



Item 5: CEO Update – REVISED*

Pablo Vegas

President and Chief Executive Officer

Board of Directors meeting

ERCOT Public

August 20, 2024

*Slide 4 revised 8/13/2024

Overview

- **Purpose**

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

- **Voting Items / Requests**

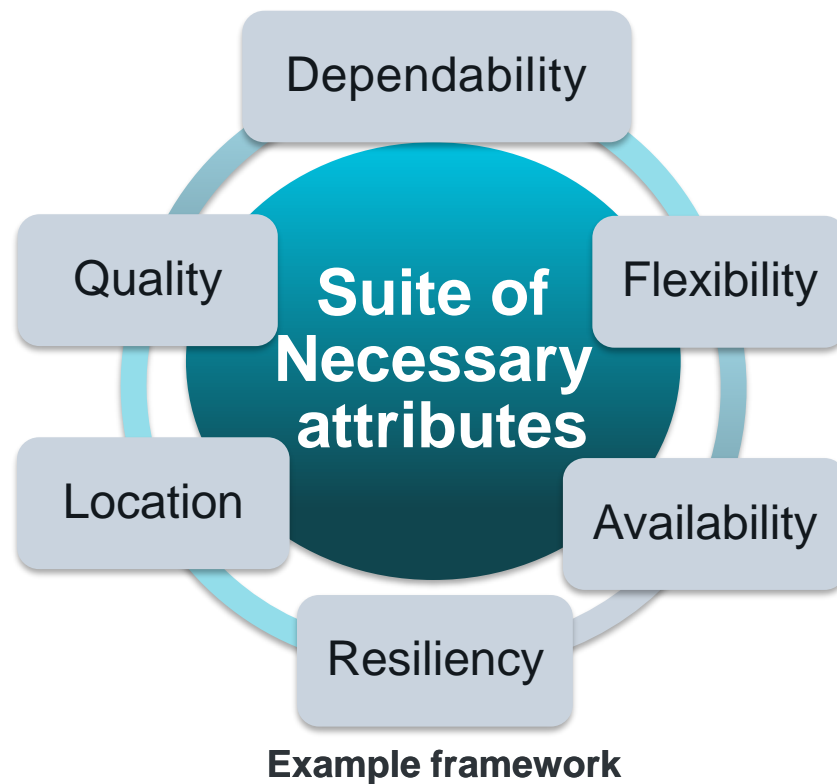
No action is requested of the Board; for discussion only

- **Key Takeaways**

- ERCOT needs a framework that allows us to evaluate changes to the market design relative to the attributes needed to reliably operate the grid.
- ERCOT is working on mitigation plans and additional solutions with the market to address the South Texas Interconnection Reliability Operating Limits.
- Transmission planning continues through the Permian Basin Reliability Plan and the 2024 Regional Transmission Plan.

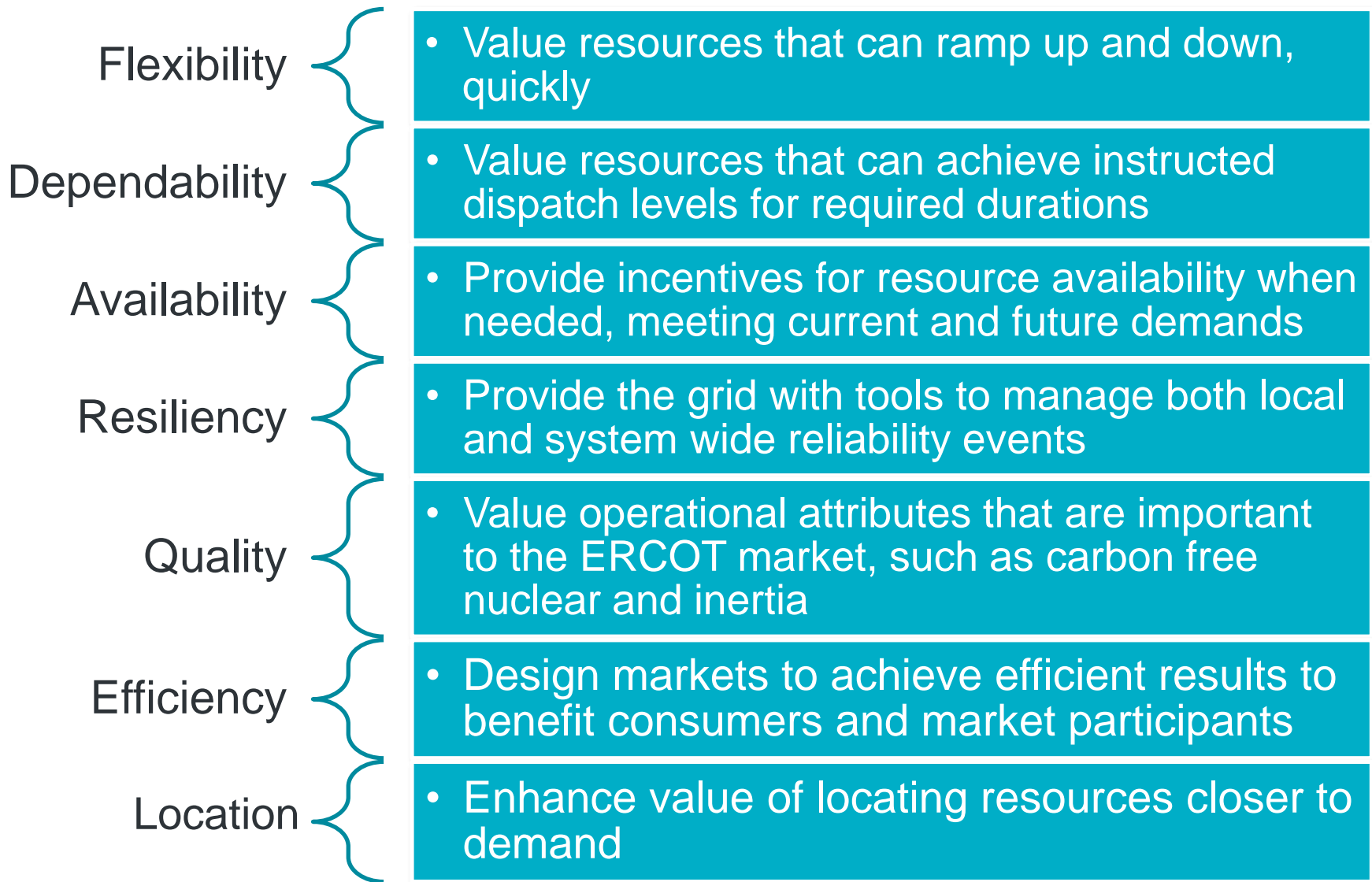
A Framework for Evaluating Market Design

