

Item 8.3: Commercial Markets Update

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Reliability & Markets Committee Meeting

ERCOT Public August 19, 2024

Overview

Purpose

Update the Committee on notable market outcomes related to Hurricane Beryl, and progress on on-going market development activities.

Voting Items / Requests

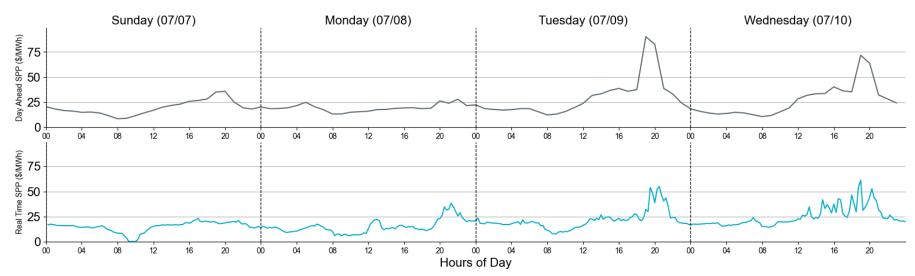
No action is requested of the Reliability & Markets Committee or the ERCOT Board; for discussion only.

Key Takeaways

- Hurricane Beryl was a significant weather event but its effects on wholesale market prices were limited at the system-wide level. However, localized price separation between load zones was pronounced as a result of congestion and other factors.
- ERCOT continues to progress on concurrent market design activities and is actively engaging stakeholders in the development of new market products and participation models.



System-wide prices were generally not affected by Hurricane Beryl

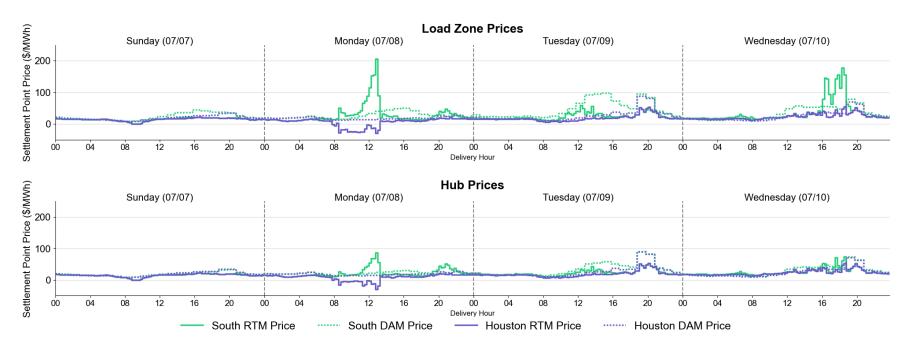


- Beryl made landfall near Matagorda, Texas on July 8 at 4:30 am as a Category 1 hurricane. On July 9 at 9 am it exited Texas.
- The system-wide price was mild throughout the event due to sufficient generation and reserves as well as relatively low demand.
 - Peak load on July 8 was roughly 15.8 GW less than the peak load on July 7.
 - Forced outages coincident with the storm gradually increased over time, peaking on July 10.



Note: Real-time prices are 15-minute values, and day-ahead prices are hourly values.

Local prices separated between the Houston and South load zones as a result of the storm



- Local congestion near the coastal areas (between Victoria and Houston metro areas) led to higher prices in the South Load Zone and lower prices in the Houston Load Zone.
 - On July 8, during the interval ending 13:15, the South Load Zone real-time price peaked at almost \$207/MWh, while simultaneously, the Houston Load Zone real-time price was just above -\$30/MWh.
- Similar price separation was observed between the South and Houston Hub prices.



Note: Real-Time prices are 15-minute values, and day-ahead prices are hourly values.

