

ERCOT Monthly Operational Overview (August 2024)

ERCOT Public September 17, 2024

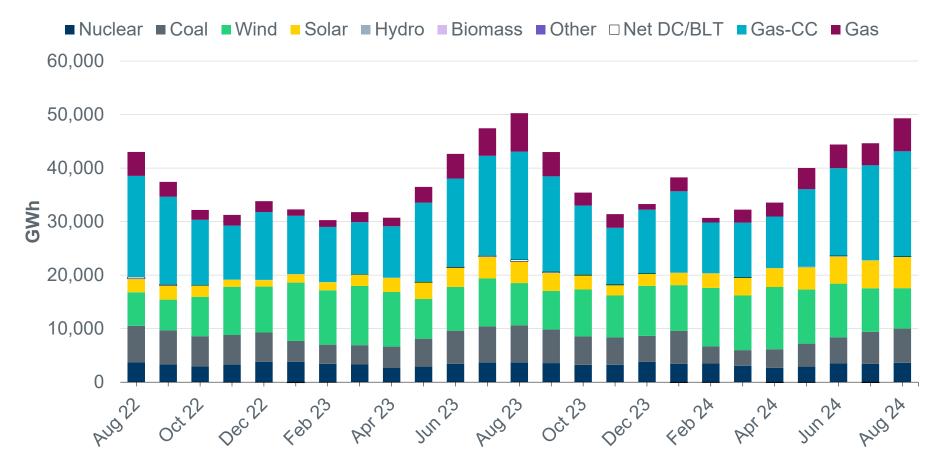
Highlights, Records and Notifications

- ERCOT's maximum peak demand for the month of August was 85,199 MW* on 8/20/2024; this is 309 MW less than the August 2023 peak demand of 85,508 MW set on 8/10/2023.
- ERCOT issued 4 notifications:
 - 2 OCNs Due to extreme hot weather.
 - 2 Advisories Geomagnetic disturbance of [K-7] or higher.



* Preliminary value from September Demand and Energy 2024 report.

Monthly energy generation decreased by 2% year-overyear to 49,268 GWh in August 2024, compared to 50,250 GWh in August 2023

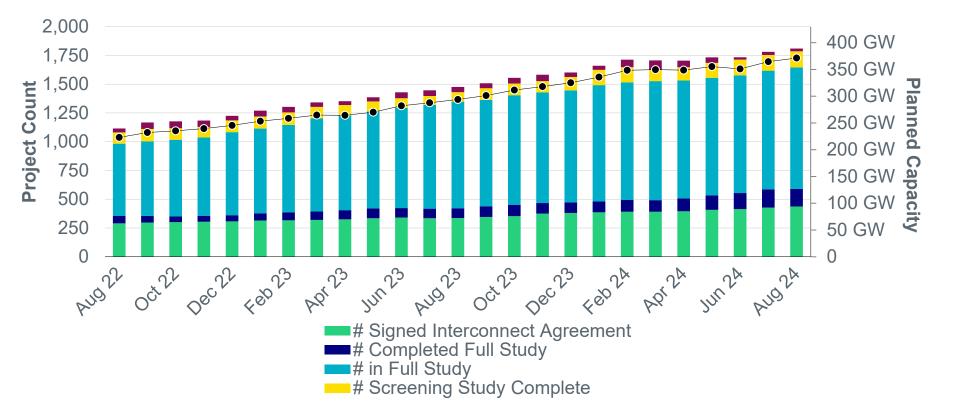


Data for latest two months are based on preliminary settlements.

