Energy Efficiency Accomplishments
of
Texas Investor Owned Utilities
Calendar Year 2008

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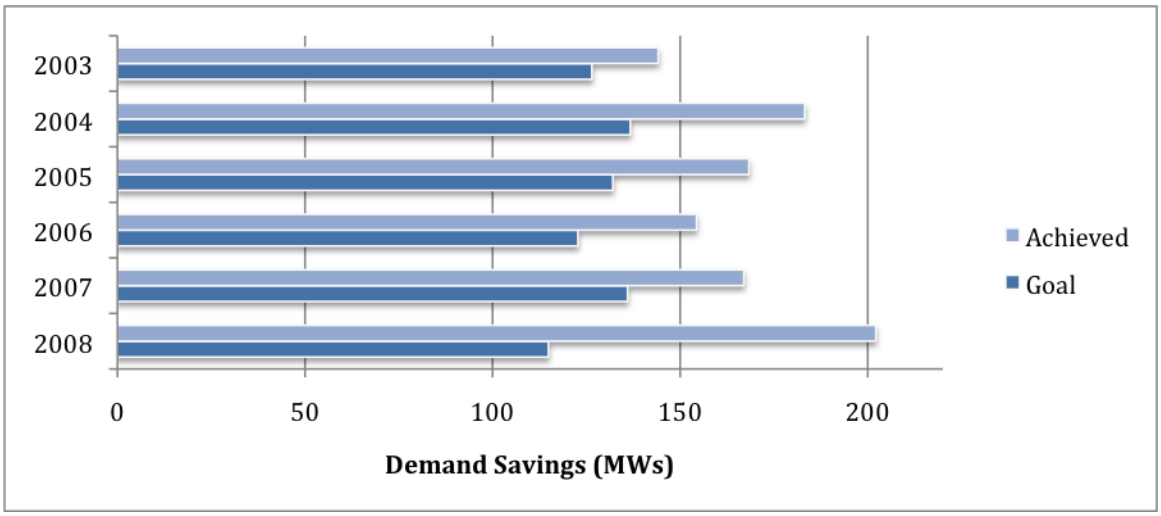
July 6, 2009

1 Accomplishments

In 2008, the nine Texas investor-owned utilities (IOUs) exceeded their statewide legislative energy efficiency goals for the sixth straight year. The utilities achieved 202 megawatts (MW) of peak demand reduction, which was 76% above their 115 MW goal, and 581 gigawatt-hours (GWh) of energy reduction. These energy savings correspond to a reduction of 882,519 pounds of nitrogen oxide (NOx) emissions per year.[1] Figure 1 illustrates the annual savings for the past six years.

Figure 1: Total Energy Savings by IOUs, 2003-2008 [2]



Most of the utilities' programs involve financial incentives, which were paid to project sponsors to offset the costs of a variety of energy efficiency improvements. The total program funds (including administration) expended to achieve 2008 savings were $96.6 million.

For 2008, the Environmental Protection Agency (EPA) again recognized Centerpoint Energy Company and Oncor Electric Delivery with "Sustained Excellence Awards."

[1] NOx emissions in this report were calculated using emission factors from the 2007 eGRID database compiled by the EPA. The average emissions factor for the ERCOT utilities has been applied to non-ERCOT utilities to provide a rough estimate of their emissions reductions as well.
[2] 2003 to 2006 data has been adjusted with a 7% T&D loss to reflect "at meter" savings

The EPA also awarded Entergy Texas, AEP Texas, and Centerpoint with "Leadership in Housing" awards for their ENERGY STAR® New Homes programs.

As of January 1, 2009, the utility programs implemented after electric industry restructuring in Texas for the years 1999 through 2008 have put measures in place that produced 1,125 MW of peak demand reduction and 3,014 GWh of electricity savings in 2008. This translates to approximately 3,490 tons of NOx emissions reductions.

2 Energy Efficiency Program Overview

The 75th Texas Legislature passed a law requiring IOUs to meet certain energy efficiency goals. To comply with this law, all IOUs contract with energy efficiency service providers (EESPs) to install energy efficiency measures that result in peak demand reductions and energy savings. EESPs install a variety of energy saving measures at homes and businesses within a utility's service area.

