

**TEXAS ELECTRICITY
PROFESSIONALS ASSOCIATION:
MAKING THE TEXAS ELECTRIC
MARKET WORK**

Donna L. Nelson, Commissioner
Public Utility Commission
November 14, 2008

Texas Works

- A CNBC study recently ranked Texas as “America’s Top State for Business.”
- Texas is home to more Fortune 500 companies than any other state
- For the third year in a row, CEO Magazine named Texas the “Best State to do Business”
- The Financial Times of London released a study ranking Texas as the best state to weather the current financial turmoil
- Last year alone, Texas created half of all the jobs that were created in the US

Making the Market Work

The entrepreneurial spirit that makes Texas great has made the Texas electric market one of the most successful in the world.

How do you measure success?

Number of competitors and offerings?

TDU Area	No. of REPs*	No. of Products*
AEP - TCC	25	81
AEP - TNC	24	78
Center Point	25	82
Oncor	25	85
TNMP	23	76

*Residential customer numbers

How do you measure success?

Investment in infrastructure
since the opening of the retail
and wholesale markets?

\$20-25 billion

How do you measure success?

Price stability since the opening of the retail electric market? (Lowest variable rates)

Wire Co.	Price	REP	K Type	K Term	Reg'd rate	% Inc.
AEPC	12.5	StarTex & Kinetic	Var.	1-mo	9.6	30%
AEPN	11.0	Champion	Var.	1-mo	10.0	10%
TNMP	11.9	StarTex	Var.	1-mo	10.6	12%
Centerpt	11.9	StarTex	Var.	1-mo	10.4	14%
Oncor	10.9	StarTex	Var.	1-mo	9.7	12.3%

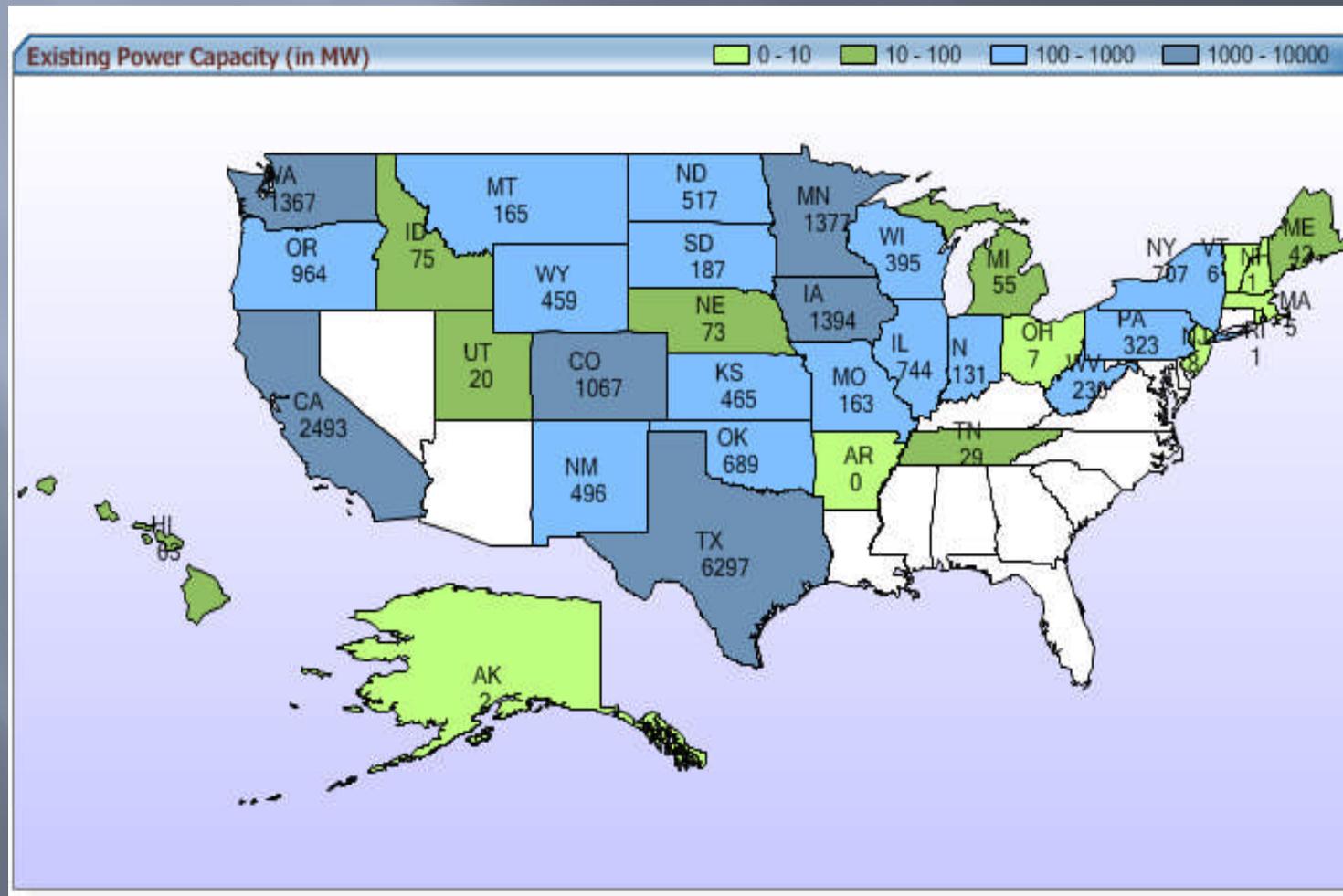
How do you measure success?

