



## **Item ES 3.1: CEO Update**

*Bill Magness*

President & Chief Executive Officer  
ERCOT

Urgent Board of Directors Meeting

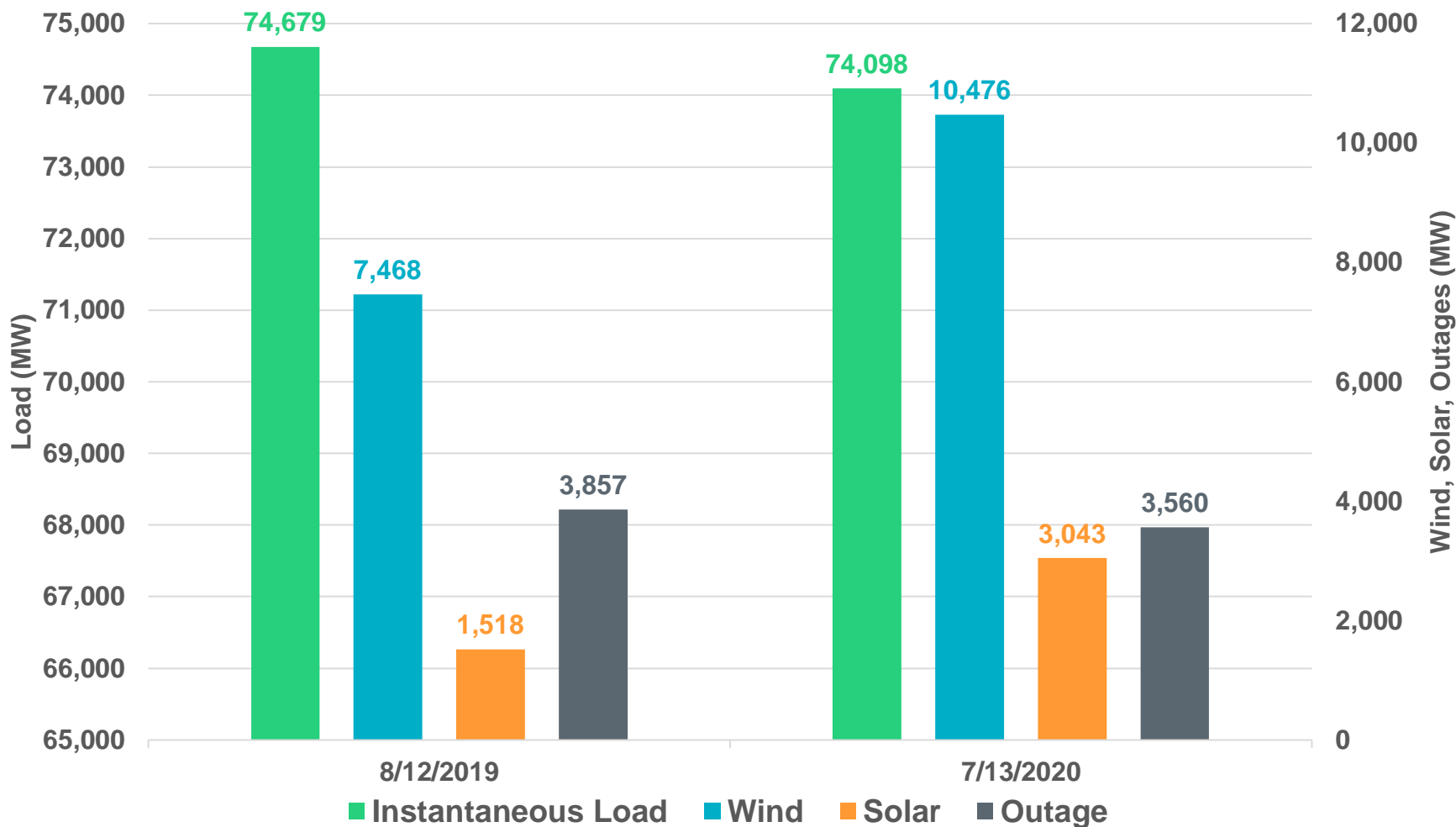
ERCOT Public  
August 11, 2020

# Summer 2020, So Far: Operations Highlights (as of Aug. 4)

- Load Patterns: Energy use was nearly 1% higher in June 2020 compared to June 2019. July 1-15 was 3.6% higher compared to the same dates last year.
  - Set new July peak demand record on July 13, reaching 73,962 MW\* between 4 and 5 p.m.
  - Far West and West zones exceeded prior summer peaks by 7% and 9%. Far West reached 4,588 MW\* on July 15, and West reached 2,301 MW\* on July 13.
- Generation Updates: Since summer 2019, ERCOT approved an additional 3,159 MW of solar and wind nameplate capacity for commercial operations (1,159 MW summer capacity contribution). New wind and solar output records in June and July.
  - Instantaneous wind record set on June 28, reaching 21,375 MW at 11:22 p.m.
  - Instantaneous solar record set on July 3, reaching 3,746 MW at 11:31 a.m.
- Weather: June-July were not as cool as 2019, although June 2020 ranked fourth coolest in 12 years.

