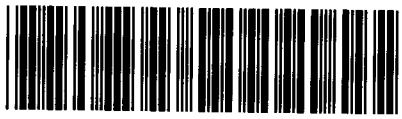

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# Southwestern Electric Power Company

# 2014 Energy Efficiency Plan and Report

## Substantive Rules § 25.181 and § 25.183

# April 1, 2014

Project No. 42264

AEP SOUTHWESTERN ELECTRIC POWER COMPANY
A unit of American Electric Power

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# INTRODUCTION

Southwestern Electric Power Company (SWEPCO or Company) presents this Energy Efficiency Plan and Report (EEPR) to comply with Substantive Rules 25.181 and 25.183 (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. Substantive Rule 25.181(e)(1) provides in pertinent part as follows:

> (e)(1) An electric utility shall administer a portfolio of energy efficiency programs to acquire, at a minimum, the following:
>
> (B) Beginning with the 2013 program year, until the trigger described in subparagraph (C) of this paragraph is reached, the utility shall acquire a 30% reduction of its annual growth in demand of residential and commercial customers.
>
> (C) If the demand reduction goal to be acquired by a utility under subparagraph (B) of this paragraph is equivalent to at least four-tenths of 1% 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 Substantive Rule 25.181. The following section describes the information that is contained in each of the subsequent sections and appendices.

# EEPR ORGANIZATION

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

### Executive Summary

- Summarizes SWEPCO's plans for achieving its goals and projected energy efficiency savings for Program Years 2014 and 2015 and highlights SWEPCO's achievements for Program Year 2013.

### 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 energy and demand 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 (2009-2013) 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 2012 and 2013.
- Section VII details SWEPCO's incentive and administration expenditures for each of the previous five years (2009-2013) detailed by program for each customer class.
- Section VIII compares SWEPCO's actual 2013 expenditures with its 2013 budget by program for each customer class. It identifies funds committed but not expended and funds remaining and not committed. It also explains any cost 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 most recent Energy Efficiency Cost Recovery Factor (EECRF).
- Section XII documents SWEPCO's Underserved Counties.
- Section XIII describes SWEPCO's Performance Bonus calculation for Program Year 2013.

### Acronyms

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

### Appendices

- Appendix A – Reported and Verified Demand and Energy 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, 2014. 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 [Substantive Rule 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 Budgets**

| Calendar Year | Average Growth in Demand (MW) | Goal Metric: 30% Growth (MW) | Weather Adjusted Peak Demand (MW) previous year | Goal Metric: 0.4% Peak Demand (MW) | Demand Goal (MW)* | Energy Goal (MWh) | Projected Demand Reduction (MW) | Projected Energy Savings (MWh) | Projected Budget (000's)** |
|---|---|---|---|---|---|---|---|---|---|
| 2014 | -1.86 | -0.56 | 1,228 | 4.91 | 5.6 | 9,811 | 11.23 | 14,966 | $3,943 |
| 2015 | -16.37 | -4.91 | 1,179 | 4.72 | 5.6 | 9,811 | 9.28 | 11,816 | $3,342 |

* Substantive Rule 25.181(e)(1)(E) – A utility's demand reduction goal in any year shall not be lower than its goal for the prior year.
** The 2014 Projected Budget includes costs associated with Evaluation, Measurement &Verification costs.

The Energy Efficiency Report portion demonstrates that in 2013 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, 2013 by procuring 14,068 kW of peak demand savings at a total cost of $4,764,765. Programs in 2013 included the Commercial Solutions MTP, Commercial SOP, CoolSaver℠ Air Conditioning (A/C) Tune-Up MTP, ENERGY STAR® Appliance Rebate Pilot MTP, Hard-to-Reach SOP, Home$avers, Load Management SOP, On-Line Home Energy Checkup, Residential SOP, Schools Conserving Resources MTP, Small Business Direct Install Pilot MTP, and the SMART Source℠ Solar PV MTP.

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

# ENERGY EFFICIENCY PLAN

## I. 2014 PROGRAMS

### A. 2014 Program Portfolio

SWEPCO has implemented a variety of programs in 2014 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 2014. 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) participation, forms required for project submission, links to the program manuals, and the currently available funding 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: 2014 Energy Efficiency Program Portfolio**

| Program | Target Market | Application | Link to Program Manual |
|---|---|---|---|
| Commercial Solutions Market Transformation Program | Commercial | Retrofit<br>New Construction | http://swepcogridsmart.com/texas/commercial-solutions-program.html |
| Commercial Standard Offer Program | Commercial | Retrofit<br>New Construction | http://swepcogridsmart.com/texas/downloads/TX-2014%20CI%20SOP%20Manual%20Sec%201.pdf |
| CoolSaver℠ A/C Tune-Up Market Transformation Program | Residential | Retrofit | http://swepcogridsmart.com/texas/commercial-solutions-program.html |
| Hard-to-Reach Standard Offer Program | Residential<br>Income-Qualified | Retrofit | http://swepcogridsmart.com/texas/downloads/HTR%20Program%20Manual.pdf |
| Load Management Standard Offer Program | Commercial | Retrofit | http://swepcogridsmart.com/texas/downloads/Load%20Management%20Program%20Manual.pdf |
| On-Line Home Energy Checkup | Residential | Education | https://www.swepco.com/save/calculate/Default.aspx |
| Open Market Transformation Program | Commercial | Retrofit | http://swepcogridsmart.com/texas/downloads/SWEPCO%20Open%20Program%20Manual.pdf |
| Residential Standard Offer Program | Residential | Retrofit | http://swepcogridsmart.com/texas/downloads/RSOP%20Program%20Manual.pdf |
| Schools Conserving Resources Market Transformation Program | Commercial | Retrofit<br>New Construction | http://swepcogridsmart.com/texas/downloads/SCORE%20Program%20Manual.pdf |

## B. Description of Existing Programs

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

SWEPCO's Solutions 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 Solutions 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 customer participants for eligible energy efficiency measures that are installed in new or retrofit applications that result in verifiable demand and energy savings.

### Commercial Standard Offer Program (CSOP)

The CSOP targets commercial customers of all sizes, 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 (Project Sponsor) on the basis of deemed savings or verified demand and energy savings.

### CoolSaver℠ A/C Tune-Up Market Transformation Program (CoolSaver℠ MTP)

The CoolSaver℠ MTP is designed to overcome market barriers that prevent residential customers from receiving high-performance A/C system tune-ups and selecting high-efficiency A/C and heat pump units for replacement. The program works with local A/C contractors to train A/C technicians on high-performance tune-up and air flow correction services, offers incentives for completing CoolSaver℠ tune-ups, and offers incentives for ENERGY STAR®-rated A/C and heat pump units.

### 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. Program incentives are higher for work performed in historically underserved counties and for identified underserved measures to encourage activity. Project comprehensiveness is encouraged and customer education 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. 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. Between June 1 and Sept 30, a five-day forecast for both the load and temperature is reviewed each day for the SWEPCO system. This five-day forecast also provides a trigger point that is a percentage of the overall projected summer peak. The percentage is derived from analyzing prior year's history to determine what threshold should be utilized to capture all of the available 48 hours. Any generation units that are out of service are also reviewed and taken into consideration.

## On-Line Home Energy Checkup

The On-Line 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.

Included in the tool are energy calculators (appliance, lighting, heating/cooling systems), an extensive home energy library, Fundamentals of Electricity information, and Kids Korner Reference Library. At this time, it is not anticipated that SWEPCO will report savings associated with the use of this On-Line Home Energy Checkup tool.

## Open Market Transformation Program (Open MTP)

This program, previously known as the "Small Business Direct Install" (SBDI), will now be referred to as the Open MTP. From the customer's perspective, the program is virtually unchanged, but due to a change in the program implementer, SWEPCO felt it appropriate to also change the program name. This program 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

- Information or search 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. Installation work will be performed by local/area contractors, thus benefiting the local economy and educating local service industries on energy efficiency benefits and capabilities.

**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. Program incentives are higher for work performed in historically underserved counties to encourage activity in these areas. Higher incentives are also paid for measures that have been installed less frequently to encourage project comprehensiveness.

**Schools Conserving Resources Market Transformation Program (SCORE MTP)**

The SCORE MTP provides energy efficiency and demand reduction solutions for public schools. 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 and 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.

## C. New Programs for 2014

SWEPCO has no new programs for 2014 and does not anticipate offering any new programs later in the year.

## D. Implementation Process

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.

