

Southwestern Electric Power Company

2016 Commercial Standard Offer Program

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Program Description

This section includes information about the eligibility requirements, incentive payments, and participation process of AEP/SWEPCO's Commercial Standard Offer Program. All of this information is also available on the program Web site at www.swepcogridsmart.com

Commercial Standard Offer Program (CSOP)

Overview

The Commercial Standard Offer Program (CSOP) was developed by Southwestern Electric Power Company (SWEPCO), an American Electric Power subsidiary to provide incentives for new construction and retrofit installation of a wide range of measures that reduce demand and save energy in non-residential facilities. Incentives are paid to energy service providers (Project Sponsors) on the basis of deemed savings or verified demand and energy savings at eligible Commercial customers' facilities. This program has been developed to comply with the Energy Efficiency Rule §25.181 implementing Senate Bill 7.

Participants in the Commercial Standard Offer Program must meet minimum eligibility criteria, comply with all program rules and procedures, submit documentation describing their projects, and enter into a Commercial Standard Offer Program Agreement with SWEPCO. This document summarizes eligibility requirements, incentives, the participation process, and other information needed to successfully take part in this program.

Eligibility

Project Sponsor

Any entity that installs eligible energy efficiency measures at a facility with non-residential electricity distribution service provided by SWEPCO in Texas is eligible to participate in the Commercial Standard Offer Program (CSOP) as a Project Sponsor. Eligible Project Sponsors may include

- National or local energy service companies (ESCOs)
- Local contractors
- National or local companies that provide energy-related services or products (such as lighting or HVAC equipment)
- Retail electricity providers
- Individual customers that install measures in their own facilities.

To ensure that the program's incentive budget is allocated to projects that are likely to meet with success, all Project Sponsors will be required to demonstrate a commitment to fulfilling program objectives and competency in completing the proposed project. Project Sponsors will be required to submit the following information as part of the application process:

- A description/profile of the Project Sponsor firm, including Tax ID relevant experience, areas of expertise, and references
- A work plan that covers the design, implementation, operation, and management of the project, including a work schedule

To ensure that incentives are available to multiple participants, Project Sponsors may be limited on the total amount of incentives received from the program incentive budget for a given year. An individual Project Sponsor can be a party to multiple applications as long as the total incentive from all such applications does not exceed the maximum limitation.

Host Customer

Any Commercial SWEPCO distribution customer who owns or operates a site, and has not qualified and elected not to participate in the Energy Efficiency Programs may host a project developed by a qualified Project Sponsor or choose to sponsor the project independently. The host customer's responsibilities include the following:

- Committing to an energy efficiency project
- Entering into an agreement with the selected Project Sponsor (or SWEPCO for independently sponsored projects)
- Providing reasonable access to project facilities both before and after project completion

Project

A project is defined by the set of measures at an eligible SWEPCO distribution customer site and the estimated demand and energy savings included in a single application. All projects must meet the following requirements:

- Each project must include a total estimated summer demand reduction of at least 5 kW. This limitation is included to ensure that projects contribute to the primary program goal of reducing summer peak demand and to minimize administrative costs. At SWEPCO's sole discretion, it may remove this limitation for a new Project Sponsor.
- If the customers and sites proposed are all similar, one project may involve the installation of measures at multiple customer sites. For example, installation of measures at a chain of grocery stores may include more than one customer site, but may constitute a single project. This limitation is included to limit administrative costs for due-diligence review of applications and projects.

Projects that include a comprehensive range of measure types are especially encouraged.

Measure

Most energy efficiency measures in retrofit applications that reduce electric energy consumption and summer daytime peak demand are eligible for the CSOP. SWEPCO does not specify eligible measures in order to provide Project Sponsors maximum

flexibility in packaging services. Therefore, Project Sponsors may propose the inclusion of any measure that:

- Produce a measurable and verifiable electric demand reduction during the peak summer period (defined as weekdays, between the hours of 1 p.m. and 7 p.m. from June through September, excluding holidays) or the peak winter period (defined as weekdays, between the hours of 6 p.m. and 10 p.m. and 6 a.m. and 10 a.m. from December through February, excluding holidays) and produce electric energy savings
- Produce savings through an increase in energy efficiency
- Is installed in a new or retrofit application
- Has a minimum useful life of 10 years (except hard-wired CFLs)
- Exceeds minimum equipment standards as provided in the Appendices of the CSOP Manual

