**Item 4.1: CEO Update**

Bill Magness
President & Chief Executive Officer
ERCOT

Board of Directors Meeting

ERCOT Public
October 9, 2018

ERCOT Market Performance for Summer 2018

- On Sept. 24, ERCOT filed its Summer 2018 ERCOT Market Performance report with the PUCT (Project #48551).

- The ERCOT region experienced record-setting levels of demand on the system, and there was sufficient generation to meet the demand.
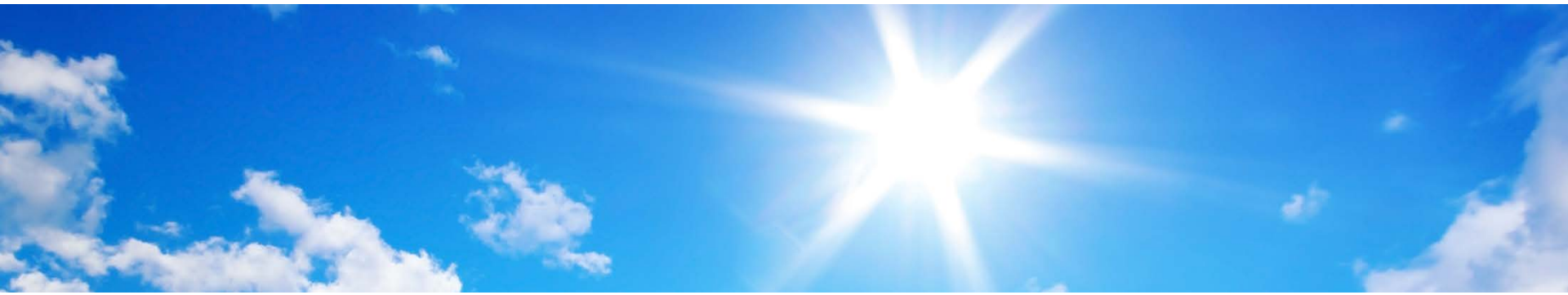
- Staff will provide a summer operations update.
  - Dan Woodfin, Senior Director, System Operations
  - Dave Maggio, Senior Manager, Market Analysis and Validation

CEO Update: Variance to Budget ($ in Millions)
Net Revenues After Department Expenditures

Net Revenues Year-to-Date Actuals: $23.3 M Favorable *(as of Aug. 31, 2018)*

Highlighted Revenue Variances

$6.4 M over budget: interest income due to higher investment balance and rates

$6.7 M over budget: system administration fees due to weather and stronger economy

$1.2 M over budget: interconnection revenue

Highlighted Expenditure Variances

$1.4 M under budget: HW/SW support and maintenance renewals

$1.2 M under budget: external studies/consulting services

$0.7 M under budget: employee health costs

$0.3 M under budget: resource management ($-1.2 M staffing management; $1.5 M project work)

$2.8 M under budget: timing differences

Net Revenues Year-End Forecast: $25.5 M Favorable *(as of Sept. 27, 2018)*

Highlighted Revenue Variances

$9.8 M over budget: interest income due to higher investment balance and rates

$7.8 M over budget: system administration fees based on current actuals and load forecast for remainder of year

$1.7 M over budget: interconnection revenue

Highlighted Expenditure Variances

$1.5 M under budget: HW/SW support and maintenance renewals

$1.3 M under budget: external studies/consulting services

$1.1 M under budget: employee health costs

$0.8 M over budget: resource management ($-2.3 M staffing management; $1.5 M project work)

2018 R5 Release Summary

R5 Release Dates: Oct. 23 – 25, 2018

- 127 Change Requests across the application areas

- NPRRs
  - NPRR833: Modify PTP Obligation Bid Clearing Change
    - DAM changes
  - NPRR843: Short-Term System Adequacy and AS Offer Disclosure Reports Additions
    - One CDR report, one 48-hour report and two 7-day reports
  - NPRR864: RUC Modifications to Consider Market-Based Solutions
  - SCR795: Addition of Intra-Hour Wind Forecast to GTBD Calculation