Price stability since the opening of the retail electric market? (Lowest fixed rates)

Wire Co.	Price	REP	K Type	K Term	Reg'd rate	% Inc.
AEPC	12.8	Amigo	Fixed	3-mo	9.6	33%
AEPN	10.6	Champion	Fixed	6-mo	10.0	6%
TNMP	12.0	Dynowatt	Fixed	6-mo	10.6	13%
Centerpt	12.6	StarTex	Fixed	6-mo	10.4	21%
Oncor	11.6	Simple Power	Fixed	6-mo	9.7	19.6%

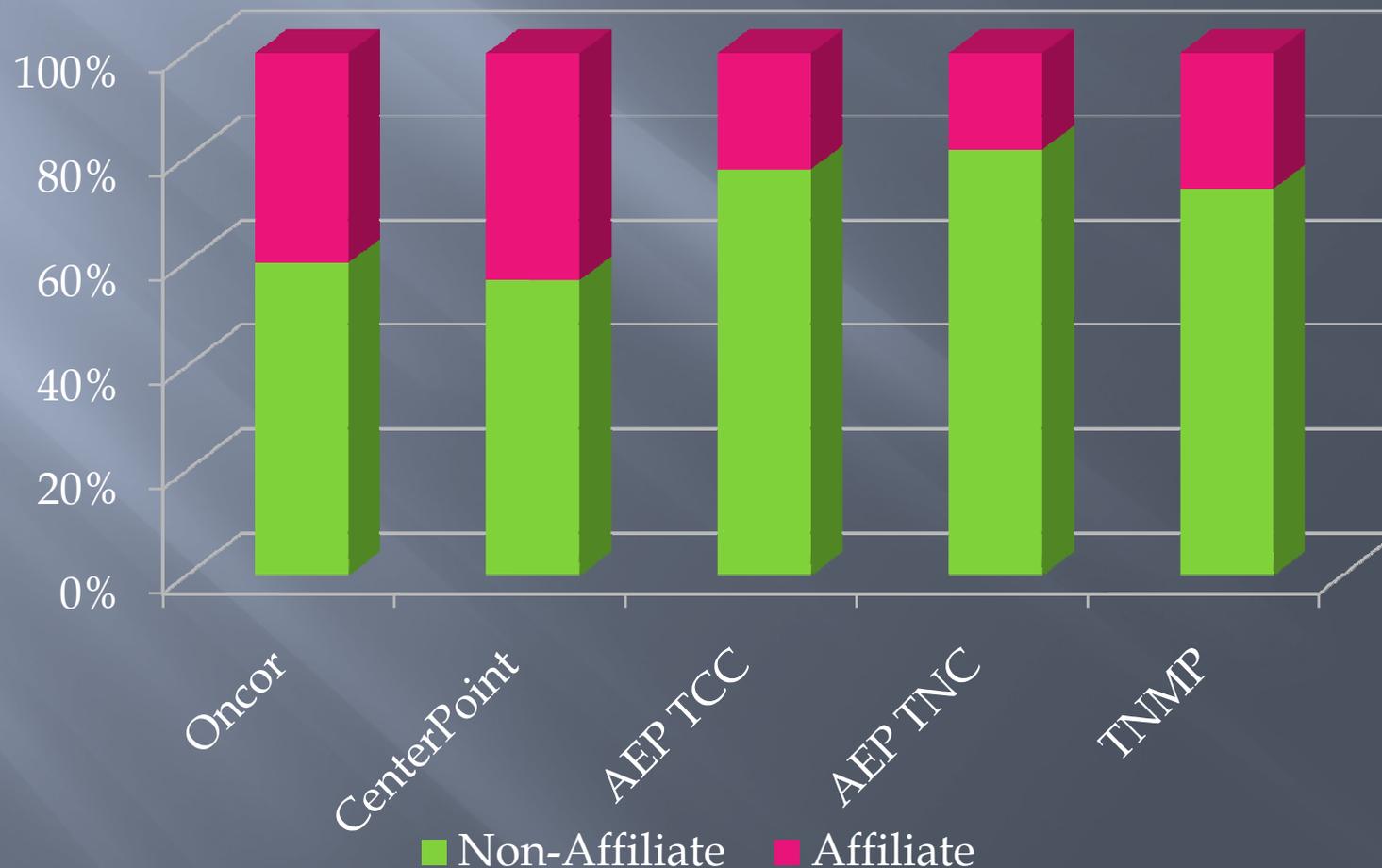
How do you measure success?

Installed wind capacity?



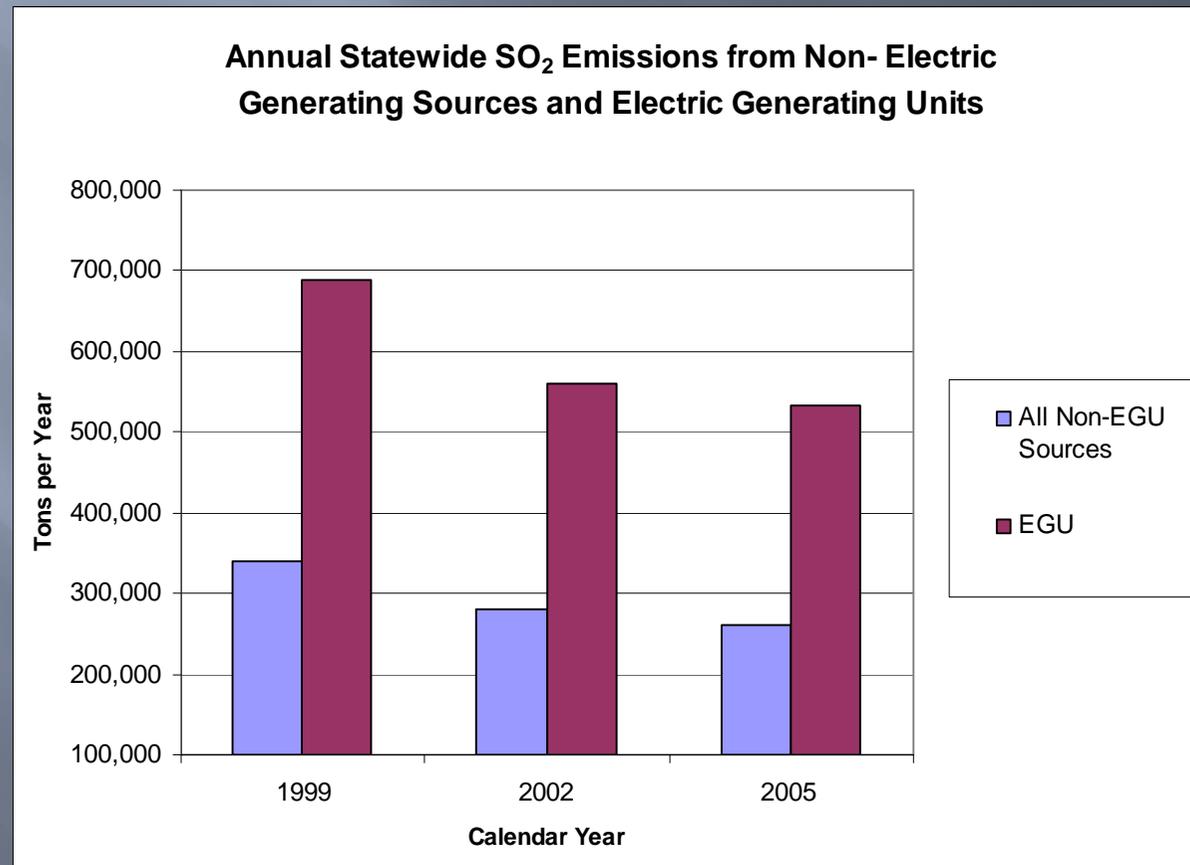
How do you measure success?