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Generation Interconnection activity by project phase

(Excludes capacity associated with projects designated as Inactive per Planning Guide Section 5.2.5)

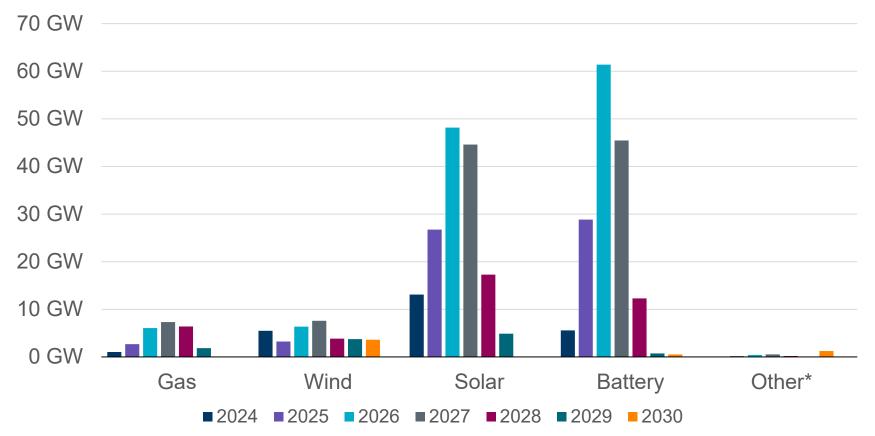


- There are an additional 49 "Small Generator" projects totaling 464 MW that are going through the simplified interconnection process.
- A break-out by fuel type can be found in the monthly Generator Interconnection Status (GIS) reports available on the ERCOT Resource Adequacy Page: <u>http://www.ercot.com/gridinfo/resource</u>



Interconnection Queue Capacity by Fuel Type

Queue totals: Solar 155 GW (41.7%), Wind 34 GW (9.1%), Gas 25 GW (6.8%), Battery 155 GW (41.7%) (Excludes capacity associated with projects designated as Inactive per Planning Guide Section 5.2.5)



A break-out by zone can be found in the monthly Generator Interconnection Status (GIS) reports available on the ERCOT Resource Adequacy Page: <u>http://www.ercot.com/gridinfo/resource</u>



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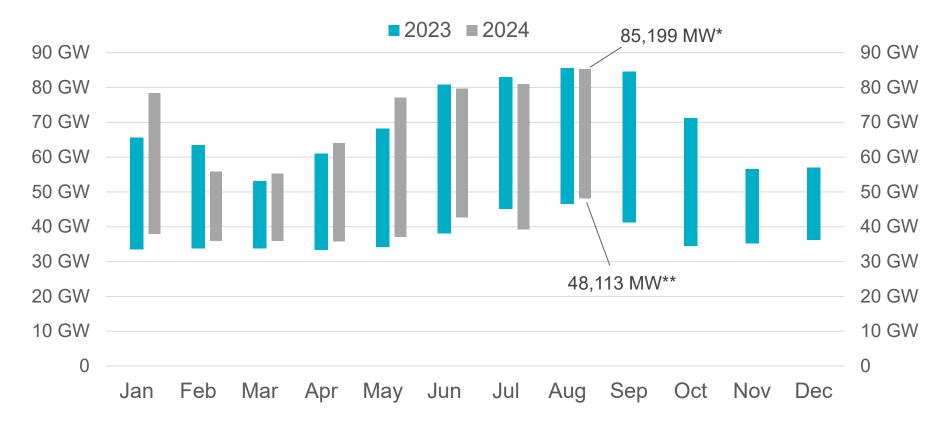
* Other includes petroleum coke (pet coke), hydroelectric, fuel oil, geothermal energy, other miscellaneous fuels reported by developers, and fuel cells that use fuels other than natural gas.

Planning Summary

- ERCOT is tracking 1,886 active generation interconnection requests totaling 371,313 MW as of August 31. This includes 154,770 MW of solar, 33,853 MW of wind, 154,799 MW of battery storage, and 25,328 MW of gas projects; 99 projects were categorized as inactive, up from 95 inactive projects in July 2024.
- ERCOT is currently reviewing proposed transmission improvements with a total estimated cost of \$2.414 billion as of August 31, 2024.
- Transmission Projects endorsed in 2024 total \$2.817 billion as of August 31, 2024.
- All projects (in engineering, routing, licensing and construction) total approximately \$14.183 billion as of June 1, 2024.
- Transmission Projects energized in 2024 total approximately \$2.160 billion as of June 1, 2024.



