



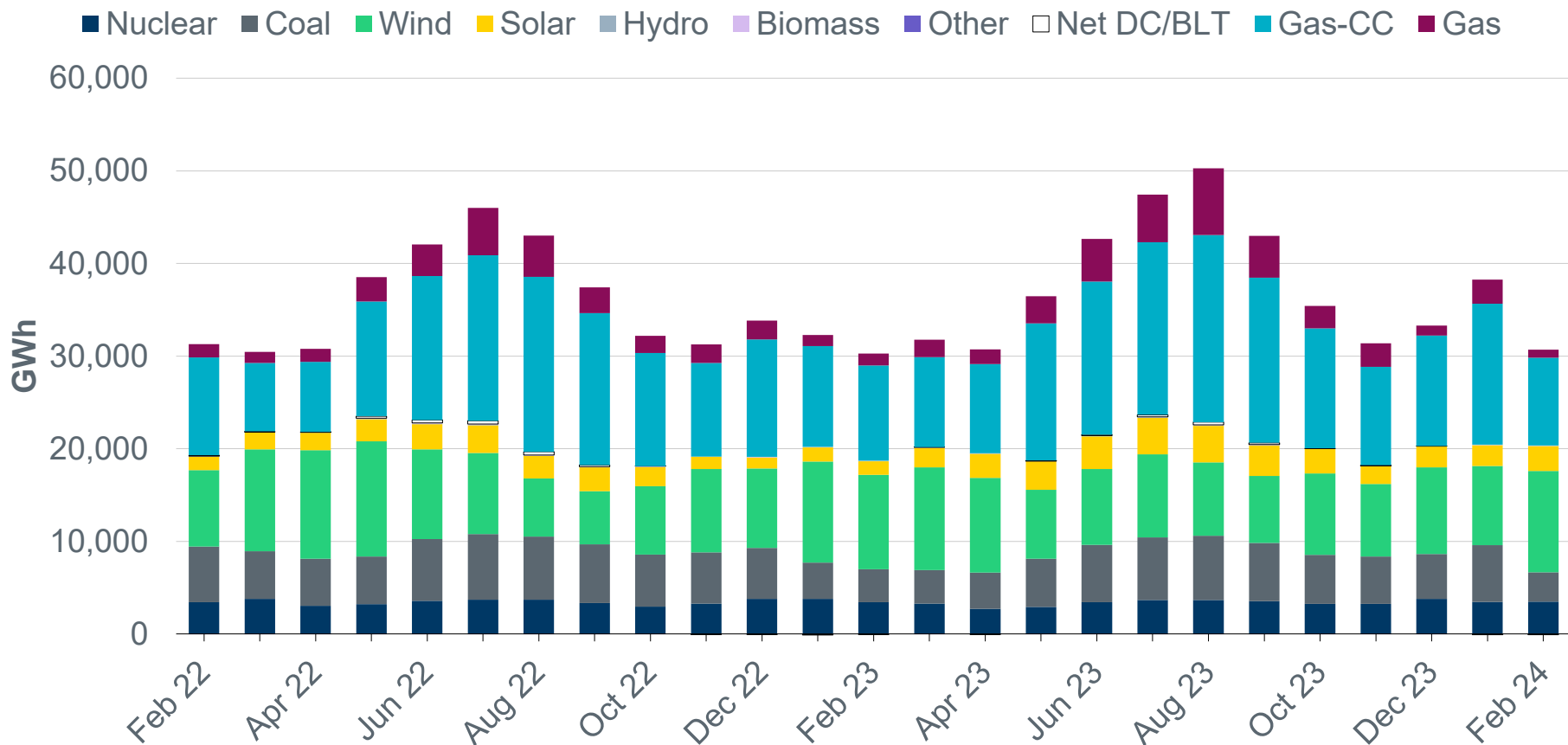
## ERCOT Monthly Operational Overview (February 2024)

ERCOT Public  
March 19, 2024

# Highlights, Records and Notifications

- ERCOT set a maximum peak demand of 55,855 MW\* in the month of February; this is 7,653 MW less than the February 2023 demand of 63,508 MW.
- ERCOT issued 1 notification:
  - 1 Advisory due to timeline deviation of the Day Ahead Market

# Monthly energy generation increased by 1.3% year-over-year to 30,625 GWh in February 2024, compared to 30,228 GWh in February 2023

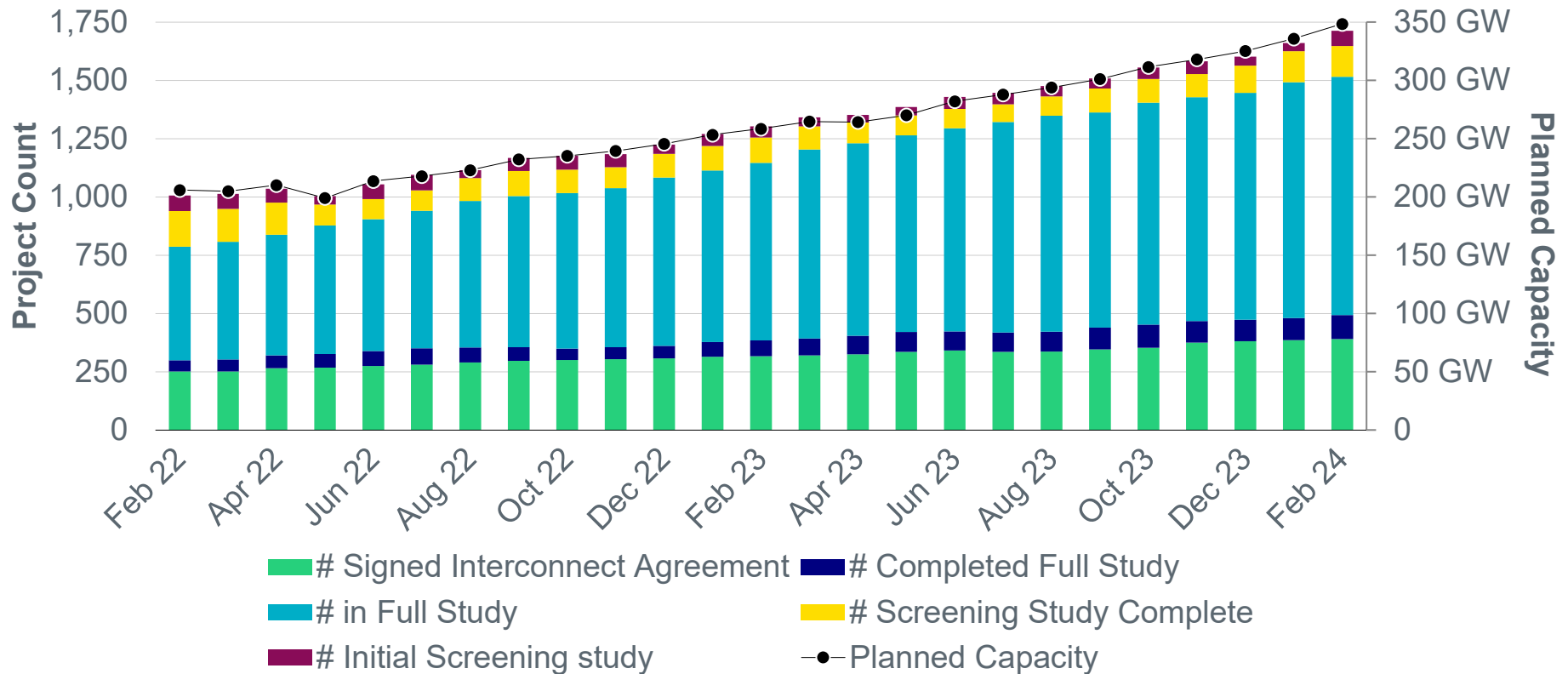


Data for latest two months are based on preliminary settlements.



