# Southwestern Public Service Company

# 2008 Energy Efficiency Plan and Report P.U.C. SUBST. R. 25.181 and 25.183

# April 1, 2009

Project No. 36689



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# Introduction

Southwestern Public Service Company, a New Mexico corporation, (õSPSö or õCompanyö) presents this Energy Efficiency Plan and Report (õEEPRö) to voluntarily comply with P.U.C. SUBST. R. 25.181 (the õEnergy Efficiency Ruleö or õEE Ruleö).<sup>1</sup> This EEPR covers the periods of time outlined in P.U.C. SUBST. R. 25.181 and provides the Public Utility Commission of Texas (õCommissionö) and interested parties with information pertaining to our energy efficiency activities. The following paragraphs provide a description of the information contained in each of the subsequent sections and appendices.

# **Energy Efficiency Plan and Report Organization**

This EEPR is separated into an Executive Summary and two main components: the Energy Efficiency Plan and the Energy Efficiency Report.

Within the Energy Efficiency Plan:

- Section I describes SPSøs program portfolio. It details how each program will be implemented, discusses related informational and outreach activities, and provides an introduction to the programs not included in SPSøs previous EEP.
- Section II explains SPSøs targeted customer classes, specifying the size of each class and the method for determining those sizes.
- Section III presents SPS¢ projected energy efficiency savings and goals for 2009 and 2010 broken out by program for each customer class.
- Section IV describes SPSøs proposed energy efficiency budgets for 2009 and 2010 broken out by program for each customer class.

Within the Energy Efficiency Report:

- Section V documents SPSøs actual weather-adjusted demand savings goals and energy targets for the previous five years (2004-2008).
- Section VI compares SPSøs projected energy and demand savings to its reported and verified savings by program for calendar year 2008.
- Section VII details SPSøs incentive and administration expenditures for the previous five years (2004-2008) broken out by program for each customer class.

<sup>&</sup>lt;sup>1</sup> The Energy Efficiency Rule and statute that prescribe the rights and obligations of other electric utilities do not apply to SPS. In Docket No. 35738, the Commission ruled that SPS is not subject to the energy efficiency mandates in PURA § 39.905. The Commission also found that, because P.U.C. SUBST. R. 25.181 was adopted under the authority of PURA § 39.905, the Energy Efficiency Rule "is necessarily not applicable to SPS" (*see* Docket No. 35738, Preliminary Order at 3 (Sept. 15, 2008)).to SPS. In Docket No. 35738, the Commission ruled that SPS is not subject to the energy efficiency mandates in PURA § 39.905. The Commission also found that, because P.U.C. SUBST. R. 25.181 was adopted under the authority of PURA § 39.905. The Commission also found that, because P.U.C. SUBST. R. 25.181 was adopted under the authority of PURA § 39.905. The Commission also found that, because P.U.C. SUBST. R. 25.181 was adopted under the authority of PURA § 39.905, that Energy Efficiency Rule "is necessarily not applicable to SPS" (*see* Docket No. 35738, Preliminary Order at 3 (Sept. 15, 2008)).

- Section VIII compares SPSøs budgeted and actual energy efficiency costs from 2008 broken out by program for each customer class. It also explains any cost increases or decreases of more than 10 percent for SPSøs overall program budget.
- Section IX describes the results from SPS¢ Market Transformation (õMTPö) programs. It compares existing baselines and existing milestones with actual results, and details any updates to those baselines and milestones.
- Section X describes the Companyøs Energy Efficiency cost recovery.
- Section XI identifies counties that were underserved during the 2008 program year.
- Section XII discusses the Companyøs eligibility for a performance bonus.

#### Appendices

- Appendix A ó Reported kW and kWh Savings broken out by county for each program.
- Appendix B ó Program templates for any new or newly-modified programs not included in SPS ø previous EEPR.

# Executive Summary

SPS submits this EEPR to voluntarily comply with the Energy Efficiency Rule. The Energy Efficiency Plan portion of this EEPR details SPSøs efforts to achieve reductions in peak demand and energy use amongst its residential and commercial customers. Pursuant to the Commissionøs decision in Docket No. 35763, SPS intends to increase its spending level above the amount currently included in base rates and progress towards the statutory goals.

For comparison purposes, Table 1 shows the statutory demand and energy goals for 2009 that SPS would be required to meet under P.U.C. SUBST. R. 25.181 if the statute and Commission rule applied to SPS. The demand goals are calculated as 20% of the average 5-year historical growth in demand. The õEnergy (MWh) Goalö is calculated from the demand goal using a 20% capacity factor, as mandated in P.U.C. SUBST. R. 25.181. Thus, the õEnergy (MWh) Goalö is 20% of the product of the õDemand (MW) Goalö and 8,760 (the number of hours in a year). The table also shows the budget (exclusive of a payment of \$758,000 to NORESCO) that would be necessary to achieve that goal and the MWh savings that are projected to be associated with that demand reduction given SPS¢s program portfolio. This õProjected MWh Savingsö estimate is based on SPS¢s past program results.

Table 1: Summary of Hypothetical, Statutory Goals and Budget Necessary to MeetHypothetical, Statutory Goals (at Meter)

| Calendar<br>Year | Average<br>Growth in<br>Demand<br>(MW) | MW Goal<br>(% of<br>Growth in<br>Demand) | Demand<br>(MW)<br>Goal | Energy<br>(MWh)<br>Goal | Projected<br>MW<br>Savings | Projected<br>MWh<br>Savings | Budget<br>Necessary<br>(000's) |
|------------------|--|--|------------------------|-------------------------|----------------------------|-----------------------------|--------------------------------|
| 2009             | 25.52                                  | 20%                                      | 5.10                   | 8,944                   | 5.10                       | 15,699                      | \$2,762                        |

Table 2 shows the projected savings associated with the 2009 and 2010 budgets. The maximum demand goal that could be achieved with these funds is also given. Detailed savings projections and budgets are given in Sections III and IV.

| Table 2: Summarv | v of Voluntary Goal | s. Projected Savings | , and Projected Budgets | s (at Meter) |
|------------------|---------------------|----------------------|-------------------------|--------------|
|                  | ,                   |                      | ,                       |              |

| Calendar<br>Year | Average<br>Growth in<br>Demand<br>(MW) | MW Goal<br>(% of<br>Growth in<br>Demand) | Demand<br>(MW)<br>Goal | Energy<br>(MWh)<br>Goal | Projected<br>MW<br>Savings | Projected<br>MWh<br>Savings | Projected<br>Budget<br>(000's) |
|------------------|--|--|------------------------|-------------------------|----------------------------|-----------------------------|--------------------------------|
| 2009             | 25.52                                  | 11%                                      | 2.75                   | 4,813                   | 2.75                       | 8,473                       | \$1,600                        |
| 2010             | 25.52                                  | 15%                                      | 3.76                   | 6,588                   | 3.76                       | 10,965                      | \$2,166                        |

The projected savings, budgets and implementation plans included in this EEPR are highly influenced by the requirements of the EE Rule and lessons learned regarding energy efficiency service provider and customer participation in the various energy efficiency programs.

The Energy Efficiency Report portion of this EEPR demonstrates that in 2008 SPS achieved energy efficiency demand and energy savings of **3,920 kW** and **12,566 MWh** at the meter, exceeding the voluntary demand and energy goals of 3,800 kW and 6,663 MWh. The expenditures for these 2008 programs were \$2,249,000 (excluding the payment of \$758,000 to NORESCO). SPS primarily used Standard Offer Programs (õSOPö) to meet the Companyøs voluntary goal of a 12% reduction in demand growth through energy efficiency. These programs included Residential Standard Offer Programs for single- and multi-family residences, the Commercial Standard Offer Program, and Hard-To-Reach Standard Offer Programs for single- and multi-family residences. SPS also continued to sponsor a Low-Income Weatherization Program implemented by the Texas Department of Housing and Community Affairs (õTDHCAö).

Finally, SPS would like to stress that all projected savings reported in this document represent the impacts that are expected from energy efficiency programs in the case that all of the available funds are reserved and expended on efficiency projects. In recent years, SPS has not experienced full subscription in its commercial programs, and while it intends to shift funds so that they are put to the best use, it is not certain that all available funds will be expended. This would cause the actual savings to fall short of the projected amounts.

In order to reach the above projected savings, SPS proposes to implement the following Standard Offer and Market Transformation Programs:

- Commercial SOP;
- Residential SOP for single- and multi-family residences; and
- Hard-To-Reach SOP for single- and multi-family residences.

SPS will also continue to sponsor a Low-Income Weatherization Program implemented by the TDHCA. These programs will ensure that all customer classes have access to energy efficiency opportunities.