Each utility contracts with national and local EESPs who in turn contract with consumers (residential, commercial, or industrial) about performing work to save energy and reduce their electric bills. Customers select the EESP, decide what equipment will be installed, and choose what work the contractor will do. Price, warranty, financing, and other purchasing matters are entirely between the contractor and customer.

Table 1 lists the Texas IOUs and their common acronyms used throughout this report.

Table 1: Texas Investor Owned Utilities

Utility Name	Utility Acronym
American Electric Power-Southwestern Electric Power Company	AEP-SWEPCO
American Electric Power-Texas Central Company	AEP-TCC
American Electric Power-Texas North Company	AEP-TNC
CenterPoint Energy Company	CNP
El Paso Electric Company	EPE
Entergy Texas, Inc.	ETI
Texas-New Mexico Power Company	TNMP
Oncor	Oncor
Xcel Energy Company*	Xcel*

*voluntary participant in energy efficiency programs

2.1 Legislative Background

Provisions in Senate Bill 7 (SB7), enacted in the 1999 Texas legislature, mandate that at least 10% of an IOU's annual growth in electricity demand be met through energy efficiency programs each year. The Public Utility Commission of Texas (PUCT) Substantive Rule §25.181 establishes procedures for meeting this legislative mandate. House Bill 3693 in 2007 amended this goal to be 15% in 2008 and 20% in 2009. The PUCT also made amendments to Substantive Rule §25.181 for meeting these new mandates. Utilities are required to administer energy saving incentive programs, which are implemented through energy efficiency service providers (EESPs). All programs are designed to reduce system peak demand, energy consumption, or energy costs.

Utilities must achieve their energy efficiency goals through either standard offer programs (SOPs) or limited, targeted market transformation programs (MTPs). Programs are made available to all residential and commercial customers. This gives each customer a choice of a variety of energy efficiency alternatives. Figure 2 depicts an overview of the Texas Energy Efficiency Process. Following is Figure 3, a map of Texas outlining the service areas of each of the IOUs. Table 2 lists the types of SOPs and MTPs offered by each utility. Table 3 gives each utility's 2008 program savings and associated 2008 expenditures.

