ERCOT Monthly Operational Overview
(September 2024)

ERCOT Public
October 17, 2024

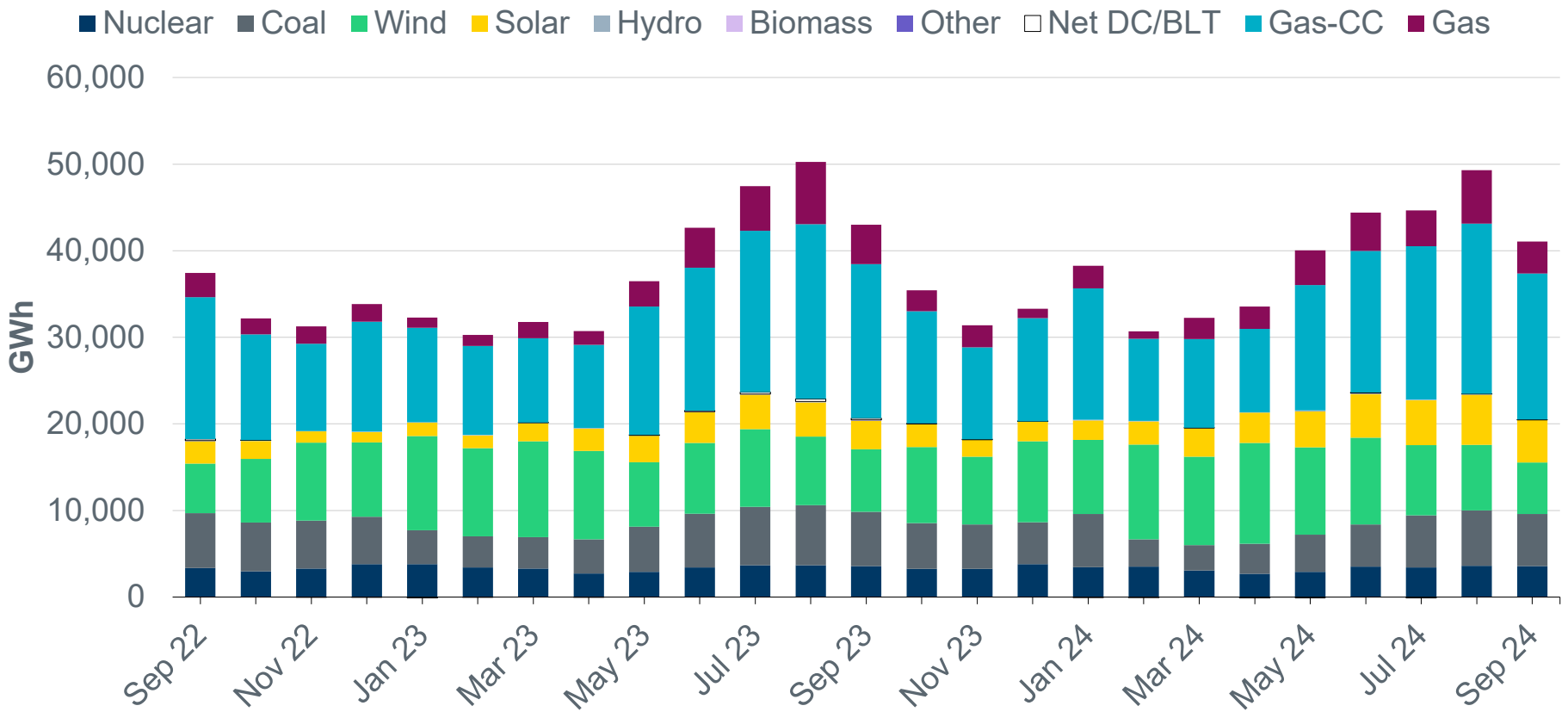
Highlights, Records and Notifications

- ERCOT's maximum peak demand for the month of September was 77,780 MW* on 9/19/2024; this is 6,690 MW less than the September 2023 peak demand of 84,470 MW set on 9/08/2023.

- ERCOT issued 7 notifications:
  - 1 DCTCN - The DC_E (East) DC Tie is being curtailed at SPP request.
  - 1 OCN - For Tropical Cyclone Six expected to increase into Tropical Storm Francine and potentially impact or making landfall in the ERCOT Region.
  - 1 Advisory - Tropical Storm Francine possibility of making landfall or impacting the ERCOT Region.
  - 3 Advisories - Geomagnetic disturbance of [K-7].
  - 1 Advisory - Geomagnetic disturbance of [K-8].

* Preliminary value from October Demand and Energy 2024 report.

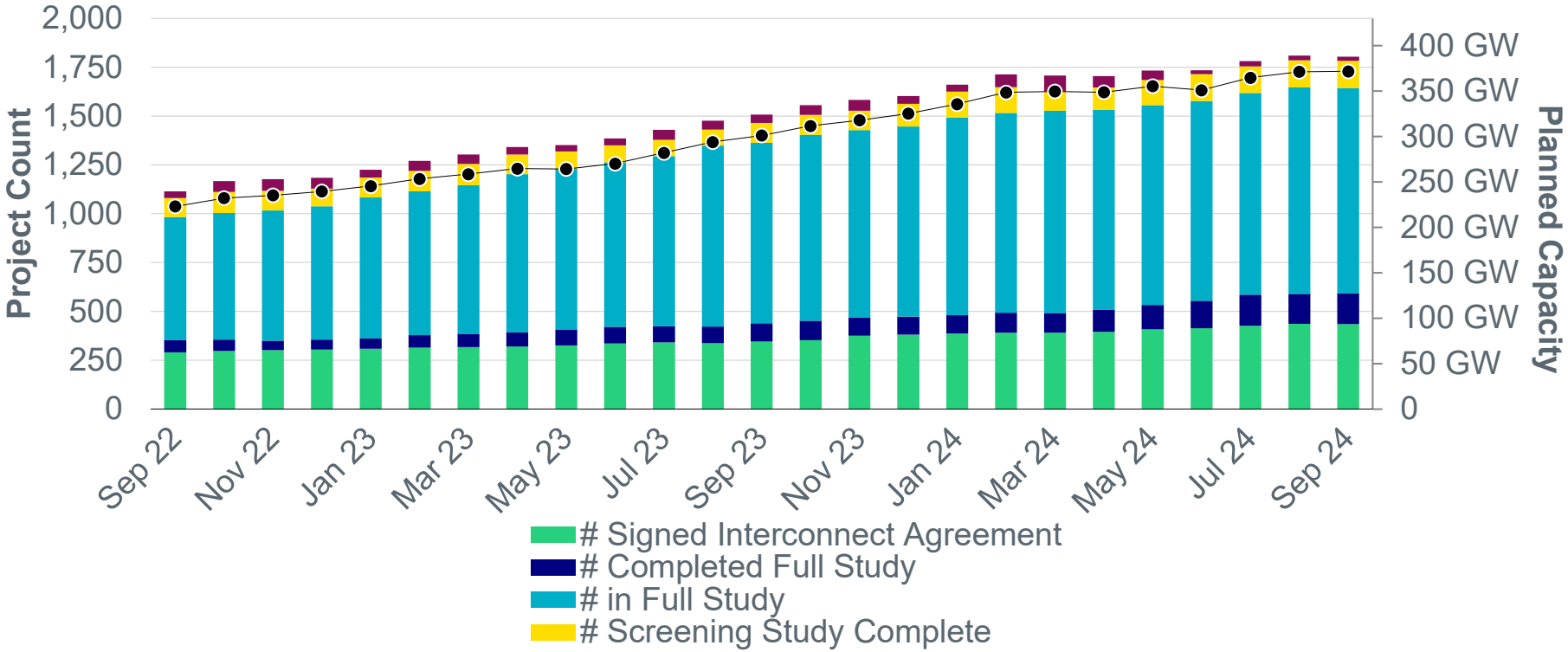
Monthly energy generation decreased by 4.6% year-over-year to 40,996 GWh in September 2024, compared to 42,979 GWh in September 2023



Data for latest two months are based on preliminary settlements.

