

ERCOT Monthly Operational Overview (January 2025)

ERCOT Public February 18, 2025

Highlights, Records and Notifications

- ERCOT's maximum peak demand for the month of January was 77,478 MW* on 1/22/25; this is 871 MW less than the January 2024 demand of 78,349 MW set on 1/16/24.
- ERCOT issued 15 notifications:
 - 2 Advisories Due to delaying DAM posting from system issues.
 - 3 Advisories Due to extreme cold weather systems approaching ERCOT.
 - 2 Advisories Due to Geomagnetic disturbances on ERCOT.
 - 3 OCNs Due to extreme cold weather systems impacting ERCOT.
 - 4 Watches Due to extreme cold weather systems impacting ERCOT.
 - 1 Emergency Notice Due to Transmission emergency.

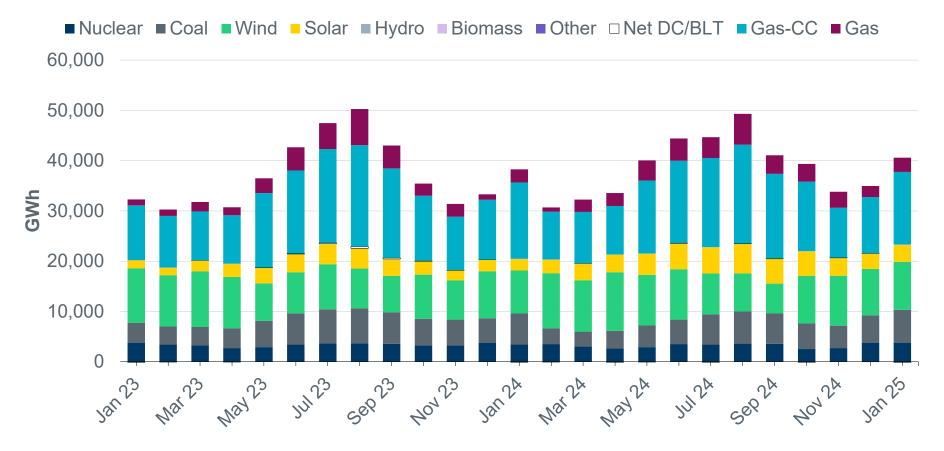


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* Preliminary value from February Demand and Energy 2024 report.

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Monthly energy generation increased by 6.0% year-overyear to 40,482 GWh in January 2025, compared to 38,184 GWh in January 2024

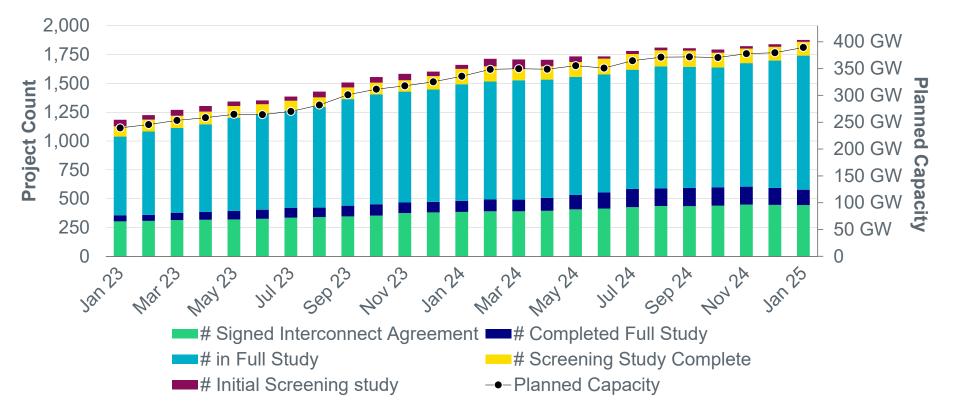


Data for latest two months are based on preliminary settlements.