# Generation Interconnection activity by project phase

(Excludes capacity associated with projects designated as Inactive per Planning Guide Section 5.7.6)



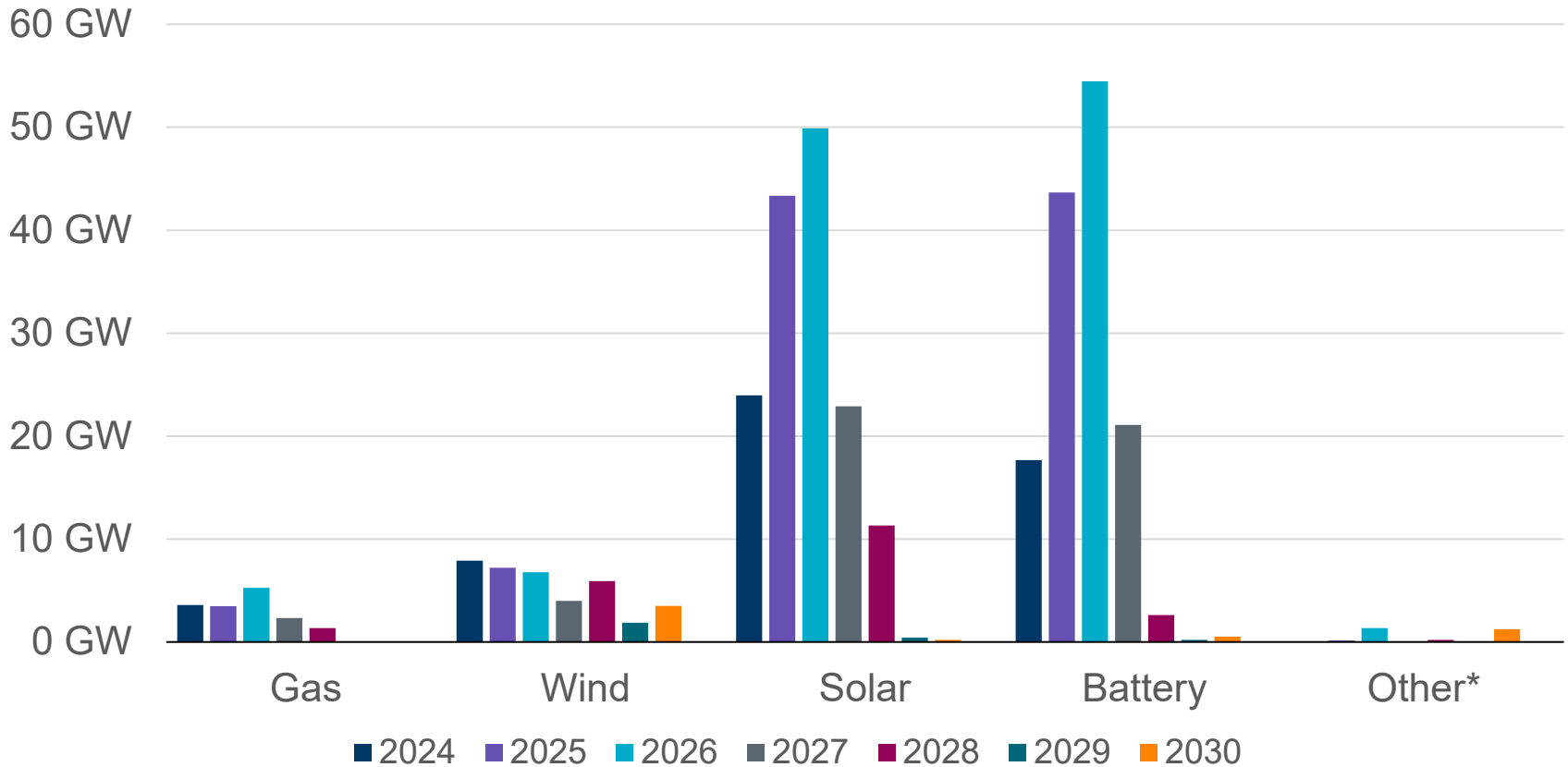
- There are an additional 27 “Small Generator” projects totaling 253 MW that are going through the simplified interconnection process.
- A break-out by fuel type can be found in the monthly Generator Interconnection Status (GIS) reports available on the ERCOT Resource Adequacy Page:

<http://www.ercot.com/gridinfo/resource>



# Interconnection Queue Capacity by Fuel Type

Queue totals: Solar 152 GW (43.6%), Wind 37 GW (10.7%), Gas 16 GW (4.6%), Battery 140 GW (40.2%)  
 (Excludes capacity associated with projects designated as Inactive per Planning Guide Section 5.7.6)



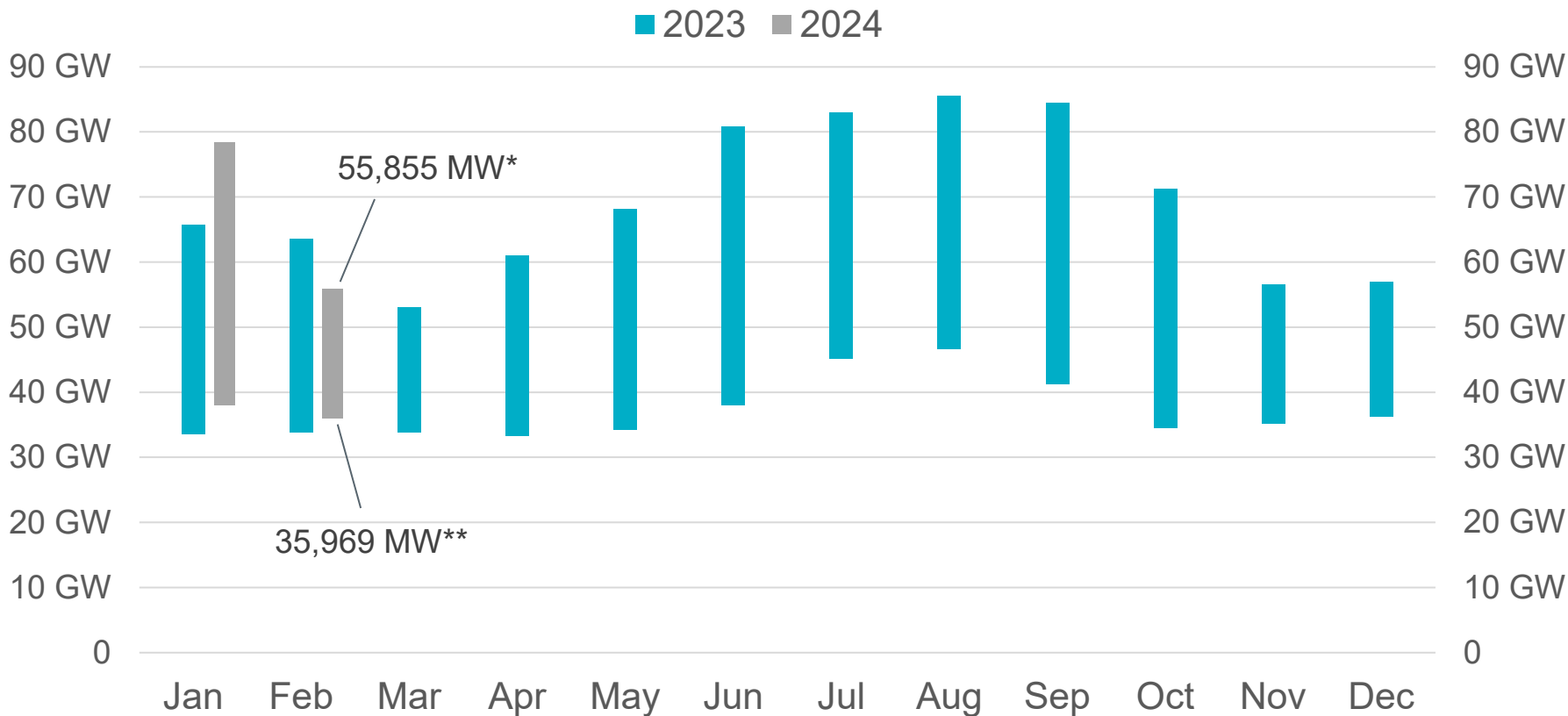
A break-out by zone can be found in the monthly Generator Interconnection Status (GIS) reports available on the ERCOT Resource Adequacy Page: <http://www.ercot.com/gridinfo/resource>

\* 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 1,783 active generation interconnection requests totaling 348,521 MW as of February 29. This includes 152,098 MW of solar, 37,215 MW of wind, 140,219 MW of battery, and 16,022 MW of gas projects; 75 projects were categorized as inactive, up from 74 inactive projects in January 2024.
- ERCOT is currently reviewing proposed transmission improvements with a total estimated cost of \$1.756 billion as of February 29, 2024.
- Transmission Projects endorsed in 2024 total \$317.30 million as of February 29, 2024.
- All projects (in engineering, routing, licensing and construction) total approximately \$13.933 billion as of February 1, 2024.
- Transmission Projects energized in 2024 total approximately \$789.5 million as of February 1, 2024.

