



## **Item 8.3: Commercial Markets Update**

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Reliability and Markets Committee Meeting

ERCOT Public

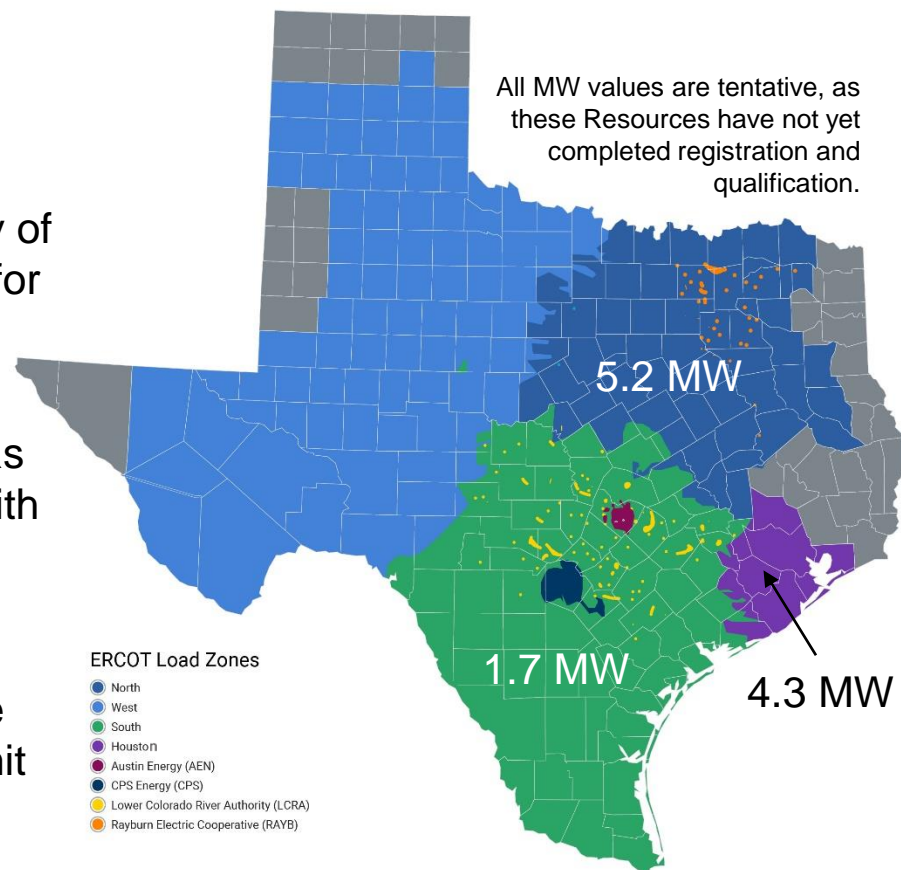
February 27, 2023

# Commercial Markets Update: Overview

- **Purpose**
  - Provide an update on recent commercial markets activity
- **Voting Items / Requests**
  - No action is requested of the R&M Committee or Board; for discussion only
- **Key Takeaways**
  - Update on the Aggregate Distributed Energy Resource (ADER) pilot project.
  - During the January cold weather event the market worked as expected with congestion being a factor at certain times. More information will follow next month.

# Aggregate Distributed Energy Resource (ADER) Pilot Project Update

- Prospective participants in the pilot have been engaging with end-use customers, Distribution Service Providers (DSPs), and ERCOT staff.
- As of February 9<sup>th</sup>:
  - ERCOT has received one Aggregation form with a desired registered capacity of 0.2 MW. Identified issues are waiting for resolution before final approval.
  - Additionally, there are 11 MW of ADERs going through Resource registration with ERCOT. Details of the Aggregation forms have not yet been submitted to ERCOT, but the Qualified Scheduling Entity (QSE) is working with applicable DSPs to complete the forms and submit to ERCOT.