Generation Interconnection activity by project phase

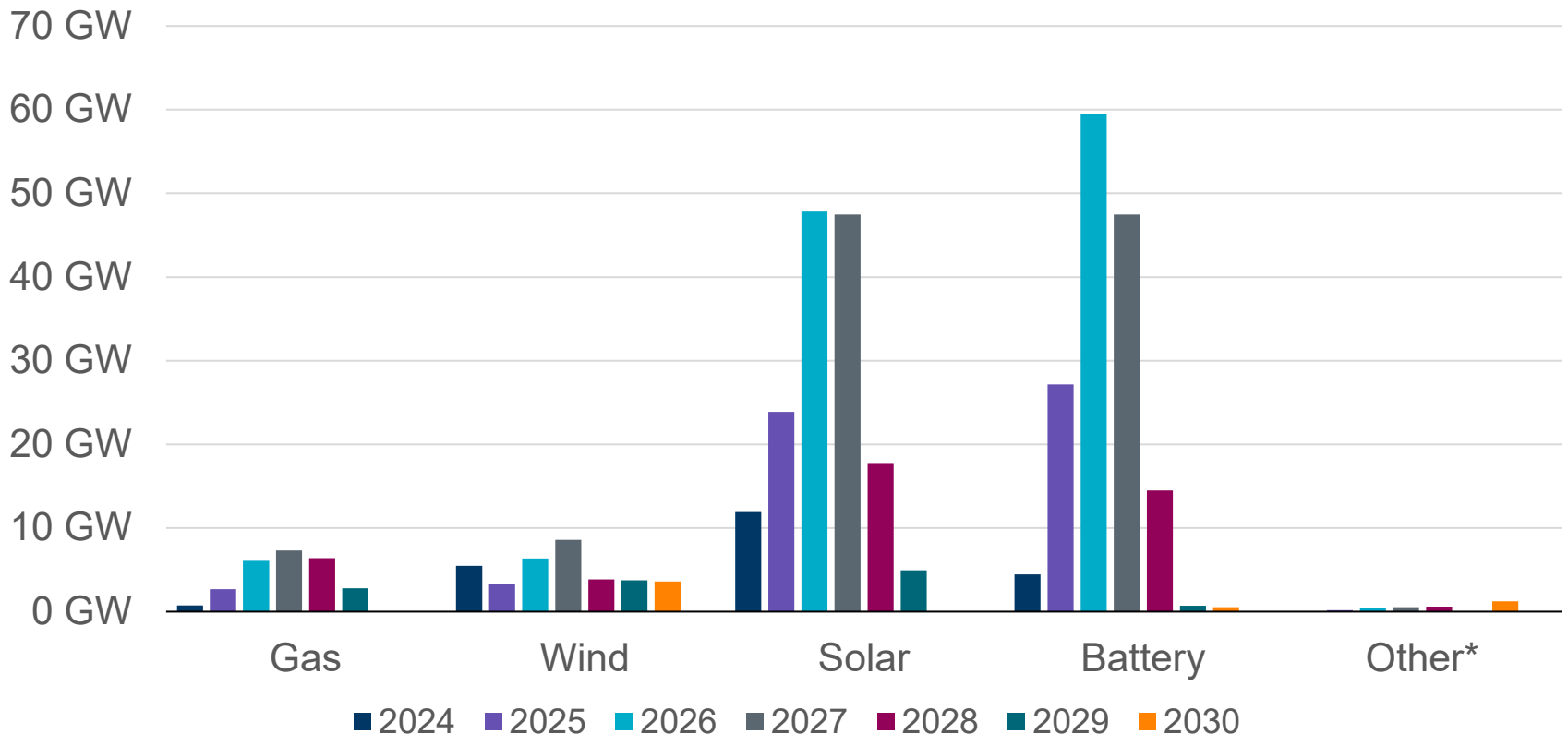
(Excludes capacity associated with projects designated as Inactive per Planning Guide Section 5.2.5)



- There are an additional 48 “Small Generator” projects totaling 454 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 (41.3%), Wind 35 GW (9.4%), Gas 26 GW (7%), Battery 154 GW (41.5%)
(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 1,881 active generation interconnection requests totaling 371,689 MW as of September 30. This includes 153,658 MW of solar, 34,839 MW of wind, 154,264 MW of battery, and 25,967 MW of gas projects; 103 projects were categorized as inactive, up from 99 inactive projects in August 2024.

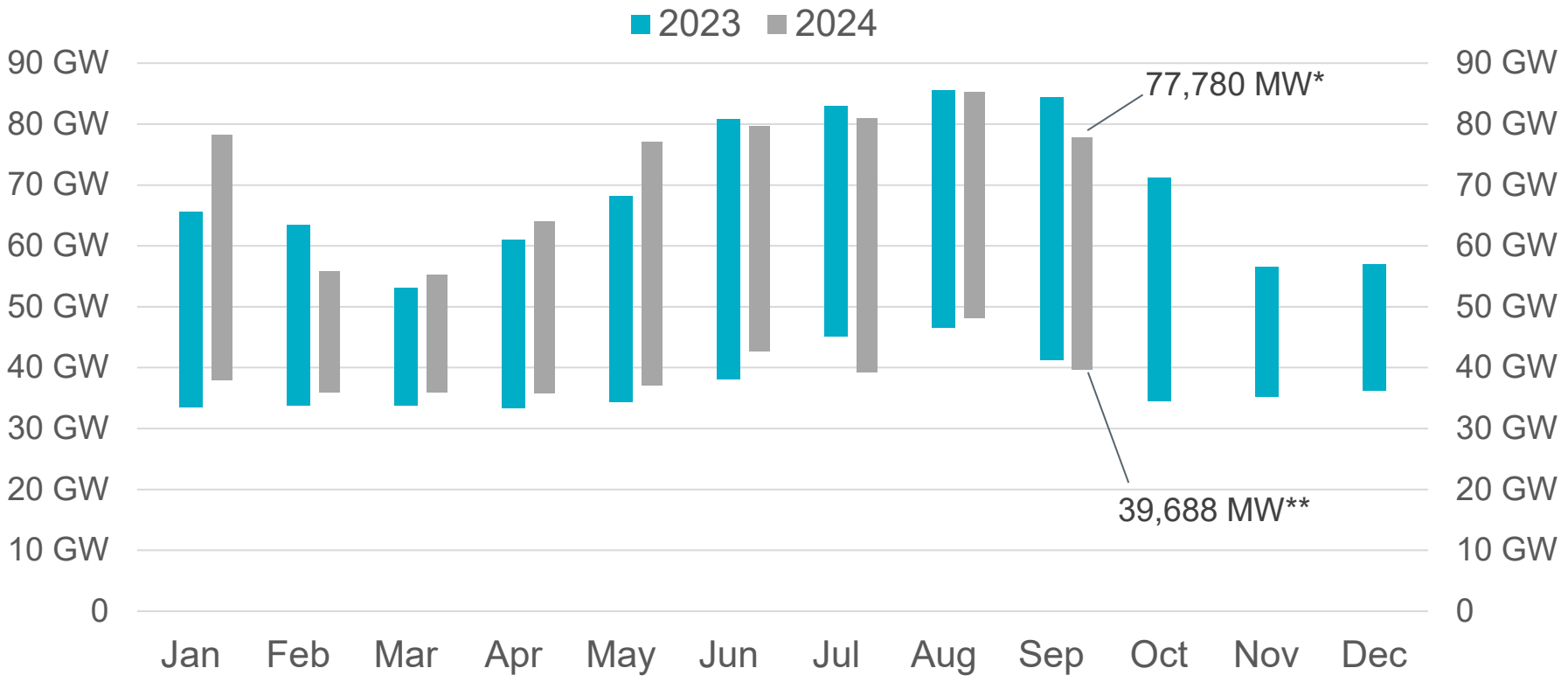
- ERCOT is currently reviewing proposed transmission improvements with a total estimated cost of $2.547 billion as of September 30, 2024.

- Transmission Projects endorsed in 2024 total $2.973 billion as of September 30, 2024.

- All projects (in engineering, routing, licensing and construction) total approximately $14.183 billion as of June 1, 2024.

