ERCOT Monthly Operational Overview
(March 2025)

ERCOT Public
April 17, 2025

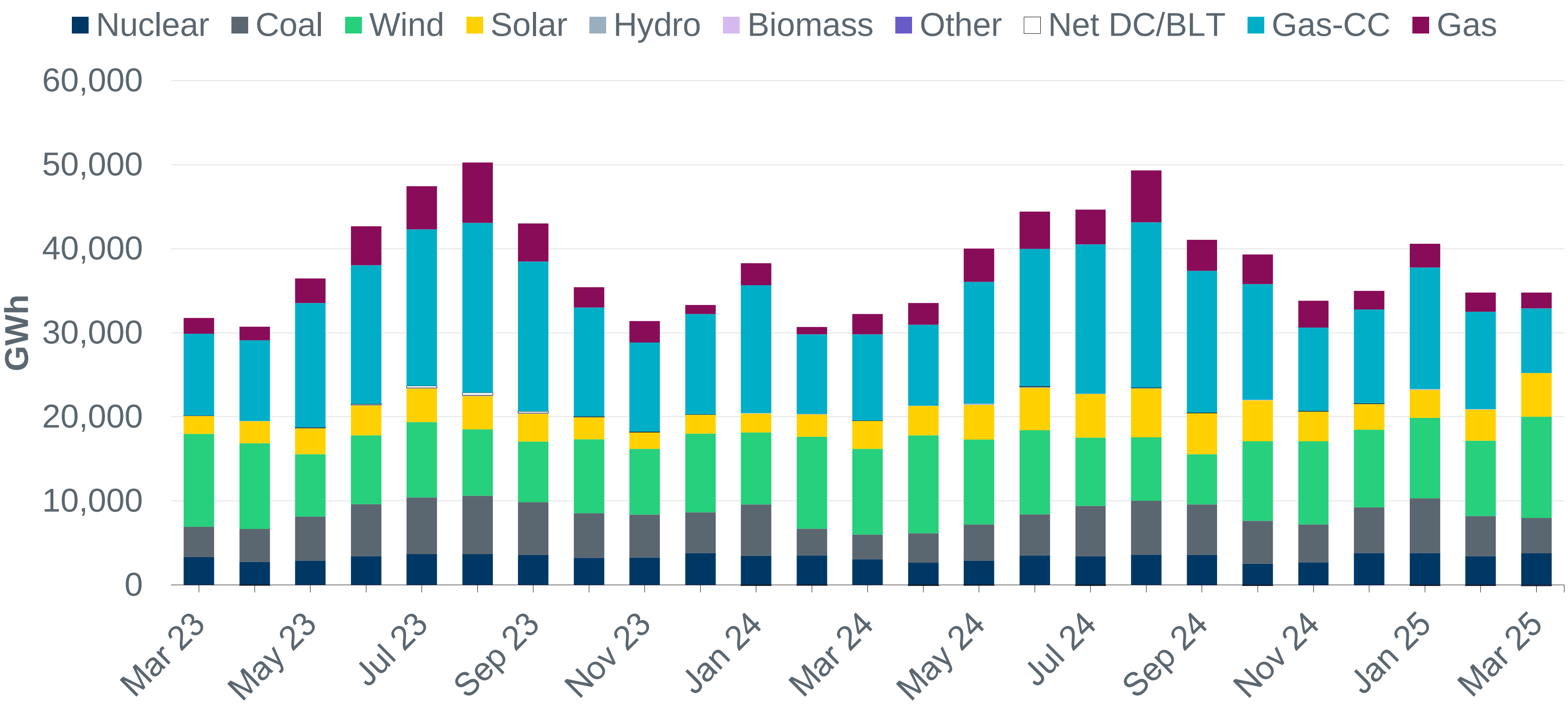
Highlights, Records and Notifications

- ERCOT set a new record of 62,920 MW* for the month of March on 3/25/2025; This is 7,614 MW more than the March 2024 demand of 55,306 MW on 3/5/2024.

- ERCOT issued 12 notifications:
  - 1 Advisory – Due to extreme ERCOT's Transient Security Stability Tool being unavailable.
  - 6 OCNs – Due to wildfire risk in the West Texas area.
  - 1 OCN – Due to topology change in the Panhandle area.
  - 1 OCN – Due to manual action taken on the West Texas IROL due to topology change.
  - 1 Watch – Due to wildfire in the Western Hill county area.
  - 1 DC Tie Curtailment Notice – Due to a planned or unplanned outage.
  - 1 Alert – Due to RTM prices investigation.

* Preliminary value from March Demand and Energy 2025 report.

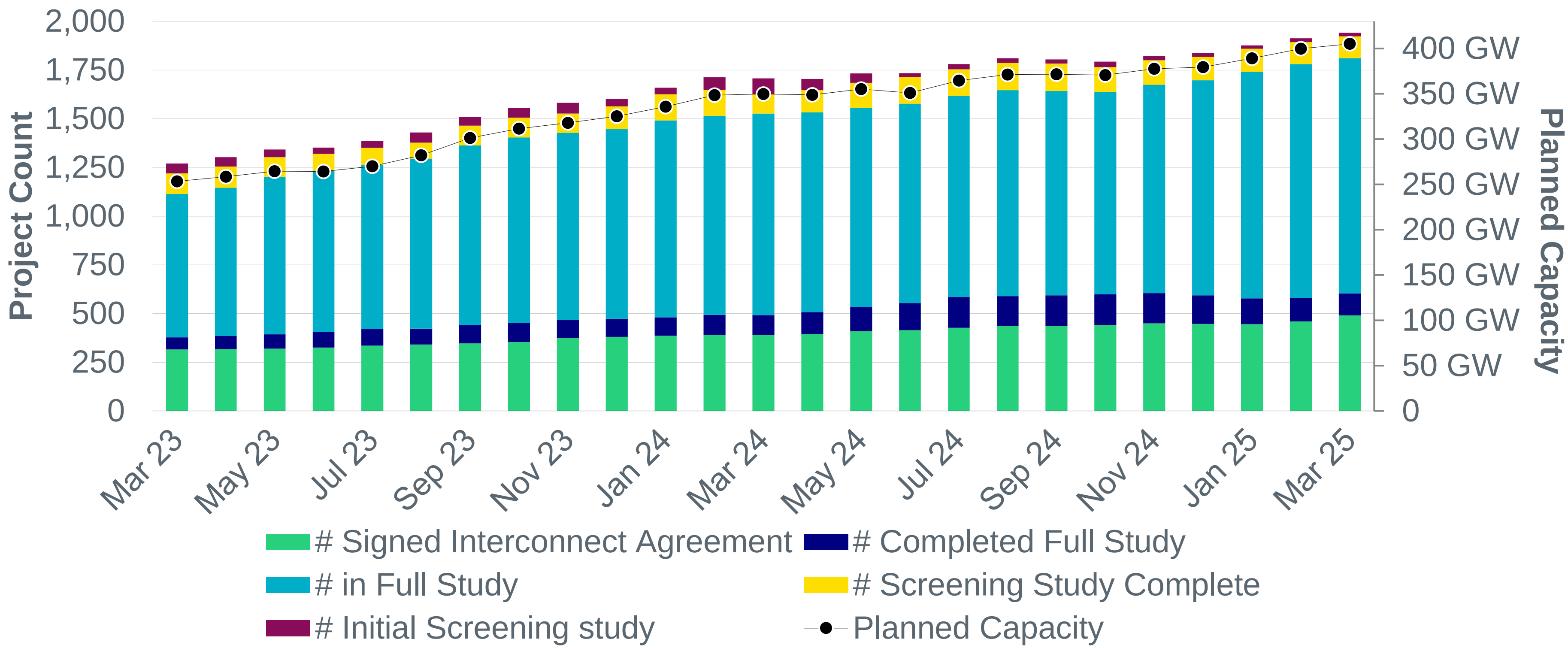
Monthly energy generation increased by 7.7% year-over-year to 34,699 GWh in March 2025, compared to 32,205 GWh in March 2024



Data for latest two months are based on preliminary settlements.