ERCOT's maximum peak demand for the month of August was 85,199 MW*; this is 309 MW less than the August 2023 all-time record demand of 85,508 MW.

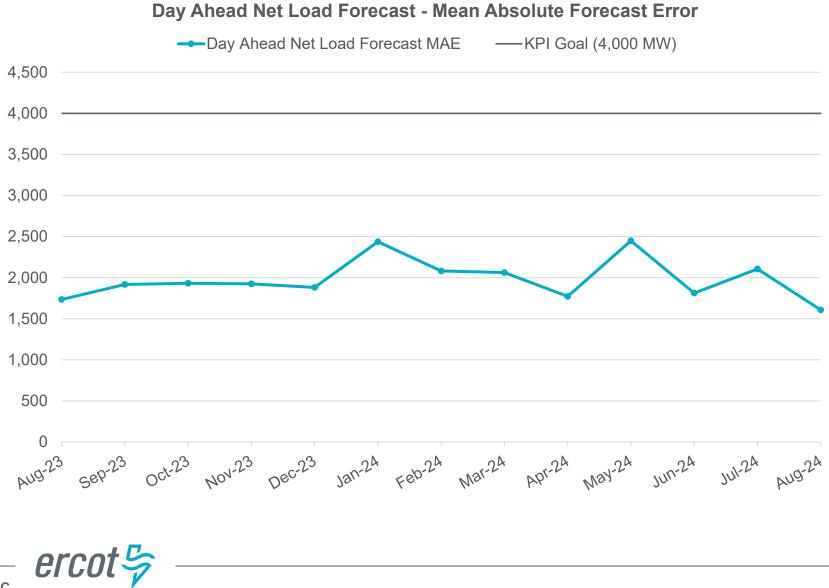


*Based on the maximum net system hourly value from the August 2024 Demand and Energy report. **Based on the minimum net system 15-minute interval value from the August 2024 Demand and Energy report.

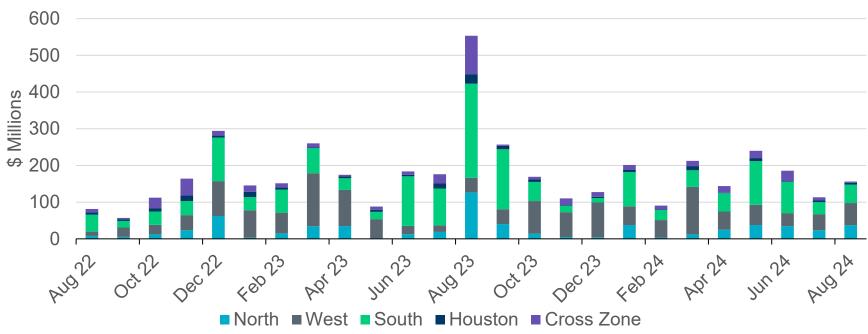
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Net Load Forecast Performance



