



Item 8.3: Operations Report **(July & August 2014)**

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President & Chief Executive Officer

Board of Directors Meeting
ERCOT Public
October 13-14, 2014

Summary – July 2014

Operations

- The peak demand of 63,500 MW on July 21st was greater than the mid-term forecast peak of 60,616 MW but less than the July 2013 actual peak demand of 64,814 MW. The instantaneous peak load on July 21st was 63,692 MW.
- Day-ahead load forecast error for July was 3.27%
- ERCOT issued 2 notifications
 - A single advisory due to PRC being below 3,000 MW.
 - A single advisory due to ERCOT's Voltage Security Assessment Tool (VSAT) being unavailable.

Planning Activities

- 231 active generation interconnection requests totaling over 63,000 MW, including 25,300 MW of wind generation as of July 31, 2014. One additional request and 2600 more MW from June 30, 2014.
- 11,566 MW wind capacity in commercial operations on July 31, 2014.

Summary – August 2014

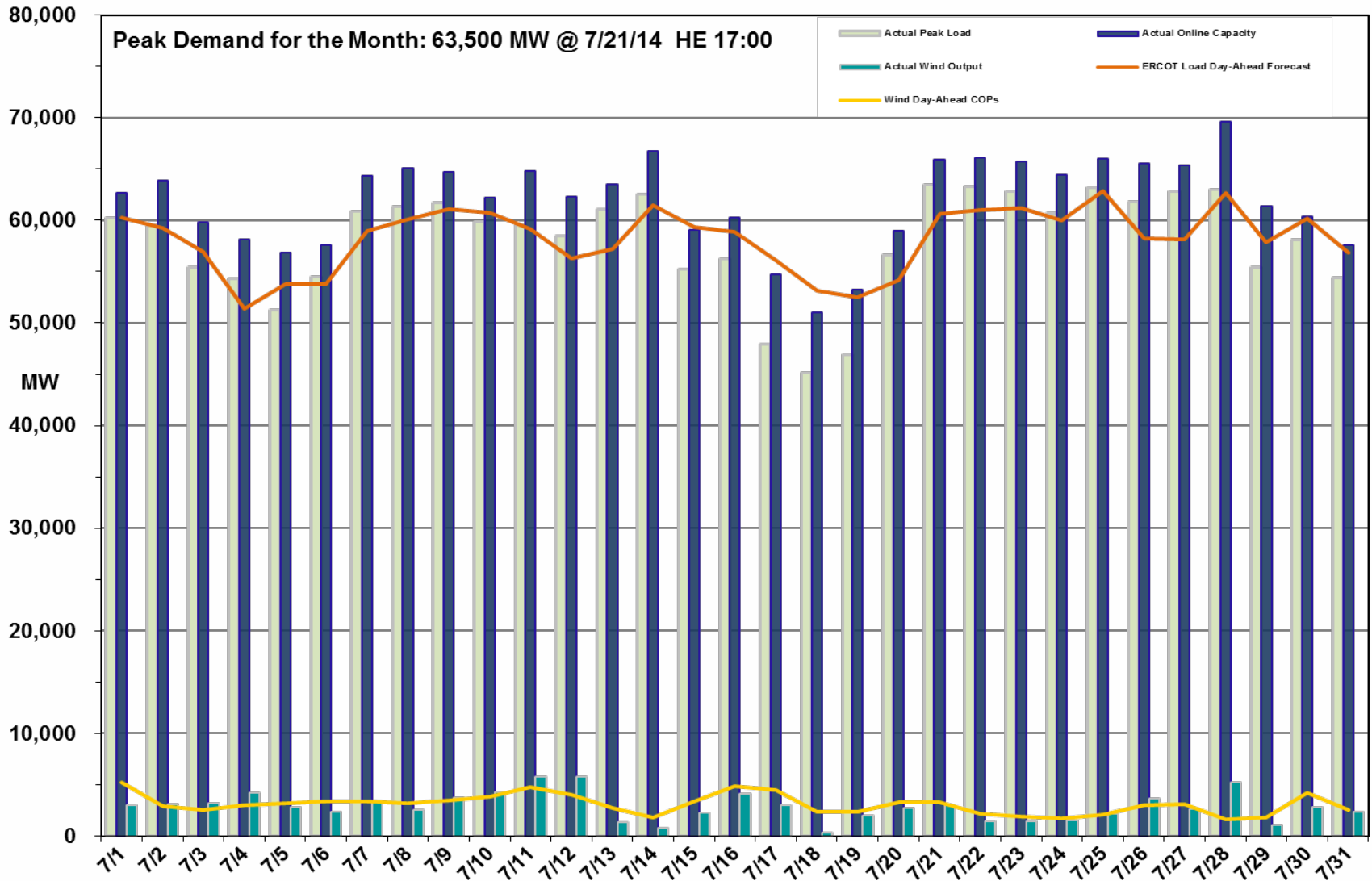
Operations

- The peak demand of 66,427 MW on August 25th was less than the mid-term forecast peak of 66,849 MW as well as the August 2013 actual peak demand of 67,245 MW. The instantaneous load on August 25th was 66,622 MW.
- Day-ahead load forecast error for August was 2.35%.
- ERCOT issued 5 notifications
 - Two OCNs due to projected reserve capacity shortages.
 - A single OCN for an EMMS site failover.
 - A single advisory due to ERCOT's Voltage Security Assessment Tool (VSAT) being unavailable.
 - A single advisory for the deadline for DAM submissions being extended.

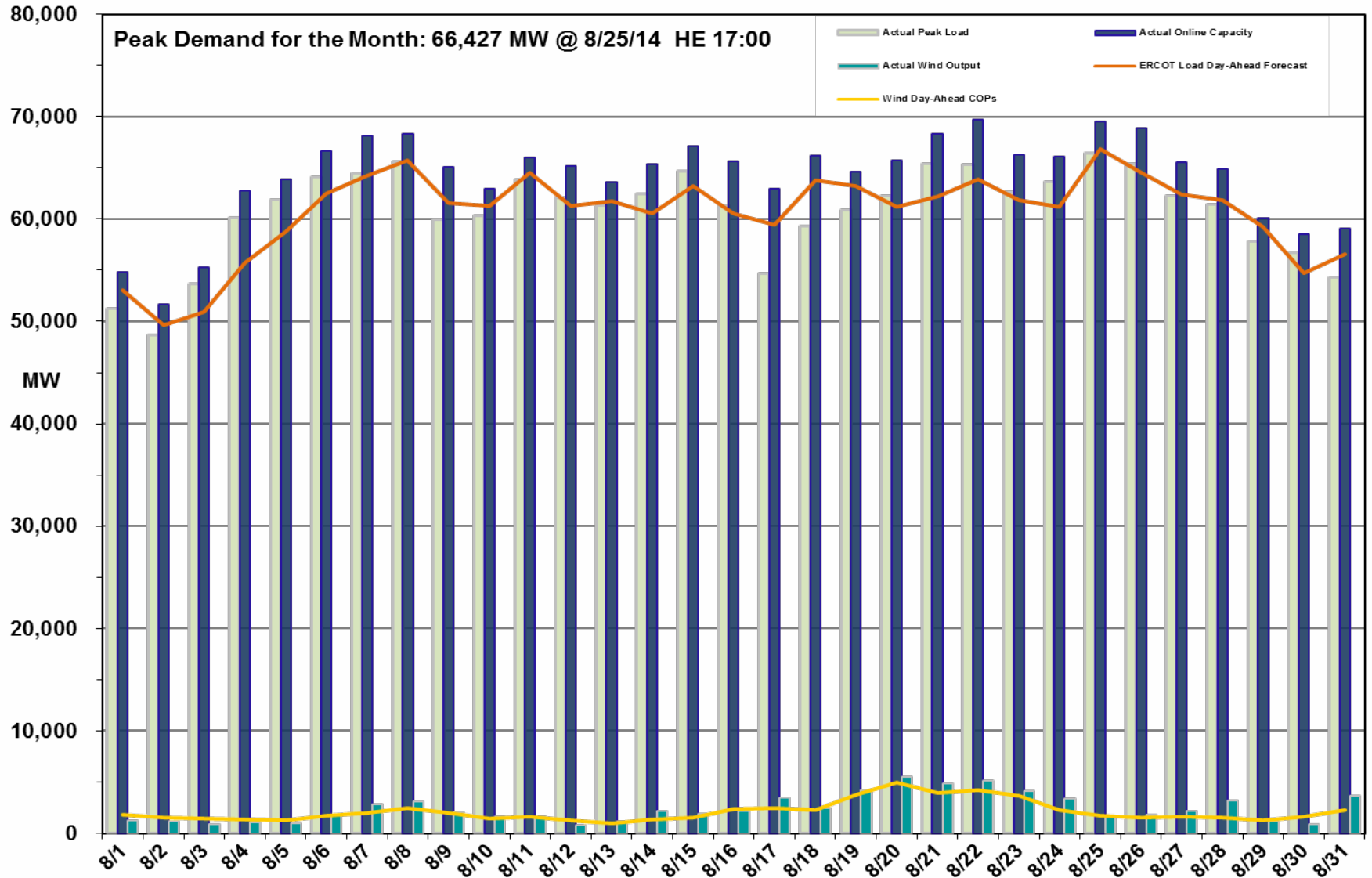
Planning Activities

- 230 active generation interconnection requests totaling over 62,800 MW, including 25,300 MW of wind generation as of August 31, 2014. One less request and 200 less MW from July 31, 2014.
- 11,509 MW wind capacity in commercial operations on August 31, 2014.

