ERCOT Monthly Operational Overview
(October 2024)

ERCOT Public
November 15, 2024

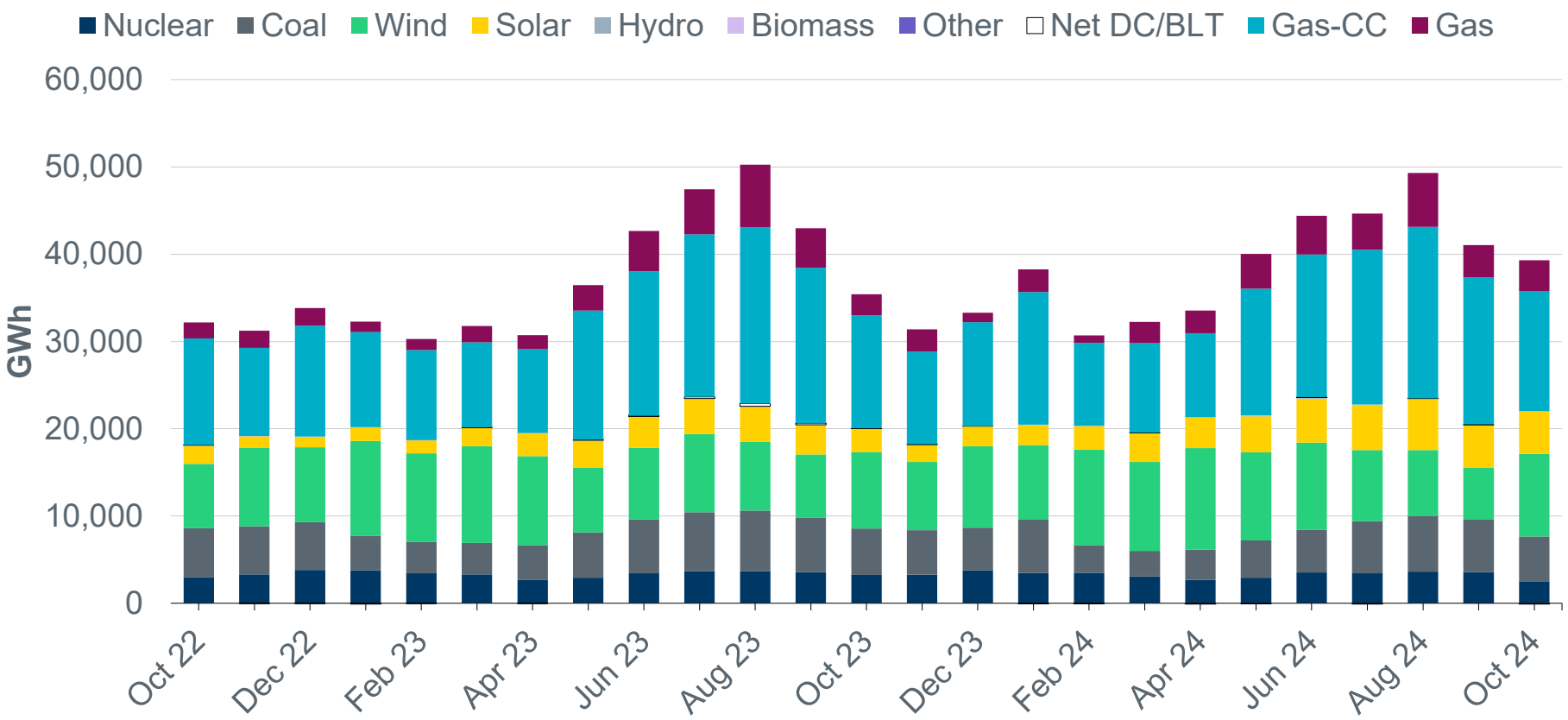
Highlights, Records and Notifications

- ERCOT's maximum peak demand for the month of October was 72,540 MW* on 10/03/2024; this is 1,306 MW more than the October 2023 peak demand of 71,234 MW set on 10/04/2023.

- ERCOT issued 12 notifications:
  - 3 OCNs - For a topology change in the PNHNDL region.
  - 2 OCNs - Due to issued AANs due to a possible future Emergency Conditions of reserve capacity deficiency.
  - 1 OCN - For taking manual action on the PNHNDL IROL for a planned outage.
  - 1 OCN - Predicted Extreme Hot Weather event for the ERCOT Region.
  - 1 OCN - Due to developing a modified Generic Transmission Constraint due to new updated limit.
  - 3 Advisories - Geomagnetic disturbance of [K-7].
  - 1 Advisory - Geomagnetic disturbance of [K-8].

* Preliminary value from November Demand and Energy 2024 report.

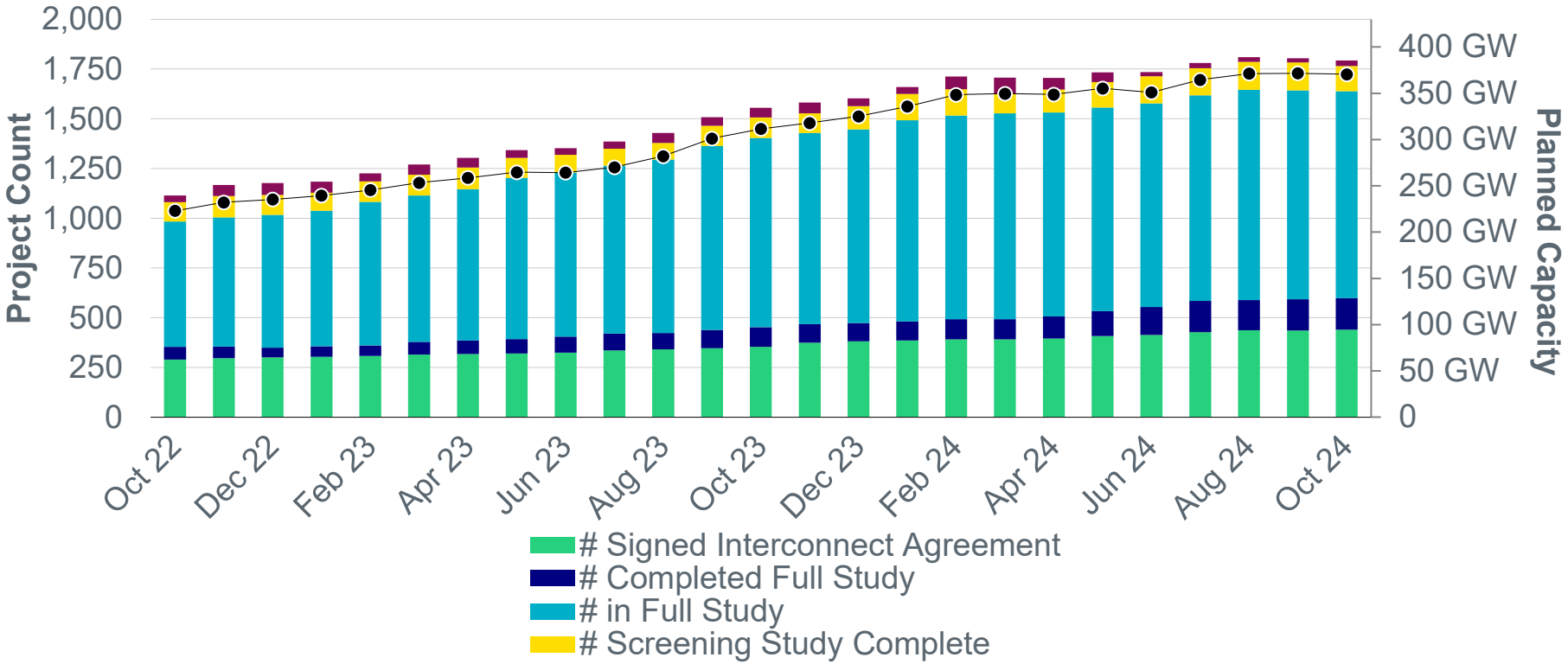
Monthly energy generation increased by 10.8% year-over-year to 39,224 GWh in October 2024, compared to 35,408 GWh in October 2023



