# **ERCOT QUICK FACTS**



## At a glance

- 85% of Texas load
- 23 million consumers
- Competitive-choice customers: 73% of load -- 6.7 million electric-service ID's (premises)
- 40,530 circuit miles of high-voltage transmission:
  -9,249 miles of 345 kV and 19,565 miles of 138 kV
- 550 generating units
- >74,000 megawatts (MW) capacity for peak demand
  One megawatt of electricity can power about
  200 Texas homes during periods of peak demand.
- Record peak demand: 68,305 MW (Aug. 3, 2011)
- Energy used in 2011: 334 billion kilowatt-hours
  A 5% increase compared to 2010
- Market size: About \$34 billion
- Market participants: >1,100 active entities that generate, move, buy, sell or use wholesale electricity

# What do we do?

The Texas Legislature restructured the Texas electric market in 1999 by unbundling the investor-owned utilities and creating retail customer choice in those areas, and assigned ERCOT four primary responsibilities:

- System reliability planning and operations
- Open access to transmission
- Retail switching process for customer choice
- Wholesale market settlement for electricity production and delivery

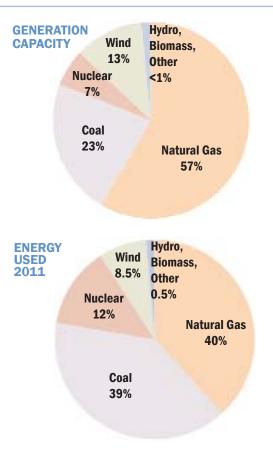
# How is the market doing?

#### **Transmission Investment and Development**

- \$7.4 billion in transmission added since 1999
- 9,500 circuit miles of transmission improvements since 1999
- 6,700 circuit miles of transmission planned
- \$8.7 billion under development in five-year plan; ~\$5-7 billion to support 18,000 MW of wind

#### **Generation Development**

- 46,000 MW new generation added since 1999
   136 older units decommissioned
- 7,500 MW generation committed for the future (with transmission contract and air permit)
- 40,000+ MW of active generation requests under review, including 21,000 MW wind (October 2012)



## Wind Integration

- Wind capacity: >10,000 MW
  - -- Most of any state in the nation
  - -- Includes >2,000 MW in coastal area
- Wind generation record: 8,521 MW (Nov. 10, 2012)
   25.9 percent of load at the time

#### **Retail Service Switches to Competitive Retailers**

- 59% of residential load (October 2012)
- 65% of small commercial load (October 2012)
- 179 certified competitive retail electric providers

#### **Advanced Meters and Demand Response**

- >5.8 million advanced meters
- 92 percent of ERCOT load settled with 15-minute interval data
- >1,800 MW in demand response resources, including:
  Load resources (mostly large industrial) ~1,200 MW
  - Emergency response service (commercial and industrial) ~430 MW
  - -- Utility load management programs
- Additional economic demand response, voluntary public responses to conservation requests and more

# **ERCOT GOVERNANCE**

# **ERCOT Board of Directors**

### **Craven Crowell**

Chair (unaffiliated)

**Judy Walsh** Vice Chair (unaffiliated)

**Jorge Bermudez** (unaffiliated)

Andrew Dalton Valero Energy Corporation (industrial consumer)

**H.B. "Trip" Doggett** President and Chief Executive Officer, ERCOT (*ex-officio*)

**Mark Dreyfus** Austin Energy (municipal utility)

**Nick Fehrenbach** City of Dallas (commercial consumer)

Michehl Gent (unaffiliated) **Sheri Givens** Office of Public Utility

Counsel (residential consumer, ex-officio)

Kevin Gresham E.ON Climate & Renewables (independent generator)

**Eric Hendrick** Stream Energy (retail electric provider)

**Clifton Karnei** Brazos Electric Cooperative (cooperative)

Donna Nelson Chair, Public Utility Commission (*ex-officio*, non-voting)

**Karl Pfirrmann** (unaffiliated)

**Scott Prochazka** CenterPoint Houston (investor-owned utility) Jean Ryall CCNG, Inc.

(independent power marketer)

## Segment Alternates

**Shannon Bowling** Cirro Group (retail electric provider)

Jeff Brown Shell Energy North America (independent power marketer)

Mark Carpenter Oncor Electric Delivery (investor-owned utility)

**Barbara Clemenhagen** Topaz Power Holdings (independent generator)

**Mike Packard** South Texas Electric Cooperative (cooperative)

**Carolyn Shellman** CPS Energy (municipal) **ERCOT OFFICERS** 

**H.B. "Trip" Doggett** President and Chief Executive Officer

**Betty Day** Vice President of Business Integration

Jerry Dreyer Vice President and Chief Information Officer

**Bill Magness** Vice President and General Counsel

**Charles B. Manning, Jr.** VP, Human Resources, and Chief Compliance Officer

**Mike Petterson** VP, Finance and Treasury

Mark Ruane VP, Credit and Enterprise Risk Management

Kent Saathoff VP, Grid Operations and System Planning

## **Board, Stakeholder Process**

The ERCOT Board of Directors has general overall responsibility for managing the affairs of ERCOT, including approval of the budget and capital spending priorities, approval of revisions to ERCOT protocols and guides, and endorsement of major new transmission recommendations.

ERCOT's 16-member "hybrid" board includes five independent (or unaffiliated) members; three consumer segment representatives (industrial, commercial and residential); the ERCOT CEO; the Public Utility Commission (PUC) chairman (nonvoting), and six representatives from each of the industry segments – investor-owned utilities (or transmission owners), municipal-owned utilities, cooperatives, generators, power marketers and retail electric providers.

Under the Board's oversight, ERCOT's stakeholder process is responsible for developing policies, procedures, and guidelines for power grid coordination, reliability, and market operations. Six standing committees and subcommittees supported by numerous working groups and task forces function within the stakeholder process.

## **PUC, Legislative Oversight**

ERCOT is unique because its electricity grid is not synchronously connected outside of the state. Because of its separateness, ERCOT is primarily regulated by the Public Utility Commission of Texas (PUC) and the Texas Legislature, not federal authorities. The PUC approves the ERCOT system administration fee and has general oversight authority including the ability to order audits.

For most purposes, ERCOT, like the PUC, is accountable to the Texas Legislature and its jurisdictional committees. For federal reliability standards, ERCOT is accountable to the Texas Reliability Entity, the North American Electric Reliability Corporation, and the Federal Energy Regulatory Commission.

The Electric Reliability Council of Texas (ERCOT) manages the flow of electric power to approximately 23 million Texas customers – representing 85 percent of the state's electric load and 75 percent of the Texas land area. 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 manages financial settlement for the competitive wholesale bulk-power market and administers customer 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.

