

ENERGY EFFICIENCY ACHIEVEMENTS IN TEXAS

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South-Central Partnership for Energy Efficiency as a ResourceAugust 5, 2014





About Frontier

- At Frontier Associates, we focus on the demand side of energy markets
 - Energy efficiency programs
 - Demand response programs
 - Innovative rates and pricing strategies
 - Research into new energy-efficiency technologies
 - Software to assist utilities in managing demand side programs
- We are based in Austin, and most of our work is in Texas and neighboring states
- Our staff of 35 has assisted nearly every major electric utility in Texas, Oklahoma, Arkansas, Colorado, and New Mexico.
 We also work with retailers, large users of energy, natural gas utilities, and water utilities.

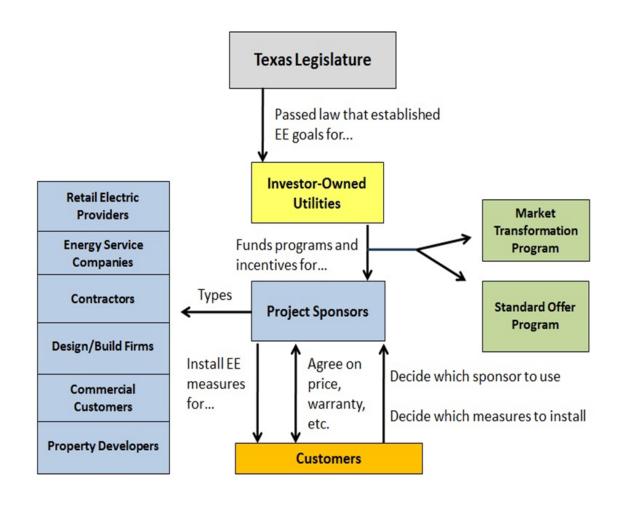


Objectives

- I will provide an overview of:
 - The Energy Efficiency Program framework in Texas
 - Some legislative and regulatory history
 - A summary of achievements
- I will skip-over the utility programs of the municipal utilities and cooperatives:
 - Some of these programs are getting very large
 - However, each non-regulated utility has a unique approach, which is very different from the model applied to the investor-owned regulated transmission and distribution utilities.
- And I will skip-over the programs operated by the State Energy Conservation Office, the Comptrollers Office, and the Texas Department of Housing and Community Affairs.



Texas Efficiency Overview



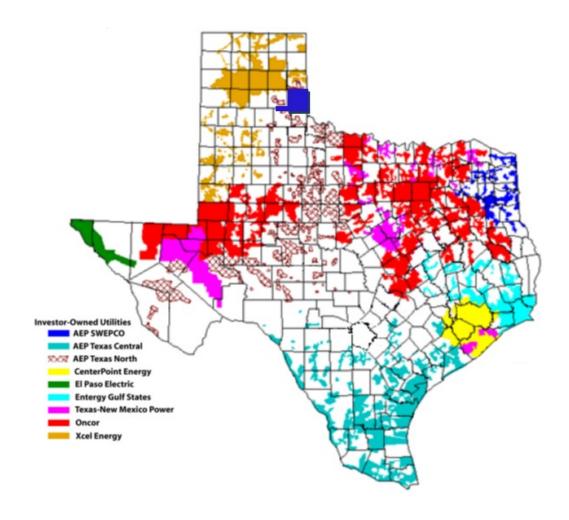


Texas Investor-Owned Utilities

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



IOU Service Territories





History

In 1999 the Texas Legislature passed Senate Bill 7 (S.B. 7) which mandated that at least 10% of an IOU's annual growth in electricity demand be met through energy efficiency programs each year.

Eight years later, the Legislature passed House Bill 3693 (H.B. 3693) which raised the goals for energy efficiency to 20% of each utility's annual growth in demand by 2009, superseding the goals set by S.B. 7.