Market Initiatives Underway

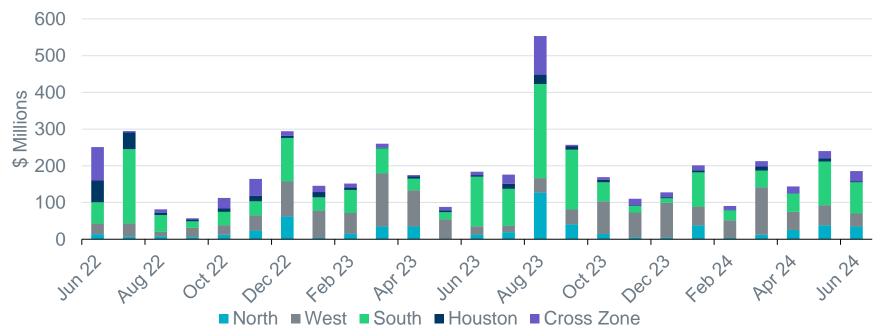
- Performance Credit Mechanism (PCM)
 - PUCT stakeholder workshop held on July 25
 - A strawman design with updated design parameters and sensitivity analysis will be discussed at the August 29 PUCT Open Meeting
 - Cost and Market Effects Analysis will be developed through the fall and delivered by the end of the year
- Dispatchable Reliability Reserve Service (DRRS)
 - NPRR1235 was raised at the June Protocol Revision Subcommittee (PRS) meeting and was referred to both the Wholesale Market Subcommittee and Reliability and Operations Subcommittee
 - Stakeholder consultation is underway, including consideration of including energy storage resources in DRRS
- ADER Pilot Progress
 - Two primary activities:
 - 1. evaluating the performance of existing participation models
 - 2. exploring new participation models for a potential 3rd phase of the pilot



Appendix



Real-Time Congestion Rent by Zone

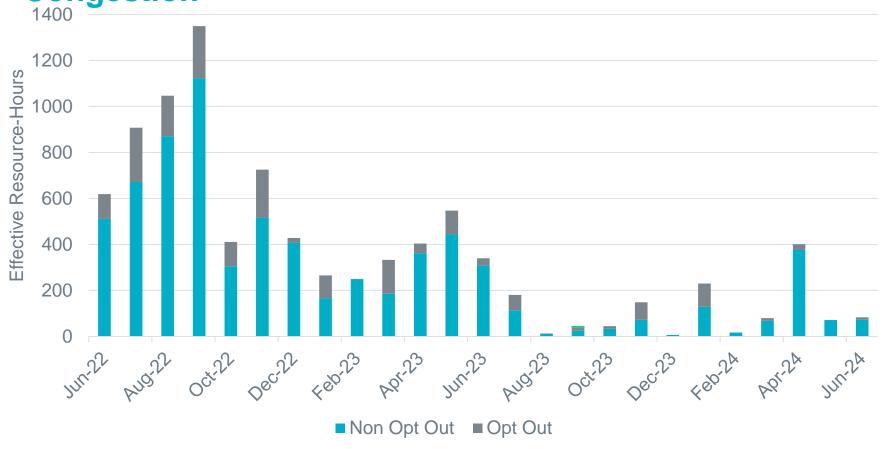


- Congestion Rent is determined using the shadow prices and MW flows for individual constraints in SCED as well as the duration of congested SCED intervals.
- In June, total Real-Time congestion rent decreased compared to May, with the highest congestion rent observed in the West and South Zones.
 - South Zone congestion rent was primarily driven by the loss of the South Valley manual contingency overloading the 138 kV transmission line from Burns to Rio Hondo.
 - West Zone congestion rent was primarily driven by the loss of the 345 kV contingency from Longshore Switch to Morgan Creek and Consavvy Switch overloading the 138 kV transmission line from Morgan Creek to Navigation.

Note: The "Cross Zone" category consists of cases in which the substations on either end of the constraint are in different zones. _



Eight Resources were Committed in June for Capacity and Congestion



"Effective Resource-Hours" excludes any period during a Reliability Unit Commitment hour when the RUC-committed Resource was starting up, shutting down, off-line, or otherwise not available for dispatch by SCED.

