



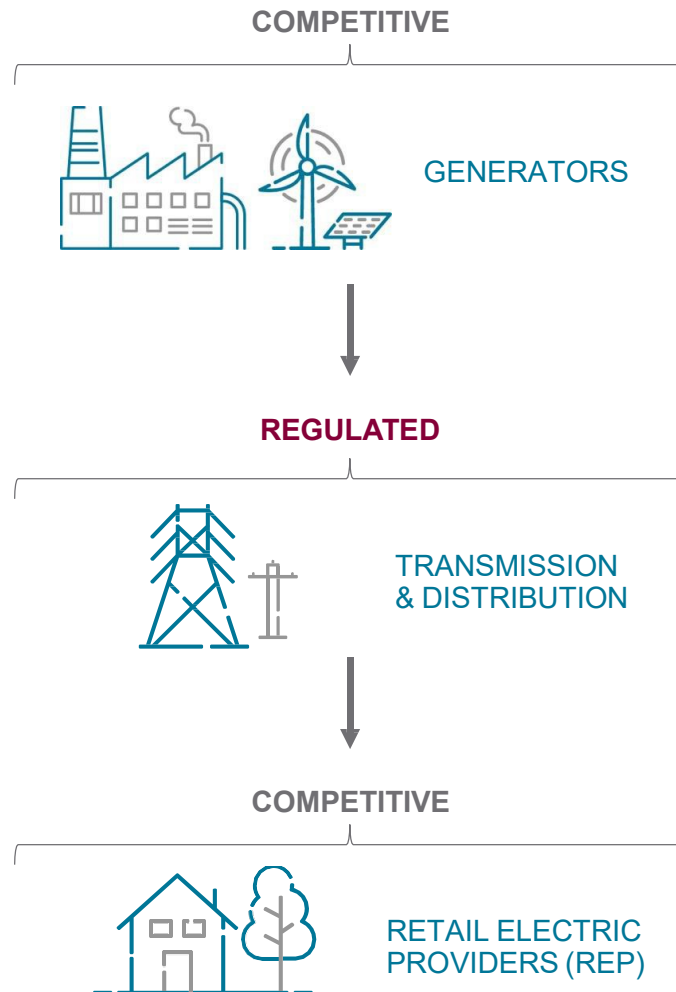
# Short Supply & Winter Storm Event Outreach



