

ERCOT Monthly Operational Overview (July 2024)

ERCOT Public August 17, 2024

#### **Highlights, Records and Notifications**

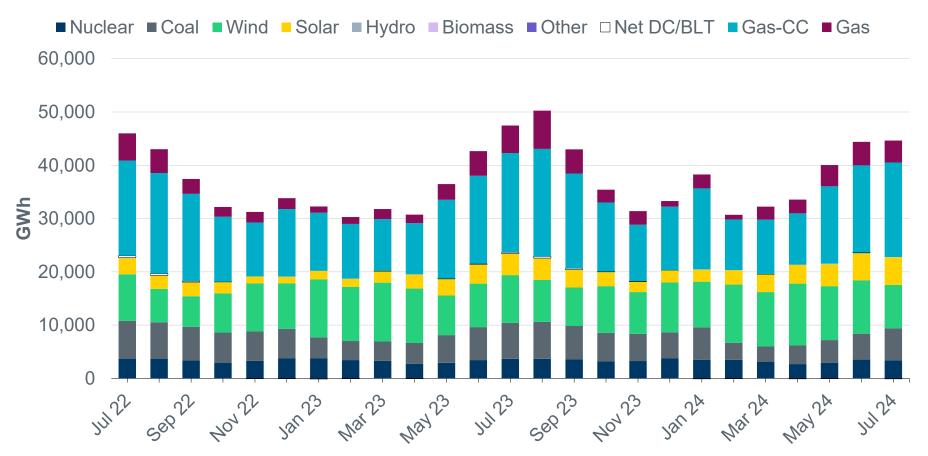
• ERCOT's maximum peak demand for the month of July was 81,010 MW\* on 7/1/2024; this is 1,954 MW less than the July 2023 peak demand of 82,964 MW set on 7/31/2023.

#### ERCOT issued 5 notifications

- 1 OCN Hurricane Beryl possibility of making landfall or impacting the ERCOT Region.
- 1 Advisory Hurricane Beryl possibility of making landfall or impacting the ERCOT Region.
- 1 Watch Hurricane Beryl possibility of making landfall or impacting the ERCOT Region.
- 1 Emergency Notice Hurricane Beryl due to Hurricane Beryl having an adverse impact on the ERCOT transmission system.
- 1 DC Tie Curtailment Notice DC\_L due to a planned or unplanned outage.



# Monthly energy generation decreased by 6.1% year-over-year to 44,545 GWh in July 2024, compared to 47,429 GWh in July 2023

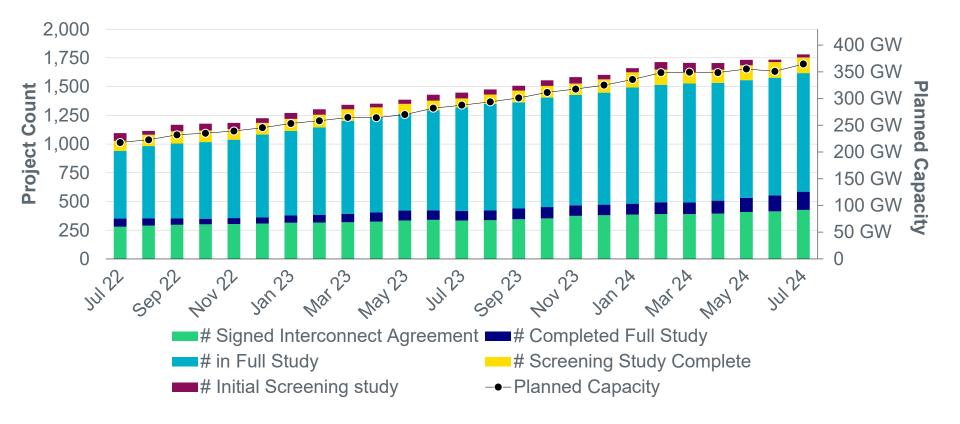




Data for latest two months are based on preliminary settlements.