# **Energy Efficiency Plan**

PURA § 39.905 and P.U.C. SUBST. R. 25.181 establish peak demand reduction goals and program guidelines for many of the Stateøs investor-owned electric utilities. Although PURA § 39.905 and P.U.C. SUBST. R. 25.181 do not apply to SPS, the Company is committed to offering cost-effective energy efficiency programs to ensure that its retail customers are offered the same energy efficiency services that are available to consumers in other areas of the State.

This EEPR reflects the Companyøs continued commitment to provide its customers with energy efficiency opportunities. SPS proposes to offer Standard Offer and Market Transformation Programs to the residential and commercial customer classes in an effort to meet the spirit of the EE Rule, if not the actual requirements. The following Plan outlines SPSøs planned efforts to encourage energy efficiency among its residential and commercial customers, including a discussion of proposed programs and budgets and program impacts estimates.

# I. 2009 Programs

# A. 2009 Program Portfolio

SPS plans to implement three standard offer programs. The Commercial SOP has two components, one for large commercial customers and another for small commercial customers. These two components are tracked and reported separately. The Residential and Hard-To-Reach SOPs each have components for single-family and multi-family residences for which incentive payments and savings are tracked separately, but they are reported together in this document.

SPS¢s portfolio of programs targets both broad market segments and smaller market sub-segments that offer significant opportunities for cost-effective savings. SPS anticipates that targeted outreach to a broad range of service provider types will be necessary in order to meet the savings goals that it has set. Table 3, below, summarizes the programs and target markets.

Table 3: Energy Efficiency Program Portfolio

| Program                         | Target Market                      | Application                |
|---------------------------------|------------------------------------|----------------------------|
| Commercial SOP                  | Large Commercial; Small Commercial | Retrofit; New Construction |
| Residential SOP                 | Residential                        | Retrofit                   |
| Hard-To-Reach SOP               | Residential Hard-To-Reach          | Retrofit                   |
| TDHCA Low-Income Weatherization | Low-Income                         | Retrofit                   |

The programs listed in Table 3are described in further detail below. SPS maintains a website containing all of the parameters for project participation, the forms required for project submission, and the current available funding at *http://www.xcelefficiency.com/*. This website is the primary method of communication used to provide potential Project Sponsors with program updates and information.

In addition to the programs mentioned above, SPS will make payments for two additional third-party energy efficiency programs during 2009: NORESCO and TDHCA.<sup>2</sup>

### **B.** Existing Programs

SPS will continue to offer the following pre-existing programs:

#### **Commercial Standard Offer Program**

The Commercial SOP has two components. The Large Commercial component of the Commercial SOP targets commercial customers with single-meter demand of more than 100 kW or aggregate meter demand of greater than 250 kW. Incentives are paid to project sponsors for certain measures installed in new or retrofit applications, which provide verifiable demand and energy savings. The Small Commercial component targets commercial customers with a single-meter demand of less than or equal to 100 kW or less than 250 kW for the sum of commonly-owned meters. Incentives are paid to project sponsors for measures installed in new or retrofit applications that provide verifiable demand and energy savings. The Small Commercial and Large Commercial incentives and savings are tracked and reported separately.

#### **Residential Standard Offer Program**

The Residential SOP provides incentives to service providers for the retrofit installation in residential applications of a wide range of measures that provide verifiable demand and energy savings. This program has two components, one for single-family residences and one for multi-family residences. Incentives and savings are tracked separately for these components but are reported together in this document.

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<sup>&</sup>lt;sup>2</sup> In accord with the settlement agreement in Docket No. 13827 (*Application of Southwestern Public Service Company for Approval of Notice of Intent for a 203 MW Phillips Cogeneration Project and a 103 MW Combustion Turbine Project*), SPS conducted an all-source resource solicitation in 1996-97 to procure cost-effective demand-side resources. As a result of this solicitation, SPS entered into four third-party õpay for performanceö contracts with three Energy Service Companies: NORESCO, UCONS, and Planergy. The Planergy contract was subsequently acquired by and assigned to Conservation Services Group. These contracts range in duration from six to fourteen years. Also as a part of this settlement agreement, SPS contracted with TDHCA to provide energy efficiency assistance to low-income customers. The TDHCA program produces new installations each year. Savings from the program are included in SPSøs annual energy efficiency program results and count toward the Companyøs energy efficiency goal.

#### Hard-To-Reach Standard Offer Program

Hard-To-Reach customers are defined by P.U.C. SUBST. R. 25.181 as customers with an annual household income at or below 200% of federal poverty guidelines. The Hard-To-Reach SOP provides incentives for the comprehensive retrofit installation of a wide range of measures that reduce demand and save energy. This includes certain measures with less than a 10-year life (i.e., CFLs). This program is split into two segments, one for single-family residences and one for multi-family residences. Incentives and savings are tracked separately for these segments but are reported together in this document.

## C. New Programs for 2009

SPS will not offer any new programs in 2009.

## D. General Implementation Plan

### **Program Implementation**

SPS will conduct activities to implement energy efficiency programs in a non-discriminatory and cost effective manner. For 2009, SPS intends to implement programs using the following activity schedule:

- In April of 2009, SPS will allow sponsors to submit applications, which will be reviewed and accepted in the order of receipt.
- Throughout 2009, qualified EESPs will be offered contracts to implement projects. After contract execution, the EESP can begin implementation and reporting of measures. All projects must be completed and results reported to SPS before November 15th of the program year. SPS will continue to inform the EESP community of pertinent news and updates by posting program notices on its energy efficiency website, offering local and Internet-based workshops (if necessary), and broadcasting email notices to various energy service company associations.
- In the fourth quarter of 2009, SPS will announce its 2010 energy efficiency programs and open its website application pages to assist EESPs to prepare project applications. The application process gives sponsors feedback on whether particular projects are eligible and the level of incentives for which they may qualify.
- Activity for 2010 will be similar to that in 2009.

### Program Tracking

SPS uses an online database to record all program activity for its energy efficiency programs. The online database is accessible to project sponsors, implementers and administrators alike. All program data can be entered in real-time, capturing added customer information (class, location by county, utility account), installed measures (quantity, deemed or measured, serial numbers, and paid incentives), authorized incentives, inspection results (including adjustments), invoice requests, and payments. The database allows SPS to guard against duplicate incentive requests to SPS øs programs.

## Measurement and Verification

Many of the projects implemented under these programs will report demand and energy savings utilizing õdeemed savings estimatesö already approved by the Commission. If deemed savings have not been approved for a particular installation, such savings will be reported using an approved measurement and verification approach.

The International Performance Measurement and Verification Protocol (õIPMVPö) will be used in the following situations:

- A Commission-approved deemed savings estimate is not available for the energy efficiency measures included in an eligible project; or
- An EESP has elected to follow the protocol because it believes that measurement and verification activities will result in a more accurate estimate of the savings associated with the project than would application of the Commission-approved deemed savings value.
- The IPMVP is voluminous and is not included with this plan.

# E. Outreach and Research Activities

SPS anticipates that outreach to a broad range of EESP and market segments will be necessary in order to meet the savings goals required by PURA § 39.905. SPS markets the availability of its programs in the following manner.

SPS maintains *http://www.xcelefficiency.com/*. SPS's website will be the primary method of communication used to provide potential Project Sponsors with program updates and information. It contains detailed information regarding requirements for project participation, project eligibility, end-use measure eligibility, incentive levels, application procedures, and current available funding. All application forms required for project submission are available for download on the website.

SPS offers separate outreach workshops for each SOP. SPS invites members of the air conditioner contractor community, weatherization service providers, lighting vendors, big box retailers, and national energy service companies to participate in the workshops. These workshops explain

elements such as responsibilities of the project sponsor, project requirements, incentive information, and the application and reporting process.

As part of SPS¢s outreach efforts, SPS will also continue to coordinate with the National Association of Energy Service Companies (õNAESCOö) to notify all its members about SPS¢s Standard Offer Programs.

SPS gauges EESP interest in online telephone broadcast of its workshops. If warranted, SPS will offer such workshops for each of its programs.

SPS coordinates the timing of its various workshops so as to avoid overlapping schedules with other utilities. This will increase accessibility to EESPs who may work in several areas.

SPS utilizes mass electronic mail (e-mail) notifications to keep potential project sponsors interested and informed.

SPS attends appropriate industry-related meetings to generate awareness and interest.

SPS participates in statewide outreach activities as may be available.