The Public Utility Commission of Texas (PUCT) Substantive Rule §25.181 ("energy efficiency rule") was created to establish procedures for meeting this legislative mandate.



History (continued)

In 2010 the PUCT approved a new energy efficiency rule, effective December 1, 2010, that ensured the continuation of energy efficiency programs. This rule required the utilities to achieve the following minimum goals:

- 20% reduction in demand growth for 2010 and 2011;
- 25% reduction in demand growth for 2012;
- 30% reduction in demand growth for 2013 and subsequent years.



History (continued)

During the 82nd Legislative Session in 2011, Texas passed S.B. 1125, codifying the goals established by the PUCT in 2010. It also altered the goal, such that it would be the lower of the growth in demand metric or 0.4% of residential plus commercial peak demand.

The legislature also passed S.B. 1434 which mandated specific funding levels for low-income weatherization programs. As a result, the PUCT opened a rulemaking proceeding to amend the energy efficiency rules in 2011-2012 (Project No. 39674).



Framework

Utilities are required to administer energy savings incentive programs, which are implemented through EESPs (i.e., project sponsors, such as energy services companies, AC contractors, or homebuilders).

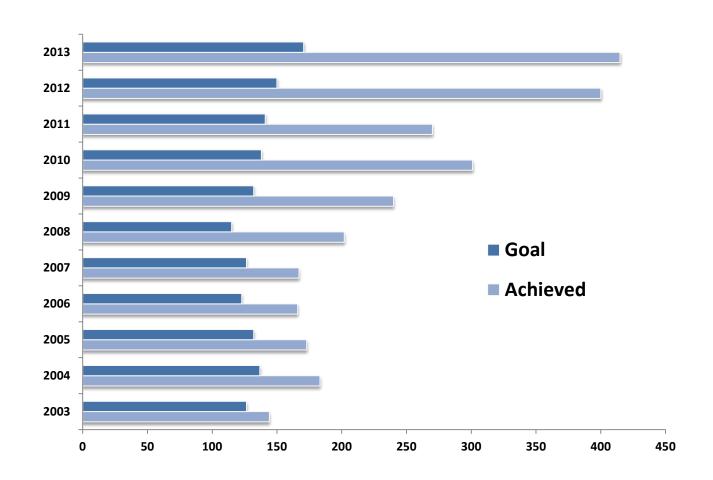
All programs are designed to reduce system peak demand, energy consumption, or energy costs.

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 customers, giving each consumer a choice of a variety of energy efficiency alternatives.



Achievements



Texas IOU Efficiency Goals & Achievements in MW, 2003-2013

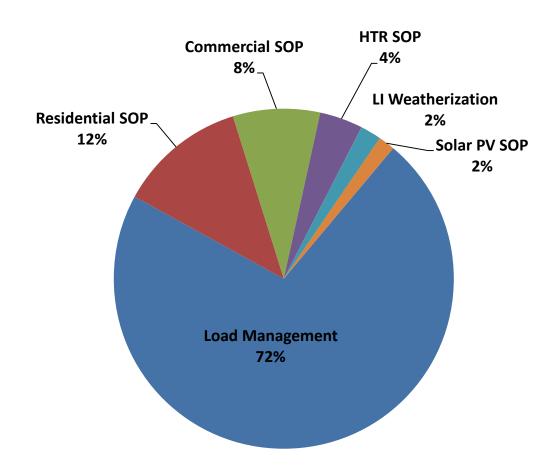


2013 Texas Investor-Owned Utility Spending, Demand Reduction, and Energy Savings

2013	Utility	Total	Spending (\$)	Demand Reduction (MW)	Energy Savings (MWh)
2013	AEP-SWEPCO	\$	4,764,765	14.07	18,778
2013	AEP-TCC	\$	13,054,810	34.14	48,954
2013	AEP-TNC	\$	2,705,070	6.93	9,087
2013	CenterPoint	\$	37,326,761	195.54	160,497
2013	Entergy, Texas	\$	8,466,333	19.10	36,996
2013	El Paso Electric	\$	4,457,214	14.19	23,394
2013	Oncor	\$	58,194,352	112.73	224,666
2013	TNMP	\$	4,808,564	10.29	16,981
2013	Xcel	\$	2,250,000	5.10	7,950
2013	Sharyland	\$	443,926	2.67	1,022
2013	TOTAL	\$	136,471,795	414.76	548,326