Measure types *excluded* from consideration in the program are those that

- Involve plug loads (i.e., office equipment)
- Involve self-generation or cogeneration, except for renewable technologies (SWEPCO does not pay incentives for solar measures)
- Rely on changes in customer behavior and require no capital investment
- Result in negative environmental or health effects
- Involve fuel-switching *to* electric
- Receive an incentive through any other energy efficiency program offered by SWEPCO

Project incentives will be paid only for energy and demand savings directly related to end-use equipment installed under the project. Savings due to interactive effects between lighting and space-cooling measures will be eligible for payment based on a stipulated value only in cases where lighting measures have been installed in a conditioned space as part of the program. Interactive effects between other end-use equipment will not be eligible for program payments.

Table 1 provides examples of eligible and ineligible measures. SWEPCO may consider any measures that are not listed in Table 1 for program eligibility on a case-by-case basis.

Table 1

Examples of Eligible and Ineligible Measures and Projects

ELIGIBLE MEASURES

Commercial Cooling and Ventilation Measures/Projects*

- Constant air volume to variable air volume conversion projects
- Chiller replacement projects
- Thermal Energy Storage
- Packaged cooling unit replacement projects
- Replacement HVAC projects increased by more than 10% will be treated on a case-by-case basis
- Air-side and Water-side economizer projects
 - Fan and pump variable-speed drive installations
 - Fan and pump motor efficiency upgrades
 - Fuel switching *from* electric to gas

Commercial Lighting Measures/Projects

- High-efficiency fluorescent, HID or LED lighting that replaces less efficient lighting
- Lighting controls to reduce operating hours
- CFLs with hard-wired ballasts or permanent locking mechanisms

Refrigeration Measures/Projects

- Air cooling and refrigeration compressor replacement projects

Industrial Measures/Projects

- Variable speed drive installations on industrial fans and pumps
- All motor-efficiency upgrade projects

HVAC & LIGHTING

- VFDs on Air Handler Supply Fans
- Demand Savings Power Adjustment Factors for Lighting Controls
- Occupancy Controls for Guestroom, Dormitory and Multifamily

Refrigeration (retrofit)

- Night Covers for Open Refrigerated Cases
- ECM Evaporator Fan Motors
- Door Heater Controls
- Solid & Glass Door Reach-Ins
- Strip Curtains
- Zero Energy Doors
- Evaporator Fan Controls
- Electric Defrost Control

Food Service

- High Eff. Electric Convection Ovens
- High Eff. Electric Combination Ovens
- ENERGY STAR Commercial Dishwashers
- ENERGY STAR Electric Steam Cookers
- ENERGY STAR Kitchen Electric Fryers
- ENERGY STAR Commercial Electric Hot Food Holding Cabinets
- Vending Machine Controls
- Pre-Rinse Spray Valves

INELIGIBLE MEASURES

- CFLs without hard-wired ballasts or permanent locking mechanisms—(No Screw in CFLs)
- Fuel switching to electric
- Load reductions caused by building vacancies, decreased production, or other changes in occupant characteristics or behavior
- SWEPCO does not have incentives for solar projects
- Measures that require no capital investment
- Measures that decrease building plug loads, such as “Green Plugs” or computer inactivity time-out controls
- Measures for which incentives were received under another AEP program
- Energy-efficient gas-only measures