**ERCOT's maximum peak demand for the month of February was 55,855 MW\*; this is 7,653 MW less than the February 2023 demand of 63,508 MW.**



\*Based on the maximum net system hourly value from the February 2024 Demand and Energy report.

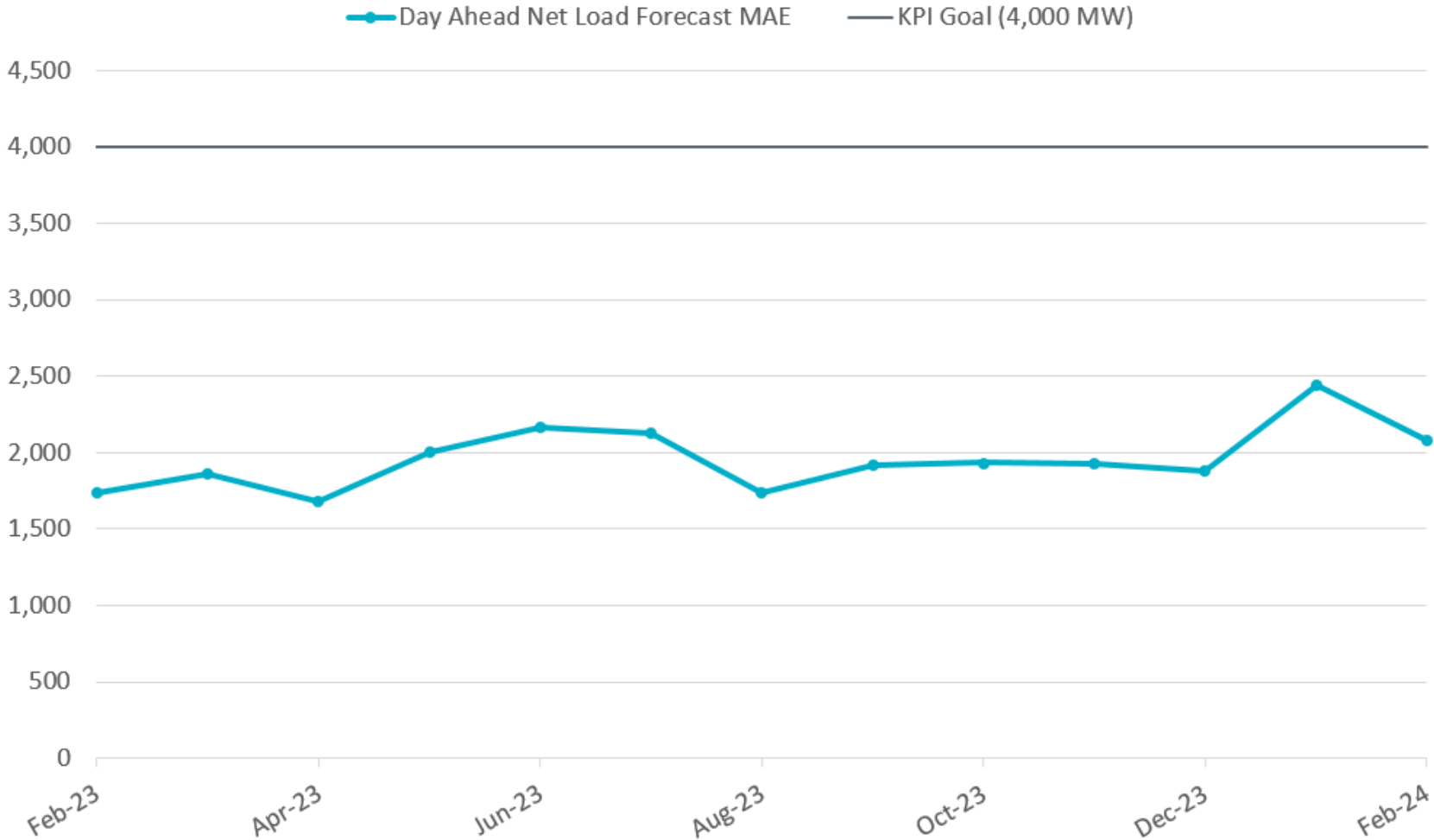
\*\*Based on the minimum net system 15-minute interval value from the February 2024 Demand and Energy report.

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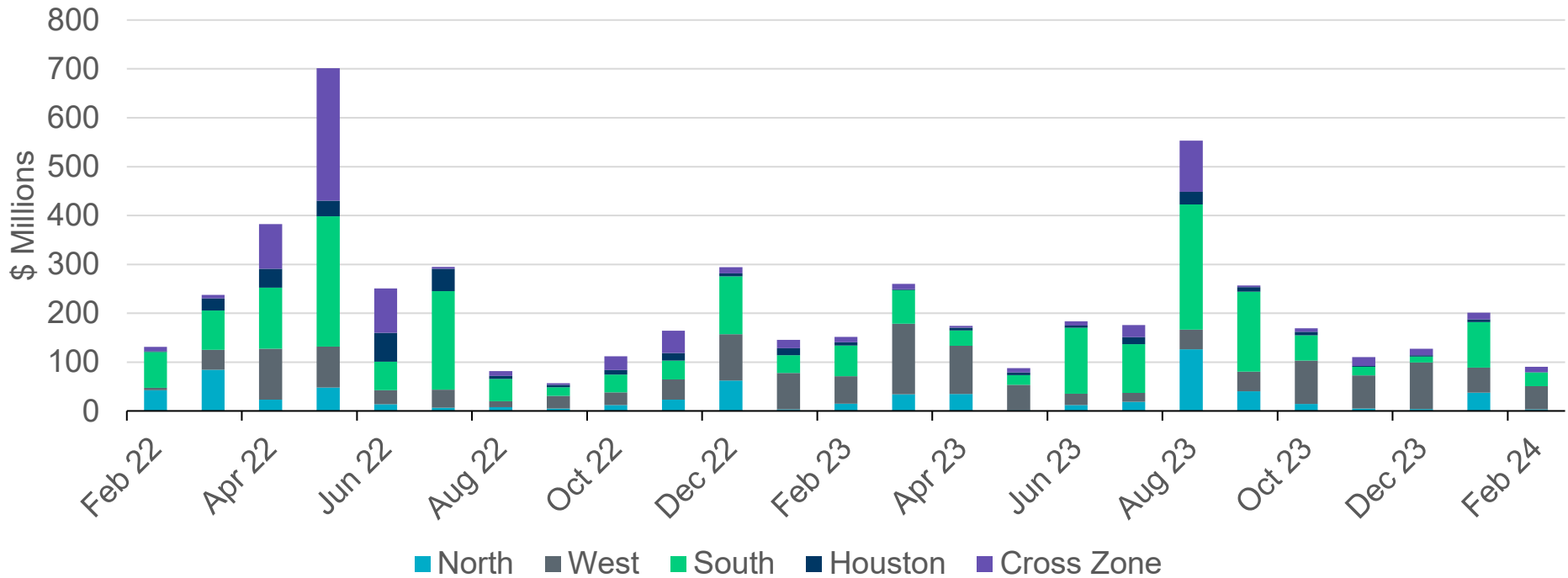
# Net Load Forecast Performance