Real-Time Congestion Rent by Zone

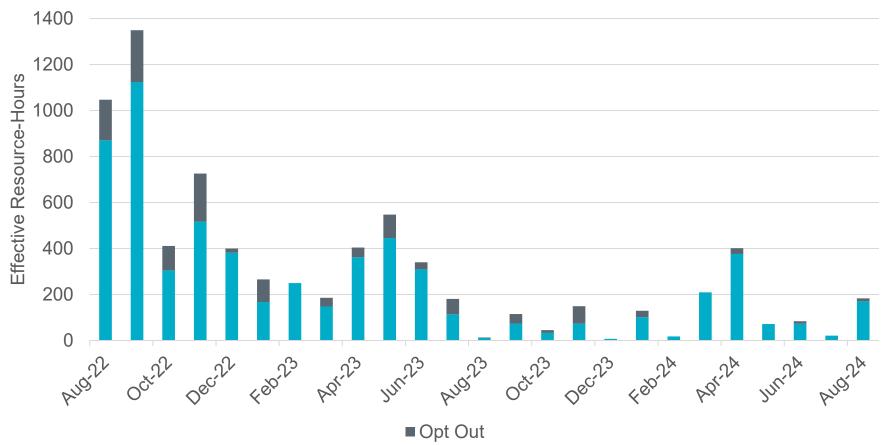


- Congestion Rent is determined using the shadow prices and MW flows for individual constraints in SCED as well as the duration of congested SCED intervals.
- In August, total Real-Time congestion rent increased compared to July, with the highest congestion rent observed in the West and South Zones.
 - South Zone congestion rent was primarily driven by the loss of the Austrop to Daffin Gin 138kv line from AEN Dunlap to Decker Power Plant.
 - West Zone congestion rent was primarily driven by the loss of the 345 kV contingency from Consavvy Switch to Morgan Creek, 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.



Sixteen Resources were Committed in August 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.