Measure Category	Measure Description	New Construction	Retrofit	Savings Calculator
Lighting	Lighting - Lamps and Fixtures	X	X	Lighting Survey Form
Lighting	Lighting Controls	X	X	Lighting Survey Form
HVAC (Cooling)	Package and Split-System (AC and Heat Pumps)	X	X	ACE Form
HVAC (Cooling)	Chillers	X	X	ACE Form
HVAC (Cooling)	Package Terminal Units and Room Air Conditioners (AC and Heat Pumps)	X	X	ACE Form
HVAC (Ventilation)	VFDs on AHU Supply Fans		X	Refrig Food Svc Control
Building Envelope	Cool Roof		X	CalcSmart Energy Star Roof
Building Envelope	Window Films and Solar Screens		X	CSOP Window Film Worksheet
Food Service	High Efficiency Electric Combination Ovens	X	X	Refrig Food Svc Control
Food Service	High Efficiency Electric Convection Ovens	X	X	Refrig Food Svc Control
Food Service	ENERGY STAR® Commercial Dishwashers	X	X	Refrig Food Svc Control
Food Service	ENERGY STAR® Commercial Electric Hot Food Holding Cabinets	X	X	Refrig Food Svc Control
Food Service	ENERGY STAR® Kitchen Electric Fryers	X	X	Refrig Food Svc Control
Food Service	Pre-Rinse Spray Valves		X	Refrig Food Svc Control
Food Service	ENERGY STAR® Electric Steam Cookers	X	X	Refrig Food Svc Control
Refrigeration	Door Heater Controls		X	Refrig Food Svc Control
Refrigeration	ECM Evaporator Fan Motors		X	Refrig Food Svc Control
Refrigeration	Electronic Defrost Control		X	Refrig Food Svc Control
Refrigeration	Evaporator Fan Controls		X	Refrig Food Svc Control
Refrigeration	Night Covers for Open Refrigerated Cases		X	Refrig Food Svc Control
Refrigeration	High-Efficiency Solid & Glass Door Reach-in Cases	X	X	Refrig Food Svc Control
Refrigeration	Strip Curtain - Walk-in Cooler/Freezer	X	X	Refrig Food Svc Control
Refrigeration	Low/No Anti-sweat Heat Glass Doors (Zero Energy Glass Doors)	X	X	Refrig Food Svc Control
Miscellaneous	Vending Machine Controllers		X	Refrig Food Svc Control

Efficiency Standards

SWEPCO has designed the CSOP to encourage electric energy efficiency improvements that go above and beyond the efficiency gains typically achieved in new construction, retrofit or replacement projects. Consequently, energy and demand savings credit will be based only on reductions that exceed current state and federal minimum efficiency standards, if such standards apply. In cases where standards do not exist, savings credit will be based on improvements relative to a customer's energy use prior to participating in the program. A list of federal and state equipment efficiency standards is provided in *Equipment Efficiency Standards* in the Appendices section of this program manual.

Incentives

Each year, throughout the course of the program, SWEPCO will determine the total incentive funds available within each participating service territory. The incentive prices and payments are summarized below.

Prices

The CSOP provides standard incentive prices for demand and energy savings of \$175.00/kW for peak demand reduction and \$0.06/kWh for energy saved. Higher incentives are available for approved certified LED lighting projects and HVAC projects. Demand savings from M&V projects will be the weighted average demand reduction that occurs during the summer peak period. Energy savings are defined as energy savings over the course of one 12-month period. Savings will be either "deemed"—that is, stipulated through standardized savings values or formulas—or estimated through measurement and verification (M & V).

	\$/KW	\$/KWH
HVAC	\$350.00	\$0.09
LED Lighting	\$250.00	\$0.075
Other Measures	\$175.00	\$0.06

Limitation – maximum Project Sponsor incentives

To ensure that incentives are available to multiple energy efficiency service providers, no Project Sponsor may initially reserve nor receive more than the defined project sponsor maximum in a given budget year, until the program manager adjusts the amount during the program year.

	CSOP Budget	Sponsor/Trade Ally Limit
SWEPCO	\$600,000	\$120,000

Limitation – project load factor (applicable to SWEPCO only)

To limit payments for excessive off-peak energy savings, SWEPCO has set the maximum incentive payment for each project based upon a project maximum annual load factor of 50% (energy savings kWh / (demand savings kW * 8,760)). This corresponds to payment for a maximum of 4,380 kWh of energy savings per every 1 kW of demand savings achieved.

Payments

SWEPCO agrees to make incentive payments to Project Sponsor based upon the sum of the documented Deemed Savings or Measured Savings derived from the Project. The total incentive payments due to Project Sponsor will be calculated by multiplying the Deemed Savings or Measured Savings by the applicable “Incentive Rate with load factor adjustments.”

Under no circumstances will SWEPCO make a total incentive payment that is more than 100% of the total estimated incentive payment specified in the CSOP Agreement. If, however, M&V activities or project changes indicate that the measured savings are less than the estimated savings, the total incentive payment may be less than the payment estimated in the agreement.

