

### Item 5: CEO Update – REVISED\*

Pablo Vegas
President and Chief Executive Officer

**Board of Directors Meeting** 

ERCOT Public October 10, 2024

### **Overview**

#### Purpose

This presentation highlights ERCOT's recent Operations and Planning activity and highlights strategic areas of focus.

### Voting Items / Requests

No action is requested of the Board; for discussion only

### Key Takeaways

- The efficiency benefits of the RTC+B have been studied and estimated by the IMM to save \$1.6 billion per year in reduced energy costs.
- ERCOT is proposing several changes to the Ancillary Services (AS) Methodology for 2025 that will result in an overall decrease in the quantities of AS procured.
- The PUCT approved the Permian Basin Reliability Plan.
- ERCOT launched a new mobile app and expanded social media presence.



## **Real-Time Co-optimization + Batteries**

- Will provide more flexibility in real time to efficiently assign resources between energy and Ancillary Services (AS)
- Will include significant improvements to modeling and consideration of batteries and state of charge available for providing energy services and AS
- SCED system will automatically select the most efficient and effective resources available to serve load and meet Ancillary Service needs
- Continue working closely with stakeholders on testing and market trials



**Key Takeaway:** The efficiency benefits of this change have been studied and estimated by the IMM to save \$1.6 billion per year in reduced energy costs.



## **Ancillary Services 2025 Methodology**

# ERCOT proposes changes to the 2025 AS Methodology based on:

- Operational experience
- Forecasted resource mix changes
- Initial analysis and input from the PUCT's AS study

## Compared to 2024, Ancillary Service quantities for 2025:

- Decrease 1.4%
- Would have been higher absent ERCOT's proposed methodology changes

This is a voting item for the ERCOT Board under the R&M Committee report. If approved, ERCOT will then seek PUCT approval before the end of 2024 so that the new AS Methodology can be effective on January 1, 2025.

**Key Takeaway:** ERCOT is proposing several changes to the AS Methodology for 2025 that will result in an overall decrease in the quantities of AS procured.



## **Ancillary Services Proposed Changes**

**Regulation Up and Regulation Down:** Compute Regulation Service quantities using historic 5-minute net load forecast error instead of 5-minute total variability

**Responsive Reserve Service:** Change the minimum Responsive Reserve Service Primary Frequency Response (RRS-PFR) limit from 1,185 MW to 1,365 MW based on the historic performance of the ERCOT generation fleet

**ERCOT Contingency Reserve Service:** Compute quantities as the higher of (1) quantity needed to restore frequency following a large generator trip or (2) quantity needed to respond to intra-hour net load forecast errors, rather than the sum of these two factors; risk factor updates based on the above change

**Non-Spinning Reserve Service:** Compute quantities for 10 p.m. to 6 a.m. based on historic 4-hour ahead net load forecast error instead of 6-hour ahead

**Key Takeaway:** The proposed changes to the Ancillary Services Methodology are due to better accounting of risks and improvements to the Security Constrained Economic Dispatch (SCED) tool. The proposed changes do not decrease system reliability.



## **New Era of Planning – Update**

### Permian Basin Reliability Plan & Extra-High Voltage (EHV) Lines

The PUCT approved the Permian Basin Reliability Plan for the 2038 forecasted Load for the region in support of HB5066.

- Applicable Transmission Service Providers are authorized to start preparing Certificate of Convenience and Necessity (CCN) applications.
  - Five 345-kV import paths
  - Three 765-kV import paths
- May 1, 2025, has been set as the date certain for determining which import path voltage will be utilized.

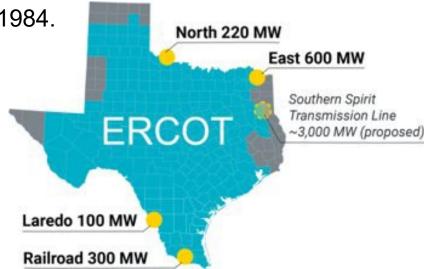
2024 Regional Transmission Plan studies continue on 765-kV transmission to reliably and efficiently connect the growing demand in Texas with an evolving generation mix.

**Key Takeaway:** Forecasted load growth coupled with the evolution of generation types and locations has led to EHV infrastructure consideration to reliably and efficiently facilitate large power transfer across the system.



## **ERCOT's Use of Direct Current (DC) Ties**

- ERCOT has four asynchronous ties.
  - Two DC ties to the Eastern Interconnection = 820 MW
  - Two ties to the Mexican system = 400 MW
    - One DC, one VFT (variable frequency transformer)
  - The Southern Spirit transmission line would be a 5<sup>th</sup> tie, 3rd to the Eastern Interconnection (proposed 3,000 MW tie).
- ERCOT has had DC ties dating back to 1984.
- DC ties allow the ERCOT grid and the connecting grid to exchange power in emergencies and for entities to trade power between the grids on a commercial basis.
- DC ties don't guarantee energy will be available if other areas are having reliability issues.



Western

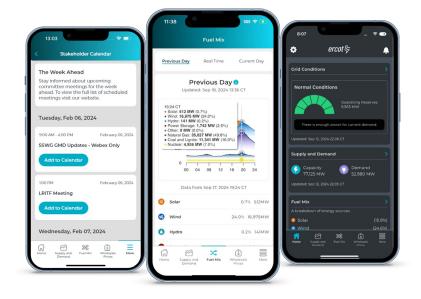
Eastern

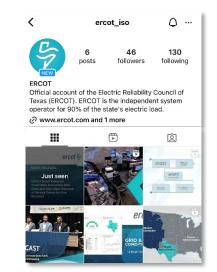
**Key Takeaway:** The Southern Spirit DC tie would not affect the ERCOT grid's independence. DC ties approved by FERC under sections 210 and 211 of the Federal Power Act do not pose a risk to the independence of ERCOT.



## New Mobile App & Expanded Social Media Presence

- Redesigned look + dark mode
- Improved navigation
- Informative welcome screens
- Most popular dashboards have been added, expanded, and are interactive
- Videos explain dashboard features
- Now customize which dashboards appear on the home screen
- Week-ahead meeting calendar view
- Easy methods for submitting feedback
- Technical updates for better performance on the latest operating systems
- ERCOT is now on Instagram! (ERCOT ISO)









## **Employee Recognition: ERCOT New Mobile App**

Adnan Ahmad Jeanette Agron Leo Angele Naresh Ancha Gopal Atluri Ruslan Baltabayev Mike Bishop Scott Bolling Anthony Boyle Penney Christian Dean Cortez Cathy Cox Ashley Dawson Anna Garcia Ron Hernandez

Julie House Jerry Insall **Brandon Johnson** Olha Lyakhovets Chris Lauer Jamie Lavas **Amy Lofton** Sanjay Manandhar Srinivasa Rao Manthena Trish Matus Angela Michelsen Priyanka Parthasarathy Sarada Potluri Duc Qui Luis Quintanilla

Sharmila Sudarsan Rao
Faizan Rauf
Tracy Richter
Narender Sandil
Vir Sanghavi
Shawn Scott
Kaushik Totakura
Ravi Tummala
Padma Veluservai
Damon Williams

