ERCOT UPDATE

SENATE NATURAL RESOURCES
APRIL 11, 2012

Trip Doggett
President & CEO
ERCOT
FUEL MIX IN ERCOT

Installed Capacity, January 2012
~ 80,000 MW

Energy Produced, 2011
335 billion kilowatt-hours
ENERGY PRODUCED (2002-2011)
Over 18,000 MW of new wind capacity generation requests under review.

Energy from wind generation in 2011 was 28.3 million megawatt-hours – 14 percent increase over the previous year.

Wind generation instantaneous record: 7,917 MW
- Representing 24% of 33,373 MW load at 4:13pm on March 18, 2012

Wind installed capacity at 9,838 MW
- Highest in the US
- Our capacity is three times the amount of #2 (Iowa).
- If Texas were a separate country, we’d be #6 in the world.

Located in these areas:
- West 7,531 MW
- South 2,075 MW
  (includes 850 MW that is switchable from West to the South)
- North 232 MW
ERCOT RESERVES OVER THE NEXT 10 YEARS

Reserve Margin for Capacity in the ERCOT Region

- Installed Capacity
- Natural Gas *
- Solar *
- CSAPR Stay ***
- Planned Units
- Nuclear *
- Wind *
- Coal *
- Other *
- Suspended Projects **

Reserve margin target 13.75%

- Fuel Composition of Projects Undergoing Full Interconnection Studies - these projects may be cancelled or delayed beyond the indicated commercial dates shown
- Monticello 1&2 – 1130MW (as a result of a federal court’s order to stay EPA’s CSAPR)
• The Seasonal Assessment of Resource Adequacy is designed to improve the assessment of near-term conditions. The seasonal assessments are based on the most-current available data on seasonal weather, the status of power plants, and the impact of factors like economic activity and the ongoing drought.
WHAT TO EXPECT THIS SUMMER

- ERCOT expects tight reserves this summer. There is a significant chance that ERCOT will need to declare an Energy Emergency Alert (EEA) on multiple occasions during the summer of 2012. However, these EEA declarations are not likely to result in the need for rotating outages.

- If a higher-than-normal number of forced generation outages occur during a period of high demand, or if record-breaking weather conditions similar to last summer lead to even higher-than-expected peak demands, the ERCOT system is likely to have insufficient resources available to serve those demands. This insufficiency would result in the need for rotating outages to maintain the integrity of the system as a whole.

- Drought conditions have improved during the winter and spring on many river basins. Reservoir levels are not expected to drop below power plant physical intake limits during summer 2012, but potential risks exist while much of Texas remains under drought conditions.

- Final Summer SARA scheduled for release May 1.
RECENT ACTIONS TO ADDRESS RESOURCE ADEQUACY CONCERNS

Completed

- Online Non-Spin standing deployment & offer floor
- Offline Non-Spin offer floor
- Responsive Reserve & Regulation Up offer floor
- Institutionalize the process to recall units for capacity
- Pricing of energy for Reliability Unit Commitment (RUC) units deployed for capacity at System Wide Offer Cap
- Expansion of Responsive Reserve with a corresponding reduction in Non-Spin

Work In Progress

- The proper magnitude and slope of the Power Balance Penalty Curve
- Review raising the System Wide Offer Cap
- Low Sustainable Limit problem for units RUC’ed online for capacity
- Compensation for Reliability Unit Commitments made to provide local reliability and transmission relief and address the issue of whether and how RUC claw-back should be adjusted
- Review Peaker Net Margin Cap
- Demand Response & Load Management Initiatives
- Posting non-binding near real-time forward prices
- Brattle Group Study
BRATTLE GROUP STUDY

• **Scope**
  – Identify and examine the factors that influence investment decisions related to the financing and development of projects to meet ERCOT’s resource adequacy goals. Consider supply-side and demand-side resources, from both a wholesale and retail perspective.
  – Provide suggestions for ways to enhance favorable investment outcomes for long-term resource adequacy in ERCOT

• **Estimated Project Completion** – **June 01, 2012**

• **Approach**
  – Interview stakeholders regarding investment criteria and concerns
  – Analyze likely outcomes under current and proposed rules
  – If we find that resource adequacy shortfalls are likely, evaluate the pros and cons of a range of policy options
Did you know real time grid information is available through social media?

Facebook:
Electric Reliability Council of Texas

Twitter: http://twitter.com/ercot_iso