SOPs are administered in-house with project sponsors providing eligible program measures. Project sponsors are usually EESPs or SWEPCO customers. SWEPCO monitors the projects being accepted so as

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

## E. 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.

## F. Discontinued Programs

### ENERGY STAR® Appliance Rebate MTP (Appliance Rebate MTP)

The Appliance Rebate MTP was operated as a pilot during 2013 to increase the penetration of ENERGY STAR-qualified products in the SWEPCO service territory. Participation in the program was less than anticipated and it did not prove to be cost-effective. The decision was made to discontinue the program and transfer the funds to more cost-effective programs.

### Home$avers

Home$avers had an evaluated cost-effectiveness of less than 1.0 for 2013. It was determined that SWEPCO customers would be better served by moving this $400,000 budget into more cost-effective residential programs.

**SMART Source[SM] Solar PV MTP (SMART Source)**

SMART Source[SM] was developed to promote the installation of solar photovoltaic (PV) installations for both residential and non-residential customers in SWEPCO's service territory. Incentives were paid to equipment installers for eligible solar installations that resulted in verified demand and energy savings. The key challenge for the SMART Source[SM] program was meeting the cost-effectiveness requirement. SWEPCO determined that this program was one of its least cost-effective programs and it was discontinued for 2014. While this targeted solar program is being discontinued, the solar PV measure is still available in the 2014 Program Year as part of the RSOP.

## 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 Public 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 Substantive Rule 25.181(e)(3)(A). Table 3 summarizes the number of active customers in each eligible customer class at SWEPCO in the month of December 2013. 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 | 30,294 |
| Residential | 147,684 |
| Hard-to-Reach[2] | 57,301* |

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

[2] According to the U.S. Census Bureau's Current Population Survey-2013 Annual Social and Economic Supplement, 38.8% of Texas families fall below 200% of the poverty threshold. Applying that percentage to SWEPCO's residential customer base of 147,684, the number of Hard-to-Reach customers is estimated at 57,301.

## III. ENERGY EFFICIENCY GOALS AND PROJECTED SAVINGS

As prescribed by Substantive Rule 25.181, SWEPCO's annual demand reduction goal to be achieved is 5.6 MW, which is no less than its prior year goal. SWEPCO calculated its 2014 goal using both methods prescribed by the EE Rule. SWEPCO's 2014 goal calculated at 30% of the most recent five-year average load growth in demand is -0.56 MW. SWEPCO's 2014 goal calculated at four-tenths of 1% the most recent year's summer weather-adjusted peak demand of the combined residential and non-residential customers is 4.91 MW. Since 30% of the most recent five-year average load growth in demand reduction goal (-0.56 MW) is not equivalent to at least four-tenths of 1% of SWEPCO's most recent year's summer weather-adjusted peak demand of the combined residential and non-residential customers (4.91 MW), SWEPCO has not reached the trigger prescribed by the EE Rule. SWEPCO's corresponding 2014 annual energy savings goal is determined by applying a 20% conservation load factor to the 2014 demand reduction goal included in this Plan.

Table 4 presents 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 (at the Meter)**

| Calendar Year | Peak Demand (MW) | | | | Energy Consumption (MWh) | | | | Growth (MW) | Average Growth (MW) |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total System | | Residential & Commercial * | | Total System | | Residential & Commercial * | | | |
| | Actual | Actual Weather Adjusted | Actual | Actual Weather Adjusted | Actual | Actual Weather Adjusted | Actual | Actual Weather Adjusted | Actual Weather Adjusted | Actual Weather Adjusted |
| **2008** | 1,446 | 1,484 | 1,199 | 1,237 | 7,393 | 7,480 | 5,686 | 5,773 | NA | NA |
| **2009** | 1,365 | 1,429 | 1,197 | 1,261 | 6,553 | 6,685 | 5,097 | 5,228 | 24 | NA |
| **2010** | 1,452 | 1,475 | 1,255 | 1,278 | 7,394 | 7,141 | 5,705 | 5,452 | 17 | NA |
| **2011** | 1,524 | 1,456 | 1,325 | 1,258 | 7,544 | 7,335 | 5,855 | 5,647 | -20 | NA |
| **2012** | 1,554 | 1,515 | 1,322 | 1,283 | 7,521 | 7,457 | 5,527 | 5,462 | 25 | NA |
| **2013** | 1,447 | 1,482 | 1,191 | 1,228 | 7,588 | 7,572 | 5,503 | 5,486 | -56 | NA |
| **2014** | NA | NA | NA | 1,179 | NA | NA | NA | NA | -48 | -1.86 |
| **2015** | NA | NA | NA | 1179 | NA | NA | NA | NA | NA | -16.37 |

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

Table 5 presents the projected demand reduction and energy savings, by program, for each customer class and for each of the years 2014 and 2015. Projected savings reflect the estimated demand and energy

savings 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 (at the Meter)**

| 2014 | | |
|---|---|---|
| **Customer Class and Program** | **kW** | **kWh** |
| **Commercial** | **9,161** | **11,275,322** |
| Solutions MTP | 609 | 2,983,157 |
| Commercial SOP | 1,272 | 4,457,567 |
| Load Management SOP | 6,368 | 70,193 |
| Open MTP | 312 | 1,834,673 |
| SCORE MTP | 600 | 1,929,732 |
| **Residential** | **1,322** | **2,387,965** |
| CoolSaver$^{SM}$ MTP | 241 | 493,754 |
| On-Line Home Energy Checkup | 0 | 0 |
| Residential SOP | 1,081 | 1,894,211 |
| **Hard-to-Reach Residential** | **743** | **1,302,324** |
| Hard-to-Reach SOP | 743 | 1,302,324 |
| **Total Annual Projected Savings** | **11,226** | **14,965,611** |

| 2015 | | |
|---|---|---|
| **Customer Class and Program** | **kW** | **kWh** |
| **Commercial** | **6,869** | **7,517,157** |
| Solutions MTP | 353 | 1,731,522 |
| Commercial SOP | 842 | 2,950,737 |
| Load Management SOP | 5,000 | 55,118 |
| Open MTP | 231 | 1,355,775 |
| SCORE MTP | 443 | 1,424,005 |
| **Residential** | **1,640** | **2,943,967** |
| CoolSaver$^{SM}$ MTP | 241 | 493,754 |
| On-Line Home Energy Checkup | 0 | 0 |
| Residential SOP | 1,399 | 2,450,213 |
| **Hard-to-Reach Residential** | **773** | **1,354,754** |
| Hard-to-Reach SOP | 773 | 1,354,754 |
| **Total Annual Projected Savings** | **9,282** | **11,815,878** |

## 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 2014 and 2015. The budget allocations are defined by the overall projected demand and energy savings, the avoided costs of capacity and energy specified in Substantive Rule 25.181, allocation of demand goals 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). In the absence of an estimate for 2014 EM&V costs, SWEPCO is using the 2013 EM&V budget figure.

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

| 2014 | Incentives | Admin | R&D & EM&V | Total |
|---|---|---|---|---|
| **Commercial** | **$1,966,771** | **$266,568** | | **$2,233,339** |
| Solutions MTP | $430,713 | $41,000 | | $471,713 |
| Commercial SOP | $604,265 | $106,635 | | $710,900 |
| Load Management SOP | $254,700 | $28,300 | | $283,000 |
| Open MTP | $338,307 | $46,133 | | $384,440 |
| SCORE MTP | $338,786 | $44,500 | | $383,286 |
| **Residential** | **$785,945** | **$121,806** | | **$907,751** |
| CoolSaver$^{SM}$ MTP | $151,045 | $10,000 | | $161,045 |
| On-Line Home Energy Checkup | $8,705 | $1,301 | | $10,006 |
| Residential SOP | $626,195 | $110,505 | | $736,700 |
| **Hard-to-Reach Residential** | **$562,360** | **$99,240** | | **$661,600** |
| Hard-to-Reach SOP | $562,360 | $99,240 | | $661,600 |
| **Research & Development** | | | **$20,000** | **$20,000** |
| **TOTAL PROGRAM BUDGET** | **$3,315,076** | **$487,614** | **$20,000** | **$3,822,690** |
| **EM&V** | | | **$120,728** | **$120,728** |
| **TOTAL BUDGET** | **$3,315,076** | **$487,614** | **$140,728** | **$3,943,418** |

## Table 6: Continued

| 2015 | Incentives | Admin | R&D & EM&V | Total |
|---|---|---|---|---|
| **Commercial** | **$1,350,000** | **$159,476** | **$0** | **$1,509,476** |
| Solutions MTP | $250,000 | $27,778 | | $277,778 |
| Commercial SOP | $400,000 | $65,616 | | $465,616 |
| Load Management SOP | $200,000 | $10,526 | | $210,526 |
| Open MTP | $250,000 | $27,778 | | $277,778 |
| SCORE MTP | $250,000 | $27,778 | | $277,778 |
| **Residential** | **$969,750** | **$154,242** | **$0** | **$1,123,992** |
| CoolSaver$^{SM}$ MTP | $151,045 | $10,000 | | $161,045 |
| On-Line Home Energy Checkup | $8,705 | $1,301 | | $10,006 |
| Residential SOP | $810,000 | $142,941 | | $952,941 |
| **Hard-to-Reach Residential** | **$585,000** | **$103,235** | **$0** | **$688,235** |
| Hard-to-Reach SOP | $585,000 | $103,235 | | $688,235 |
| **Research & Development** | | | **$20,000** | **$20,000** |
| **TOTAL PROGRAM BUDGET** | **$2,904,750** | **$416,953** | **$20,000** | **$3,341,703** |
| **EM&V** | **$0** | **$0** | **$0** | **$0** |
| **TOTAL BUDGET** | **$2,904,750** | **$416,953** | **$20,000** | **$3,341,703** |

# 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 (2009-2013) calculated in accordance with Substantive Rule 25.181.