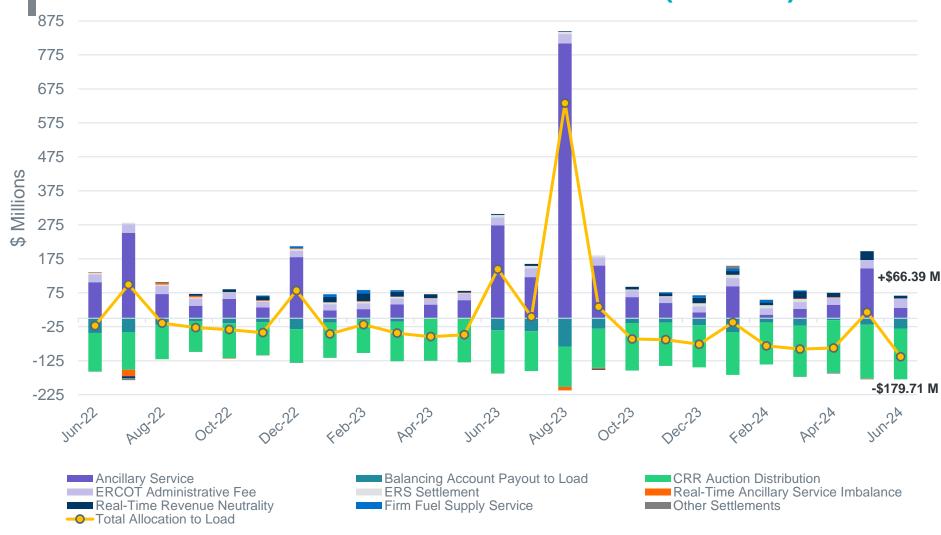


Eight Resources were Committed in June for Capacity and Congestion

Resource #	Effective Resource-hours	Non Opt Out (Effective Hours)	Opt Out (Effective Hours)
1	19.7	8.7	11.0
2	41.0	41.0	0.0
3	2.0	2.0	0.0
4	3.0	3.0	0.0
5	3.0	3.0	0.0
6	6.0	6.0	0.0
7	4.9	4.9	0.0
8	3.9	3.9	0.0
SUM	83.5	72.5	11.0



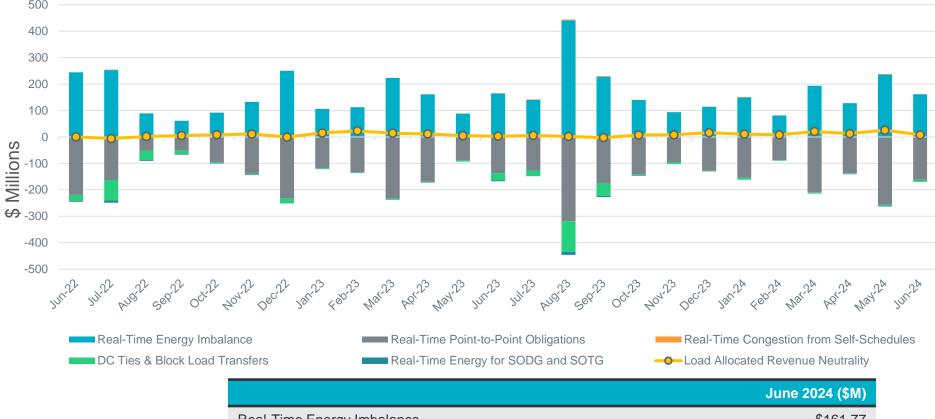
Net Allocation to Load in June 2024 was (\$113.31) Million







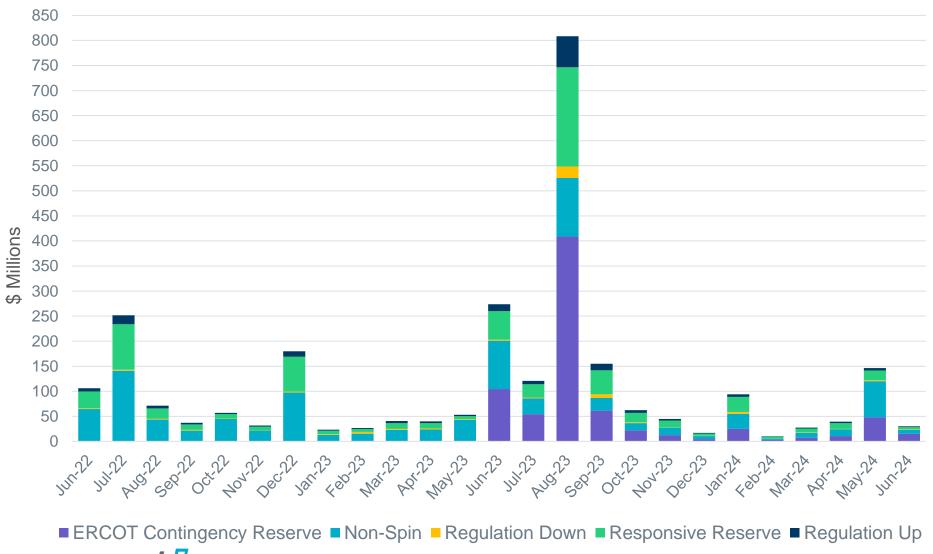
Real-Time Revenue Neutrality Allocated to Load was \$7.93M for June 2024