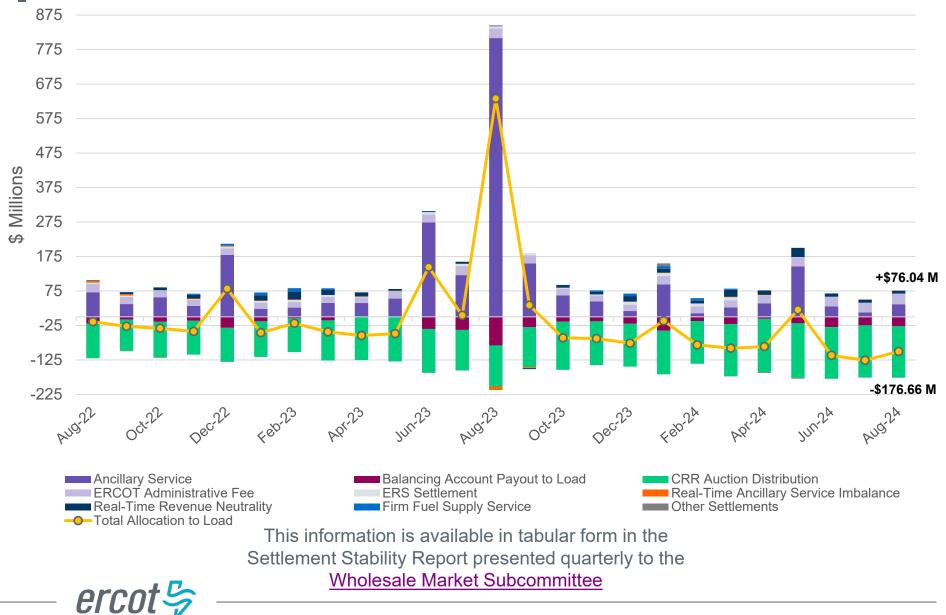


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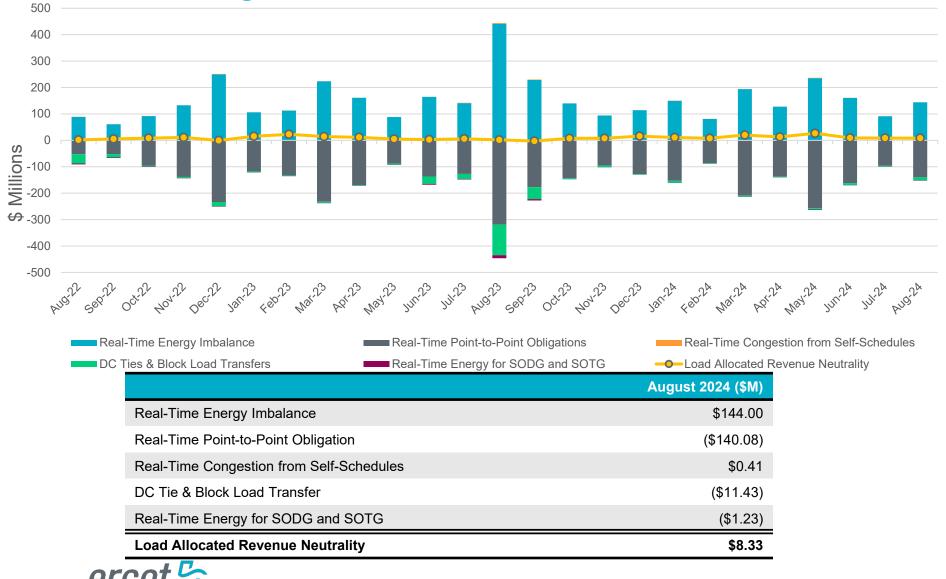
Resource #	Effective Resource-hours	Non Opt Out (Effective Hours)	Opt Out (Effective Hours)
1	6.0	0.0	6.0
2	37.0	31.0	6.0
3	10.0	10.0	0.0
4	8.0	8.0	0.0
5	23.9	22.9	1.0
6	8.0	8.0	0.0
7	15.9	15.9	0.0
8	7.0	7.0	0.0
9	13.9	13.9	0.0
10	18.6	18.6	0.0
11	10.9	10.9	0.0
12	3.9	3.9	0.0
13	3.0	3.0	0.0
14	5.0	5.0	0.0
15	5.0	5.0	0.0
16	6.9	6.9	0.0
SUM	183.1	170.1	13.0

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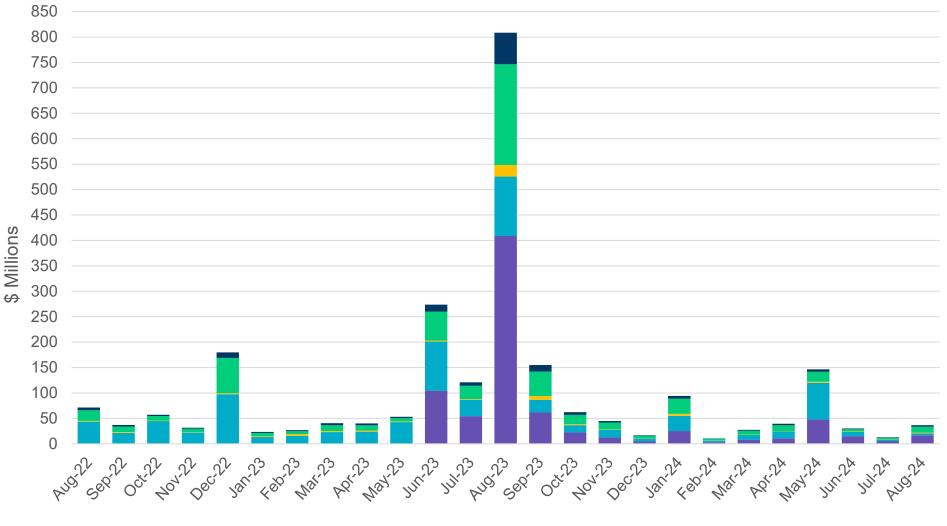
Net Allocation to Load in August 2024 was (\$100.62) Million