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

| Calendar Year | Actual Weather Adjusted Demand Goal (MW) | Actual Weather Adjusted Energy Goal (MWh) | Actual Demand Reduction (MW) | Actual Energy Savings (MWh) |
|---|---|---|---|---|
| 2009 | 5.60 | 9,811 | 9.56 | 17,880 |
| 2010 | 5.60 | 9,811 | 14.75 | 18,478 |
| 2011 | 5.60 | 9,811 | 15.03 | 22,582 |
| 2012 | 5.60 | 9,811 | 13.33 | 19,078 |
| 2013 | 5.60 | 9,811 | 14.07 | 18,778 |

* Actual weather-adjusted MW and MWh goals as reported in SWEPCO's EEPRs filed in years 2009 – 2013.

# VI. PROJECTED, REPORTED AND VERIFIED DEMAND AND ENERGY SAVINGS

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

| 2013 | Projected Savings | | Reported and Verified Savings | |
|---|---|---|---|---|
| **Customer Class and Program** | **kW** | **kWh** | **kW** | **kWh** |
| **Commercial** | | | | |
| Solutions MTP | 861 | 4,489,370 | 352 | 1,689,529 |
| Commercial SOP | 1,151 | 6,460,771 | 1,019 | 4,334,200 |
| Load Management SOP | 8,828 | 97,312 | 7,698 | 45,640 |
| SCORE MTP | 673 | 1,881,809 | 609 | 1,680,418 |
| Small Business Direct Install Pilot MTP | 550 | 2,200,742 | 368 | 1,816,431 |
| SMART Source[SM] | 112 | 216,000 | 127 | 245,192 |
| SWEPCO Care$ | 0 | 0 | 1 | 2,383 |
| **Residential** | | | | |
| CoolSaver[SM] MTP | 289 | 641,296 | 165 | 384,266 |
| Appliance Rebate Pilot MTP | 61 | 252,894 | 52 | 101,190 |
| On-Line Home Energy Checkup | NAP | NAP | NAP | NAP |
| Residential SOP | 1,496 | 5,132,884 | 2,110 | 5,076,861 |
| SMART Source | 45 | 86,400 | 44 | 83,786 |
| **Hard-to-Reach Residential** | | | | |
| Hard-to-Reach SOP | 946 | 2,875,525 | 1,390 | 2,979,590 |
| Home$avers | 85 | 256,776 | 133 | 338,607 |
| **Total Annual Savings** | **18,019** | **33,837,554** | **14,068** | **18,778,093** |

| 2012 | Projected Savings | | Reported and Verified Savings | |
|---|---|---|---|---|
| **Customer Class and Program** | **kW** | **kWh** | **kW** | **kWh** |
| **Commercial** | | | | |
| Solutions MTP | 364 | 741,186 | 385 | 2,008,553 |
| Commercial SOP | 1,261 | 5,266,313 | 811 | 4,550,108 |
| LED Lighting Pilot MTP | 0 | 0 | 0 | 80,351 |
| Load Management SOP | 7,960 | 219,640 | 8,237 | 90,083 |
| SCORE MTP | 482 | 1,213,381 | 580 | 1,622,035 |
| Small Business Direct Install Pilot MTP | 367 | 1,467,161 | 242 | 1,063,147 |
| SWEPCO Care$ | 13 | 36,828 | 17 | 55,246 |
| **Residential** | | | | |
| CoolSaver[SM] MTP | 273 | 614,495 | 205 | 413,181 |
| On-Line Home Energy Checkup | N/A | N/A | N/A | N/A |
| Residential SOP | 1,556 | 5,203,741 | 1,520 | 5,217,855 |
| SMART[SM] Source | 64 | 123,424 | 57 | 109,434 |
| **Hard-to-Reach Residential** | | | | |
| Hard-to-Reach SOP | 1,292 | 3,918,628 | 1,189 | 3,612,589 |
| Home$avers | 129 | 333,674 | 84 | 255,386 |
| **Total Annual Savings** | **13,761** | **19,138,471** | **13,327** | **19,077,968** |

## VII. HISTORICAL PROGRAM EXPENDITURES

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

**Table 9: Historical Program Incentive and Administrative Expenditures for 2009 through 2013 ($000's)**

| | 2013 | | 2012 | | 2011 | | 2010 | | 2009 | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Commercial** | Incent | Admin | Incent | Admin | Incent | Admin | Incent | Admin | Incent | Admin |
| Solutions MTP | 263.4 | 48.2 | 165.5 | 27.2 | 458.7 | 45.1 | 270.2 | 25.6 | 255.9 | 16.4 |
| Commercial SOP | 469.5 | 110.4 | 337.8 | 56.0 | 635.1 | 101.7 | 345.1 | 54.0 | 466.3 | 47.8 |
| CoolSaver℠ MTP | NAP | NAP | NAP | NAP | 132.6 | 11.0 | 20.0 | 1.8 | NAP | NAP |
| LED Lighting Pilot MTP | NAP | NAP | 13.2 | 1.0 | 33.9 | 5.8 | 21.4 | 6.9 | NAP | NAP |
| Load Management SOP | 229.5 | 37.0 | 250.9 | 32.0 | 267.0 | 35.0 | 290.9 | 32.7 | 169.5 | 21.1 |
| SCORE MTP | 344.1 | 51.8 | 306.4 | 39.0 | 278.7 | 30.2 | 336.1 | 27.1 | 201.3 | 19.7 |
| Small Business Direct Install Pilot MTP | 409.9 | 38.5 | 270.2 | 31.8 | 67.8 | 12.5 | NAP | NAP | NAP | NAP |
| SMART Source℠ MTP | 151.8 | 14.5 | NAP | NAP | 204.3 | 14.3 | 141.8 | 9.3 | 0.0 | 0.0 |
| SWEPCO Care$ | 7.2 | 0.8 | 88.1 | 12.1 | 67.6 | 6.9 | 98.7 | 11.6 | 84.9 | 7.1 |
| **Residential** | | | | | | | | | | |
| Appliance Recycling Pilot MTP | NAP | NAP | NAP | NAP | NAP | NAP | NAP | NAP | 30.0 | 3.0 |
| Appliance Rebate Pilot MTP | 89.6 | 9.8 | NAP | NAP | NAP | NAP | NAP | NAP | NAP | NAP |
| CoolSaver℠ MTP | 164.4 | 17.0 | 222.7 | 26.0 | 56.8 | 4.7 | 105.3 | 9.7 | NAP | NAP |
| On-Line Home Energy Checkup | 8.5 | 0.7 | 7.8 | 1.4 | 0.0 | 5.3 | NAP | NAP | NAP | NAP |
| Residential SOP | 765.1 | 102.9 | 880.6 | 123.5 | 808.9 | 110.5 | 888.8 | 98.1 | 419.3 | 48.8 |
| SMART Source℠ MTP | 84.8 | 8.1 | 132.9 | 14.5 | 52.7 | 3.7 | 87.1 | 5.7 | 35.8 | 6.5 |
| TX Statewide Energy Star Residential CFL MTP | NAP | NAP | NAP | NAP | NAP | NAP | 2.7 | 0.0 | 29.4 | 11.0 |
| **Hard-to-Reach Residential** | | | | | | | | | | |
| Hard-to-Reach SOP | 605.3 | 86.2 | 899.2 | 123.3 | 848.4 | 116.2 | 599.1 | 69.4 | 745.9 | 68.2 |
| Home$avers | 386.5 | 37.0 | 371.6 | 33.9 | 373.0 | 25.9 | 503.3 | 33.5 | 246.4 | 26.7 |
| **Research and Development (R&D)** | | 101.8 | 0.0 | 52.7 | 0.0 | 74.3 | 0.0 | 185.5 | 7.3 | 136.9 |
| **Evaluation, Measurement & Verification** | | 120.5 | | | | | | | | |
| **Total Expenditures** | **3,979.6** | **785.2** | **3,946.9** | **574.4** | **4,285.6** | **603.0** | **3,710.5** | **570.9** | **2,692.0** | **413.2** |

## VIII. PROGRAM FUNDING FOR CALENDAR YEAR 2013

As shown in Table 10, the Total Projected Budget for 2013 was $5,200,026. Total Funds Expended for 2013 were $4,764,765. This is an overall total program expenditure decrease of 8.4% from the amount budgeted.