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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)

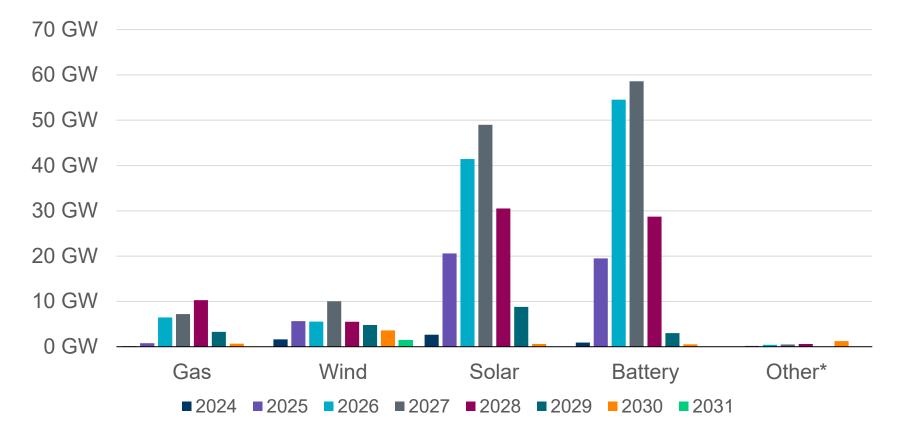


- There are an additional 46 "Small Generator" projects totaling 425 MW that are going through the simplified interconnection process.
- A break-out by fuel type can be found in the monthly Generator Interconnection Status (GIS) reports available on the ERCOT Resource Adequacy Page: <u>http://www.ercot.com/gridinfo/resource</u>



Interconnection Queue Capacity by Fuel Type

Queue totals: Solar 154 GW (39.5%), Wind 38 GW (9.8%), Gas 29 GW (7.4%), Battery 166 GW (42.6%), Other 3 GW (.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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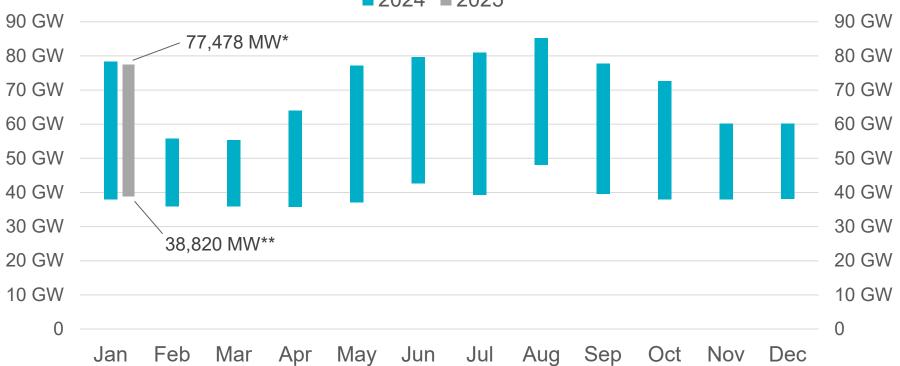
* Other includes petroleum coke (pet coke), hydroelectric, fuel oil, geothermal energy, other miscellaneous fuels reported by developers, and fuel cells that use fuels other than natural gas.

Planning Summary

- ERCOT is tracking 1,952 active generation interconnection requests totaling 389,318 MW as of January 31. This includes 153,607 MW of solar, 38,223 MW of wind, 165,933 MW of battery, and 28,774 MW of gas projects; 126 projects were categorized as inactive, up from 125 inactive projects in December 2024.
- ERCOT is currently reviewing proposed transmission improvements with a total estimated cost of \$3.357 billion as of January 31, 2025.
- Transmission Projects endorsed in 2025 total \$191.16 million as of January 31, 2025.
- All projects (in engineering, routing, licensing and construction) total approximately \$16.866 billion as of February 1, 2025.
- Transmission Projects energized in 2025 total approximately \$386.78 million as of February 1, 2025.



ERCOT's maximum peak demand for the month of January was 77,478 MW* on 1/22/25; this is 871 MW less than the January 2024 demand of 78,349 MW set on 1/16/24.