- As we consider the drivers for investment and the various levers available to us to provide investment signals, we need to think about the full suite of attributes that are needed to reliably operate the grid.
- These attributes create a framework with which market features can be evaluated.
- Development of an evaluation framework has begun, and we expect this to be a future and ongoing topic with the Board.



Key Takeaway: It is crucial that we leverage a framework to evaluate both existing attributes and changes to the market design relative to the attributes that are needed to reliably operate the grid.

Key Framework Attributes



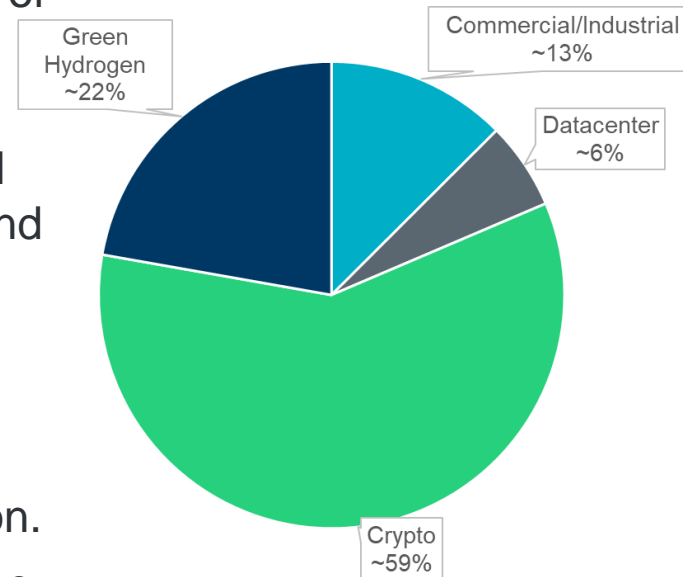
Interconnection Reliability Operating Limits (IROLs) Update

- The South Texas IROLs remain a primary reliability risk under specific scarcity conditions.
- Several mitigations have been implemented since IROL was established.
- Transmission Service Providers (TSPs) have reviewed critical line rating limitations and have made dynamic line rating updates where appropriate.
- ERCOT has developed a transmission switching plan at San Miguel and Calavaras.
- TSPs are evaluating the integration of wind cooling in the real-time dynamic rating calculation.

Key Takeaway: ERCOT continues to actively work on solutions for the South Texas IROLs while the resolving transmission solution is developed.

Permian Basin Reliability Plan

- Based on load forecast data provided by the TSPs, ERCOT studied a total Permian Basin load for 2030 of 23,659 MW.
 - 11,964 MW oil & gas and 11,695 MW additional load
- ERCOT evaluated the transmission facilities needed to serve the Permian Basin region based on 2030 and 2038 load forecasts.
- The plan includes local transmission projects to interconnect and serve the projected load and additional transmission capacity to import power to meet forecasted demand in the Permian Basin region.
- The local transmission projects needed to serve 2030 and 2038 Permian Region demand is estimated to cost \$4.02 billion.



Breakdown for 11,695 MW of additional non-oil & gas load by type

Key Takeaway: The Permian Basin Reliability Plan identified significant local and regional transmission projects to serve the forecasted load.

New Era of Planning – Transmission Update

2024 Preliminary Regional Transmission Plan

New Extra High Voltage (EHV) Lines

- move power over long distances
- reduce congestion
- increase grid stability
- address uncertainty of future generation changes and location

765 kV

500 kV double circuit

Traditionally-used Transmission Lines

- will continue to be core component of transmission plans and operations

345 kV

138 kV

69 kV

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

Employee Recognition:

RFPs for Summer Capacity and Reliability-Must Run Alternatives

- Tanzila Ahmed
- Janice Ayson
- Nathan Bigbee
- Bill Blevins
- Cory Carswell
- Gordon Drake
- Davida Dwyer
- Freddy Garcia
- Thelma Garza
- Robert Golen
- Ino Gonzalez
- Jimmy Hartmann
- Alex Lee
- Marcelo Magarinos
- Robert Matlock
- Megan Miller
- Mark Patterson
- Kenneth Ragsdale
- Jimmy Ramirez
- Carl Raish
- Ben Richardson
- Austin Rosel
- Magie Shanks
- Matthew Skiles
- Agee Springer
- Jason Terrell
- Pete Warnken
- Rebecca Zerwas

Permian Basin Reliability Plan

- Nathan Bigbee
- Prabhu Gnanam
- Robert Golen
- Sun Wook Kang
- Misael Rodriguez
- Jose Solchaga
- Trudi Webster
- Ying Li
- Scott Zuloaga