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)

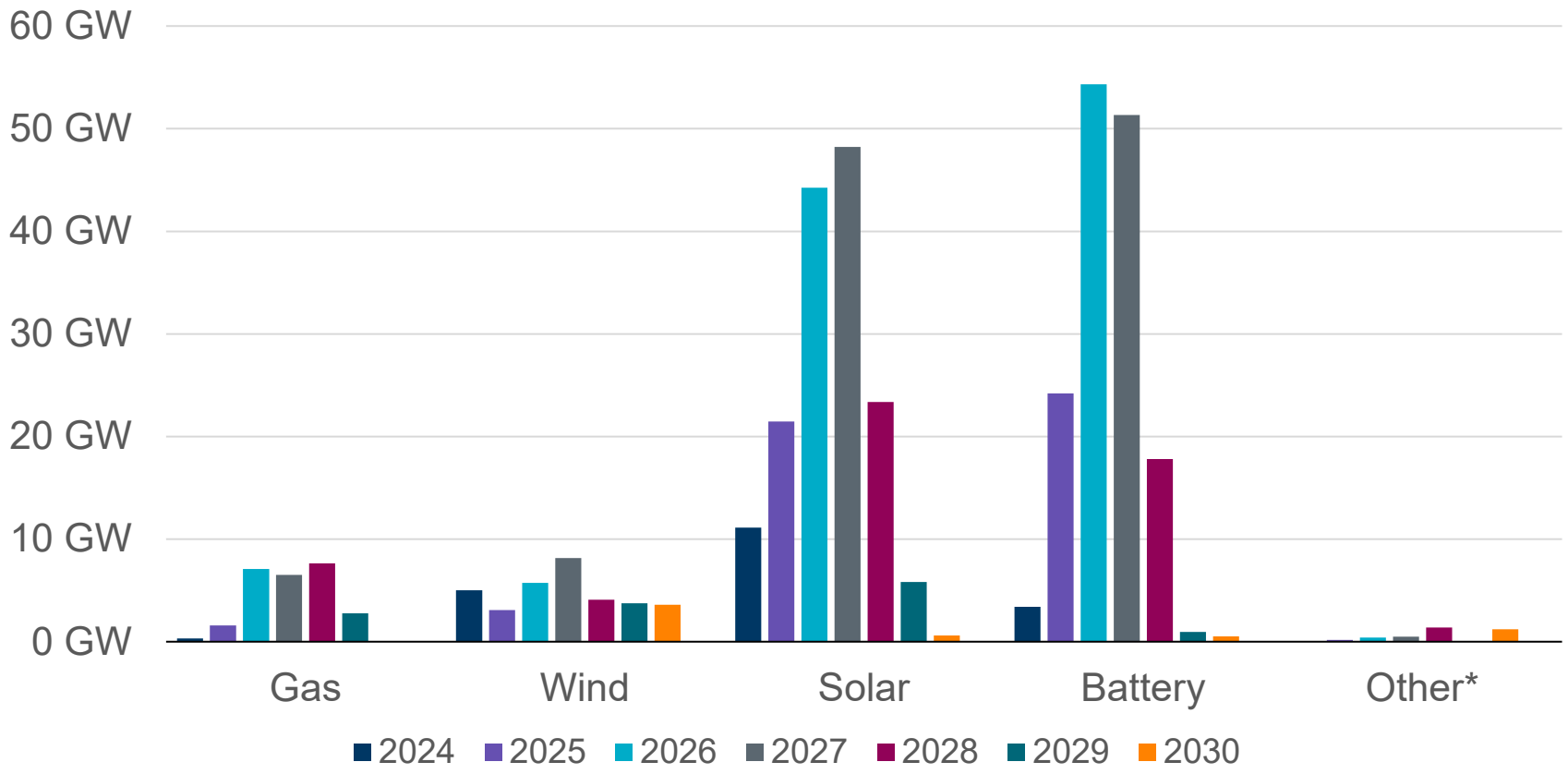


- There are an additional 44 “Small Generator” projects totaling 415 MW that are going through the simplified interconnection process.
- A break-out by fuel type can be found in the monthly Generator Interconnection Status (GIS) reports available on the ERCOT Resource Adequacy Page: http://www.ercot.com/gridinfo/resource

Interconnection Queue Capacity by Fuel Type

Queue totals: Solar 155 GW (41.8%), Wind 33 GW (9%), Gas 26 GW (7%), Battery 153 GW (41.2%), Other 4 GW (1%)

(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 1,872 active generation interconnection requests totaling 370,574 MW as of October 31. This includes 154,860 MW of solar, 33,467 MW of wind, 152,580 MW of battery, and 25,954 MW of gas projects; 117 projects were categorized as inactive, up from 103 inactive projects in September 2024.

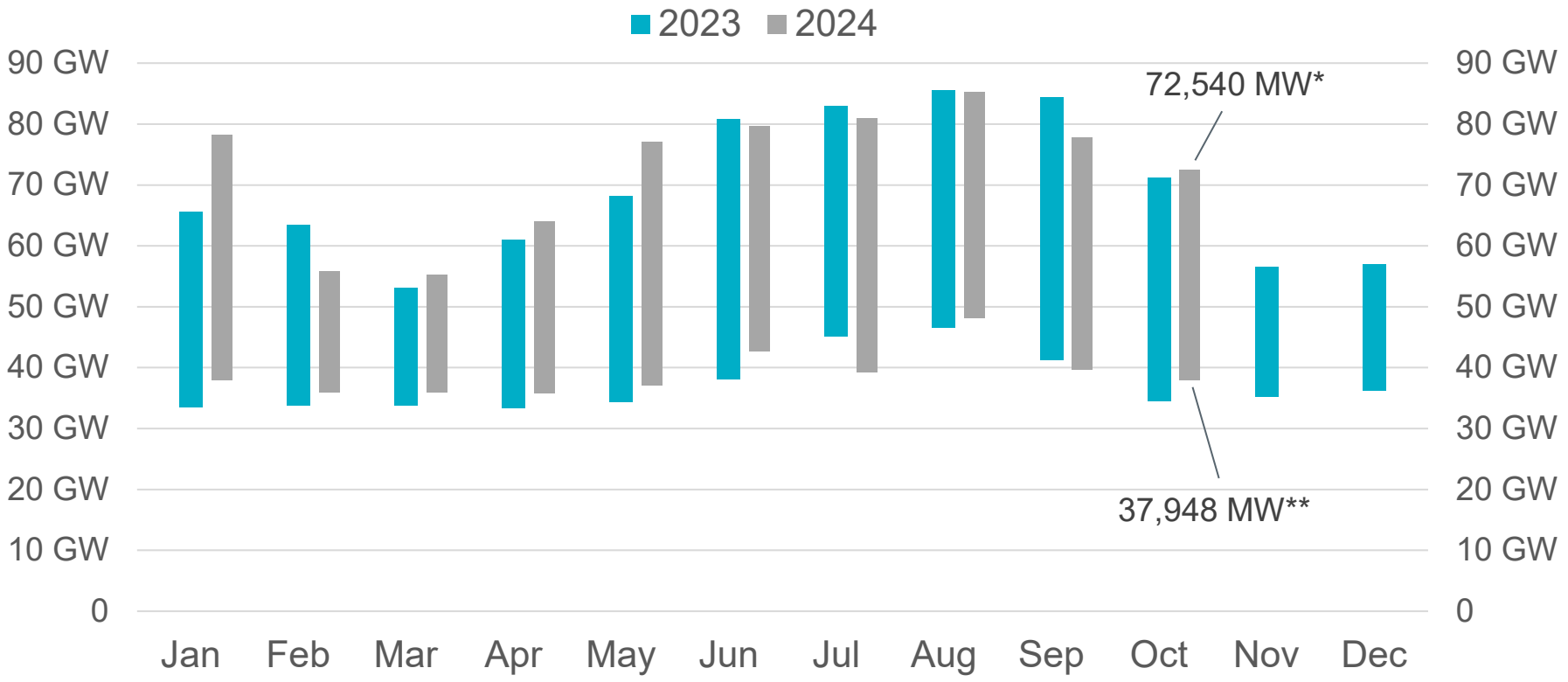
- ERCOT is currently reviewing proposed transmission improvements with a total estimated cost of $3.397 billion as of October 31, 2024.