Generation Interconnection activity by project phase

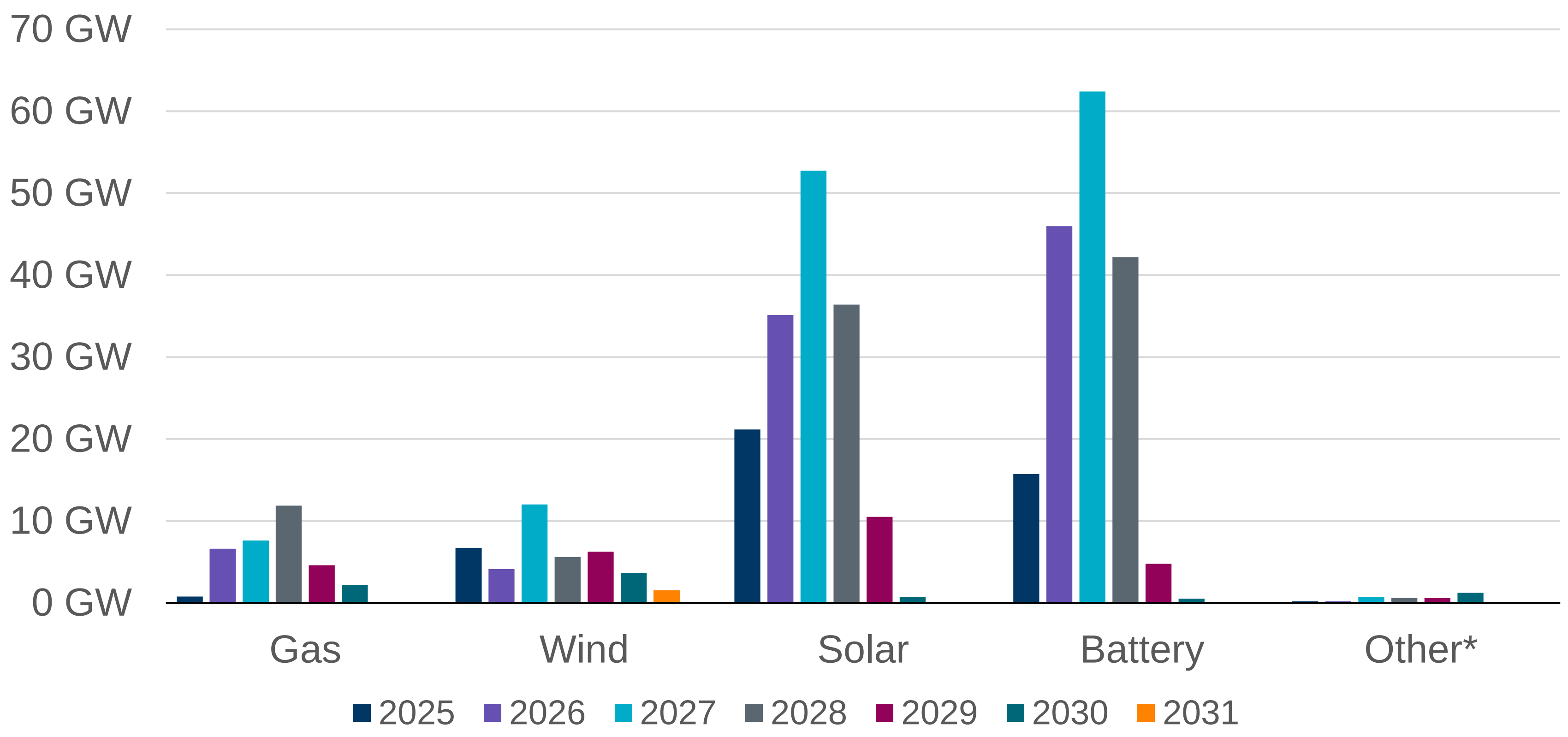
(Excludes capacity associated with projects designated as Inactive per Planning Guide Section 5.2.5)



- There are an additional 50 “Small Generator” projects totaling 463 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 157 GW (38.7%), Wind 40 GW (9.8%), Gas 34 GW (8.3%), Battery 172 GW (42.4%), Other 4 GW (.9%)
(Excludes capacity associated with projects designated as Inactive per Planning Guide Section 5.2.5)



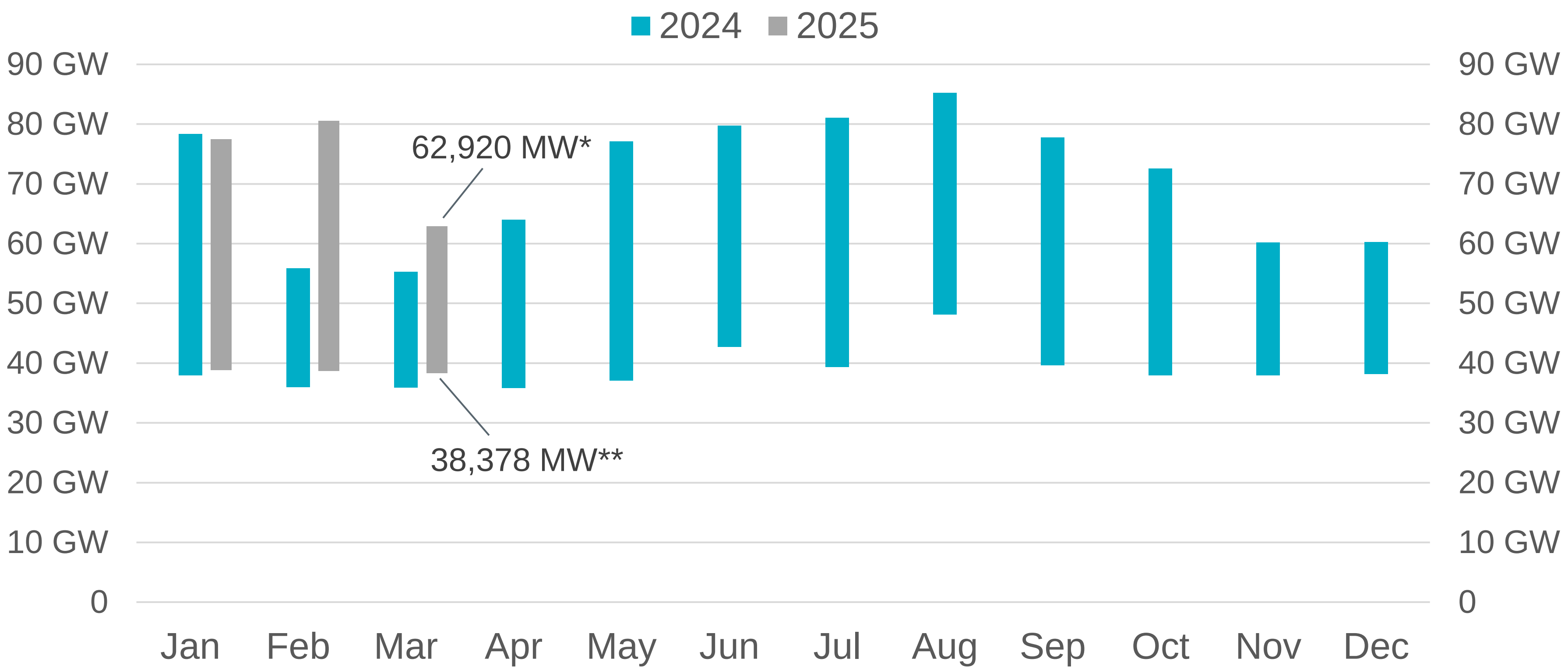
A break-out by zone can be found in the monthly Generator Interconnection Status (GIS) reports available on the ERCOT Resource Adequacy Page: http://www.ercot.com/gridinfo/resource