■ 2024 ■ 2025

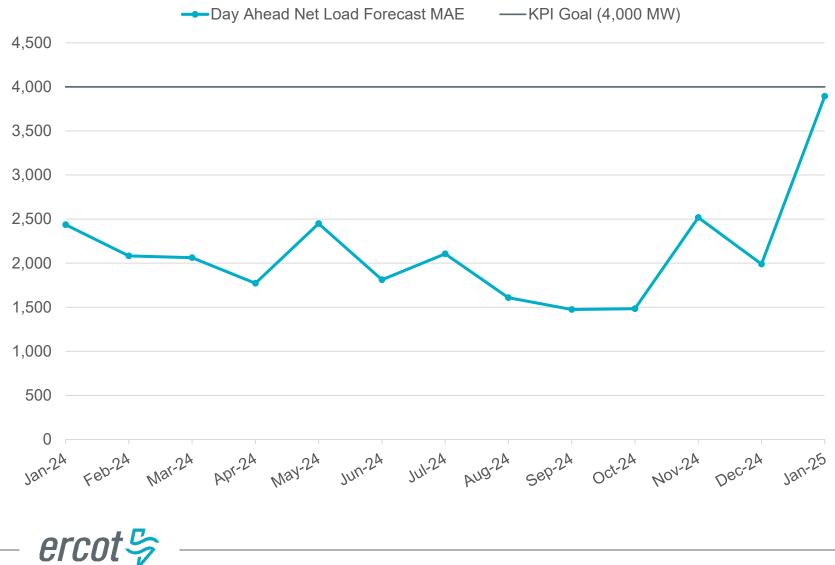
*Based on the maximum net system hourly value from the January 2025 Demand and Energy report. **Based on the minimum net system 15-minute interval value from the January 2025 Demand and Energy report.

Data for latest two months are based on preliminary settlements.