#### Generation Interconnection activity by project phase

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

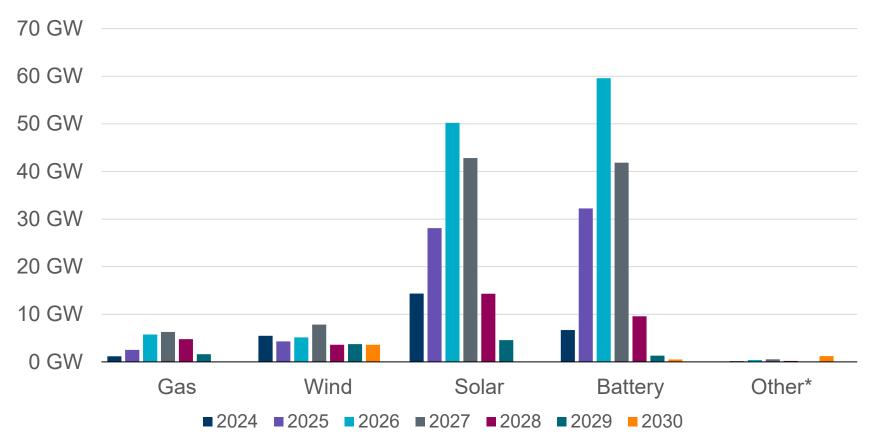


- There are an additional 46 "Small Generator" projects totaling 435 MW that are going through the simplified interconnection process.
- A break-out by fuel type can be found in the monthly Generator Interconnection Status (GIS) reports available on the ERCOT Resource Adequacy Page: http://www.ercot.com/gridinfo/resource



#### Interconnection Queue Capacity by Fuel Type

Queue totals: Solar 154 GW (42.3%), Wind 34 GW (9.2%), Gas 22 GW (6.1%), Battery 152 GW (41.6%) (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



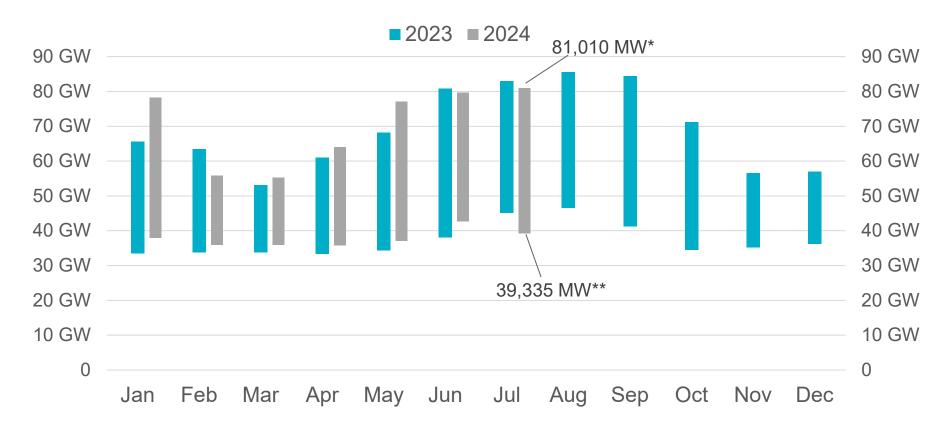
<sup>\*</sup> Other includes petroleum coke (pet coke), hydroelectric, fuel oil, geothermal energy, other miscellaneous fuels reported by developers, and fuel cells that use fuels other than natural gas.

### **Planning Summary**

- ERCOT is tracking 1,858 active generation interconnection requests totaling 364,671 MW as of July 31. This includes 154,407 MW of solar, 33,731 MW of wind, 151,811 MW of battery, and 22,160 MW of gas projects; 95 projects were categorized as inactive, down from 96 inactive projects in June 2024.
- ERCOT is currently reviewing proposed transmission improvements with a total estimated cost of \$2.001 billion as of July 31, 2024.
- Transmission Projects endorsed in 2024 total \$2.518 billion as of July 31, 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 July was 81,010 MW\*; this is 1,954 MW less than the July 2023 demand of 82,964 MW.

