

ERCOT Monthly Operational Overview (December 2024)

ERCOT Public January 17, 2025

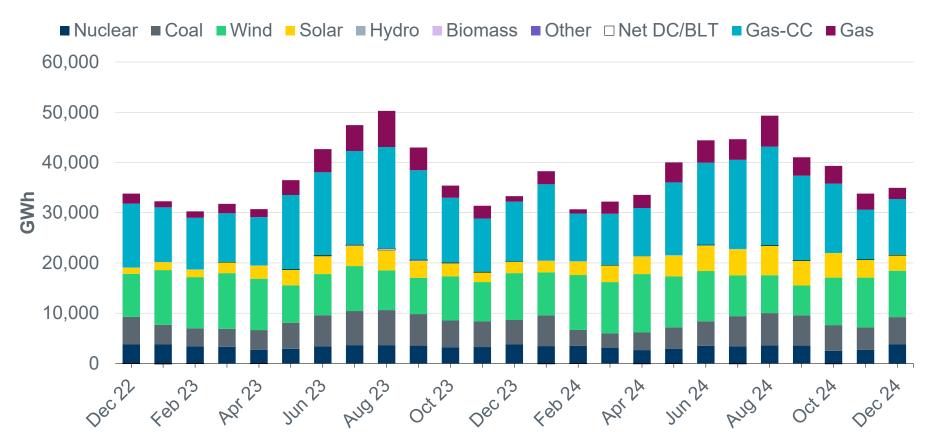
Highlights, Records and Notifications

• ERCOT's maximum peak demand for the month of December was 60,235 MW* on 12/11/24; this is 3,259 MW more than the December 2023 demand of 56,976 MW set on 12/11/23.

- ERCOT issued 2 notifications:
 - 1 Advisory Due to ERCOT's Transient Security Assessment Tool being unavailable.
 - 1 DC Tie Curtailment DC_L (Laredo VFT) DC tie curtailed.



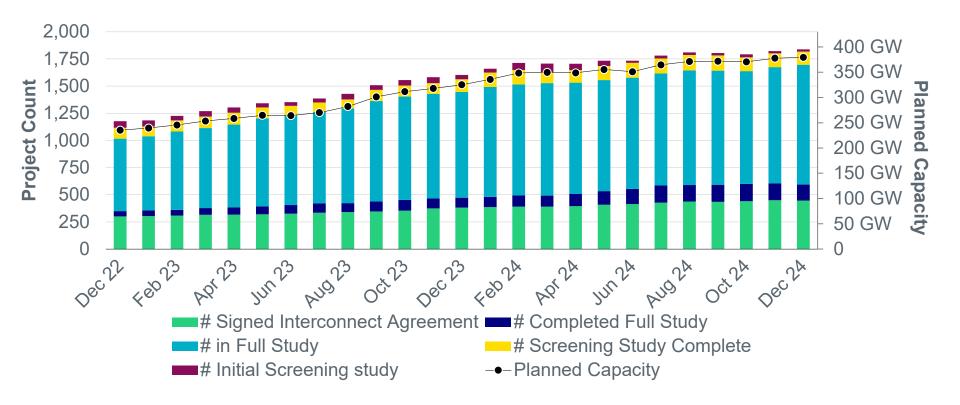
Monthly energy generation increased by 4.9% year-overyear to 34,890 GWh in December 2024, compared to 33,271 GWh in December 2023