	June 2024 (\$M)		
Real-Time Energy Imbalance	\$161.77		
Real-Time Point-to-Point Obligation	(\$161.99)		
Real-Time Congestion from Self-Schedules	\$0.64		
DC Tie & Block Load Transfer	(\$7.36)		
Real-Time Energy for SODG and SOTG	(\$1.00)		
Load Allocated Revenue Neutrality	\$7.93		

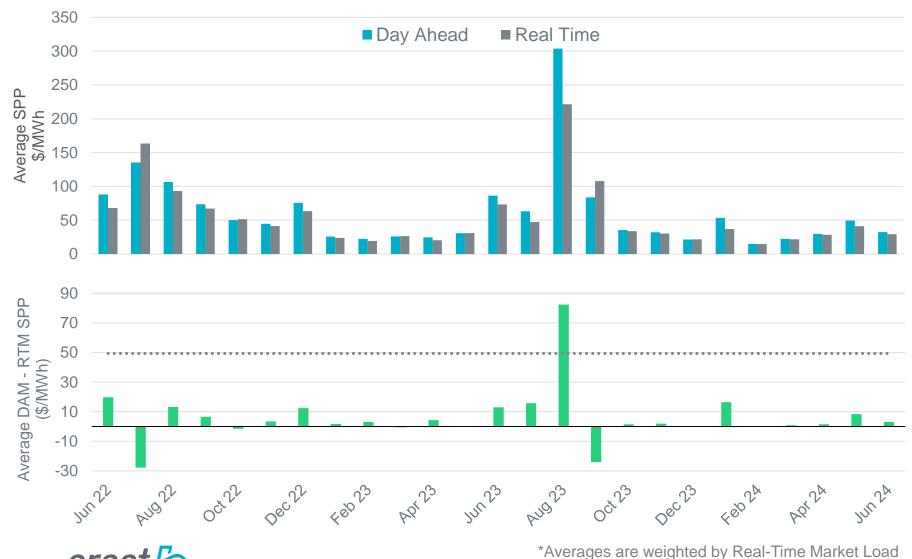


Ancillary Services for June 2024 totaled \$30.07M



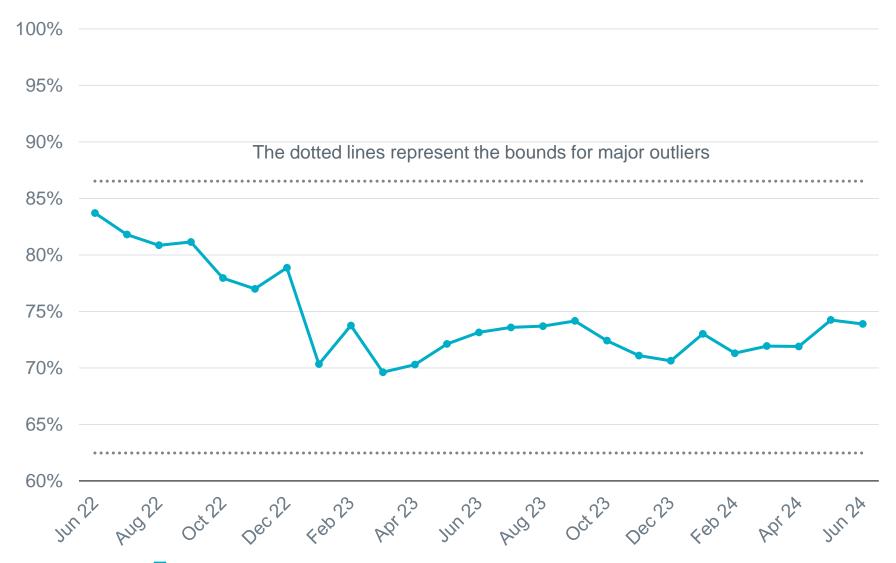


Day-Ahead and Real-Time Market Price Differences



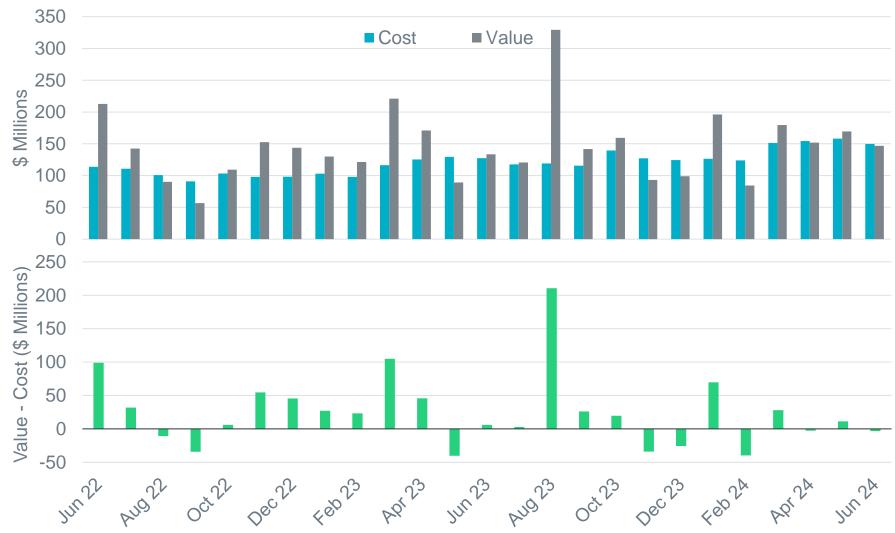


Percentage of Real-Time Load Transacted in the Day-Ahead Market





