



Item 2: Market Financial Matters

ERCOT Staff

Urgent Board of Directors Meeting

ERCOT Public
March 12, 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.

Invoice Payout Amounts to Market Participants

- These amounts are total outgoing payments on the Operating Day.
- Incoming and outgoing payments together typically net each other out.

Monday	Tuesday	Wednesday	Thursday	Friday
February 8	February 9	February 10	February 11	February 12
\$11,420,771	\$9,435,390	\$10,175,463	\$24,612,030	\$18,087,827
February 15	February 16	February 17	February 18	February 19
Bank Holiday	\$9,528,743	\$21,619,193	\$72,005,047	\$1,029,028,387
February 22	February 23	February 24	February 25	February 26
\$1,081,268,649	\$1,626,011,622	\$2,150,514,458	\$0	\$12,544,389,667

Settlement Timeline, February 19-26

	Friday February 19	Monday February 22	Tuesday February 23	Wednesday February 24	Thursday February 25	Friday February 26
Invoice Payout Date	2/19/21	2/22/21	2/23/21	2/24/21	2/25/21	2/26/21
Real-Time Operating Day for Initial Settlement	2/11/21	2/12/21	2/13/21	2/14/21	Nothing Due because of 2/22 Pause:	2/15/21 through 2/18/21
Day-Ahead Operating Day	2/12/21 Through 2/1/21	2/15/21	2/16/21	2/17/21		2/18/21 through 2/21/21
Collected by ERCOT from Market Participants	\$1.044B	\$1.087B	\$1.629B	\$2.153B	\$0	\$11.786B
CRR Auction Funds Used by ERCOT	\$0	\$0	\$0	\$0	\$0	\$800M
Paid Out by ERCOT to Market Participants	\$1.029B	\$1.081B	\$1.626B	\$2.151B	\$0	\$12.554B
Short Pay to Market Participants	\$1.56M	\$0	\$11.753M	\$16.601M	\$0	\$1.317B

Differences between funds collected and paid out are due to CRRs and System Administration Fees.

Settlement Timeline, March 1-8

	Monday March 1	Tuesday March 2	Wednesday March 3	Thursday March 4	Friday March 5	Monday March 8
Invoice Payout Date	3/1/21	3/2/21	3/3/21	3/4/21	3/5/21	3/8/21
Real-Time Operating Day for Initial Settlement	2/19/21	2/20/21	2/21/21	2/22/21 through 2/24/21	2/25/21	2/26/21
Day-Ahead Operating Day	2/22/21	2/23/21	2/24/21	2/25/21	2/26/21 through 2/28/21	3/1/21
Collected by ERCOT from Market Participants	\$1.381B	\$52.89M	\$12.704M	\$12.15M	\$21.718M	\$170.118M
CRR Auction Funds Used by ERCOT	\$0	\$0	\$0	\$0	\$0	\$0
Paid Out by ERCOT to Market Participants	\$957.207M	\$52.167M	\$12.149M	\$10.647M	\$20.456M	\$169.485M
Short Pay to Market Participants	\$345.07M	\$1.291M	\$0.147M	\$0.165M	\$0.614M	\$27.665M

Differences between funds collected and paid out are due to CRRs and System Administration Fees.

Material Breach Timeline

	+2 Bank Business Days (3 p.m.)	+2 Business Days (5 p.m.)	Failure to Timely Post/Pay Breach Notification	+1 Bank Business Day of Delivery Breach Notification (3 p.m.)	+1 Calendar Day Following Default
Collateral Call	Deadline to post collateral				
Invoice Payment		Deadline to pay invoice			
Notice of Material Breach			ERCOT sends Notice of Material Breach	<ul style="list-style-type: none"> • Deadline to cure shortfall • Failure to cure shortfall is a default • ERCOT may take actions to suspend, terminate, etc. 	
Confirmation of Default (REP Mass Transition)				ERCOT to confirm failure to cure shortfall	
				Mass Transition kickoff	



Short Pay and Uplift Process