## F. Existing DSM Contracts or Obligations

Additional energy efficiency services are made available to industrial, commercial, and residential customers through pay-for-performance programs implemented by third-party EESPs selected from the 1995 all-source solicitation. This approach has enabled SPS to acquire additional energy efficiency resources without having to hire additional internal human resources. Generally, these programs were implemented under long-term contracts, in order to help ensure that the savings were maintained. Completed programs do not contribute peak demand reductions toward SPS¢s demand reduction goals for 2007, 2008, 2009, or 2010. SPS also continues its contract with the TDHCA to operate a low-income weatherization program. The following paragraphs describe SPS¢s long-term contracts:

#### NORESCO Industrial Energy Conservation Program

Implemented through a third-party ESCO, this program provided energy efficiency services to large commercial and industrial customers. Efficiency measures included the replacement of existing lighting, HVAC, refrigeration, and motors with higher efficiency equipment, the installation of equipment controls, process improvements, and load management strategies. Program implementation activities were completed in 2002.

#### Low-income Program

This is a õpiggy-backö program that supplements a program operated by TDHCA. The efficiency measures include the installation of compact fluorescent lamps in lieu of incandescent bulbs, weatherization measures, and the replacement of inefficient refrigerators with new high efficiency

models. If customers have electric water heaters, water heater blankets and low-flow showerheads are installed. Program implementation activities are ongoing.

## II. Customer Classes

SPS targets the Commercial, Residential, and Hard-To-Reach customer classes with its energy efficiency programs. Table 4 summarizes the number of customers in each of the customer classes. The annual budgets are allocated to customer classes by examining historical program results, evaluating economic trends, and taking into account P.U.C. SUBST. R. 25.181, which states that no less than 5% of the utility total demand goal should be achieved through programs for Hard-To-Reach customers. For 2009 and 2010, the budget allocation was designed so that the projected savings achieved for the residential and commercial classes are roughly proportional to the contribution to system peak of these classes of customers. Although these guidelines have been set, the actual distribution of the budget must remain flexible based upon the response of the marketplace and the potential interest that a customer class may have toward a specific program. SPS will offer a portfolio of SOPs that will be available to all customer classes.

| Table 4: Summary o | f Customer Classes |
|--------------------|--------------------|
|--------------------|--------------------|

| Customer Class | Qualifications          | Number of Customers |
|----------------|-------------------------|---------------------|
| Commercial     | <69 KV service voltage  | 53,565              |
| Residential    | Non-HTR Residential     | 143,699             |
| Hard-To-Reach  | HTR Income Requirements | 67,004              |

## III. Projected Energy Efficiency Savings and Goals

P.U.C. SUBST. R. 25.181 requires that Texasøs investor-owned utilities administer energy efficiency programs to achieve a demand reduction equivalent to 20% of the utilityøs average demand growth by December 31, 2009. While this rule does not apply to SPS, SPS plans to administer energy efficiency programs in 2009 and 2010 that will produce reductions in peak demand.

For the sake of record-keeping and comparison only, the calculation of 20% of SPSøs average growth in demand is presented below. Table 5 shows SPSøs total retail sales and peak demand over the last six years, as well as the sales and peak demand for only SPSøs residential and commercial customers. The table also shows the annual growth in peak demand for the residential and commercial customers and the average of this annual growth over the past five years, 25.5 MW. The demand goal calculated according to P.U.C. SUBST. R. 25.181 is then 20% of this value, or 5.10 MW, as shown in Table 1. SPS estimates that a budget of \$3.52 million (including payments to NORESCO) would be necessary to achieve that goal.

|               |        | Peak Dem                   | and (MW)                 |                               |                  | Energy Consu               | mption (MW               | h)                         |                               | Average                       |
|---------------|--------|----------------------------|--------------------------|-------------------------------|------------------|----------------------------|--------------------------|----------------------------|-------------------------------|-------------------------------|
| Calendar Year | Tota   | al System                  | Residential & Commercial |                               | ial Total System |                            | Residential & Commercial |                            | Growth (MW)                   | Growth (MW) <sup>3</sup>      |
|               | Actual | Actual Weather<br>Adjusted | Actual                   | Actual<br>Weather<br>Adjusted | Actual           | Actual Weather<br>Adjusted | Actual                   | Actual Weather<br>Adjusted | Actual<br>Weather<br>Adjusted | Actual<br>Weather<br>Adjusted |
| 2003          | 2,047  | 1,999                      | 1,577                    | 1,529                         | 12,419,166       | 12,425,426                 | 7,906,979                | 7,913,238                  | NA                            | NA                            |
| 2004          | 2,058  | 2,072                      | 1,537                    | 1,551                         | 12,626,108       | 12,734,324                 | 7,993,223                | 8,101,438                  | 22                            | NA                            |
| 2005          | 2,051  | 2,081                      | 1,546                    | 1,576                         | 12,921,768       | 12,925,843                 | 8,264,399                | 8,268,474                  | 25                            | NA                            |
| 2006          | 2,168  | 2,156                      | 1,643                    | 1,631                         | 13,039,007       | 13,038,019                 | 8,396,520                | 8,395,532                  | 55                            | NA                            |
| 2007          | 1,962  | 2,184                      | 1,416                    | 1,638                         | 13,180,377       | 13,207,469                 | 8,430,967                | 8,458,059                  | 7                             | NA                            |
| 2008          | 2,272  | 2,273                      | 1,655                    | 1,657                         | 14,143,864       | 14,198,484                 | 8,446,329                | 8,500,950                  | 19                            | NA                            |
| 2009          | NA     | NA                         | NA                       | NA                            | NA               | NA                         | NA                       | NA                         | NA                            | 25.5                          |
| 2010          | NA     | NA                         | NA                       | NA                            | NA               | NA                         | NA                       | NA                         | NA                            | 25.5                          |

| Table 5: Annual Growth in Demand and Energy Consumption (at Meter) |
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 $<sup>\</sup>frac{1}{3}$  Average historical growth in demand over the last five years (2004-2008) for residential and commercial customers adjusted for weather fluctuations.

For 2009 and 2010, SPS developed budgets for energy efficiency spending in excess of the \$2 million included in base rates.<sup>4</sup> Details of these budgets, including the allocation of funds to specific programs, are given in Section IV.

The projected savings from SPS¢s energy efficiency programs have been calculated from these proposed budgets, using the cost per kW of demand reduction achieved in SPS¢s 2008 programs and the budget allocation for each program. The expected energy savings were then calculated from the projected demand reductions using the average load factors from each of SPS¢s 2008 programs. Table 6 shows the projected demand and energy savings broken out by program. As was displayed in Table 2 in the Executive Summary, the spending is projected to correspond to demand reductions in 2009 and 2010 of 11% in 2009 and 15% in 2010.

Table 7 shows the projected savings to be realized in 2009 and 2010 as a result of third-party payfor-performance programs. Any savings realized from these programs will be due to measures installed in previous years and will not be counted towards SPSø demand goal. However, SPS will make payments in 2009 and 2010 to the implementers for these savings.

<sup>&</sup>lt;sup>4</sup> See Item No. 826 (Unanimous Stipulation) on the InterChange for PUC Docket No. 35763, Section 8(c), for discussion of base rate energy efficiency cost recovery and the certified question relating to the recovery or refund of the difference between actual expenses and the amount included in base rates. Under the Unanimous Stipulation, the base rate increase includes \$2.0 million for energy efficiency programs. Under the Commission, ruling on the certified question, expenditures over \$2 million will be deferred for recovery in SPS next base rate case.

# Table 6: Projected Demand and Energy Savings Broken Out by Program for EachCustomer Class (at Meter)

| 2009                               | Projected Savings |                    |  |  |
|------------------------------------|-------------------|--------------------|--|--|
| Customer Class and Program         | kW                | kWh                |  |  |
| Commercial                         | 1,607             | 5,656,047          |  |  |
| Large Commercial SOP               | 1,302             | 4,440,594          |  |  |
| Small Commercial SOP               | 305               | 1,215,453          |  |  |
| Residential                        | 895               | 2,346,084          |  |  |
| Residential SOP                    | 895               | 2,346,084          |  |  |
| Hard-To-Reach                      | 246               | 470,517            |  |  |
| Hard-To-Reach SOP                  | 200               | 376,517            |  |  |
| TDHCA                              | 46                | 94,000             |  |  |
| Total Annual Projected Savings     | 2,747             | 8,472,649          |  |  |
| 2010<br>Customer Class and Program | Projected Savings |                    |  |  |
| Commercial                         | 2,199             | 7,741,213          |  |  |
| Large Commercial SOP               | 1,782             | 6,077,669          |  |  |
| Small Commercial SOP               | 417               | 1,663,544          |  |  |
| Residential                        | 1,225             | 2,582,284          |  |  |
| Residential SOP                    | 725               | 1,900,466          |  |  |
| Residential BOT                    |                   |                    |  |  |
| AC Distributor MTP                 | 500               | 681,818            |  |  |
|                                    | 500<br><b>336</b> | 681,818<br>641,323 |  |  |
| AC Distributor MTP                 |                   |                    |  |  |
| AC Distributor MTP Hard-To-Reach   | 336               | 641,323            |  |  |

| 2009                                     | Projected Savings |                |  |  |
|--|-------------------|----------------|--|--|
| Customer Class and Program               | kW                | kWh            |  |  |
| Commercial                               |                   |                |  |  |
| NORESCO Texas                            | 4,849             | 29,928,408     |  |  |
| <b>Total Annual Projected</b>            |                   |                |  |  |
| Savings                                  | 4,849             | 29,928,408     |  |  |
|  | Projected Savings |                |  |  |
| 2010                                     | Projected         | Savings        |  |  |
| 2010<br>Customer Class and Program       | Projected<br>kW   | Savings<br>kWh |  |  |
|  |                   |                |  |  |
| Customer Class and Program               |                   |                |  |  |
| Customer Class and Program<br>Commercial | kW                | kWh            |  |  |

 Table 7: Projected Demand and Energy Savings for Third-Party Programs

## **IV. Program Budgets**

Table 8 presents the details of the proposed budgets for 2009 and 2010. These budgets are projected to achieve the demand and energy savings shown in Table 6.