Real-Time Revenue Neutrality Allocated to Load was \$8.33M for August 2024



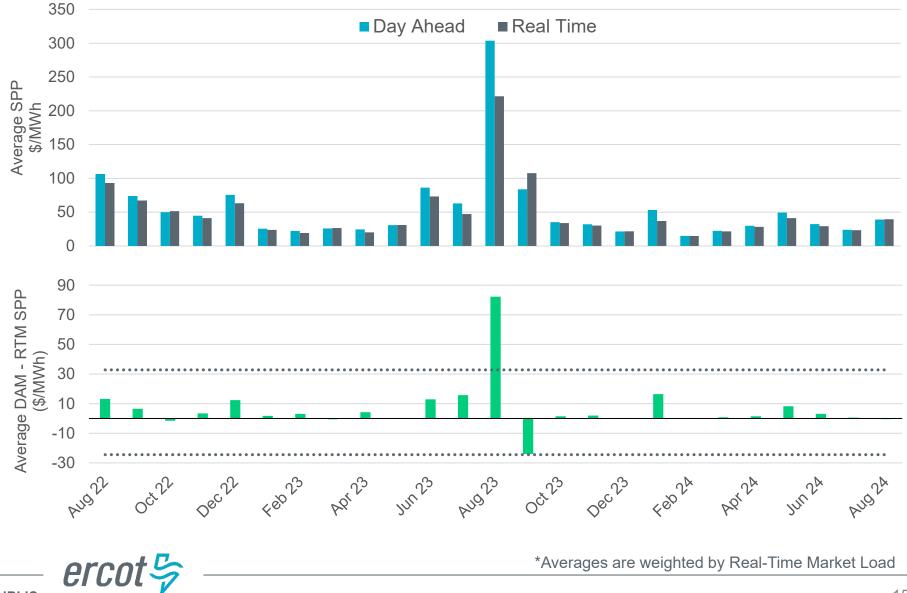
Ancillary Services for August 2024 totaled \$36.57M



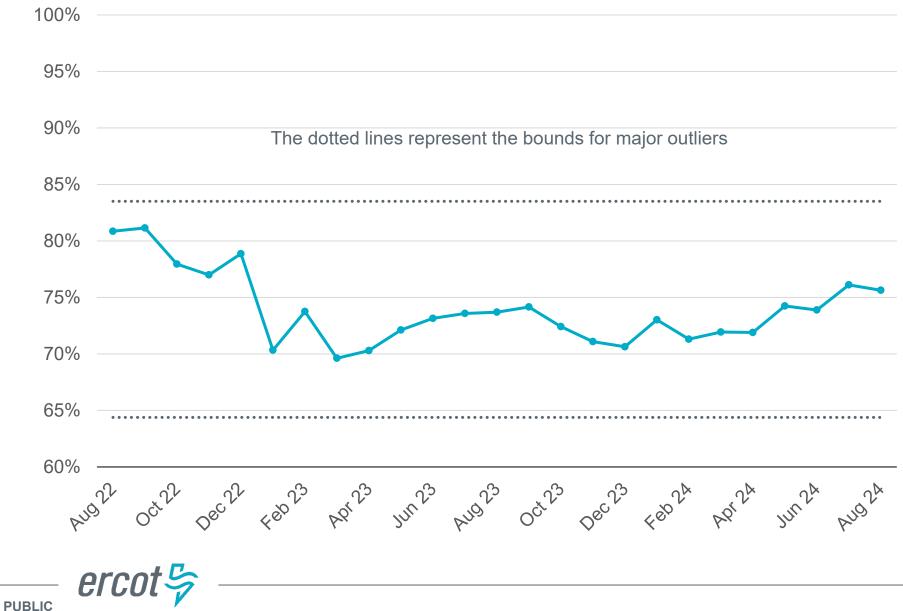
ERCOT Contingency Reserve Non-Spin Regulation Down Reserve Reserve Regulation Up