Generation Interconnection activity by project phase

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

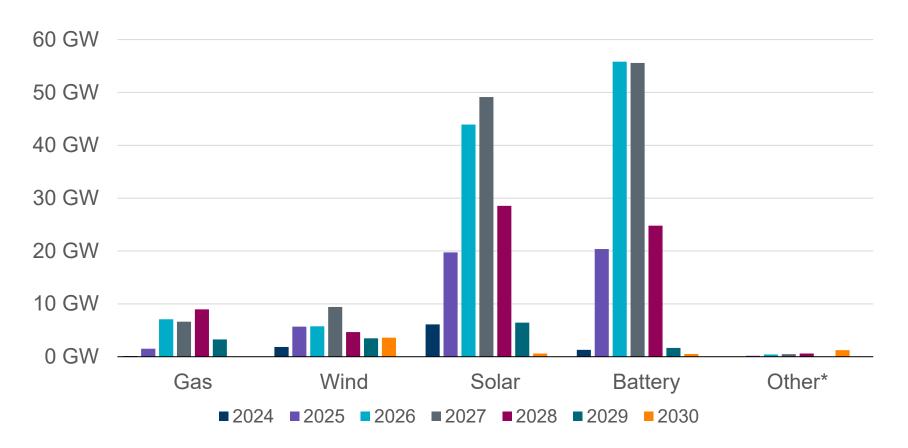


- There are an additional 46 "Small Generator" projects totaling 425 MW that are going through the simplified interconnection process.
- A break-out by fuel type can be found in the monthly Generator Interconnection Status (GIS) reports available on the ERCOT Resource Adequacy Page: http://www.ercot.com/gridinfo/resource



Interconnection Queue Capacity by Fuel Type

Queue totals: Solar 154 GW (40.7%), Wind 34 GW (9.1%), Gas 28 GW (7.3%), Battery 160 GW (42.2%), Other 3 GW (.8%) (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: http://www.ercot.com/gridinfo/resource



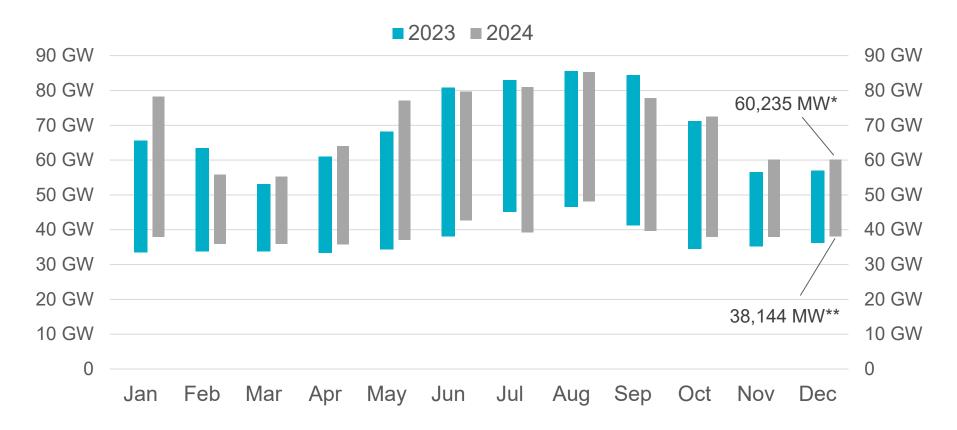
^{*} Other includes petroleum coke (pet coke), hydroelectric, fuel oil, geothermal energy, other miscellaneous fuels reported by developers, and fuel cells that use fuels other than natural gas.

Planning Summary

- ERCOT is tracking 1,917 active generation interconnection requests totaling 379,494 MW as of December 31. This includes 154,487 MW of solar, 34,450 MW of wind, 159,775 MW of battery, and 27,578 MW of gas projects; 125 projects were categorized as inactive, up from 117 inactive projects in November 2024.
- ERCOT is currently reviewing proposed transmission improvements with a total estimated cost of \$3.150 billion as of December 31, 2024.
- Transmission Projects endorsed in 2024 total \$3.785 billion as of December 31, 2024.
- All projects (in engineering, routing, licensing and construction) total approximately \$16.504 billion as of October 1, 2024.
- Transmission Projects energized in 2024 total approximately \$2.435 billion as of October 1, 2024.



ERCOT's maximum peak demand for the month of December was 60,235 MW* on 12/11/24; this is 3,259 MW more than the December 2023 demand of 56,976 MW set on 12/11/23.



^{*}Based on the maximum net system hourly value from the December 2024 Demand and Energy report.