SPS has added an additional budgeting õclassö for R&D to account for R&D expenditures that are not affiliated with a specific customer class or program. SPS has not committed any R&D projects as of the date of this filing, but has included funds to allow for some R&D activities in the budget. It is planned that any funds budgeted for R&D but not expended will be made available as incentives in one or more of SPS¢ SOPs.

Table 9 shows the expected payments to be made in 2009 and 2010 to third-party contractors for the savings given in Table 7.

| 2009                           | Incentives | Admin      | R&D        | Total Budget |
|--------------------------------|------------|------------|------------|--------------|
| Commercial                     | \$567      | \$63       | \$0        | \$630        |
| Large Commercial SOP           | \$425      | \$47       | \$0        | \$472        |
| Small Commercial SOP           | \$143      | \$16       | \$0        | \$158        |
| Residential                    | \$447      | \$50       | <b>\$0</b> | \$497        |
| Residential SOP                | \$447      | \$50       | \$0        | \$497        |
| Hard-To-Reach                  | \$455      | \$17       | <b>\$0</b> | \$473        |
| Hard-To-Reach SOP              | \$155      | \$17       | \$0        | \$173        |
| TDHCA                          | \$300      | \$0        | \$0        | \$300        |
| Research and Development (R&D) | <b>\$0</b> | <b>\$0</b> | \$0        | <b>\$0</b>   |
| Total Budgets by Category      | \$1,470    | \$130      | \$0        | \$1,600      |
| 2010                           | Incentives | Admin      | R&D        | Total Budget |
| Commercial                     | \$777      | \$86       | \$0        | \$863        |
| Large Commercial SOP           | \$581      | \$65       | \$0        | \$646        |
| Small Commercial SOP           | \$195      | \$22       | \$0        | \$217        |
| Residential                    | \$511      | \$40       | <b>\$0</b> | \$568        |
| Residential SOP                | \$362      | \$40       | \$0        | \$402        |
| AC Distributor MTP             | \$149      | \$0        | \$0        | \$166        |
| Hard-To-Reach                  | \$526      | \$25       | \$0        | \$551        |
| Hard-To-Reach SOP              | \$226      | \$25       | \$0        | \$251        |
| TDHCA                          | \$300      | \$0        | \$0        | \$300        |
| Research and Development       | <b>\$0</b> | <b>\$0</b> | \$184      | \$184        |
| General R&D                    | \$0        | \$0        | \$184      | \$184        |
| Total Annual Budgets           | \$1,814    | \$151      | \$184      | \$2,166      |

Table 8: Proposed Annual Budget Broken Out by Program for Each Customer Class (\$000's)

#### Table 9: Proposed Budgets for Third-Party Programs (\$000's)

| 2009                | <b>Projected Payments</b>   |
|---------------------|-----------------------------|
| Commercial          | <b>\$758</b>                |
| NORESCO Texas       | \$758                       |
| Total Annual Budget | \$758                       |
|                     |                             |
| 2010                | <b>Projected Payments</b>   |
| 2010<br>Commercial  | Projected Payments<br>\$758 |
|                     |                             |

# Energy Efficiency Report

## V. Historical Demand Savings Goals and Energy Targets for Previous Five Years (2004-2008)

Table 10 documents SPSøs voluntary demand goals and energy targets for the previous five years (2004-2008).

| Calendar Year | Actual Weather Adjusted<br>Demand Goal (MW) <sup>5</sup> | Actual Weather Adjusted<br>Energy Targets (MWh) |
|---------------|--|---|
| 2008          | 3.800  | 6,663   |
| 2007          | 3.064  | 9,592   |
| 2006          | 3.154  | 7,150   |
| 2005          | 2.335  | 10,569  |
| 2004          | 1.917  | 7,732   |

Table 10: Historical Demand Savings Goals and Energy Targets (at Meter)

# VI. Projected, Reported, and Verified Demand and Energy Savings

This section documents SPSøs projected, reported, and verified savings for program years 2007 and 2008. Table 11 shows the savings for Standard Offer Programs, Market Transformation Programs, and the TDHCA Weatherization program. It shows that SPSøs 2008 programs produced demand reductions of 3.92 MW, which is 4% smaller than the projected reductions but 3% greater than the voluntary demand goal that SPS set for 2008.

Table 12 shows program savings information for the three third-party contracts that were in effect during the 2007 and 2008 calendar years. The SOP and MTP programs savings differ from the third-party program savings in that the SOP and MTP savings reflect annual savings produced by measures that were installed in 2007 and 2008, whereas the third-party savings reflect the annual savings that were produced in 2007 and 2008 by measures installed in previous years.

<sup>&</sup>lt;sup>5</sup> Actual weather-adjusted demand (MW) goals and energy (MWh) targets as reported in SPSøs annual Energy Efficiency Plan and Report (EEPR) filed in June of 2008 under Project No. 35440 and in SPSøs annual Energy Efficiency Plans (EEP) filed in April of each year under the following Project Nos. 33884 (2007), 32107 (2006), 30739 (2005), and 29440 (2004).

| 2008                          | Projected Savings <sup>6</sup> |            | Reported and<br>Verified Savings |                   |  |
|-------------------------------|--------------------------------|------------|----------------------------------|-------------------|--|
| Customer Class and<br>Program | MW                             | MWh        | MW                               | MWh               |  |
| Commercial                    | 2.40                           | 11,372     | 2.22                             | 7,726             |  |
| Commercial & Industrial SOP   | 1.83                           | 8,783      | 1.97                             | 6,707             |  |
| Small Commercial SOP          | 0.57                           | 2,589      | 0.26                             | 1,019             |  |
| Residential                   | 1.34                           | 4,563      | 1.38                             | 4,231             |  |
| Residential SOP               | 1.30                           | 3,738      | 1.29                             | 3,348             |  |
| Statewide CFL MTP             | 0.04                           | 825        | 0.09                             | 883               |  |
| Hard-To-Reach                 | 0.34                           | 819        | 0.32                             | 609               |  |
| Hard-To-Reach SOP             | 0.27                           | 681        | 0.27                             | 515               |  |
| TDHCA                         | 0.07                           | 138        | 0.05                             | 94                |  |
| Total Annual Savings Goals    | 4.08                           | 16,754     | 3.92                             | 12,566            |  |
| <b>2007</b> <sup>7</sup>      | Projecto                       | ed Savings | -                                | ed and<br>Savings |  |
| Customer Class and<br>Program | MW                             | MWh        | MW                               | MWh               |  |
| Commercial                    | 2.11                           | 5,709      | 2.81                             | 13,233            |  |
| Commercial & Industrial SOP   | 1.53                           | 3,304      | 1.68                             | 8,060             |  |
| Small Commercial SOP          | 0.58                           | 2,405      | 1.13                             | 5,173             |  |
| Residential                   | 0.60                           | 2,484      | 1.04                             | 2,831             |  |
| Residential SOP               | 0.60                           | 2,484      | 1.04                             | 2,831             |  |
| Hard-To-Reach                 | 0.35                           | 1,399      | 0.29                             | 753               |  |
| Hard-To-Reach SOP             | 0.35                           | 1,399      | 0.22                             | 615               |  |
| TDHCA                         | NA                             | NA         | 0.07                             | 138               |  |
| Total Annual Savings Goals    | 3.06                           | 9,592      | 4.14                             | 16,818            |  |

Table 11: Projected versus Reported and Verified Savings for 2008 and 2007 (at Meter)