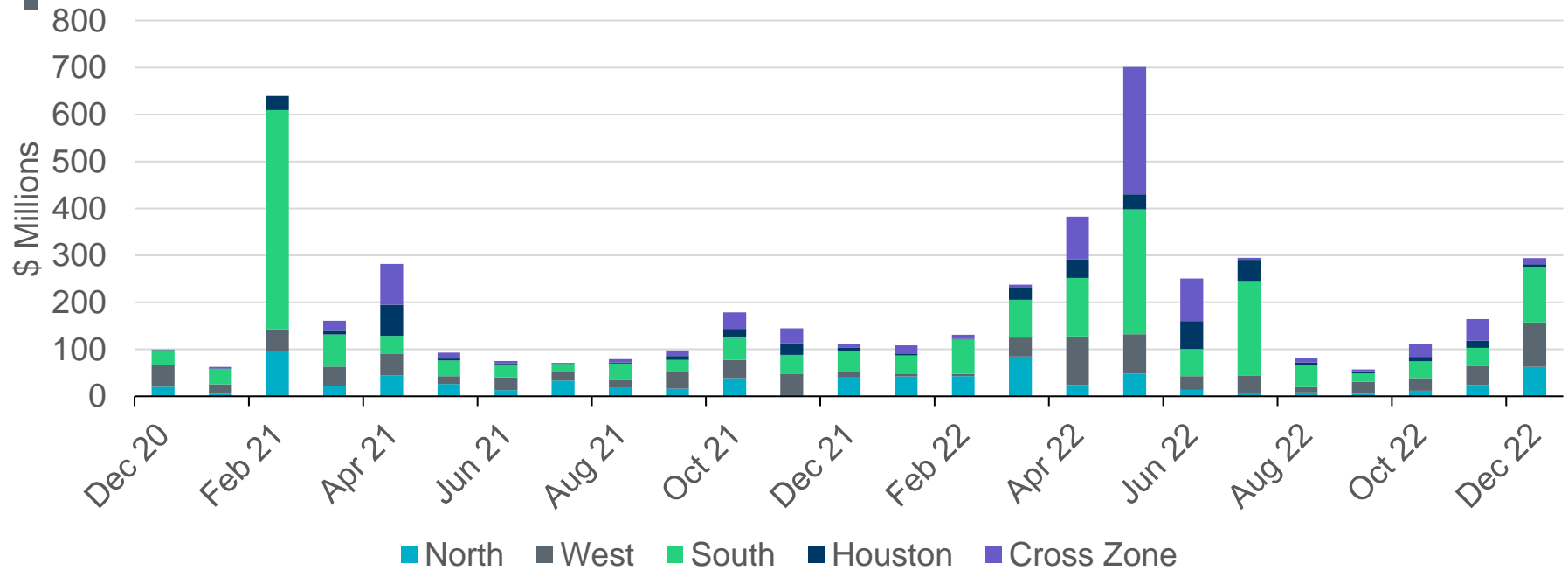


## Next Steps

- Deliver proposal on Bridge Solutions
- Finish next steps on Firm Fuel Service
- Prepare for the implementation of ERCOT Contingency Reserve Service (ECRS) in June
- Finish planning Real-Time Co-optimization (RTC)

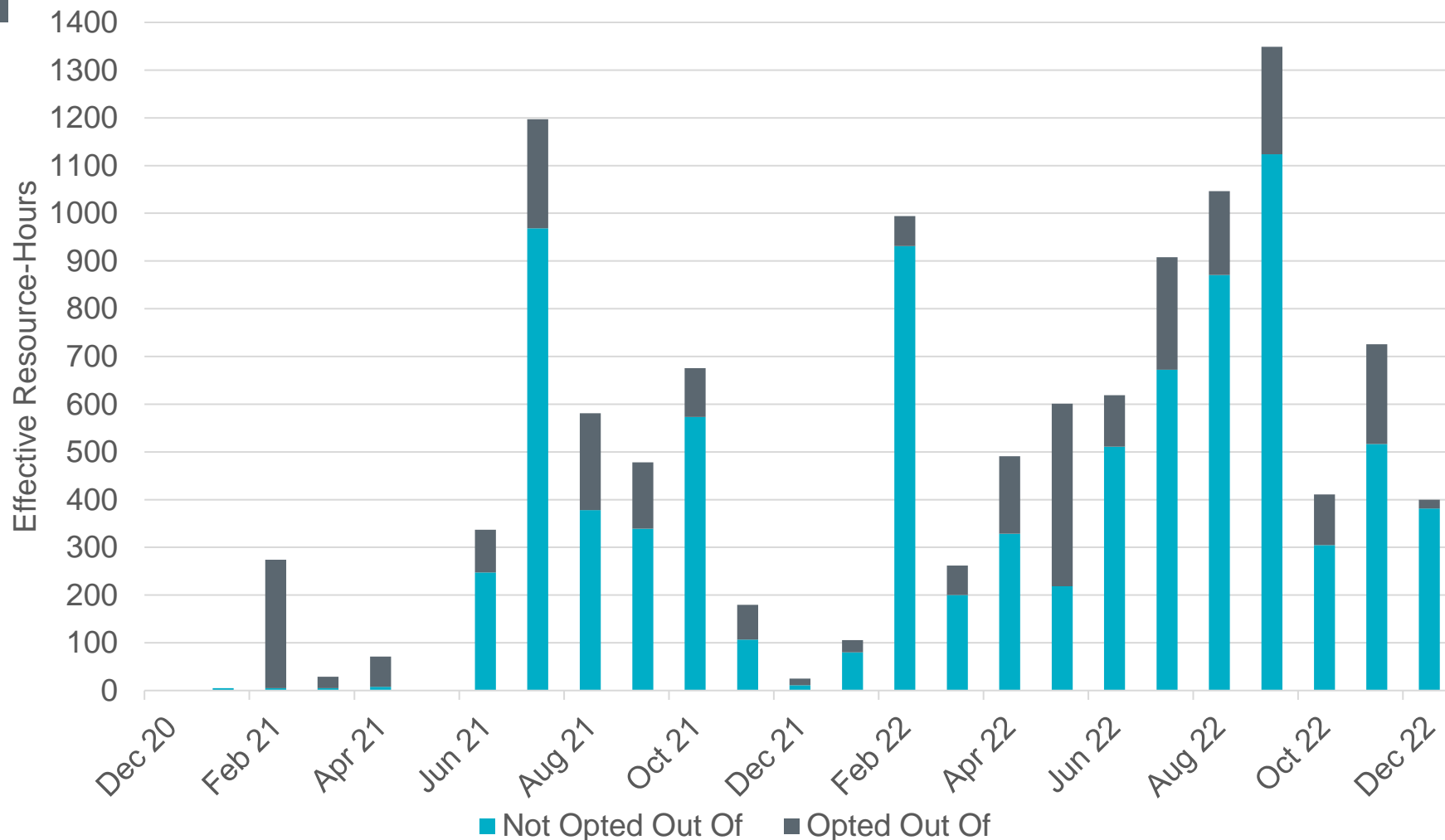
# Appendix

# Real-Time Congestion Rent by Zone



- Congestion rent increased in the North, West, and South Zones in December 2022 compared to November 2022. 38% of the month's congestion rent accumulated on December 23<sup>rd</sup> as Winter Storm Elliot passed through Texas.
- The two zones with the highest congestion rent were the West and South Zones.
  - Congestion rent in the West Zone was primarily driven by the loss of the Skywest to Spraberry switch 138 kV contingency overloading the 138 kV line from Cottonfield station to Consavvy switch.
  - Congestion rent in the South Zone was primarily driven by the loss of the Elmcreek to San Miguel 345 kV double circuit contingency overloading the 345 kV line from Pawnee switching station to Calaveras.
- 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.

