.147	-0.405	-0.18%
2016	229.469	229.646	230.977	231.975	232.906	233.838	233.292	233.561	234.069	234.337	234.029	234.204	232.692	2.545	1.11%

<https://data.bls.gov/cgi-bin/surveymost>