 <sup>&</sup>lt;sup>6</sup> Projected savings from EEPR filed in June of 2008, Project No. 35440.
 <sup>7</sup> Projected and Reported/Verified Savings from EEPR filed under Project No. 35440.

| Table 12: Projected versus Reported and Verified Savings for 2008 and 2007 Third-Party |
|--|
| Programs (at Meter)  |

| 2008                                  | Projected Savings |                   | Reported and<br>Verified Savings |                |  |
|---------------------------------------|-------------------|-------------------|----------------------------------|----------------|--|
| Customer Class and<br>Program         | MW                | MWh               | MW                               | MWh            |  |
| Commercial                            | 4.85              | 29,928            | 4.92                             | 30,352         |  |
| NORESCO Third Party                   | 4.85              | 29,928            | 4.92                             | 30,352         |  |
| Total Annual Savings Goals            | 4.85              | 29,928            | 4.92                             | 30,352         |  |
|                                       | Projected Savings |                   | Reported and<br>Verified Savings |                |  |
| 2007                                  | Projecte          | ed Savings        | -                                |                |  |
| 2007<br>Customer Class and<br>Program | Projecto<br>MW    | ed Savings<br>MWh | -                                |                |  |
| Customer Class and                    |                   |                   | Verified                         | Savings        |  |
| Customer Class and<br>Program         | MW                | MWh               | Verified<br>MW                   | Savings<br>MWh |  |

## VII. Historical Program Expenditures

This section documents SPSø incentive and administration expenditures for the previous five years (2004-2008) broken out by program for each customer class. Table 13 shows expenditures for Standard Offer Programs, Market Transformation Programs, and the TDHCA Weatherization program. Table 14 shows expenditures for Third-Party Contract Programs. These expenditures reflect payments for incremental demand and energy savings that were realized in each year, not for payments for measures installed in each year.

|                             | 2       | 008          | 200     | 07    | 2       | 006         | 2005    | 5           | 20                | 04                |
|-----------------------------|---------|--------------|---------|-------|---------|-------------|---------|-------------|-------------------|-------------------|
|                             | Incent. | Admin        | Incent. | Admin | Incent. | Admin       | Incent. | Admin       | Incent.           | Admin             |
| Commercial                  | \$759   | <b>\$88</b>  | \$804   | \$99  | \$405   | \$73        | \$678   | \$57        | \$435             | <b>\$48</b>       |
| Commercial & Industrial SOP | \$628   | \$73         | \$670   | \$83  | \$365   | \$67        | \$563   | \$52        | \$435             | \$48              |
| Small Commercial SOP        | \$131   | \$15         | \$134   | \$17  | \$39    | \$5         | \$115   | \$6         | see<br>RES<br>SOP | see<br>RES<br>SOP |
| Residential                 | \$714   | \$75         | \$514   | \$63  | \$376   | <b>\$68</b> | \$674   | \$20        | \$0               | \$0               |
| Residential SOP             | \$646   | \$75         | \$514   | \$63  | \$367   | \$51        | NA      | NA          | NA                | NA                |
| AC Distributor MTP          | NA      | NA           | NA      | NA    | \$10    | \$17        | NA      | NA          | NA                | NA                |
| Statewide CFL MTP           | \$68    | \$0          | NA      | NA    | NA      | NA          | NA      | NA          | NA                | NA                |
| Hard-To-Reach               | \$516   | \$25         | \$504   | \$25  | \$661   | \$21        | \$490   | \$13        | <b>\$88</b>       | \$10              |
| Hard-To-Reach SOP           | \$216   | \$25         | \$204   | \$25  | \$361   | \$21        | \$190   | \$13        | \$88              | \$10              |
| TDHCA                       | \$300   | \$0          | \$300   | \$0   | \$300   | \$0         | NA      | NA          | NA                | NA                |
| Total Annual Expenditures   | \$1,990 | <b>\$188</b> | \$1,821 | \$187 | \$1,442 | \$161       | \$1,841 | <b>\$90</b> | \$523             | \$58              |

Table 13: Historical Program Incentive and Administrative Expenditures for 2004 through 2008 (\$000's)<sup>8</sup>

Southwestern Public Service Company

<sup>&</sup>lt;sup>8</sup> 2008 expenditures taken from Table 18 in the current EEPR; 2007 expenditures from EEPR filed under Project No. 35440; 2006 expenditures from Energy Efficiency Report (õEERö) filed under Project No. 33884; 2005 expenditures from EER, Project No. 32107; 2004 expenditures from EER, Project No. 30739.

|                               | 2          | 008   | 200     | )7               | 2       | 006        | 2005    | 5     | 20           | 04         |
|-------------------------------|------------|-------|---------|------------------|---------|------------|---------|-------|--------------|------------|
|                               | Incent.    | Admin | Incent. | Admin            | Incent. | Admin      | Incent. | Admin | Incent.      | Admin      |
| Commercial                    | \$715      | \$2   | \$604   | \$20             | \$706   | \$17       | \$871   | \$4   | <b>\$980</b> | \$12       |
| CSG Lighten Up Third Party    | \$100      | \$1   | \$0     | \$6 <sup>9</sup> | \$0     | \$17       | \$144   | \$4   | \$199        | \$12       |
| NORESCO Third Party           | \$616      | \$1   | \$604   | \$14             | \$706   | \$0        | \$726   | \$0   | \$781        | \$0        |
| Residential                   | <b>\$0</b> | \$0   | \$0     | <b>\$0</b>       | \$0     | <b>\$0</b> | \$446   | \$1   | <b>\$0</b>   | <b>\$0</b> |
| UCONS                         | NA         | NA    | NA      | NA               | \$446   | \$0        | NA      | NA    | NA           | NA         |
| CSG Bright Lights Third Party | \$0        | \$0   | NA      | NA               | \$0     | \$1        | NA      | NA    | NA           | NA         |
| Total Annual Expenditures     | \$715      | \$2   | \$604   | \$20             | \$706   | \$17       | \$1,317 | \$5   | <b>\$980</b> | \$12       |

Table 14: Historical Third-Party Program Incentive and Administrative Expenditures for 2004 through 2008 (\$000's)

#### Southwestern Public Service Company

<sup>&</sup>lt;sup>9</sup> Funds for Measurement and Verification Study.

# VIII. Program Costs for Calendar Year 2008

As shown in Table 15, SPS spent a total of \$2,249,000 on all of its energy efficiency programs in 2008. This is a 13% increase over the \$1,990,000 spent in 2007. The total forecasted budget for 2008 was \$2,719,000 and actual expenditures were \$2,249,000, an overall decrease of 17%. This decrease is primarily a result of undersubscribed Commercial SOP and of smaller than expected Research and Development expenditures. There were also some funds unreserved in the Hard-to-Reach SOP. It should be noted that \$160,000 were shifted from the Small Commercial SOP to the C&I SOP during the program year.

| 2008                           | Total<br>Projected<br>Budget <sup>10</sup> | Numbers of<br>Customers<br>Participating | Actual<br>Funds<br>Expended<br>(Incentives) | Actual<br>Funds<br>Expended<br>(Admin) | Actual<br>Funds<br>Expended<br>(R&D) <sup>11</sup> | Total<br>Funds<br>Expended | Funds<br>Committed<br>(Not<br>Expended) | Funds<br>Remaining<br>(Not<br>Committed) |
|--------------------------------|--|--|---|--|--|----------------------------|---|--|
| Commercial &<br>Industrial     | \$1,147                                    | 80                                       | \$759                                       | \$88                                   | \$0  | \$848                      | \$153                                   | \$147                                    |
| Commercial &<br>Industrial SOP | \$811                                      | 56                                       | \$628                                       | \$73                                   | \$0  | \$701                      | \$148                                   | \$121                                    |
| Small Commercial SOP           | \$336                                      | 24                                       | \$131                                       | \$15                                   | \$0  | \$146                      | \$4                                     | \$26                                     |
| Residential                    | \$797                                      | 4,282                                    | \$714                                       | \$75                                   | <b>\$0</b>   | <b>\$789</b>               | <b>\$8</b>                              | <b>\$0</b>                               |
| Residential SOP                | \$722                                      | 1,485                                    | \$646                                       | \$75                                   | \$0  | \$721                      | \$1                                     | \$0                                      |
| Statewide CFL MTP              | \$75                                       | 2,797                                    | \$68  | \$0                                    | \$0  | \$68                       | \$7                                     | \$0                                      |
| Hard-To-Reach                  | \$562                                      | 556                                      | \$516                                       | \$25                                   | \$0  | \$541                      | \$0                                     | \$20                                     |
| Hard-To-Reach SOP              | \$262                                      | 481                                      | \$216                                       | \$25                                   | \$0  | \$241                      | \$0                                     | \$20                                     |
| TDHCA                          | \$300                                      | 75                                       | \$300                                       | \$0                                    | \$0  | \$300                      | \$0                                     | \$0                                      |
| Research and<br>Development    | \$213                                      | NA                                       | \$0   | \$0                                    | \$71   | \$71                       | \$0                                     | \$142                                    |
| Total Annual<br>Expenditures   | \$2,719                                    | 4,918                                    | \$1,990                                     | \$188                                  | \$71   | \$2,249                    | \$161                                   | \$309                                    |

#### Table 15: Program Costs for Calendar Year 2008 (Dollar amounts in 000's)

<sup>&</sup>lt;sup>10</sup> Projected Budget from the EEPR filed in June 2008 under Project No. 35440.

