

Item 4.1: CEO Update

Bill Magness President & CEO ERCOT

Board of Directors Meeting

ERCOT Public April 10, 2018

2017 State of the Grid Report

- The 2017 State of the Grid Report, released today, focuses on the people who make our industry work, and ERCOT's continuing efforts to successfully adapt to changing grid conditions.
- Please let us know if you would like additional copies.





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

Net Revenues Year to Date Actuals: \$4.3 M Favorable (as of February 28, 2018)

Major Revenue Variances

\$1.9 M over budget: system administration fees due to colder-than-expected weather and stronger economy \$0.9 M over budget: interest income due to higher investment balance and rates

Major Expenditure Variances

\$0.6 M over budget: resource management (\$-0.9M staffing management; \$0.3M project work)

\$2.1 M under budget: timing differences

Net Revenues Year End Forecast: \$7.2 M Favorable (as of March 28, 2018)

Major Revenue Variances

\$4.0 M over budget: system administration fees based on current actuals and load forecast for remainder of year

\$5.4 M over budget: interest income due to higher investment balance and rates

Major Expenditure Variances

\$1.4 M over budget: resource management (\$-1.9 M staffing management; \$0.5 M project work)



2018 R2 Release Summary

R2 Release Dates: April 5-9, 2018

- 132 Change Requests across the application areas
- NPRRs
 - NPRR776: Voltage Set Point Communication
 - SCR792: Enhance Communications of BAAL Exceedances
- R2 impacted functional areas
 - Access & Identity Management, Data and Information Products, Data Management & Governance, Energy Management System, Enterprise Integration Nodal Services, Infrastructure, Market Management System, Market Settlements, Web Communications



Operations Report Background: RENA, CRR Price Convergence & Market Based Uplift

- Revenue Neutrality Allocation (RENA)
 - Main driver has been high prices during congestion events
 - Two factors pushing up RENA: high prices at one end of constraint and limits on low prices at the other end
 - Market is functioning as designed
- Congestion Revenue Rights (CRR) Price Convergence
 - CRR DAM revenues exceeding auction value became a trend in 2017 and has continued in 2018
 - Transmission outages are a contributing factor
 - ERCOT is reviewing data to see whether there are market design issues
- Market Based Uplift
 - Main driver was high Ancillary Service costs in January
 - Unusual occurrence on Jan. 17, 2018: NSRS cleared well above RRS
 - Market is functioning as designed



Operations Report Background: Project Updates

Two projects are not tracking as expected. Both were covered in detail during the February Board meeting.

CRR upgrade

- Team is working through the defects that are causing the delay.
- The vendor committed to improving the quality of deliverables.
- Once significant defects are resolved, the target date can be announced.
- The current re-plan effort will determine the final go-live date and budget.
- Expect re-plan to be completed in June.

ITCM/CMS - IT Change & Configuration Management System

- Additional time is required to validate the discovery and accuracy of data.
- Integration between systems requires more time than originally planned.
- Additional scope was added to ensure controls maintain data accuracy.
- The current re-plan effort will determine the go-live date and budget.
- Expect re-plan to be completed in May.



Preparations for Summer 2018

- Preliminary Seasonal Assessment of Resource Adequacy (SARA) released March 1
 - ERCOT anticipates record-breaking peak demand this summer
 - Tight conditions expected due to high demand and reduced generation available
 - ERCOT has sufficient generation based on normal conditions
- Final summer SARA and May Capacity, Demand and Reserves (CDR) Report scheduled for release April 30
- ERCOT pre-summer communications meeting set for mid-May
- Strong focus on operational preparedness and performance





Changes to ORDC Price Adder

- On March 8, the PUC approved the removal of Reliability Unit Commitment resources, including Reliability Must-Run units, from the capacity considered when calculating price adders for the Operating Reserve Demand Curve (ORDC).
 - Online reserves will be reduced based on the aggregate capacity of these resources.
 - Offline reserves may be increased if the resources brought online would have otherwise been eligible for the offline reserve price adder.
- ERCOT anticipates this change will be implemented by June.



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FERC Grid Resilience Proceeding: PUC & ERCOT Filing

"ERCOT and the PUC view resilience as an important subset of their existing reliability responsibilities."

- FERC requested comments from U.S. ISOs and RTOs on various issues concerning grid resilience to major disturbances. FERC request implicated NERC standards applicable to the ERCOT Interconnection.
- ERCOT and PUC filed joint comments on March 9, 2018.
 - Highlighted corporate risk-identification mechanisms, operator drills and training programs, generator weatherization check-ups and various operational practices aimed at ensuring resilience (e.g., N-1 operations).



Legislative Interim Committee Meetings

- The Texas Senate Select Committee on Cyber Security held a hearing on March 21 to examine cyber security measures in various Texas industries.
- The Senate Committee on Business and Commerce will hold a hearing May 1 to receive an update on, among other topics, the "2018 electric reliability forecasts announced by ERCOT."





Lubbock Power & Light Integration

- PUC signed an order on March 15 approving LP&L's integration of approximately 470 MW of load from SPP to ERCOT
- Projected integration date: June 2021
- New transmission facilities needed for integration will be constructed by Sharyland and/or LP&L



Next steps

- CCN applications expected to be filed in 2018
- ERCOT will begin working with LP&L to prepare for the integration, including registering LP&L as a TDSP in the ERCOT region
- ERCOT and LP&L will file quarterly updates on the transition with the PUC



Board Security & Technology Deep Dive

- ERCOT staff plans and facilitates meetings for Board members to provide information on current topics related to security (cyber and physical) and information technology. The first of these meetings was held in 2012.
- Allows a subset of Board members to discuss these sensitive topics in detail, in a secure environment



- Meetings are held every other year, and assist in technology and budget planning.
- Special thanks to Enterprise Risk Management & Strategic Analysis, IT Strategy & Governance and Critical Infrastructure Security teams at ERCOT.



Strategic Planning Process Update

- ERCOT Strategic Planning team and executives participated in strategic planning training
- The team conducted eight internal working sessions
 - Identified and prioritized ERCOT's strengths, weaknesses, opportunities and threats
 - Developing potential strategic objectives
- Next steps
 - Share draft work with Board in June (Executive Session)
 - Further review and refinement at August Board meeting and summer segment meetings
 - Finalize 2019-2023 Strategic Plan at October Board meeting



Employee Recognition: EPRI Award

- Electric Power Research Institute (EPRI) Technology Transfer Awards for Black Start contributions
 - Identified optimal locations and size for new Black Start resources

The EPRI Technology Transfer Awards spotlight the value of collaborative research to the electricity sector and its customers

Pictured from left, Sidharth Rajagopalan, Weifeng Li, Sandip Sharma and John Adams