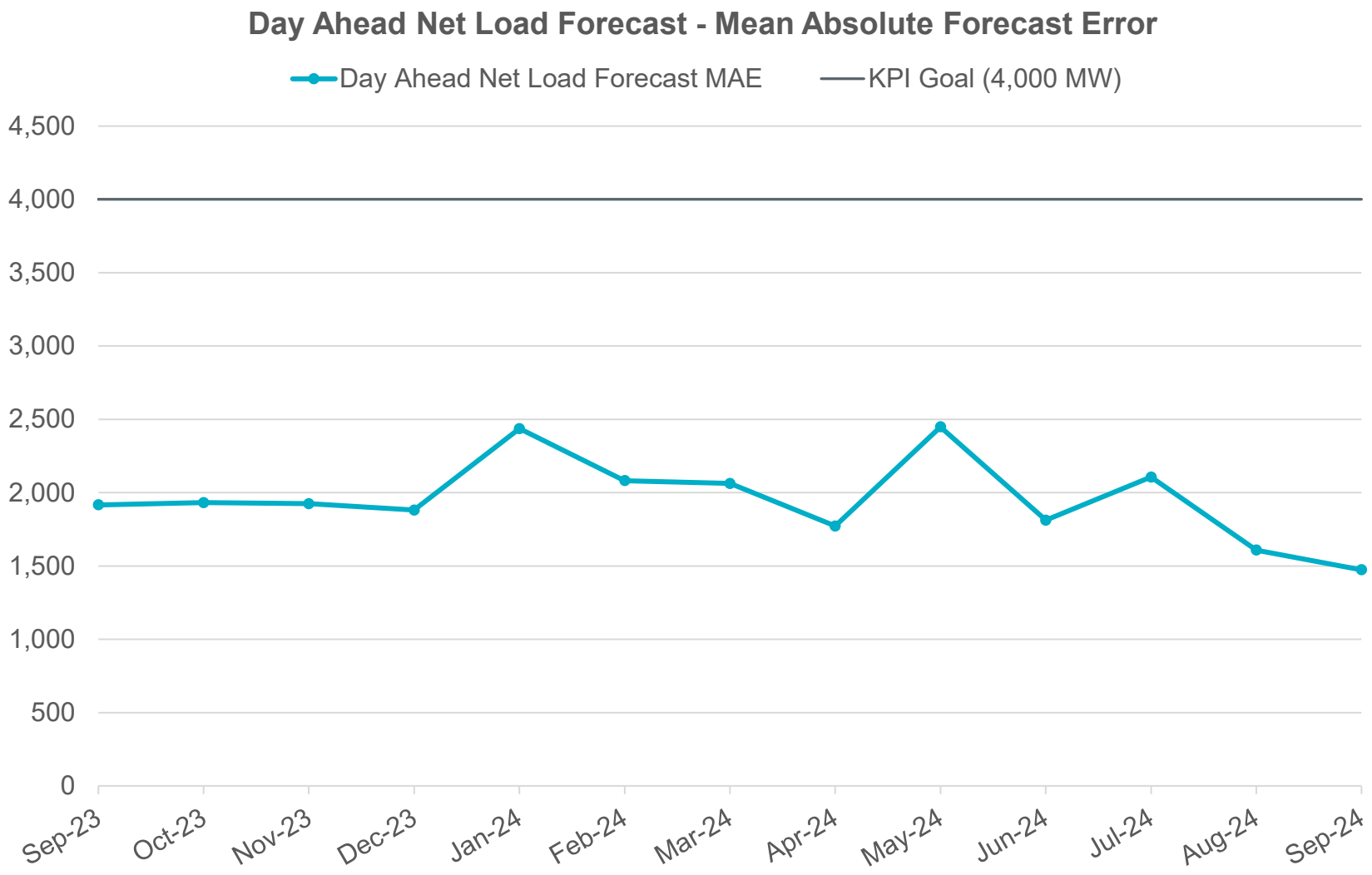
- Transmission Projects energized in 2024 total approximately $2.160 billion as of June 1, 2024.

ERCOT's maximum peak demand for the month of September was 77,780 MW*; this is 6,690 MW less than the September 2023 monthly record demand of 84,470 MW.

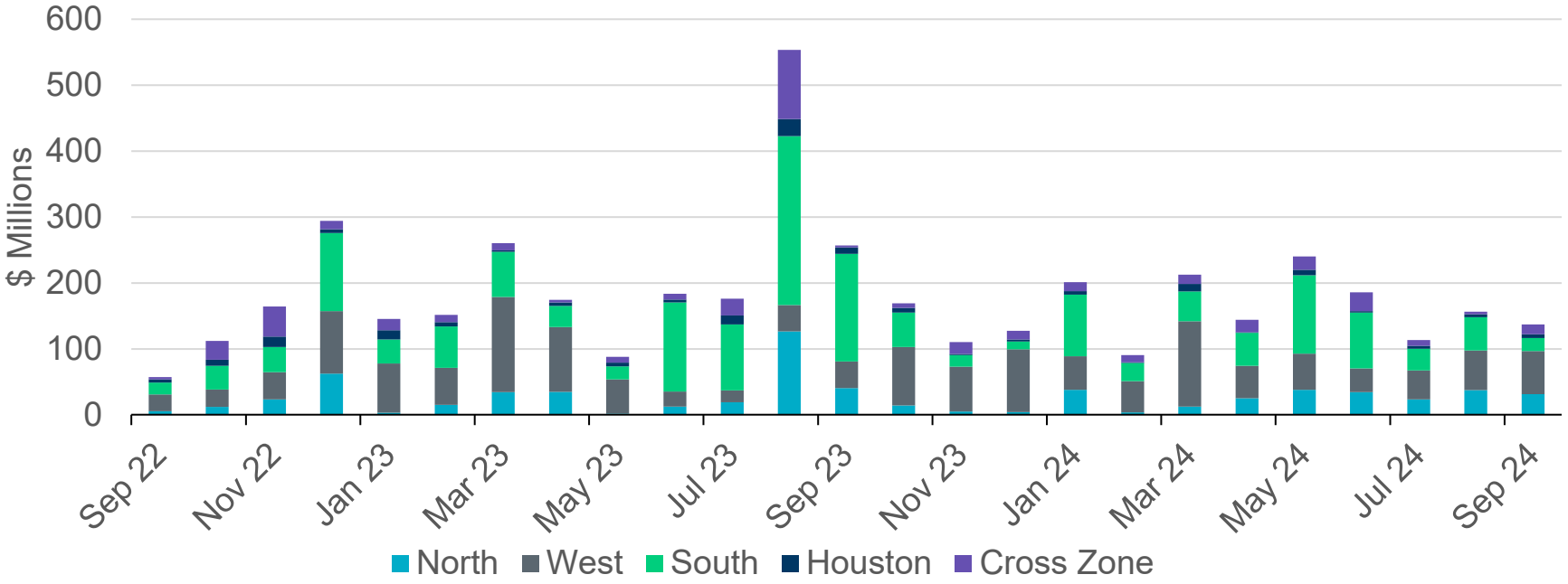


*Based on the maximum net system hourly value from the September 2024 Demand and Energy report.
**Based on the minimum net system 15-minute interval value from the September 2024 Demand and Energy report.
Data for latest two months are based on preliminary settlements.