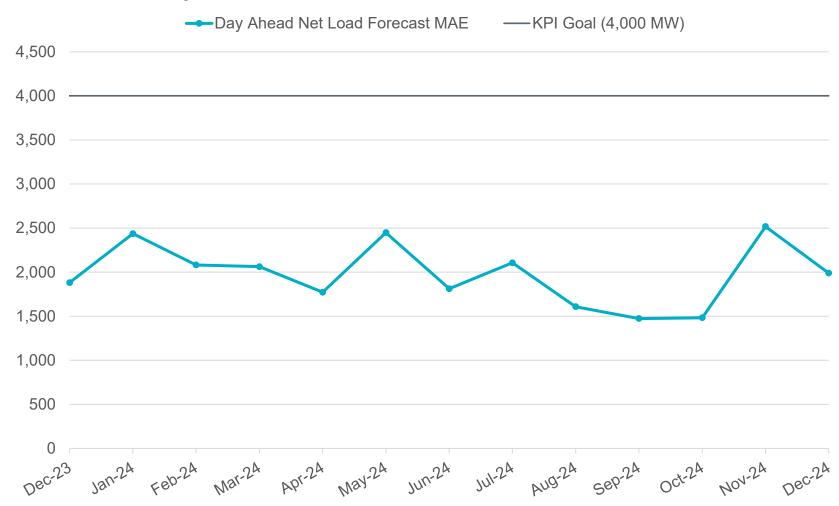
Data for latest two months are based on preliminary settlements.



^{**}Based on the minimum net system 15-minute interval value from the December 2024 Demand and Energy report.

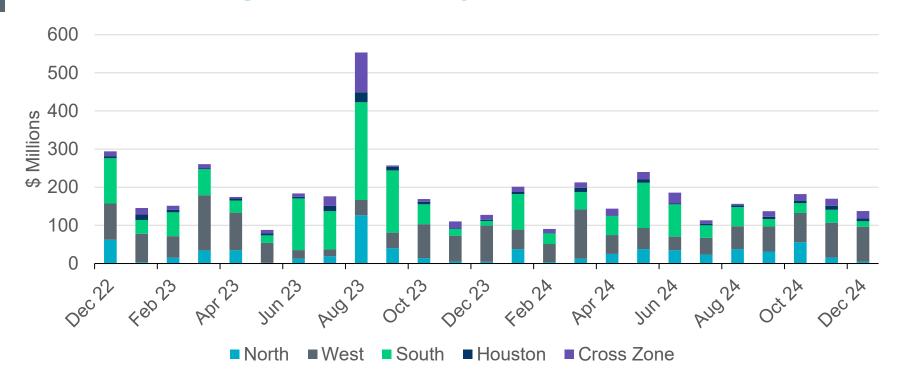
Net Load Forecast Performance

Day Ahead Net Load Forecast - Mean Absolute Forecast Error





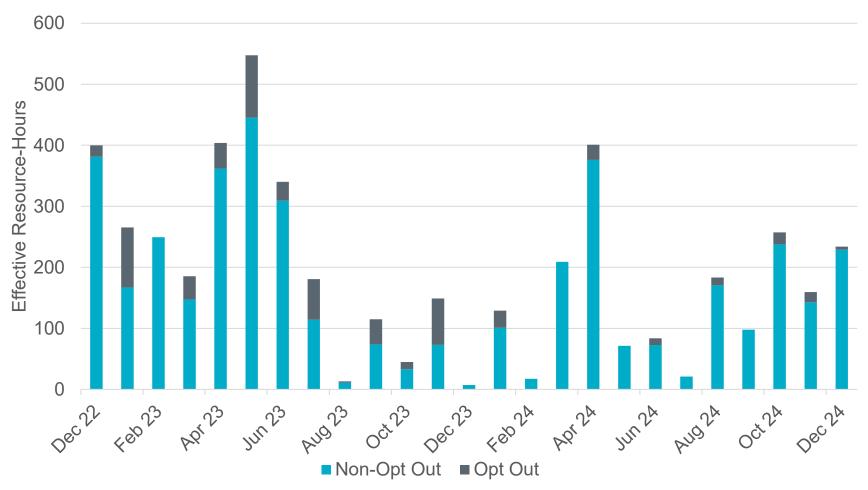
Real-Time Congestion Rent by Zone



- 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 decreased in December compared to November, with the highest congestion rent in the West and Cross Zones.
 - Congestion rent in the West Zone was primarily driven by the loss of the 345kV double circuit Consavvy Switch to
 Morgan Creek SES and Consavvy Switch to Longshore Switch overloading the 138kV line from Polecat Creek Switch to
 Wrage Ranch Pod.
 - Congestion rent in the Cross Zone was primarily driven by the West Texas Export Interface Base Case power flow violation due to high wind generation.