- Transmission Projects endorsed in 2024 total $3.034 billion as of October 31, 2024.

- All projects (in engineering, routing, licensing and construction) total approximately $16.504 billion as of October 1, 2024.

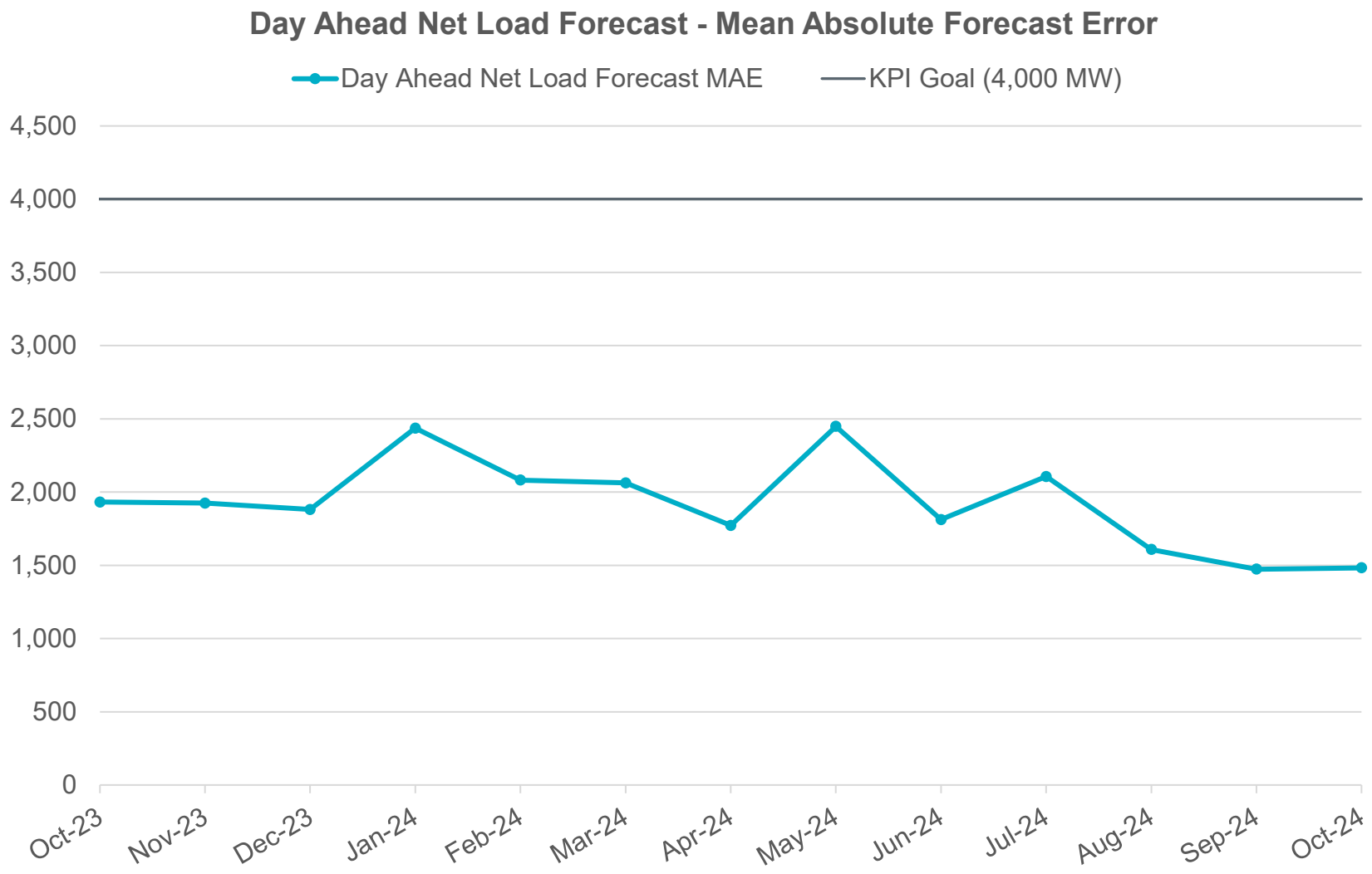
- Transmission Projects energized in 2024 total approximately $2.435 billion as of October 1, 2024.

ERCOT's maximum peak demand for the month of October was 72,540 MW*; this is 1,306 MW more than the October 2023 demand of 71,234 MW.

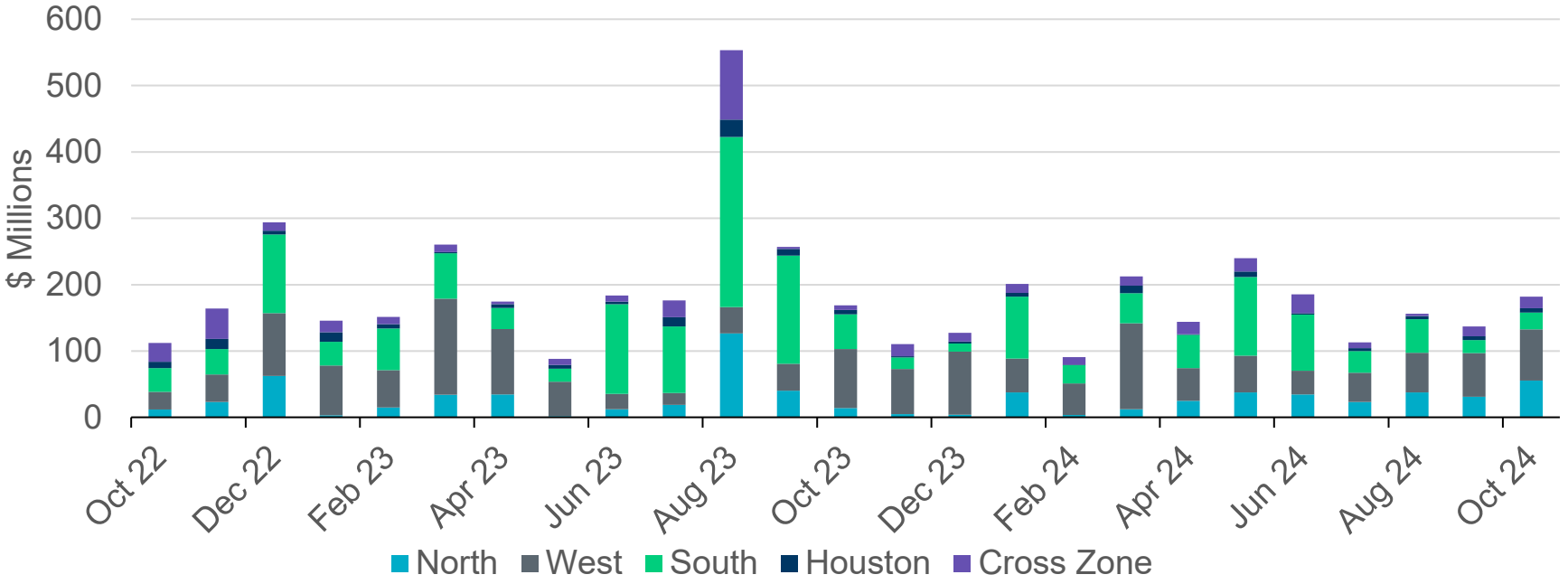


*Based on the maximum net system hourly value from the October 2024 Demand and Energy report.
**Based on the minimum net system 15-minute interval value from the October 2024 Demand and Energy report.
Data for latest two months are based on preliminary settlements.