Special Incentive Cases

Projects involving fuel switching measures are subject to limitations on their total incentive payment.

Fuel Switching Measures

Projects involving fuel switching (i.e. electric chillers to gas or absorption chillers) shall have the electricity savings reduced by the amount of the new fuel consumption; refer to the M&V Guidelines in Section III to determine how to calculate fuel switching savings. As mentioned earlier, fuel switching to electric is not an eligible measure in the CSOP.

Participation Process

All documentation will be submitted in the P3 EnerTrek Database system. The Project Sponsor (PS) participation process is as follows:

- **Project Sponsor** will review the CSOP Manual at www.swepcogridsmart.com
- **Project Sponsor** will go to <https://swepco.p3.enertrek.com/> to create a Log In in the P3 Database. An email will be sent to the verify the email address
- **Project Sponsor** will follow the link in the email to begin the entering company profile information as a Market Actor.
- **Project Sponsor** will create an Enrollment Application for the Commercial Standard Offer Program and submit to SWEPCO for approval.

- ***SWEPCO** will approve, pre-approve, or deny the Enrollment.*
- ***Project Sponsor** can begin Project Creation with detailed information about the host customer site, identified by ESID number, once the Enrollment is approved.*
- ***Project Sponsor** (PS) will complete a copy of the **Project Sponsor CSOP Application and Process Form** and **Customer Project Sponsor Agreement Form** and load into the project information.*
- ***Project Sponsor** will upload calculators such as **Lighting Survey Form** or **ACE Form**, **Equipment Spec Sheets**, **Building Plans**, and other project information before submitting Project for Pre-Approval.*
- ***SWEPCO** will pre-approve, send back for more information, or deny the project. Once the project is Pre-Approved it will move to Work Completion Pending and pre-inspections may be required or the PS may begin work.*
- ***SWEPCO** will send PS a CSOP Agreement for the project that includes the savings and incentive for the project.*
- ***Project Sponsor** completes the work, submits invoices, photos and other required documents and submits the project as Work Completed in P3.*
- ***SWEPCO** makes final inspections and will process appropriate incentive payment.*

Project Initiation

Project Sponsors begin the Enrollment Process for SWEPCO projects by completing Enrollments in the P3 database; for more information contact EE Coordinator, Ron Tevebaugh by email at rwtevebaugh@aep.com. The Project Sponsor will be provided with the website instructions, application forms and calculators. The Initial Enrollment shall contain the following information:

- Identification and Qualifications of the Project Sponsor.
- Identification of the host SWEPCO customer site(s) including the ESID number(s).
- Description of the proposed set of energy-efficiency measures including spec sheets.
- Brief work plan for project design, implementation, operation, and management, including the anticipated project timeline.
- Building occupancy and equipment operating schedules
- Engineering calculations estimating energy and demand savings based on the efficiency of the proposed equipment compared to that of new, minimum-standard efficiency equipment or completion of the appropriate savings calculator for “Deemed Savings” projects.
- A project-specific M&V plan describing how the sponsor will monitor and verify energy and demand savings, the methods for calculating actual savings, and a schedule for conducting and reporting on M&V activities. In some cases, pre-installation M&V activities may be required to accurately estimate savings.

- Work plan for project design, implementation, operation, and management, including the anticipated project timeline.

Enrollments will be reviewed on a first-come, first-served basis until all incentive funding has been committed. A third (3rd) party Project Sponsor must submit the Project Sponsor and Customer Agreement with the Enrollment submittal. Once SWEPCO has completed pre-inspections, provided feedback, necessary corrections completed, and Pre-Approved (project will move to Work Completion Pending) the Enrollment funding is reserved for the project, and the Project Sponsor may start work on the project. A typical review cycle for Initial Enrollment Applications is 15 business days.

