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 past six years in the <u>Annual Baseline Assessment of Choice in</u> <u>Canada and the United States</u> (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 334,000 GWh annual energy
 - Approximately 240 counterparties active in the market, providing depth and liquidity
 - More than 1,000 active entities that generate, move, buy, sell or use wholesale electricity
- "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

Quick Facts

- 85 percent of Texas Load
- 23 million consumers
- 550 generating units
- 74,000 megawatts (MW) capacity for peak demand
- Record peak demand: 68,305 MW (Aug. 3, 2011)
- Market size: ~\$34 billion
- Market participants: >1,100 active entities that generate, move, buy, sell or use wholesale electricity

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.

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

What's ahead?

- Up to \$9.7 billion in transmission improvements in engineering, routing, licensing and construction for 2012-2018 and beyond, which could add an estimated 5,523 circuit miles of new transmission, 2,119 miles of rebuilt or upgraded transmission, and 18,626 megavolt amperes of transformer capacity to the grid
 - Includes ~\$5-7 billion to support 18,000 MW of wind part of the Competitive Renewable Energy Zones (CREZ) project

Generation Development

ERCOT has approximately 75,300 megawatts (MW) of resources available to meet peak demand, including about 2,000 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 40,000+ MW under review (October 2012)

Wind Integration

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

- 10,035 MW of installed wind capacity #1 in the US
- 21,000 MW of wind generation requests in the interconnection review process (October 2012)
- 8,521 MW of instantaneous wind generation recorded on Nov. 10, 2012 (25.9 percent of load)
- Developed first-of-its-kind <u>wind ramp forecasting tool</u> to help operators prepare for large and sudden changes in wind production

Innovation

- Smart Meters Currently using 15-minute data from more than 5.8 million advanced meters in wholesale market settlement (November 2012)
- Demand Response Market-based demand response program for load resources has approximately 207 sources that can provide more than 1,600 MW of capacity when needed, and pilot projects are in place to encourage additional demand response actions.
- 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)

The Electric Reliability Council of Texas (ERCOT) manages the flow of electric power to 23 million Texas customers -- representing 85 percent of the state's electric load. As the independent system operator for the region, ERCOT schedules power on an electric grid that connects 40,500 miles of transmission lines and more than 550 generation units. ERCOT also performs financial settlement for the competitive wholesale bulk-power market and administers retail switching for 6.7 million premises in competitive choice areas. ERCOT is a membership-based 501(c)(4) nonprofit corporation, governed by a board of directors and subject to oversight by the Public Utility Commission of Texas and the Texas Legislature. ERCOT's members include consumers, cooperatives, generators, power marketers, retail electric providers, investor-owned electric utilities (transmission and distribution providers), and municipal-owned electric utilities.

Government Contact: Shelly Botkin, sbotkin@ercot.com; Media Contact: Robbie Searcy, rsearcy@ercot.com