Customer switching rates?



How do you measure success?

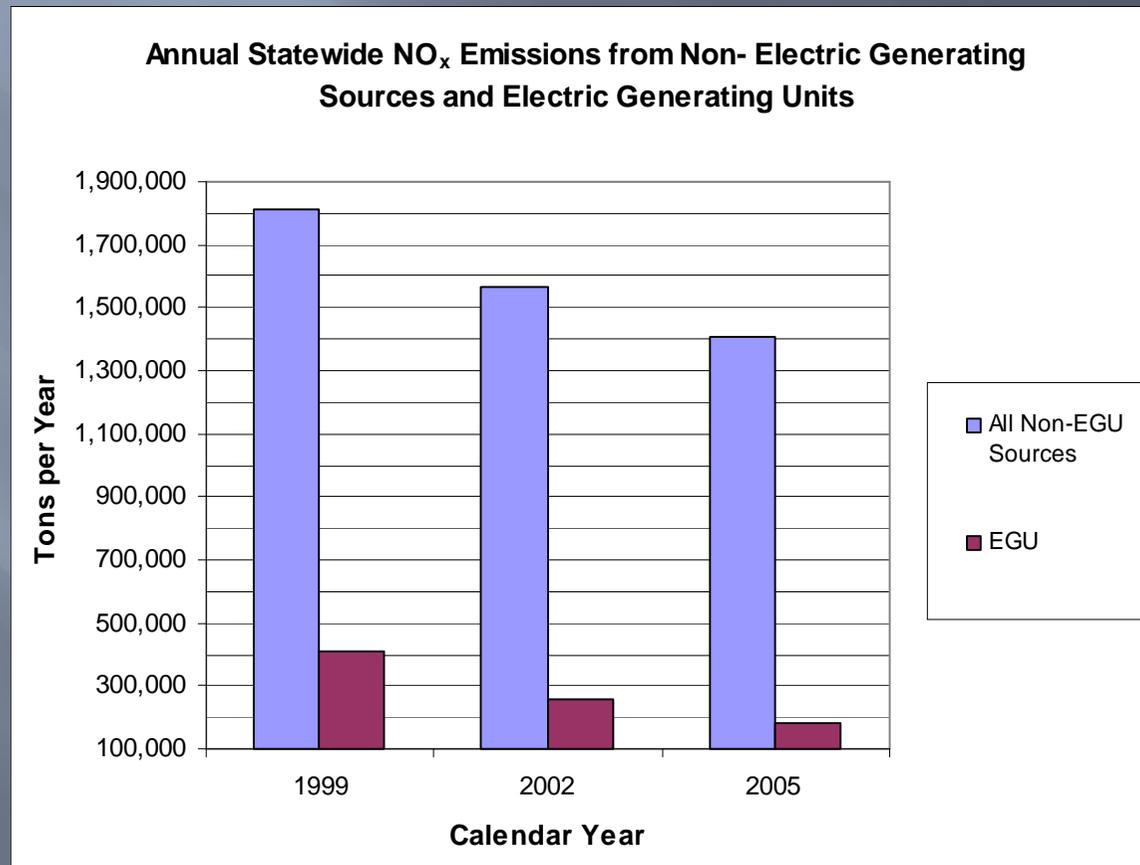
Reduction in SO₂ Emissions?



