



Item 4.3: Operations Report **(July and August)**

Trip Doggett
President & CEO

Board of Directors Meeting
ERCOT Public
September 17, 2013

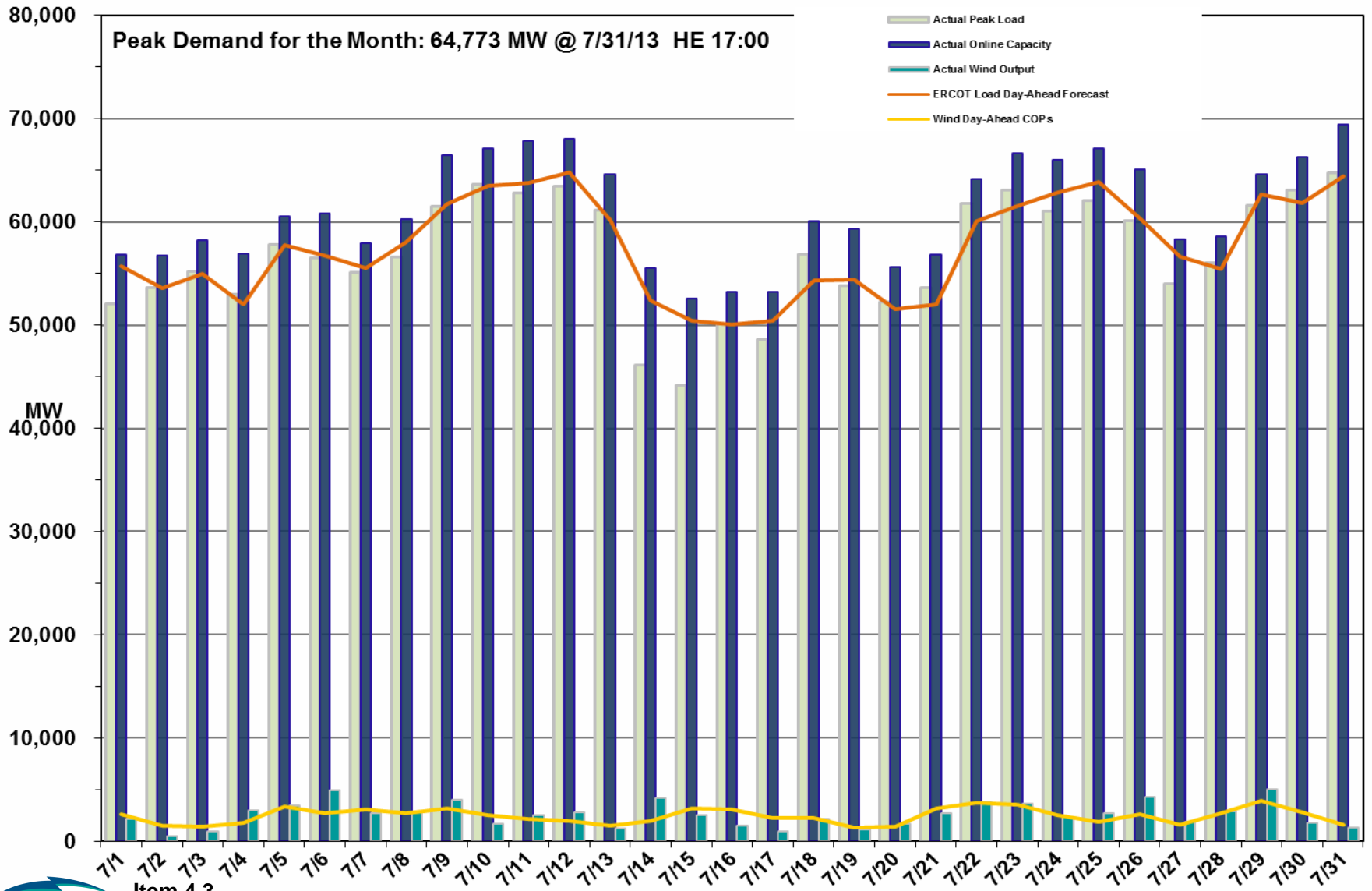
Summary – July 2013

- July 2013 Operations
 - The peak demand of 64,773 MW on July 31st was more than the mid-term forecast peak of 64,393 MW and less than the July 2012 actual peak demand of 65,787 MW. The instantaneous load on July 31st was 65,004 MW.
 - Day-ahead load forecast error for July was 2.70%
 - ERCOT issued two Advisories.
 - Two separate advisories for Voltage Security Assessment Tool (VSAT) not solving for 30 minutes.
 - No Watches were issued
 - No Energy Emergency Alert (EEA) events
- Planning Activities
 - 163 active generation interconnection requests totaling over 42,800 MW, including 21,000 MW of wind generation as of July 31, 2013. Two more requests and 1,800 more total MW from June 30, 2013
 - 10,570 MW wind capacity in commercial operation July 31, 2013; no change from June 30, 2013