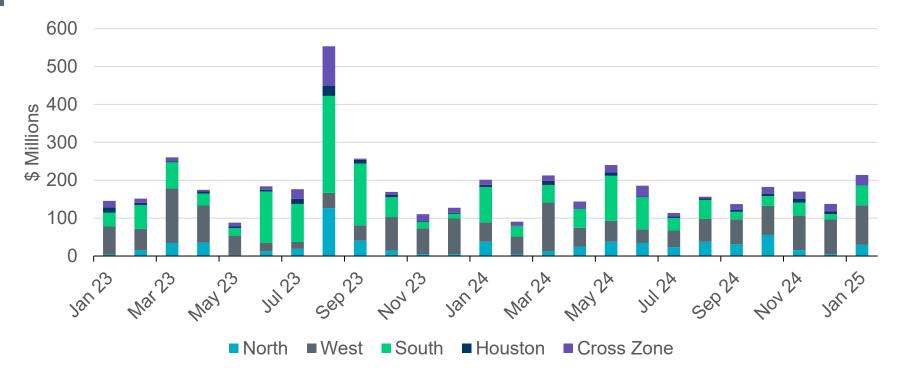


Net Load Forecast Performance

Day Ahead Net Load Forecast - Mean Absolute Forecast Error



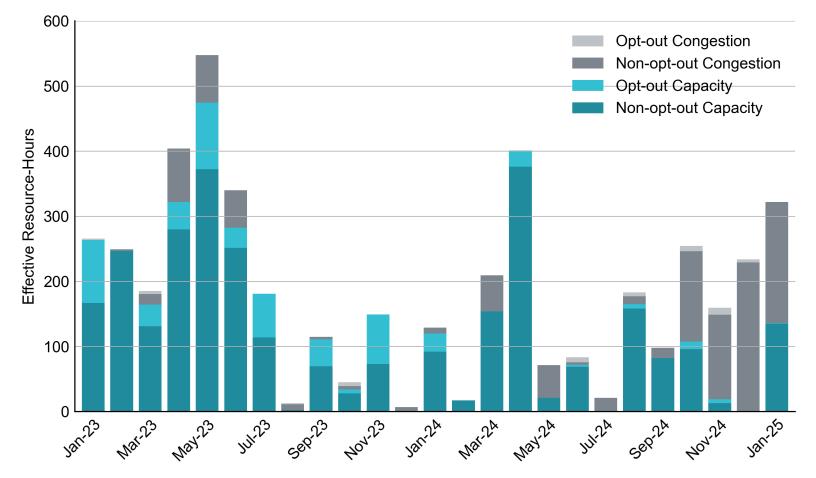
Real-Time Congestion Rent by Zone



- Congestion rent is determined using the shadow prices and MW flows for individual constraints in SCED as well as the length in time of SCED intervals.
- Total Real-Time congestion rent increased in January compared to December, with the highest congestion rent in the West and South Zones.
 - Congestion rent in the West Zone was primarily driven by the loss of the 345kV Consavvy Switch to Morgan Creek SES line overloading the Morgan Creek SES 345 to 138kV transformer.
 - Congestion rent in the South Zone was primarily driven by the loss of the 138kV Rangerville to La Palma line overloading the 138kV Stewart to Vertrees line.



Elevated RUC Activity Continues, Providing Capacity and Managing Congestion



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

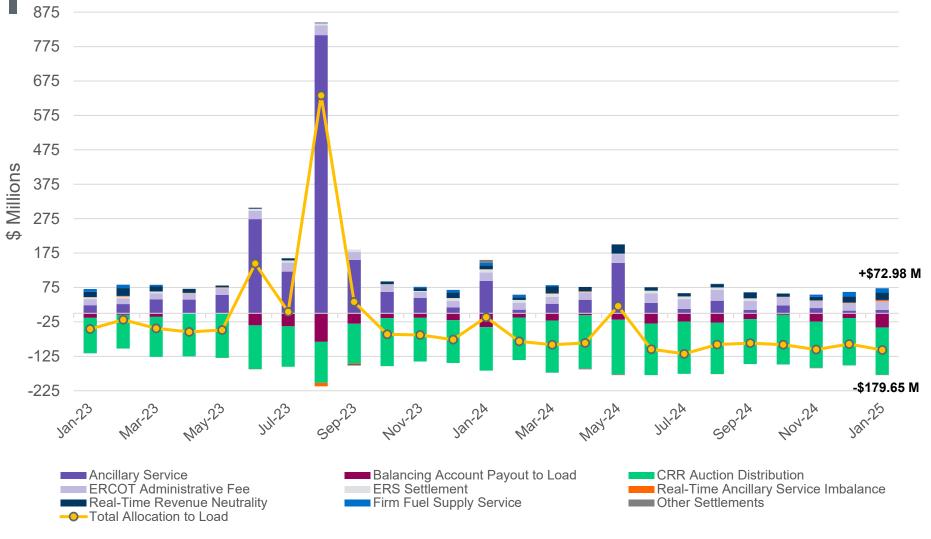


Twenty-Five Resources were Committed in January, to Manage Congestion and Provide Capacity

	Effective Resource-hours	For Congestion		For Capacity	
Resource #		Opt-out	Non-Opt-Out	Opt-Out	Non-Opt-Out
1	1.0	0.0	0.0	1.0	0.0
2	5.3	0.0	5.3	0.0	0.0
3	6.9	0.0	6.9	0.0	0.0
4	12.0	0.0	12.0	0.0	0.0
5	28.4	0.0	17.9	0.0	10.5
6	18.9	0.0	7.9	0.0	11.0
7	6.0	0.0	6.0	0.0	0.0
8	6.0	0.0	6.0	0.0	0.0
9	9.1	0.0	9.1	0.0	0.0
10	20.3	0.0	20.2	0.0	0.1
11	6.0	0.0	6.0	0.0	0.0
12	24.9	0.0	8.0	0.0	16.9
13	4.0	0.0	4.0	0.0	0.0
14	20.6	0.0	11.0	0.0	9.6
15	21.3	0.0	12.3	0.0	9.0
16	40.9	0.0	0.0	0.0	40.9
17	3.8	0.0	3.8	0.0	0.0
18	5.2	0.0	5.2	0.0	0.0
19	45.2	0.0	12.3	0.0	32.9
20	3.0	0.0	3.0	0.0	0.0
21	3.0	0.0	3.0	0.0	0.0
22	9.9	0.0	9.9	0.0	0.0
23	8.0	0.0	8.0	0.0	0.0
24	4.0	0.0	0.0	0.0	4.0
25	8.0	0.0	8.0	0.0	0.0
TOTAL	321.8	0.0	185.9	1.0	134.8