The CoolSaver℠ MTP used only 72% of its program budget. Both contractor and customer participation were lower than anticipated.

The Commercial Solar MTP spent 83% of the program budgeted amount for 2013. While the total budget amount was not expended, the savings goal was actually exceeded due to several projects in the 10 kW to 20 kW range.

Spending for the HTR SOP and RSOP was reduced because the residential cost cap for 2013 might be exceeded.

CARE$ made one payment this year, although it was not an active program. This one payment was for a project completed late in 2012.

The Commercial Solutions MTP used 78% of the program budget due to lower participation than expected.

## Table 10: Program Funding for Calendar Year 2013

| 2013 | Total Projected Budget | Number of Participating ESI ID Accounts | Actual funds Expended (Incentives) | SWEPCO Admin | Statewide EM&V Contractor | Total funds Expended | Funds Committed (Not Expended) | Funds Remaining |
|---|---|---|---|---|---|---|---|---|
| **Commercial** | | | | | | | | |
| Commercial Solutions MTP | $411,000 | 53 | $263,416 | $45,943 | NAP | $309,359 | $0 | $99,360 |
| CARE$ | $0 | 1 | $7,225 | $732 | NAP | $7,957 | $0 | $0 |
| Commercial SOP | $564,273 | 36 | $469,514 | $106,289 | NAP | $575,803 | $0 | $0 |
| Load Management SOP | $282,995 | 10 | $229,520 | $35,026 | NAP | $264,546 | $0 | $16,462 |
| SCORE MTP | $395,000 | 32 | $344,092 | $48,827 | NAP | $392,919 | $0 | $0 |
| Small Business Direct Install Pilot MTP | $495,000 | 60 | $409,886 | $34,934 | NAP | $444,820 | $0 | $46,631 |
| SMART Source$^{SM}$ Solar PV MTP | $200,000 | 4 | $151,773 | $13,234 | NAP | $165,007 | $0 | $33,678 |
| **Residential** | | | | | | | | |
| CoolSaver$^{SM}$ A/C Tune-Up MTP | $253,343 | 483 | $164,353 | $15,555 | NAP | $179,908 | $0 | $72,012 |
| Energy Star Appliance Rebate Pilot MTP | $161,045 | 250 | $89,612 | $9,034 | NAP | $98,646 | $2,320 | $59,303 |
| On-Line Home Energy Checkup | $10,006 | 62 | $8,505 | $600 | NAP | $9,105 | $0 | $827 |
| Residential SOP | $995,682 | 1,501 | $765,113 | $96,309 | NAP | $861,422 | $0 | $127,636 |
| SMART Source$^{SM}$ Solar PV MTP | $100,000 | 6 | $84,765 | $7,391 | NAP | $92,156 | $0 | $7,108 |
| **Hard-to-Reach Residential** | | | | | | | | |
| Hard-to-Reach SOP | $822,727 | 1,335 | $605,266 | $80,946 | NAP | $686,212 | $0 | $131,274 |
| Home$avers | $400,000 | 186 | $386,505 | $33,615 | NAP | $420,120 | $0 | $0 |
| **Research & Development** | $108,955 | NAP | NAP | $101,824 | NAP | $101,824 | $0 | $0 |
| **Evaluation, Measurement, & Verification** | | NAP | NAP | $34,458 | $120,503 | $154,961 | $0 | $0 |
| **Total Expenditures** | $5,200,026 | 4,019 | $3,979,545 | $664,717 | $120,503 | $4,764,765 | NAP | NAP |

# IX. MARKET TRANSFORMATION PROGRAM RESULTS

## Appliance Rebate MTP

The Appliance Rebate MTP was administered as a pilot program by a third party. SWEPCO rebate notifications were put on ENERGY STAR refrigerators, washing machines, and window air conditioners at participating stores. Nine small independents participated, as well as 15 large chain stores. Two methods of delivering the rebates were tried: 1) The customer was given the rebate form to send in, along with a copy of the sales receipt; and 2) A single centrally-located chain store offered a manufacturer buy-down for window air conditioners. The buy-down purchases accounted for 57% of the sales. SWEPCO concluded that the program was not as effective as hoped.

## CoolSaver[SM] MTP

In 2013, CoolSaver[SM]-trained technicians performed 437 tune-ups and replaced 59 cooling systems with ENERGY STAR units with a 15.0 SEER minimum. SWEPCO projected to acquire 289 kW demand savings from this program; SWEPCO verified and reported savings of 165 kW. These savings occurred at 483 different residential locations in 12 different counties.

## SCORE MTP

The SCORE MTP provided non-cash incentives, such as building energy analysis (benchmarking), energy master-planning seminars, technical assistance, communications support, and monetary incentives for the installation of documented energy efficiency measures that reduce peak demand and energy use. In 2013, SWEPCO projected to acquire 673 kW in demand savings from this program. SWEPCO has verified and reported savings of 609 kW. This included participation by 32 customers in six counties.

## SMART Source[SM] MTP

In 2013, SWEPCO projected to acquire 157 kW in demand savings from this program. SWEPCO has verified reported savings of 170.66 kW or 108% of the original goal. A total of six residential customers and four non-residential customers in seven counties participated in the program.

## Solutions MTP

SWEPCO contracted with a third-party program implementer 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 2013, SWEPCO projected to acquire 861 kW of demand savings from

this program. SWEPCO's verified and reported results are 352 kW. This included participation by 53 customers in three different counties.

## X. RESEARCH AND DEVELOPMENT

R&D activities and projects accounted for 2% of SWEPCO's 2013 program expenses. R&D activities are intended to help SWEPCO meet future energy efficiency goals by researching new technologies and program options, as well as developing more effective and efficient ways to administer current programs. The R&D for 2013 included webinars, Association of Energy Service Professionals conferences, program kickoffs, user group meetings, and specialized training. SWEPCO continued to refine and enhance data collection, management, and reporting systems for current programs. One of the enhancements was in response to an EM&V team recommendation that project sponsors have the ability to upload documents that were formerly maintained in paper form. This capability allows the EM&V team ready access to all pertinent program paperwork.

## XI. CURRENT ENERGY EFFICIENCY COST RECOVERY FACTOR (EECRF)

In Docket No. 41439, SWEPCO requested an EECRF to recover the following costs.

- $3,822,690, the cost of SWEPCO's energy efficiency program projected for 2014 to meet its energy efficiency objectives under PURA §39.905,
- A performance bonus of $1,051,633,
- $201,213 for SWEPCO's share of the statewide EM&V costs for Program Years 2012 and 2013, and
- A return to customers of $4,143, representing SWEPCO's over-recovery of its actual energy efficiency program costs for 2012.

SWEPCO's request was granted by the PUCT on November 4, 2013. The EECRF was made effective on January 1, 2014 and is calculated to recover $5,071,394 in energy efficiency costs. The resulting energy efficiency factors are shown below in Table 11.

**Table 11: 2014 EECRF**

| Customer Class | Customer EECRF Factors |
|---|---|
| Residential | $0.001041/kWh |
| General Service | $0.000863/kWh |
| Municipal Service | $0.001747/kWh |
| Municipal Pumping | $0.000128/kWh |
| Lighting & Power | $0.000759/kWh |
| Cotton Gin | ($0.000081)/kWh |
| Metal Melting<69kV | $0.007127/kWh |
| Electric Furnace | $0.000200/kWh |
| Oil Field Lg Industrial | ($0.000099)/kWh |
| Large L&P<69 kV | $0.000088/kWh |
| Lighting | ($0.000052)/kWh |

## 2013 Collections for Energy Efficiency

SWEPCO collected $5,299,883 through its 2013 EECRF. This total included $ 977,719, the amount approved as SWEPCO's performance bonus for exceeding its 2011 energy efficiency goal, and returned an over-recovery of $ 324,219 to customers. Therefore, SWEPCO collected $4,646,383 related to its 2013 energy efficiency programs.

