



## ERCOT Success Markers

### Top Market in the United States, Canada

**ERCOT consistently ranks as the top market in the United States and Canada, particularly related to ERCOT's success as registrar and facilitator of the retail market.**

- Texas residential and commercial/industrial electric markets ranked #1 in competitive markets in North America for the last five years in the [Annual Baseline Assessment of Choice in Canada and the United States](#) (Distributed Energy Financial Group, 2011).
  - Texas was the only market that ranked “excellent” for both residential and commercial markets in 2011.
- \$34 billion market based on 335,000 GWh annual energy at an average \$0.10/KWh rate
  - Approximately 300 counter-parties active in the market providing depth and liquidity
  - More than 1,100 active entities that generate, move, buy, sell or use wholesale electricity
- "There's only one market model that actually works, and this is the one [ERCOT is] embracing. The reason it works is that the pricing system and the dispatch system, and the control system and the reliability rules, are all internally consistent.... [ERCOT's nodal model] makes it much easier to operate the system. It makes it more efficient, and it gives people the incentive to do things that are good for the system and invest in the right places."  
(Harvard University Professor William Hogan, *SNL Power Daily*, Nov. 30, 2010)
- “I think we can learn a lot from Texas. .... I'm nothing but impressed with the transmission project that the Texas [Public Utility Commission] put together for moving that west wind into the central and eastern parts of Texas. ... [It was done] in a very expeditious manner and a manner that is probably unprecedented with respect to a transmission project of that size anywhere in the country.” (Jon Wellinghoff, Federal Energy Regulatory Commission Chairman, *Texas Tribune*, Dec. 7, 2011)
- “Texas has the most robust retail competition anywhere in the country. I think that's a fantastic experiment to see how that's moving forward and to see how that plays out to the benefit of Texas consumers.” (Wellinghoff, *Texas Tribune*, Dec. 7, 2011)

### Transmission Planning

**ERCOT's record in transmission planning and development is the most successful in the US.**

- Nearly 9,500 circuit miles of transmission built since 1999
- \$7.4 billion in new transmission and upgrades since 1999

#### What's ahead?

- Up to \$8.7 billion in transmission improvements under review for 2012-2017 which could add an estimated 6,700 circuit miles of transmission and 17,300 megavolt amperes of autotransformer capacity to the grid.
  - Includes \$5 billion to support 18,000 MW of wind – part of the Competitive Renewable Energy Zones (CREZ) project



## Generation Development

ERCOT has approximately 73,600 megawatts (MW) of resources available to meet peak demand, including about 2,750 MW of “mothballed” generation.

- Nearly 46,000 MW new generation added since 1999
  - 136 older units decommissioned since 1999
- More than 7,500 MW committed for the future and 38,000 MW under review (Dec. 2011)

## Wind Integration

ERCOT has successfully integrated the highest level of wind power in the nation into its grid operations.

- 9,604 MW of installed wind capacity – #1 in the US and # 5 in the world
- 19,000 MW of wind generation requests in the interconnection review process (Dec. 2011)
- 7,400 MW of instantaneous wind generation recorded on Oct. 7, 2011 (15.2 percent of load)
- Developed first-of-its-kind [wind ramp forecasting tool](#) to help operators prepare for large and sudden changes in wind production

## Innovation

- **Smart Meters** – Currently using 15-minute data from more than 4.3 million advanced meters in wholesale market settlement (Dec. 2011)
- **Demand Response** – Market-based demand response program for load resources has approximately 197 sources providing more than 2,400 MW of peak interruptible capacity
- **Macomber Map™** – a visualization tool developed by ERCOT to help system operators integrate multiple data sources and see all data for a single element of the grid across applications and systems; provides situational awareness for control room operators – allowing operators to navigate from high- to low-level network model, energy and market data, geographically and temporally; currently being used nationally, including at NERC and FERC

## Strong Financial Management

- Consistently exemplary credit rating of Aa3
- Moody's Investors Service touts ERCOT's “sound credit policies” and the “size, stability and liquidity of the ERCOT power market”
- Conservative use of debt – 40 percent down payment from revenue; debt paid off over the average useful life of its assets (usually 3-5 years)