## Twenty-nine Resources were Committed in December for Capacity



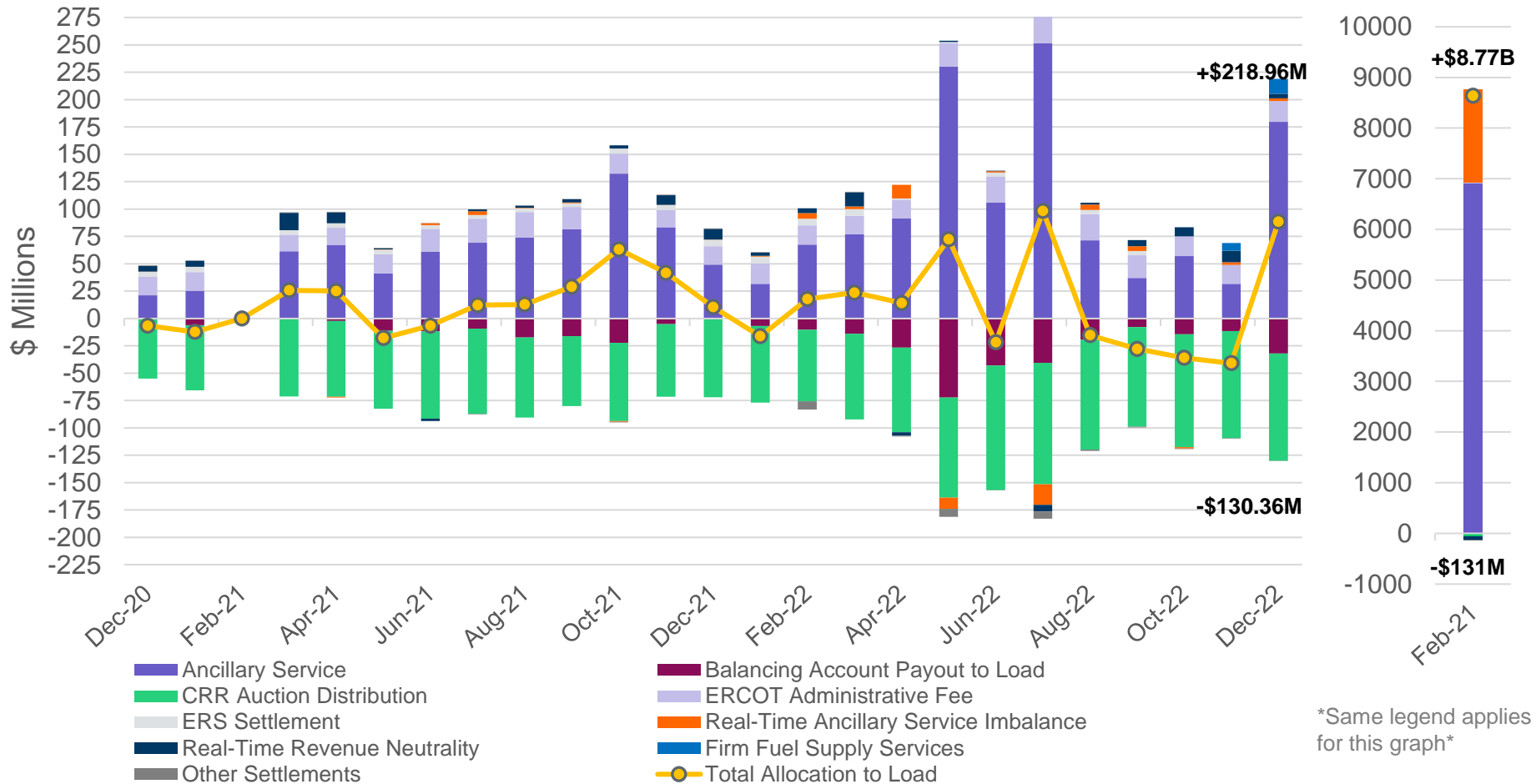
“Effective Resource-Hours” excludes any period during a Reliability Unit Commitment hour when the RUC-committed Resource was starting up, shutting down, off-line, or otherwise not available for dispatch by SCED.

## Twenty-nine Resources were Committed in December for Capacity

Resource #	Effective Resource-hours	Non Opt Out (Effective Hours)	Opt Out (Effective Hours)
1	11.0	6.0	5.0
2	11.0	11.0	0.0
3	9.5	9.5	0.0
4	9.8	9.8	0.0
5	5.0	0.0	5.0
6	31.0	31.0	0.0
7	22.3	22.3	0.0
8	0.9	0.9	0.0
9	31.0	31.0	0.0
10	26.9	26.9	0.0
11	0.8	0.0	0.8
12	0.8	0.0	0.8
13	0.8	0.0	0.8
14	0.8	0.0	0.8
15	35.9	35.9	0.0
16	35.0	33.0	2.0
17	8.0	8.0	0.0
18	14.0	14.0	0.0
19	14.0	14.0	0.0
20	2.0	2.0	0.0
21	26.3	22.8	3.5
22	1.1	1.1	0.0
23	5.0	5.0	0.0
24	5.0	5.0	0.0
25	3.0	3.0	0.0
26	5.0	5.0	0.0
27	62.0	62.0	0.0
28	9.3	9.3	0.0
29	12.9	12.9	0.0
	<b>399.9</b>	<b>381.3</b>	<b>18.6</b>