Net Load Forecast Performance



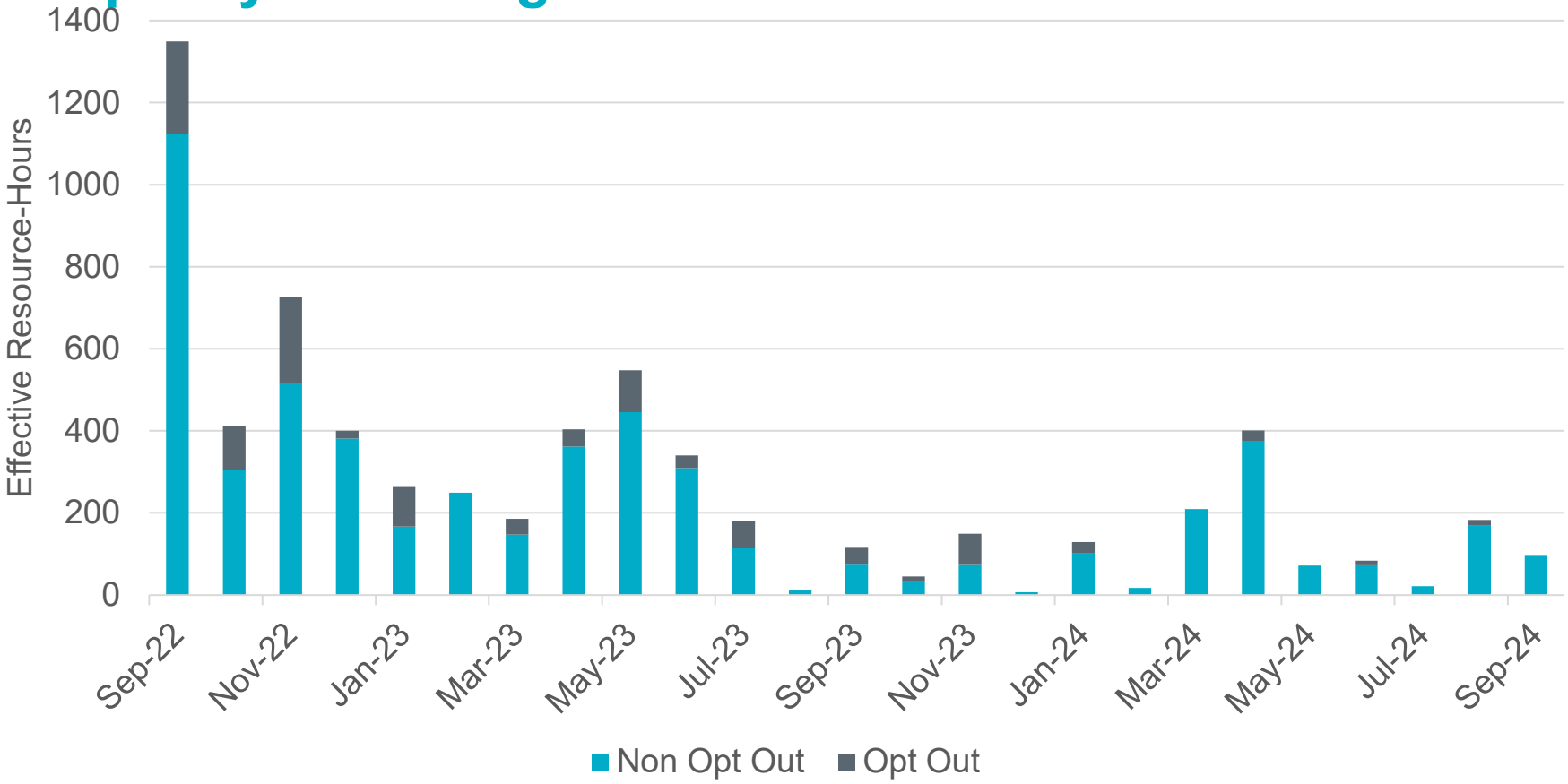
Real-Time Congestion Rent by Zone



- 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 September, total Real-Time congestion rent decreased compared to August, with the highest congestion rent observed in the West and North Zones.
  - North Zone congestion rent was primarily driven by the loss of the Salado Switch to Knob Creek 345 kV line and Temple to Bell County 138 kV double circuit
  - West Zone congestion rent was primarily driven by the loss of the 345 kV double circuit from Morgan Creek SES to Longshore Switch and from Morgan Creek SES to Consavvy Switch, which overloaded the 138 kV line from Lamesa to Jim Payne Point

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

Fourteen Resources were Committed in September for Capacity and Congestion

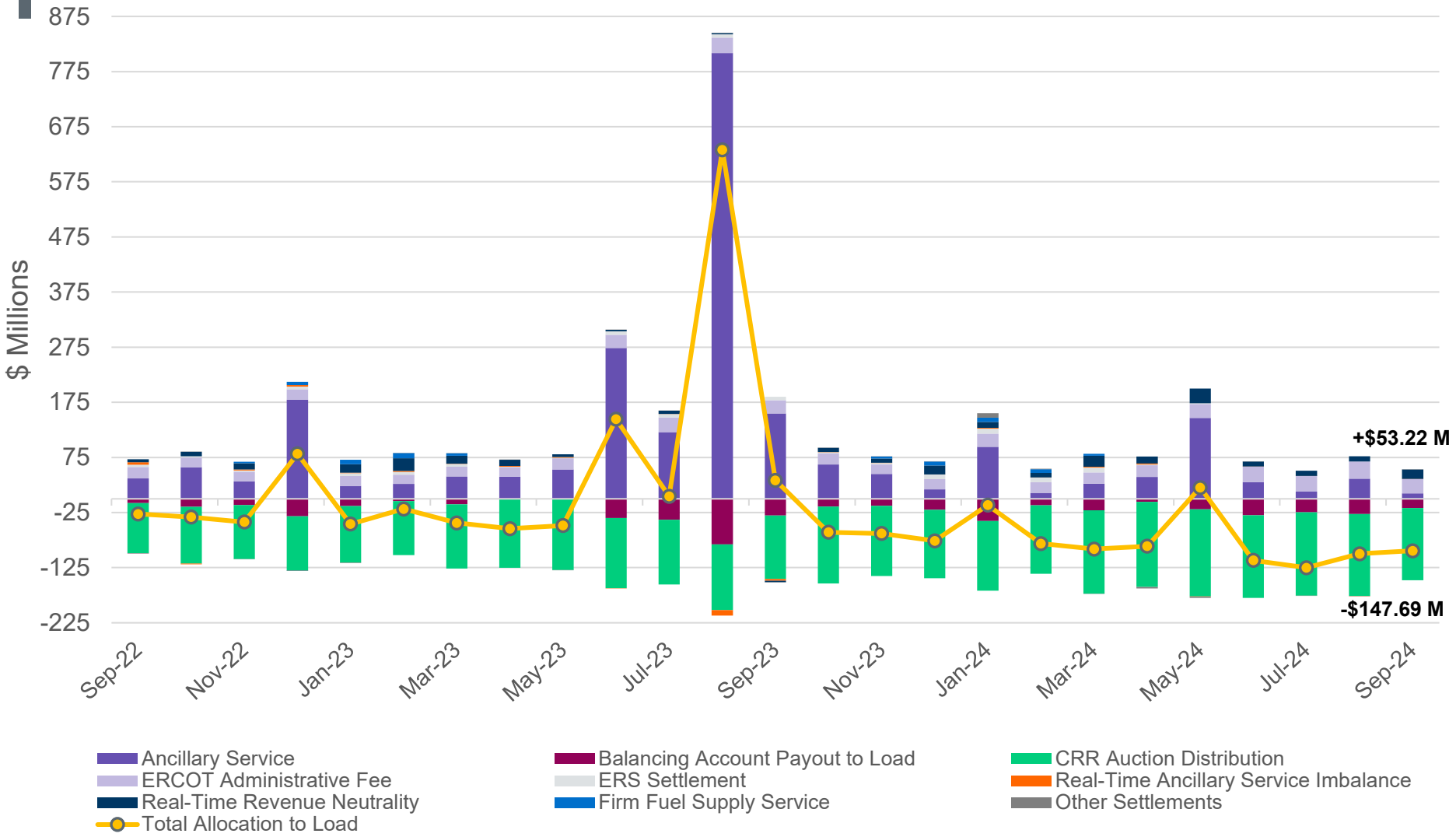


"Effective Resource-Hours" excludes any period during a Reliability Unit Commitment hour when the RUC-committed Resource was starting up, shutting down, off-line, or otherwise not available for dispatch by SCED.