Summary – August 2013

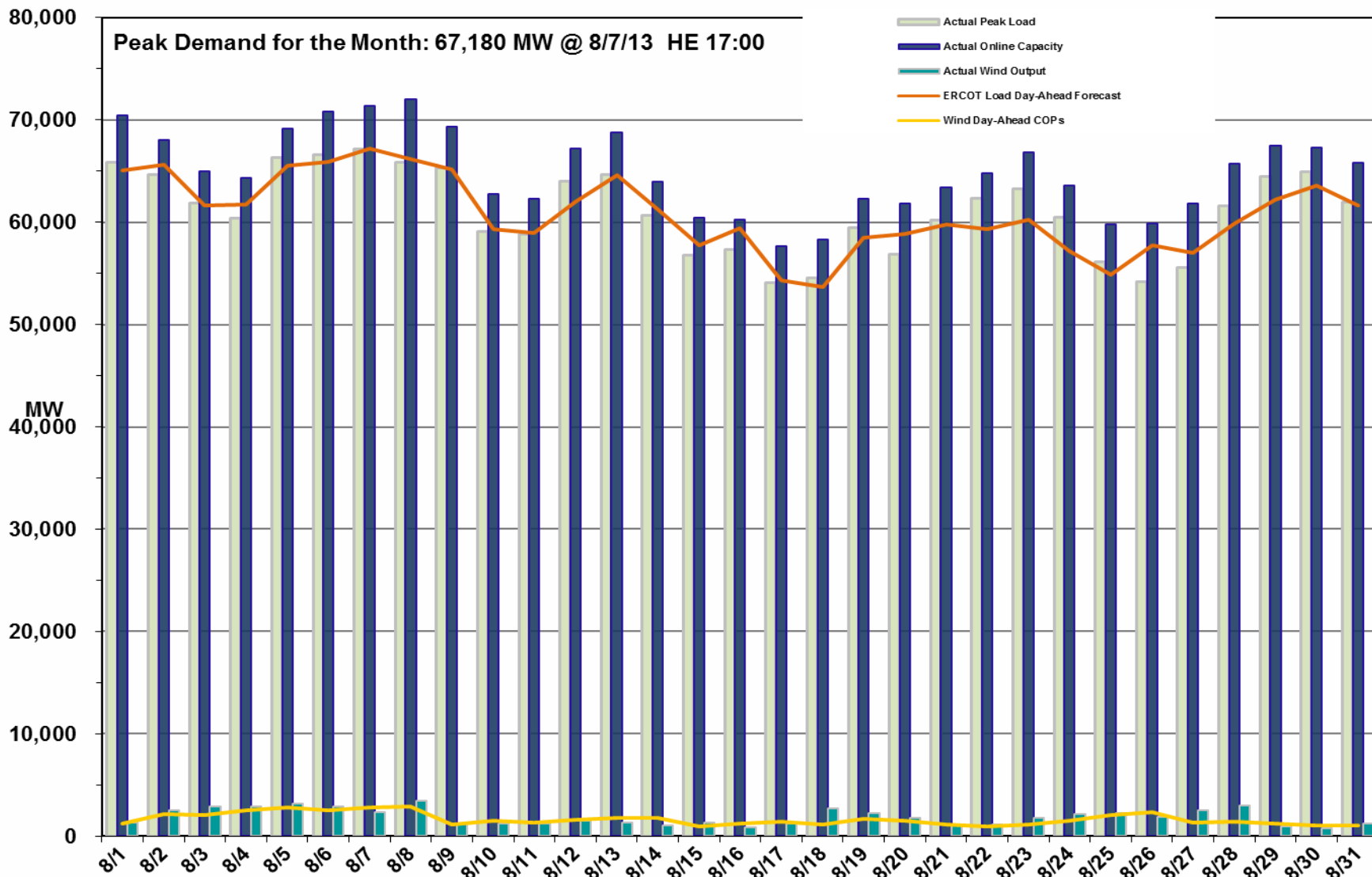
- August 2013 Operations
 - The peak demand of 67,180 MW on August 7th was less than the mid-term forecast peak of 67,225 MW but greater than the August 2012 actual peak demand of 66,509 MW. The instantaneous load on August 7th was 67,314 MW.
 - Day-ahead load forecast error for August was 2.07%
 - ERCOT issued two Advisories.
 - Two separate advisories for extreme hot weather expected in the North Central and South Central weather zones (8/7,8/8).
 - No Watches were issued
 - ERCOT issued an Emergency Notice due to SCED failure (8/16 03:10)
 - No Energy Emergency Alert (EEA) events
- Planning Activities
 - 162 active generation interconnection requests totaling over 41,400 MW, including 20,900 MW of wind generation as of August 31, 2013. One less requests and 1,400 less total MW from July 31, 2013
 - 10,570 MW wind capacity in commercial operation August 31, 2013; no change from July 31, 2013