# Net Allocation to Load in December 2022 was \$88.60 Million

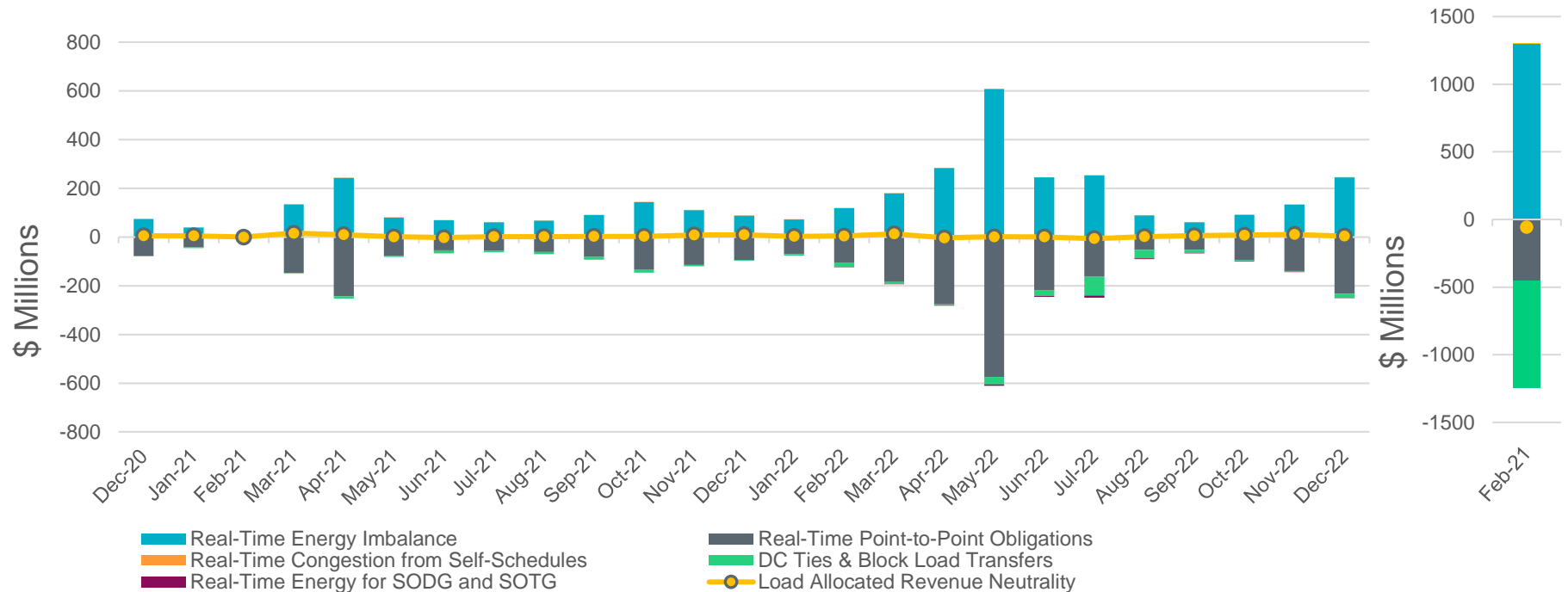


This information is available in tabular form in the Settlement Stability Report presented quarterly to the [Wholesale Market Subcommittee](#)

Note: For visual purposes, February 2021 has been separated into its own graph with different scaling. The legend applies for both graphs.