Figure 2: Overview of Texas Energy Efficiency Programs

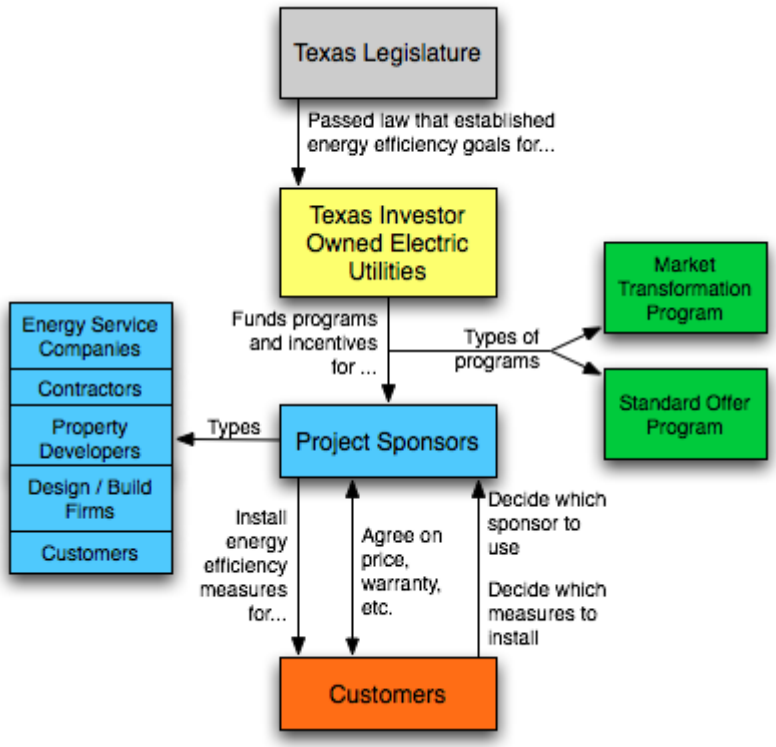


Figure 3: Texas Investor Owned Utility Service Area Map

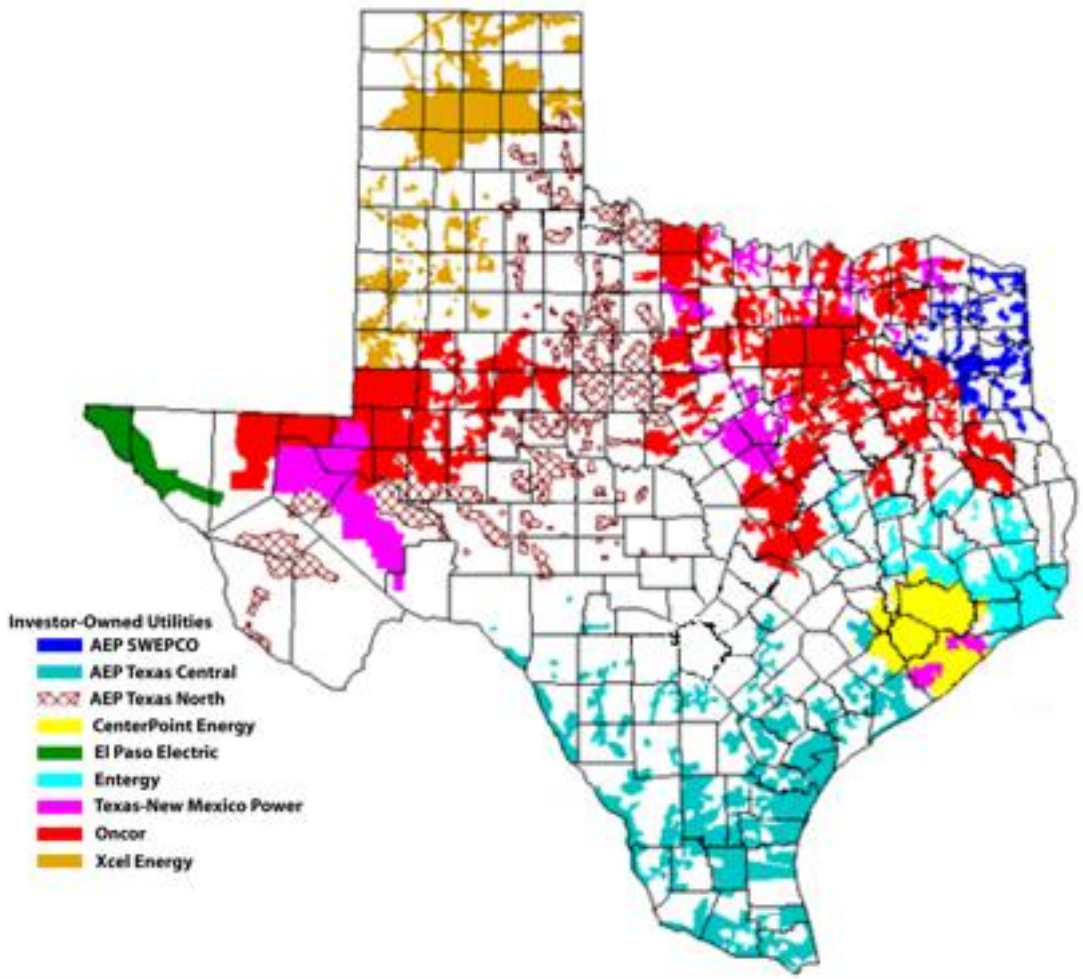


Table 2: Programs Offered by Utility in 2008

Program Type	Type	AEP[i]	CNP	ETI	EPE	TNMP	Oncor	Xcel
Commercial & Industrial	SOP	●	●	●	●	●	●	●
Residential & Small Commercial	SOP	●	●	●	●	●	●	●
Hard-to-Reach	SOP	●	●	●	●	●	●	●
Statewide CFL	MTP	●	●	●	●	●	●	●
Load Management	SOP	●	●	●			●	
CCET Demand Response[ii]	MTP		●				●	
Energy Efficiency Improvement Program[iii]	Non SB7	●						
Low-Income Weatherization[iii]	Non SB7	●	●	●	●	●	●	●
ENERGY STAR® New Homes	MTP	● [iv]	●	●		●	●	
Air Conditioning Distributor	MTP						●	
Air Conditioning Installer Training	MTP						●	
Retro-Commissioning	MTP		●					
Multifamily Water & Space Heating	MTP		●					
Texas SCORE/CitySmart	MTP	●	●	●	●[ii]	●	●	
A/C tune-up[ii]	MTP						●	
Appliance Recycling[ii]	MTP	●					●	
Underserved Area	SOP					●		
Third Party Contracts	N/A						●	●
Data Centers[ii]	MTP						●	

[i] AEP is American Electric Power, and includes Texas North, Texas Central, and SWEPCO in this table.