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



Item 4.3
ERCOT Public

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



Item 4.3
ERCOT Public

Market Statistics – July 2013

Market Statistics	July 2012	July 2013	2012 Average	2013 YTD Average
Percentage of Real-Time load hedged in Day-Ahead Market	117.24%	118.65%	122.66%	118.41%
Average 'ERCOT Hub Average 345 kV Hub' Settlement Point Price in Day-Ahead Market (\$/MWh)	32.34	35.68	30.18	32.78
Average 'ERCOT Hub Average 345 kV Hub' Settlement Point Price in Real-Time (\$/MWh)	27.91	33.27	26.49	30.25

Market Statistics – August 2013

Market Statistics	August 2012	August 2013	2012 Average	2013 YTD Average
Percentage of Real-Time load hedged in Day-Ahead Market	116.96%	117.45%	122.66%	118.29%
Average 'ERCOT Hub Average 345 kV Hub' Settlement Point Price in Day-Ahead Market (\$/MWh)	44.54	39.69	30.18	33.88
Average 'ERCOT Hub Average 345 kV Hub' Settlement Point Price in Real-Time (\$/MWh)	30.64	33.81	26.49	30.82

Operational Performance Measures – July 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 – August 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 – July & August 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 during this period

Operational Dashboard – July & August 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 reliability No resources were committed in HRUC during this period
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 not deployed during this period
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 – July 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"> 97.0% of ERCOT load settled with 15-minute interval data. 6.3M Advanced Metering System (AMS) Electric Service Identifier (ESIIDs) included in settlement as of July 2013.
Settlement Dollars	Yes	<ul style="list-style-type: none"> For the month of July 2013, the daily average settlement dollars are \$12.6M, which is up from \$12.4M in June 2013 and lower than July 2012 which had an average of \$10.9M.
Revenue Neutrality	Yes	<ul style="list-style-type: none"> For the month of July 2013, Revenue Neutrality uplift is a charge of nearly \$4.99M, which is up slightly from June 2013 which was a charge of \$4.82M and down significantly from July 2012 which was a charge of \$11.11M.
Market-Based Uplift to Load	Yes	<ul style="list-style-type: none"> For the month of July 2013, the market-based uplift to load is trending as a credit of \$22.92M, as opposed to a \$11.89M credit in June 2013 and a credit of \$16.27M in July 2012.

Operational Dashboard – August 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"> 97.2% of ERCOT load settled with 15-minute interval data. 6.4M Advanced Metering System (AMS) Electric Service Identifier (ESIIDs) included in settlement as of 8/28/13*
Settlement Dollars	Yes	<ul style="list-style-type: none"> As of settlement of Operating Day 08/29/13*, the daily average settlement dollars are \$13.1M, which is up from \$12.6M in July 2013 and higher than August 2012 which had an average of \$12.9M.
Revenue Neutrality	Yes	<ul style="list-style-type: none"> As of settlement of Operating Day 08/29/13*, Revenue Neutrality uplift is a charge of nearly \$3.71M, which is down from July 2013 which was a charge of \$4.99M and down significantly from August 2012 which was a charge of \$10.10M.
Market-Based Uplift to Load	Yes	<ul style="list-style-type: none"> As of settlement of Operating Day 08/29/13*, the market-based uplift to load is trending as a credit of \$5.52M, as opposed to a \$22.37M credit in July 2013 and a charge of \$3.87M in August 2012.