# Real-Time Revenue Neutrality Allocated to Load was \$4.34M for December 2022

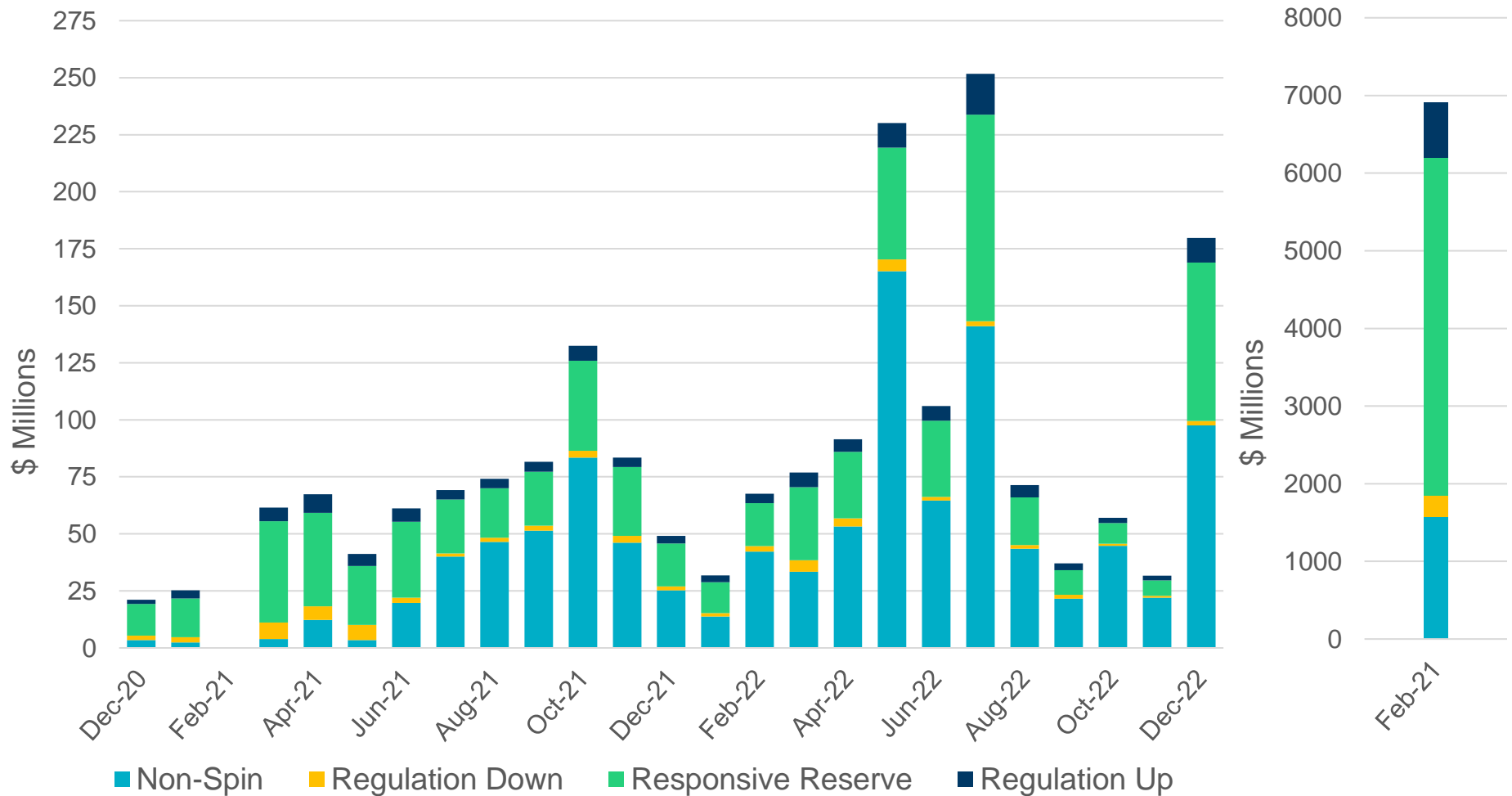


Note: For visual purposes, February 2021 has been separated into its own graph with different scaling. The legend applies for both graphs.

December 2022 (\$M)	
Real-Time Energy Imbalance	\$245.17
Real-Time Point-to-Point Obligation	(\$233.37)
Real-Time Congestion from Self-Schedules	\$1.51
DC Tie & Block Load Transfer	(\$16.39)
Real-Time Energy for SODG and SOTG	(\$1.25)
<b>Load Allocated Revenue Neutrality</b>	<b>\$4.34</b>



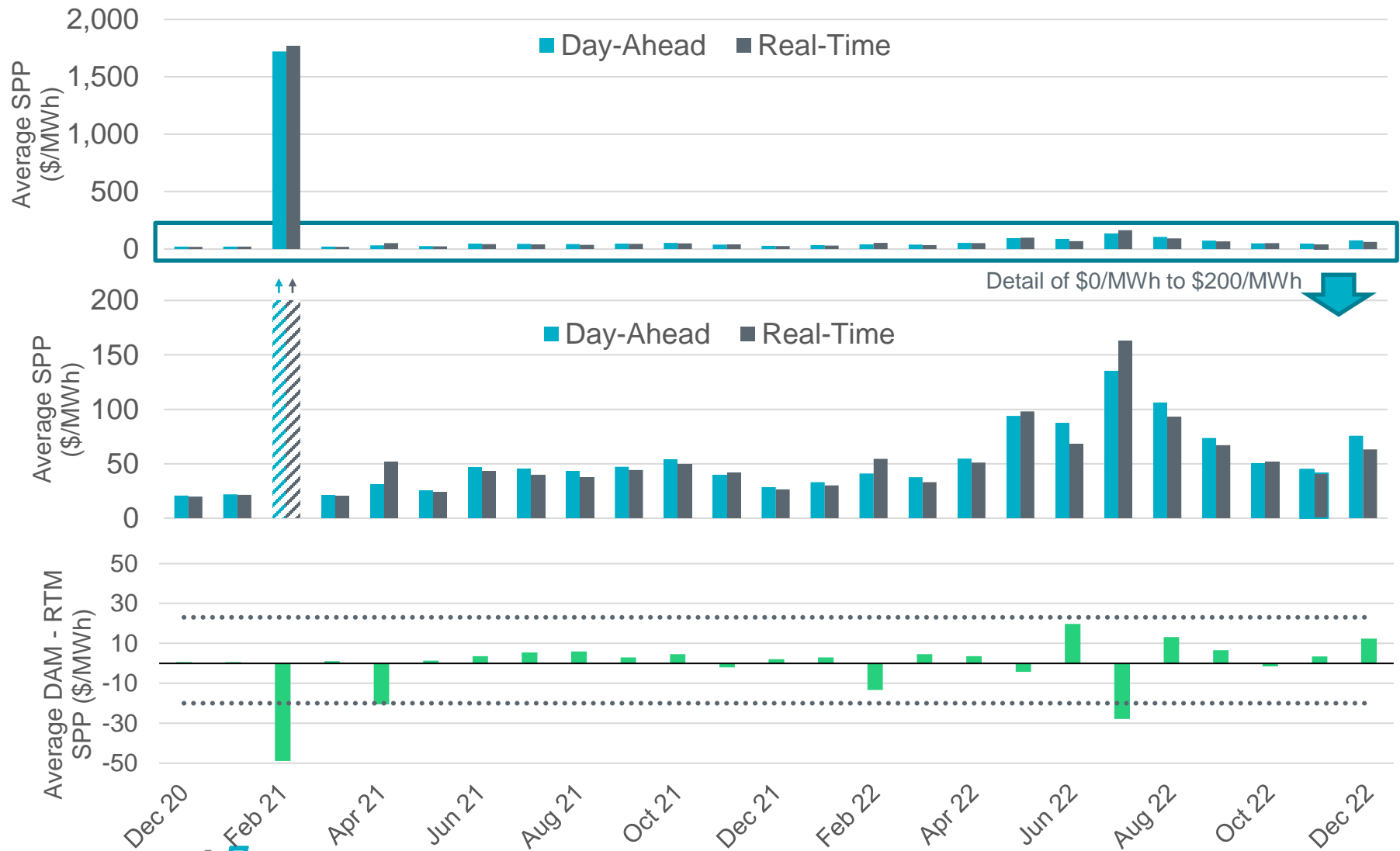
# Ancillary Services for December 2022 totaled \$179.78M