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

Planning Summary

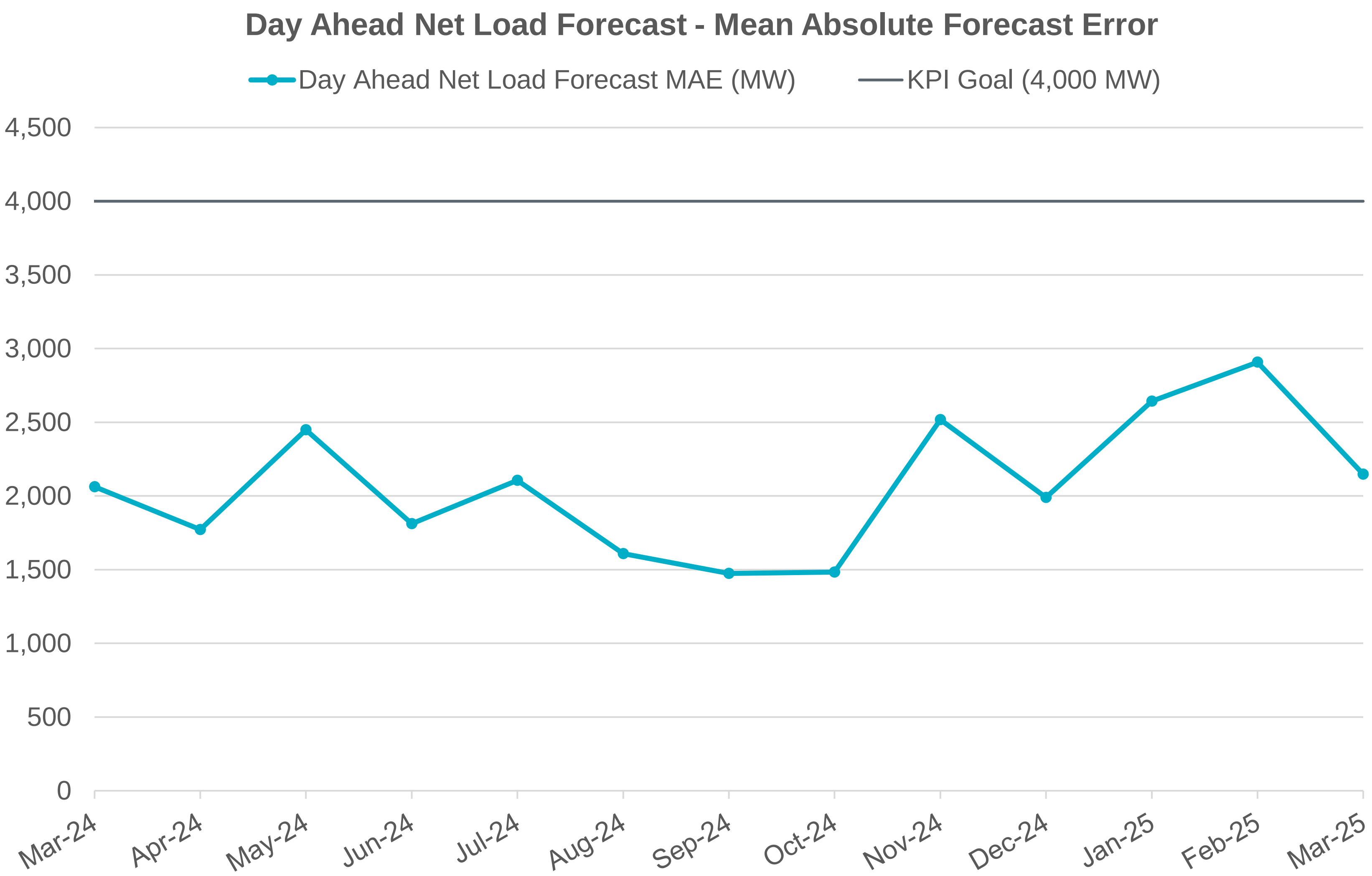
- ERCOT is tracking 2,018 active generation interconnection requests totaling 405,164 MW as of March 31. This includes 156,685 MW of solar, 39,795 MW of wind, 171,592 MW of battery, and 33,578 MW of gas projects; 118 projects were categorized as inactive, down from 125 inactive projects in February 2025.
- ERCOT is currently reviewing proposed transmission improvements with a total estimated cost of $4.828 billion as of March 31, 2025.
- Transmission Projects endorsed in 2025 total $742.13 million as of March 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 set a new record of 62,920 MW* for the month of March on 3/25/2025; This is 7,614 MW more than the March 2024 demand of 55,306 MW on 3/5/2024.

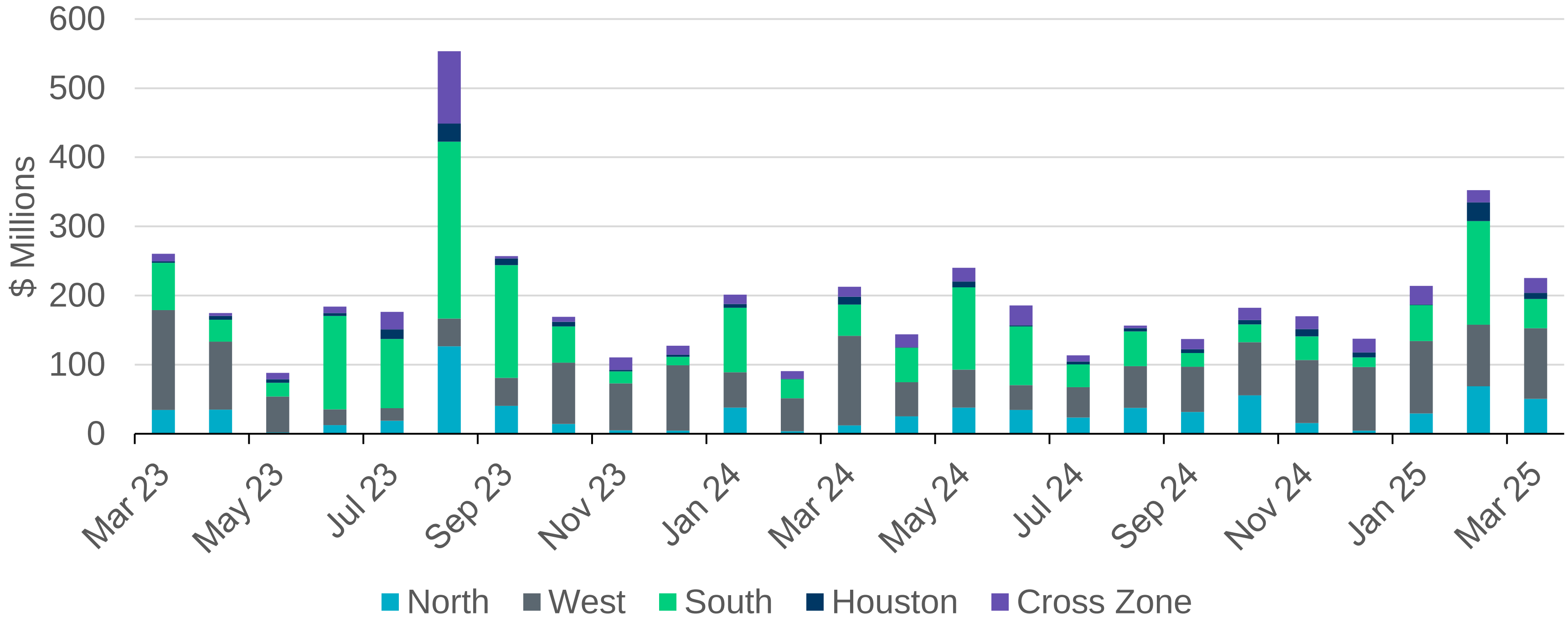


*Based on the maximum net system hourly value from the March 2025 Demand and Energy report.
**Based on the minimum net system 15-minute interval value from the March 2025 Demand and Energy report.
Data for latest two months are based on preliminary settlements.

