



Tab 4.3: Operations Report (November 2012)

H.B. "Trip" Doggett
President & Chief Executive Officer

Board of Directors Meeting
ERCOT Public
December 11, 2012

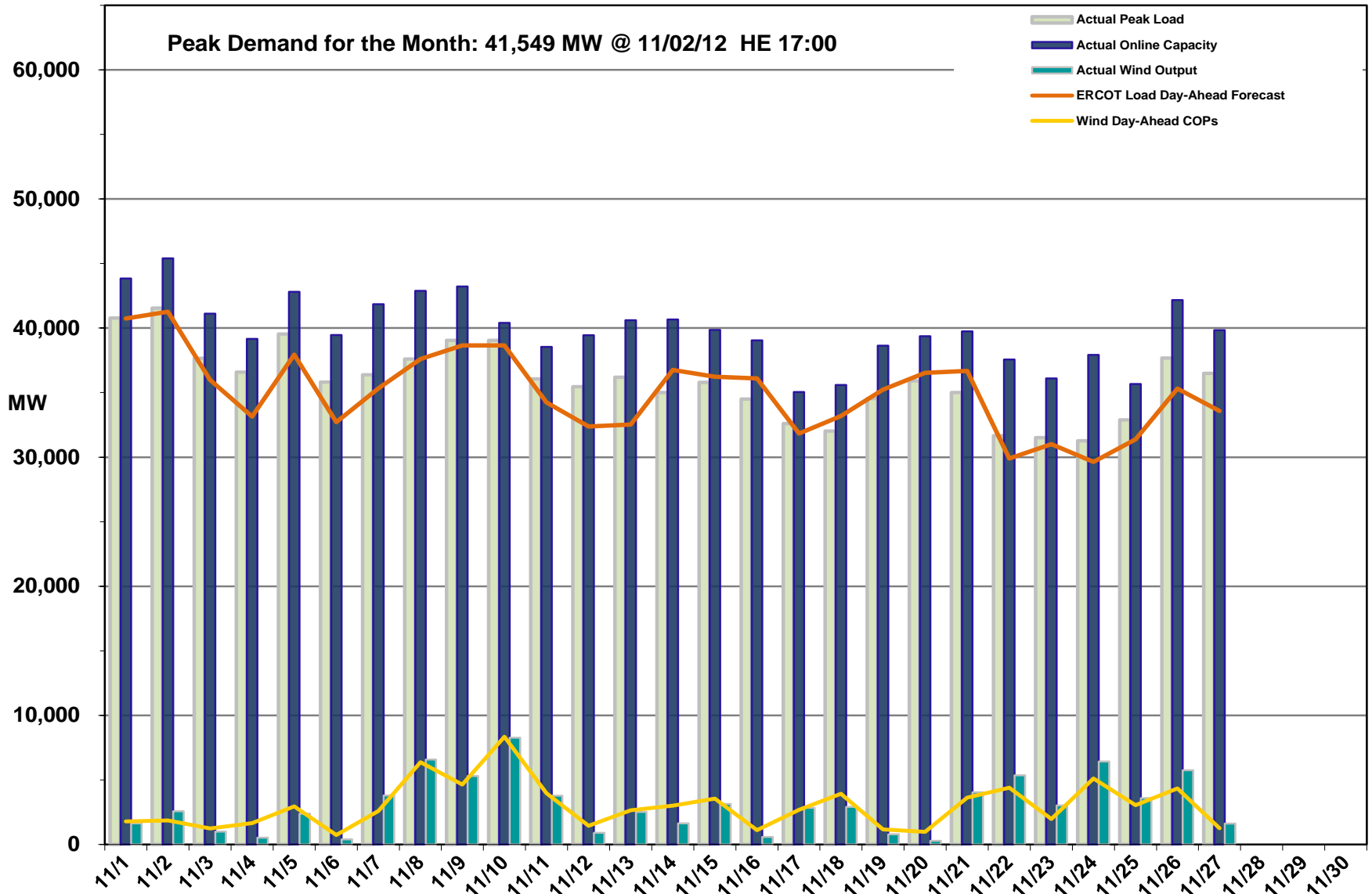
- **November 2012 Operations (through 11/27/12)**