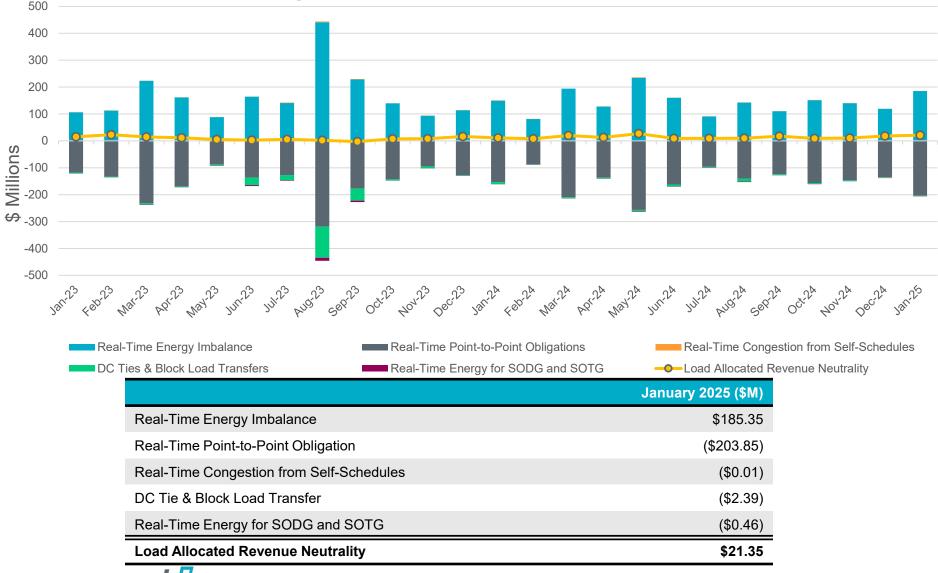
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Net Allocation to Load in January 2025 was (\$106.67) Million

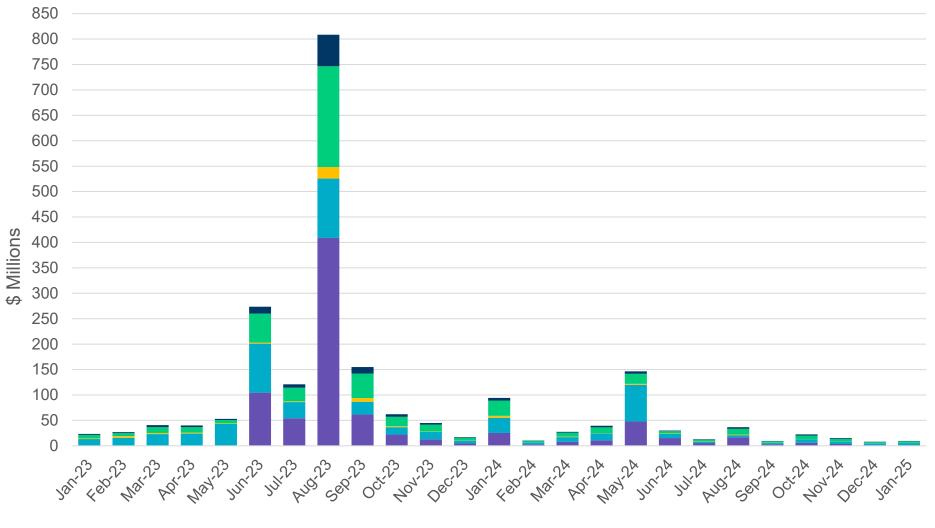


This information is available in tabular form in the Settlement Stability Report presented quarterly to the <u>Wholesale Market Subcommittee</u>