Fourteen Resources were Committed in September for Capacity and Congestion

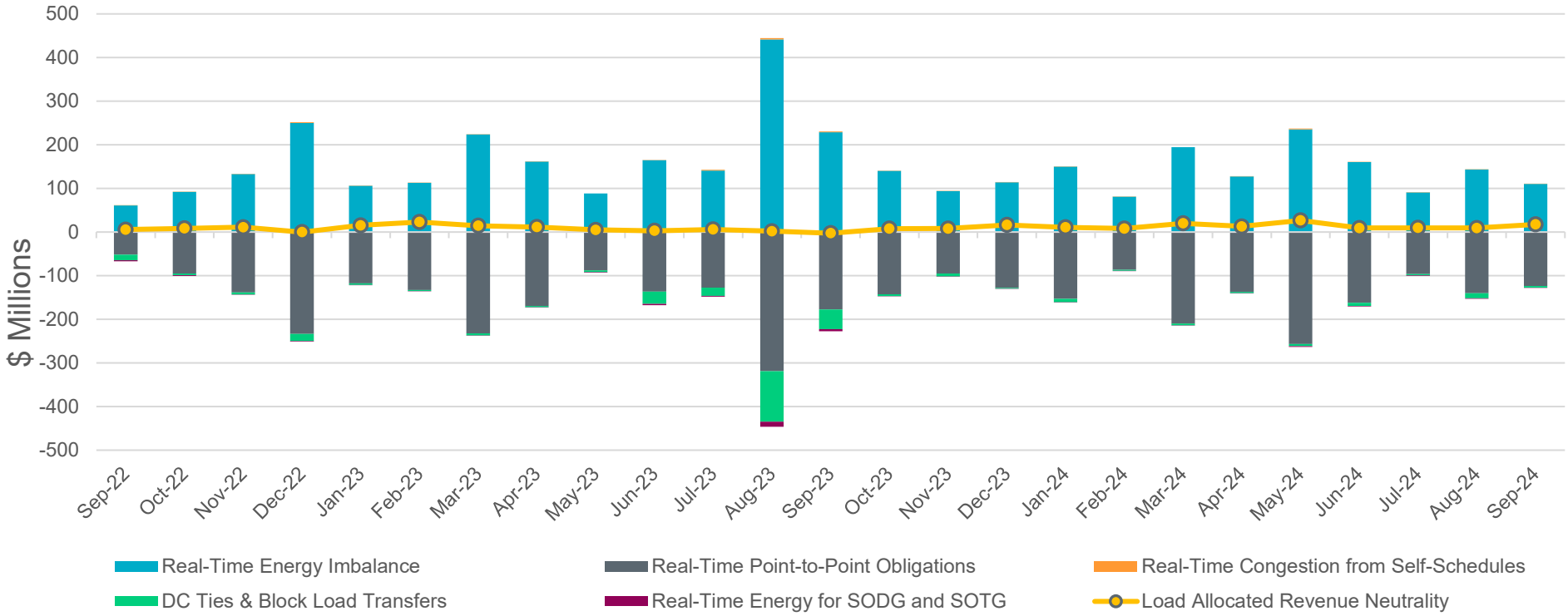
Resource #	Effective Resource-hours	Non Opt Out (Effective Hours)	Opt Out (Effective Hours)
1	24.0	24.0	0.0
2	3.0	3.0	0.0
3	4.0	4.0	0.0
4	8.1	8.1	0.0
5	1.0	1.0	0.0
6	3.0	3.0	0.0
7	16.0	16.0	0.0
8	4.0	4.0	0.0
9	5.9	5.9	0.0
10	5.9	5.9	0.0
11	5.0	5.0	0.0
12	5.0	5.0	0.0
13	4.0	4.0	0.0
14	8.9	8.9	0.0
SUM	**97.8**	**97.8**	**0.0**

Net Allocation to Load in September 2024 was ($94.48) Million



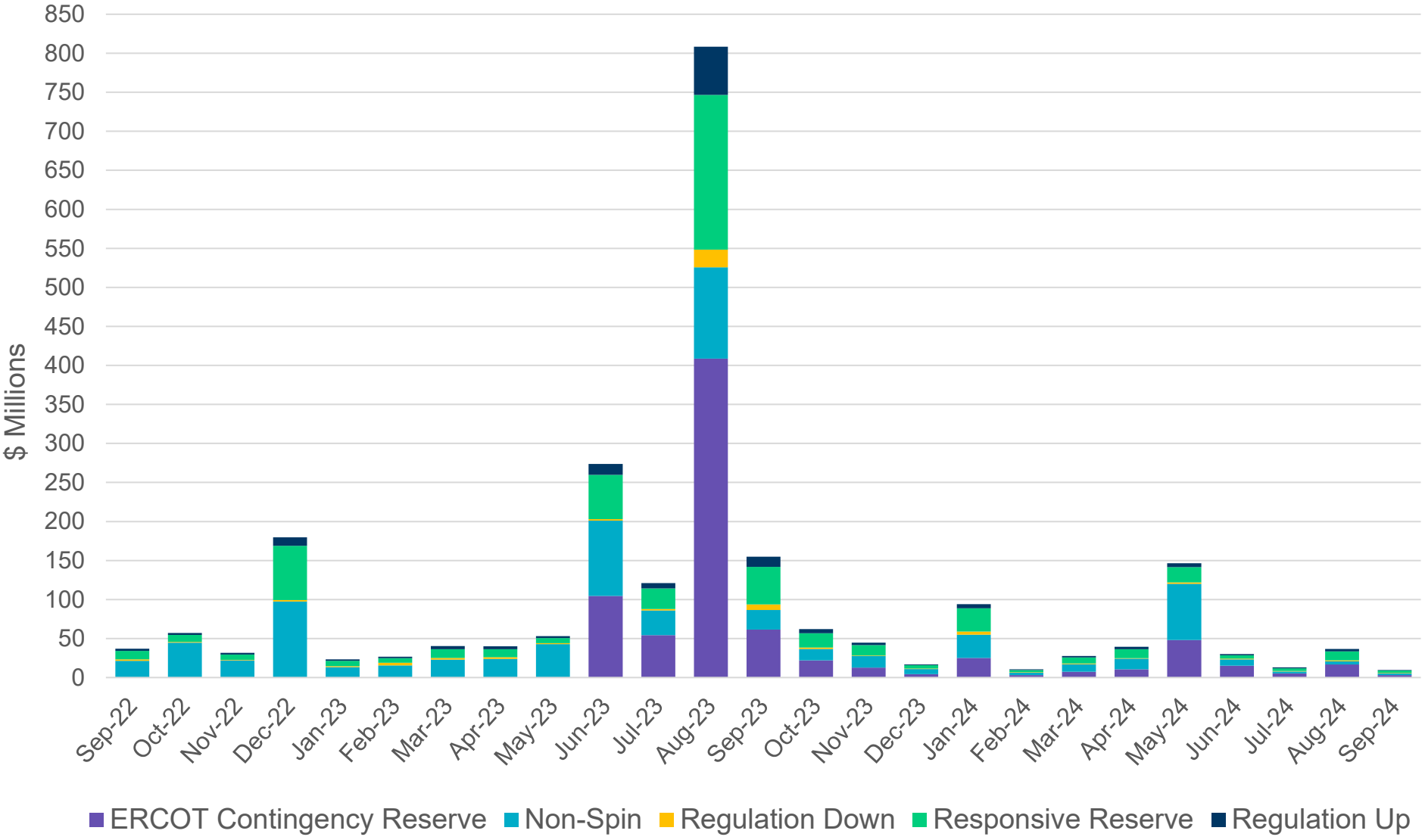
This information is available in tabular form in the Settlement Stability Report presented quarterly to the [Wholesale Market Subcommittee]