Daily Peak Demand: Hourly Average Actual vs. Forecast, Wind Day-Ahead COPs & On-line Capacity at Peak – July 2014



Daily Peak Demand: Hourly Average Actual vs. Forecast, Wind Day-Ahead COPs & On-line Capacity at Peak – Aug. 2014



Market Statistics – July 2014

Market Statistics	July 2013	July 2014	2013 Average	2014 YTD Average
Percentage of Real-Time load hedged in Day-Ahead Market	118.65%	115.89%	121.18%	124.32%
Average 'ERCOT Hub Average 345 kV Hub' Settlement Point Price in Day-Ahead Market (\$/MWh)	35.68	38.48	34.14	44.15
Average 'ERCOT Hub Average 345 kV Hub' Settlement Point Price in Real-Time (\$/MWh)	33.27	34.75	32.45	42.99

Market Statistics – August 2014

Market Statistics	August 2013	August 2014	2013 Average	2014 YTD Average
Percentage of Real-Time load hedged in Day-Ahead Market	117.45%	113.25%	121.18%	122.94%
Average 'ERCOT Hub Average 345 kV Hub' Settlement Point Price in Day-Ahead Market (\$/MWh)	39.69	42.95	34.14	43.96
Average 'ERCOT Hub Average 345 kV Hub' Settlement Point Price in Real-Time (\$/MWh)	33.81	37.27	32.45	42.10

Operational Performance Measures – July & August 2014

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

Operational Dashboard – July & August 2014

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 resource was committed in DRUC in this period

Operational Dashboard – July & August 2014

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 2 resources were committed in July and 2 resources were committed in August to help resolve congestion
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
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 2014

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"> 98.2 % of ERCOT load settled with 15-minute interval data. 6.6M Advanced Metering System (AMS) Electric Service Identifier (ESIIDs) included in settlement as of July 2014.
Settlement Dollars	Yes	<ul style="list-style-type: none"> As of settlement of Operating Day 07/31/2014, the daily average settlement dollars for July are \$13.56M, which is down from \$13.90M in June 2014 and higher than July 2013 which had an average of \$12.58M.
Revenue Neutrality	Yes	<ul style="list-style-type: none"> As of settlement of Operating Day 07/31/2014, Revenue Neutrality uplift is a charge of \$4.39M, which is up from a \$1.19M charge in June 2014 and down from a \$5.00M charge in July 2013.
Market-Based Uplift to Load	Yes	<ul style="list-style-type: none"> As of settlement of Operating Day 07/31/2014, the market-based uplift to load is a credit of \$5.73M, as opposed to a \$3.29M charge in June 2014 and a credit of \$8.33M in July 2013.

Operational Dashboard – August 2014

Metric	Trending as Expected	Further Information
Retail Transactions	No	<ul style="list-style-type: none"> Mass Transition of 639 ESI IDs Seasonal variations in transaction volumes trending as expected
Advanced Metering	Yes	<ul style="list-style-type: none"> 98.3 % of ERCOT load settled with 15-minute interval data. 6.6M Advanced Metering System (AMS) Electric Service Identifier (ESIID)s included in settlement as of August 2014.
Settlement Dollars	Yes	<ul style="list-style-type: none"> As of settlement of Operating Day 8/31/2014, the daily average settlement dollars for August are \$14.99M, which is up from \$13.56M in July 2014 and from August 2013 which had an average of \$13.53M.
Revenue Neutrality	Yes	<ul style="list-style-type: none"> As of settlement of Operating Day 8/31/2014, Revenue Neutrality uplift is a charge of \$3.83M, which is down from July 2014 which was a charge of \$4.39M and up from August 2013 which was a charge of \$3.82M.
Market-Based Uplift to Load	Yes	<ul style="list-style-type: none"> As of settlement of Operating Day 8/31/2014, the market-based uplift was a charge of \$10.30M, as opposed to a credit of \$5.73M in July 2014 and a charge of \$1.67M in August 2013.