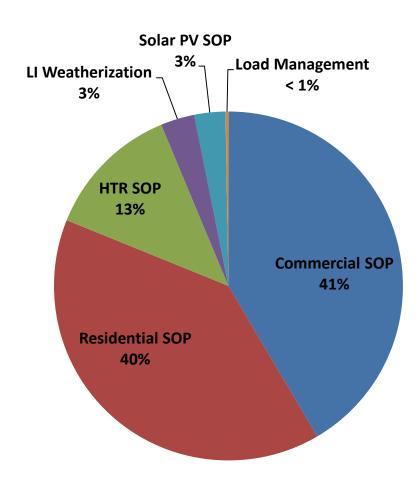


Standard Offer Programs Demand Reduction, 2013



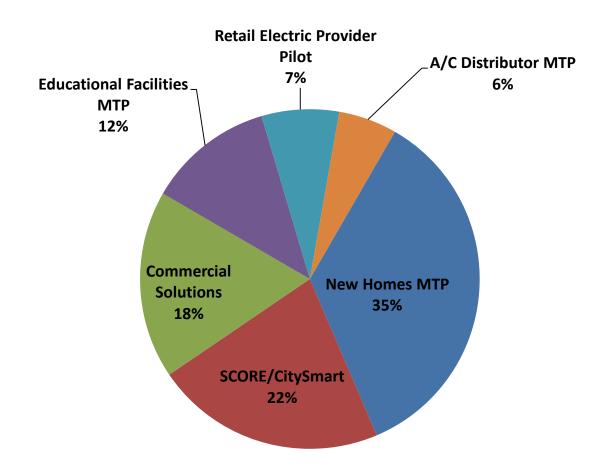


Standard Offer Programs Energy Savings, 2013



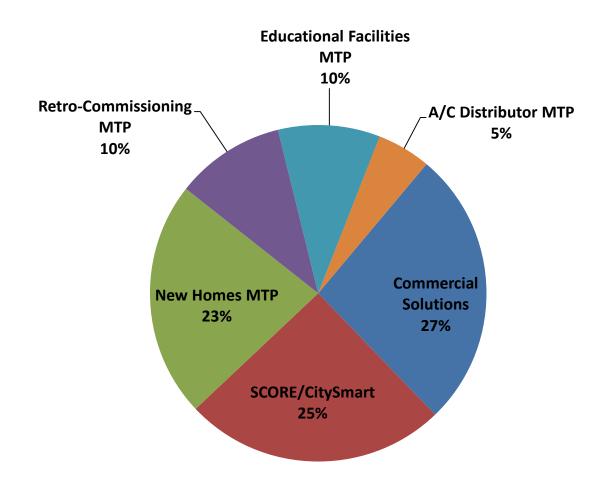


Market Transformation Programs Demand Reduction, 2013





Market Transformation Programs Energy Savings, 2013





Conclusions

Overall, the programs have worked fairly well:

- Most of the utilities meet their targets
- The programs have proven to be very cost-effective, relative to power plant alternatives.

There have been plenty of challenges along the way:

- There are regional differences in the abilities of utilities to meet energy efficiency goals.
- Participation by retailers in the programs has been low.
- Restrictions on the TDUs' relationships with consumers have hampered program marketing efforts, and have had to be relaxed over time.
- Application of cost-benefit tests tend to be awkward, since the TDU
 administering the program sees no avoided generation costs, and the
 program benefits tend to accrue to parties in other sectors of the market.