<sup>&</sup>lt;sup>11</sup> R&D expenditures include payments for a Home Use Study and the Market Potential Study performed for the Commission.

# IX. Market Transformation Program Results

#### Statewide CFL Pilot MTP

In 2008, SPS participated with seven other Texas investor-owned utilities in the Statewide õMake Your Markö CFL Pilot MTP. This program, implemented by Ecos Consulting (õEcosö), encouraged the customers of the sponsor utilities to purchase compact fluorescent light bulbs instead of incandescent light bulbs by lowering prices and increasing the availability of CFLs at stores within the service area of the sponsors through upstream markdowns/buy-downs. Markdowns and buy-downs consist of providing payments to lighting manufacturers to provide products to retailers at lower prices, sometimes allowing retailers to carry products that they have not carried previously. The program also involved placing in participating stores point-ofpurchase marketing materials that informed consumers about CFLs and encourage their purchase.

In the last six months of 2008, the program achieved its annual goal by discounting over 1.4 million CFLs statewide. In the service territory of SPS, 118% of the bulb sales goal was achieved with 33,724 bulbs sold, which translates to gross annual savings of 1,401,608 kWh and 140 kW. This included sales in at least three stores that had never carried CFLs prior to the program. In addition, the program oversaw retailer training sessions and six in-store and community outreach events. As an extra step to foster a responsible market shift towards CFLs, the program sponsored four CFL recycling efforts at Home Depot.

Frontier Associates was contracted to perform measurement and verification for the program. Frontier estimated the free-ridership and leakage associated with the program to affirm its costeffectiveness under the Commission¢ rules.

Ecos obtained detailed information from manufacturers about the bulbs that were discounted through the program. For each store participating in the program, the number of discounted bulbs sold at the store was recorded by stock keeping unit (SKU). This information was the starting point for Frontierøs analysis.

Leakage from the program is defined here as the sale of CFLs that were discounted through the program to consumers that do not receive service from one of the sponsor utilities. The leakage was estimated on a store-by-store basis by evaluating the location of each participating store in relation to the sponsor utilitiesøservice areas. It was estimated that less than half of one percent of the total program bulb sales were made to non-Texans and that less than 5% were sales to consumers living outside the utility service territories.

The free-ridership ratio is the fraction of participants that bought bulbs discounted through the program that would have made the purchase in the absence of the program. The Net-to-Gross (õNTGö) factor for free-ridership is then one minus the free-ridership ratio. Frontier estimated the NTG value in two ways using data collected from a random survey to Texas residents.

First, a so-called *is*elf-reportø free-ridership ratio was determined from the answers to a question that asked CFL purchasers if they would have bought the bulbs that they bought if the price had been \$1, \$2, or \$3 higher per bulb. The program average bulb incentive was between \$1 and \$2 per bulb, so those respondents that indicated that they would have paid \$2 or \$3 more were considered free-riders. This method yielded a free-ridership ratio of 0.35, meaning a NTG of 0.65. This should be considered as a conservative estimate given that it ignores the effects of the program that are not related to price, like point-of-purchase marketing and increased CFL availability and visibility.

The second method used to estimate the free-ridership ratio was a statistical model referred to as a nested logit model. The model uses detailed survey results to attempt to isolate the effects of the program on a respondent¢ decision to participate in the program. The NTG determined by this method was in the range of 0.7-0.8.

While P.U.C. SUBST. R. 25.181 does not require that reported savings be adjusted for free-ridership, the sponsor utilities felt that the unique program design and current market characteristics surrounding this program warranted special treatment. Given the uncertainties in determining free-ridership and the limited data available, the sponsor utilities chose to adopt a conservative estimate for the NTG of about 0.63 for reporting purposes. This value is based on a comprehensive evaluation being performed for the California Public Utility Commissionøs update to the Database for Energy Efficient Resources (DEER) and will likely be used by California IOUs for 2009-2011 program planning. The CFL Pilot MTP is the first large scale CFL program in Texas, while California has had utility programs in place for years, and this estimate is lower than both of those determined explicitly for the Texas program, so the sponsors should be confident that the program will be responsible for savings at least as great as the savings being reported.

Accounting for these adjustments, the Statewide CFL Pilot MTP put over 875,000 CFLs in the hands of customers who would not have bought them otherwise. In SPSø service territory, the programøs net annual impacts for 2008 were 883,362 kWh and 88 kW. Using these savings estimates and a conservative effective useful life estimate of five years, the program is very cost-effective, with an avoided costs-to-program costs ratio over three.

# X. Energy Efficiency Cost Recovery

On June 2, 2008, SPS filed for approval of an Energy Efficiency Cost Recovery Factor Rider as permitted under the P.U.C. SUBST. R. 25.181(f); the Commission ruled that SPS is not subject to the energy efficiency mandates in PURA § 39.905 that, because P.U.C. SUBST. R. 25.181 was adopted under the authority of PURA § 39.905, that rule "is necessarily not applicable to SPS."<sup>12</sup>

<sup>&</sup>lt;sup>12</sup> See Application of Southwestern Public Service Company for Approval of Energy Efficiency Cost Recovery Factor Rider and Related Exception, Docket No. 35738, Preliminary Order at 2-3 (Sept. 15, 2008).

In the Docket No. 35738 Preliminary Order, the Commission concluded "that SPS's rider should not be considered outside a general rate case."<sup>13</sup>

In SPS¢ pending rate case (Docket No. 35763), a unanimous stipulation memorializing the terms of the settlement was filed on February 20, 2009.<sup>14</sup> The parties agreed that, among other things, SPS would be allowed to implement a \$57.393 million base rate increase, and that \$2 million of the base rate increase would be allocated to energy efficiency programs. The only issue the parties could not agree on was what would happen if SPS's annual energy efficiency expenses are more or less than \$2 million. On February 20, 2009, the parties filed a joint request asking the State Office of Administrative Hearings Administrative Law Judges (õALJsö) to certify the following questions to the Commission:

1. Does the Public Utility Regulatory Act (PURA) authorize the establishment of a means by which SPS may recover or refund the difference between the \$2 million that the parties have agreed is to be included in base rates for Energy Efficiency programs in the Settlement Agreement in Docket No. 35763, and its actual energy efficiency expenses?

2. If so, what recovery or refund mechanism and process are proper?

The ALJs certified the questions to the Commission on March 5, 2009. At its Open Meeting on March 27, 2009, the Commission determined that it has the authority to allow SPS to create a regulatory asset or liability to defer energy efficiency program expenses above or below the level included in base rates. That regulatory asset or liability will be recovered or refunded in the next base rate case.

As it relates to costs incurred through December 31, 2008, pursuant to a unanimous stipulation filed in SPSøs pending rate case (Docket No. 35763), the parties agreed that SPS will recover costs associated with the historic energy efficiency expenditures through amortization of a rate base item, amortized over 10 years, with carrying charges accrued at SPSøs long-term debt rate.<sup>15</sup>

### **Revenue Collected**

Not Applicable (see earlier discussion under Energy Efficiency Cost Recovery)

### **Over- or Under-recovery**

Not Applicable (see earlier discussion under Energy Efficiency Cost Recovery)

# XI. Underserved Counties

Table 16 shows the number of SPS customers in each county that SPS serves and the demand reductions and energy savings that were produced in each county through installations of measures under the 2008 programs. It also shows, and is ordered by, the demand reductions per customer in

<sup>&</sup>lt;sup>13</sup> Docket No. 35378 Preliminary Order at 3.

<sup>&</sup>lt;sup>14</sup> Docket No. 35763, Unanimous Stipulation at 1-13 (Feb. 20, 2009).

<sup>&</sup>lt;sup>15</sup> See Docket No. 35763, Unanimous Stipulation at 8 (Feb. 20, 2009).

each county. The table shows that there are eight counties with one to five thousand customers that had no participants in SPS¢ programs. There were also counties that had participants but had demand reductions per customer less than half of the average demand reduction per customer for SPS¢s service territory as a whole, which was 0.0137 kW per customer. This data suggests that some of these counties were underserved.