Day Ahead Net Load Forecast - Mean Absolute Forecast Error



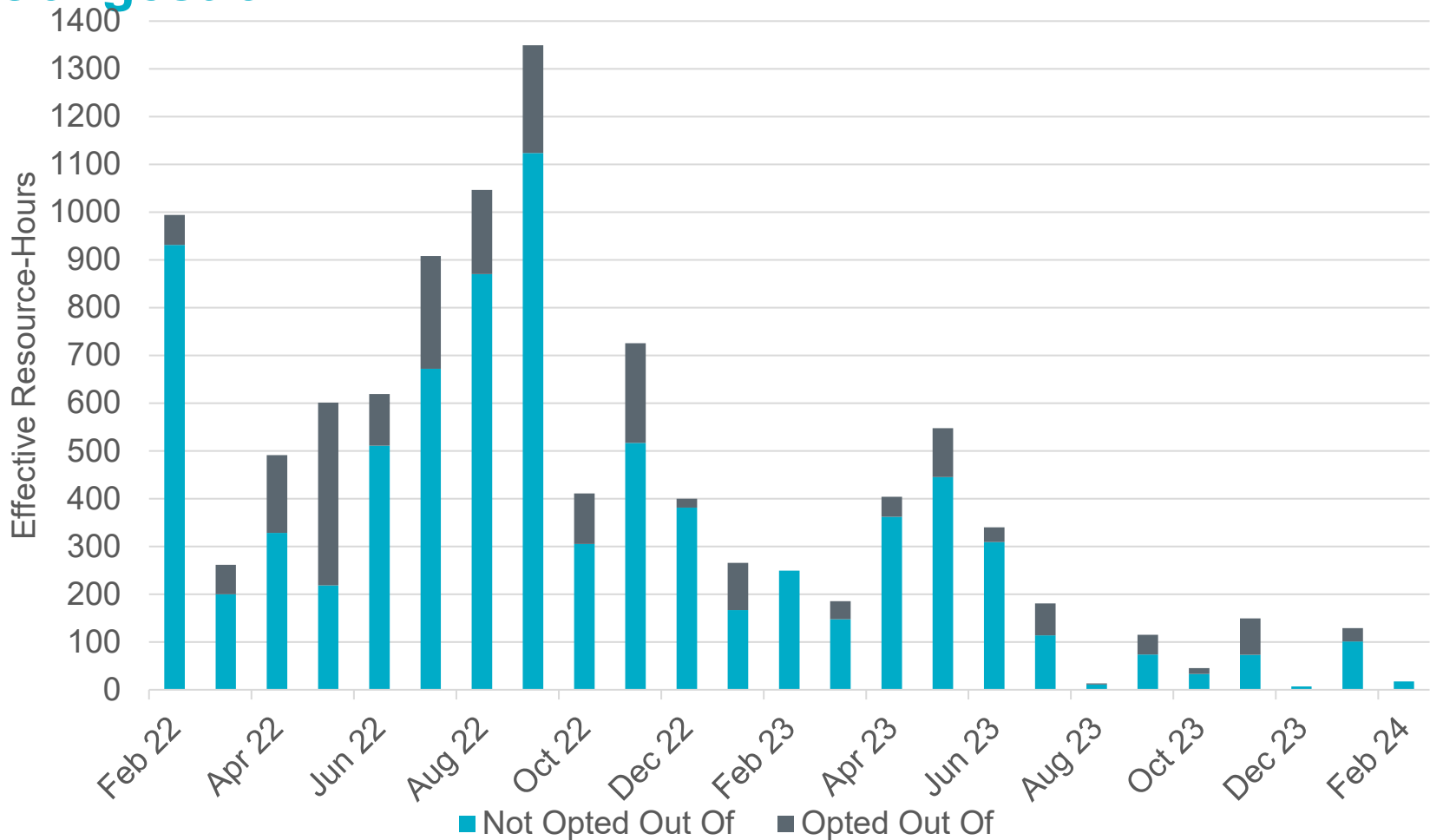


# Real-Time Congestion Rent by Zone



- Total Real-Time congestion rent decreased in February compared to January, 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 345 kV contingency from Morgan Creek to Champion Creek and Bitter Creek to Morgan Creek overloading the 345 kV transmission line from Morgan Creek to Tonkawa Switch.
  - Congestion rent in the South Zone was primarily driven by the loss of the Fowlerlon substation overloading the Bruni 69 kV substation.
- 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.
- The “Cross Zone” category consists of cases in which the substations on either end of the constraint are in different zones.

# Five Resources Committed in February for Capacity or Congestion



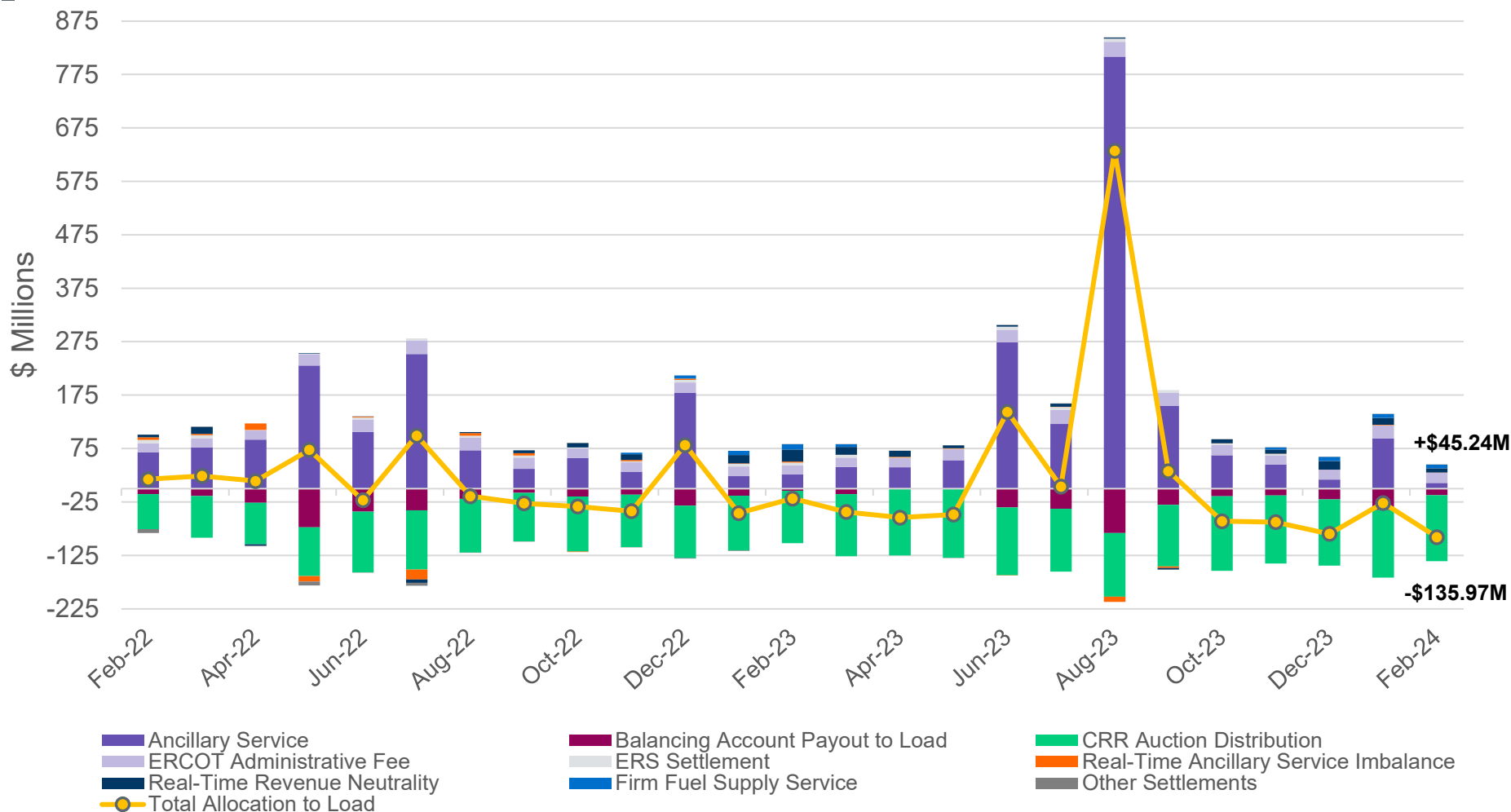
“Effective Resource-Hours” excludes any period during a Reliability Unit Commitment hour when the RUC-committed Resource was starting up, shutting down, off-line, or otherwise not available for dispatch by SCED.



