



Item 4.3: Operations Report (Jan & Feb 2013)

**H.B. “Trip” Doggett
President & Chief Executive Officer**

**Board of Directors Meeting
ERCOT Public
March 19, 2013**

Summary – January 2013

- **January 2013 Operations**

- The peak demand of 50,687 MW on January 16th was more than the mid-term forecast peak of 50,052 MW and more than the January 2012 actual peak demand of 46,908 MW. The instantaneous load on January 16th was 51,511 MW.
- Day-ahead load forecast error for January was 3.50%
- 3 Advisories issued for Physical Responsive Capability (PRC) below 3000 MW
- No Watches were issued for PRC under 2500 MW
- No Energy Emergency Alert (EEA) events

- **Planning Activities**

- 159 active generation interconnection requests totaling over 48,000 MW, including 20,000 MW of wind generation as of January 31, 2013. Seven more requests and 2,000 MW additional since December 31, 2012
- 10,407 MW wind capacity in commercial operation January 31, 2013; no change from December 31, 2012

Summary – February 2013

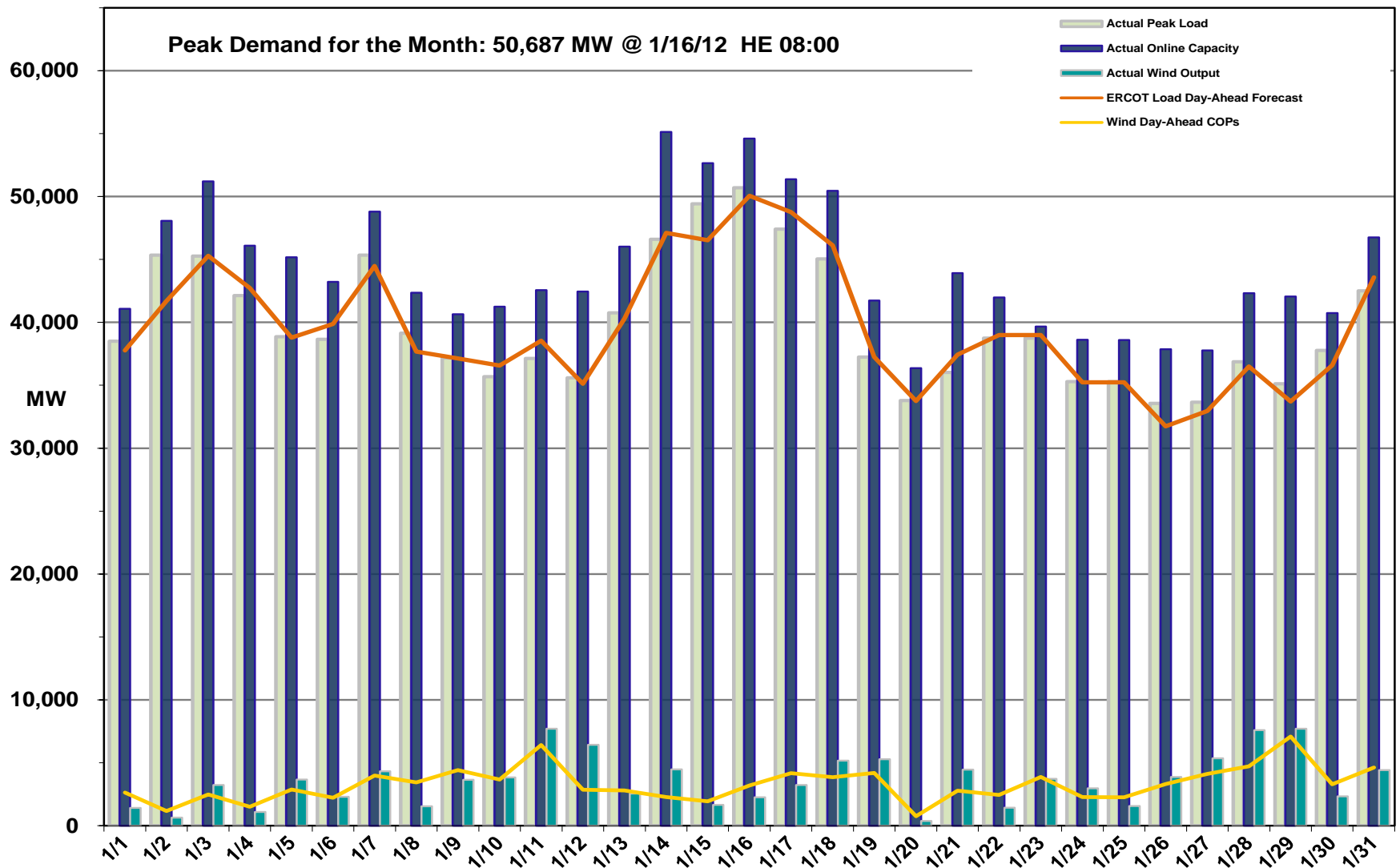
- **February 2013 Operations**

- The peak demand of 40,752 MW on February 28th was less than the mid-term forecast peak of 42,419 MW and less than the February 2012 actual peak demand of 42,216 MW. The instantaneous load on February 28th was 41,607 MW.
- Day-ahead load forecast error for February was 2.83%
- One Advisory issued for Physical Responsive Capability (PRC) below 3000 MW
- No Watches were issued for PRC under 2500 MW
- No Energy Emergency Alert (EEA) events

- **Planning Activities**

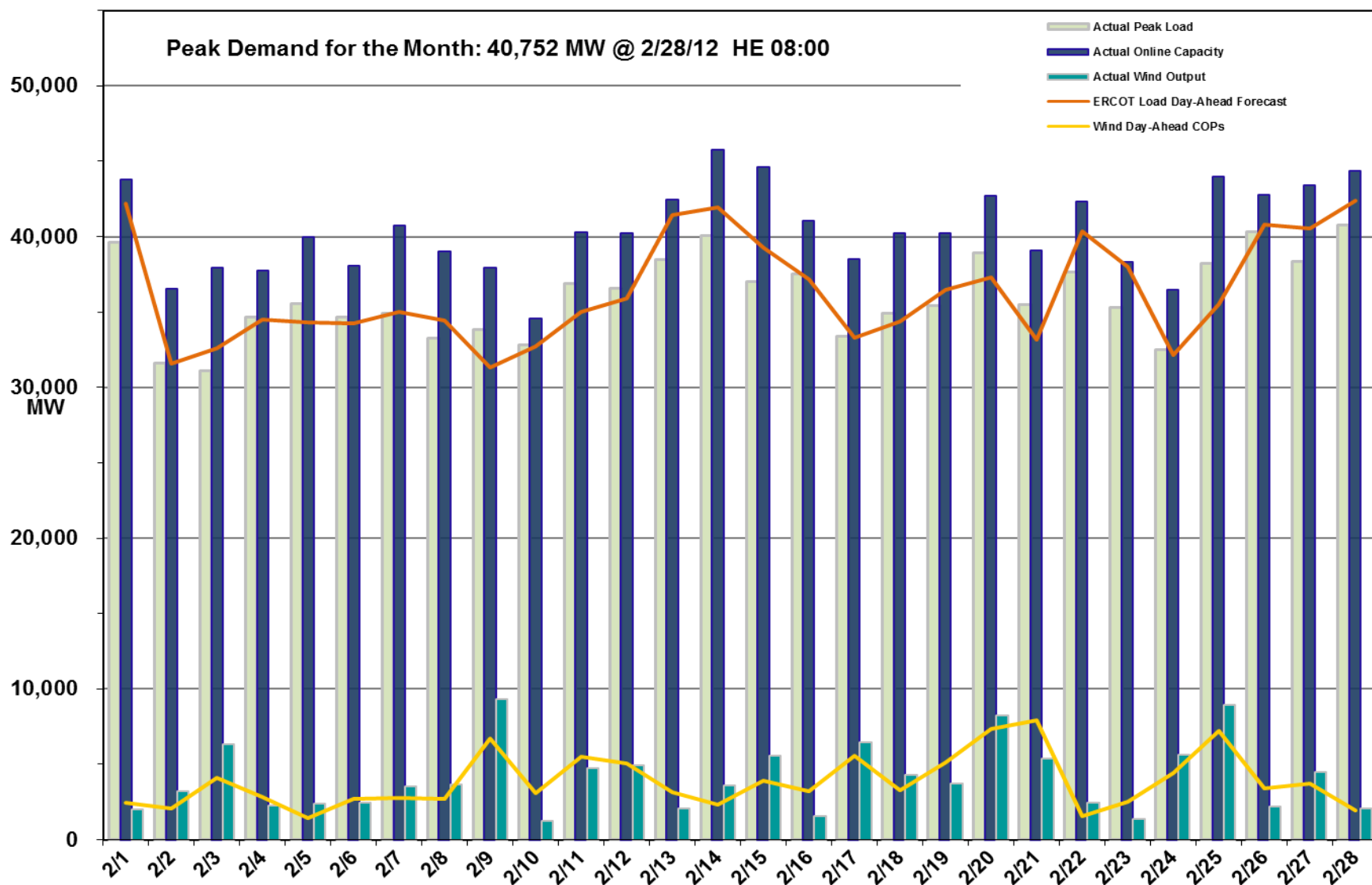
- 162 active generation interconnection requests totaling over 48,000 MW, including 21,000 MW of wind generation as of February 28, 2013. Three more requests but the same total MW from January 31, 2013
- 10,407 MW wind capacity in commercial operation February 28, 2013; no change from January 31, 2013