Note that the TDHCA program savings are not included in this data set because they are not reported by county. Also, note that the total number of customers used for this analysis includes outdoor and street lighting and customers taking service at transmission level and so will not match the values in Table 4.

| County    | kW Savings | kWh Savings | kW Savings<br>per Customer | SPS Customers |
|-----------|------------|-------------|----------------------------|---------------|
| BRISCOE   | 0.0        | 0           | -                          | 556           |
| CURRY-IN  | 0.0        | 0           | -                          | 1             |
| DAWSON    | 0.0        | 0           | -                          | 13            |
| EDDY-IN   | 0.0        | 0           | -                          | 2             |
| GARZA     | 0.0        | 0           | -                          | 2,240         |
| HANSFORD  | 0.0        | 0           | -                          | 3,093         |
| HARTLEY   | 0.0        | 0           | -                          | 2,059         |
| HEMPHILL  | 0.0        | 0           | -                          | 1,538         |
| LIPSCOMB  | 0.0        | 0           | -                          | 1,981         |
| OCHILTREE | 0.0        | 0           | -                          | 4,883         |
| ROBERTS   | 0.0        | 0           | -                          | 750           |
| SHERMAN   | 0.0        | 0           | -                          | 1,216         |
| TERRY     | 0.0        | 0           | -                          | 682           |
| WHEELER   | 0.0        | 0           | -                          | 1,835         |
| HALE      | 1.0        | 866         | 0.000065                   | 15,340        |
| HOCKLEY   | 0.6        | 6,135       | 0.000074                   | 8,325         |
| GAINES    | 1.0        | 10,422      | 0.000128                   | 8,155         |
| BAILEY    | 0.9        | 709         | 0.000320                   | 2,747         |

 Table 16. 2008 Savings per Customer by County

| County     | kW Savings | kWh Savings | kW Savings<br>per Customer | SPS Customers |
|------------|------------|-------------|----------------------------|---------------|
| LYNN       | 0.8        | 652         | 0.000408                   | 1,935         |
| LAMB       | 8.0        | 23,053      | 0.001133                   | 7,035         |
| GRAY       | 27.0       | 40,104      | 0.001989                   | 13,558        |
| CASTRO     | 9.5        | 14,001      | 0.003189                   | 2,988         |
| SWISHER    | 3.6        | 11,223      | 0.003210                   | 1,106         |
| PARMER     | 13.1       | 43,759      | 0.003522                   | 3,716         |
| CARSON     | 17.2       | 56,402      | 0.003672                   | 4,693         |
| MOORE      | 40.3       | 131,455     | 0.004246                   | 9,500         |
| HUTCHINSON | 129.7      | 287,639     | 0.009374                   | 13,840        |
| LUBBOCK    | 343.6      | 1,959,550   | 0.010676                   | 32,189        |
| ARMSTRONG  | 13.8       | 34,943      | 0.012868                   | 1,070         |
| YOAKUM     | 65.6       | 328,117     | 0.019478                   | 3,368         |
| DEAF SMITH | 147.3      | 161,126     | 0.019506                   | 7,554         |
| COCHRAN    | 39.2       | 30,177      | 0.020589                   | 1,902         |
| POTTER     | 1,209.4    | 4,568,887   | 0.021477                   | 56,311        |
| RANDALL    | 1,267.6    | 3,753,391   | 0.022157                   | 57,210        |
| CROSBY     | 98.9       | 247,535     | 0.030431                   | 3,250         |
| DALLAM     | 92.8       | 280,302     | 0.032301                   | 2,874         |
| FLOYD      | 121.5      | 304,198     | 0.056121                   | 2,166         |
| OLDHAM     | 221.4      | 172,789     | 0.166730                   | 1,328         |

# XII. Performance Bonus

SPS does not qualify for a performance bonus for 2008 program results.

# Acronyms

| C&I        | Commercial and Industrial  |
|------------|--|
| Commission | Public Utility Commission of Texas   |
| DSM        | Demand-Side Management   |
| EECRF      | Energy Efficiency Cost Recovery Factor   |
| EEP        | Energy Efficiency Plan, which was filed as a separate document prior to April 2008   |
| EEPR       | Energy Efficiency Plan and Report  |
| EER        | Energy Efficiency Report, which was filed as a separate document prior to April 2008 |
| EE Rule    | Energy Efficiency Rule, P.U.C. SUBST. R. 25.181 and 25.183                           |
| EESP       | Energy Efficiency Service Provider   |
| ERCOT      | Electric Reliability Council of Texas  |
| HTR        | Hard-To-Reach  |
| IPMVP      | International Performance Measurement and Verification Protocol                      |
| M&V        | Measurement and Verification   |
| MTP        | Market Transformation Program  |
| NAESCO     | National Association of Energy Service Companies                                     |
| REP        | Retail Electrical Provider   |
| RES        | Residential  |
| SOP        | Standard Offer Program   |
| SPS        | Southwestern Public Service Company, a New Mexico Corporation                        |

# Glossary

Actual Weather Adjusted -- õActual Weather Adjustedö peak demand and energy consumption is the historical peak demand and energy consumption adjusted for weather fluctuations using weather data for the most recent ten years.

At Meter -- Demand (kW/MW) and Energy (kWh/MWh) figures reported throughout the EEPR are reflective of impacts at the customer meter. This is the original format of the measured and deemed impacts that the utilities collect for their energy efficiency programs. Goals are necessarily calculated õat sourceö (generator) using utility system peak data at the transmission level. In order to accurately compare program impacts, goals and projected savings have been adjusted for the line losses (12% for demand and 10% for energy) that one would expect going from the source to the meter.

Average Growth -- Average historical growth in demand (kW) over the prior five years for residential and commercial customers adjusted for weather fluctuations.

**Capacity Factor** -- The ratio of the annual energy savings goal in kWh to the peak demand goal for the year, measured in kW, multiplied by the number of hours in the year or the ratio of the actual annual energy savings in kWh, to the actual peak demand reduction for the year, measured in kW, multiplied by the number of hours in the year.

**Commercial customer** -- A non-residential customer taking service at a metered point of delivery at a distribution voltage under an electric utilityøs tariff during the prior calendar year and a non-profit customer or government entity, including an educational institution. For purposes of this section, each metered point of delivery shall be considered a separate customer.

**Deemed savings** -- A pre-determined, validated estimate of energy and peak demand savings attributable to an energy efficiency measure in a particular type of application that an electric utility may use instead of energy and peak demand savings determined through measurement and verification activities.

**Demand** -- The rate at which electric energy is used at a given instant, or averaged over a designated period, usually expressed in kilowatts (kW) or megawatts (MW).

**Demand savings --** A quantifiable reduction in demand.

**Energy efficiency** -- Improvements in the use of electricity that are achieved through facility or equipment improvements, devices, or processes that produce reductions in demand or energy consumption with the same or higher level of end-use service and that do not materially degrade existing levels of comfort, convenience, and productivity.

**Energy efficiency measures --** Equipment, materials, and practices at a customerøs site that result in a reduction in electric energy consumption, measured in kilowatt-hours (kWh), or peak demand, measured in kilowatts (kWs), or both. These measures may include thermal energy storage and removal of an inefficient appliance so long as the customer need satisfied by the appliance is still met.

**Energy efficiency program --** The aggregate of the energy efficiency activities carried out by an electric utility under this section or a set of energy efficiency projects carried out by an electric utility under the same name and operating rules.

**Energy Efficiency Rule (EE Rule)** -- § 25.181 and § 25.183, which are the sections of the Public Utility Commission of Texasø Substantive Rules implementing Public Utility Regulatory Act (PURA) § 39.905.

**Energy savings** -- A quantifiable reduction in a customer's consumption of energy that is attributable to energy efficiency measures.

**Growth in demand --** The annual increase in demand in the Texas portion of an electric utility's service area at time of peak demand, as measured in accordance with the Energy Efficiency Rule.

**Hard-To-Reach (HTR) customers --** Residential customers with an annual household income at or below 200% of the federal poverty guidelines.

**Incentive payment --** Payment made by a utility to an energy efficiency service provider under an energy-efficiency program.

**Inspection** -- Examination of a project to verify that an energy efficiency measure has been installed, is capable of performing its intended function, and is producing an energy savings or demand reduction.

**Load control --** Activities that place the operation of electricity-consuming equipment under the control or dispatch of an energy efficiency service provider, an independent system operator or other transmission organization or that are controlled by the customer, with the objective of producing energy or demand savings.