[ii] Pilot program

[iii] The Energy Efficiency Improvement Program for Not-for-Profit Agencies (EEIP NFP), and Targeted Low-Income Energy Efficiency Program are non-SB7 programs, but included here for completeness. The EEIP NFP is an SOP at AEP-TCC and AEP-TNC.

[iv] ENERGY STAR® New Homes is offered in AEP-TCC

Table 3: Utility Funds Expended with Associated Demand and Energy Savings 2008*

(From the annual Energy Efficiency Plans and Reports (Project No. 36689), including SB7 and non-SB7 programs.)

Utility	Funds Expended (000)	Demand Savings (MW)	Energy Savings (MWh)
AEP-SWEPCO	$2,446	6.26	14,876
AEP-TCC	$6,649	13.07	36,118
AEP-TNC	$1,373	1.93	5,660
CNP	$24,271	68.11	177,221
EPE	$1,574	2.92	12,494
ETI	$2,838	5.53	13,361
TNMP	$1,160	3.27	7,088
Oncor	$53,377	97.15	302,242
Xcel	$2,894	3.92	12,566
TOTAL	$96,582	202.16	581,626

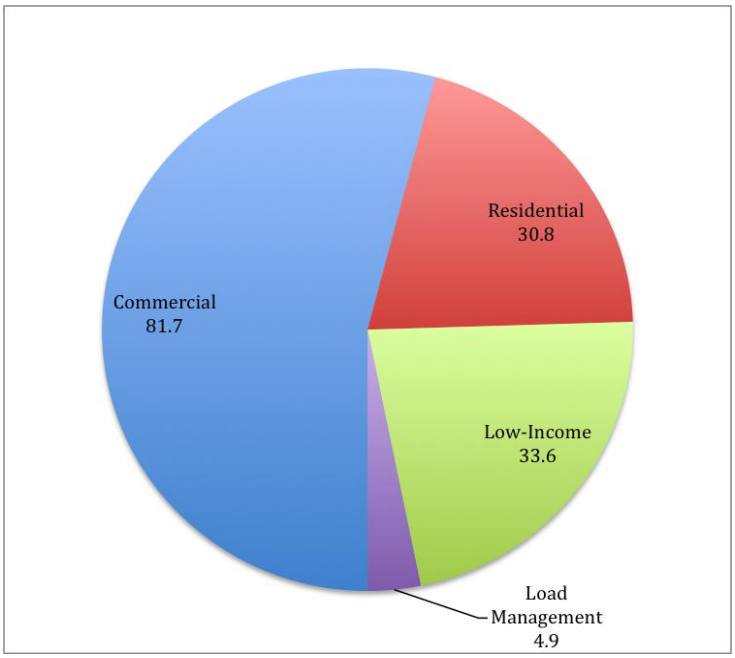
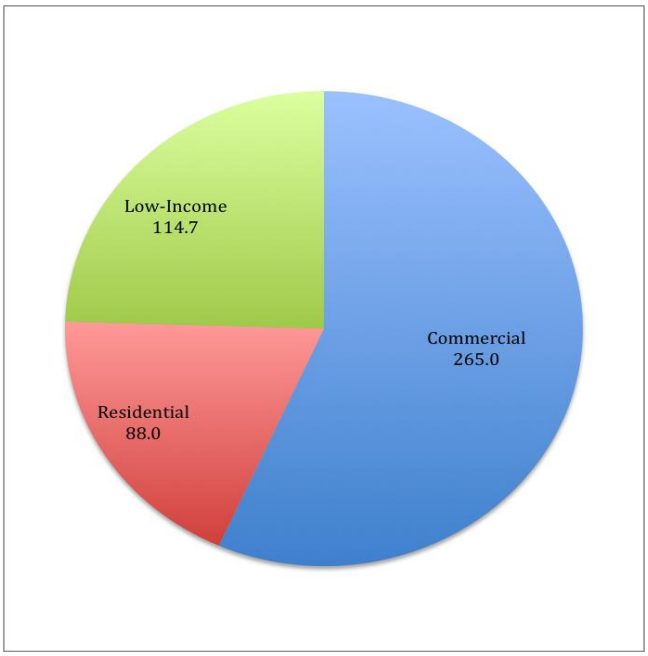
*All energy savings are calculated at meter.