Net Load Forecast Performance



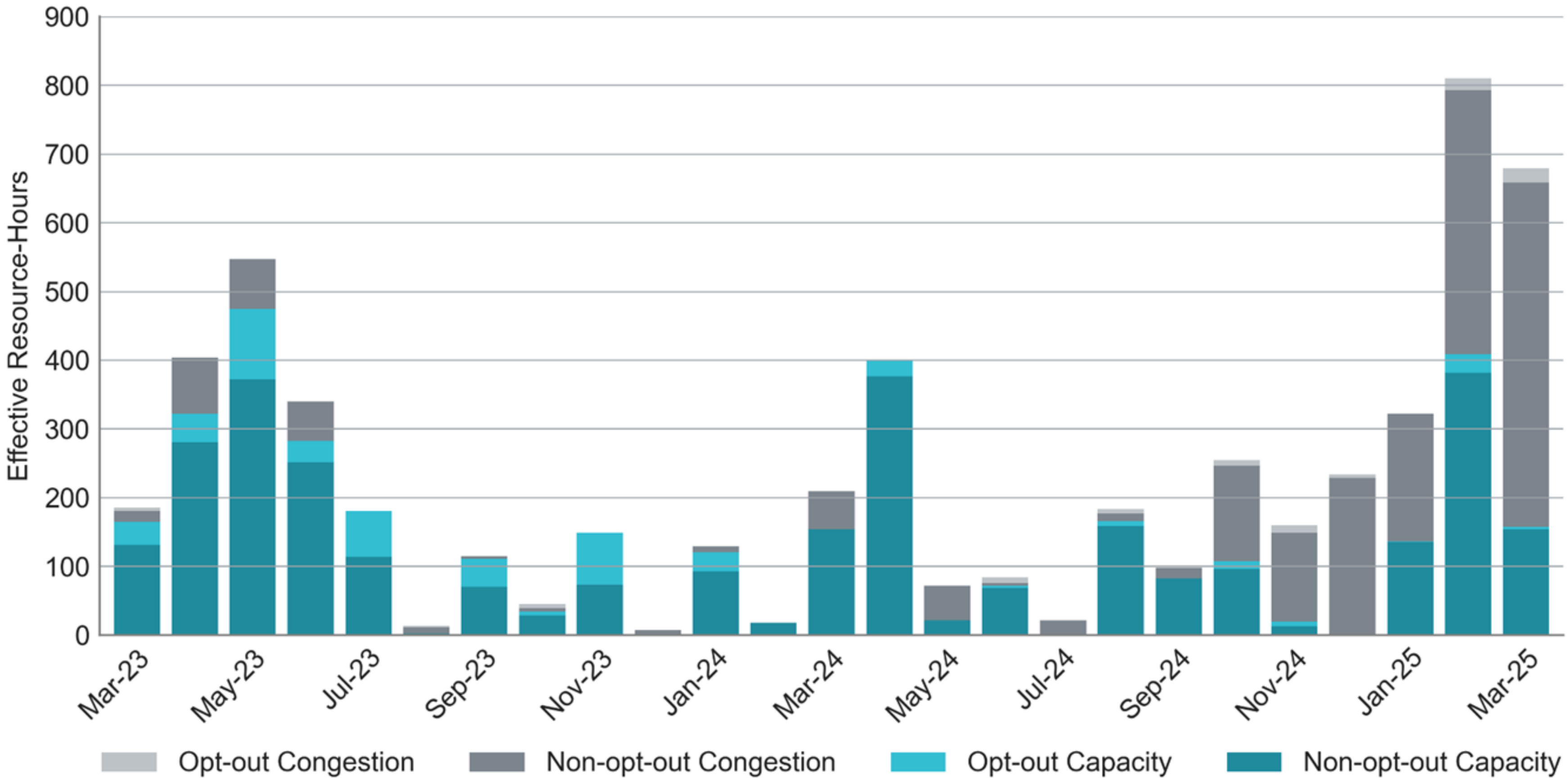
Real-Time Congestion Rent by Zone



- Total Real-Time congestion rent decreased in March compared to February, with the highest congestion rent in the West and North Zones.
  - Congestion rent in the West Zone was primarily driven by a constraint representing the loss of the 345 kV line from Wett Long Draw to Volta which would overload the 138 kV line from Vealmoor to Koch Tap.
  - Congestion rent in the North Zone was primarily driven by a constraint representing the loss of the 345 kV double circuit Salado Switch to Killen Switch which would overload the 138 kV line from Killeen Switch to Harker Heights South.

Notes:
1) 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.
2) The “Cross Zone” category consists of cases in which the substations on either end of the constraint are in different zones.

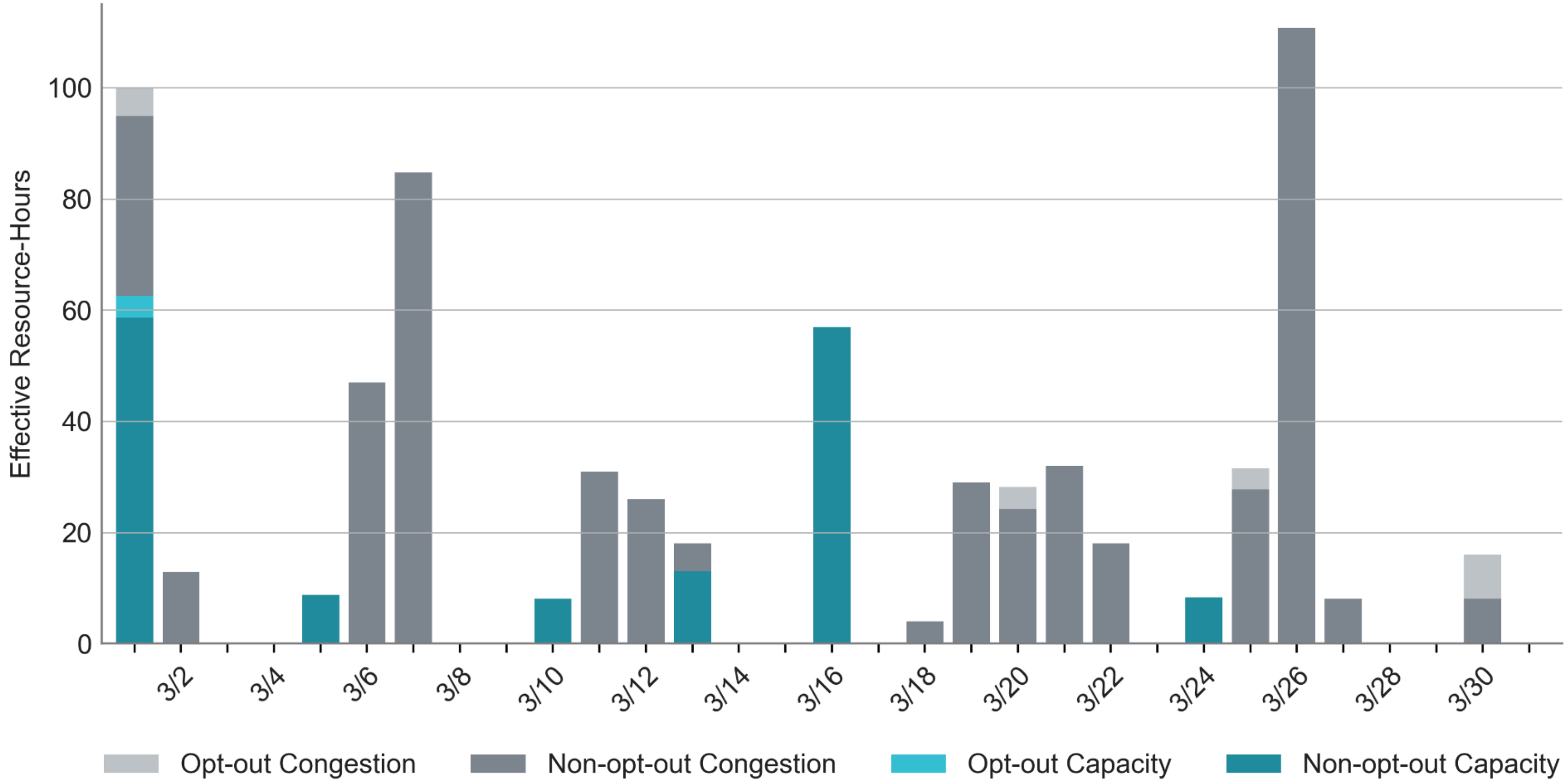
Elevated RUC Activity Continues, Mostly Managing Congestion but also Providing Capacity



Notes:
1) “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.

RUC Instruction Reasons in March 2025

- Factors contributing to the volume of RUC activity in March include higher seasonal outages and transmission constraints in South Texas; further discussion on drivers of RUC activity over the past few months is planned at the May 5th Wholesale Market Working Group (WMWG).



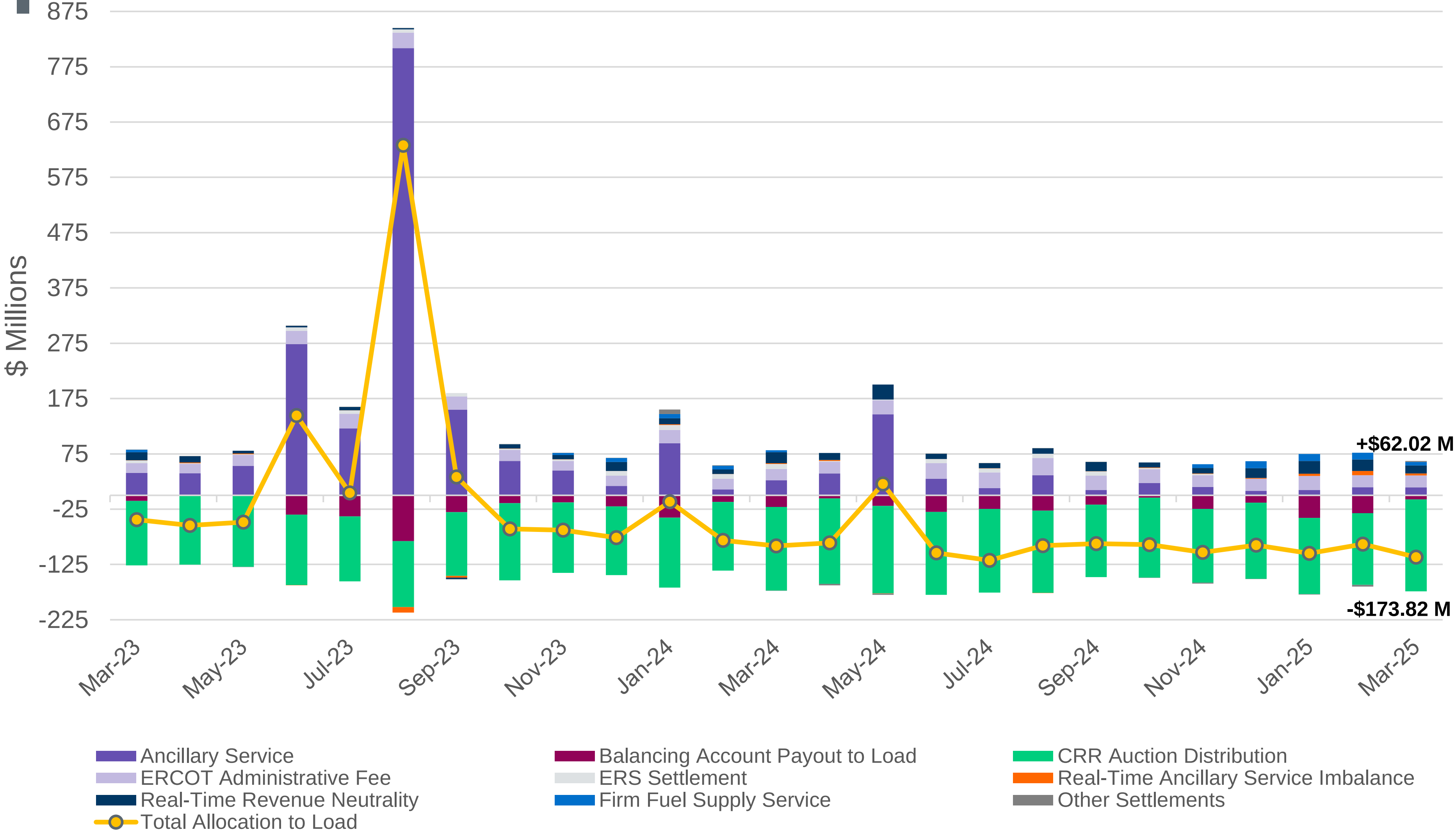
Forty-One Resources were Committed in March, Mostly Managing Congestion but also Providing Capacity