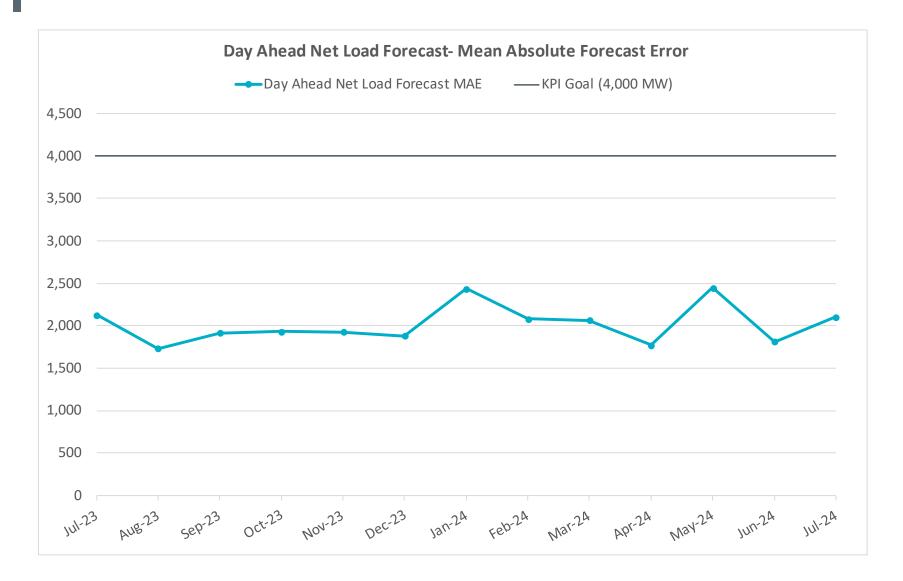


<sup>\*</sup>Based on the maximum net system hourly value from the July 2024 Demand and Energy report.

<sup>\*\*</sup>Based on the minimum net system 15-minute interval value from the July 2024 Demand and Energy report. Data for latest two months are based on preliminary settlements.