Net Load Forecast Performance



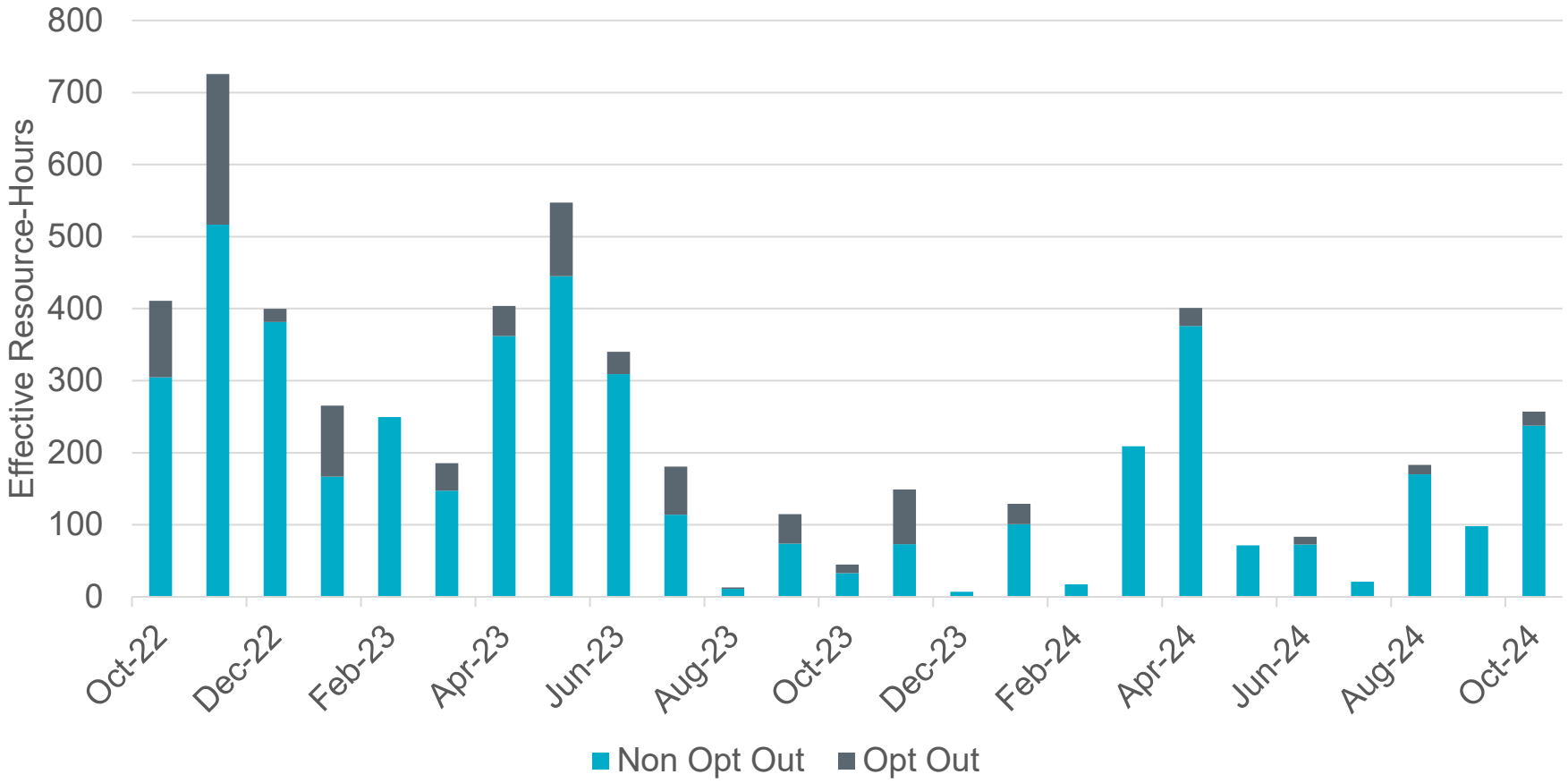
Real-Time Congestion Rent by Zone



- 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 October, total Real-Time congestion rent increased compared to September, with the highest congestion rent observed in the West and North Zones.
  - North Zone congestion rent was primarily driven by the loss of the double circuit 345kv line from Salado Switch to Knob Creek Switch and the 138kv line from Temple Switch to Bell County which overloads the 138kV line from Temple Switch to Temple Southeast.
  - West Zone congestion rent was primarily driven by the loss of the 345kV double circuit from Wolf Switching Station to Moss Switch, which overloads the 138kV line from Odessa Ehv Switch to Yarbrough Sub.