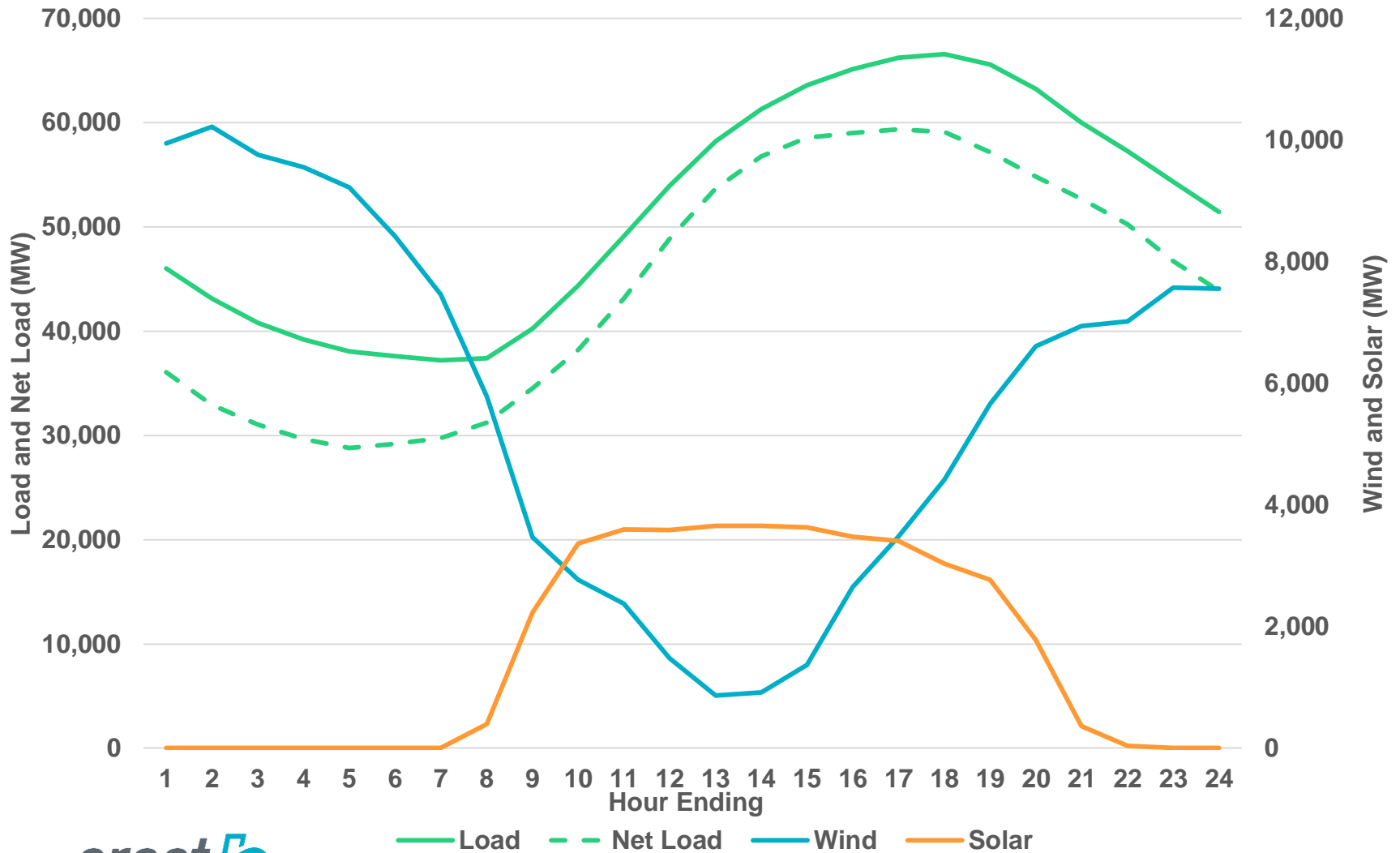
*(\*preliminary operating data)*

## Load, Wind, Solar and Outages at Peak on Aug. 12, 2019 (all-time peak) versus July 13, 2020 (new July record)

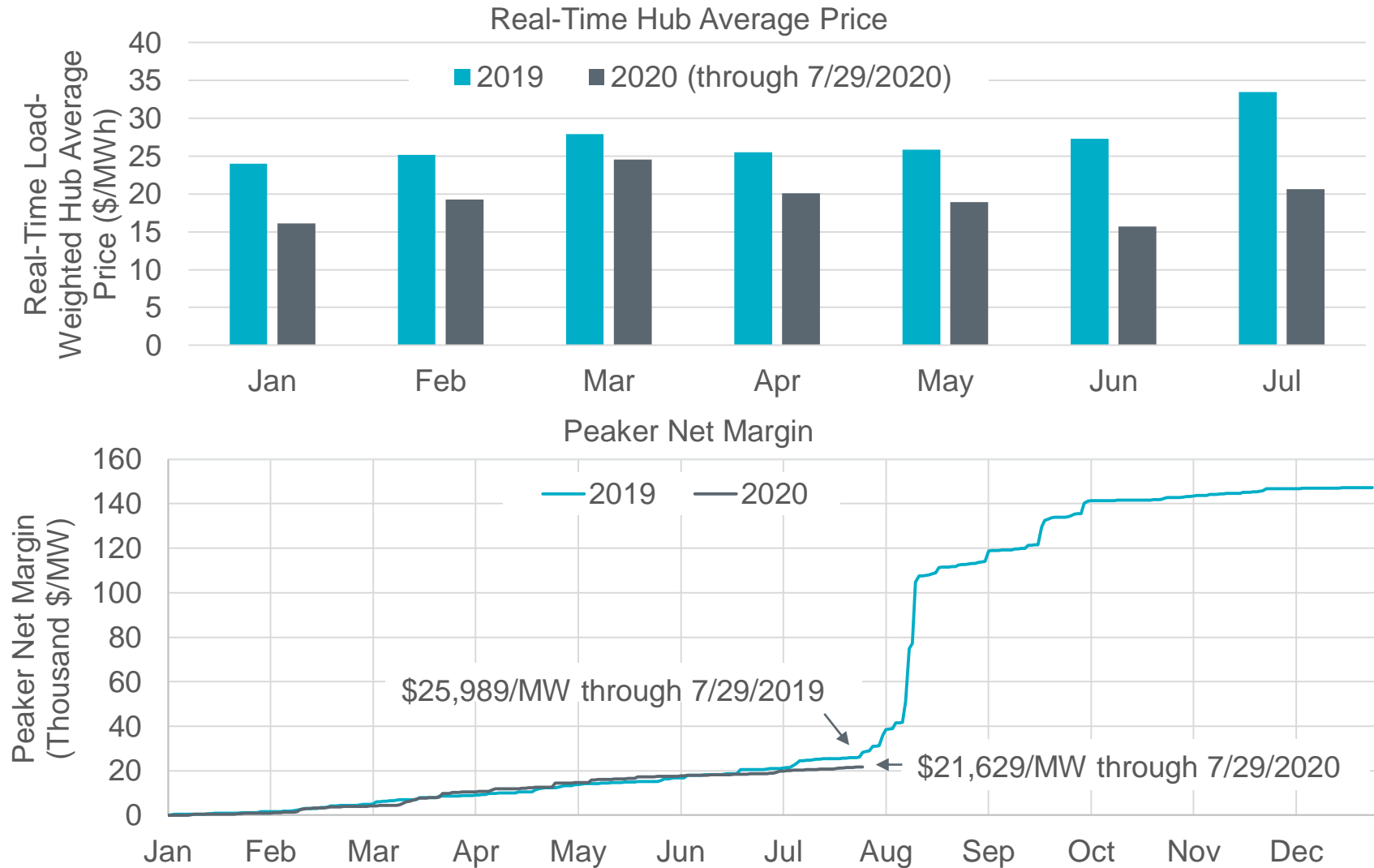


# Emergence of Solar in ERCOT

## Example Load, Wind, Solar Patterns – 7/4/2020



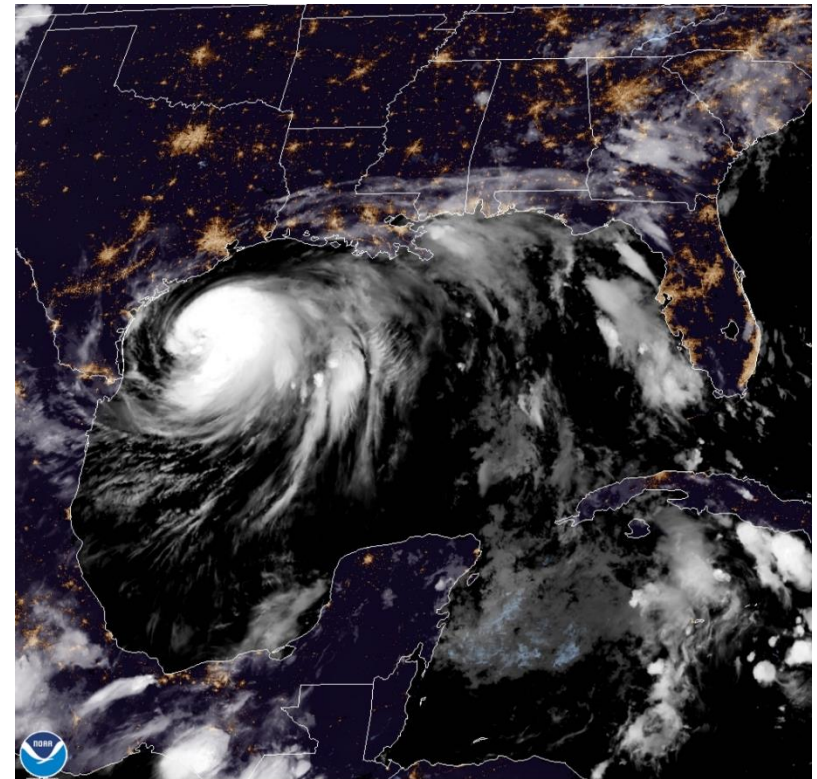
# Real-Time Hub Price and Peaker Net Margin



# Hurricane Hanna: Damage in South Texas

ERCOT filed two updates with the PUC (Project No. 27706) regarding the impacts of Hurricane Hanna on the ERCOT system, and potential continued risks in the Rio Grande Valley.

- OCN issued July 23; Advisory issued July 24; notices canceled July 26
- No system reliability issues and no damage to 345-kV lines during the storm
- Approximately 1,800 MW of wind generation unavailable during periods of high wind speeds
- Approximately twenty 138-kV lines and ten 69-kV lines experienced storm-related damage
- Localized transmission constraints may occur while infrastructure is repaired



25 Jul 2020 04:01Z NOAA/NESDIS/STAR GOES-East GEOCOLOR

# Measuring Performance During Pandemic Conditions

- Employee Health and Safety
  - Working with epidemiology and industrial hygiene professionals
  - Implemented priority triage and COVID-19 testing plan for control room staff through local healthcare facility
  - Installed more “no touch” devices for on-site work
  - No on-site COVID-19 cases identified or reported to date
- Priority on Communication, Feedback, Creative Solutions
  - Weekly CEO video updates and a re-designed online employee newsletter
  - Several surveys of management and employees to detect trends and problems
  - Expansion of remote work tools and Information Technology support
  - Successful on-boarding of new employees working remotely
  - Effective communication with stakeholder leadership
- Regular Measurements of Progress on Established Enterprise Priorities
  - Attention to Key Performance Indicators, budget management, and other operations metrics
  - Identification of risks, gaps in current practices, and improvement opportunities
  - Retain focus on Objectives & Key Results (OKRs): Prioritize, Align, Execute