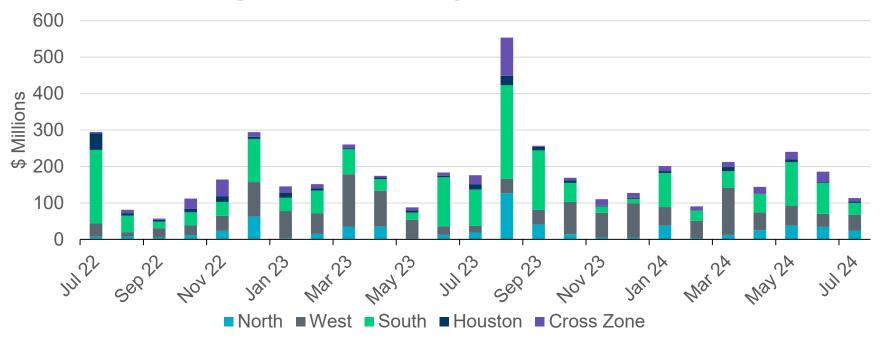


### **Net Load Forecast Performance**





### **Real-Time Congestion Rent by Zone**

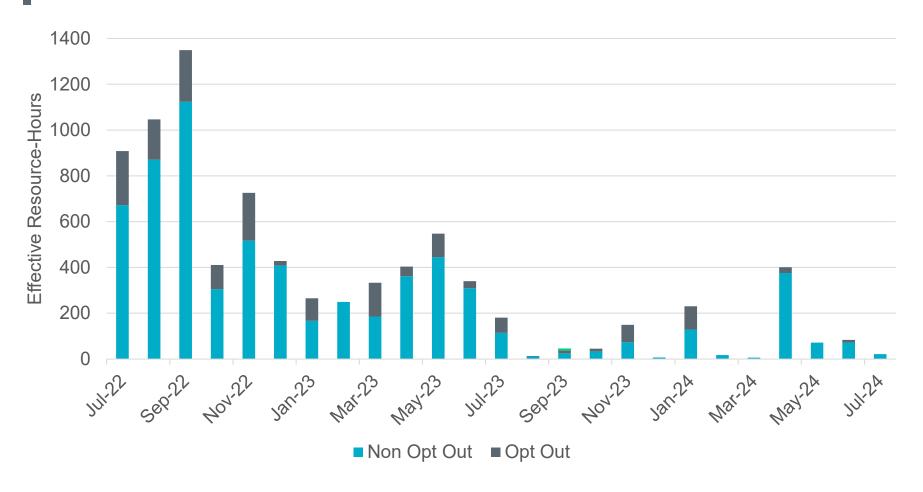


- Congestion Rent is determined using the shadow prices and MW flows for individual constraints in SCED as well as the duration of congested SCED intervals.
- In July, total Real-Time congestion rent decreased compared to June, with the highest congestion rent observed in the West and South Zones.
  - South Zone congestion rent was primarily driven by the South Texas Import Interface power flow violation in the Base Case, combined with a generation deficit in South Texas due to low wind and thermal outages.
  - West Zone congestion rent was primarily driven by the loss of the 345 kV contingency from Consavvy Switch to Morgan Creek, overloading the 138 kV transmission line from Morgan Creek to Navigation.

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



### Three Resources were Committed in July for 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.

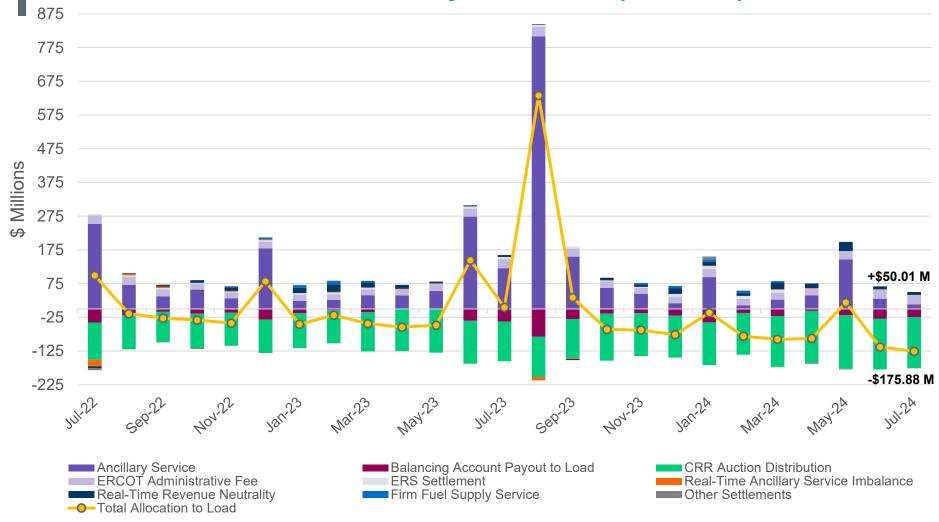


### Three Resources were Committed in July for Congestion

Resource #	Effective Resource-hours	Non-Opt Out (Effective Hours)	Opt Out (Effective Hours)
1	6.0	6.0	0.0
2	7.9	7.9	0.0
3	7.1	7.1	0.0
SUM	21.0	21.0	0.0