Real-Time Revenue Neutrality Allocated to Load was $17.37M for September 2024

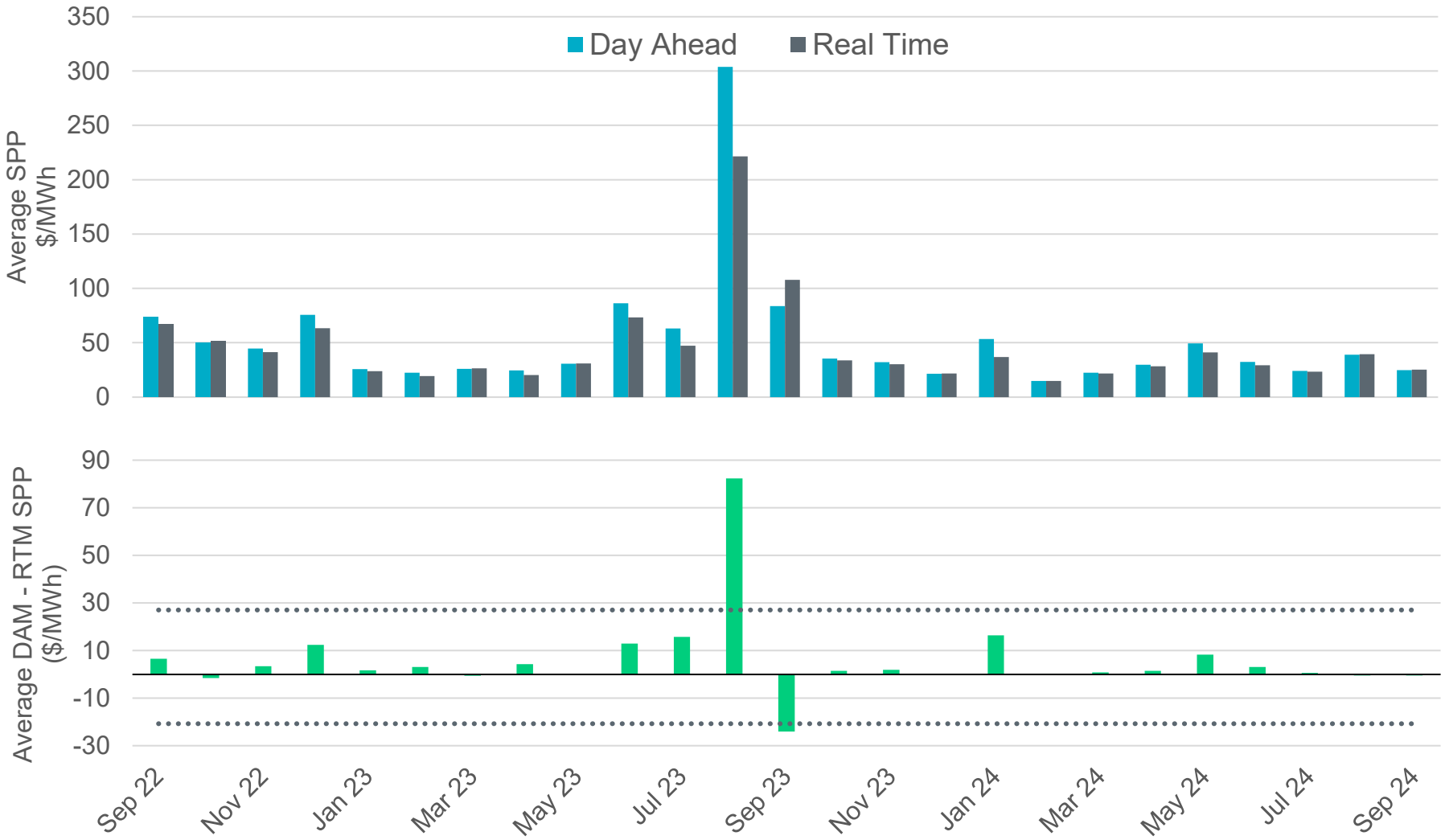


	September 2024 ($M)
Real-Time Energy Imbalance	$110.40
Real-Time Point-to-Point Obligation	($123.73)
Real-Time Congestion from Self-Schedules	$0.12
DC Tie & Block Load Transfer	($3.61)
Real-Time Energy for SODG and SOTG	($0.55)
Load Allocated Revenue Neutrality	**$17.37**