## Topics for Discussion

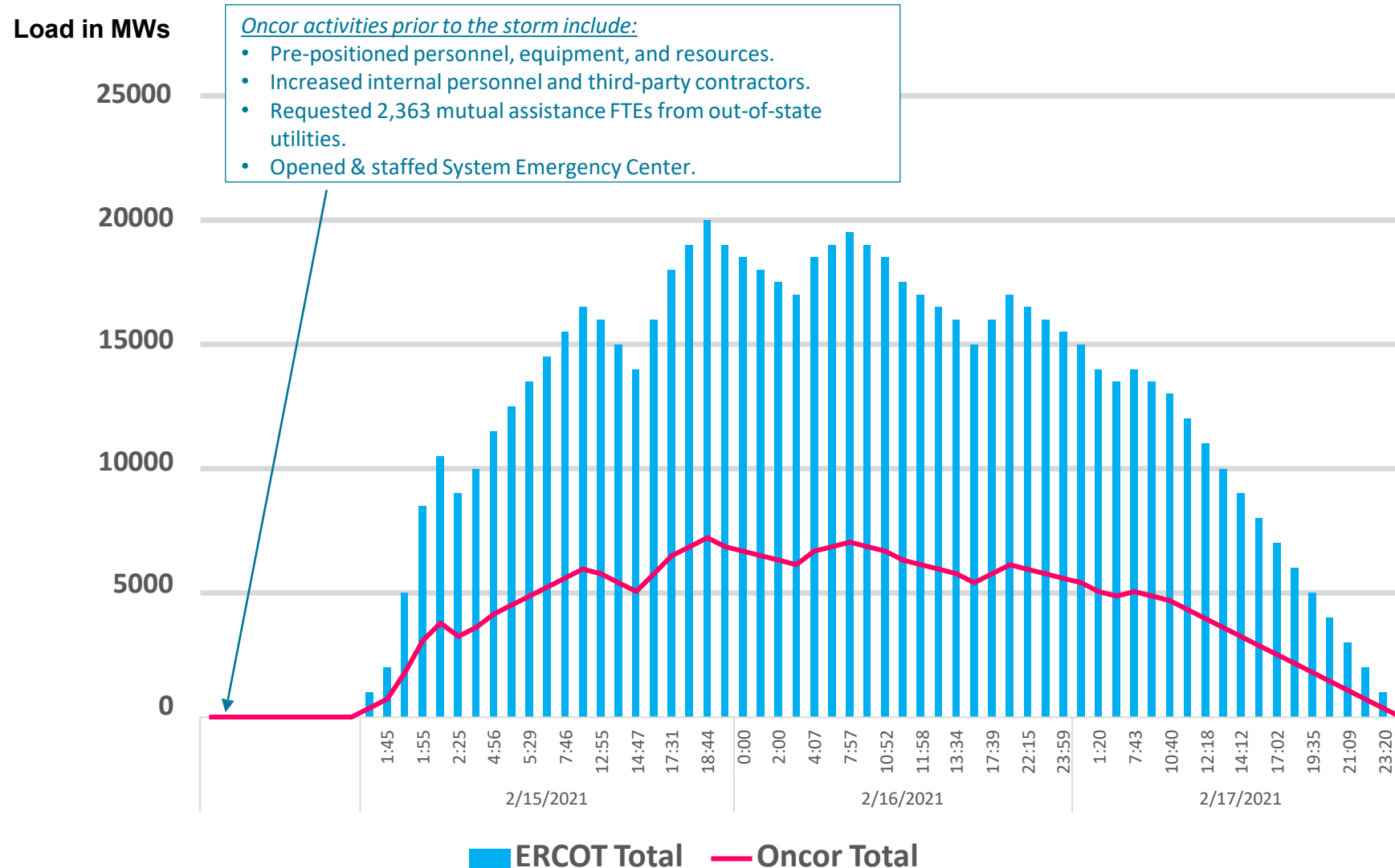
- Communication Process and Challenges
- Rotating Outages versus Controlled Outages
- Was the Process Equitable?
- Critical Load and Critical Care Customers
- Why Where Some Customers and Locations Not Impacted?
- Next Steps

# ERCOT Market Structure



- Oncor is a regulated TDU in ERCOT.
- Delivers electricity to more than 10M Texans.
- Operates more than 139,000 miles of T&D lines.
- Employs more than 4,000 Texans in our service area.
- Service areas spans Permian Basin to Piney Woods, and Red River to Round Rock.

# ERCOT Emergency Load Shed Event



## Oncor Emergency Response

- At the peak of the event, ERCOT directed TDUs to shed 20,000 MW of load to ensure grid stability, and Oncor implemented its response accordingly.
- Oncor was ultimately directed to shed more than 7,200 MW of load, which:
  - Was approximately 5 times as large as the last load-shedding event in 2011;
  - At its peak, impacted approximately 1.3M customers in Oncor's service area.
- Rapid response by Oncor and other TDUs ensured grid stability and avoided a potential blackout of the entire ERCOT system.
- The magnitude of load shed made it impossible to employ limited-duration rotating outages and reduce enough load to balance the system, leaving some Oncor customers without power for an extended time period.

# Load Shedding – Customer Impacts

*Without the ability to shed load, the grid potentially becomes imbalanced and can lead to a blackout.*

## OVERVIEW

- Necessary when electric supply (generation) cannot support the level of demand (load).
- Executed under the direction of grid operators like ERCOT.
- Employed by ERCOT & TDUs as an emergency response measure.
- Utilized to restore stability to the grid.
- Pre-planned manual process shared as equitably as possible in the communities we serve.

## EMERGENCY

- The amount of load shed requested by ERCOT made it impossible to employ limited-duration rotating outages.
- Controlled outages were employed to provide stability to the grid and to maintain service to critical facilities like hospitals and 911 centers.
- Unfortunately, controlled outages left many of our customers without power for an extended period of time.
- Customers were also impacted by winter storm outages to equipment.

## Items for further Review / Examination

- Industry's general approach to managing and responding to load shed events of the magnitude.
- Continued collaboration with gas industry regarding their electrical needs.
- Better understanding the priorities of our cities with regard to water systems and facilities.
- Developing analytics programs and processes that better help identify "other" outages occurring during load shed events.
- Better communication with customers as to new information received from ERCOT, timelines for restoration, and changing grid and operational conditions.
- Helping customers identify opportunities for reducing load during emergency events (e.g., downtown dimming).