Source: Texas Commission on Environmental Quality

How do you measure success?

Reduction in NO_x Emissions?



Source: Texas Commission on Environmental Quality

How do you measure success?

Press?

Star-Telegram

Survey: Many officials are foreseeing re-regulation

By R.A. DYER

Fort Worth Star-Telegram

September 21, 2007

Deregulation: Raw deal for power users

11:21 PM CDT on Friday, July 13, 2007

By GARY REAVES / WFAA-TV

How do you measure success?

DEREGULATION DEBATE

Many Texas consumers feel competition in the state's energy markets has been a costly failure

By TOM FOWLER and JANET ELLIOTT Copyright 2007 Houston Chronicle
Oct. 8, 2007, 7:15AM

When Texas lawmakers agreed to open the state's power markets to competition back in 1999, one promise was on the tip of many tongues — lower prices.

"Competition in the electric industry will benefit Texans by reducing monthly rates and offering consumers more choices about the power they use," then-Gov. George W. Bush said at the time.

Then-state Sen. David Sibley, who was a key author of the bill, put the promise more bluntly: "If all consumers don't benefit from this, we will have wasted our time and failed our constituency," he said.

Eight years later, many consumers are calling deregulation just that — a failed waste of time.

How do you measure success?

- In spite of the phenomenal success of its electric market, Texas is facing challenges, caused by many factors, including:
 - Global market conditions
 - The growth of Texas
 - The increase in the cost of electric infrastructure, both generation and transmission

Making the Market Work

- ▣ Texas' heavy reliance on natural gas in its fuel mix
- ▣ The unprecedented growth of wind energy
- ▣ The current financial situation
- ▣ Other challenges in the wholesale and retail electric markets
- ▣ A growing need for talent

Making the Market Work

“Entrepreneurs are simply those who understand that there is little difference between obstacles and opportunity and are able to turn both to their advantage.”

--Victor Kiam

Making the Market Work

How does Texas, the entrepreneurial state, turn its challenges into opportunities? How does Texas “make it work?”

Making the Market Work

The Electric Wholesale Market:

- ▣ Resist the urge to intervene: do not fix what is not broken
 - Let the competitive wholesale market determine what generation should be built
 - Competitive market has decided that we need a diverse generation mix
 - Because of the price volatility of natural gas, companies are increasingly investing in other generation sources, i.e. coal, nuclear, wind

Making the Market Work

- ▣ Legal and regulatory uncertainty makes the investment community skittish
- ▣ Only exception: consider incentives limited in scope and duration to jump start new technologies
- ▣ Address challenge areas
 - Transition to nodal market
 - Wind integration and backup
 - Increasing infrastructure costs
 - Uncertainty created by potential federal carbon legislation
 - Misconceptions re: electric competition created by press

Making the Market Work

The Electric Retail Market:

- ▣ Resist the urge to re-regulate or otherwise set prices
- ▣ Ensure that residential customers receive sufficient education regarding
 - Electric competition
 - Energy efficiency program
 - Demand side management