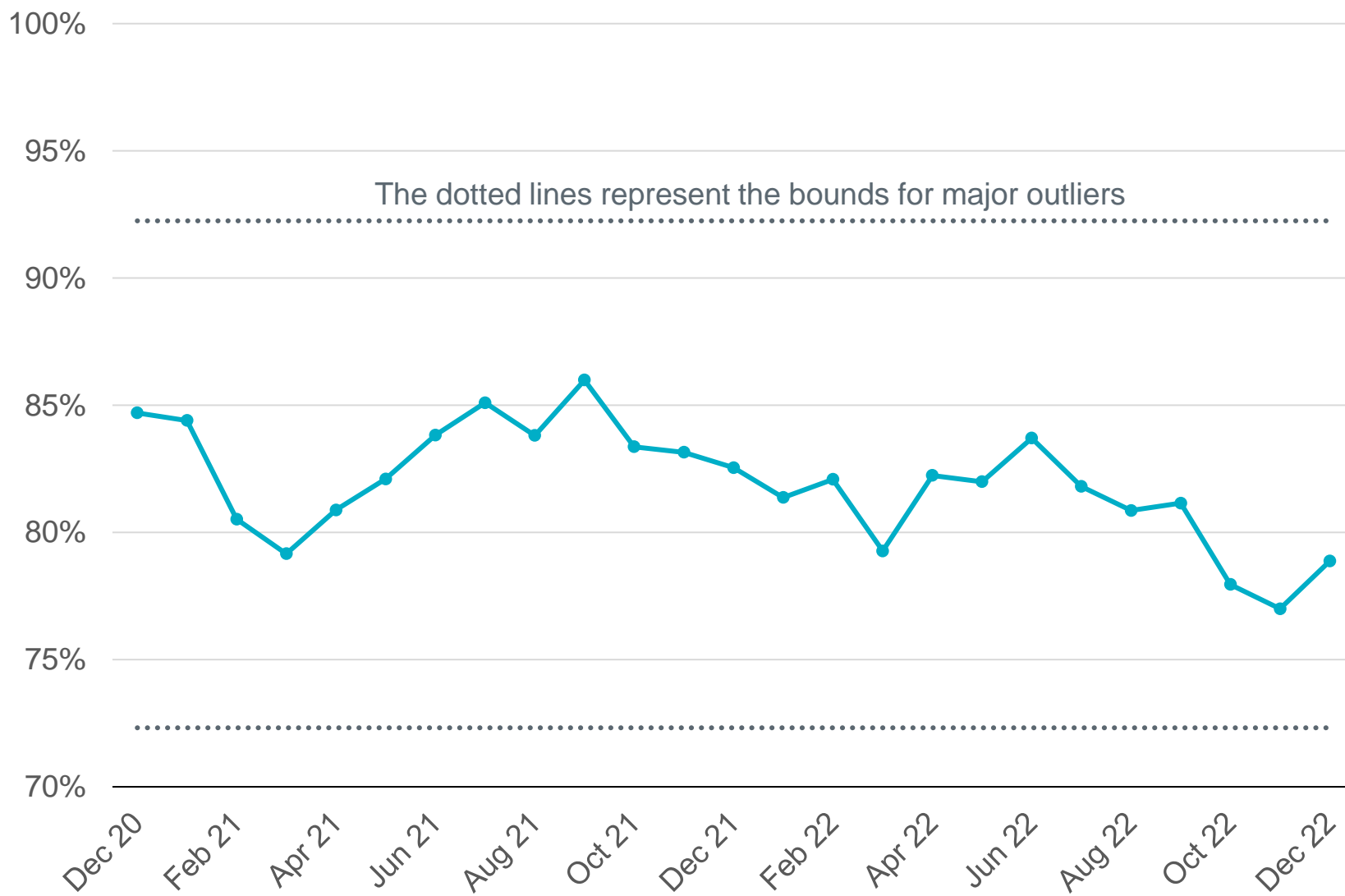
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# Day-Ahead and Real-Time Market Price Differences