3 Standard Offer Programs

An SOP is a type of energy efficiency program where parties enter into a contract with standard terms and conditions. Utilities offer standard incentives for a wide range of measures that are bundled together as a project. Incentive rates are set for each kW of demand reduction and each kWh of energy savings produced and are based on prescribed avoided costs. Payment is based on the measures installed and deemed savings values for each measure with random inspections to verify proper installation.

Figure 4 shows the electricity savings from each SOP.

Figure 4: Demand & Energy Savings* by Customer Class in 2008

Demand Savings (MW)	Energy Savings (GWh)
	

*For completeness, this chart includes the savings associated with Energy Efficiency Improvement Programs for Not-for-Profit (EEIP NFP), and Targeted Low-Income Energy Efficiency Programs even though these programs are not SB7 programs. Combined they are too small to distinguish on the chart. The EEIP NFP is an SOP at AEP-TCC and AEP-TNC. This chart also includes CNP's settlement programs.

3.1 Commercial

The Commercial programs target commercial customers with a minimum demand requirement. Minimum requirements vary based on utility. Utilities pay incentives to project sponsors for certain measures installed in new or retrofit applications that provide verifiable demand and energy savings. Typical projects include chillers, lighting, and industrial process retrofits.

3.2 Residential

The Residential programs target residential customers including multi-family, single-family, and mobile homes. Some utilities also offer the residential program to small commercial customers. The programs provide incentives for the installation of a wide range of measures that reduce system peak demand, energy consumption and energy costs. Retrofits and efficient new construction of low-income housing may also be undertaken.

Utilities pay incentives to Energy Efficiency Service Providers (EESPs). These incentives are based on deemed savings when available. (Deemed savings estimates are predetermined, validated estimates of energy and peak demand savings attributable to an energy efficiency measure.) Otherwise, the EESPs must follow the measurement and verification (M&V) protocol adopted by the PUCT. In this case, the incentives are based upon verified peak demand or energy savings using the International Performance Measurement and Verification Protocol.

3.3 Low Income

The Low Income programs encourage energy efficiency improvements in households with annual incomes at or below 200% of the federal poverty guideline. The programs are designed to be comprehensive by emphasizing first improving the building shell and then addressing end uses. These are typically retrofit programs that target multi-family, single-family, and mobile homes.

Incentives are paid to project sponsors for eligible measures that provide verifiable demand and energy savings. Special measures include compact fluorescent lighting and water savers.