Ancillary Services for September 2024 totaled $9.58M

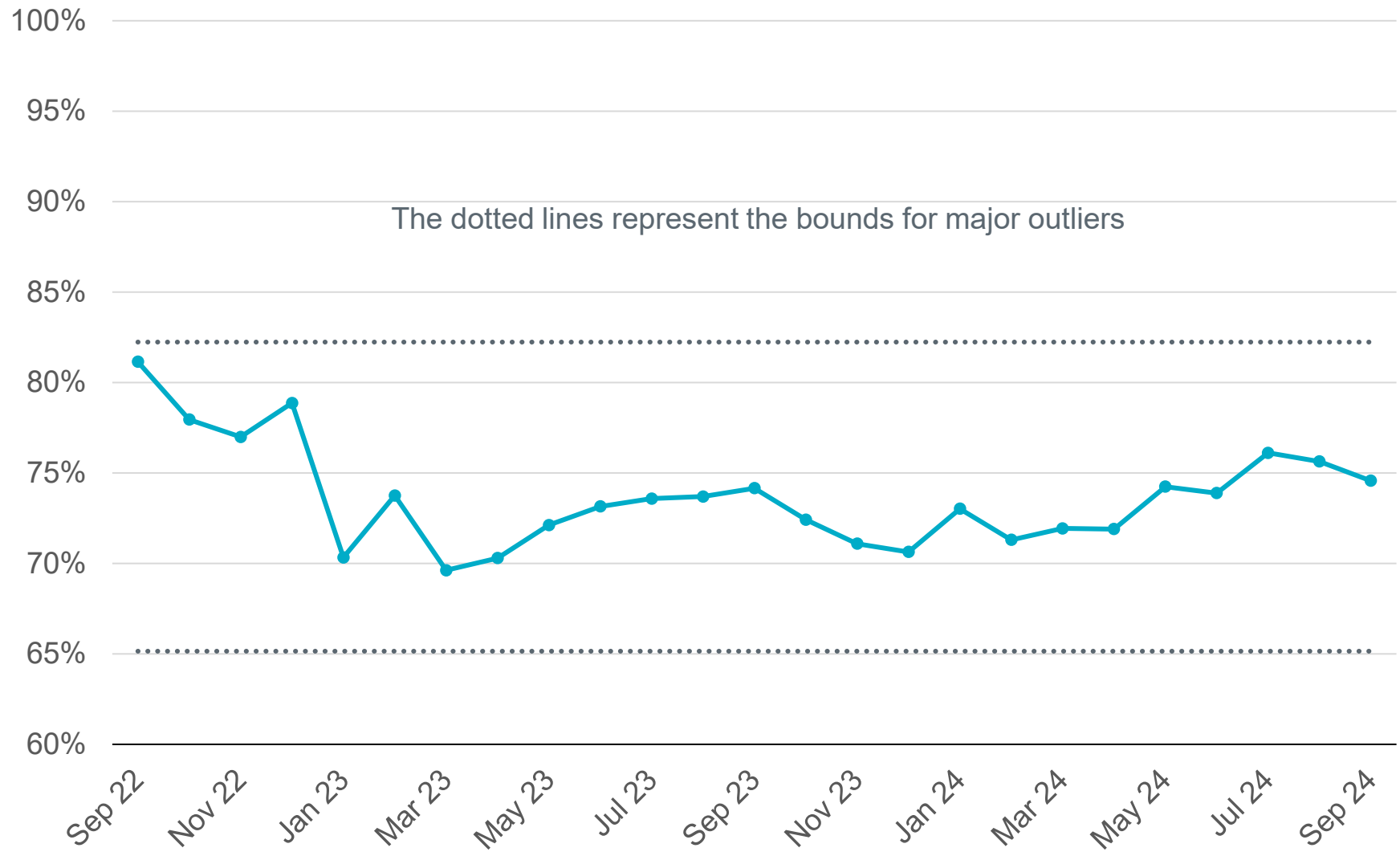


Day-Ahead and Real-Time Market Price Differences

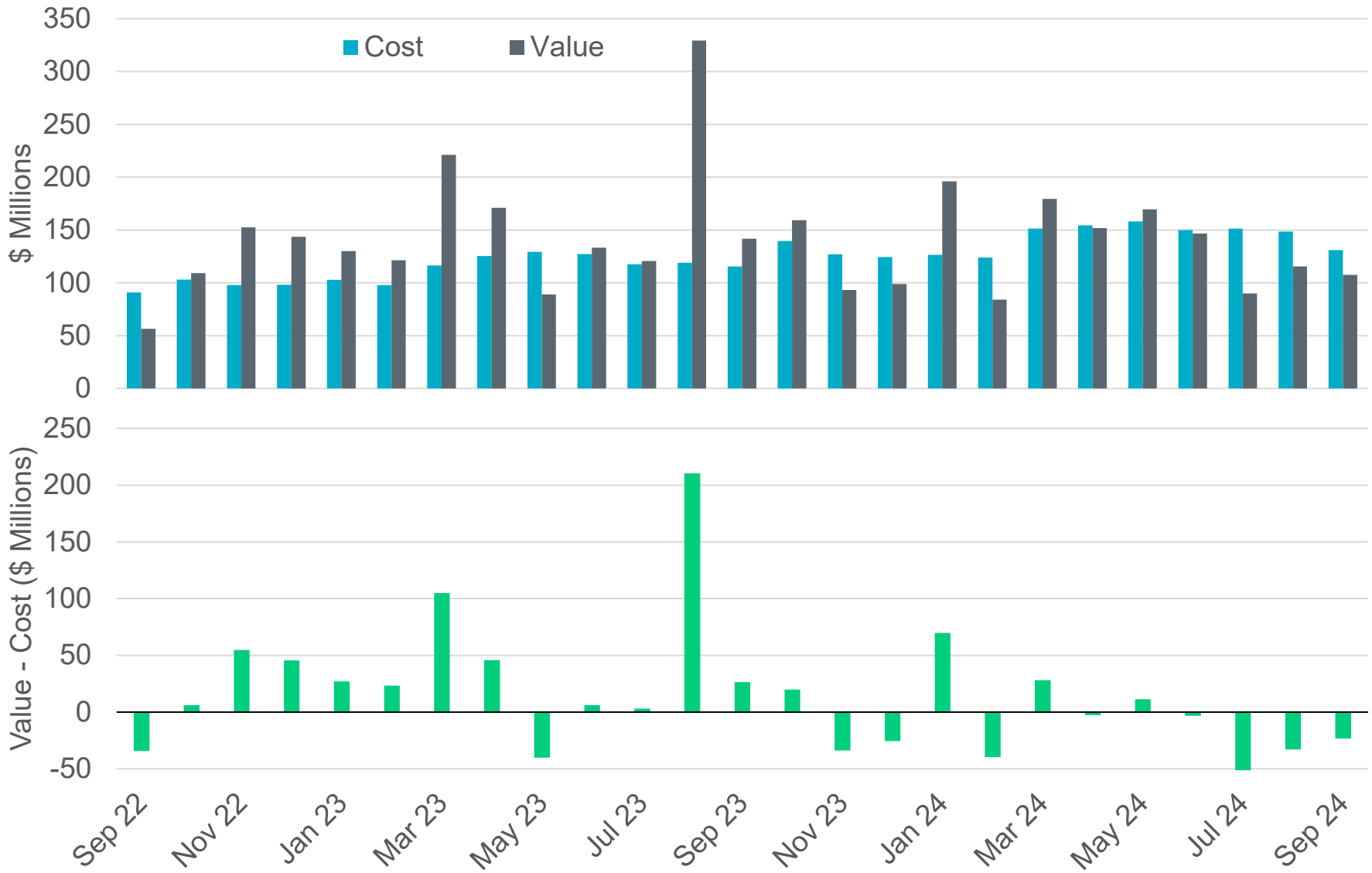


*Averages are weighted by Real-Time Market Load

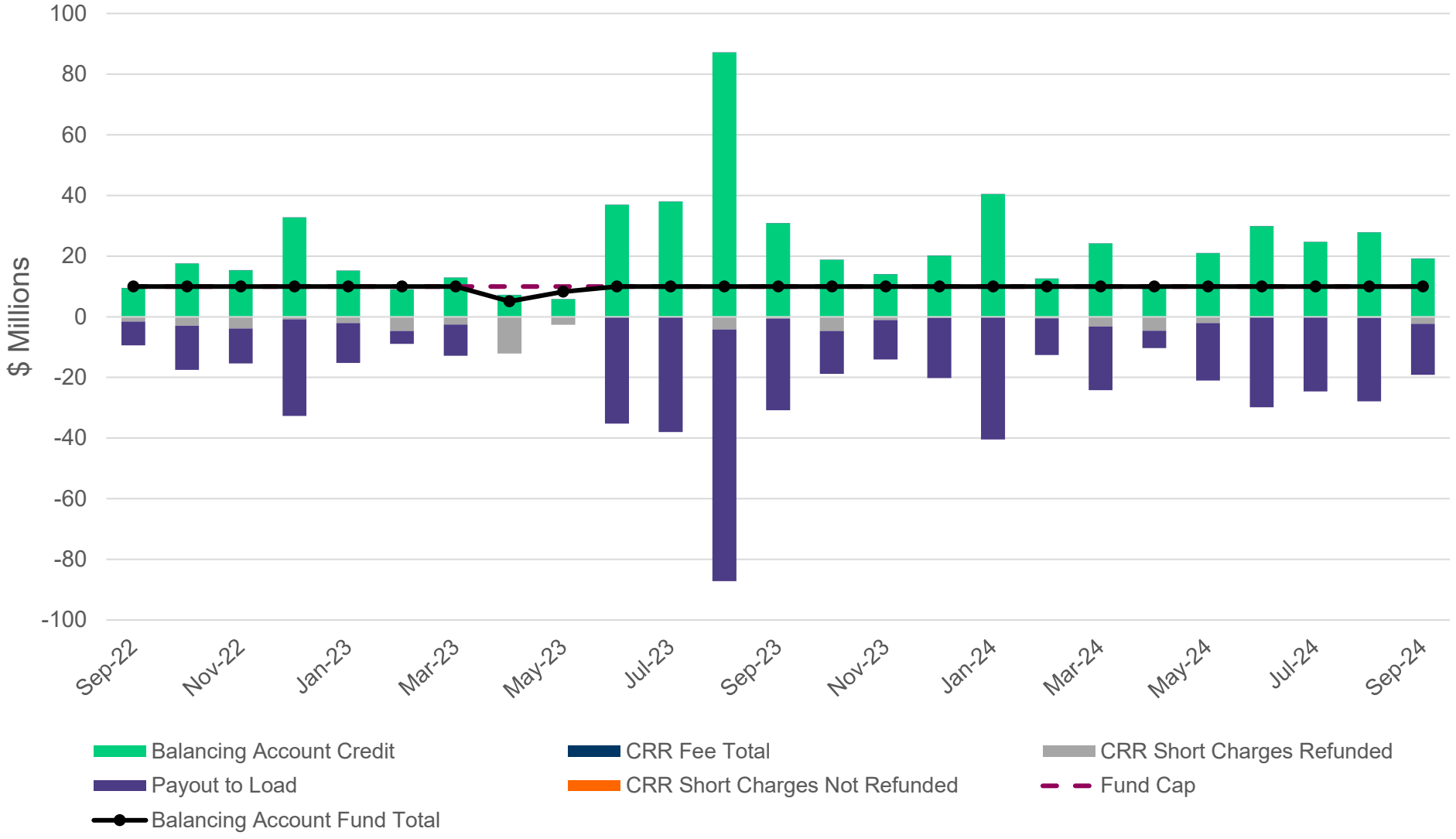
Percentage of Real-Time Load Transacted in the Day-Ahead Market