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



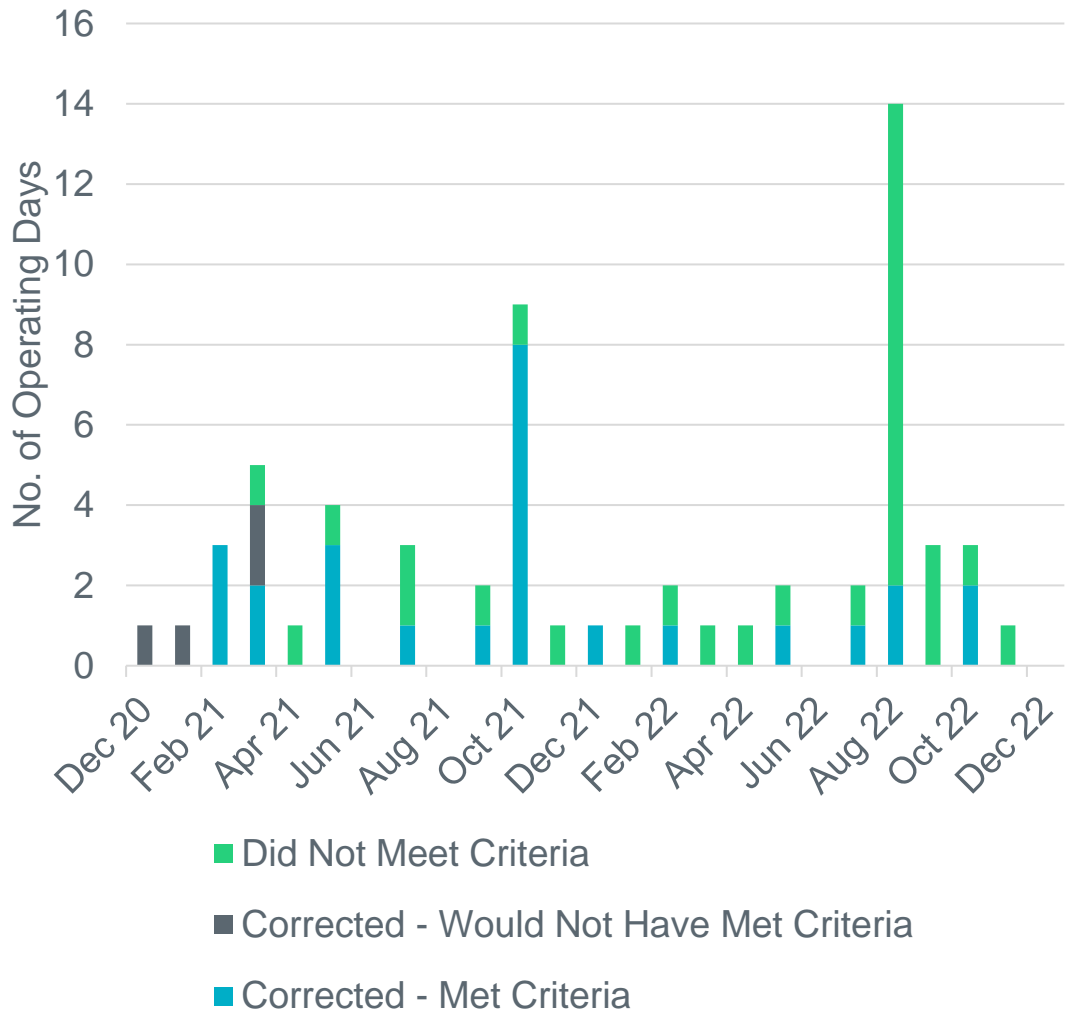
# Congestion Revenue Right (CRR) Value and Cost Differences



# 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:

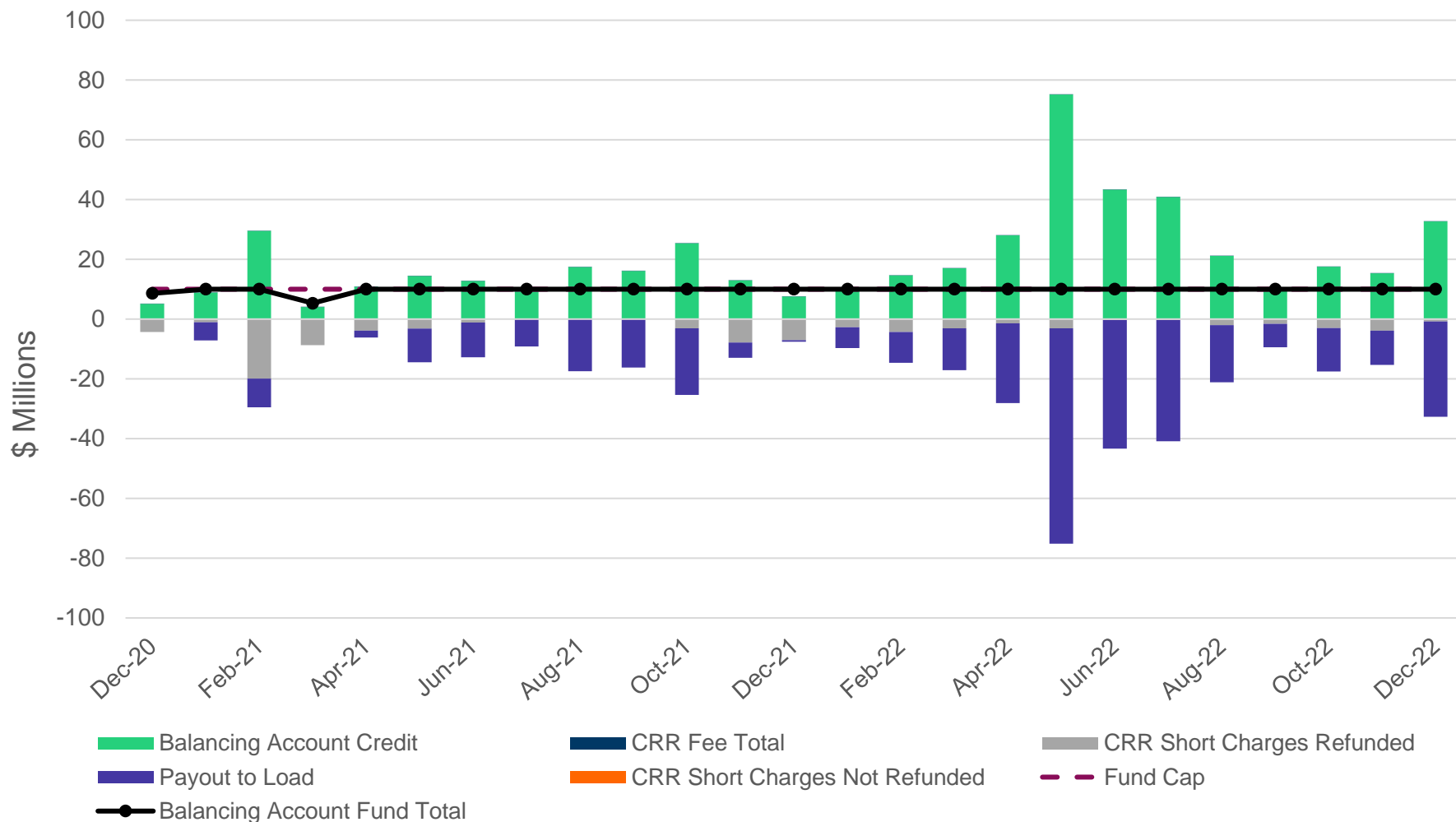
- Days that met the criteria for “significance” under NPRR1024 and were corrected;
- Days that would not have met the criteria for “significance” under NPRR1024, but were corrected because NPRR1024 was not yet in place; and
- Days that were not corrected because they did not meet the criteria for “significance” under NPRR1024.