3.4 Load Management

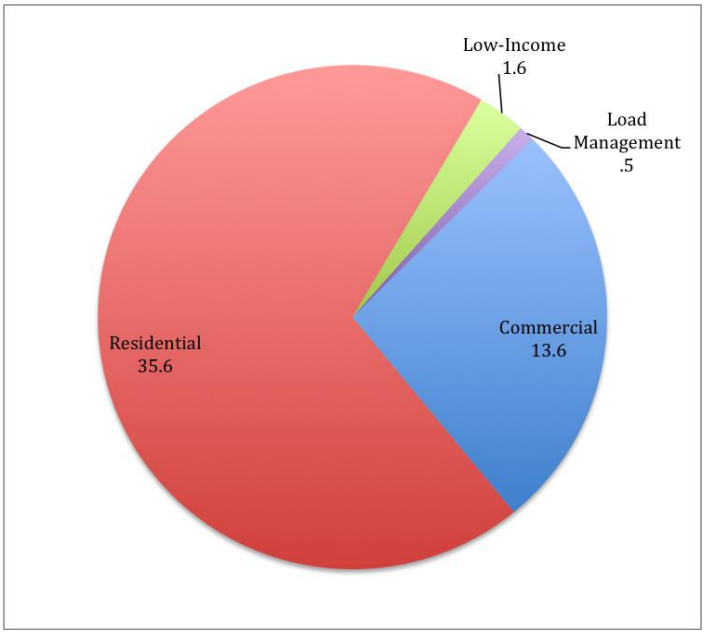
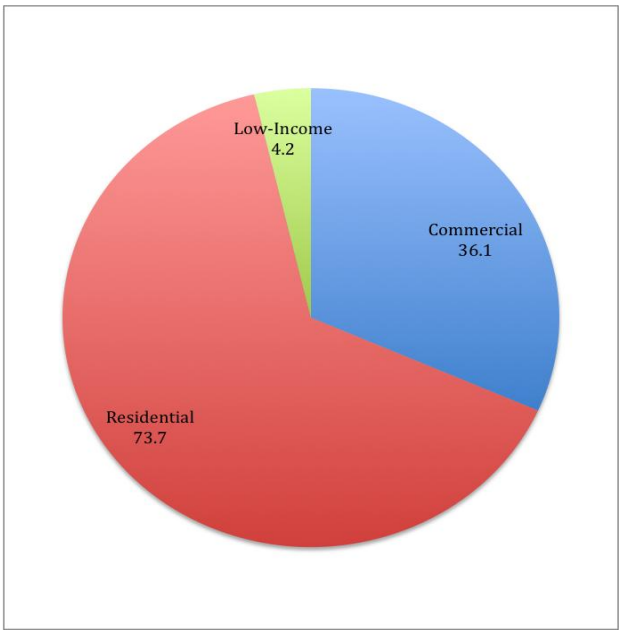
Load Management programs encourage electric load control or shifting of electric loads in facilities from on-peak to off-peak periods. The load must be under the control of the project sponsor, utility, or Independent System Operator or other transmission organization. These programs target a mix of commercial and residential facilities. Generally, the load management SOPs are available to commercial customers, while load management through residential loads is obtained through Demand Response MTPs.

4 Market Transformation Programs

An MTP is a strategic effort to make lasting changes in the market that result in increased adoption of energy efficient technologies, services, and practices. MTPs are designed to overcome specific market barriers that prevent energy efficient technologies from being accepted.

Figure 5 shows the electricity savings from each MTP. Following are descriptions of major contributing MTPs offered by the IOUs in Texas. Only the top five programs (CitySmart and SCORE have been described together) are shown below. The utilities also offered the following MTP programs: Appliance Recycling, Agencies in Action, Data Centers, Rebuilding Together Houston, Commercial AC, AC installer info & training, AC tune up, and Multi-Family water & heating.

Figure 5: Demand & Energy Savings* by Customer Class in 2008

Demand Savings (MW)	Energy Savings (GWh)
	

* This chart includes CNP's settlement programs.

4.1 ENERGY STAR® New Home Construction

The ENERGY STAR® New Home Construction program targets residential new construction. It promotes the construction of energy efficient ENERGY STAR® new homes. To qualify, homes must score an 85 or less on the Home Energy Rating System and be 15% more efficient than the energy requirements of the 2004 International Energy Conservation Code. The program provides education and technical assistance to builders and subcontractors. In addition, the program is supported by training, education, and advertising components. This program reduced demand by 30.2 MW and energy by 28.0 GWh.

4.2 Texas Schools Conserving Our Resources (SCORE)/CitySmart

The Texas SCORE Program promotes a structured process to K-12 school districts to identify opportunities and implement energy efficiency measures. Incentives to school districts encourage these installations. Non-cash incentives promote best business practices. The Texas CitySmart Program promotes a similar program to a targeted audience of local and state government entities and municipalities. These programs reduced demand by 12.1 MW and energy by 28.8 GWh.

4.3 Statewide CFL program

The Texas Statewide CFL program produces reductions in electrical peak demand and energy usage through the increased sales of ENERGY STAR® qualified CFLs throughout the service areas of EUMMOT sponsor utilities. Increased sales are achieved by economic incentives and consumer education that remove market barriers for CFLs in Texas. This program reduced demand by 4.3 MW and energy by 41.3 GWh (these numbers include CNP's CFL program).

4.4 Retro-Commissioning

The Retro-Commissioning program helps energy end users reduce their peak demand and energy usage. The program provides expert analysis and systematic evaluation of building systems. By implementing low-cost and no-cost measures that improve system operation, customers reduce energy and peak demand while maintaining or improving customer comfort. This program reduced demand by 1.0 MW and energy by 5.1 GWh.