**Load management** -- Load control activities that result in a reduction in peak demand on an electric utility system or a shifting of energy usage from a peak to an off-peak period or from high-price periods to lower price periods.

**Market transformation program (MTP)** -- Strategic programs to induce lasting structural or behavioral changes in the market that result in increased adoption of energy efficient technologies, services, and practices, as described in this section.

**Measurement and verification (M&V)** -- Activities intended to determine the actual energy and demand savings resulting from energy efficiency projects as described in this section.

**Peak demand --** Electrical demand at the times of highest annual demand on the utility's system.

**Peak demand reduction** -- Reduction in demand on the utility system throughout the utility system's peak period.

**Peak period --** For the purpose of this section, the peak period consists of the hours from one p.m. to seven p.m., during the months of June, July, August, and September, excluding weekends and Federal holidays.

**Projected Demand and Energy Savings** ó Peak demand reduction and energy savings for the current and following calendar year that SPS is planning and budgeting for in the EEPR. These projected savings reflect SPSøs modified goals in the spirit of the Energy Efficiency Rule (Substantive Rule § 25.181).

**Project sponsor** -- An energy efficiency service provider or customer who installs energy efficiency measures or performs other energy efficiency services under the Energy Efficiency Rule. An energy efficiency service provider may be a retail electric provider or commercial customer, provided that the commercial customer has a peak load equal to or greater than 50kW.

**Renewable demand-side management (DSM) technologies** -- Equipment that uses a renewable energy resource (renewable resource), as defined in §25.173(c) of this title (relating to Goal for Renewable Energy) that, when installed at a customer site, reduces the customer's net purchases of energy, demand, or both.

**Standard offer program (SOP)** -- A program under which a utility administers standard offer contracts between the utility and energy efficiency service providers.

Appendices

# APPENDIX A: REPORTED DEMAND AND ENERGY REDUCTION BY COUNTY

#### Table 17: 2008 Program Savings by County

| County              | # of Customore | Report  | rted Savings |
|---------------------|----------------|---------|--------------|
|                     | # of Customers | kW      | kWh          |
| Cochran             | 1              | 39.2    | 30,177       |
| Crosby              | 1              | 98.9    | 247,535      |
| Dallam              | 2              | 81.8    | 248,300      |
| Deaf Smith          | 2              | 113.8   | 103,124      |
| Floyd               | 2              | 121.5   | 304,198      |
| Gray                | 1              | 1.9     | 11,754       |
| Hutchinson          | 4              | 107.5   | 240,046      |
| Lamb                | 4              | 8.0     | 23,053       |
| Lubbock             | 4              | 295.8   | 1,527,406    |
| Moore               | 1              | 3.2     | 2,729        |
| Oldham              | 1              | 219.7   | 171,427      |
| Potter              | 18             | 517.9   | 2,417,591    |
| Randall             | 14             | 290.5   | 1,051,835    |
| Yoakum              | 1              | 65.1    | 323,110      |
| Large C&I SOP Total | 56             | 1,964.7 | 6,702,284    |

#### **Commercial & Industrial SOP**

#### **Small Commercial SOP**

| County                      | H = C Constant | Repor | <b>Reported Savings</b> |  |
|-----------------------------|----------------|-------|-------------------------|--|
|                             | # of Customers | kW    | kWh                     |  |
| Dallam                      | 1              | 11.1  | 32,002                  |  |
| Gray                        | 1              | 15.1  | 7,951                   |  |
| Lubbock                     | 1              | 6.9   | 22,955                  |  |
| Potter                      | 5              | 39.2  | 166,069                 |  |
| Randall                     | 16             | 183.0 | 789,765                 |  |
| <b>RSC Small Commercial</b> | 24             | 255.3 | 1,018,741               |  |

#### **Residential SOP**

| County     | H of Constant and | <b>Reported Savings</b> |           |
|------------|-------------------|-------------------------|-----------|
|            | # of Customers    | kW                      | kWh       |
| Armstrong  | 14                | 13.8                    | 34,943    |
| Bailey     | 1                 | 0.9                     | 709       |
| Carson     | 14                | 17.2                    | 56,402    |
| Castro     | 10                | 7.5                     | 9,553     |
| Deaf Smith | 31                | 28.4                    | 51,137    |
| Gray       | 10                | 9.6                     | 20,178    |
| Hale       | 2                 | 1.0                     | 866       |
| Hutchinson | 25                | 22.2                    | 47,593    |
| Lynn       | 1                 | 0.8                     | 652       |
| Moore      | 20                | 14.6                    | 31,911    |
| Oldham     | 1                 | 1.7                     | 1,362     |
| Parmer     | 13                | 13.1                    | 43,759    |
| Potter     | 614               | 489.1                   | 1,482,518 |
| Randall    | 726               | 669.4                   | 1,555,034 |
| Swisher    | 3                 | 3.6                     | 11,223    |
| Res Total  | 1,485             | 1,292.9                 | 3,347,840 |

#### Hard-to-Reach SOP

| County            | # of Customers | <b>Reported Savings</b> |         |
|-------------------|----------------|-------------------------|---------|
|                   |                | kW                      | kWh     |
| Castro            | 2              | 2.0                     | 4,448   |
| Deaf Smith        | 6              | 5.1                     | 6,865   |
| Gray              | 1              | 0.4                     | 221     |
| Moore             | 62             | 22.6                    | 96,815  |
| Potter            | 281            | 130.7                   | 178,112 |
| Randall           | 129            | 111.9                   | 228,747 |
| HTR Single-family | 481            | 272.7                   | 515,208 |

# TDHCA Low-Income

### Weatherization

| Organization                  | # of Customers | <b>Reported Savings</b> |        |
|-------------------------------|----------------|-------------------------|--------|
|                               | # of Customers | kW                      | kWh    |
| Caprock Community Action      | 16             | 8.4                     | 22,732 |
| Panhandle Community Services  | 35             | 21.0                    | 33,777 |
| South Plains Community Action | 13             | 8.4                     | 20,913 |
| West Texas Opportunities      | 4              | 3.0                     | 12,178 |
| Lubbock, City of              | 7              | 5.5                     | 4,599  |
| TDHCA Total                   | 75             | 46.1                    | 94,199 |

TDHCA results are not tracked by county.

#### **CFL Pilot MTP**

| County    | # of Customers | <b>Reported Savings</b> |         |
|-----------|----------------|-------------------------|---------|
|           | # of Customers | kW                      | kWh     |
| Gaines    | 39             | 1.0                     | 10,422  |
| Hockley   | 21             | 0.6                     | 6,135   |
| Lubbock   | 1,270          | 40.9                    | 409,189 |
| Potter    | 1,015          | 32.5                    | 324,598 |
| Randall   | 434            | 12.8                    | 128,010 |
| Yoakum    | 19             | 0.5                     | 5,008   |
| CFL Total | 2,797          | 88.3                    | 883,362 |

#### Total (All SOPs and MTPs; TDHCA is not included.)

| County     |                | Reported Savings |            |
|------------|----------------|------------------|------------|
|            | # of Customers | kW kW            | kWh        |
| Armstrong  | 14             | 13.8             | 34,943     |
| Bailey     | 1              | 0.9              | 709        |
| Carson     | 14             | 17.2             | 56,402     |
| Castro     | 12             | 9.5              | 14,001     |
| Cochran    | 1              | 39.2             | 30,177     |
| Crosby     | 1              | 98.9             | 247,535    |
| Dallam     | 3              | 92.8             | 280,302    |
| Deaf Smith | 39             | 147.3            | 161,126    |
| Floyd      | 2              | 121.5            | 304,198    |
| Gaines     | 39             | 1.0              | 10,422     |
| Gray       | 13             | 27.0             | 40,104     |
| Hale       | 2              | 1.0              | 866        |
| Hockley    | 21             | 0.6              | 6,135      |
| Hutchinson | 29             | 129.7            | 287,639    |
| Lamb       | 4              | 8.0              | 23,053     |
| Lubbock    | 1,275          | 343.6            | 1,959,550  |
| Lynn       | 1              | 0.8              | 652        |
| Moore      | 83             | 40.3             | 131,455    |
| Oldham     | 2              | 221.4            | 172,789    |
| Parmer     | 13             | 13.1             | 43,759     |
| Potter     | 1,933          | 1,209.4          | 4,568,887  |
| Randall    | 1,319          | 1,267.6          | 3,753,391  |
| Swisher    | 3              | 3.6              | 11,223     |
| Yoakum     | 20             | 65.6             | 328,117    |
| Total      | 4,843          | 3,873.9          | 12,467,435 |

# **APPENDIX B: PROGRAM TEMPLATES**

SPS does not plan to offer any new programs in 2009.