# Five Resources Committed in February for Capacity or Congestion

Resource #	Effective Resource-hours	Non-Opt Out (Effective Hours)	Opt Out (Effective Hours)
1	1.6	1.6	0.0
2	1.8	1.8	0.0
3	5.9	5.9	0.0
4	3.0	3.0	0.0
5	5.0	5.0	0.0
<b>Total</b>	<b>17.3</b>	<b>17.3</b>	<b>0.0</b>

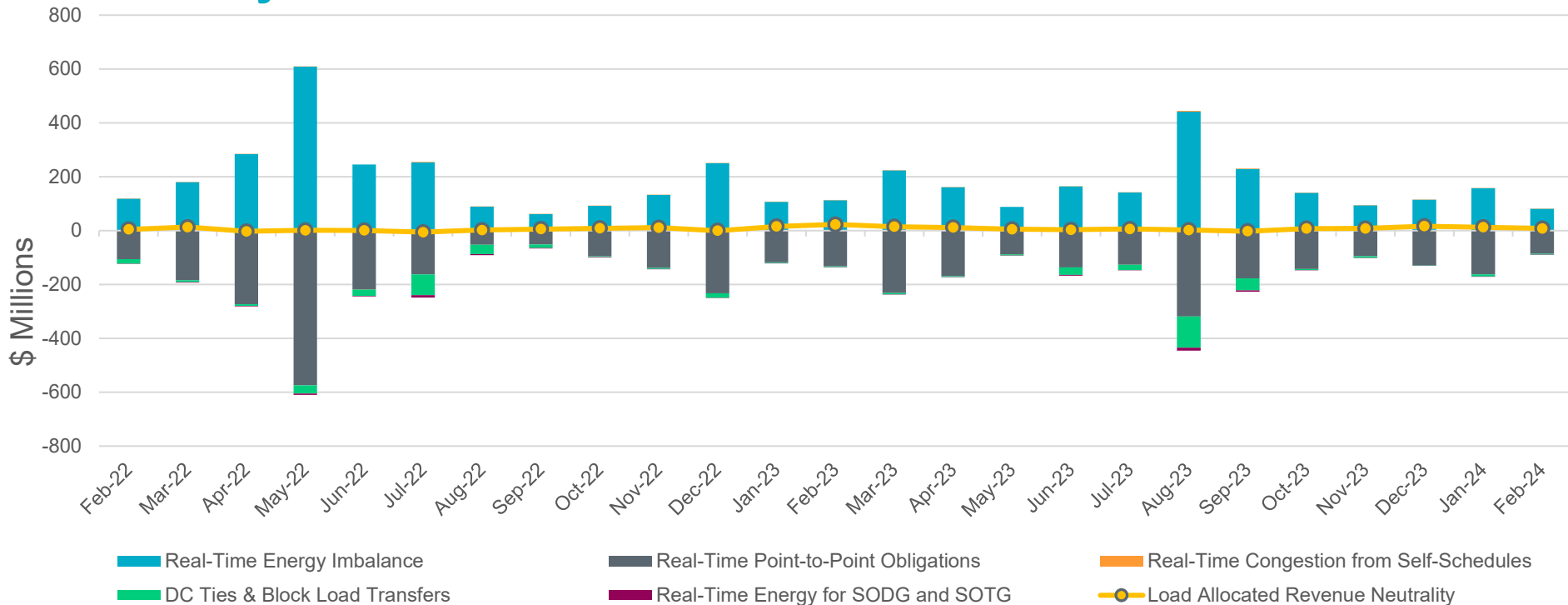
# Net Allocation to Load in February 2024 was (\$90.73) Million



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



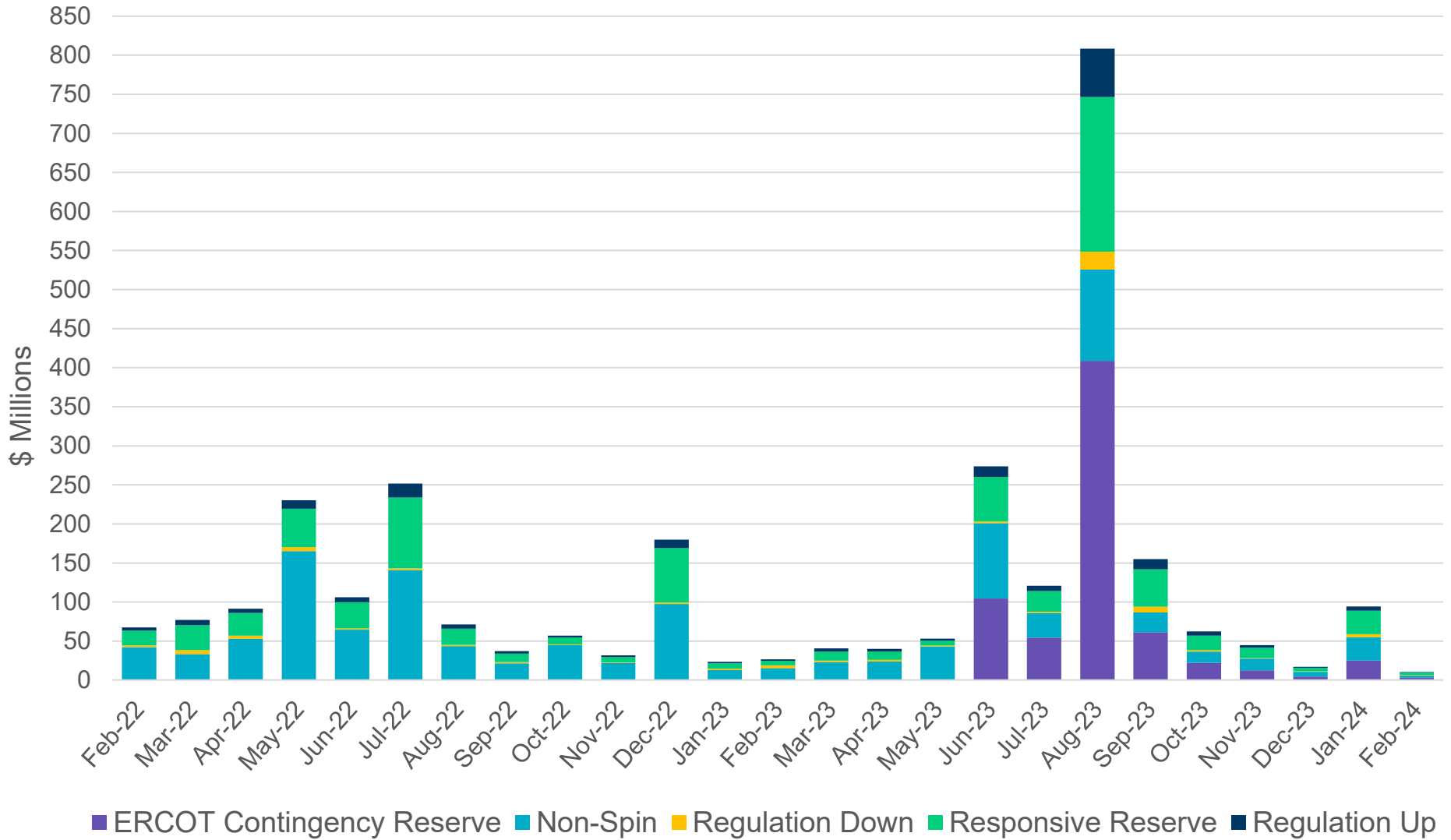
# Real-Time Revenue Neutrality Allocated to Load was \$7.73M for February 2024