\* NPRR1024, *Determination of Significance with Respect to Price Correction*

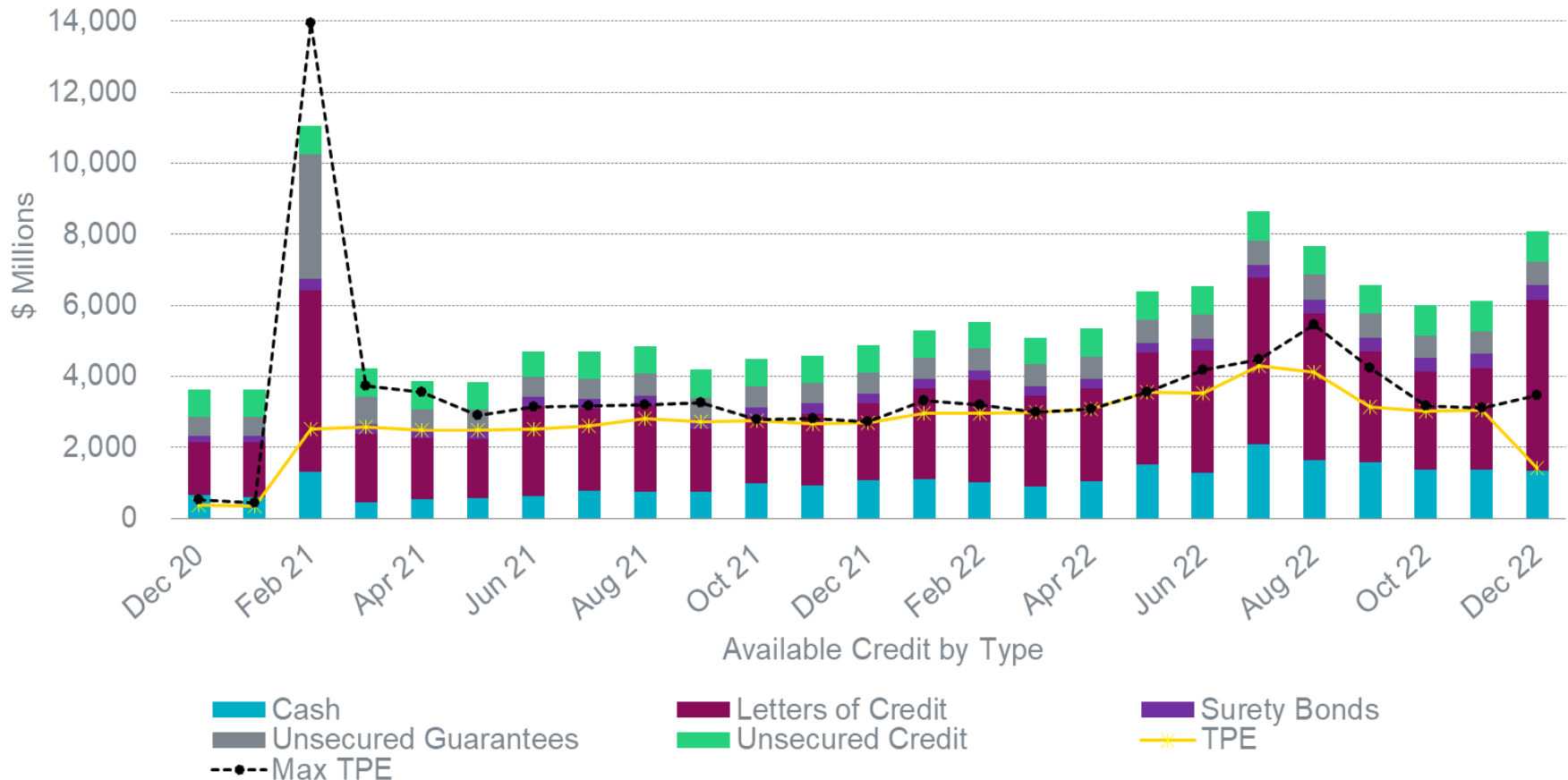


# The CRR Balancing Account was fully-funded and excess amounts were allocated to Load





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



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

# Retail Transaction Volumes – Summary – December 2022

	Year-To-Date		Transactions Received	
Transaction Type	December 2022	December 2021	December 2022	December 2021
Switches	1,182,485	1,542,185	70,513	70,637
Acquisitions	0	48,862	0	0
Move - Ins	3,098,201	2,784,176	232,968	214,374
Move - Outs	1,381,804	1,277,550	95,982	93,239
Continuous Service Agreements (CSA)	676,125	696,478	33,759	64,948
Mass Transitions	24,463	26,584	0	0
<b>Total</b>	<b>6,363,078</b>	<b>6,375,835</b>	<b>433,222</b>	<b>443,198</b>