Making the Market Work

- ▣ Address challenge areas
 - Retail electric provider certification standards
 - Review notice requirements for rate changes to residential and small commercial customers
 - Revise the *provider of last resort* rules

Making the Market Work

Transmission and distribution:

- ▣ Ensure that Texas has proper incentives in place for building of necessary infrastructure
 - Consider streamlining rate cases to remove regulatory lag
- ▣ Consider longer range planning by ERCOT of transmission needs
- ▣ Review infrastructure hardening based on recent experience with Hurricane Ike

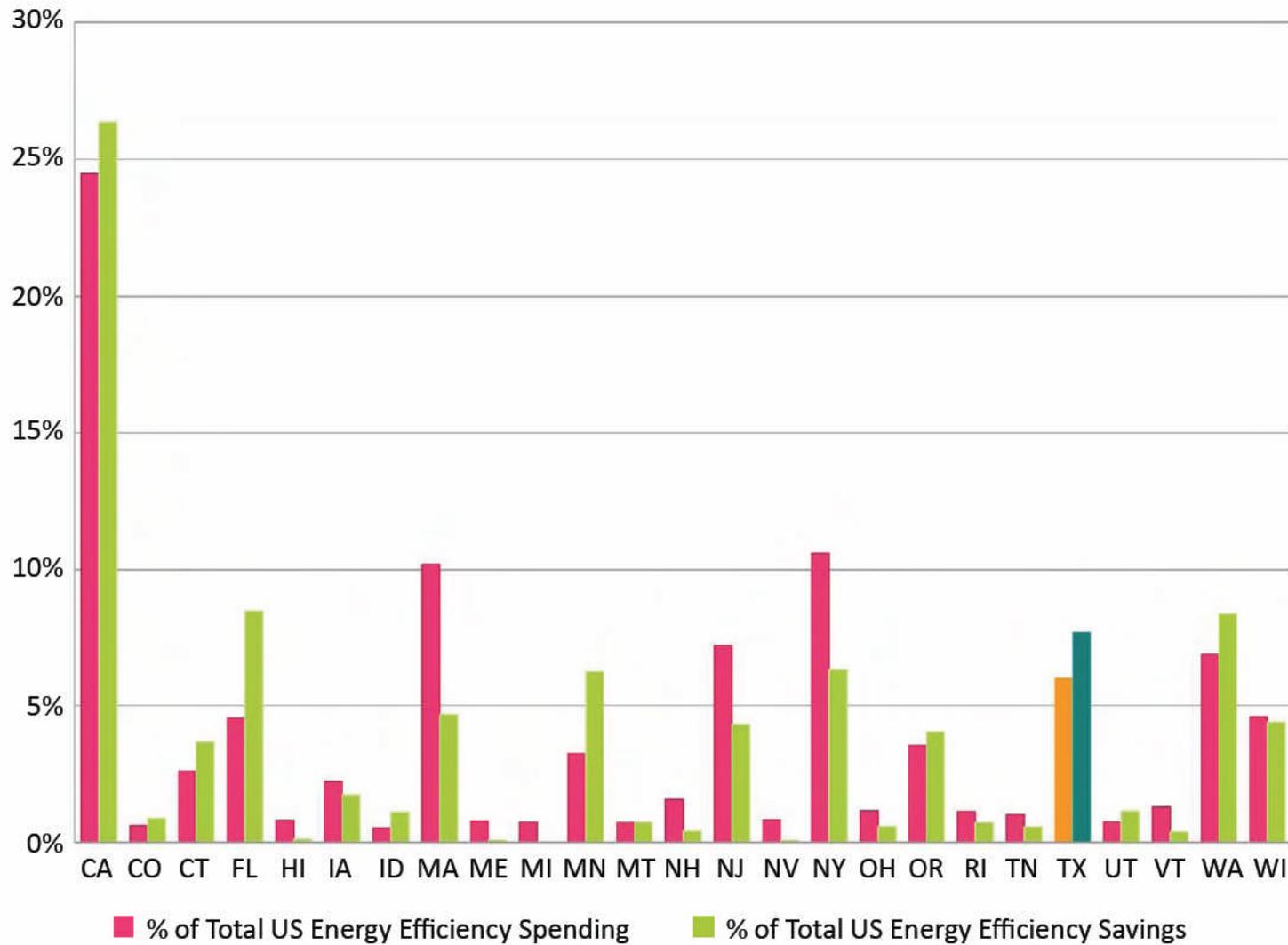
Making the Market Work

Energy efficiency and demand response:

- ▣ Consider whether to increase cost-effective energy efficiency requirements
- ▣ Provide for ubiquitous rollout of Advanced Meters to provide residential customers with the tools they need to control their demand
- ▣ Ensure that ERCOT develops the capability of 15-minute settlement