Elevated RUC Activity Continues, to Manage 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.

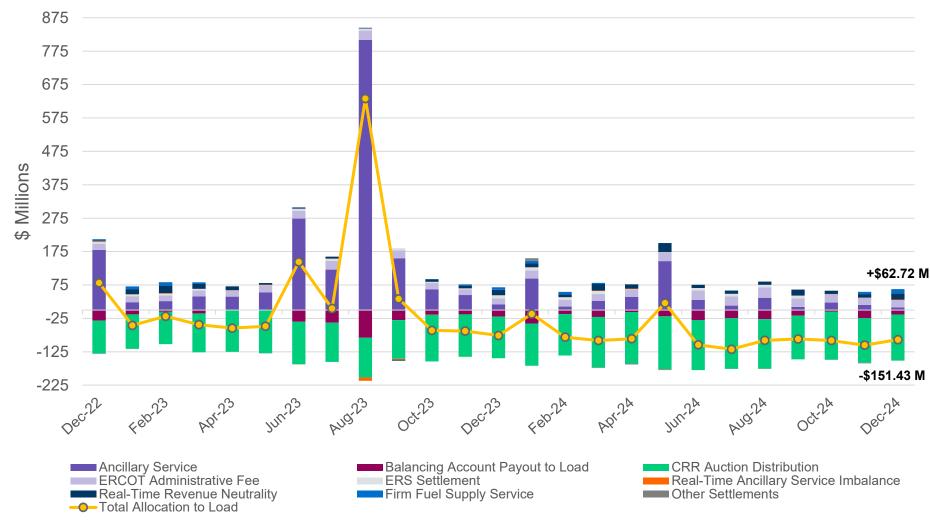


Fourteen Resources were Committed in December for Congestion

Resource #	Effective Resource-hours	Non-Opt Out (Effective Hours)	Opt Out (Effective Hours)
1	6.0	6.0	0.0
2	8.0	8.0	0.0
3	123.0	123.0	0.0
4	11.9	11.9	0.0
5	19.8	19.8	0.0
6	6.0	6.0	0.0
7	8.0	8.0	0.0
8	14.0	14.0	0.0
9	9.0	8.0	1.0
10	13.0	9.0	4.0
11	4.0	4.0	0.0
12	3.1	3.1	0.0
13	4.0	4.0	0.0
14	4.0	4.0	0.0
Total	233.8	228.8	5.0



Net Allocation to Load in December 2024 was (\$88.71) Million

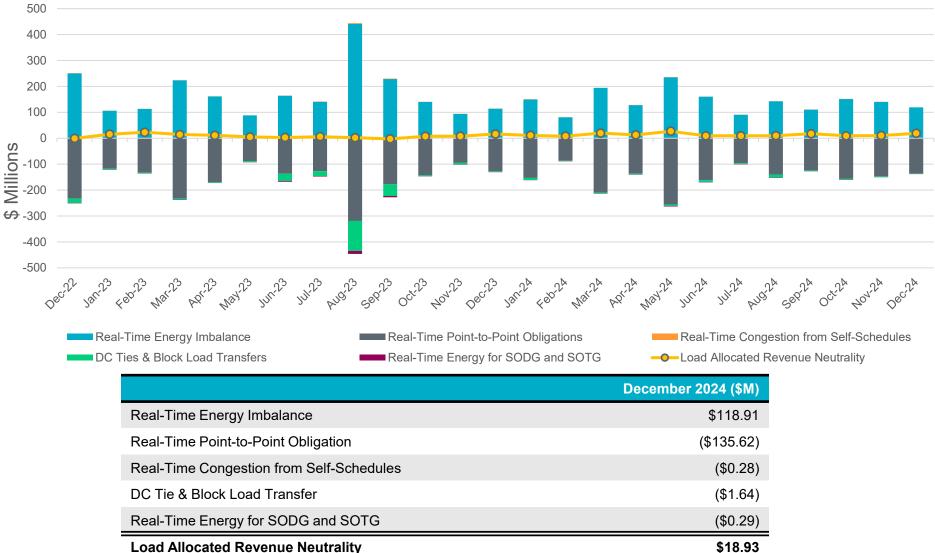


This information is available in tabular form in the Settlement Stability Report presented quarterly to the