Resource #	Effective Resource-hours	For Congestion		For Capacity	
		Opt-out	Non-Opt-Out	Opt-Out	Non-Opt-Out
1	4	0	4	0	0
2	15.9	0	7.9	0	8
3	8	0	8	0	0
4	8	0	4	4	0
5	17.7	0	12	0	5.7
6	4	0	4	0	0
7	6	0	6	0	0
8	15	5	10	0	0
9	4	0	0	0	4
10	30.9	0	26.9	0	4
11	13	0	9	0	4
12	14	0	0	0	14
13	30.8	0	29	0	1.8
14	50.8	0	46.8	0	4
15	6.9	0	6.9	0	0
16	55.9	8	39.9	0	8
17	59.9	0	39.9	0	20
18	8.3	0	0	0	8.3
19	7	0	7	0	0
20	8	0	8	0	0

Forty-One Resources were Committed in March, Mostly Managing Congestion but also Providing Capacity

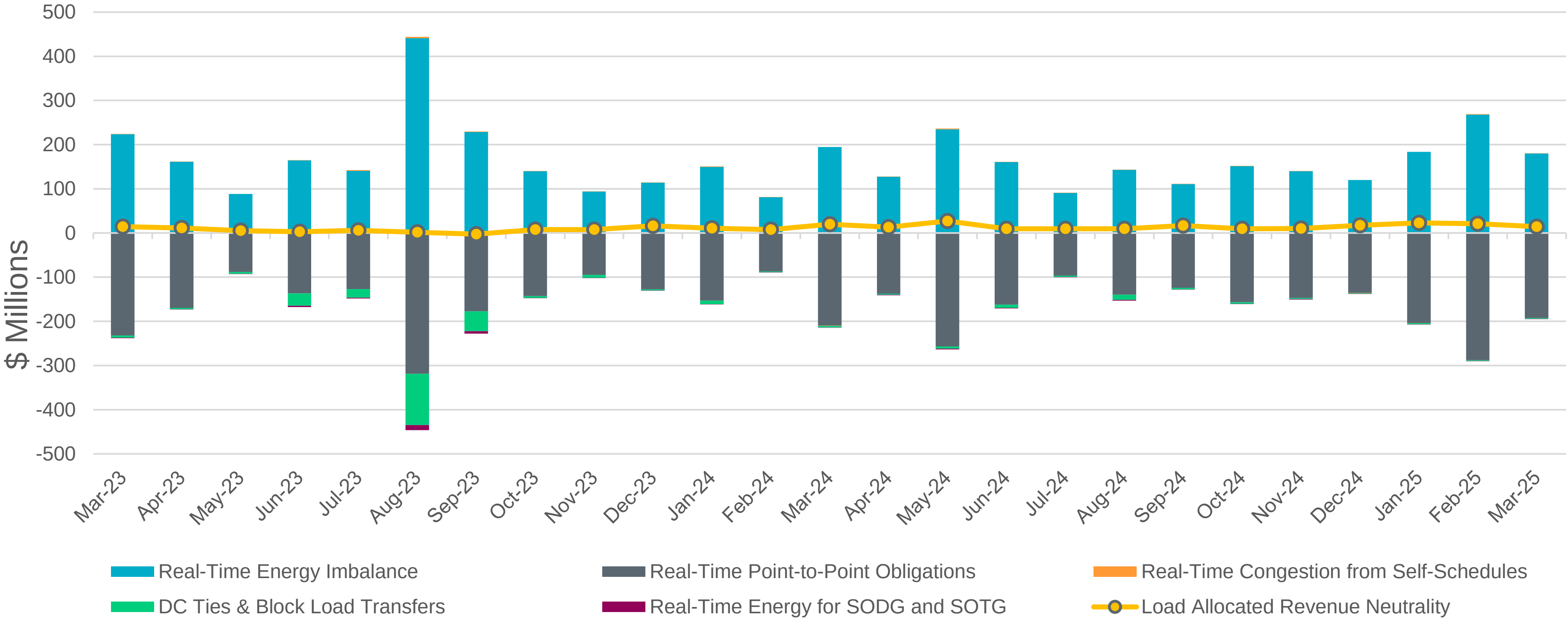
Resource #	Effective Resource-hours	For Congestion		For Capacity	
		Opt-out	Non-Opt-Out	Opt-Out	Non-Opt-Out
21	7	0	7	0	0
22	6	0	6	0	0
23	9.9	0	0	0	9.9
24	13.7	3.7	10	0	0
25	7.9	0	7.9	0	0
26	7.9	0	7.9	0	0
27	35.6	0	22.6	0	12.9
28	41.5	0	41.5	0	0
29	10	0	10	0	0
30	3	0	3	0	0
31	4	0	4	0	0
32	39	0	35	0	4
33	6	0	0	0	6
34	15.9	0	15.9	0	0
35	3	0	0	0	3
36	20.9	0	7.9	0	13
37	11.2	0	1.2	0	10
38	9	4	0	0	5
39	24	0	16	0	8
40	6	0	6	0	0
41	29	0	29	0	0
TOTAL	678.7	20.7	500.2	4	153.6

Net Allocation to Load in March 2025 was ($111.8) Million



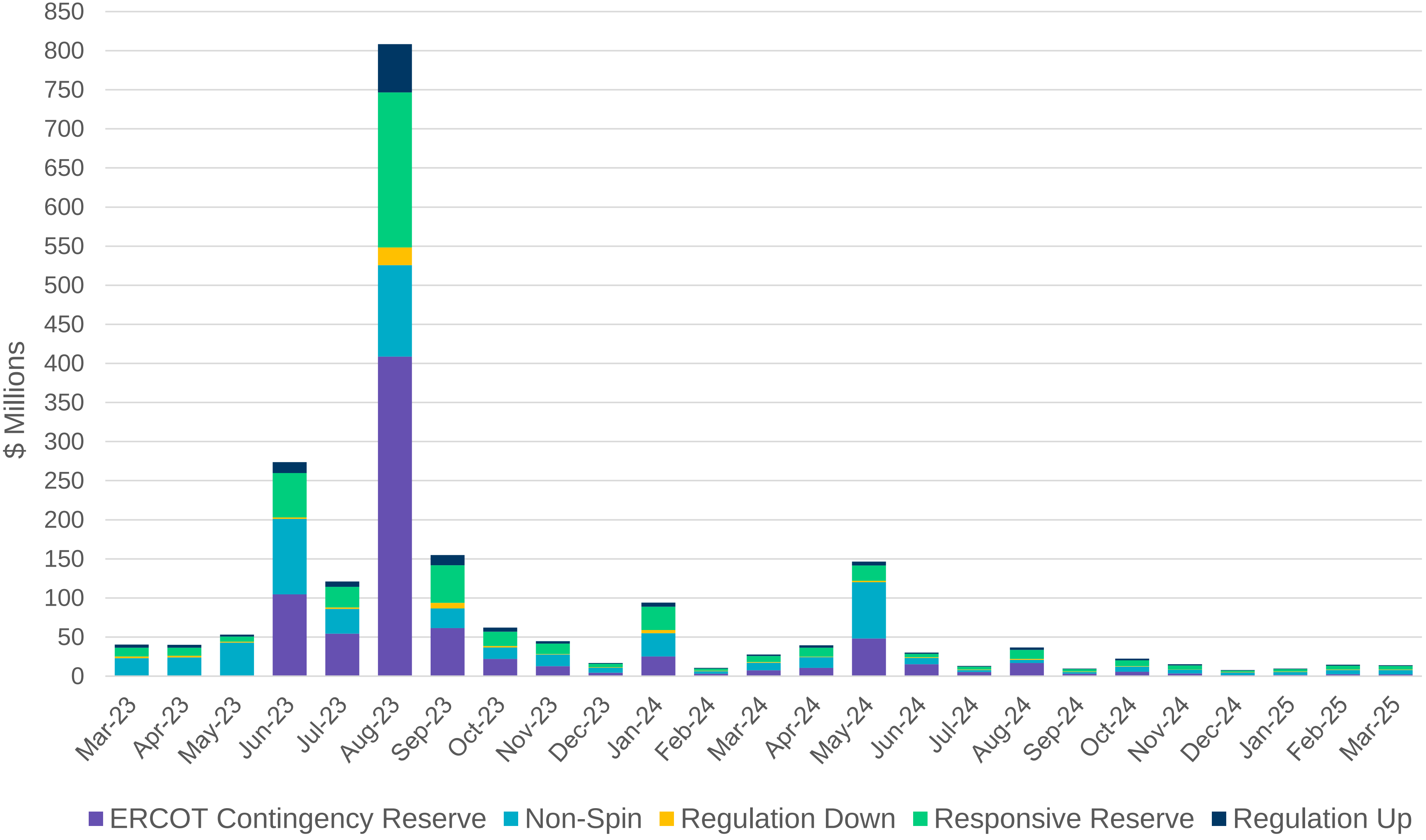
This information is available in tabular form in the
Settlement Stability Report presented quarterly to the
Wholesale Market Subcommittee