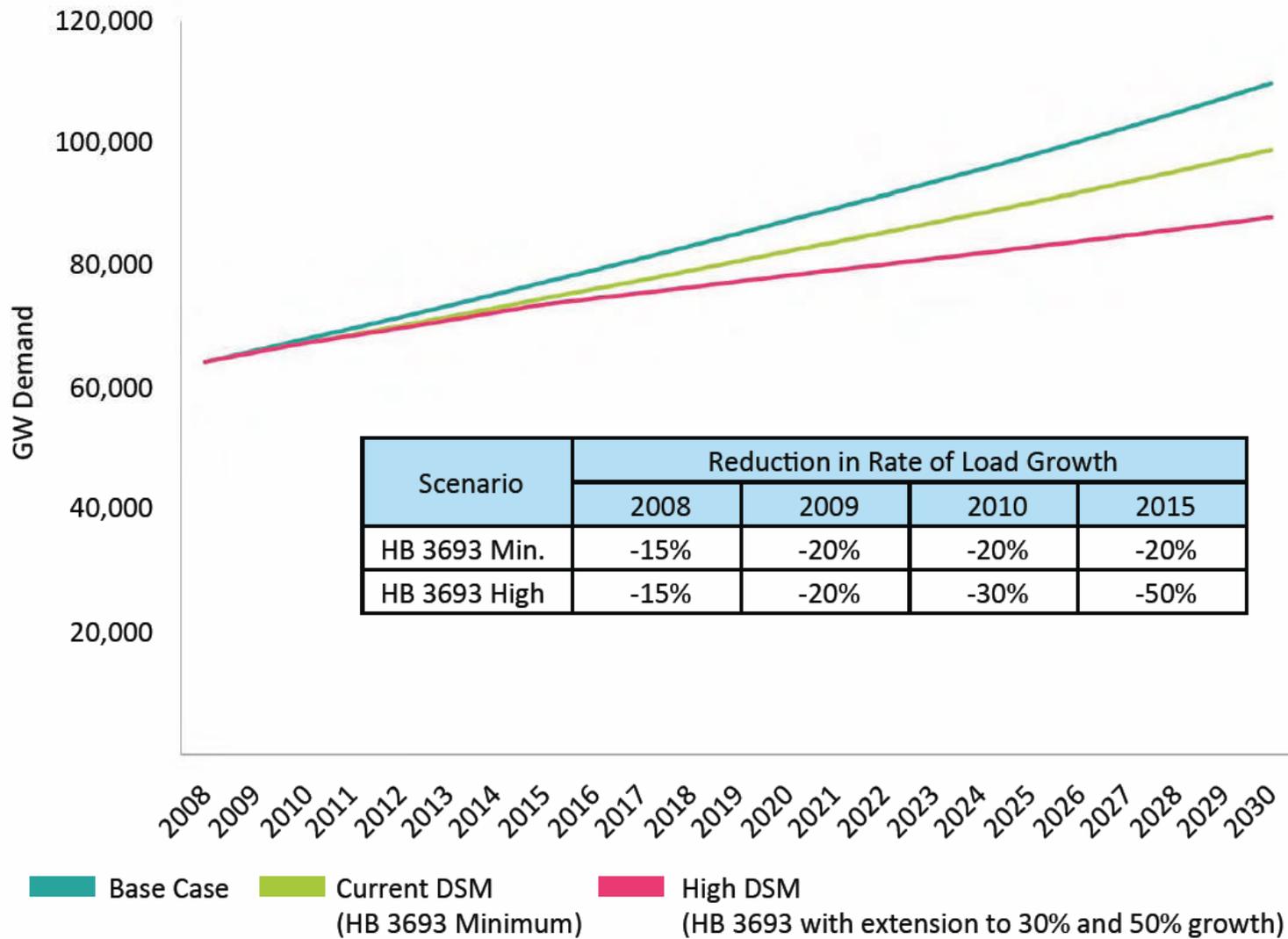
DSM Savings Comparison

FIGURE 40: TEXAS DSM SPENDING AND SAVINGS RELATIVE TO OTHER STATES, 2006



DSM Scenarios & Peak Demand

FIGURE 41: IMPACT ON SYSTEM PEAK DEMAND OF VARIOUS DSM SCENARIOS



What else should we
do to address
challenges?

Governor's Competitiveness Council

- ▣ Governor Perry appointed a 29 member Council in November of 2007 to study competitiveness
- ▣ Council was comprised of leaders from the private sector – all major growth industries – and leaders from the state agencies that affect the economic strength of the state and its businesses
 - Broad group of industry leaders, from Dell to Texas Instruments to Luminant Energy
 - Broad group of agency leaders, from TEA to TWC to PUC, RRC, and TCEQ

Governor's Competitiveness Report

- Council presented Governor with Competitiveness Report and Energy Plan on August 6, 2008
- The Report studied the six fastest growing clusters, including Energy and Petrochemical
 - The Report looks at what businesses in Texas need to succeed in a global economy
 - It covers the following critical areas: talent development (workforce and education), innovation, infrastructure, resources, and governance
- Because of the Council's work, the Governor has indicated that he intends to evaluate all legislation to determine if it makes the state more or less competitive

One final issue: the
workforce needs of
the electric
industry.

Energy Sector Workforce Needs

FIGURE 42: PROJECTION OF WORKFORCE DEMAND IN THE ENERGY CLUSTER