January 2013 Daily Peak Demand: Hourly Average Actual vs. Forecast, Wind Day-Ahead COPs & On-line Capacity at Peak



Note: All data are hourly averages during the peak load hour obtained from COPs, and EMMS.

February 2013 Daily Peak Demand: Hourly Average Actual vs. Forecast, Wind Day-Ahead COPs & On-line Capacity at Peak



Note: All data are hourly averages during the peak load hour obtained from COPs, and EMMS.

Market Statistics – January 2013

Market Statistics	Jan 2012	Jan 2013	2012 Average	2013 YTD Average
Percentage of Real-Time load hedged in Day-Ahead Market	133.52%	124.20%	122.66%	124.20%
Average 'ERCOT Hub Average 345 kV Hub' Settlement Point Price in Day-Ahead Market (\$/MWh)	22.60	26.32	30.18	26.32
Average 'ERCOT Hub Average 345 kV Hub' Settlement Point Price in Real-Time (\$/MWh)	21.74	24.95	26.49	24.95

Market Statistics – February 2013

Market Statistics	Feb 2012	Feb 2013	2012 Average	2013 YTD Average
Percentage of Real-Time load hedged in Day-Ahead Market	130.07%	122.46%	122.66%	123.33%
Average 'ERCOT Hub Average 345 kV Hub' Settlement Point Price in Day-Ahead Market (\$/MWh)	21.09	25.14	30.18	25.79
Average 'ERCOT Hub Average 345 kV Hub' Settlement Point Price in Real-Time (\$/MWh)	18.92	24.31	26.49	24.66

Operational Performance Measures – **January 2013**

Performance Measure	Target Met	Further Information
Retail Transaction Performance (Target 98%)	Yes	<ul style="list-style-type: none">• Retail transaction processing performance was at 100%
Settlements Performance (Target 99%)	Yes	<ul style="list-style-type: none">• 100% timely statement and invoice posting

Operational Performance Measures – February 2013

Performance Measure	Target Met	Further Information
Retail Transaction Performance (Target 98%)	Yes	<ul style="list-style-type: none">• Retail transaction processing performance was at 100%
Settlements Performance (Target 99%)	Yes	<ul style="list-style-type: none">• 100% timely statement and invoice posting