- The peak demand of 41,549 MW on November 2nd was more than the mid-term forecast peak of 41,262 MW and greater than the November 2011 actual peak demand of 41,365 MW. The instantaneous load on November 2nd was 41,745 MW.
- Day-ahead load forecast error for November was 2.94%
- No Advisories issued for Physical Responsive Capability (PRC) below 3000 MW
- No Watches issued for PRC under 2500 MW
- No Energy Emergency Alert (EEA) events

- **Planning Activities**

- 152 active generation interconnection requests totaling over 43,000 MW, including 20,000 MW of wind generation as of November 28, 2012. Nine more requests and 3,000 MW additional total MW since October 31, 2012
- 10,035 MW wind capacity on line November 28, 2012; No change from October 31, 2012

November 2012 Daily Peak Demand: Hourly Average Actual vs. Forecast, Wind Day-Ahead COPs & On-line Capacity at Peak



Tab 4.3

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



Market Statistics – November 2012 (thru the 26th)

Market Statistics	Nov 2011	Nov 2012	2011 Average	2012 YTD Average
Percentage of Real-Time load hedged in Day-Ahead Market	128.08%	129.29%	115.13%	122.80%
Average 'ERCOT Hub Average 345 kV Hub' Settlement Point Price in Day-Ahead Market (\$/MWh)	25.12	30.08	55.19	30.53
Average 'ERCOT Hub Average 345 kV Hub' Settlement Point Price in Real-Time (\$/MWh)	26.76	27.62	50.83	26.65

Operational Performance Measures – November 2012

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 – November 2012 (thru the 26th)

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 & Real-Time prices for Load Zone West were higher than other zones for many days due to planned outages and wind related 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, particularly during peak hours, 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 • Two resources committed in DRUC for this month, both for voltage support

Operational Dashboard – November 2012 (thru the 26th)

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 reliability Six resources committed in HRUC for this month, two for congestion and four for voltage support
Supplemental Ancillary Service Market Monthly Summary	Yes	<ul style="list-style-type: none"> Normal trend indicates that deliverability was not a major concern SASMs generally resulted from unit trips and maintenance outages
Non-Spinning Reserve Service Deployment	Yes	<ul style="list-style-type: none"> Non-Spin was not manually deployed by Operators
Congestion Revenue Rights Price Convergence	No	<ul style="list-style-type: none"> The total CRR value was about 2.1 times of the total CRR cost CRRs were valued much higher due to combination of outage and wind related congestion

Operational Dashboard – November 2012

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"> 93.3% of ERCOT load settled with 15-minute interval data. 5.9M Advanced Metering System (AMS) Electric Service Identifier (ESIIDs) included in settlement as of 11/20/12*
Settlement Dollars	Yes	<ul style="list-style-type: none"> As of settlement of Operating Day 11/19/12*, the daily average settlement dollars are trending to be near \$9.7M, which is down from \$10.53 in October and expected to be higher than November 2011.*
Revenue Neutrality	Yes	<ul style="list-style-type: none"> As of settlement of Operating Day 11/19/12*, Revenue Neutrality uplift is trending as a charge of nearly \$.56M, which is down slightly from last month and down significantly from November 2011.
Market-Based Uplift to Load	Yes	<ul style="list-style-type: none"> As of settlement of Operating Day 11/19/12*, the market-based uplift to load is trending as a charge of over \$1M, which is a slight increase from October and down significantly from November 2011.