- R5 impacted functional areas
  - Congestion Revenue Rights, Data and Information Products, Data Management & Governance, Energy Management System, Enterprise Integration Nodal Services, Enterprise Integration Retail Services, Infrastructure, Market Management System, Market Settlements, Outage Scheduling, Retail Operations, Web Communications
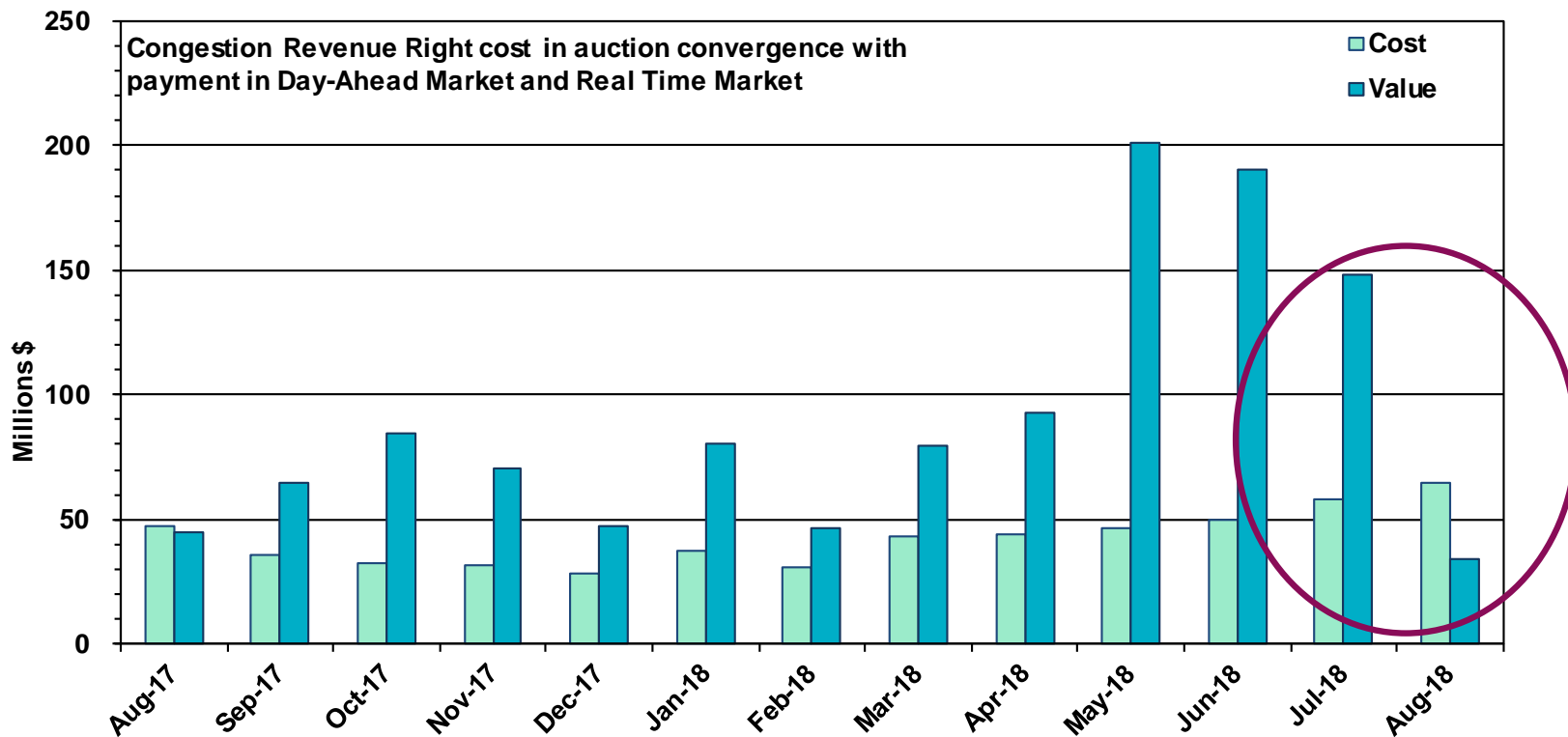
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Major Projects Reported "Not Trending As Expected"

- **Congestion Revenue Rights (CRR) - $2.9M**
  - <u>Project objective</u>: Upgrade features and technology for auction software
  - Vendor quality issues resolved
  - Scheduled for Nov. 19, 2018 go-live

- **Credit Monitoring and Management (CMM) - $4.3M**
  - <u>Project objective</u>: In current Phase 1b, implement NPRR 510, 620, 660, 741, 755 and upgrade technology
  - Early software deliveries did not meet business expectations. Project communication was improved to ensure future expectations are met.
  - Expect re-plan to finalize in October 2018

Project Updates

- **IT Change and Configuration Management (ITCM/CMS) $5.8M**
  - <u>Project objective</u>: Increase efficiency, control and visibility to manage hardware/software
  - Project remains on schedule, but with increased resources dedicated over original estimate ($580K increase). Additional work may extend the go-live date (now scheduled for Q4 2018).
  - Increased workload involves building reference data for go-live and ensuring operational readiness

- **Identity and Access Management (IAM) $7.4M**
  - <u>Project objective</u>: Upgrade internal Access Management system
  - Six-month delay in scheduled completion, $1.3M increase
  - Increased workload to remediate old system data, ensure proper integration and simplify user experience
  - Schedule (phase in) for Q2 2019

CRR Price Convergence – Auction Revenues Exceed Payments in the DAM and RT in August 2018

Congestion Revenue Right cost in auction convergence with payment in Day-Ahead Market and Real Time Market

- This is a metric for evaluating the efficiency of the Congestion Revenue Right (CRR) market.

- All else being equal, the price at which Market Participants purchase CRRs is expected to match the return they get on those CRRs (price modified for risk and time value of money).

- Auction revenues were lower than CRR payments in July, but revenues were greater than payments in August.

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Information Security: NPPRs in the Stakeholder Process

- **NPRR 899: Digital Certificates and User Security Administrator Clarifications and Opt Out Procedure**

  - Market Participants raised concerns about the administration of Digital Certificates.