### Net Allocation to Load in July 2024 was (\$125.87) Million

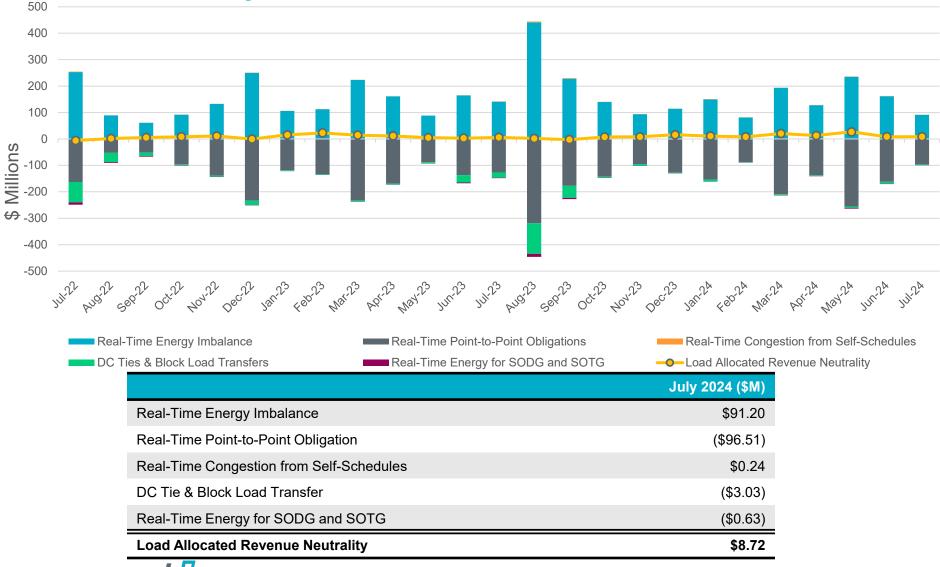


This information is available in tabular form in the Settlement Stability Report presented quarterly to the