Real-Time Revenue Neutrality Allocated to Load was \$21.35 M for January 2025



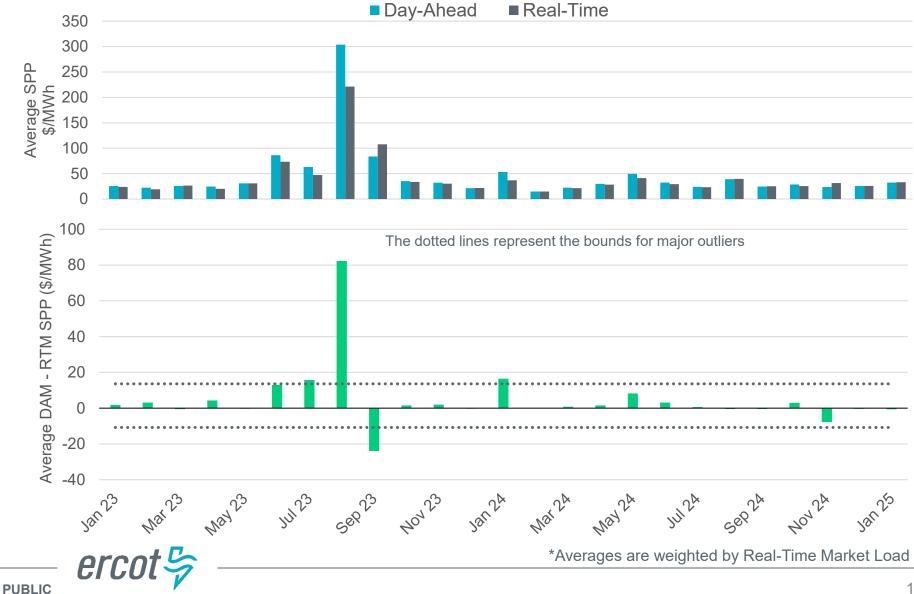
Ancillary Services for January 2025 totaled \$9.65M



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



Real-Time prices were aligned with Day-Ahead prices, on average, in January



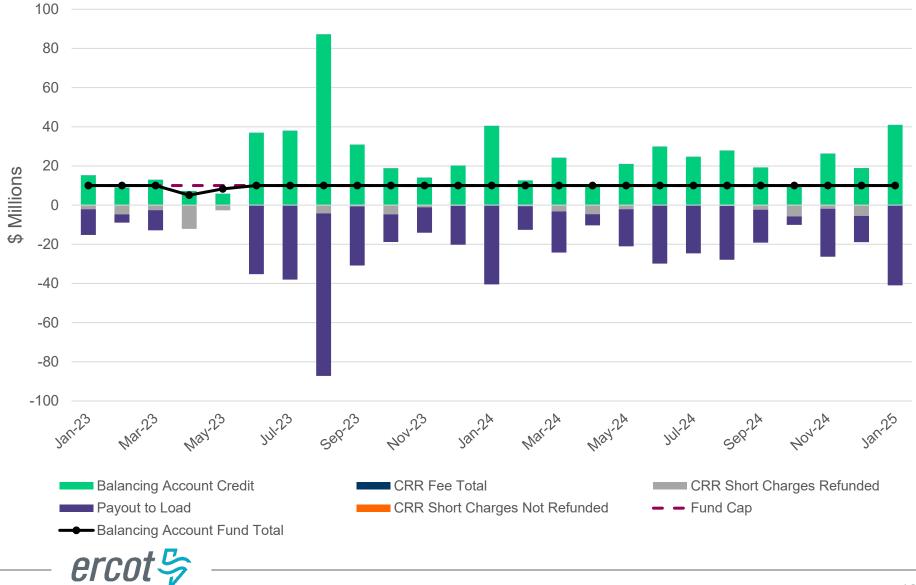
Percentage of Real-Time Load Transacted in the Day-Ahead Market increased in January compared to December