Congestion Revenue Right (CRR) Value and Cost Differences



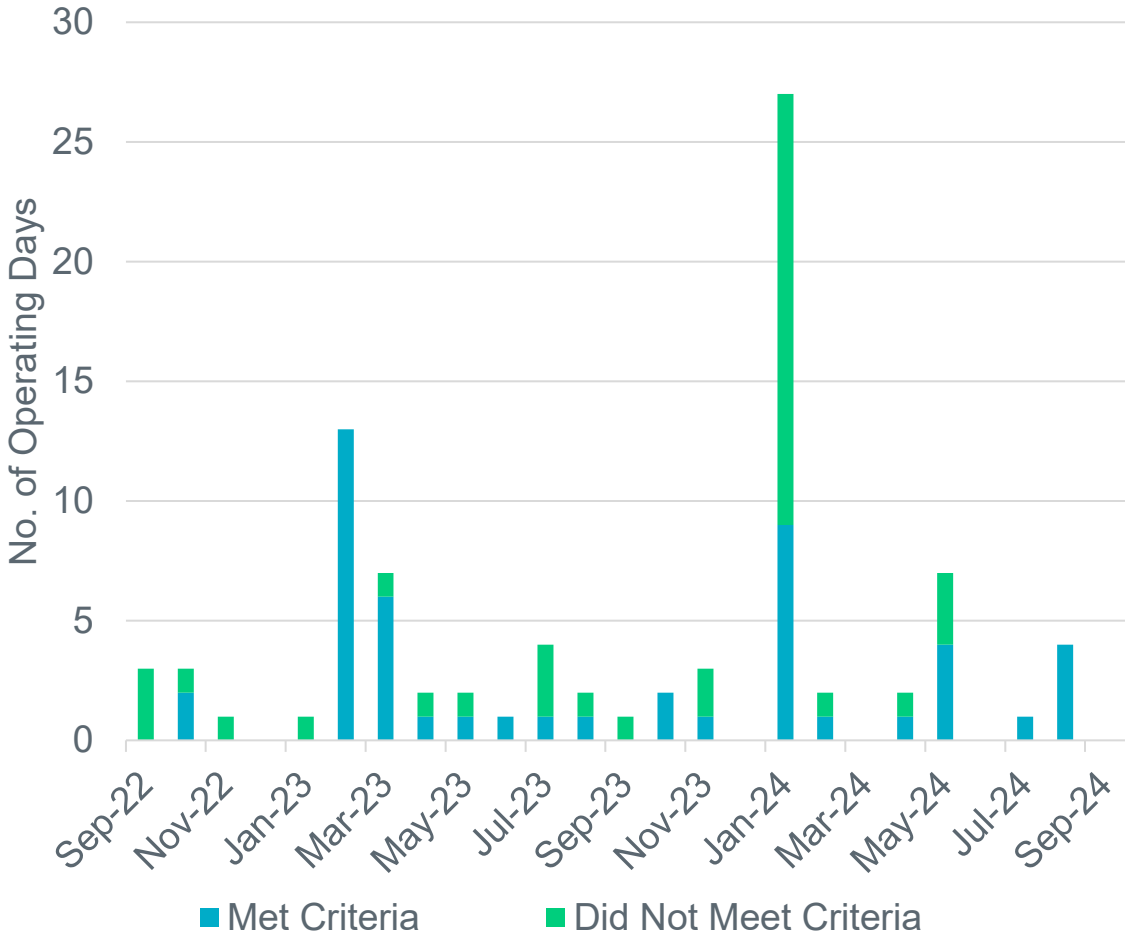
The CRR Balancing Account was fully-funded and excess amounts were allocated to Load



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.

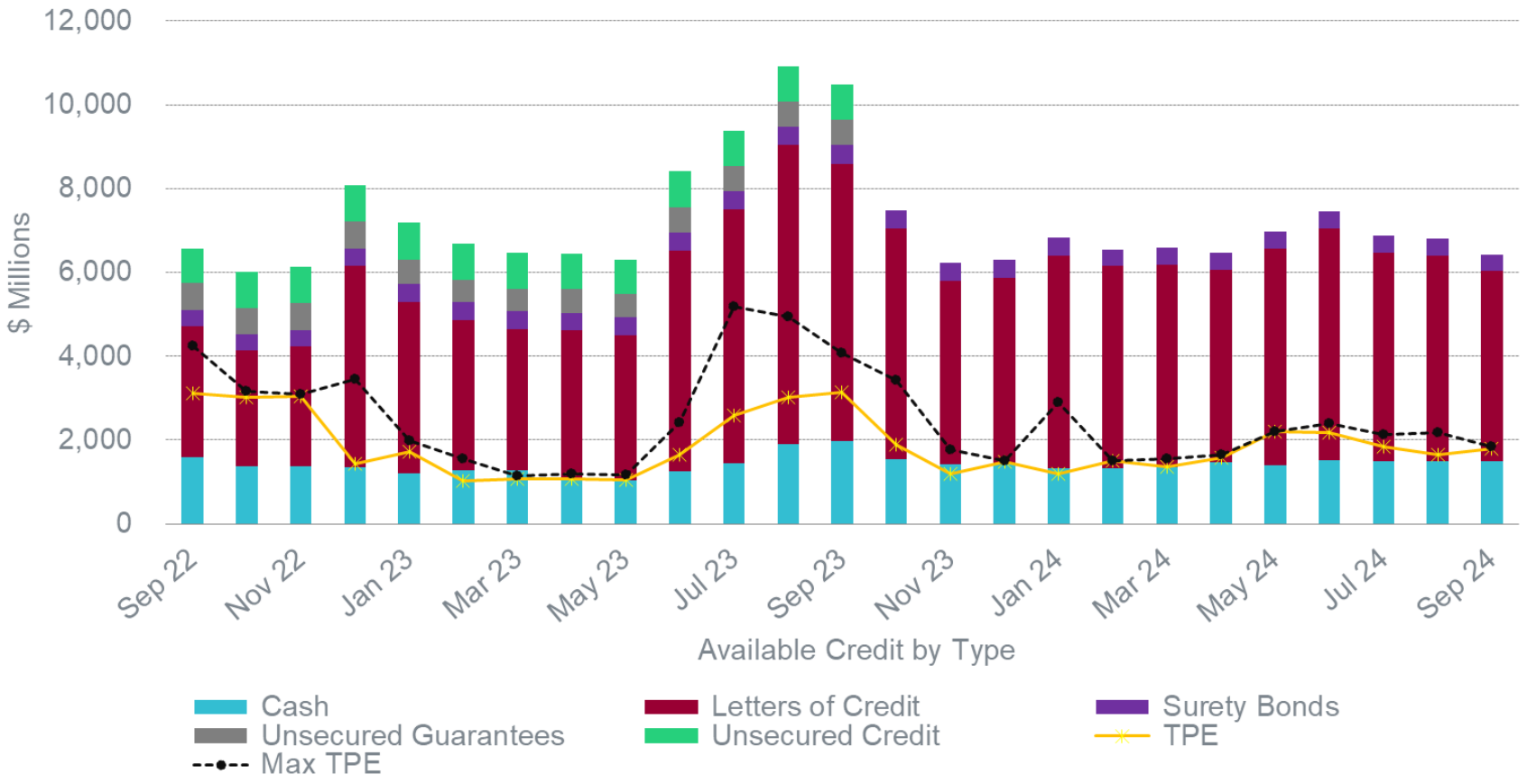


Details for Pricing Impact Review

- On September 5, 2024, ERCOT discovered a software defect that affected a Resource's megawatt value when its data quality was suspect. The megawatt value is used in the calculation of a transmission constraint's mathematical limit. (See Market Notice M-A091124-01) ERCOT is currently performing an impact analysis for Operating Days (ODs) 30 days prior to the issued Market Notice, Aug. 12 – Sept. 11, 2024. Once the impact analysis is complete, ERCOT will notify market participants if any of the ODs meet the criteria to seek review of prices by the ERCOT Board of Directors.

- On September 23, 2024, a software defect was discovered in the Reliability Unit Commitment (RUC) process that incorrectly blocked a Resource from opting out of being committed by RUC. (See Market Notices M-A100824-01 and M-A100824-02) ERCOT is unable to determine accurate prices and will therefore not seek a price correction under ERCOT Protocols Section 6.3(4).

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



*Numbers are as of month end except for Max TPE

Retail Transaction Volumes – Summary – September 2024

	Year-To-Date		Transactions Received	
Transaction Type	September 2024	September 2023	September 2024	September 2023
Switches	965,028	865,960	98,473	78,185
Acquisitions	0	0	0	0
Move - Ins	2,423,187	2,373,339	262,630	271,986
Move - Outs	1,093,474	1,069,539	131,447	124,702
Continuous Service Agreements (CSA)	322,588	346,354	27,603	34,758
Mass Transitions	0	0	0	0
Total	4,804,277	4,655,192	520,153	509,631