Congestion Revenue Right (CRR) Value and Cost Differences

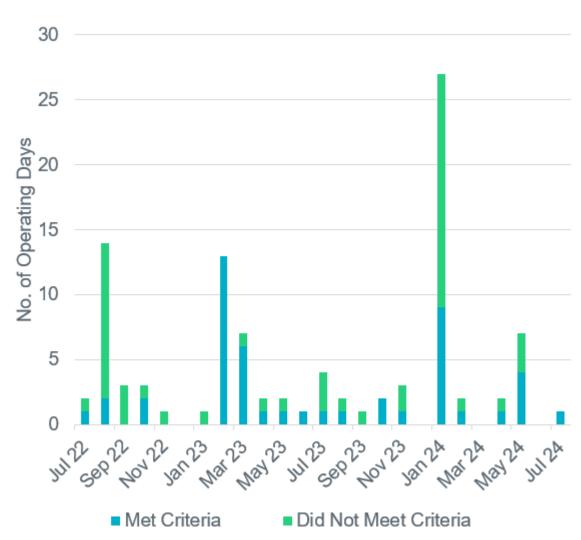




Price Issues and the Impact of Nodal Protocol Revision Request (NPRR) 1024 on Price Corrections

This graph looks at the recent history of price issues in the RTM or DAM and breaks the impacted Operating Days into two categories:

- Days that met the criteria for "significance" under NPRR1024 and were corrected and;
- Days that were not corrected because they did not meet the criteria for "significance" under NPRR1024.





Details for June Price Corrections Review

There were no price impact events for the month of June.