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

Twenty-five Resources were Committed in October for Capacity and Congestion

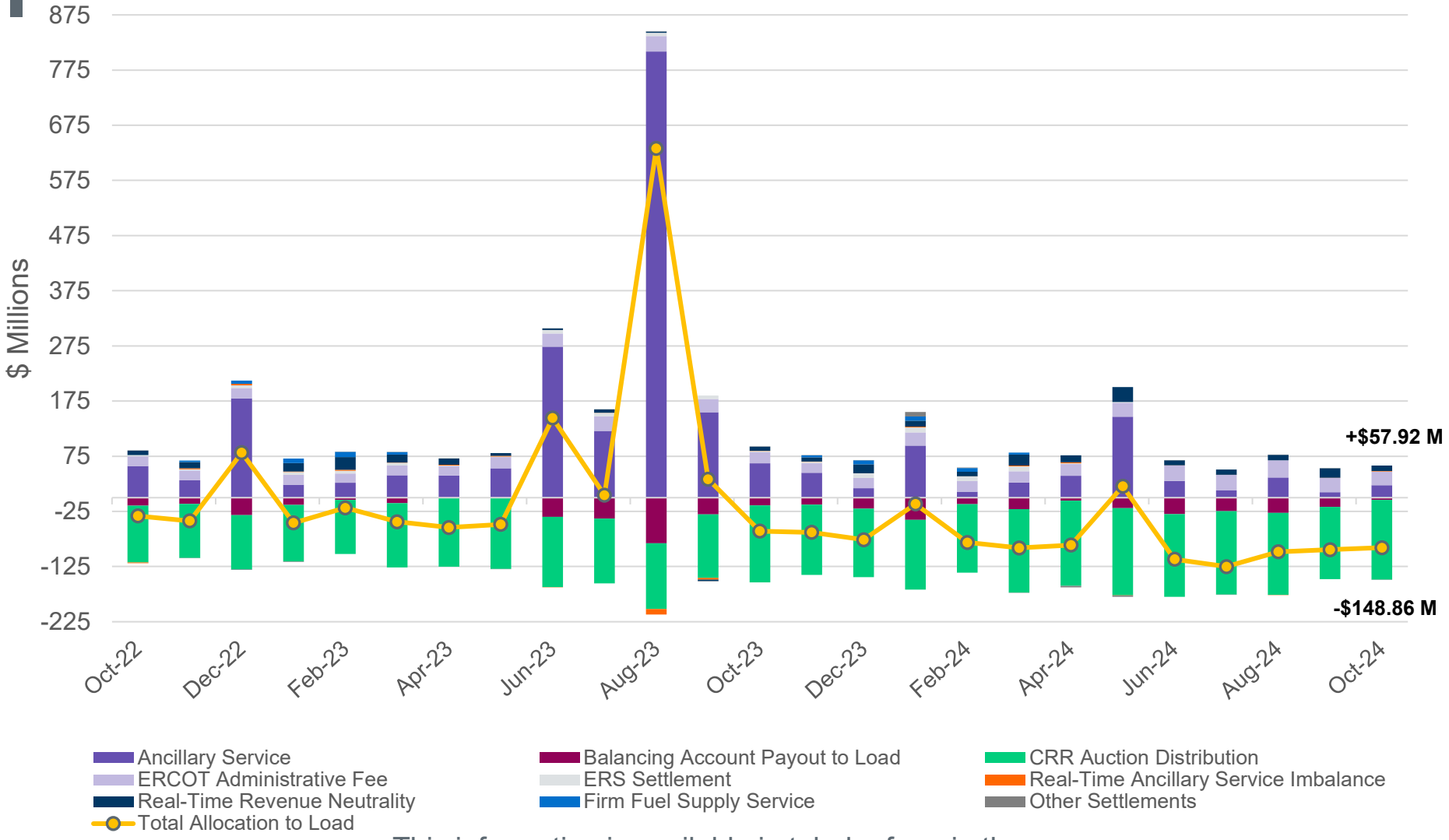


"Effective Resource-Hours" excludes any period during a Reliability Unit Commitment hour when the RUC-committed Resource was starting up, shutting down, off-line, or otherwise not available for dispatch by SCED.

Twenty-five Resources were Committed in October for Capacity and Congestion

Resource #	Effective Resource-hours	Non Opt Out (Effective Hours)	Opt Out (Effective Hours)
1	6.0	6.0	0.0
2	24.0	24.0	0.0
3	8.0	8.0	0.0
4	6.0	6.0	0.0
5	6.0	0.0	6.0
6	18.0	18.0	0.0
7	5.0	5.0	0.0
8	2.0	2.0	0.0
9	4.0	4.0	0.0
10	8.0	8.0	0.0
11	7.9	0.0	7.9
12	15.9	15.9	0.0
13	24.8	24.8	0.0
14	15.8	15.8	0.0
15	14.2	14.2	0.0
16	5.7	0.0	5.7
17	2.0	2.0	0.0
18	2.0	2.0	0.0
19	25.7	25.7	0.0
20	10.7	10.7	0.0
21	22.5	22.5	0.0
22	10.7	10.7	0.0
23	3.0	3.0	0.0
24	5.0	5.0	0.0
25	4.0	4.0	0.0
SUM	**257.0**	**237.5**	**19.6**

Net Allocation to Load in October 2024 was ($90.94) Million

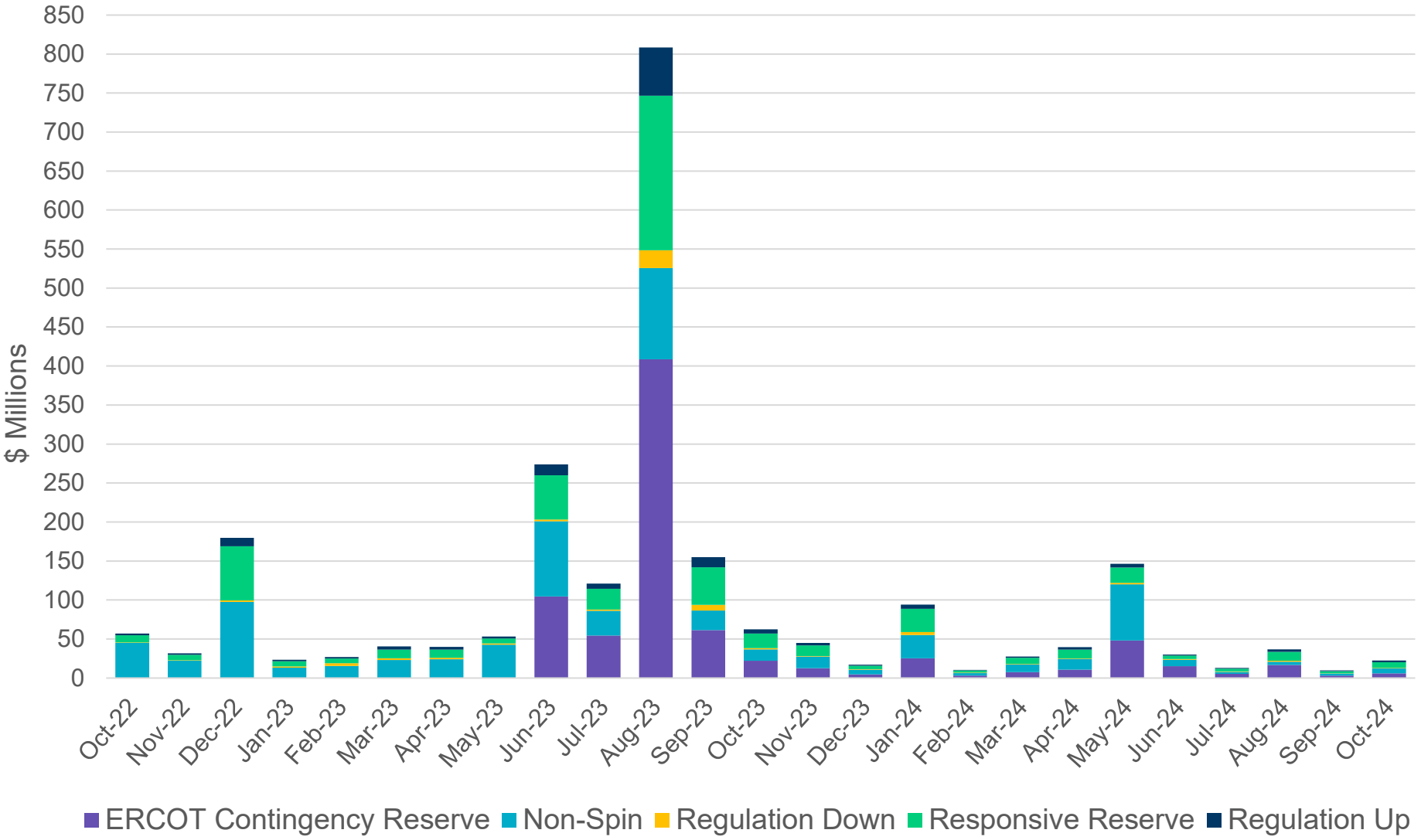


This information is available in tabular form in the Settlement Stability Report presented quarterly to the [Wholesale Market Subcommittee]