Real-Time Revenue Neutrality Allocated to Load was $14.26 M for March 2025

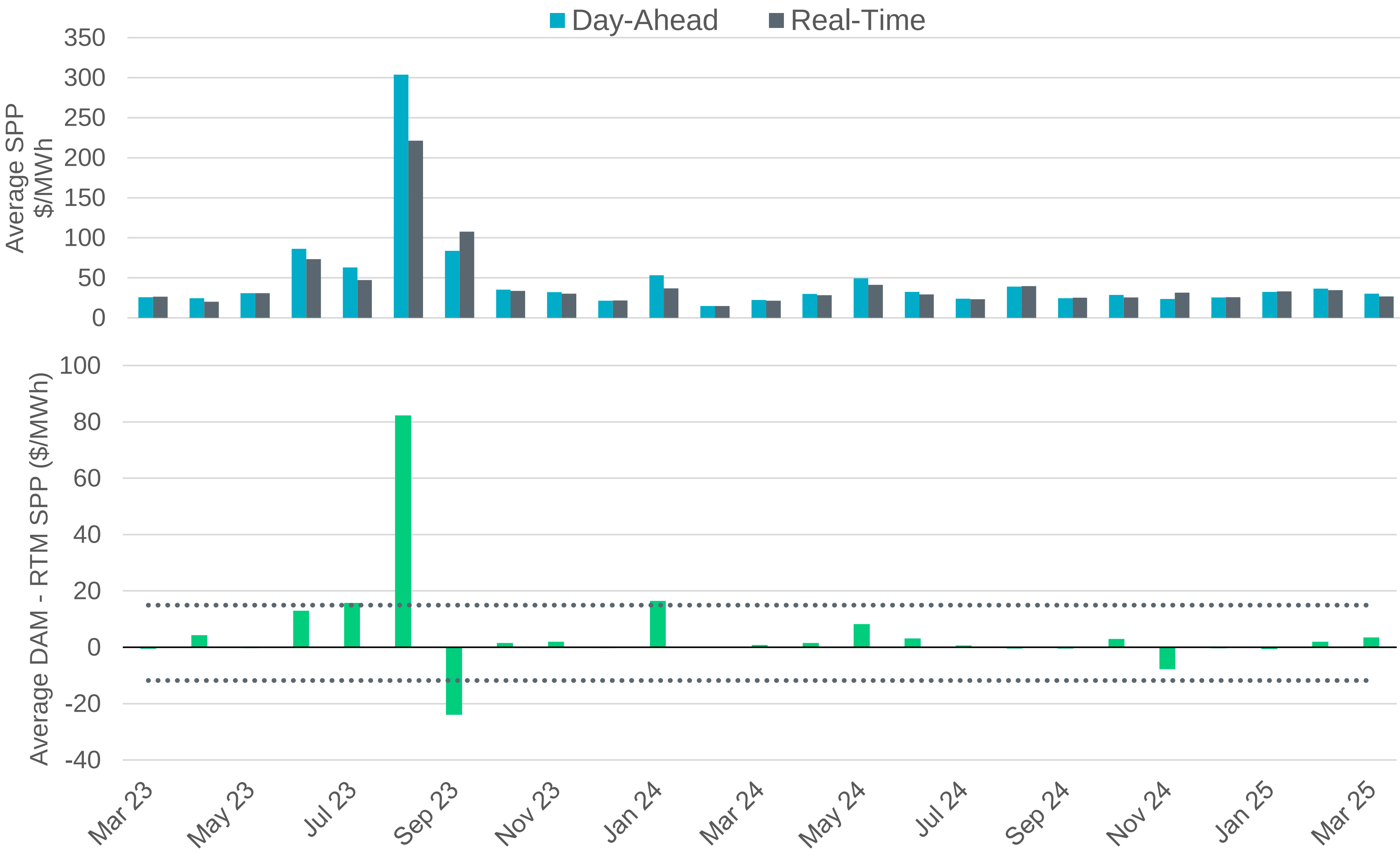


	March 2025 ($M)
Real-Time Energy Imbalance	$180.10
Real-Time Point-to-Point Obligation	($192.53)
Real-Time Congestion from Self-Schedules	$0.14
DC Tie & Block Load Transfer	($1.57)
Real-Time Energy for SODG and SOTG	($0.40)
Load Allocated Revenue Neutrality	**$14.26**