Congestion Revenue Right (CRR) Value was Slightly Greater than Cost in January



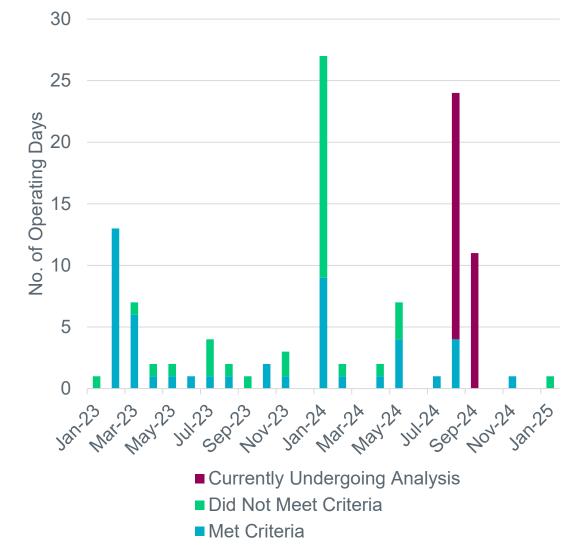
The CRR Balancing Account was fully-funded and excess amounts were allocated to Load



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 were not corrected because they did not meet the criteria for "significance" under NPRR1024; and
- Days that are currently undergoing analysis to determine if criteria for "significance" under NPRR1024 is met.





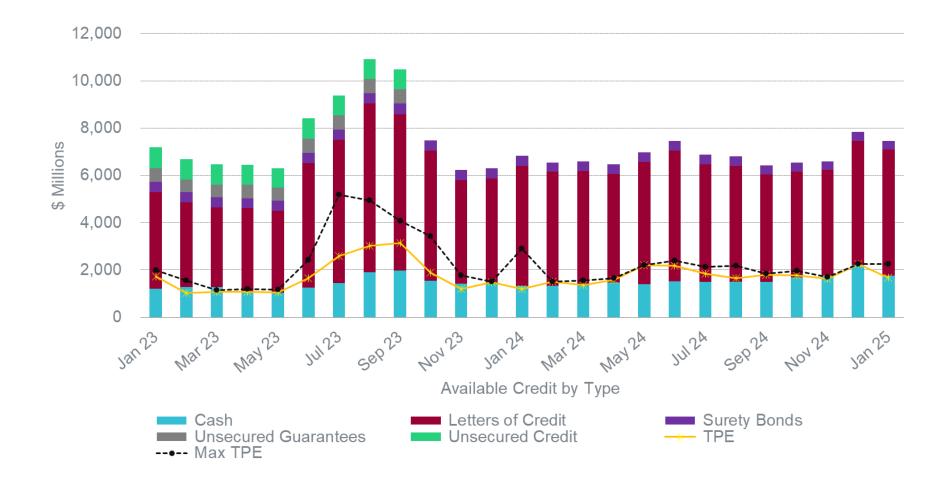
Details for Price Corrections Review

Pricing Impacts Not Meeting Criteria

On Operating Day January 13, 2025, the Emergency Basepoint flag was activated during a planned site failover. The flag was active for approximately 2 minutes, impacting meter prices for the real-time settlement interval 15:45. The total estimated dollar impact was approximately \$11, not meeting the criteria of \$500 for performing a price correction.



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 – January 2025

Year-To-Date		Transactions Received	
January 2025	January 2024	January 2025	January 2024
83,765	84,343	83,765	84,343
0	0	0	0
230,136	263,084	230,136	263,084
109,839	108,465	109,839	108,465
31,817	22,247	31,817	22,247
0	0	0	0
455,557	478,139	455,557	478,139
	January 2025 83,765 0 230,136 109,839 31,817 0	January 2025 January 2024 83,765 84,343 0 0 230,136 263,084 109,839 108,465 31,817 22,247 0 0	January 2025 January 2024 January 2025 83,765 84,343 83,765 0 0 0 230,136 263,084 230,136 109,839 108,465 109,839 31,817 22,247 31,817 0 0 0

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