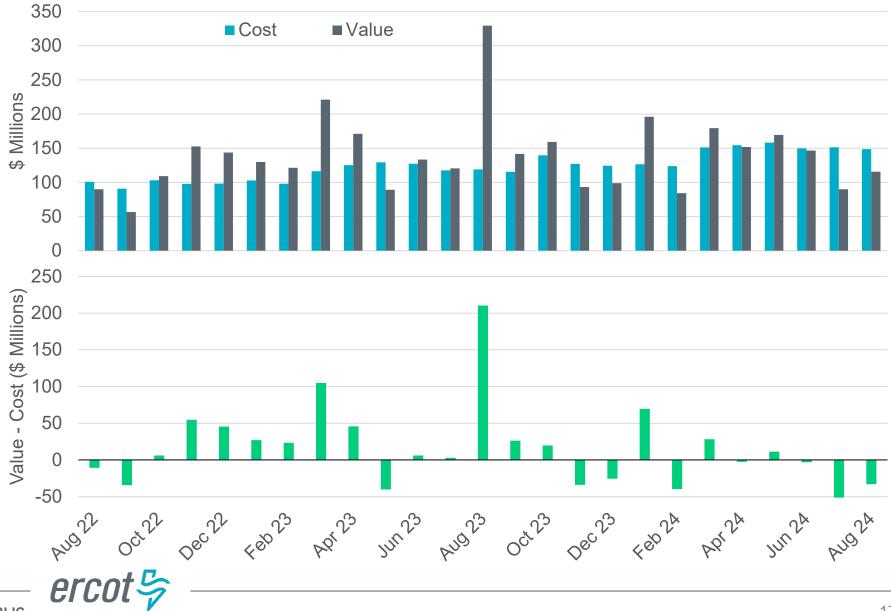
Day-Ahead and Real-Time Market Price Differences



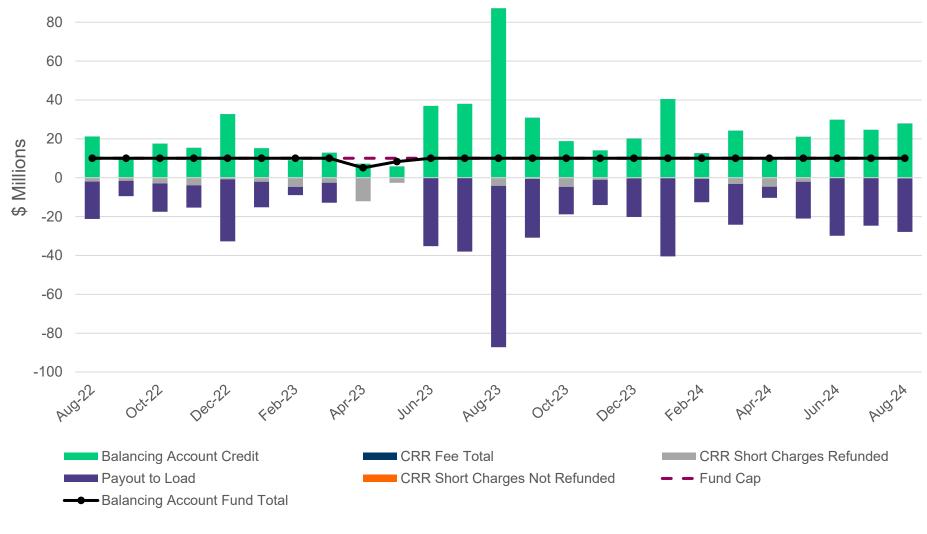
Percentage of Real-Time Load Transacted in the Day-Ahead Market



Congestion Revenue Right (CRR) Value and Cost Differences



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

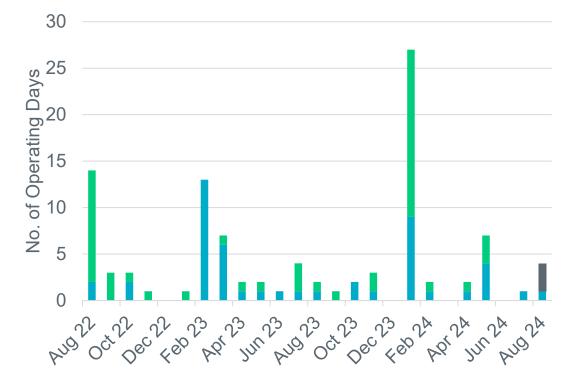




Price Issues and the Impact of Nodal Protocol Revision Request (NPRR) 1024 on Price Corrections