## Energy Efficiency Program Costs Expended

SWEPCO expended a total of $4,764,765, which includes $4,644,262 program costs and $120,503 EM&V costs for its 2013 energy efficiency programs. The amount expended is $435,261 less than SWEPCO's 2013 projected budget of $5,200,026.

## Under-Recovery of Energy Efficiency Costs

Pursuant to the final order in Docket No. 40357, SWEPCO was authorized to recover $5,853,526 through its 2013 EECRF. SWEPCO's actual EECRF program costs were $4,764,765 and SWEPCO collected $4,646,383 of its program costs through its 2013 EECRF, resulting in an under-recovery of $118,383, which will be applied to the 2015 EECRF.

## XII. UNDERSERVED COUNTIES

The underserved counties in the SWEPCO service territory per Substantive Rule 25.181 are Childress, Hopkins, Rains, and Van Zandt. Underserved counties have been defined by SWEPCO as any county for which SWEPCO did not report demand or energy savings through any of its 2013 SOPs or MTPs.

## XIII. PERFORMANCE BONUS

SWEPCO achieved a 14,068 kW reduction in peak demand from its energy efficiency programs offered in 2013. SWEPCO's demand reduction goal for 2013 was 5,600 kW. This achievement represents 251% of its 2013 demand reduction goal. SWEPCO also achieved energy savings of 18,778,093 kWh, which represents 191% of its 2013 energy goal of 9,811,000 kWh. These results qualify SWEPCO for a Performance Bonus. Per Substantive Rule 25.181(h), SWEPCO is eligible for a Performance Bonus of $1,930,025, which it will request within its April 29, 2014 EECRF filing for recovery in 2015.

In 2013, SWEPCO's total spending on energy efficiency programs was $4,764,765. This includes actual EM&V expenditures to the EM&V team of $120,503. 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 2013, instead of the actual EM&V team expenditures. As a result, the total program expenditures for the bonus calculation will not match the actual total program expenditures exhibited in the applicable tables in this EEPR. For the purposes of the bonus calculation, SWEPCO's total program costs equaled $4,764,990.

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

| | kW | kWh |
|---|---|---|
| **2013 Goals** | 5,600 | 9,811,200 |
| **2013 Actual Demand and Energy Savings** | 14,068 | 18,778,093 |
| *Reported/Verified Hard-to-Reach* | 1,523 | |
| **2013 Program Costs** | $4,764,990 | |
| **2013 Performance Bonus** | $1,930,025 | |

## Performance Bonus Calculation

251% Percentage of Demand Reduction Goal Met (Reported kW/Goal kW)

191% Percentage of Energy Reduction Goal Met (Reported kWh/Goal kWh)

TRUE Met Requirements for Performance Bonus?

$24,065,236 Total Avoided Cost ((Reported kW * PV(Avoided Capacity Cost) + Reported kWh *PV(Avoided Energy Cost))

$4,764,990 Total Program Costs

$19,300,246 Net Benefits (Total Avoided Cost - Total Expenses)

## Bonus Calculation

$14,591,720 Calculated Bonus ((Achieved Demand Reduction/Demand Goal - 100%) / 2) * Net Benefits

$1,930,025 Maximum Bonus Allowed (10% of Net Benefits)

$1,930,025 Bonus (Minimum of Calculated Bonus and Bonus Limit)

# ACRONYMS

| | |
|---|---|
| **A/C** | Air Conditioning |
| **Appliance Rebate MTP** | ENERGY STAR® Appliance Rebate Pilot Market Transformation Program |
| **Company** | Southwestern Electric Power Company |
| **CoolSaver℠ MTP** | CoolSaver℠ A/C Tune-Up Market Transformation Program |
| **CSOP** | Commercial Standard Offer Program |
| **EE Rule** | Energy Efficiency Rule, PUC Substantive Rules 25.181 and 25.183 |
| **EECRF** | Energy Efficiency Cost Recovery Factor |
| **EEP** | Energy Efficiency Plan |
| **EEPR** | Energy Efficiency Plan and Report |
| **EER** | Energy Efficiency Report, which was filed as a separate document prior to April 2008 |
| **EESP** | Energy Efficiency Service Provider |
| **EM&V** | Evaluation, Measurement & Verification |
| **HTR SOP** | Hard-to-Reach Standard Offer Program |
| **HTR** | Hard-To-Reach |
| **LED MTP** | LED Lighting Pilot Market Transformation Program |
| **LM SOP** | Load Management Standard Offer Program |
| **MTP** | Market Transformation Program |
| **NAP** | Not Applicable |
| **PLAN** | Energy Efficiency Plan, which was filed as a separate document prior to April 2008 |
| **PUCT** | Public Utility Commission of Texas |
| **PURA** | Public Utility Regulatory Act |
| **PV** | Photovoltaic |
| **Open MTP** | Open Market Transformation Program |

## ACRONYMS (Continued)

| | |
|---|---|
| **R&D** | Research and Development |
| **REPORT** | Energy Efficiency Report |
| **RFP** | Request for Proposals |
| **RSOP** | Residential Standard Offer Program |
| **SBDI** | Small Business Direct Install |
| **SCORE MTP** | Schools Conserving Resources Market Transformation Program |
| **SMART Source$^{SM}$** | SMART Source$^{SM}$ Solar PV Pilot Market Transformation Program |
| **Solutions MTP** | Solutions Market Transformation Program |
| **SWEPCO CARE$** | SWEPCO CARE$ Energy Efficiency for Not-for-Profit Agencies Program |
| **SWEPCO** | Southwestern Electric Power Company |

# APPENDIX A:

# REPORTED AND VERIFIED DEMAND AND ENERGY REDUCTION BY COUNTY

## CALENDAR YEAR 2013

| | Appliance | | Solutions MTP | | Commercial SOP | | CoolSaver MTP | | Hard-to-Reach SOP | | Home$avers | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh |
| **Bowie** | 2 | 10,654 | 107 | 346,214 | 525 | 2,507,095 | 43 | 80,682 | 45 | 78,251 | 40 | 108,533 |
| **Camp** | 0 | 1,292 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 21,154 | 7 | 17,459 |
| **Cass** | 1 | 1,874 | 27 | 129,723 | 0 | 0 | 3 | 6,049 | 3 | 8,384 | 27 | 62,366 |
| **Childress** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Collingsworth** | 0 | 0 | 2 | 10,598 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,013 |
| **Donley** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 138,635 | 1 | 377 |
| **Franklin** | 0 | 1,152 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 846 | 1 | 2,406 |
| **Gregg** | 47 | 73,818 | 108 | 562,081 | 175 | 812,922 | 45 | 122,897 | 722 | 1,619,473 | 2 | 3,289 |
| **Hall** | 0 | 0 | 3 | 12,689 | 0 | 0 | 0 | 0 | 61 | 70,195 | 1 | 4,531 |
| **Harrison** | 1 | 5,216 | 23 | 117,988 | 283 | 849,633 | 0 | 0 | 90 | 166,988 | 23 | 52,780 |
| **Hopkins** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Marion** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 63 | 173,153 | 0 | 0 |
| **Morris** | 0 | 418 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 96,225 | 2 | 5,731 |
| **Panola** | 0 | 576 | 5 | 34,366 | 0 | 0 | 0 | 0 | 54 | 118,457 | 1 | 3,424 |
| **Rains** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Red River** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Rusk** | 0 | 1,950 | 74 | 468,611 | 0 | 0 | 36 | 119,193 | 73 | 165,232 | 3 | 6,642 |
| **Shelby** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 88 | 268,443 | 0 | 0 |
| **Smith** | 0 | 261 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 5,432 | 0 | 0 |
| **Titus** | 0 | 1,105 | 1 | 7,259 | 0 | 0 | 0 | 0 | 6 | 12,583 | 26 | 68,644 |
| **Upshur** | 0 | 2,449 | 0 | 0 | 0 | 0 | 37 | 53,261 | 7 | 15,270 | 0 | 0 |
| **Van Zandt** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wheeler** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 20,869 | 0 | 1,412 |
| **Wood** | 0 | 425 | 0 | 0 | 36 | 164,550 | 1 | 2,184 | 0 | 0 | 0 | 0 |