Pre-Installation Inspection

Before approval of the Enrollment Application, SWEPCO may, at its sole discretion, conduct a pre-installation inspection of the project site or plans to verify the baseline conditions documented in the application and the feasibility of installing the proposed equipment. SWEPCO will contact the Project Sponsor and complete the inspection, typically, within 30 business days of the Enrollment. The pre-installation inspection requires the presence of at least one representative of the Project Sponsor familiar with the project and the facility so that any discrepancies can be identified simultaneously by all parties. The inspection will verify the following information:

- The accuracy of the equipment survey. For most measures the accuracy of the equipment quantity and nameplate information is verified. For lighting measures, the requirement for acceptance is that the total error of the installed demand of the sample must be within $\pm 5\%$ of the total demand submitted on the survey form.
- The M&V plan is appropriate for the measure, and the necessary M&V activities are being performed.
- All existing equipment listed in the Enrollment are still in place and operational.
- New equipment installation, or preparation for installation, has not begun.

When electrical measurements are necessary, the representative(s) is required to perform any necessary disruptions in equipment operation, the opening of any electrical connection boxes, or the connection of current and power transducers. If the pre-installation inspection cannot be completed in a timely manner because the representative(s) is unfamiliar with the facility or project, the project site will fail the inspection.

Work Completed

Project Sponsors must Submit Work Completed in the P3 database within 15 business days from the completion of the measure installation. This should include uploads of Customer Acknowledgement Form, corrected calculators, and other information to define the project completely. The Work Submitted submittal will include the following information, submitted by the Project Sponsor:

- Full description of the existing and installed equipment, including equipment counts, equipment efficiencies
- Pictures of existing and new equipment.
- Equipment specification sheets, equipment nameplate data.
- Equipment invoices with model numbers and quantity.

SWEPCO may also review the feasibility of the proposed measures, the accuracy of the savings estimates, and the comprehensiveness of the M&V plan. SWEPCO may request clarification of or additional information about any item in the application. Project Sponsors will have ten working days to respond to such requests. If the clarification or additional information is not forthcoming, SWEPCO may choose to discontinue its evaluation of the application. If the project is approved, SWEPCO will reserve the appropriate amount of incentive funds for the project and prepare a Commercial Standard Offer Program Agreement. A typical review cycle, including the inspection, for Final Applications is 25 business days for measures involving the simplified M&V guidelines, and 45 business days for measures involving the full M&V guidelines.

Commercial Standard Offer Program Agreement

The Project Sponsor shall execute a Commercial Standard Offer Program Agreement and SWEPCO must receive this executed Agreement within fifteen (15) business days of the FA approval. The Project Sponsor is required to sign the Agreement with SWEPCO before installing any measures. The terms of the Agreement will be standard for all Project Sponsors and will include the measures to be installed, estimates of demand and energy savings, a maximum incentive payment associated with the project, and the approved M&V approach.

Post-Installation Inspection

SWEPCO will contact the Project Sponsor and may conduct a post-installation inspection of the project site within 30 business days of the receipt of the Work Completed submittal. The post-installation inspection requires the presence of at least one representative of the Project Sponsor familiar with the project and the facility. The inspection shall verify that:

- The savings measures specified in the Commercial Standard Offer Program Agreement have been installed and are operating as described in the approved

Application. For most measures the accuracy of the equipment quantity and nameplate information is verified. For lighting measures, the requirement for acceptance is that the total error of the installed demand of the sample must be within $\pm 5\%$ of the total demand submitted on the survey form.

- The M&V plan is being followed in accordance with the approved Final Application.

When electrical measurements are necessary, the representative(s) is required to perform any necessary disruptions in equipment operation, the opening of any electrical connection boxes, or the connection of current and power transducers. If the post-installation inspection cannot be completed in a timely manner because the representative(s) is unfamiliar with the facility or project, the project site will fail the inspection.

Measurement and Verification

Before the incentive payment is made, the potential for the project measures to save demand and energy must be verified and the actual savings estimated. These activities will be conducted in accordance with the M&V plan developed for the project. Project Sponsors are responsible for developing their own M&V plans conducting all M&V activities for the project.

M&V procedures will vary in detail and rigor depending on the measures installed. For each installed measure, the chosen procedures will depend upon the predictability of equipment operation, the availability of evaluation data from previous programs, and the benefits of the chosen M&V approach relative to its cost. The proposed M & V plan will be reviewed by the state E M & V Team for approval.

Project-specific M&V procedures may be classified according to three distinct approaches that represent increasing levels of detail and rigor.