Wholesale Market Subcommittee

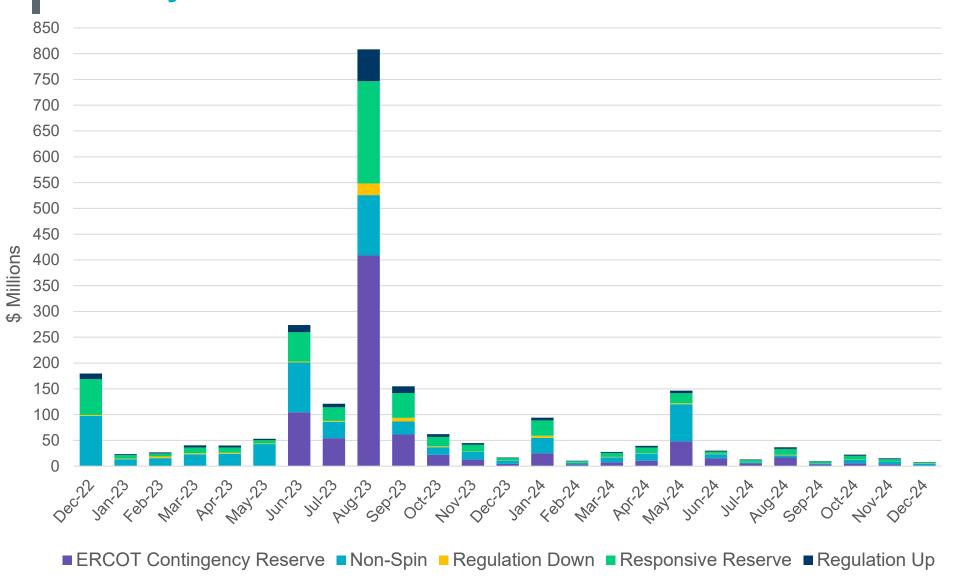


Real-Time Revenue Neutrality Allocated to Load was \$18.93 M for December 2024





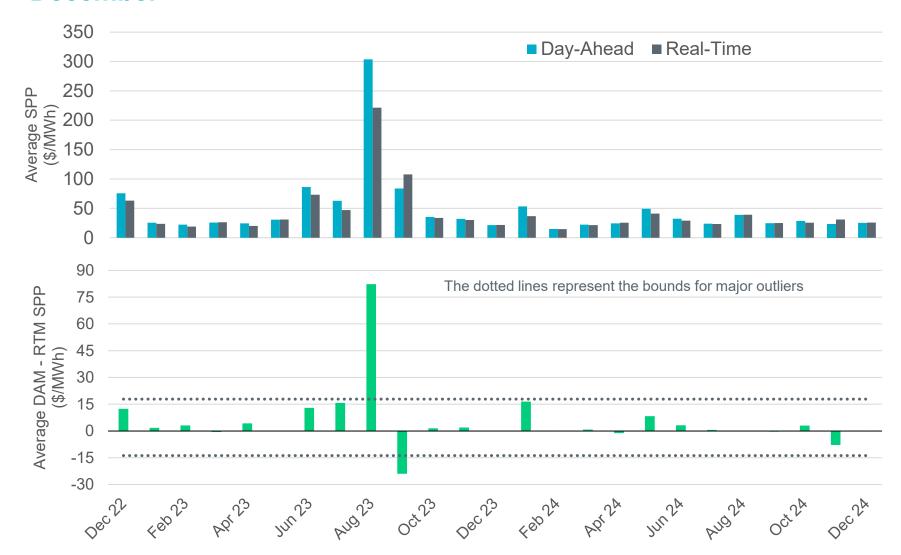
Ancillary Services for December 2024 totaled \$7.89M