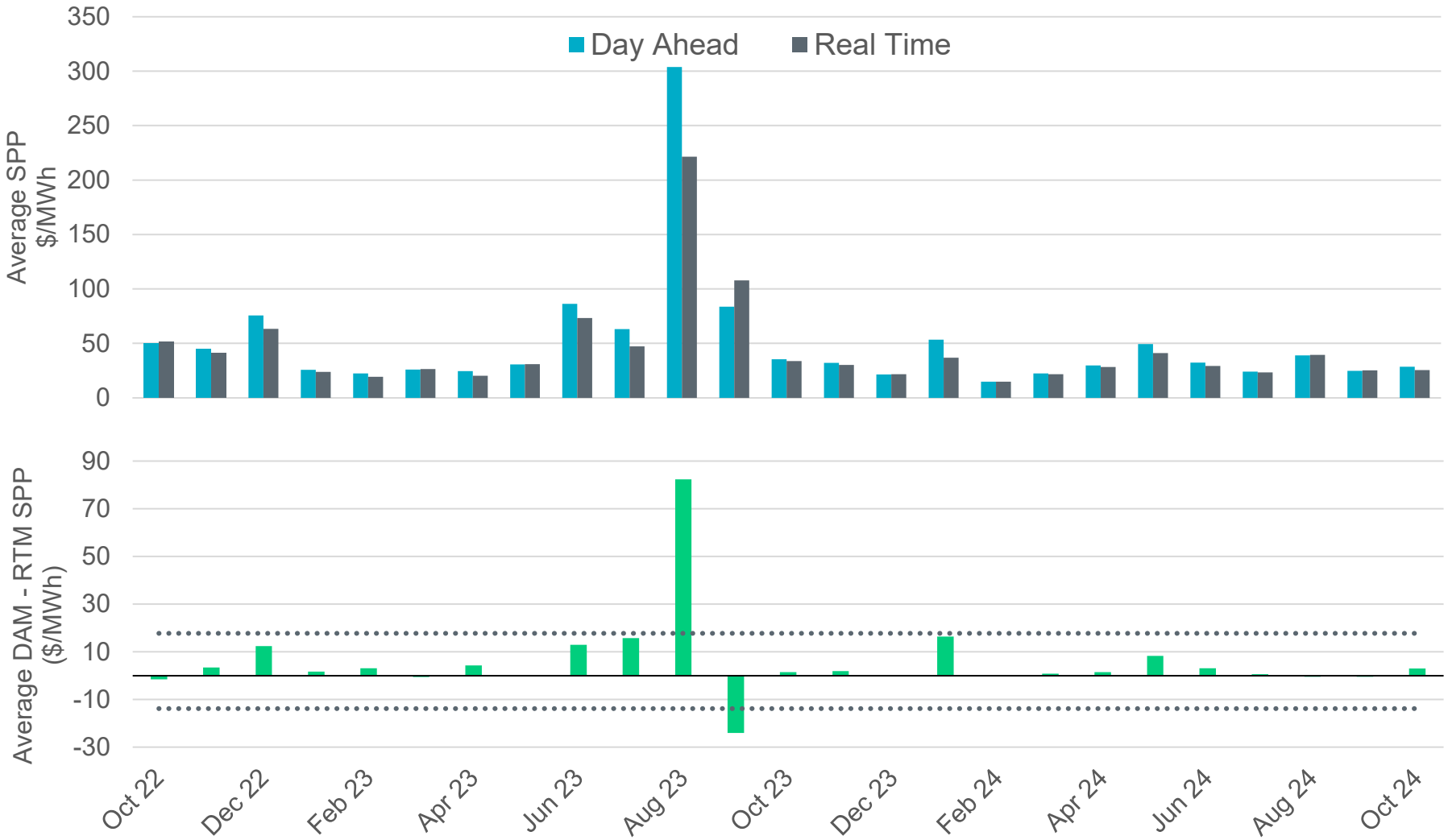
Real-Time Revenue Neutrality Allocated to Load was $9.77M for October 2024

	October 2024 ($M)
Real-Time Energy Imbalance	$150.87
Real-Time Point-to-Point Obligation	($156.71)
Real-Time Congestion from Self-Schedules	$0.20
DC Tie & Block Load Transfer	($3.59)
Real-Time Energy for SODG and SOTG	($0.54)
Load Allocated Revenue Neutrality	**$9.77**