## 2020 Enterprise Objectives & Key Results (OKRs)



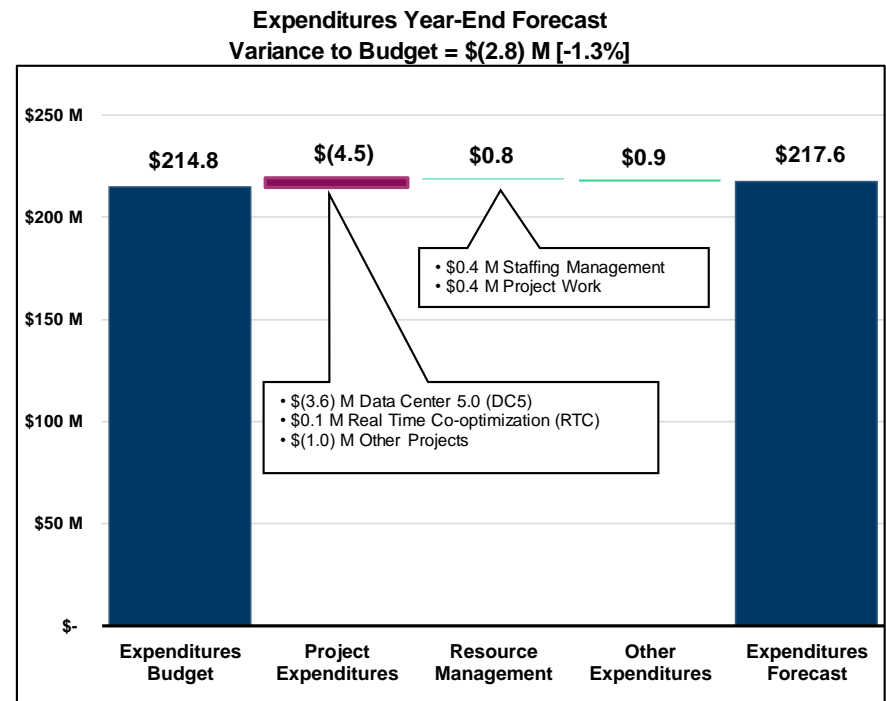
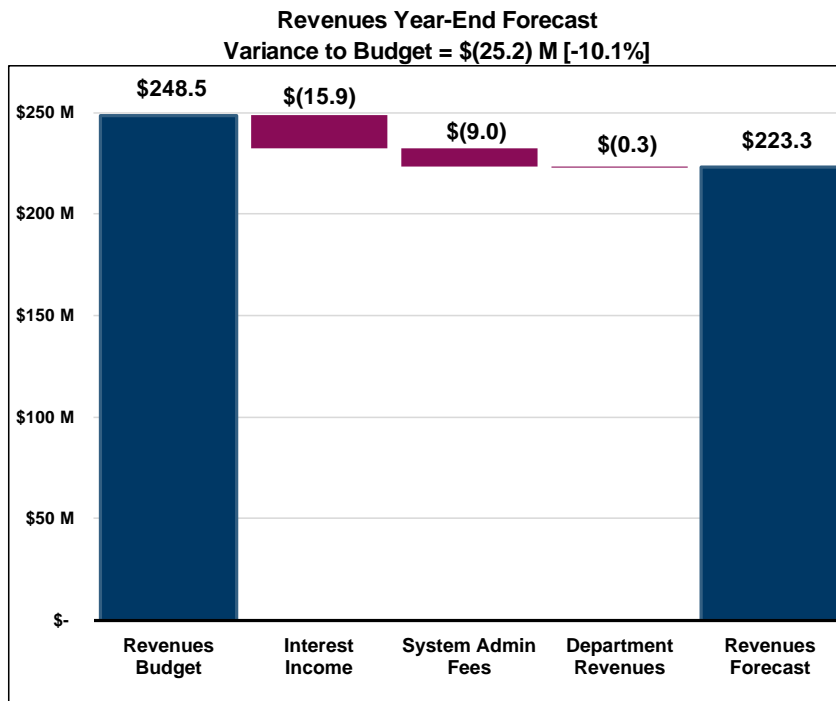
**Establish rules for new resources and market modernization.**

**Improve data and information exchange services to ERCOT stakeholders.**

**Complete defined stages of core system and service improvements.**

# August 2020 Financial Summary: 2020 Variance to Budget (\$ in Millions)

**Net Available Year-End Forecast Variance to Budget = \$(28.0) M**



Charts may not foot due to rounding

# 2020 R4 Releases Continue as Scheduled

R4 Release Dates: Aug. 4–6, 2020

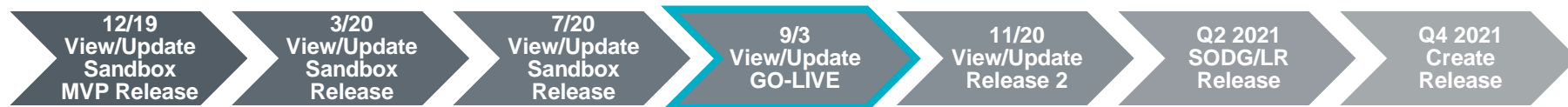
- 89 Change Requests across the application areas
- Revision Requests and System Change Requests delivered in R4 Change Requests:
  - NPRR 935(a) – Post All Wind and Solar Forecasts
    - Section 4.2.2 (1)(6) and Section 4.2.5
  - NPRR 951 – Active and Inactive SCED Constraint Reporting
  - NPRR 977 – Create MIS Posting for RUC Cancellations
- R4 impacted functional areas
  - Data and Information Products, Data Management & Governance, Energy Management System, Market Information System, Market Management System, Market Settlements