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

- Days that met the criteria for "significance" under NPRR1024 and were corrected;
- Days that would not have met the criteria for "significance" under NPRR1024, but were corrected because NPRR1024 was not yet in place; and
- Days that were not corrected because they did not meet the criteria for "significance" under NPRR1024.



Met Criteria - Correction Pending Board Review

- Did Not Meet Criteria
- Met Criteria

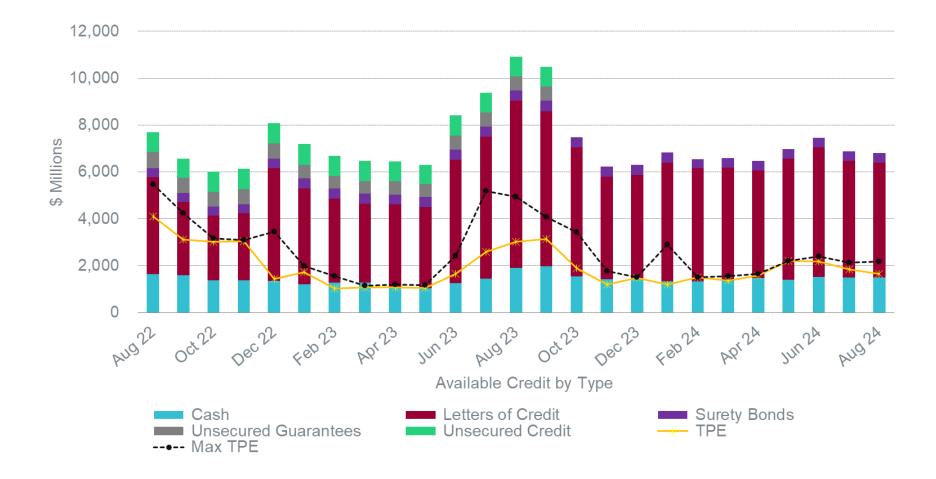


Details for Price Corrections Review

- On August 9 10, 2024, ERCOT had incorrectly updated the effective dates for a Resource's registration status, resulting in the Resource not being considered for Security-Constrained Economic Dispatch (See Market Notice <u>M-A082024-01</u>). Impact analysis showed that both Operating Days (ODs) met criteria for seeking review by the ERCOT Board of Directors (Board). Further details of the analysis will be given in an upcoming Market Notice.
- On August 20, 2024, an attempt by ERCOT to recall 500 MW resulted in all 2000 MW of the currently deployed ECRS to be recalled. This was due to a software defect in the user interface used by the Operator (See Market Notice <u>M-A082824-01</u>). Impact analysis showed that the OD met criteria for seeking review by the ERCOT Board of Directors (Board). Further details of the analysis will be given in an upcoming Market Notice.
- On August 23, 2024, Emergency Basepoints were activated during a planned upgrade to the MMS system. The resulting impact analysis showed that this day met criteria for price correction, with an estimated total dollar impact of \$50,914.



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



*Numbers are as of month end except for Max TPE

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Retail Transaction Volumes – Summary – August 2024

	Year-To-Date		Transactions Received	
Transaction Type	August 2024	August 2023	August 2024	August 2023
Switches	866,555	787,775	104,312	119,121
Acquisitions	0	0	0	0
Move - Ins	2,160,557	2,101,353	282,027	282,005
Move - Outs	962,027	944,837	123,848	127,670
Continuous Service Agreements (CSA)	294,985	311,596	50,506	28,454
Mass Transitions	0	0	0	0
Total	4,284,124	4,145,561	560,693	557,250

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