Market Enhancements Under Consideration

Enhancement	Further Information
Evaluating market design improvement proposals	<ul style="list-style-type: none">• Operating Reserve Demand Curve (ORDC)<ul style="list-style-type: none">• ERCOT is working with stakeholders to improve the ORDC design• Future Ancillary Services Team (FAST) Activity<ul style="list-style-type: none">• FAST-TAC meetings were conducted in July, August and September to review the Draft NPRR• Comments on the Draft NPRR are due on October 15, 2014• Scheduled to revise the Draft NPRR and submit the numbered NPRR by November 17, 2014• A Request for Proposal for a Cost Benefit Analysis (CBA) on the Future Ancillary Services framework was released in September• Vendor selection for CBA expected by December 1, 2014
Evaluating Pilot Project Feasibility	<ul style="list-style-type: none">• No current pilot projects

Major Project Highlights (as of 9/24/2014)

Project	Trending as Expected	Further Information
<p>EMS Upgrade – Upgrade EMS and OTS from ALSTOM EMP 2.3 to EMP 3.0</p>	Yes	<ul style="list-style-type: none"> • Project is tracking to the approved schedule and budget • Planning Phase 2: <ul style="list-style-type: none"> ○ Execution phase schedule and budget development complete ○ ALSTOM Task Order (contract) for the Execution phase complete ○ Executive review and approval to gate into the Execution phase complete • Other development/testing work completed or in progress: <ul style="list-style-type: none"> ○ Load Frequency Control and related subsystem detailed testing in progress at ERCOT; as built design document update in progress at ALSTOM ○ Network Analysis detailed testing of the planned groups of customs (mainly developed by ALSTOM) complete; issues being fixed/tested ○ Additional Network Analysis group development assigned within ERCOT complete as planned with remaining work pending for the Execution phase ○ Operator Training Simulator (OTS) migration work on track ○ Load Forecast, Scada and ETS (CIM Importer) – previously completed and in maintenance
<p>Oracle 11g Upgrade – Upgrade Oracle databases and related tools that support ERCOT's application portfolio from Oracle 10g to Oracle 11g</p>	Yes	<ul style="list-style-type: none"> • All planned system upgrades have been completed • Project is now in stabilization and will close in October
<p>NMMS Upgrade – Replace the current Siemens NMMS application with the next generation of model management software available from Siemens</p>	Yes	<ul style="list-style-type: none"> • Completed Planning Phase 1 which delivered the detailed requirements and resulted in the execution of a Statement of Work (SOW) with Siemens • Planning Phase 2 is currently in progress and on schedule. Deliverables during this phase include detailed designs, detailed test plan, prototypes of the user interface and a detailed work plan/schedule for the Execution phase • On track to complete Planning Phase 2 and transition to the Execution phase in early December.

Major Project Highlights (as of 9/24/2014) – continued

Project	Trending as Expected	Further Information
<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>	<ul style="list-style-type: none"> • Gated to the Execution phase in August and project currently proceeding as planned <ul style="list-style-type: none"> ○ ABB delivered the new release to ERCOT at the end of August ○ The release is installed in development environments; installation in Functional Testing environment in progress ○ Functional testing to begin by the end of September • Other ERCOT milestones completed recently include: <ul style="list-style-type: none"> ○ Delivery of infrastructure changes for Development, Functional and Integration test environments, including hardware and third party software installations ○ Successful upgrade of the database within Development and Functional Testing environments ○ Completion of documented test procedures to be used for Functional and Integration testing ○ Completion of the Technical Architecture document
<p>Settlement System Upgrade – Replace proprietary code, data structures and tools with an ERCOT supported solution</p>	<p>Yes</p>	<ul style="list-style-type: none"> • Go-live of Data Aggregation functionality occurred as planned with Release 4 in July; no major issues encountered • Go-live of Settlements and Billing (S&B) functionality continues on track for production with Release 6 in December <ul style="list-style-type: none"> ○ Development for the application replacement is complete ○ Functional acceptance testing and performance testing activities are underway and scheduled to complete in October ○ Full integration testing will complete in November • The project is also on schedule with two NPRRs that have been incorporated into the scope of delivery with Release 6. Both are scheduled to complete FAT in October and go-live in December <ul style="list-style-type: none"> ○ NPRR580, Congestion Revenue Rights Credit Calculations & Payments ○ NPRR467, Balancing Account resettlement Due to DAM Resettlement
<p>NPRR626 – Reliability Deployment Price Adder</p>	<p>Yes</p>	<ul style="list-style-type: none"> • Project is currently in the early stages of Planning and is exploring options to deliver a quality solution in an expeditious manner

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