Ancillary Services for March 2025 totaled $14.15M

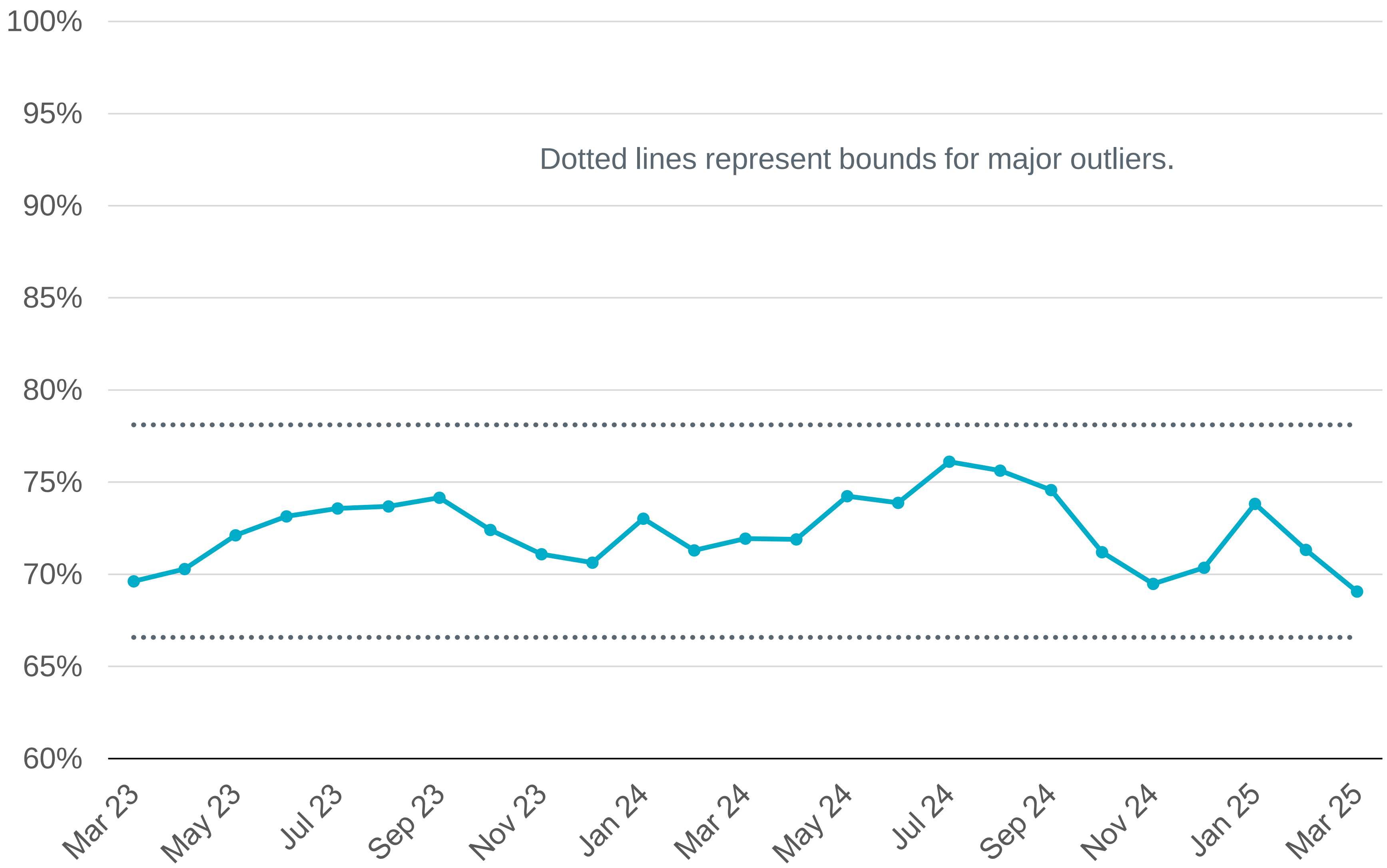


Day-Ahead Prices were Slightly Higher, on Average, than Real-Time Prices



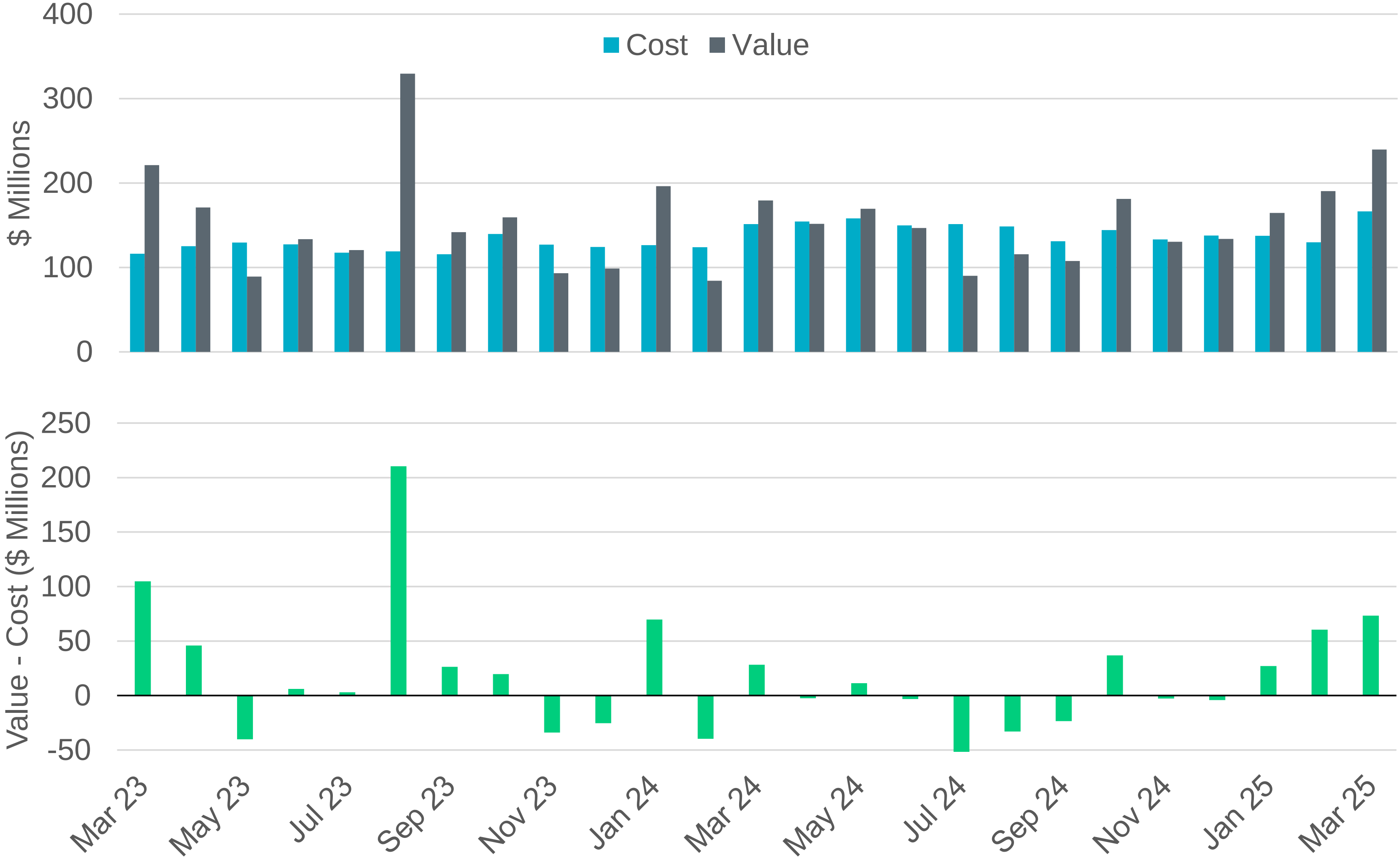
Notes:
1) The dotted lines represent the bounds for major outliers.
2) Averages are weighted by Real-Time Market Load.

Percentage of Real-Time Load Transacted in the Day-Ahead Market decreased in March compared to February

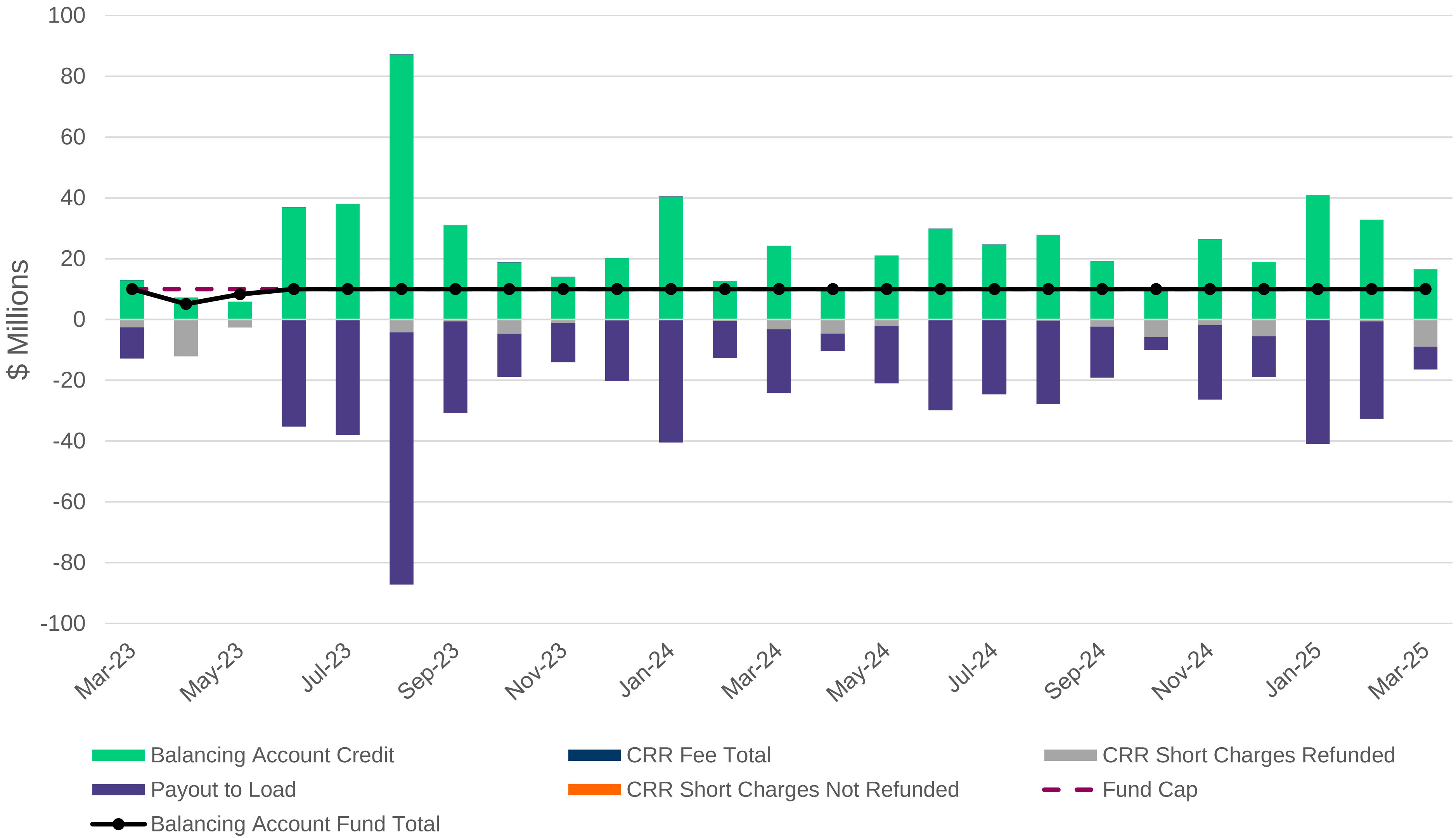


Notes:
1) The dotted lines represent the bounds for major outliers.