# Major Projects Update

Project	Target
<b>Improve data and information exchange services to ERCOT stakeholders.</b>	
<b>Resource Integration &amp; Ongoing Operations (RIOO)</b>	<p>Multiple releases planned for RARF spreadsheet retirement. 2020: deliver the RIOO function that enables Market Participants to electronically review and edit existing Resource Asset registration data. RARF replacement targets:</p> <ul style="list-style-type: none"> <li>• On track for September 2020 go-live for view/update capabilities</li> <li>• Q2 2021 go-live for view/update/create/delete capabilities for additional Resource types</li> <li>• Q4 2021 “Create” go-live for create/delete capabilities for all Resources</li> </ul>
<b>Enterprise Content Management System (ECMS)</b>	<p>Multiple releases planned to complete the ECMS implementation</p> <ul style="list-style-type: none"> <li>• MIS Release – soft launch September 2020 &amp; go-live November 2020</li> <li>• ERCOT.com Release – iterative releases Q3-Q4 2021</li> </ul>
<b>Complete defined stages of core system and service improvements.</b>	
<b>Retail Portfolio Refresh</b>	<p>Trending to meet planned critical milestones</p> <ul style="list-style-type: none"> <li>• EDI Map &amp; Translator Replacement and NAESB Application Tech Refresh projects trending towards planned market testing period in August 2020 and go-live on Oct. 31, 2020</li> <li>• Retail/wholesale registration system upgrade project in execution and targeted go-live Q2 2021</li> </ul>
<b>Market Management System/Outage Scheduler (MMS/OS) Tech Refresh</b>	<p>Trending to meet Q4 2020 go-live</p> <ul style="list-style-type: none"> <li>• Q2–Q4 2020 system and integration testing activities</li> <li>• In system “freeze” period, non-critical changes to be deferred until after MMS/OS Tech Refresh go-live</li> <li>• Ongoing coordination with RTC efforts</li> </ul>
<b>Fast Frequency Response (FFR) &amp; ERCOT Contingency Reserve Service (ECRS) Implementation</b>	<ul style="list-style-type: none"> <li>• FFR Implementation – Complete</li> <li>• FFR Advancement – Adds remaining functionality, including Loads providing FFR and optimization of FFR bids with other Ancillary Service bids. Planning underway; target go-live TBD</li> <li>• ECRS Implementation – Working in coordination with RTC team to determine the optimal delivery timeline</li> </ul>



# Focus on RIOO



## Looking Back

- SCR781 MP Online Data Entry (2014) focused on reduction of manual processes associated with RARF and improving the efficiency of maintaining Resource data
- Project put on hold in 2015 due to resource constraints associated with the NMMS upgrade
- Resumed in 2017 with focus of completing the GINR project (RIOO entry point for new Resources)
- Declared an enterprise OKR in 2018: prioritization and resources provided to accelerate progress
- GINR completed in March 2019
- RIOO testing & training sandbox system delivered in December 2019

## Looking Ahead

- Deliver RIOO View & Update initial capability for existing Resource Asset registration data in September 2020 (currently on schedule), and add capabilities in November 2020 release
- Scope added to the original project: Deliver View/Update/Create capability for Settlement-Only Distributed Generation/Load Resources/Distribution Generation Resources/Energy Storage Resources/Small Generation in Q4 2021
- Continue monthly engagement with Resource Integration Working Group
- Forecasted total spend on project is \$11.8 M (including costs of remediating data)

# Focus On Market Readiness: MIS & Retail Systems

## MIS Replacement

### **AUGUST: MIS Technical Integration Workshop**

- Communicate changes to identify potential impacts
- Focus on programmatic access to MIS
- Includes ERCOT representatives from IT Operations, Solution Architecture and Enterprise Architecture

### **SEPTEMBER: MIS Soft-Launch to Production**

- Available for Market Participant Testing
- Test certificates and role-based access to content
- Notification through standard market notices
- MIS User Workshops September, October and November

### **NOVEMBER: MIS Production Go-Live**

- Targeted for mid-November
- Notification through standard market notices
- Old MIS to be decommissioned in Q1 2021

More info at <http://www.ercot.com/about/redesign>

Feedback at any time to [webmaster@ercot.com](mailto:webmaster@ercot.com)

## Retail Portfolio Refresh

### **AUGUST: Updated Retail Market Test Environment Available for Testing**

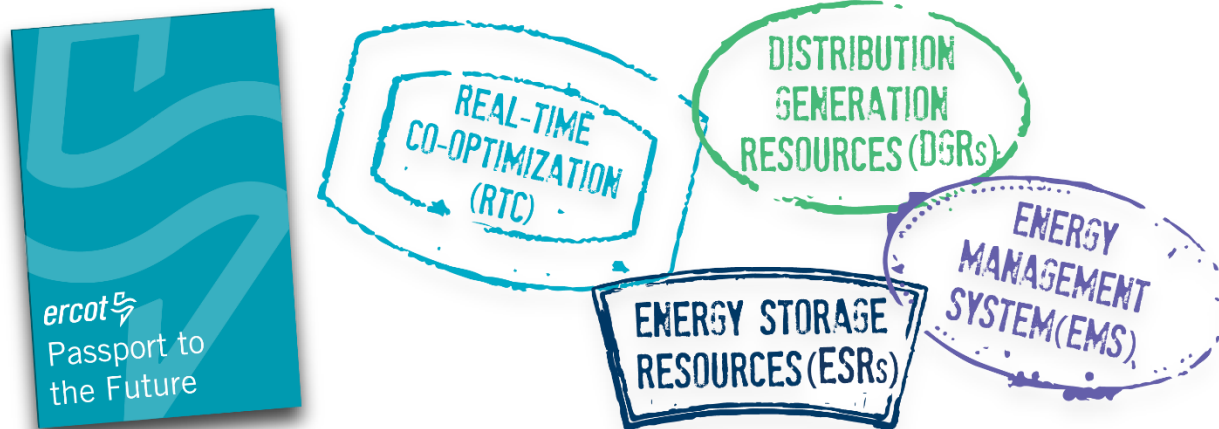
- Organizations can test data exchanges on the upgraded systems in the Retail Market Test Environment
- Mandatory for Entities that interact with ERCOT NAESB systems
- Testing information communicated at RMS and TXSET, as well as by targeted emails and conference calls