* 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">• ERCOT is scheduled to provide a draft NPRR and corresponding Other Binding Document (OBD) that would implement Hogan B+ as described in the white paper<ul style="list-style-type: none">• The target date for the submittal to the PUC is 9/19/2013 (3 weeks from the 8/29/2013 Open Meeting)• Key parameters will be left as variables
Evaluating Pilot Project Feasibility	<ul style="list-style-type: none">• Fast Responding Regulation Service pilot started on Operating Day 2/25/13 and will continue until 2/28/14• 30-minute ERS pilot continuing through end of January 2014 with NPRR introduced into stakeholder process and targeting Nov. 2013 Board for consideration• Weather-sensitive ERS pilot project will conclude at the end of September with final report scheduled before the end of 2013

Major Project Highlights

Project	Trending as Expected	Further Information
SCR760 – Recommended Changes Needed for Information Model Manager and Topology Processor for Planning Models	Yes	The final components of this project were released to production as planned, in late July during the R4 release window. The project is now in the Closing phase with final cost estimated to remain within the approved budget.
NPRR461 – Energy Storage Settlements Consistent with PUCT Project 39917	Yes	This project was released, as planned, to production in late July with the R4 release. Stabilization activities completed in August and the project is now in the Closing phase. Final estimated cost remains aligned with the approved budget.
Oracle 11g Upgrade – Upgrade Oracle databases and related tools that support ERCOT’s application portfolio from Oracle 10g to Oracle 11g	Yes	<p>Work delays previously reported have been re-planned with no impacts to approved budget. The revised schedule, approved by ERCOT management in July, extends the project completion to the end of Q1 2014.</p> <p>Upgrades for the Information Services Master (ISM) database were delivered to production in August, along with updates to development for ISM, CDR, and NDCRC databases. The team also started work, on schedule, for upgrades to MIS, EMS, and RCD databases.</p>
NPRR484 – Revisions to Congestion Revenue Rights Credit Calculations and Payments	No	<p>Project is in Execution phase with a target go-live of October 21st for Phase 1A scope (core functionality to support the NPRR requirements).</p> <p>The project has been working to an extremely aggressive schedule and performance issues are putting the go-live date at risk. At this time, plans for Market testing remain intact, however, any changes to the schedule will be confirmed by September 27, as well as a revised go-live target, if possible.</p>

Major Project Highlights (cont.)

Project	Trending as Expected	Further Information
<p>EMS Upgrade – Upgrade EMS and OTS from ALSTOM EMP 2.3 to EMP 3.0</p>	<p>Yes</p>	<p>The project gated to Planning Phase 2 on August 7 and will continue in this phase through June 2014. This phase will deliver the detailed plan and schedule, as well as develop the budget, that will deliver the upgrade to production and stabilization.</p> <p>Business, development and production teams are on track with planned milestone dates for the delivery of individual subsystems' functional requirements, functional design and test script documentation. Technical architecture team has identified the existing platforms as upgrade candidates. Prototype of CIM Importer subsystem is in progress to determine the development effort and risk associated with this program area.</p> <p>Delivery of the EMP 3.0 product release, forecasted for July, was delayed by the vendor and is now forecasted for September.</p>
<p>ABB MMS/OS Technology Refresh - improve ERCOT's ability to support and maintain the Market Management System (MMS) and Outage Scheduler (OS) system by upgrading the underlying infrastructure and its required components to versions on mainstream vendor support</p>	<p>Yes</p>	<p>The project began Planning activities in late May 2013 that will continue through November. It remains in line with approved schedule and budget.</p> <p>Planning activities are focused on vendor site installation of required hardware and software to support testing phases to follow, as well as documentation of the test strategy required for functional, regression and middleware component testing. The team is also evaluating current environment impacts to ensure progress towards delivery while minimizing impacts to other projects or testing initiatives.</p>
<p>Settlement System Upgrade – Replace proprietary code, data structures and tools with an ERCOT supported solution</p>	<p>Yes</p>	<p>The project continues in Execution, tracking to the approved schedule that completes the upgrade to production by end of 2014. Costs continue to trend to stay within the Board-approved budget.</p> <p>Code development of business logic, bundled into 10 major component deliveries, continues as planned and Functional Acceptance Test (FAT) activities, led by the Business team, are now underway for half of these components. FAT is planned to complete by mid-2014, followed by full system batch and integration tests that run through early Q4 2014.</p>

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