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



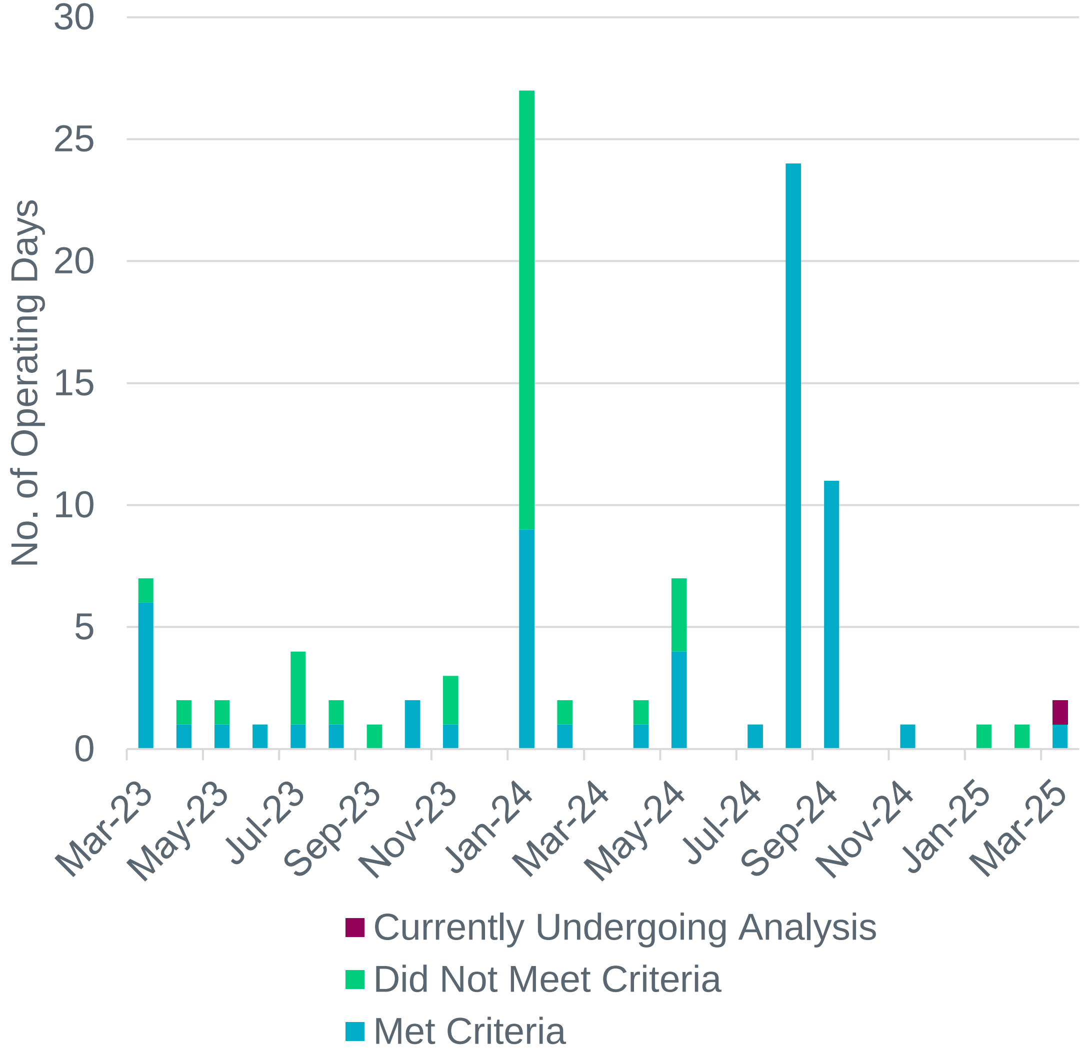
The CRR Balancing Account was fully-funded and excess amounts were allocated to Load



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

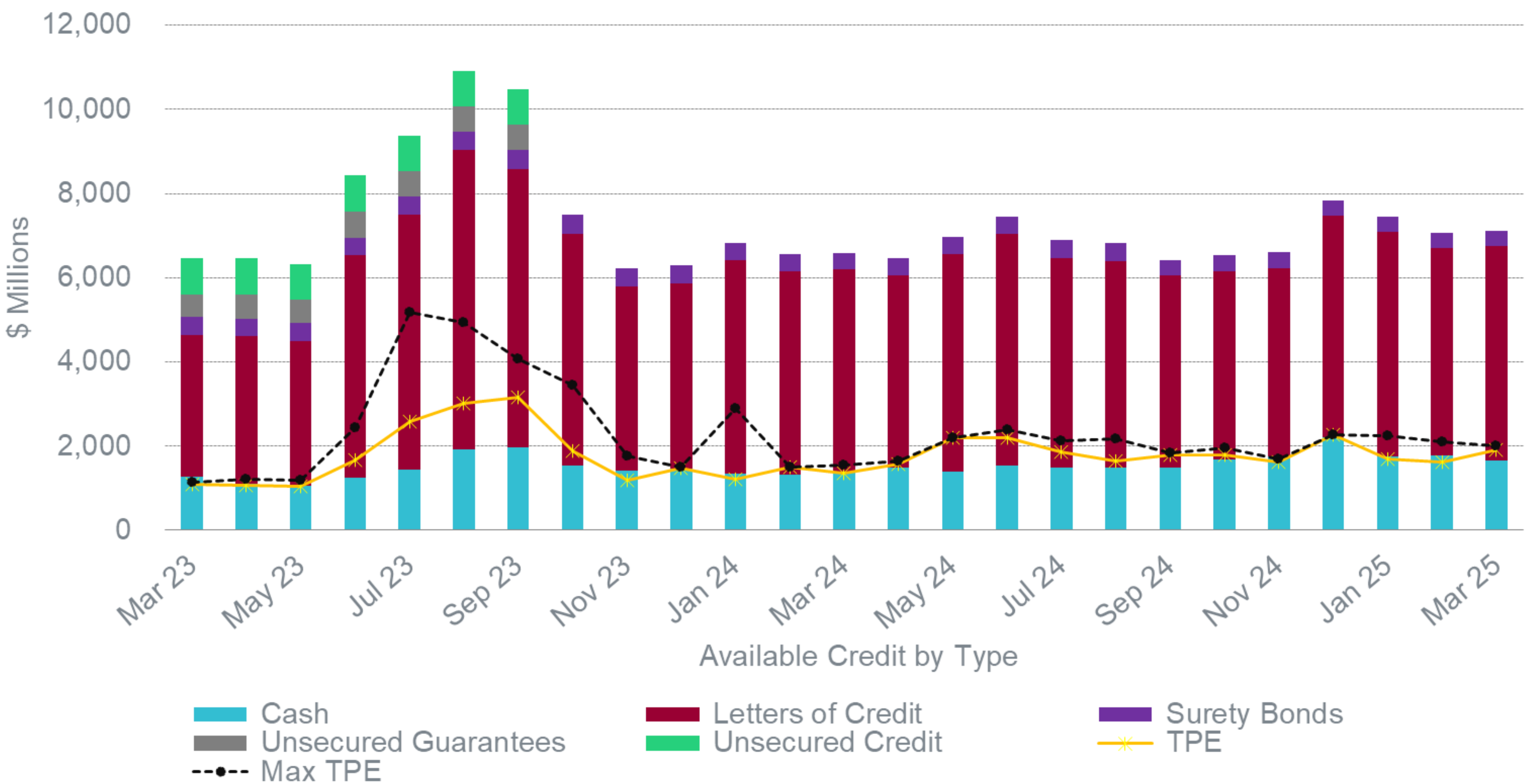
March 28 & 29, 2025

On March 27, 2025, during a routine software release update for the Energy Management System (EMS), a configuration parameter was inadvertently reset to its default value resulting in a more restrictive limitation. As a result, a post-contingency overload on the Generic Transmission Constraint (GTC) was activated such that it impacted the optimization of Security-Constrained Economic Dispatch (SCED). At times the constraint reached its maximum shadow price of $5,251 per megawatt hour (MWh). This impacted multiple SCED intervals on Operating Days (ODs) March 28, 2025 and March 29, 2025. The issue was discovered and the configuration corrected on March 31, 2025. See Market Notice M-B040225-01.

Prices for March 28, 2025 were able to be corrected before prices became final on April 1, 2025.

Prices for March 29, 2025 were not able to be corrected for prices became final on April 1, 2025 and are currently undergoing further analysis to determine impact to Counter-Parties and whether ERCOT will pursue review of prices by the ERCOT Board of Directors.

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



*Numbers are as of month end except for Max TPE