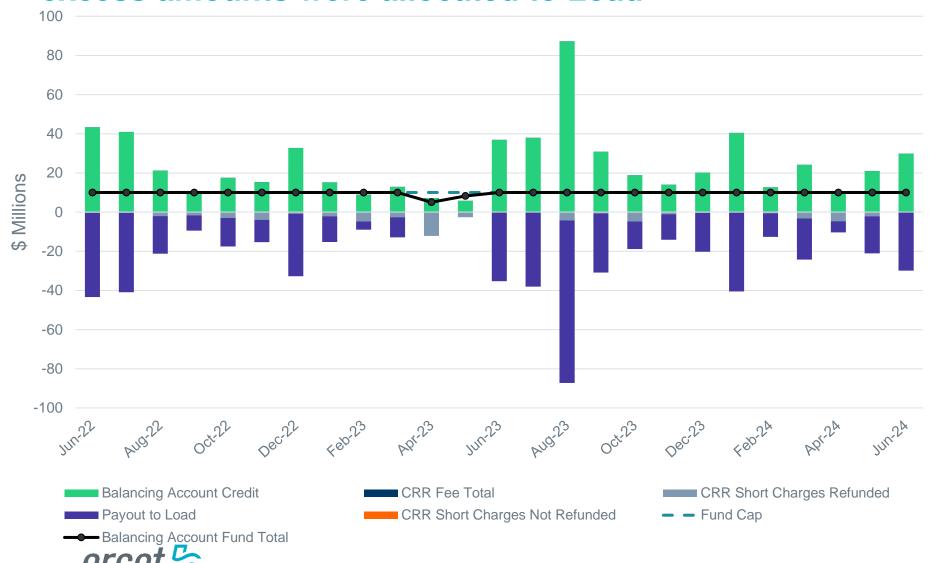
Details for July Price Corrections Review

Operating Days Meeting Significance Criteria

 On July 18, 2024, the Emergency Basepoint Flag was activated during planned maintenance of the Market Management System. Due to market database connectivity issues, the maintenance was halted and rescheduled to the following day. The estimated total dollar impact was approximately \$778. The price corrections were made within the 2-day deadline for correction specified within the Protocols.



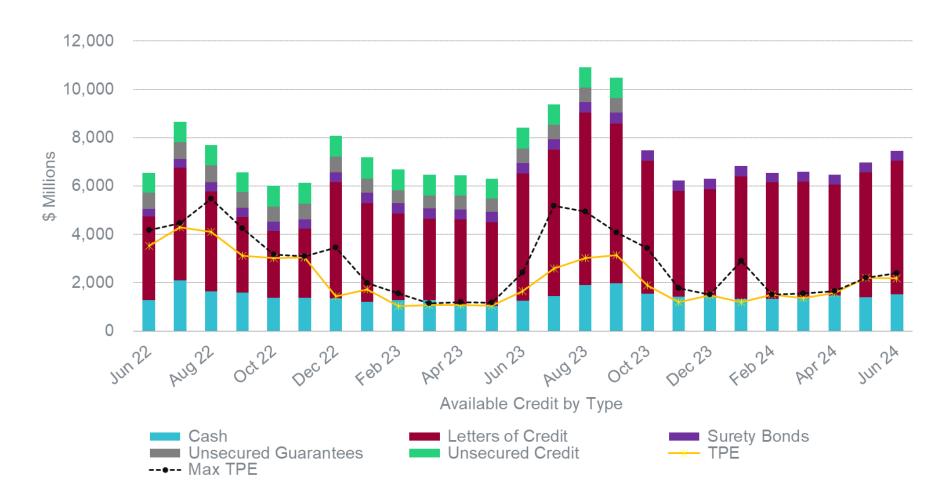
The CRR Balancing Account was fully-funded and excess amounts were allocated to Load



Item 8.3

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Available Credit by Type Compared to Total Potential Exposure (TPE)





Retail Transaction Volumes – Summary – June 2024

	Year-To-Date		Transactions Received	
Transaction Type	June 2024	June 2023	June 2024	June 2023
Switches	647,947	573,520	106,772	98,957
Acquisitions	0	0	0	0
Move - Ins	1,609,081	1,552,659	255,906	273,254
Move - Outs	705,956	694,257	126,702	126,867
Continuous Service Agreements (CSA)	213,754	253,202	52,149	59,879
Mass Transitions	0	0	0	0
Total	3,176,738	3,073,638	541,529	558,957
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