Ancillary Services for October 2024 totaled $22.4M

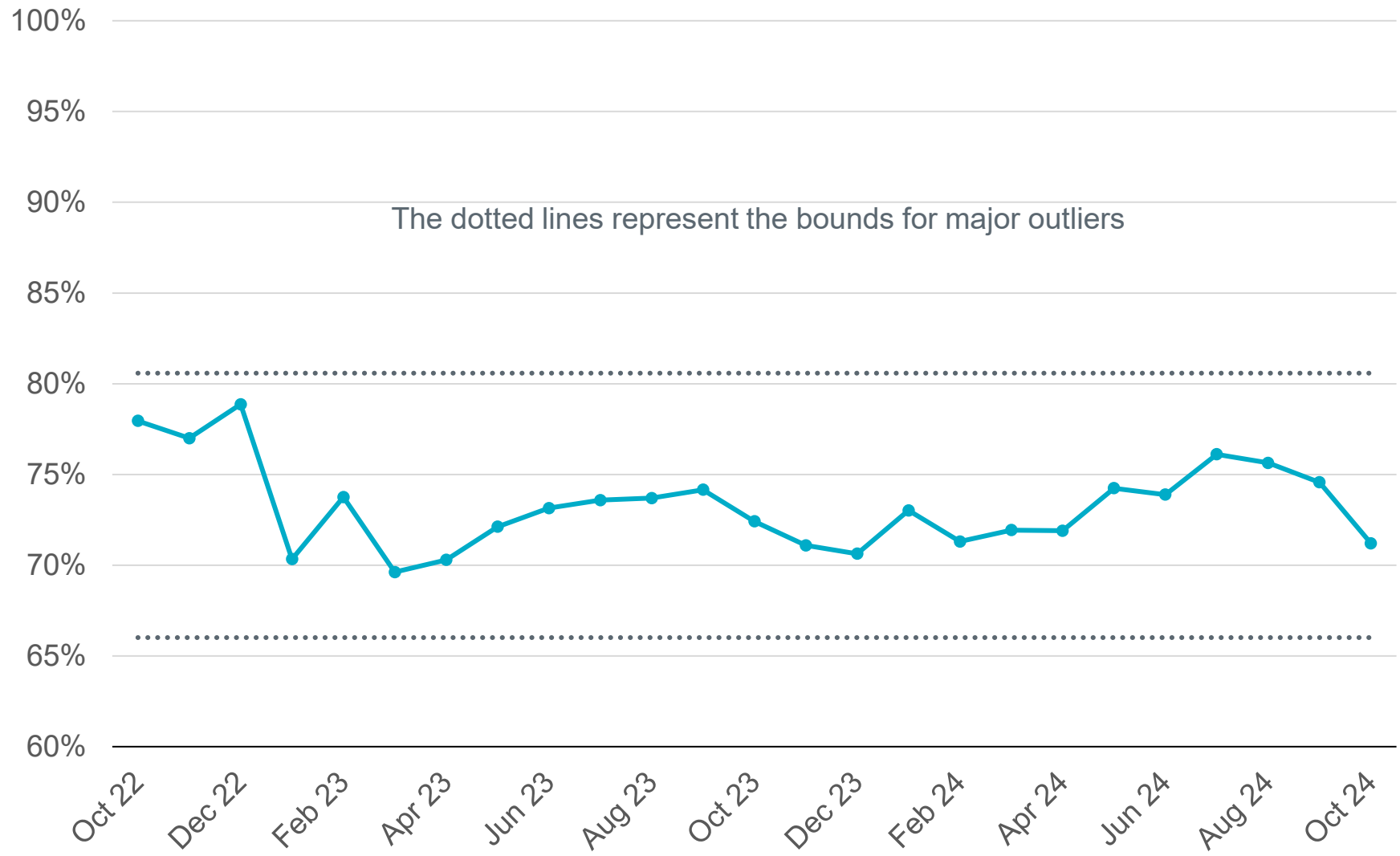


Day-Ahead and Real-Time Market Price Differences

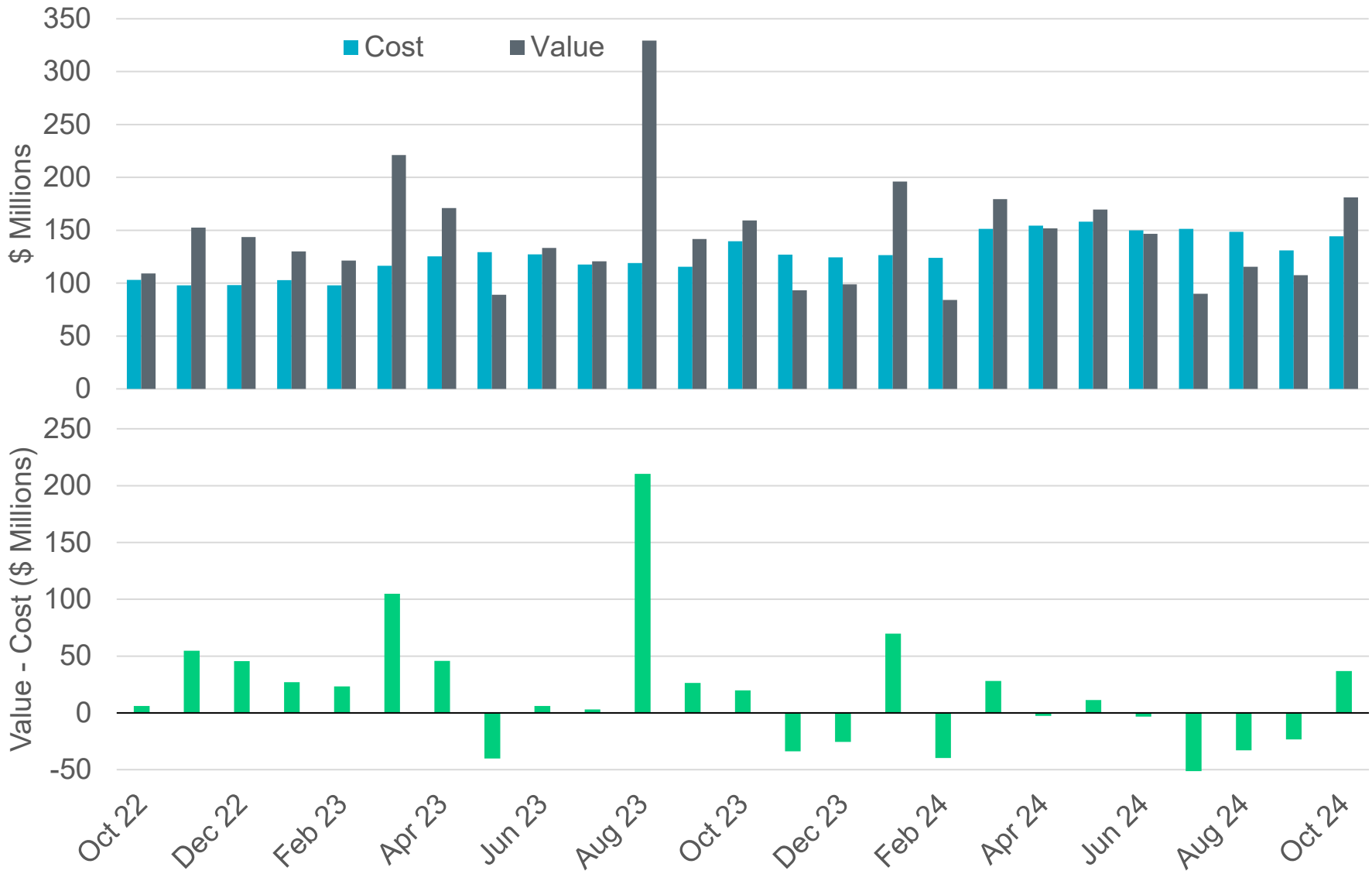


*Averages are weighted by Real-Time Market Load

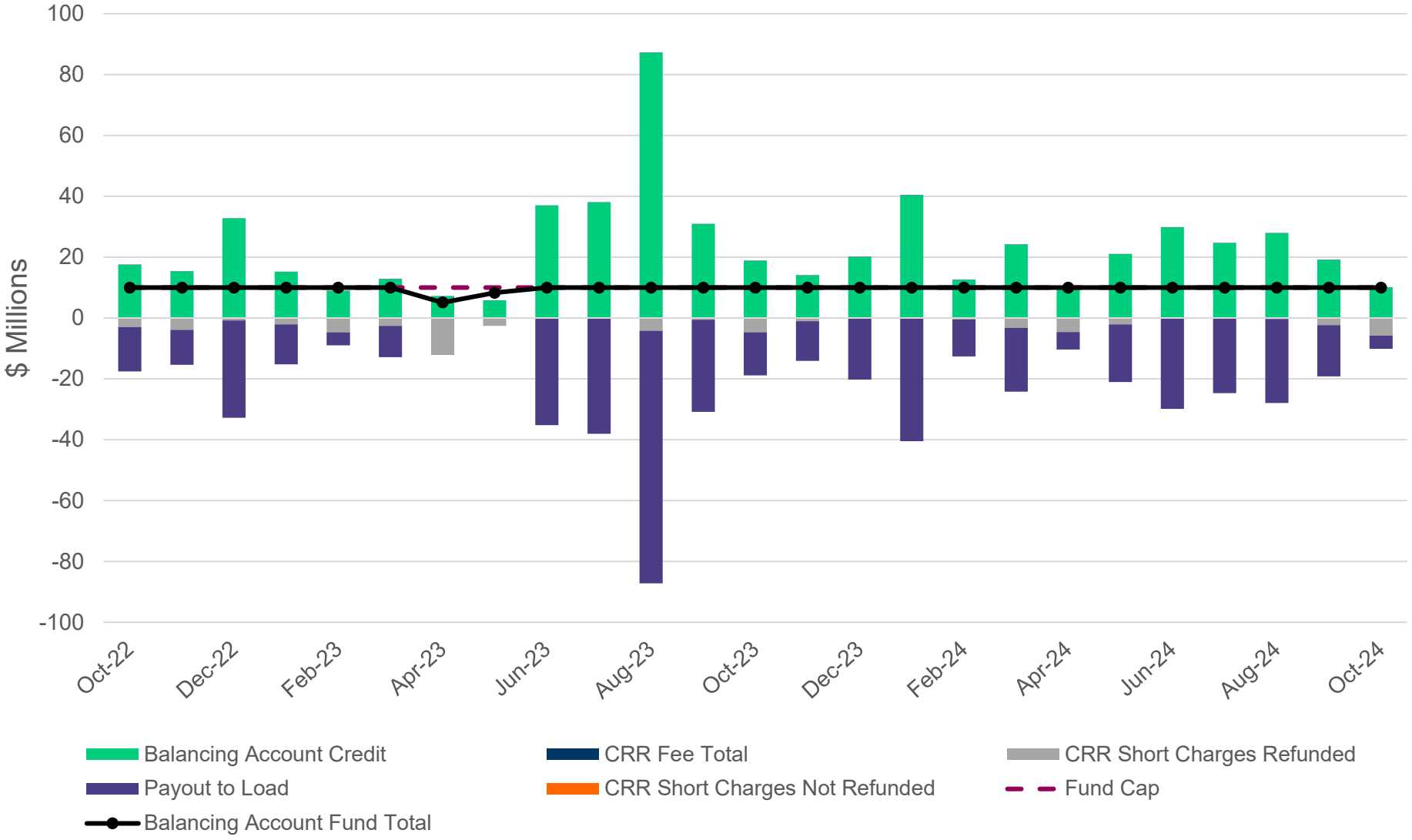
Percentage of Real-Time Load Transacted in the Day-Ahead Market