* 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">• Hour-Ahead Market• Real-Time Commitment and Dispatch• Competitive Constraint Test design improvements• Over mitigation in Real Time Market• Price reversal during ERS deployments• Reduction to settlement timeline
Evaluating Pilot Project Feasibility	<ul style="list-style-type: none">• FRRS pilot project and governing document approved at November Board meeting• Expected to start mid-January of next year
Look-Ahead SCED	<ul style="list-style-type: none">• Analyzing performance of the future indicative prices that are currently being posted by ERCOT• Working with Market Participants to improve the quality of future indicative prices

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 proposal and estimates for SCR760-1 and SCR760-6, the final two enhancements, have been finalized and development work has started. Schedule and budget continue on track, with the target release to production by end of June 2013.
EMS Upgrade – Upgrade EMS and OTS from ALSTOM EMP 2.3 to EMP 3.0	Yes	Project planning activities in support of code comparisons between ALSTOM base product and ERCOT production version, on track to complete in January 2013. Comparisons for Generation, Load Forecast and SCADA near completion; remaining comparison activities still tracking to deliver in January 2013. Results of the comparisons will be used for detailed planning activities scheduled to start in February 2013.
Oracle 11g Upgrade – Upgrade Oracle databases and related tools that support ERCOT’s application portfolio from Oracle 10g to Oracle 11g	Yes	The project continues on schedule in November, completing additional test environment upgrades, as well as preparation activities for upcoming Production upgrades. Upgrades completed in October remain stable with no identified issues.
NPRR347/400 – Combines the DAM and the Real-Time Market Invoices into a single daily Settlement Invoice; Eliminate Unsecured Credit for CRR Auctions and for Future Credit Exposure (FCE); Eliminate netting of FCE with Current Credit Exposure (CCE)	Yes	Production release was migrated to Production on schedule in early November and the project is currently in stabilization monitoring. The team is testing a code release, to be migrated with the December R6 release, which will address some stabilization needs, as well as NPRR497 requirements.
Settlement System Upgrade – Replace proprietary code, data structures and tools with an ERCOT supported solution	No	Management has implemented several corrective steps addressing solution design and resource commitments intended to reduce risk to the project’s schedule and budget. The team is currently re-planning a change from the solution’s original, more complex design to a less complex, but proven, design. Re-plan activities are scheduled to complete in the January 2013 timeframe and will confirm any impacts to overall schedule and budget.
CRR Upgrade – Upgrades the CRR clearing engine and associated components to Linux in order to provide measurable performance improvements in the annual auction	No	Due to defects discovered in the vendor code package, plans to run new functionality in parallel with October’s annual auction did not occur. The delay in resolving the defects has impacted go-live plans; however, the team is actively working with the vendor to confirm patch release dates in order to assess schedule and budget impacts.

Tab 4.3
ERCOT Public



Projects with Red or Yellow Status

Project	Trending as Expected	Further Information
ERCOT Website Enhancements	No	Completion of development and testing activities, as well as the go-live date for the enhanced ERCOT.com public website, are delayed due to requirements and design issues that need to be addressed. While the new website design and solution are aligned with Business needs, the content management functions to support the new website require additional effort to deliver. The team is currently updating documentation to address gaps and assessing the work remaining in order to confirm schedule and budget impacts.
Cyber Security Project #1	No	Planned go-live in December has been delayed a few weeks as a result of database changes that were outside of this project, but resulted in reconfiguration changes and additional fail-over testing for the project team. No impact to overall budget.
ITRON Load Forecast	No	Launch was previously pushed from the October (R5) release to the December (R6) release. The team is tracking to the revised go-live date and remains within the original budget. The delay was necessitated by additional time needed to address requirements/design issues prior to launch and by a change in project resources resulting from the resignation of a key team member.
NPRR322 – Real-Time PTP Option Modeling	No	Schedule remains intact for the December (R6) release; however the budget required an increase due to additional effort by the development team to deliver the code changes.
CRR Upgrade	No	Schedule is slipping due to longer than expected vendor defect remediation cycles. Team is actively working with the vendor to confirm patch release dates in order to assess schedule and budget impacts.

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