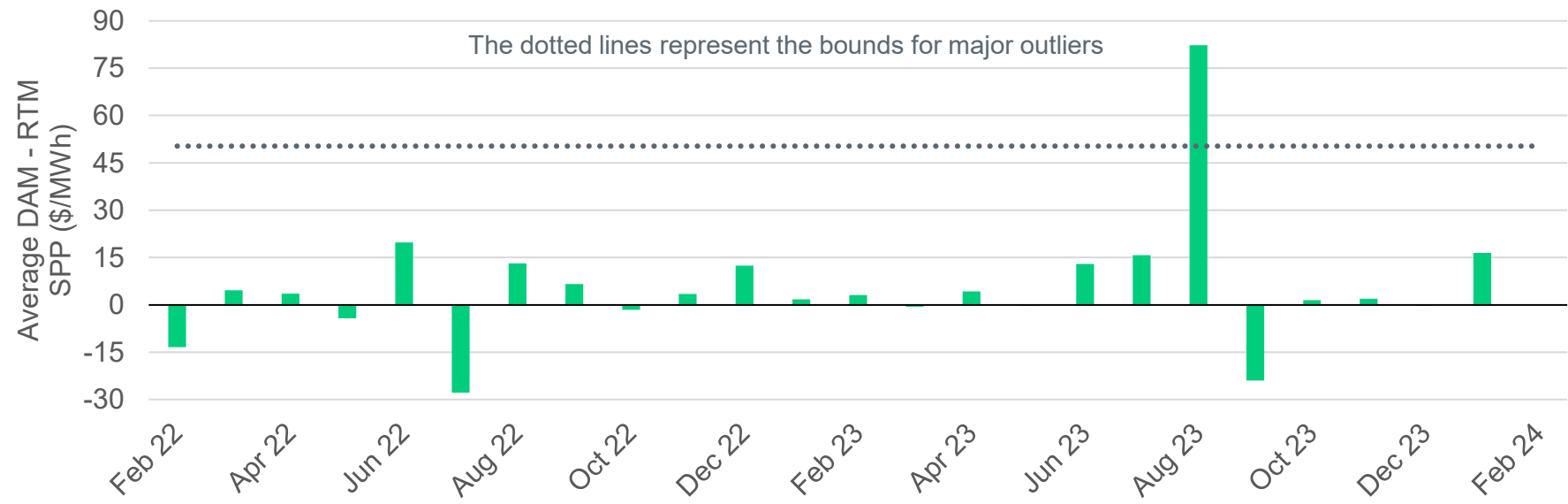
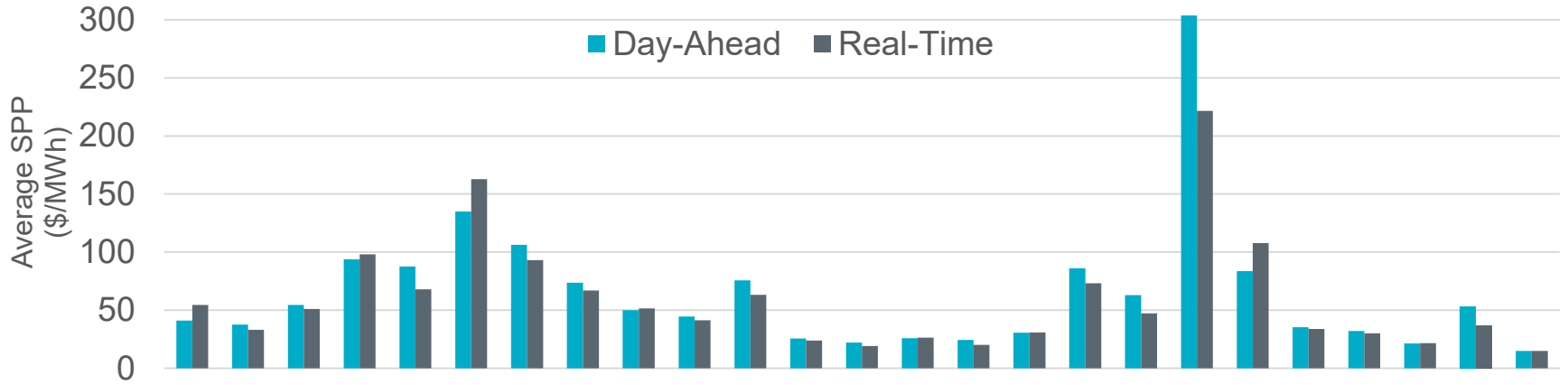
February 2024 (\$M)	
Real-Time Energy Imbalance	\$81.21
Real-Time Point-to-Point Obligation	(\$86.82)
Real-Time Congestion from Self-Schedules	\$0.19
DC Tie & Block Load Transfer	(\$2.14)
Real-Time Energy for SODG and SOTG	(\$0.17)
<b>Load Allocated Revenue Neutrality</b>	<b>\$7.73</b>



# Ancillary Services for February 2024 totaled \$10.5M



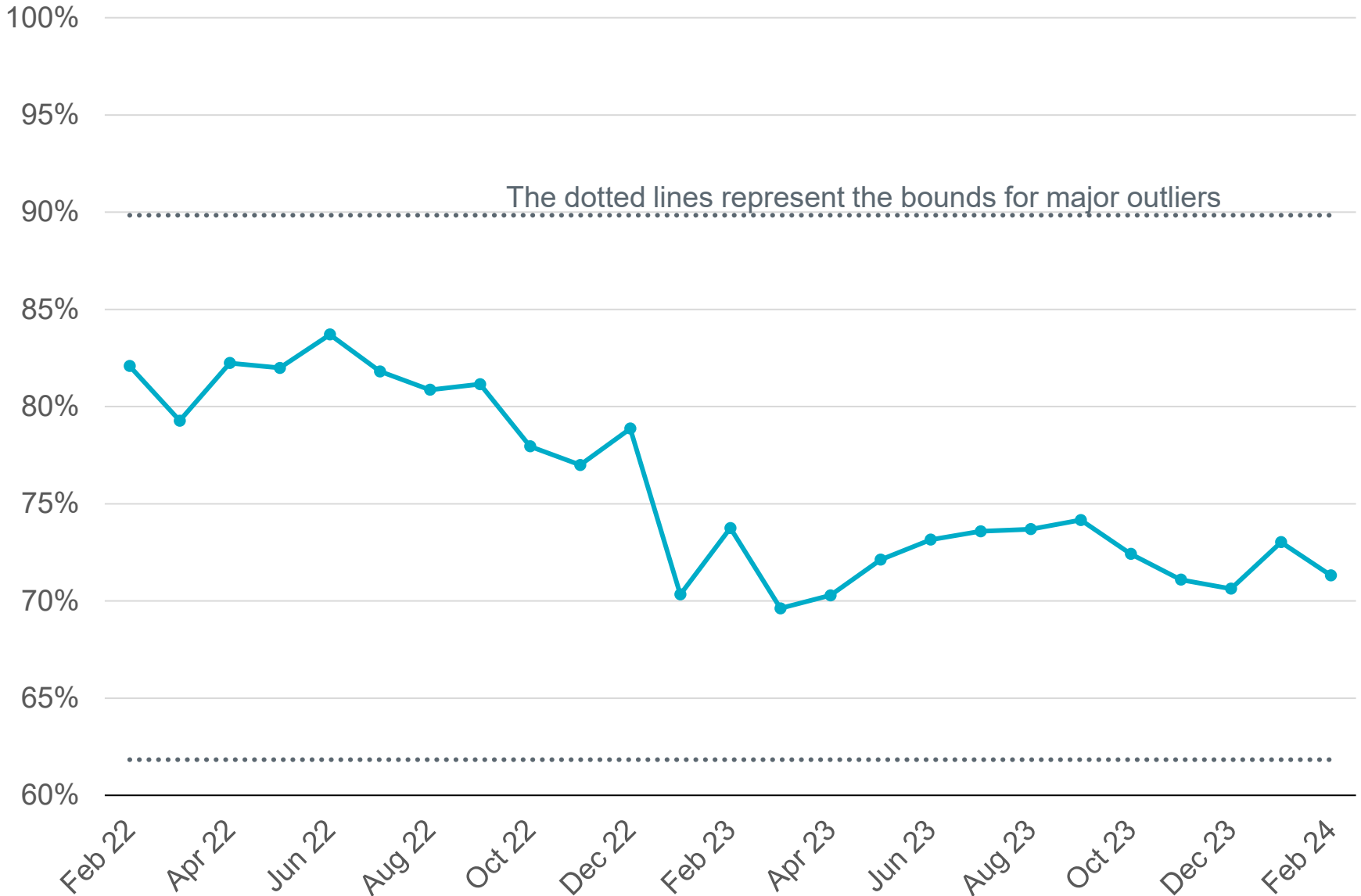
# Day-Ahead and Real-Time Market Price Differences