Congestion Revenue Right (CRR) Value and Cost Differences



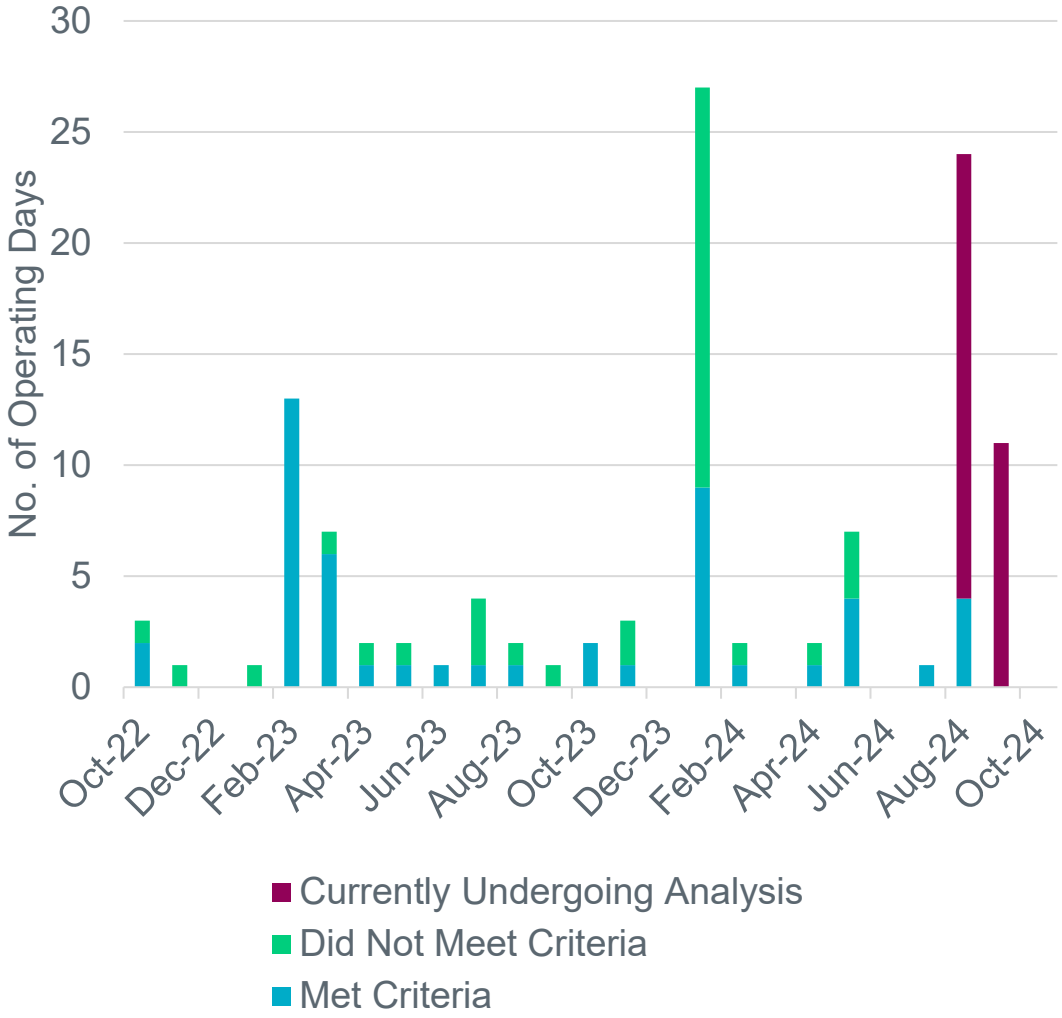
The CRR Balancing Account was fully-funded and excess amounts were allocated to Load



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 are currently undergoing impact analysis to determine if criteria is met;
- 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.

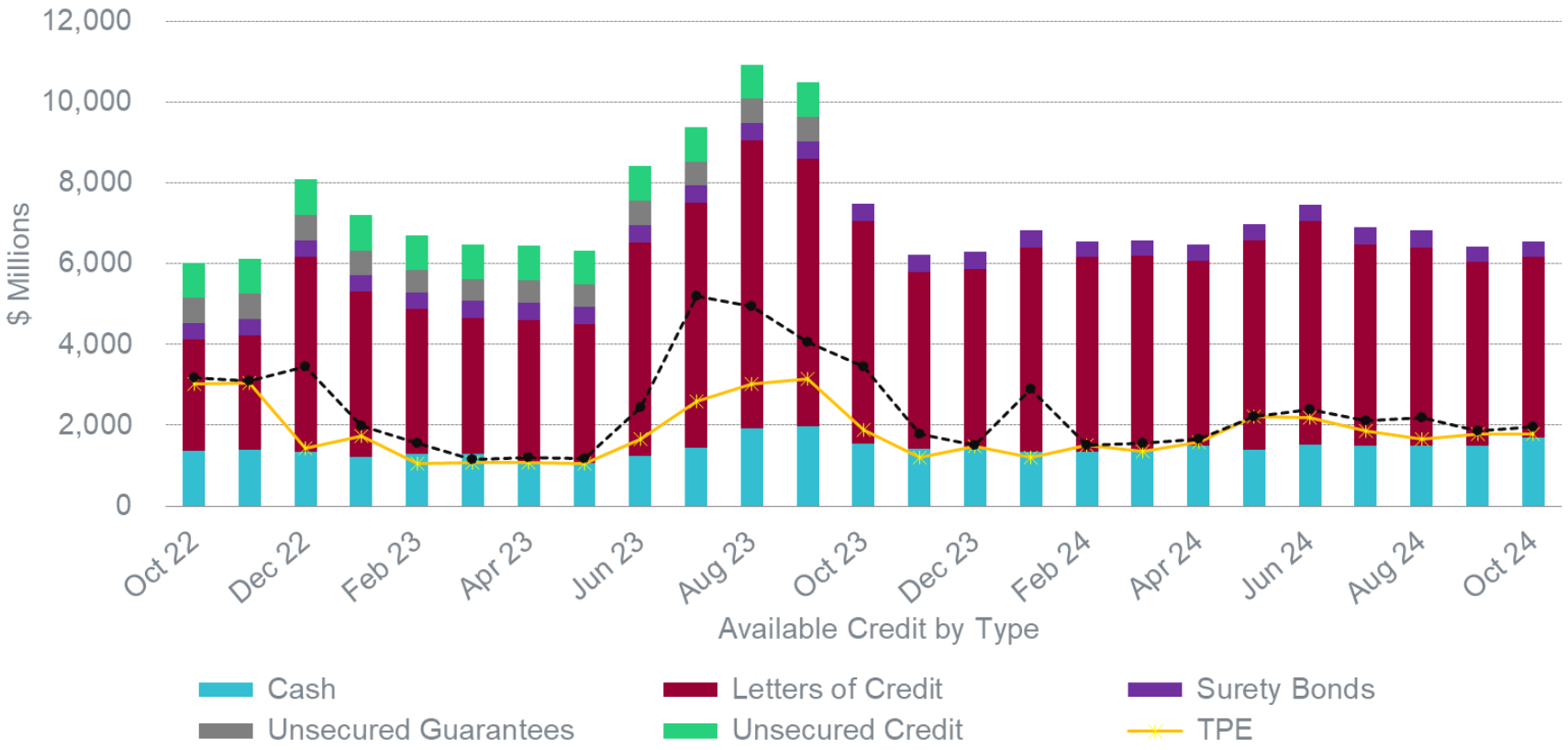


Details for Pricing Impact Review

- 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.

- There were no Operating Days in October that required price correction.

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



*Numbers are as of month end except for Max TPE

Retail Transaction Volumes – Summary – October 2024

	Year-To-Date		Transactions Received	
Transaction Type	October 2024	October 2023	October 2024	October 2023
Switches	1,051,226	957,294	86,198	91,334
Acquisitions	0	0	0	0
Move - Ins	2,693,988	2,635,493	270,801	262,154
Move - Outs	1,227,470	1,195,975	133,996	126,436
Continuous Service Agreements (CSA)	368,242	378,125	45,654	31,771
Mass Transitions	0	0	0	0
Total	5,340,926	5,166,887	536,649	511,695