# 2015 National Symposium on Market Transformation

# **Regional Roundup - Texas**



TAKE A LOAD OFF, **TEXAS** 

Year Founded	1912
Direct Legislative/Regulatory Oversight Bodies	Public Utility Commission of Texas (PUCT) / Texas Reliability Entity (TRE) / FERC
2014 Revenues (Unaudited)	\$ 3.6 Billion
Annual Energy Efficiency Budget (2015)	\$50,498,925 (Includes Admin, R&D, EM&V)
Customers Served	10 Million
Fuels	
Gas	No
Electricity	Yes
Major Energy Efficiency Program Related Responsibilities	
Informing Policy (various jurisdictions)	Yes
Emerging Technology Development	Yes
Program Design	Yes
Program Implementation	Yes
Program Measurement and Evaluation	Yes
Other Reporting and Program Support	Yes
Demand Response Programs	Yes
DR integrated with EE	DR/LM is part of EE portfolio



Energy Efficiency Results Since 2002:

- Spent over \$590 million
- > Reduced 1,277 MW
- Saved over 2,900 GWHs

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#### **Texas Market Structure**





### **Texas Energy Efficiency Resource Standard**

- Authorized by Texas Legislature in 1999
- All Texas investor-owned utilities must annually meet <u>at least</u> 30% of their annual incremental growth in peak demand and reduce energy consumption equivalent to a 20% load factor based upon demand reduction goal.
- Programs to be administered by transmission-distribution utilities and implemented by Energy Efficiency Services Providers and Retail Electric Providers
- Program and Administrative costs are capped
- Utilities are not decoupled
- Utilities can earn Performance Bonus (up to 10% of portfolio net benefits) based upon Portfolio Cost Effectiveness (Utility Cost Test)



## **Statewide Emerging Trends**

### Forecasted Load Growth in ERCOT

- Demand and energy to grow over 1% a year in the next decade
- More than a 15% reserve margin through 2019

### Local Leadership in Advancing Energy Codes

- Legislation to move to IECC 2012 has stalled
- 57 cities, covering 20% of the population, have adopted IECC 2012 energy codes or equivalent
- Project underway to validate and quantify potential savings due to increased code compliance

### > Updates to Texas Technical Resource Manual

- Shift lighting to T8 lighting baseline
- Additional increases in HVAC baselines.
- 70% of all claimed savings fall into these categories



### **Statewide Program and Policy Success**

### >2014 Program Results

- 391 MW savings
- 541 GWH savings
- \$135 million program spend

### >Evaluation, Measurement and Verification

- 2014 realization rates for demand and energy savings are over 100%
- 2014 programs delivered savings for \$0.016 per kWh and \$12.77 per kW
- Program Cost-effectiveness
  - 3.43 including low-income programs
  - 3.81 excluding low-income programs



## **Challenges and Opportunities**

### Customer Market Segmentation

- Increased focus on targeted commercial markets
- Customer segments that have a high energy utilization factor

### Leveraging Smart Thermostat technology

- 2016 programs that focus on demand and energy reduction.
- Approved M&V methodology

### Battery Storage

- Up to 5,000 MW of grid connected storage is cost effective (Brattle 2014) and will lower customer costs while improving reliability
- Utilities cannot own batteries without new legislation