## CALENDAR YEAR 2013

| | Load Management | | Residential SOP | | SCORE MTP | | SBDI MTP | | SMART Source MTP | | SWEPCO CARE$ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh |
| **Bowie** | 1,246 | 9,968 | 133 | 217,887 | 32 | 67,125 | 93 | 365,089 | 77 | 147,824 | 0 | 0 |
| **Camp** | 225 | 1,796 | 41 | 95,923 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Cass** | 0 | 0 | 23 | 54,736 | 18 | 26,936 | 32 | 137,376 | 8 | 16,192 | 0 | 0 |
| **Childress** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Collingsworth** | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 32,148 | 0 | 0 | 0 | 0 |
| **Donley** | | 0 | 19 | 33,383 | 8 | 21,796 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Franklin** | 0 | 0 | 55 | 126,486 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Gregg** | 5,557 | 28,520 | 864 | 2,256,387 | 131 | 463,236 | 129 | 755,356 | 30 | 58,240 | 1 | 2,383 |
| **Hall** | 0 | 0 | 11 | 9,556 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Harrison** | 519 | 4,152 | 388 | 931,944 | 133 | 510,488 | 93 | 472,966 | 0 | 0 | 0 | 0 |
| **Hopkins** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Marion** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Morris** | 0 | 0 | 84 | 199,134 | 0 | 0 | 0 | 0 | 8 | 16,192 | 0 | 0 |
| **Panola** | 0 | 0 | 36 | 92,727 | 29 | 152,856 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Rains** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Red River** | 0 | 0 | 0 | 0 | 7 | 32,737 | 0 | 0 | 34 | 64,968 | 0 | 0 |
| **Rusk** | 151 | 1,204 | 131 | 304,370 | 6 | 12,582 | 0 | 0 | 5 | 9,370 | 0 | 0 |
| **Shelby** | 0 | 0 | 2 | 6,959 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Smith** | 0 | 0 | 1 | 2,808 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Titus** | 0 | 0 | 216 | 499,820 | 231 | 374,968 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Upshur** | 0 | 0 | 42 | 97,429 | 14 | 17,694 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Van Zandt** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wheeler** | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 53,495 | 0 | 0 | 0 | 0 |
| **Wood** | 0 | 0 | 64 | 147,312 | 0 | 0 | 0 | 0 | 8 | 16,192 | 0 | 0 |

## CALENDAR YEAR 2013

| | Totals per County | |
|---|---|---|
| | kW | kWh |
| **Bowie** | 2,342 | 3,939,322 |
| **Camp** | 280 | 137,624 |
| **Cass** | 141 | 443,636 |
| **Childress** | 0 | 0 |
| **Collingsworth** | 11 | 43,759 |
| **Donley** | 127 | 194,191 |
| **Franklin** | 57 | 130,890 |
| **Gregg** | 7,810 | 6,758,602 |
| **Hall** | 76 | 96,971 |
| **Harrison** | 1,553 | 3,112,155 |
| **Hopkins** | 0 | 0 |
| **Marion** | 63 | 173,153 |
| **Morris** | 140 | 317,700 |
| **Panola** | 126 | 402,406 |
| **Rains** | 0 | 0 |
| **Red River** | 41 | 97,705 |
| **Rusk** | 479 | 1,089,154 |
| **Shelby** | 90 | 275,402 |
| **Smith** | 4 | 8,501 |
| **Titus** | 481 | 964,379 |
| **Upshur** | 100 | 186,103 |
| **Van Zandt** | 0 | 0 |
| **Wheeler** | 37 | 75,776 |
| **Wood** | 109 | 330,663 |

## APPENDIX B:

# PROGRAM TEMPLATES

SWEPCO does not have any program templates to report this year.

# APPENDIX C:

# EXISTING CONTRACTS OR OBLIGATIONS

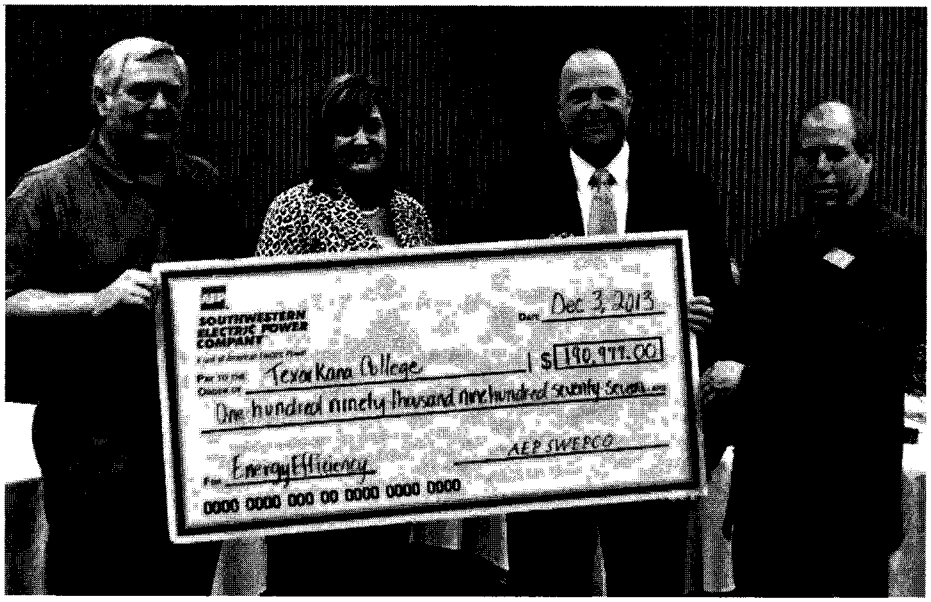
SWEPCO does not have any Existing Contracts or Obligation documentation to provide.

# APPENDIX D:

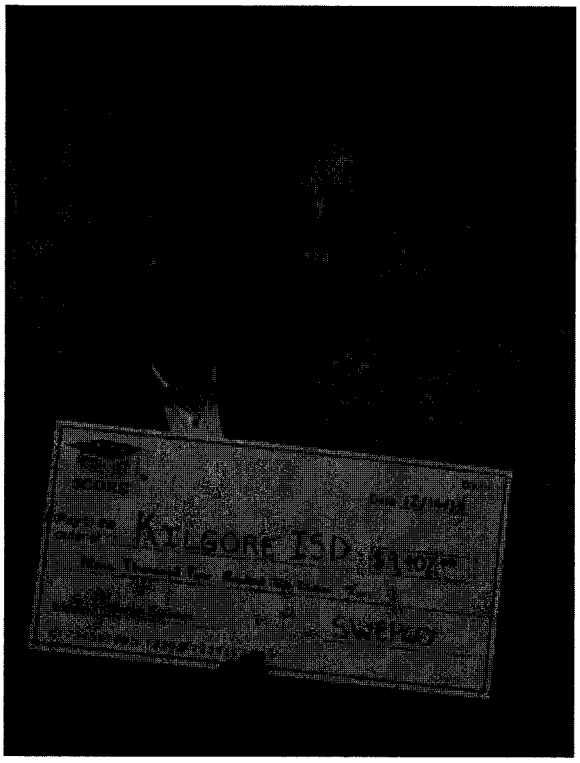
# OPTIONAL SUPPORTING DOCUMENTATION

SWEPCO provides the following Optional Supporting Documentation.