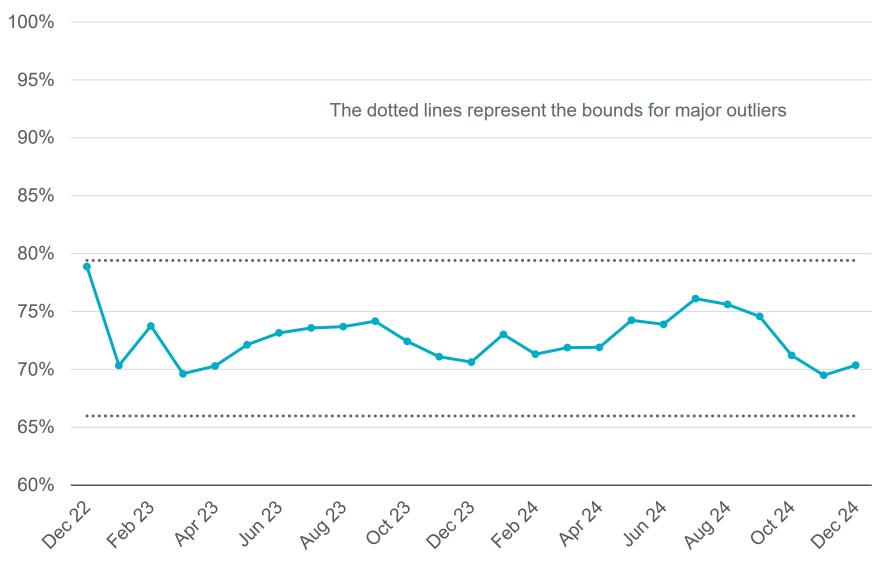
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Real-Time prices were aligned with Day-Ahead prices, on average, in December

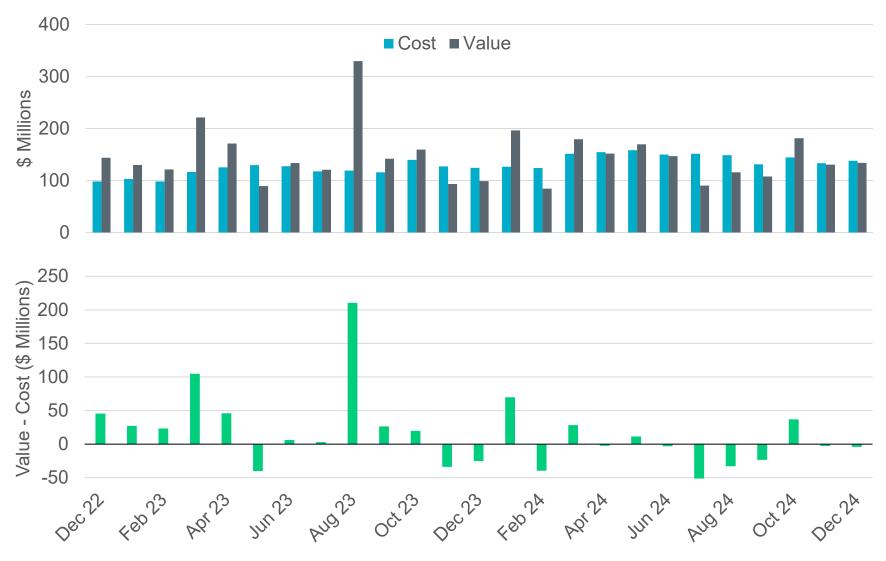




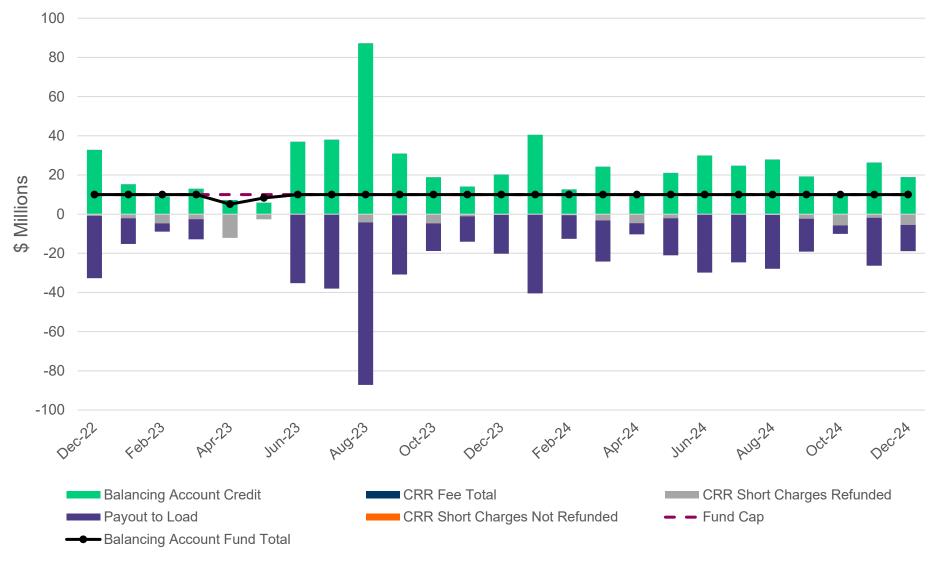
Percentage of Real-Time Load Transacted in the Day-Ahead Market slightly increased in December compared to November