- **Deemed savings:** Savings values are stipulated based on engineering calculations using typical equipment characteristics and operating schedules developed for particular applications, without on-site testing or metering. This approach can be used only for measures for which savings are relatively certain, such as Lighting Efficiency and Controls, HVAC replacements, Commercial Refrigeration, and Food Service Equipment, and any other measure savings approved by the Public Utility Commission of Texas.
- **Simple M&V:** Savings values are based on engineering calculations using typical equipment characteristics and operating schedules developed for particular applications, with some short-term testing or simple long-term metering. For example, chiller energy and demand savings can be determined using the simple approach by comparing rated efficiencies of high-efficiency equipment to standard equipment, and using kW spot-metering and simple long-term kWh metering.
- **Full M&V:** Savings are estimated using a higher level of rigor than in the deemed savings or simple M&V approaches through the application of metering, billing analysis, or computer simulation. These methods will need to be developed in accordance with the 2001 International Performance Measurement and Verification

Protocol (IPMVP), which represents the starting point for standard industry practice. More information about the IPMVP may be found on the Internet at www.ipmvp.org. Using the IPMVP as a guide, SWEPCO has developed several measure-specific guidelines to help ensure consistency and quality of the M&V performed by Project Sponsors. Project Sponsors will need only to adapt the guidelines to their specific projects in order to specify a project-specific M&V plan for the application stage.

The time required to complete M&V activities will range from less than a month to up to 12 months, depending on the approach chosen. Refer to the M&V section of the appendices of this manual for details regarding the M&V guidelines for the program.

Savings Report

After all M&V activities are complete, the Project Sponsor shall complete a Savings Report (SR) documenting the measured demand and energy savings of the project. An approved Savings Report will serve as notice that all work has been completed. The incentive payment is based on the project's verified savings. The total incentive payment cannot exceed the incentive payment stated in the Commercial Standard Offer Agreement. A typical review cycle for Savings Reports is 30 business days.

Deadlines

To encourage the timely completion of projects, the following deadlines have been established:

The Project Sponsor and Customer Agreement must be included in the Initial Project Application submittal.

Work Completed submittal must be submitted within fifteen (15) business days from the date the measure installation is complete.

Commercial Standard Offer Program Agreement (Agreement) must be received by SWEPCO before work is started and within fifteen (15) business days of the Pre-Approval of the project.

Measure installation must be complete within six (6) months from the Project Approval Date; extensions may be granted by SWEPCO on a case-by-case basis.

The Installation Report (IR) must be submitted within fifteen (15) business days from measure installation;

The Customer Acknowledgement Form must be included in the Work Completed submittal.

The Savings Report must be submitted to SWEPCO within thirty (30) business days of the conclusion of M&V activities and within 18 months of the execution of the Commercial Standard Offer Agreement.

SWEPCO

All correspondence and documentation for the CSOP in SWEPCO's Texas service territory should be directed to the address below:

SWEPCO
Attn: Ron W. Tevebaugh
4421 W. Loop 281
Longview, TX 75604
Phone: (903) 234-7334
E-mail: rwtevebaugh@aep.com

Confidentiality

The CSOP is subject to oversight by the Public Utility Commission of Texas (PUCT), which may request a copy of any program materials received by SWEPCO. Sensitive company and project information, such as financial statements, should be identified as "confidential" when submitted to SWEPCO. These materials will be treated confidentially, and will not be provided directly to outside parties other than the PUCT. SWEPCO will have no liability to any Project Sponsor or other party as a result of public disclosure of any submittals.

Participation Costs

SWEPCO will not reimburse any Project Sponsor for any costs incurred by participating in the Commercial Standard Offer Program, including costs of preparing the Application or reviewing the Commercial Standard Offer Program Agreement.

Submission of False Information

SWEPCO reserves the right to discontinue its evaluation of all submittals from any Project Sponsor who, in the sole judgment of SWEPCO, submits false, misleading, or incorrect information.

Web Site

The CSOP web site at www.swepcogridsmart.com will serve as the primary sources for all updated program information and materials. The web site will include the following:

- Information that describes the program design and requirements
- Contact information to receive more information about the program
- Status updates on program funding available and committed
- Downloadable guidelines, applications, savings calculators, and submittal forms