5 NOx Emission Reductions

Table 4 shows the emission reductions of all Texas IOUs implementing SOPs and MTPs as part of the Texas Energy Efficiency Program.

Table 4: Annual Emission Reductions by Utility for Activities Completed in 2008*

Utility	Electricity Savings (MWh)	Emission Factor (lbs NOx/MWh)	Emission Reduction (lbs NOx)**
AEP-SWEPCO	14,876	1.429	21,258
AEP-TCC	36,118	1.122	40,524
AEP-TNC	5,660	1.122	6,351
CNP	177,221	1.629	288,693
EPE	12,494	1.429	17,854
ETI	13,361	1.429	19,093
TNMP	7,088	1.222	8,662
Oncor	302,242	1.529	462,128
Xcel	12,566	1.429	17,957
TOTAL	581,626		882,519

*Emission factors are from the 2007 eGRID database compiled by the EPA; these factors are the same as those reported to the Texas Commission on Environmental Quality by the Energy Systems Laboratory for the Public Utility Commission of Texas SB7. The average emissions factor for the ERCOT utilities has been applied to the non-ERCOT utilities, as well, to provide a rough estimate of the emissions reductions achieved by the programs implemented by the non-ERCOT utilities.

**NOx Emission Reduction values assume discount (0%), and degradation (0%). There is a 7% T&D adjustment.

6 National Awards

For 2008, the Environmental Protection Agency (EPA) again recognized Centerpoint Energy Company and Oncor Electric Delivery with "Sustained Excellence Awards." The EPA also awarded Entergy Texas, AEP Texas, and Centerpoint with "Leadership in Housing" awards for their ENERGY STAR® New Homes programs.

7 Summary & Conclusion

Once again, the nine Texas investor-owned utilities exceeded the legislature's statewide goals for energy efficiency. The utilities exceeded their 2008 demand reduction goal of 115 MW by 76%, achieving 202 MW of demand reduction. Furthermore, 581.6 GWh of energy savings were achieved, effectively reducing NOx emissions by 882,519 pounds for the year.

8 Appendices

8.1 Acronyms & Abbreviations

A/C	Air Conditioning
C&I	Commercial & Industrial
EEIP	Energy Efficiency Improvement Program
EEM	Energy Efficiency Measure
EESP	Energy Efficiency Service Provider
EPA	Environmental Protection Agency
GW	Gigawatt=one billion watts
GWh	Gigawatt-hour
IOU	Investor Owned Utility
kW	Kilowatt=one thousand watts
kWh	Kilowatt-hour
MTP	Market Transformation Program
M&V	Measurement & Verification
MW	Megawatt=one million watts
MWh	Megawatt-hour
NFP	Not-For-Profit
NOx	Nitrogen Oxides
PUCT	Public Utility Commission of Texas
RSC	Residential and Small Commercial
SB7	Senate Bill 7
SEER	Seasonal Energy Efficiency Ratio
SOP	Standard Offer Program
TDHCA	Texas Department of Housing and Community Affairs

8.2 Key Terms

Deemed savings estimate: a predetermined, validated estimate of energy and peak demand savings attributable to an energy efficiency measure. Deemed savings estimates may be used instead of determining energy and peak demand savings by measurement and verification activities.

Energy efficiency measure: systems, pieces of equipment, or materials that result in either reduced electric energy consumption, reduced peak demand, or both.

Nitrogen oxides: gases consisting of one molecule of nitrogen and one or more molecules of oxygen. Power plants and gasoline-powered vehicles typically emit NOx.

When NOx molecules reach the atmosphere, they often contribute to the formation of smog. NOx are thus considered pollutants and are recognized as such by the EPA.

Market transformation program: strategic efforts to induce lasting structural or behavioral changes in the market that result in increased adoption of energy efficient technologies, services, and practices.

Measurement & verification: all necessary equipment surveys, metering and monitoring, statistical estimation and analysis, and reporting used to quantify the energy savings and demand savings resulting from the installation of energy efficiency measures.

Standard offer program: a type of energy efficiency program where parties enter into a contract with standard terms and conditions, and utilities offer standard incentives for a wide range of installed energy efficient measures bundled together as a project.