## SCORE MTP

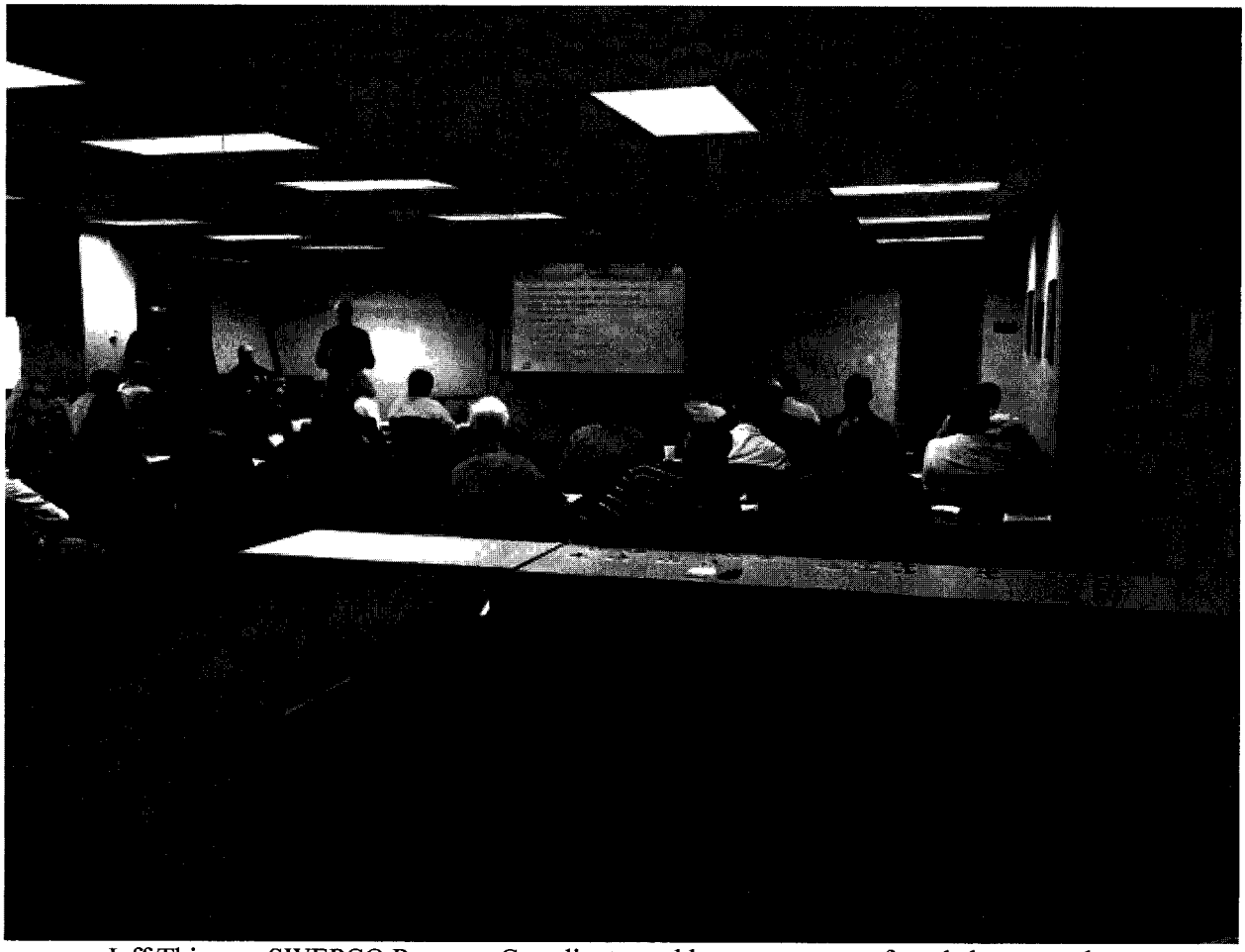



Representatives of AEP SWEPCO present a rebate check for $190,977 to the Texarkana College Board of Trustee members for money saved through the recent installation of energy efficient equipment, systems, and lighting. Jennifer Meyer Harland and Ron Tevebaugh of SWEPCO made the presentation to the board.




Dan Merchant, CLEAResult SCORE Program Implementer presented to check to Kilgore ISD for participation in the SCORE program. The school installed lighting and HVAC equipment at two existing campuses and two new campuses.

## Residential Standard Offer Program RSOP
## and
## Hard-to-Reach Standard Offer Program



Jeff Thigpen, SWEPCO Program Coordinator, addresses a group of workshop attendees.

A joint workshop between SWEPCO Texas and AEP Texas for Energy Efficiency Service Providers was held on October 23, 2013 at the AEP Texas home office in Corpus Christi. The 2014 Residential and Hard-to-Reach Standard Offer Programs were the primary focus of the workshop, which described the programs and changes for the 2014 program year. The workshop featured approximately 55 attendees.

# SBDI Marketing Flier

## Direct Install Program

**The Small Business Direct Install Program is designed to promote energy efficiency in small businesses.**

The primary focus of this program is to maximize the implementation of cost- effective high-efficiency lighting measures, while also addressing refrigeration and customized technologies.

- Customers may sign up to participate beginning Jan. 1, 2013.
- All projects must be installed by Dec. 1, 2013 to be eligible to receive an incentive in 2013.
- Funds are limited and awarded on a first-come, first-served basis.

## Contact Us

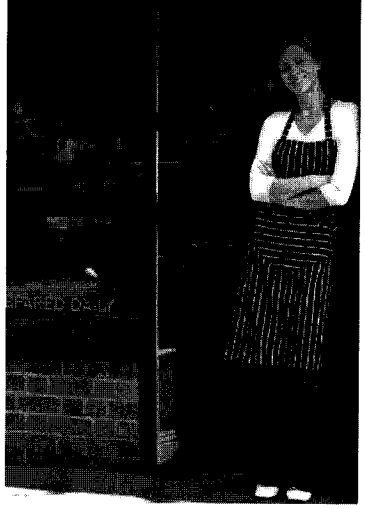
Please contact us for more information regarding the Small Business Direct Install Program. We can help you understand the eligibility requirements and program process.

**Small Business Direct Install Program**
Phone: (855) 829-9826 (toll-free)
Fax: (855) 829-9825 (toll-free)

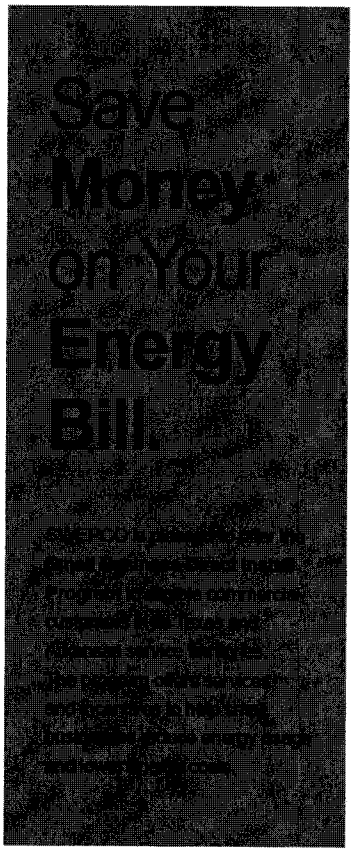
gridSMART®
from Southwestern Electric Power Company

gridSMART is provided by SWEPCO as part of the company's commitment to reduce energy consumption and demand. KEMA Services, Inc. implements SWEPCO's Small Business Direct Install Program as an independent consultant.

# Small Business Direct Install Program



AEP SOUTHWESTERN ELECTRIC POWER COMPANY
*A unit of American Electric Power*




## What Does the Direct Install Program Offer?

Typical measures include indoor and outdoor lighting, and refrigeration controls. The program pays a high percentage of the project cost.

**DIRECT INSTALL SAMPLE MEASURES**

**Lighting**
T12 to T8 Lighting Retrofit*
HID to T8/T5 High Bay Fixtures*
Screw-in CFL (ARKANSAS only)
Occupancy Sensors
LED Exit Sign

**Refrigeration Controls**
Anti-Sweat Heater (ASH) Control
Electronically Commutated Motor (ECM)
Strip Curtains on Walk-in Coolers and Freezers

*T8 system retrofits must meet the CEE specifications for High Performance or Reduced Wattage systems to be eligible for incentives.

## Who's Eligible?

The Small Business Direct Install Program is available to SWEPCO non-residential customers in Texas and Arkansas with:

- 50 kW maximum billing demand
- Annual consumption less than 200,000 kWh, based on last 12 months of billing history

## Contact Us

Phone: **(855) 829-9826 toll-free**
Email: **SWEPCOsbdi@kema.com**

## Why Participate?

Incentives average 75 percent of the project cost for the installation of approved technologies.*

**Program benefits include:**

- FREE, no-obligation facility assessment to identify potential energy saving opportunities.
- Recommendations and estimates of energy savings, project cost and payback period provided for your review and consideration.
- Installation of approved energy-saving equipment by a local pre-qualified contractor.
- Pre- and post-installation inspections to assure quality and verify energy savings at NO COST
- Incentive amount paid directly to your contractor by the program
- Average payback less than one year.
- Ongoing reduction in energy costs

*Incentive percentages, actual savings and payback periods vary depending on the energy efficiency equipment installed, building characteristics, energy usage patterns, age of existing equipment, location and other parameters specific to your project.

# SBDI Newspaper Advertisement

# Saving energy just got easy for small business owners.

Do you want to lower your electricity costs? If you're a small business owner and a SWEPCO customer, you may qualify to participate in the **Small Business Direct Install** (SBDI) program.

Take advantage of incentives for installing energy-efficient lighting and refrigeration equipment to help you start saving costs today.

