The History of Texas Energy Efficiency Programs

DEREGULATION

- 1999 Texas passed SB 7, deregulating and unbundling the electricity market into distinctly separate companies performing generation, transmission and distribution, and retail electric services.
- Many formerly regulated functions of the vertically integrated Investor-Owned Utilities (IOUs) were placed into free market competition, and Texas IOUs' scope was limited to transmission and distribution of electricity.
- Texas was the first state to enact a renewable portfolio standard (RPS) and an energy efficiency resource standard (EERS), requiring the IOUs to achieve a specified amount of efficiency annually.
- IOUs the "wires" utilities were also given responsibility for administering the new energy efficiency incentive programs. To achieve the EERS, "...each electric utility annually will provide, through market-based standard offer programs or through targeted market-transformation programs, incentives sufficient for retail electric providers and competitive energy service providers to acquire additional cost-effective energy efficiency."²
- The rest of the market, including provision of efficiency services, was to remain open to competition.

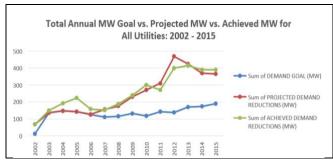
ENERGY EFFICENCY PROGRAM DESIGN

- Efficiency program incentive payments are made directly to energy services companies (ESCOs) or retail electric providers (REPs), who interact directly with customers. This encourages a competitive energy efficiency marketplace.
- Consumer education and the marketing of efficiency programs is left up to the ESCOs and REPs. The IOUs' energy efficiency programs are required to reach all customer classes except industrial customers, which were later exempted from contribution to or participation in the programs. Cost caps were established to limit the impact to customer bills.
- Technology-neutral <u>Standard Offer Programs</u> (SOPs) were developed both to allow normal competition among providers to occur, and to pay service providers a standardized incentive based on actual performance. Over time, based on actual field experience and engineering studies, "deemed savings" or stipulated savings values were adopted and applied to a wide range of products and measures.
- <u>Market Transformation Programs</u> (MTPs) were designed to overcome specific market challenges or introduce new technologies, such as compact fluorescent lightbulbs. Utilities could request research and development funding up to 10 percent of their budgets to stay abreast of best practices and were given simplified ability to pilot new programs. The utilities were also paid a performance bonus in later years, for exceeding their EERS goals cost effectively.

ENERGY EFFICIENCY PROGRAM SPENDING AND SAVINGS

- Since 2009, Texas utilities have consistently spent over \$100 million dollars each year to implement energy efficiency programs. In 2015, total annual efficiency program expenditures for all utilities in Texas were \$120 million.
- The American Council for an Energy-Efficient Economy's 2016 State Scorecard reported that Texas only spent 0.5% of total energy revenue on energy efficiency programs, when the national average was 1.3%; Texas utilities spent \$6.50 per capita on energy efficiency programs and the national average of per capita spending was \$16.00. The national average of expenditures on energy efficiency programs is almost 250% more per capita than in Texas.
- Texas' energy savings could be greatly increased with minimal changes. The utility-administered programs acquire some of the lowest cost energy resources in Texas, and save Texas consumers over \$50 million per year on their energy bills. The reduced energy demand has contributed to grid reliability and decreased investments in generation, emissions (despite significant population and economic growth), the cost of transmission & distribution, and the cost of power to all customers in ERCOT.
- Since 2012, utility energy efficiency programs have achieved around 400 MW of peak demand savings and delivered over 500,000,000 kWh of total energy savings. 400 MW of peak demand savings is the equivalent of power to 184,000 homes! The tables on the back show that peak demand savings and overall energy savings from energy efficiency programs have increased slightly over time, and that utilities consistently exceed their goals.







Glossary

EE – Energy Efficiency: simply using less energy to perform the same task.

EERS – Energy Efficiency Resource Standards: requirement of utilities to achieve a certain percentage of energy savings based on the amount of electricity or natural gas sold in the state.

ERCOT – Electric Reliability Council of Texas: operates the electric grid and manages the deregulated market for 75% of Texas.

IOU – Investor Owned Utilities: a private utility that generate and distribute power to you, the electric consumer, over their defined service territory.

KW – Kilowatt: a unit or measure of power equal to one thousand watts.

kWh - Kilowatt hour: an amount of energy used in an hour.

MW - Megawatt: a unit of power equal to one million watts.

mWh – Megawatt hour: an amount of energy used / measured use in an hour.

MTP – Market Transformation Programs: describes both a policy objective and a program strategy to promote the value and self-sustaining presence of energy-efficient technologies in the marketplace.

PUCT – Public Utility Commission of Texas: regulates the state's electric, telecommunication, and water and sewer utilities, implements respective legislation, and offers customer assistance in resolving consumer complaints.

REP – Retail Electric Provider: sells electric energy to retail customers in the areas of Texas where the sale of electricity is open to retail competition.

RPS – Renewable Portfolio Standard: policies designed to increase the use of renewable energy sources for electricity generation.

SOP – Standard Offer Program: a program under which a utility administers standard offer contracts between the utility and the energy efficiency service providers.

T & D – Transmission and Distribution: refers to the different stages of carrying electricity over poles and wires from generators to a home or business.