Operational Dashboard – January & February 2013

Metric	Trending as Expected	Further Information
Day-Ahead Schedule	Yes	<ul style="list-style-type: none"> • Normal level of market activity and liquidity • Loads appear to have hedged against exposure to Real-Time prices
Day-Ahead Electricity And Ancillary Service Hourly Average Prices	Yes	<ul style="list-style-type: none"> • Hourly average prices correctly reflect the opportunity cost of energy
Day-Ahead vs Real-Time Load Zone Settlement Point Price (Hourly Average)	Yes	<ul style="list-style-type: none"> • Day-Ahead & Real-Time prices for different Load Zones reflect relative transmission congestion
Day-Ahead vs Real-Time Trading Hub Settlement Point Price (Hourly Average)	Yes	<ul style="list-style-type: none"> • The average energy price across the system reflects marginal offers and scarcity pricing impacts • Higher average Day-Ahead energy prices reflect the risk premium between Day-Ahead & Real-Time
Day-Ahead Reliability Unit (DRUC) Commitment Monthly Summary	Yes	<ul style="list-style-type: none"> • Capacity committed by the DRUC process indicates the level of out of market activity needed Day-Ahead to maintain reliability • No resources were committed in DRUC in this period

Operational Dashboard – January & February 2013

Metric	Trending as Expected	Further Information
Hourly Reliability Unit Commitment (HRUC) Monthly Summary	Yes	<ul style="list-style-type: none">Capacity committed by the HRUC process indicates the level of out of market activity needed during the Operating Day to maintain reliabilityEleven and seven resources were committed in January and February, respectively, to help resolve congestion or voltage stability
Supplemental Ancillary Service Market Monthly Summary	Yes	<ul style="list-style-type: none">Normal trend indicates that deliverability was not a major concern
Non-Spinning Reserve Service Deployment	Yes	<ul style="list-style-type: none">Offline Non-Spin was deployed briefly from one resource in January for help resolve congestion and from one resource in February for testing purpose
Congestion Revenue Rights Price Convergence	Yes	<ul style="list-style-type: none">Normal trend indicates good ability of market participants to estimate value of hedges

Operational Dashboard – January 2013

Metric	Trending as Expected	Further Information
Retail Transactions	Yes	<ul style="list-style-type: none"> Seasonal variations in transaction volumes trending as expected
Advanced Metering	Yes	<ul style="list-style-type: none"> 94.8% of ERCOT load settled with 15-minute interval data. 6.1M Advanced Metering System (AMS) Electric Service Identifier (ESIIDs) included in settlement as of 1/31/13
Settlement Dollars	Yes	<ul style="list-style-type: none"> For the month of January 2013, the final daily average settlement dollars were \$8.7M, which is up from \$7.9 M in December 2012 and from \$6.2M in January 2012.
Revenue Neutrality	Yes	<ul style="list-style-type: none"> For the month of January 2013, Revenue Neutrality uplift was a charge of \$.19M, which is down slightly from \$.81M in December 2012 and from \$.32M in January 2012.
Market-Based Uplift to Load	Yes	<ul style="list-style-type: none"> For the month of January 2013, the market-based uplift to load was a credit of \$5.48M, as opposed to a \$5.59M credit in December 2012 and a credit of \$6.19M in January 2012.

Operational Dashboard – February 2013

Metric	Trending as Expected	Further Information
Retail Transactions	Yes	<ul style="list-style-type: none"> Seasonal variations in transaction volumes trending as expected
Advanced Metering	Yes	<ul style="list-style-type: none"> 95.7% of ERCOT load settled with 15-minute interval data. 6.2M Advanced Metering System (AMS) Electric Service Identifier (ESIID)s included in settlement as of 2/26/13*
Settlement Dollars	Yes	<ul style="list-style-type: none"> As of settlement of Operating Day 02/25/13*, the daily average settlement dollars are trending to be near \$9.0M, which is up from \$8.7M in January and expected to be higher than February 2012 which had an average of \$5.59M.*
Revenue Neutrality	Yes	<ul style="list-style-type: none"> As of settlement of Operating Day 02/25/13*, Revenue Neutrality uplift is trending as a credit of nearly \$.05M, which is down from last month which was a charge of \$.19M and from February 2012 which was a charge of \$.23M.
Market-Based Uplift to Load	Yes	<ul style="list-style-type: none"> As of settlement of Operating Day 02/25/13*, the market-based uplift to load is trending as a charge of \$6.64M, as opposed to a \$5.48M credit in January and a credit of \$6.73M in February 2012. The swing is due largely to high AS costs on February 6th.