Industry Groups	2007 Jobs	2017 Jobs	Total Change	% Change
Fossil Fuels	7,543	8,339	796	11
Nuclear	2,214	5,545	3,331	150
Renewable (Wind, Solar, Hydro, & Tidal)	18,427	36,903	18,476	100
Transmission and Distribution	11,330	15,636	4,306	38
TOTAL	39,514	66,423	26,909	68

Source: EMSI (Economic Modeling Systems, Inc.), *Economic Impact – Input/Output*, 2008

- Texas' energy workforce is projected to grow in the fossil fuels, nuclear, renewables, and transmission and distribution sectors, a healthy 68 percent between 2007 and 2017, from about 40,000 to 66,000 jobs.

Workforce Needs

- ▣ The electric industry, like other industrial segments, is experiencing the vanguard of approaching labor challenges.
- ▣ The aging technical workforce needs skilled replacements. This problem exists in both the college-educated workforce and the skilled high school-graduate workforce.
- ▣ Labors experts estimate that up to 50 percent of engineers and skilled laborers in the energy field will retire in the next five to ten years.

Building a Skills Pipeline

- ▣ Given the outlook for skills demand and supply for occupations crucial to the competitive growth of the Energy cluster, how well is the Texas skills pipeline performing? The skills pipeline issues are:
 - ▣ Preparation: Are Texas students college- and work-ready?
 - ▣ Advancement: Is Texas developing the right skills at the right time?
 - ▣ Renewal: Is Texas retaining and harnessing the current skills base?

Questions

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