  - This NPRR allows certain Market Participants to opt out of receiving Digital Certificates and appointing a User Security Administrator, and also clarifies other requirements.

  - Those who opt out will no longer have access to the MIS Secure area and Certified area. This allows better management of access to secure information.

- **NPRR 902: ERCOT Critical Energy Infrastructure Information (ECEII)**

  - Defines ECEII and clarifies Market Participants' responsibilities

  - Provides a framework for the submission of ECEII to ERCOT

  - Creates a process for contesting ERCOT determinations on ECEII

New GIS Report and Resource Capacity Trend Charts

- The Generator Interconnection Status Report has been redesigned to include more project information.

- Resource capacity charts are now located in a separate file, under a new category on the Resource Adequacy page.

- Two new charts are available for gas capacity.

- Home page ⟶ Grid Information ⟶ Resource Adequacy ⟶ Resource Capacity Trend Charts

Generator Interconnection Status Report

View the latest public interconnection information on generation resources in the ERCOT region.

GIS Report August 2018
Generator interconnection activity for August, using the new report format.
(Sep 18, 2018 – xlsx – 114.5 KB)

Resource Capacity Trend Charts

Files with charts and accompanying data showing annual changes in resource capacity by fuel type for the ERCOT Region, incorporating both historical additions and planned projects being studied as part of the interconnection request process. The chart files are updated on a monthly basis.

Capacity Changes by Fuel Type Charts, August 2018
Bar charts and accompanying data showing historical and planned capacity additions for gas, wind and solar resource types.
(Sep 07, 2018 – xlsx – 59.9 KB)
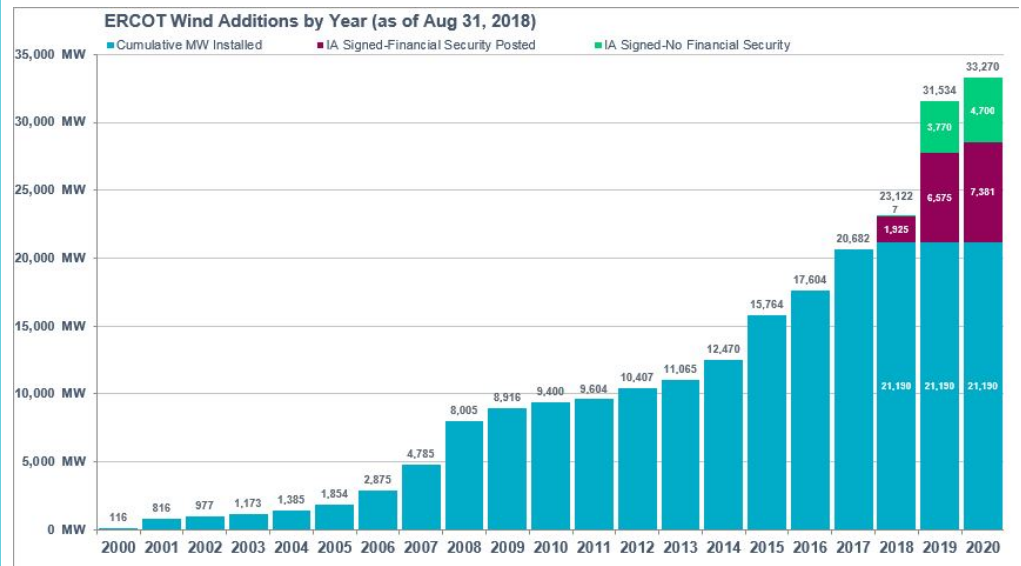
Upcoming Reports

Brattle
THE POWER OF **ECONOMICS**

At the request of the PUCT, ERCOT will release a study by the Brattle Group on the Economically Optimal Reserve Margin (EORM) and Market Equilibrium Reserve Margin (MERM) on Oct. 12.

ERCOT will release its final winter Seasonal Assessment of Resource Adequacy (SARA) and preliminary spring Seasonal Assessment of Resource Adequacy on Nov. 1.

October 2018	November 2018

On Oct. 25, ERCOT will participate in a PUC workshop to provide a review of ERCOT's summer performance. (PUC Project #48551)

NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

NERC's "Accelerated Generation Retirements Special Reliability Assessment" will focus on PJM and ERCOT systems. The assessment is expected to be discussed at the NERC Board of Trustees meeting in November.

GridGeo Recognition

Pictured (from left): Michael Taylor, Jerry Insall, Paul Li, Scott Privette, Linda Mars, Preethi Meher Malla, Jeff Gilbertson, Stephen Solis, Richard Howard, Mike Duffy, Sreenivas Badri, Yong Ma and Jithender Polusani

Not pictured: Joel Koepke

- Congratulations to everyone involved in the development of the GridGeo platform.

- GridGeo provides a geographical view of the ERCOT system using network model data and real-time telemetry from the EMS system. It also includes weather overlays.

- The tool is used by control room operators and control room support functions, as well as during operations training.