* For full month detail refer to the Monthly Operational Overview.

Market Enhancements Under Consideration

Enhancement	Further Information
Evaluating market design improvement proposals	<ul style="list-style-type: none">• Ongoing discussions with stakeholders on:<ul style="list-style-type: none">• Over mitigation in the Real-time Market• Price reversal during ERS and Load Resource deployment• Reduction to the settlement timeline• Constraint Competitiveness Test design improvements
Evaluating Pilot Project Feasibility	<ul style="list-style-type: none">• 6 month Fast Responding Regulation Service pilot started on Operating Day 2/25/13• 30-minute ERS pilot continuing through end of September 2013• Governing Document for a weather-sensitive ERS pilot project posted for March Board consideration
Look-Ahead SCED	<ul style="list-style-type: none">• Future indicative prices are currently being posted by ERCOT and all identified issues have been addressed.

Major Project Highlights

Project	Trending as Expected	Further Information
SCR760 – Recommended Changes Needed for Information Model Manager and Topology Processor for Planning Models	Yes	Vendor development work for SCR760-1 and SCR760-6, the final two enhancements, is on track for a target release to production by end of June 2013. Schedule and budget are tracking to plan.
NPRR461 - Energy Storage Settlements Consistent with PUCT Project 39917	Yes	The project is currently in the Planning phase. Requirements have been finalized and the project team is working on detailed design and related Planning documentation. Schedule and budget are tracking to plan, with a target to complete the Planning phase and enter into the Execution phase in March 2013.
Oracle 11g Upgrade – Upgrade Oracle databases and related tools that support ERCOT's application portfolio from Oracle 10g to Oracle 11g	Yes	<p>The team has completed re-plan activities to address impacts from December's production storage failure. A revised delivery approach has been implemented that better utilizes known windows when environments and database staff are historically less utilized. This in turn allows the upgrades to continue forward with minimal impacts to other project or environment activities already scheduled.</p> <p>The re-planning effort shows that overall schedule and budget remain intact, with a Aug 2013 target completion for the project. Schedule risk remains high, but the team monitors for issues or impacts to mitigate quickly and avoid additional delays.</p>
CRR Upgrade – Upgrades the CRR clearing engine and associated components to Linux in order to provide measurable performance improvements in the annual auction	Yes	Since delivery of the vendor's defect patch in December, the project has progressed as planned against the revised schedule. Integration testing and preparation of the new Linux production environment completed by March 5, 2013. A final test of the upgrade and Linux environment will occur during a parallel run for the April monthly auction cycle between March 15 – March 18. The go-live cut-over to the new system is scheduled for April 1.

Major Project Highlights

Project	Trending as Expected	Further Information
EMS Upgrade – Upgrade EMS and OTS from ALSTOM EMP 2.3 to EMP 3.0	Yes	<p>Preliminary planning activities focused on assessment of the differences between the ALSTOM base product and ERCOT's production version, as well as delivery of a vendor Statement of Work (SOW) package for the upgrade, completed as planned in January.</p> <p>Overall schedule is on track with the team now conducting a review of the SOW and prepping for a subsequent detailed Planning phase that will focus on activities needed to deliver a complete plan for the upgrade (inclusive of scope and requirements confirmation, design and other technical considerations and the resource needed to deliver this project). Planning is expected to take 5-7 months.</p>
Settlement System Upgrade – Replace proprietary code, data structures and tools with an ERCOT supported solution	Yes	<p>The project completed re-plan activities in January. The re-plan's goal was to address the schedule slip seen in late 2012 by incorporating a change in design and by increasing resource availability to the project. The changes needed are in place and the team has confirmed that the project will go-live in Oct 2014 and supports no change to the budget at this time.</p> <p>As of February 1, the project returned to the Execution mode with focus on on coding efforts. Early deliverables associated with the revised plan and completed over the last 5 weeks are proving out the validity of the revised plan.</p>

The ***ERCOT Monthly Operational Overview*** will be posted to (<http://www.ercot.com/committees/board/>) on the 15th day of the following month