### **OCT. 31: EDI & NAESB System Go-live**

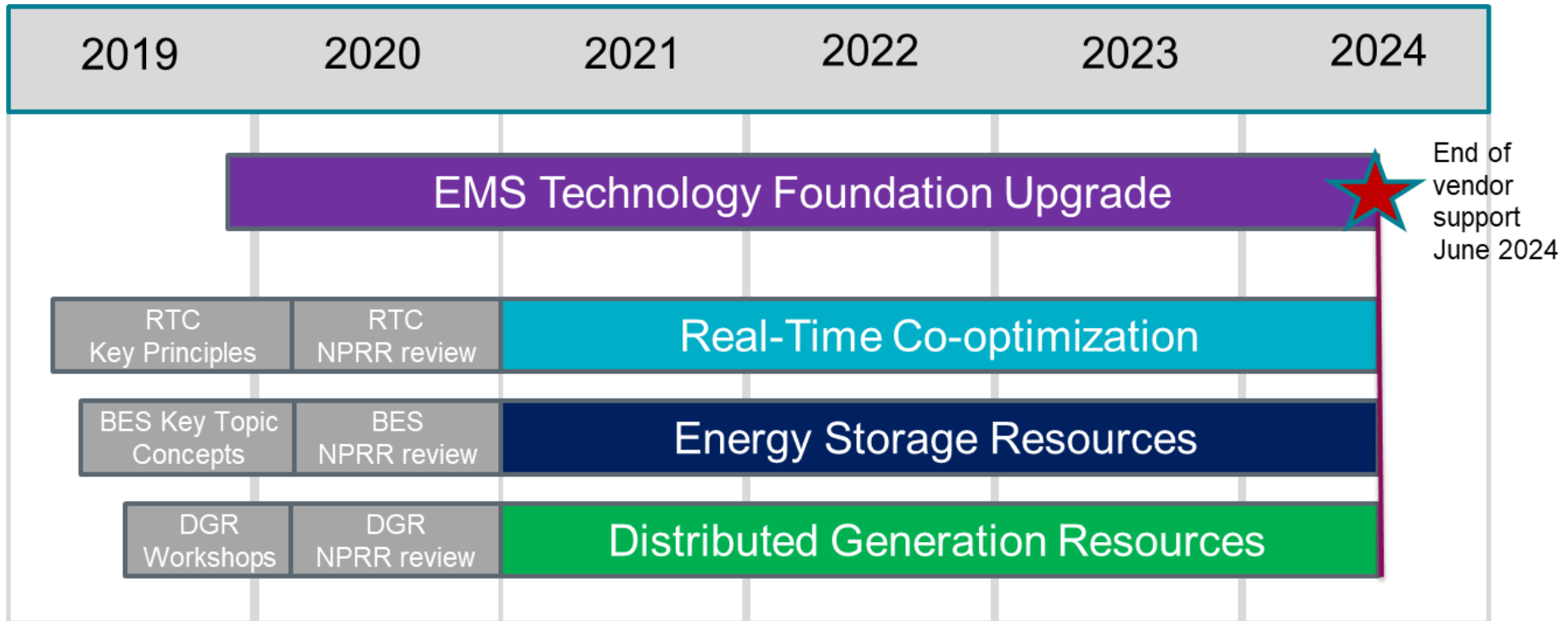
- Cutover scheduled for retail outage weekend
- Impacted Market Participants will be notified upon finalization of schedule
- Notification via normal Market Notice sequence
- No direct operational impact to Market Participants

# Looking Ahead: Passport Program

- ERCOT is taking a programmatic approach to major projects running simultaneously with ERCOT's Energy Management System (EMS) upgrade to be completed in 2024.
- Includes Real-Time Co-optimization (RTC), and incorporation of Energy Storage Resources (ESRs) and Distribution Generation Resources (DGRs) into ERCOT systems.
- The Passport program represents the implementation path for the work being completed in 2020 to approve market rules for RTC, ESRs, and DGRs. Those efforts are included in Passport planning, scheduling, and budgeting.
- When completed in 2024, ERCOT will be positioned to manage existing and new resource types as effectively as any grid operator. The “program” approach is improving the efficiency of planning and delivering the complex projects.