\*Averages are weighted by Real-Time Market Load

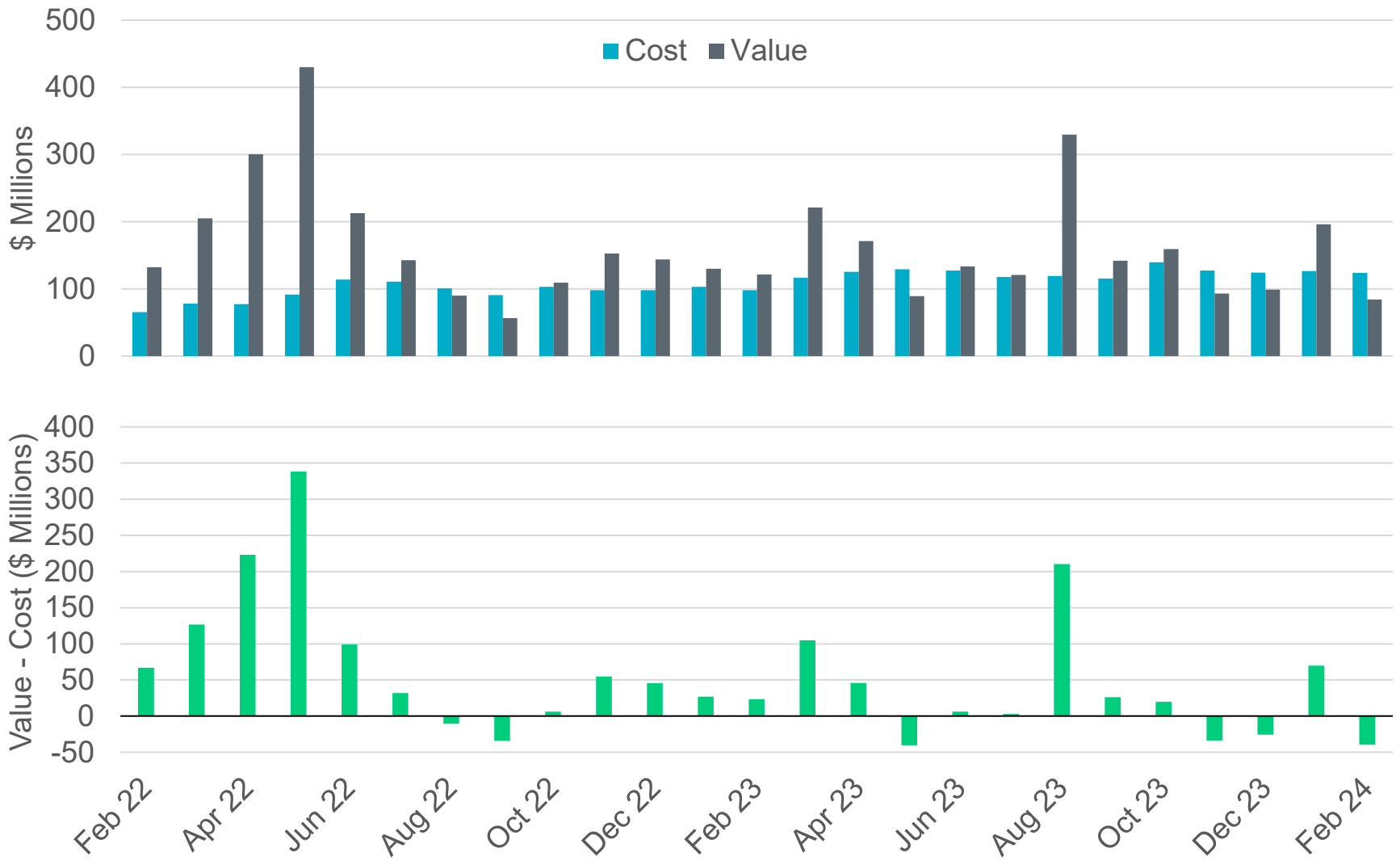


# Percentage of Real-Time Load Transacted in the Day-Ahead Market





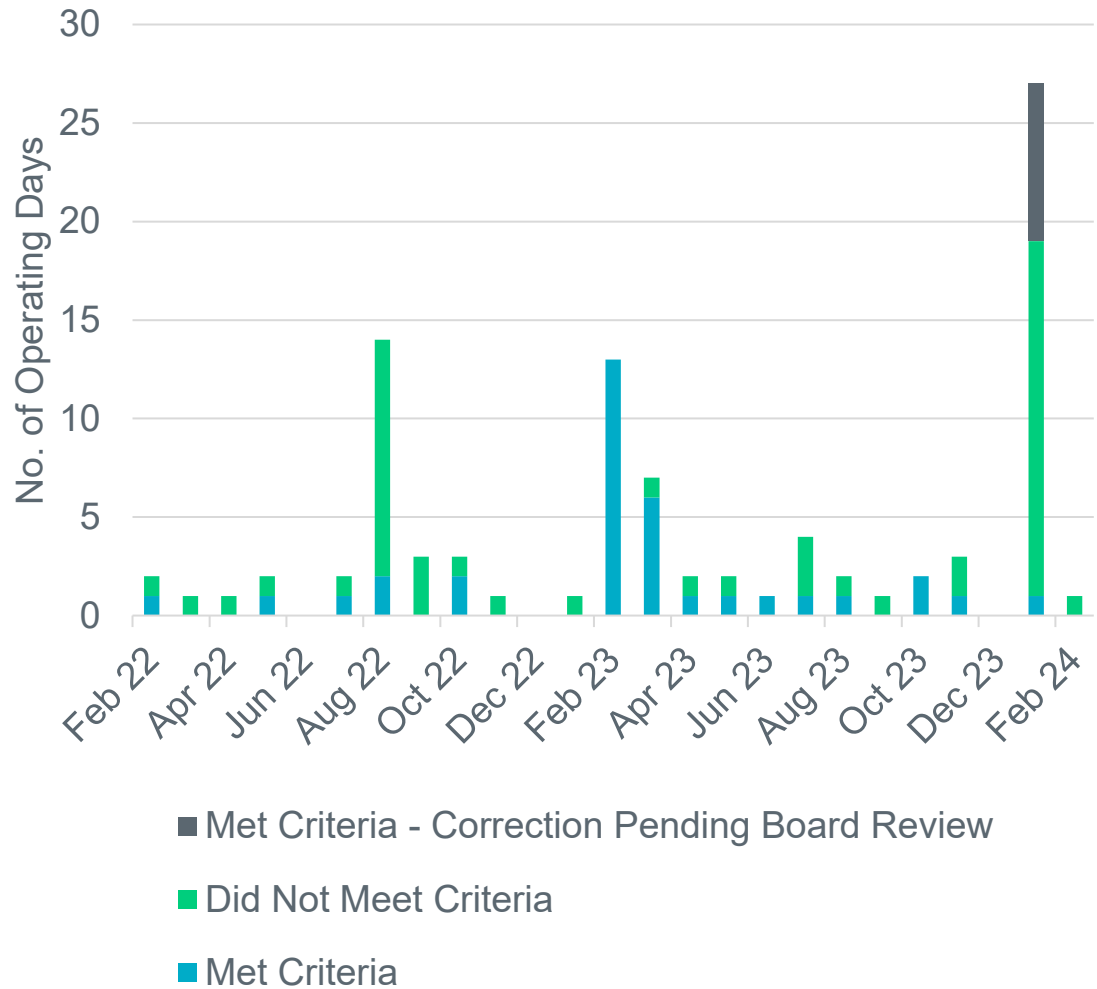
# CRR Value and Cost Differences



# 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 met the criteria for “significance” under NPRR1024 and are awaiting Board Review.



# Details for February Price Corrections Review

## Operating Days Not Meeting Significance Criteria

- On February 25, 2024, a Controllable Load Resource was incorrectly identified in ERCOT systems as not being qualified for dispatch by SCED. This incorrect qualification status resulted in the Resource not being considered for dispatch by SCED, thus impacting dispatch and Real-Time Market (RTM) prices for some portions of this Operating Day (OD). Upon completion of price impact analysis, the OD did not meet significance criteria for seeking Board review. See Market Notice [M-C030424-01](#) for additional details.

## Operating Days Under Investigation

- On February 28, 2024, an issue occurred during routine maintenance which resulted in the Energy Management System sending incorrect constraint data for Generic Transmission Constraints to the Market Management System. Security-Constrained Economic Dispatch was impacted between 15:50 and 16:25. ERCOT is investigating the potential impact to RTM prices for this event. Given the complexity of the analysis, ERCOT was not be able to meet the deadline to correct prices before they become final at 16:00 on 3/1/24. Further analysis is being performed to determine if criteria is met for pursuing review by the ERCOT Board of Directors. A follow-up Market Notice will be issued once ERCOT has more information.

# Details for January Price Corrections Review

On January 29, 2024, an issue concerning the ratings of certain transmission lines, series devices, and transformers was discovered. This resulted in significantly high, erroneous prices that were unable to be corrected before the prices became final. See Market Notice [M-A020524-01](#). Upon completion of the impact analysis, it was found that of the 30 days considered for seeking Board review, 8 ODs met significance criteria for the Day-Ahead Market (DAM) and 3 ODs met significance for the RTM. These corrections will be considered by the Board during their meetings in April.