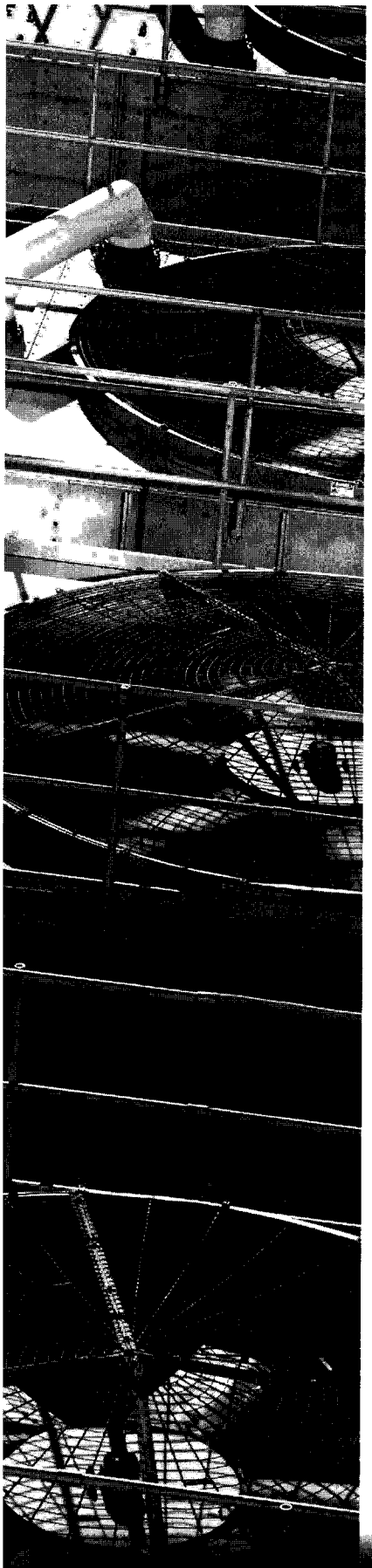
- Install lighting occupancy sensors to control energy use.
- Switch out exit signs to energy-efficient LED units.
- Add anti-sweat heater controls to coolers to manage temperatures that reduce energy and condensation.

Get as much as 100% of your project costs covered by incentives — paid directly to your program-approved contractor — and a quick payback on any out-of-pocket costs.

**Call to schedule your free facility assessment today.**

**(855) 829-9826**
**SWEPCOsbdi@kema.com**

AEP SOUTHWESTERN ELECTRIC POWER COMPANY
*A unit of American Electric Power*



# AEP SWEPCO

## Energy Efficiency Programs Bulletin

VOLUME 4, ISSUE 1 | SUMMER 2013

AEP SOUTHWESTERN ELECTRIC POWER COMPANY℠

*A unit of American Electric Power*

## Mount Pleasant ISD Even Cooler Now!

Mount Pleasant ISD keeps getting cooler. The school district recently retrofitted numerous HVAC systems with the help of NextEra Energy Solutions. The upgrades are expected to reduce energy costs by $7,758 annually. In addition, Mount Pleasant ISD received a $9,660 incentive as a result of its participation in SWEPCO's SCORE Program, for a total savings of $17,418 in the first year after the upgrades!

SCORE is a no-cost program that helps schools reduce peak electricity consumption and corresponding costs. To learn more about SCORE and other programs that help save energy and money, visit **SWEPCOgridSMART.com**.



## Mayo Furniture Gets a Makeover

Mayo Furniture recently completed a lighting retrofit, reducing energy costs by $3,989 annually and helping its merchandise look even better. In addition to reducing energy costs, the retrofit saved 56,991 kilowatt-hours of electricity – which is equivalent to eliminating carbon dioxide emissions from the consumption of 4,508 gallons of gas, according to the Environmental Protection Agency (EPA). The Mayo Furniture work was completed in-house as a part of SWEPCO's Commercial Solutions Program.



The SCORE Program provides no-cost technical and financial assistance to help school districts, colleges and universities implement energy efficiency improvements. The Program helps partners minimize the impact of volatile energy costs, ease budget pressures, and improve infrastructure and learning environments for students.

Similar to SCORE, the no-cost Commercial Solutions Program provides technical and financial support to help businesses identify and implement energy efficiency upgrade projects.

For more information about the Programs, contact Program Manager Paul Pratt at pepratt@aep.com or

The programs are sponsored by SWEPCO and administered by CLEAResult. You can reach CLEAResult at SWEPCO-Efficiency@CLEAResult.com or (888) 637-7937.

SWEPCOgridSMART.com

twitter.com/swepconews | facebook.com/

# PARTNER SUCCESS

following partners recently
npleted projects and were
awarded incentives:

**Offices & Warehouses**
$755

**Atlanta ISD**
$219

**City of Longview**
$1,227

**Guard-Line**
$3,921

**Hallsville ISD**
$18,995

**rte Hanks Call Center**
$747

**eTourneau University**
$1,025

**Longview ISD**
$4,995

**Mayo Furniture**
$3,311

**Mt. Pleasant ISD**
$21,221

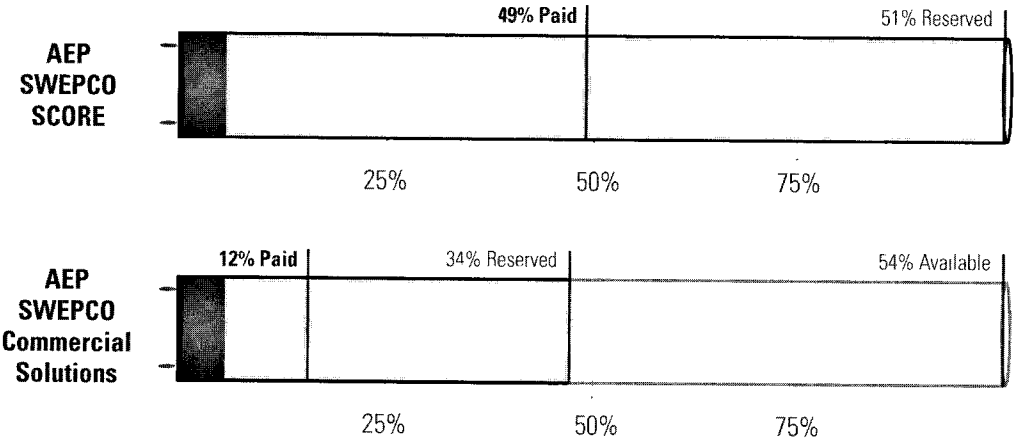
**Novatron**
$180

**Vista College**
$999

ngratulations,
Partners!

## Project Status Bar

Do you find yourself wondering if it's too late to reserve program funds? Are you looking for a tool to help sell more projects to your Board of Directors? Each newsletter includes a project status bar to help you answer these questions.




Please contact your account representative to identify additional opportunities to save energy and earn incentives in 2013.

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# Did You Know: Parking Lot Lighting Guidelines

**Things to Consider**

- Upfront costs can pale in comparison to life cycle costs, since maintenance and operating expenses are so high.
- Parking lots are frequently over lit.
  - Minimum outdoor lighting requirements are typically 1.5 footcandles or less.
- Do the lights promote safety for pedestrians and drivers?
- Uncontrolled light can spill into surrounding areas.
- Durability protects against weather and vandalism.
- Lumen output does not tell the whole story. Higher color temperature, higher CRI, and better light distribution can dramatically improve brightness, uniformity, and visibility in outdoor settings.
- Stringent outdoor energy code requirements often require the most efficient lighting options for new construction projects (and many retrofits).

**Benefits of LED Lighting**

- Compared to metal halide, induction, or fluorescent lighting, LED lighting offers the longest life, the best wattage results, and the lowest overall cost.
- Directionality makes it much easier to achieve uniform light levels where needed, minimize light pollution in the area, and maximize efficiency.
- "Cooler" color temperatures activate both photopic and scotopic vision, making them appear brighter than other light sources at night.
  - People feel safer and facial recognition on security cameras improves.
- Better occupancy, dimming and diagnostic control.
- LED lighting functions in a broad range of ambient temperatures.
- When operating at full brightness, LED lights turn on and restrike instantly.
- LED quality, efficacy (lumens per watt), and price are constantly improving, so reevaluate often.

*Source US Department of Energy (www.eere.energy.gov)*

### Technology Comparison

| | EXISTING | PROPOSED | | |
|---|---|---|---|---|
| | Metal Halide | Induction | Fluorescent | LED |
| Sample Fixture | 400W | 250W | 4 lamp T5HO | 168W |
| Input Wattage | 465W | 262 | 230 | 168 |
| Rated Life | 20,000 hrs | 70,000 hrs | 30,000 hrs | 70,000 hrs |
| Price Estimate[1] | $400 | $650 | $400 | $650 |

[1]*Price estimates assume the project is a retrofit using existing poles and include labor and lift rental costs.*