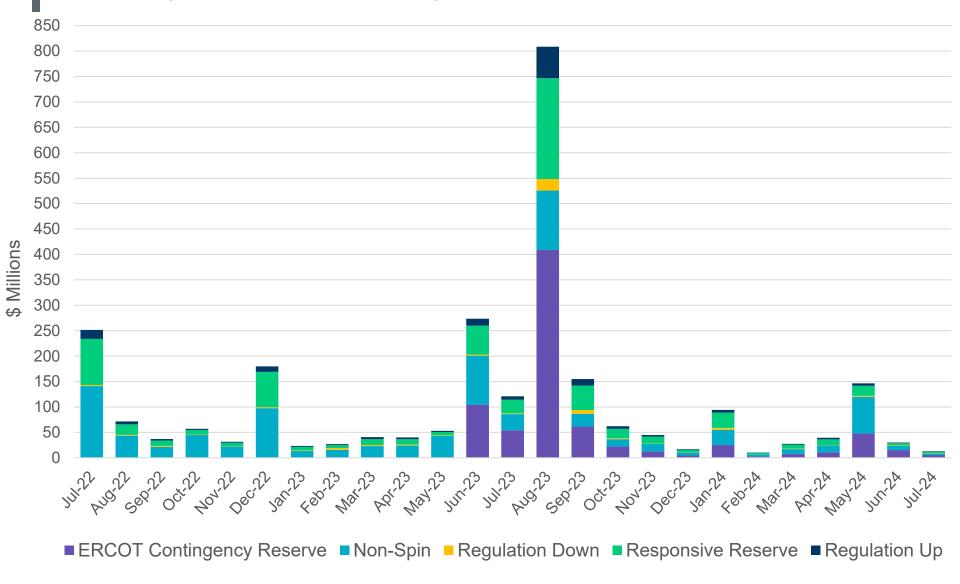
Wholesale Market Subcommittee



### Real-Time Revenue Neutrality Allocated to Load was \$8.72M for July 2024

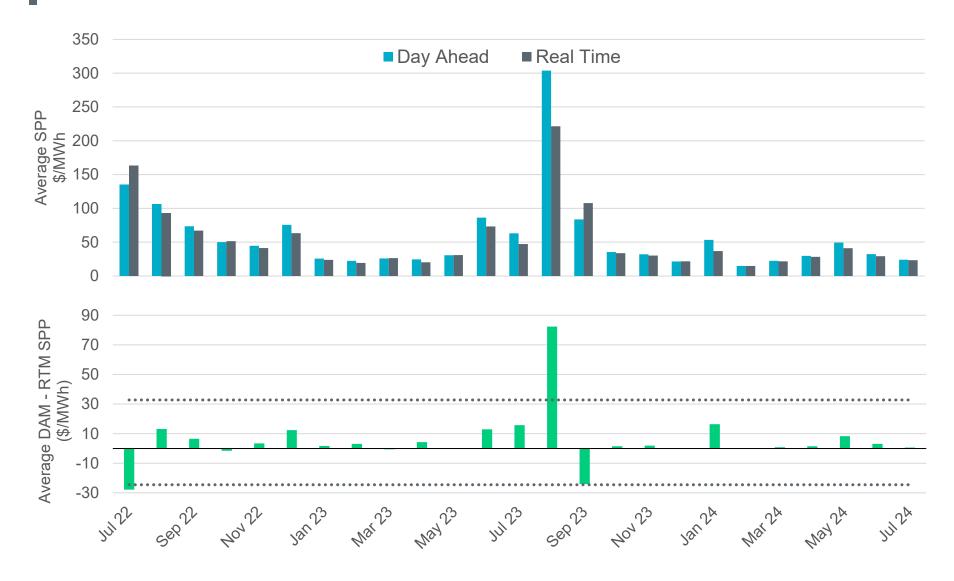


### **Ancillary Services for July 2024 totaled \$13M**



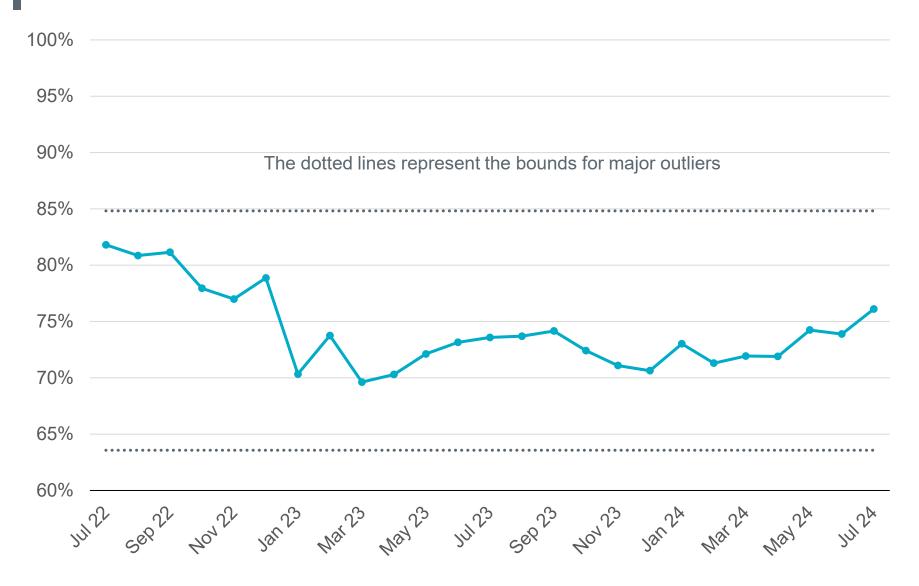


### **Day-Ahead and Real-Time Market Price Differences**





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

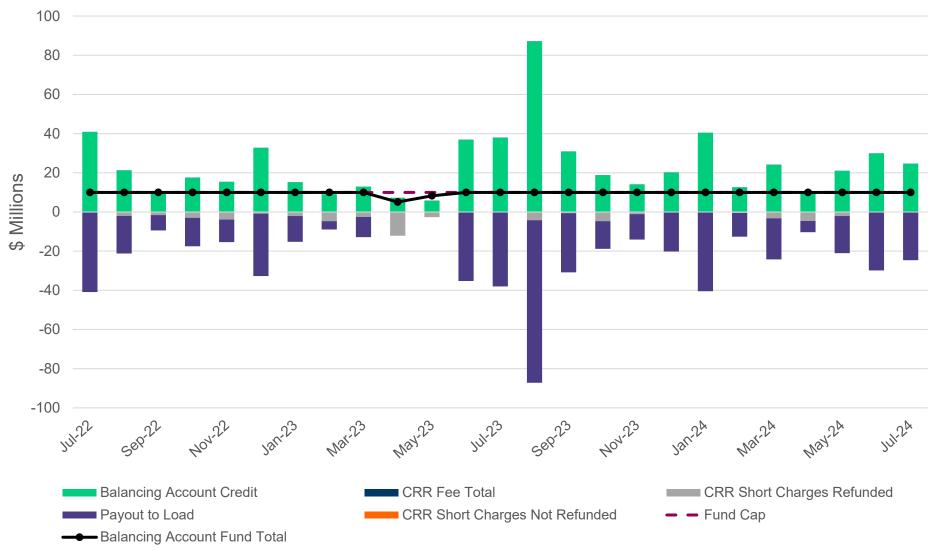




### **Congestion Revenue Right (CRR) Value and Cost Differences**



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

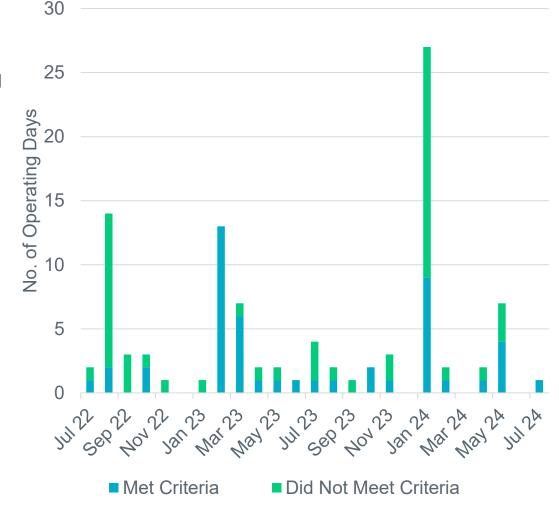




### Price Issues and the Impact of Nodal Protocol Revision Request (NPRR) 1024 on Price Corrections

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.



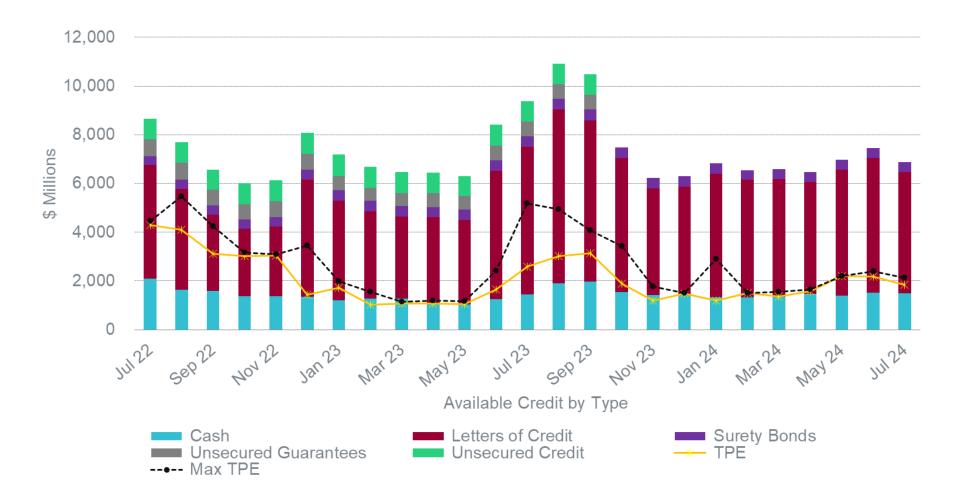


### **Price Correction Details**

On Operating Day July 17, 2024, the Emergency Basepoint flag was activated during a planned site failover. The flag was on for a duration of 15 minutes, impacting meter prices for the real-time settlement interval 16:00. The total estimated dollar impact was \$778, meeting the criteria of \$500 for performing a price correction. Prices were corrected before 4 PM on July 22, 2024.



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





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

### **Retail Transaction Volumes – Summary – July 2024**

	Year-To-Date		Transactions Received	
Transaction Type	July 2024	July 2023	July 2024	July 2023
Switches	762,243	668,654	114,296	95,134
Acquisitions	0	0	0	0
Move - Ins	1,878,530	1,819,348	269,449	266,689
Move - Outs	838,179	817,167	132,223	122,910
Continuous Service Agreements (CSA)	244,479	283,142	30,725	29,940
Mass Transitions	0	0	0	0
Total	3,723,431	3,588,311	546,693	514,673