## Day-Ahead Market

OD	CPs Meeting Criteria (i)	CPs Meeting Criteria (ii)
1/10/2024	5	7
1/15/2024	1	0
1/17/2024	6	8
1/18/2024	6	41
1/19/2024	6	18
1/20/2024	0	2
1/23/2024	0	1
1/25/2024	0	1

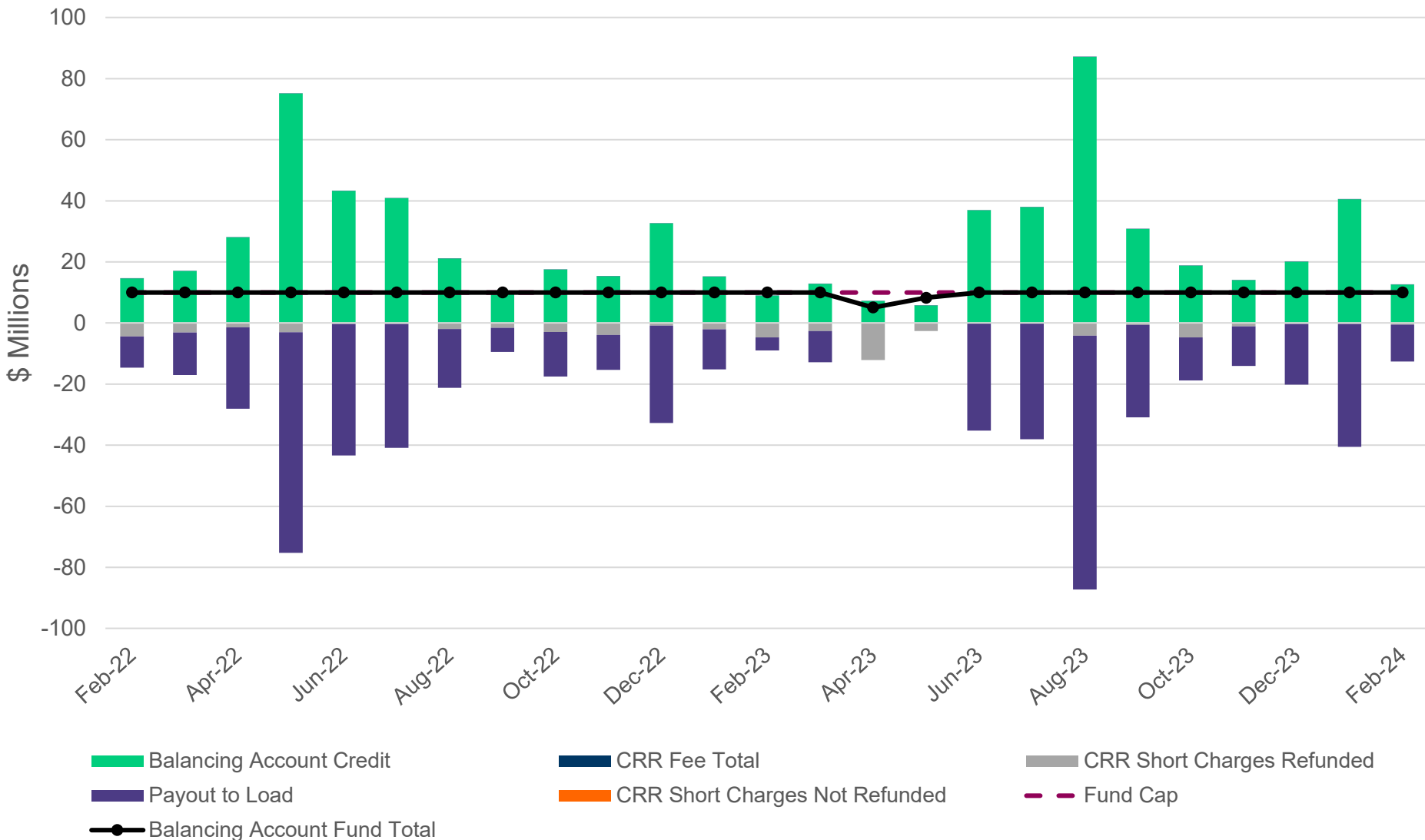
## Real-Time Market

OD	CPs Meeting Criteria (i)	CPs Meeting Criteria (ii)
1/15/2024	38	26
1/17/2024	38	69
1/19/2024	8	16

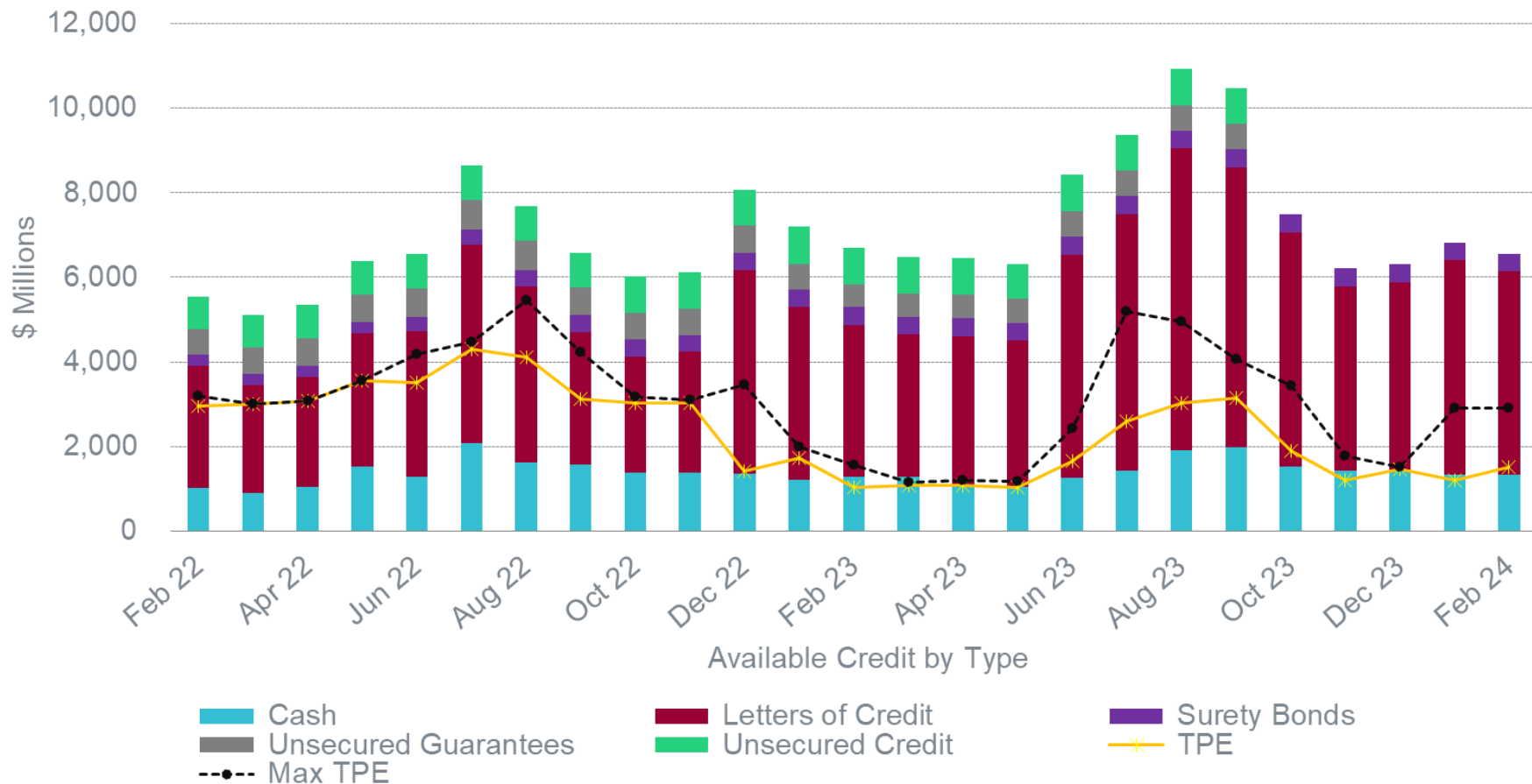
Protocol section 6.3(7)(b), states that ERCOT shall ask the Board to review prices if the absolute value impact to any single Counter-Party is greater than:

- (i) 2% and also greater than \$20,000; or
- (ii) 20% and also greater than \$2,000.

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



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



\*Numbers are as of month end except for Max TPE

# Retail Transaction Volumes – Summary – February 2024

Transaction Type	Year-To-Date		Transactions Received	
	February 2024	February 2023	February 2024	February 2023
<b>Switches</b>	190,246	206,872	105,903	127,309
<b>Acquisitions</b>	0	0	0	0
<b>Move - Ins</b>	595,023	485,381	331,939	239,968
<b>Move - Outs</b>	219,321	210,049	110,856	102,027
<b>Continuous Service Agreements (CSA)</b>	53,008	79,056	30,761	40,616
<b>Mass Transitions</b>	0	0	0	0
<b>Total</b>	<b>1,057,598</b>	<b>981,358</b>	<b>579,459</b>	<b>509,920</b>