



Texas House State Affairs Committee

Bill Magness
President & Chief Executive Officer

ERCOT Public
March 16, 2021

Reliability Action: February 18-19

- On Thursday morning, February 18, 2021, ERCOT distributed a public market notice stating in part:

“...many customers have not yet been re-energized. As a result, ERCOT will remain in EEA3 through at least the morning peak period on Friday, February 19, 2021.”

- This was an intentional and carefully considered decision to protect human health and safety while stabilizing the electric grid. It was not an error.

To:
Legal Notifications; Operations

Sent:
Thu, Feb 18, 2021 07:46 AM

Subject:
M-C021521-04 Update: ERCOT Expectations Regarding Exiting EEA3 and Public Utility Commission Emergency Orders Affecting ERCOT Market Prices

NOTICE DATE:
February 18, 2021

NOTICE TYPE:
M-C021521-04 Legal

SHORT DESCRIPTION:
Update: ERCOT Expectations Regarding Exiting EEA3 and Public Utility Commission Emergency Orders Affecting ERCOT Market Prices

INTENDED AUDIENCE:
ERCOT Market Participants

6 Reasons for Reliability Action

- 1 Protecting Human Health & Safety:**
Some Texans had been without heat in sub-freezing temperatures since Monday morning – they needed their power restored as soon as possible and they needed it to stay on.
- 2 Stabilizing the Electric Grid:**
Throughout the storm, power plants that returned had additional problems and went back offline – creating multiple days of outages. There was a significant risk that power plants would continue to fail and cause the return of rotating or controlled outages.
- 3 High Customer Demand Load Forecasts:**
Computer Models showed high load forecasts for Thursday and Friday mornings that were not covered by existing generation. This contributed to the high risk.

6 Reasons for Reliability Action (continued)

- 4 Bridge Gap Between Ending Outages and Restoring Customers:**
Transmission owners notified us of likely gaps between ending outages and the need for fieldwork in still-hazardous conditions to restore customer load. While load shed orders may have ended, it would take time to actually restore load – making accurate load ramp-up forecasts very difficult.
- 5 Large Industrial Loads Returning:**
Large industrial customers that had reduced or eliminated their load while prices were at EEA3 level would be returning, quickly adding large amounts of load when emergency conditions ended.
- 6 Acting in the Best Interests of the Grid:**
We were acting to increase the electric generation needed to restore the load and *service it reliably over the long term.*

Our Challenge

- **The following issues were out of ERCOT's control:**
 - Continued winter weather risk
 - Power plants continuing to experience failures (supply)
 - Restoring service to customers (demand)
 - Timing of industrial loads (demand)
- **The available options for managing the risk of renewed outages:**
 - Maintain every market-based incentive to keep generators running at full power
 - Encourage large, price-sensitive loads to slowly return, rather than creating a spike that could send the system out of balance
- **Our approach maintained maximum supply, and encouraged maximum economic demand response**

Timeline of Reliability Action (times approximate)

<p>Wednesday February 17</p> <p>6:00 PM <i>(throughout evening)</i></p>	<ul style="list-style-type: none"> • Additional generation appears sufficient to reduce load shed directives through the evening of February 17 with objective of reaching 0 MW load shed directives • Review of updated load forecasts for Thursday and Friday morning peaks • Communications to coordinate restoration of load with Transmission Distribution Utilities (TDUs), and assess risks associated with residential and industrial load return to service • ERCOT Operations and Market teams discuss risk assessments related to impacts of reduced market prices on generation availability during forecast high demand periods. • Discussion of risks of return to controlled outages – and options to prevent it – with PUC Chairman Walker
<p>11:55 PM</p>	<ul style="list-style-type: none"> • ERCOT issues instructions to TDUs – load shed at 0 MW for first time since Monday, Feb. 15.
<p>Thursday February 18</p>	
<p>12:15 AM</p>	<ul style="list-style-type: none"> • ERCOT begins work on Market Notice
<p>6:45 AM</p>	<ul style="list-style-type: none"> • Consultation on draft notice between ERCOT, IMM and Chairman Walker.
<p>7:46 AM</p>	<ul style="list-style-type: none"> • Market Notice published by ERCOT.

Ancillary Service (AS) Prices Calculated According to Market Rules

- There were no Day-Ahead Market (DAM) offers in excess of the applicable System-Wide Offer Cap (SWCAP) of \$9,000/MWh on February 15.
- PUCT Rule 25.501(a) requires the DAM AS prices to be determined based on the shadow price of the constraint for each AS product.
- Consistent with PUC. Subst. R. 25.501(a) and Protocols Section 4.5.1(9) language: The Day-Ahead Market Clearing Prices for Capacity (MCPC) for each hour for each Ancillary Service is the Shadow Price for that Ancillary Service for the hour as determined by the DAM algorithm.
- The shadow price reflects the opportunity costs, and therefore, the MCPC can exceed the SWCAP of \$9,000/MWh.