Congestion Revenue Right (CRR) Value and Cost Were Closely Matched in December



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

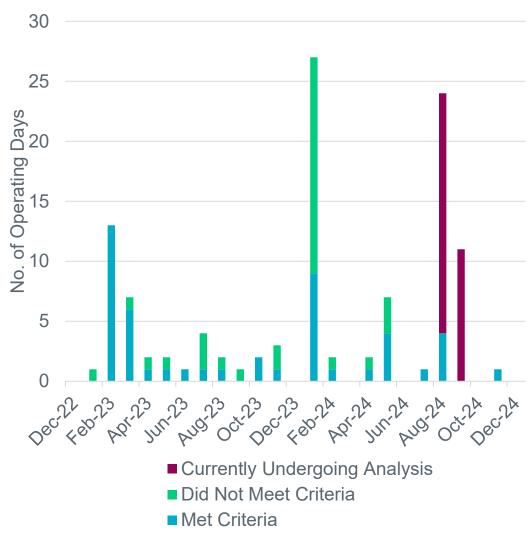




Price Issues and the Impact of Nodal Protocol Revision Request (NPRR) 1024 on Price Corrections

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.





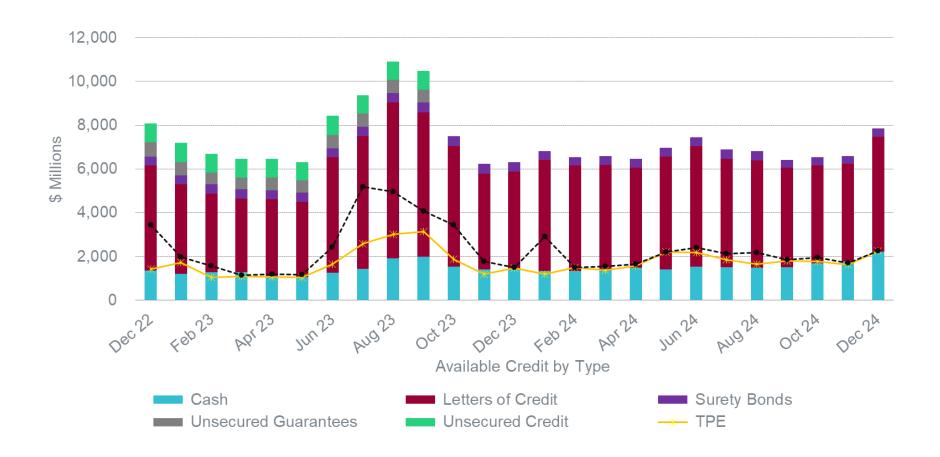
Details for Price Corrections Review

There were no price correction events in the month of December 2024.

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





*Numbers are as of month end except for Max TPE

Retail Transaction Volumes – Summary – December 2024

	Year-To-Date		Transactions Received	
Transaction Type	December 2024	December 2023	December 2024	December 2023
Switches	1,203,316	1,154,851	82,578	124,388
Acquisitions	0	0	0	0
Move - Ins	3,127,818	3,070,588	213,001	208,546
Move - Outs	1,437,057	1,403,990	106,972	98,427
Continuous Service Agreements (CSA)	424,793	433,469	22,363	37,755
Mass Transitions	0	0	0	0
Total	6,192,984	6,062,898	424,914	469,116