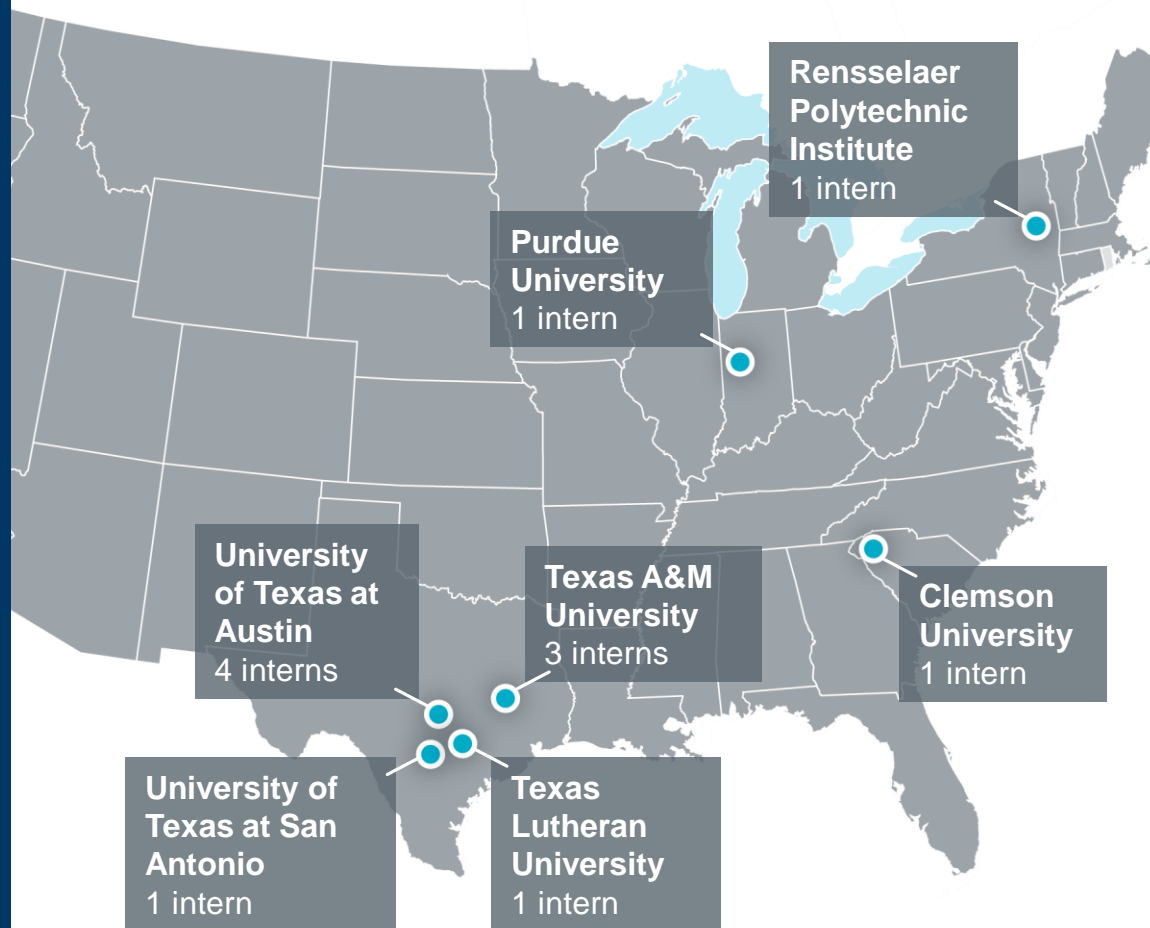
# Passport Program Scope & Delivery



ERCOT executive leadership will make the plans for the Passport Program a key focus of the upcoming annual strategic planning sessions with membership segments in September.

# 2020 Summer Internship Program

- ERCOT successfully administered its Summer Internship Program
  - Received more than 600 applications for 12 openings
  - Selected students representing 7 universities
  - Interns worked for 12 different departments
- In the remote work environment, interns communicated with each other and staff using a variety of video conferencing tools
- Final presentations were recorded for employees to view; live Q&A session held



# Congratulations and Thanks, Summer 2020 Interns

