



## ERCOT Monthly Operational Overview (May 2019)

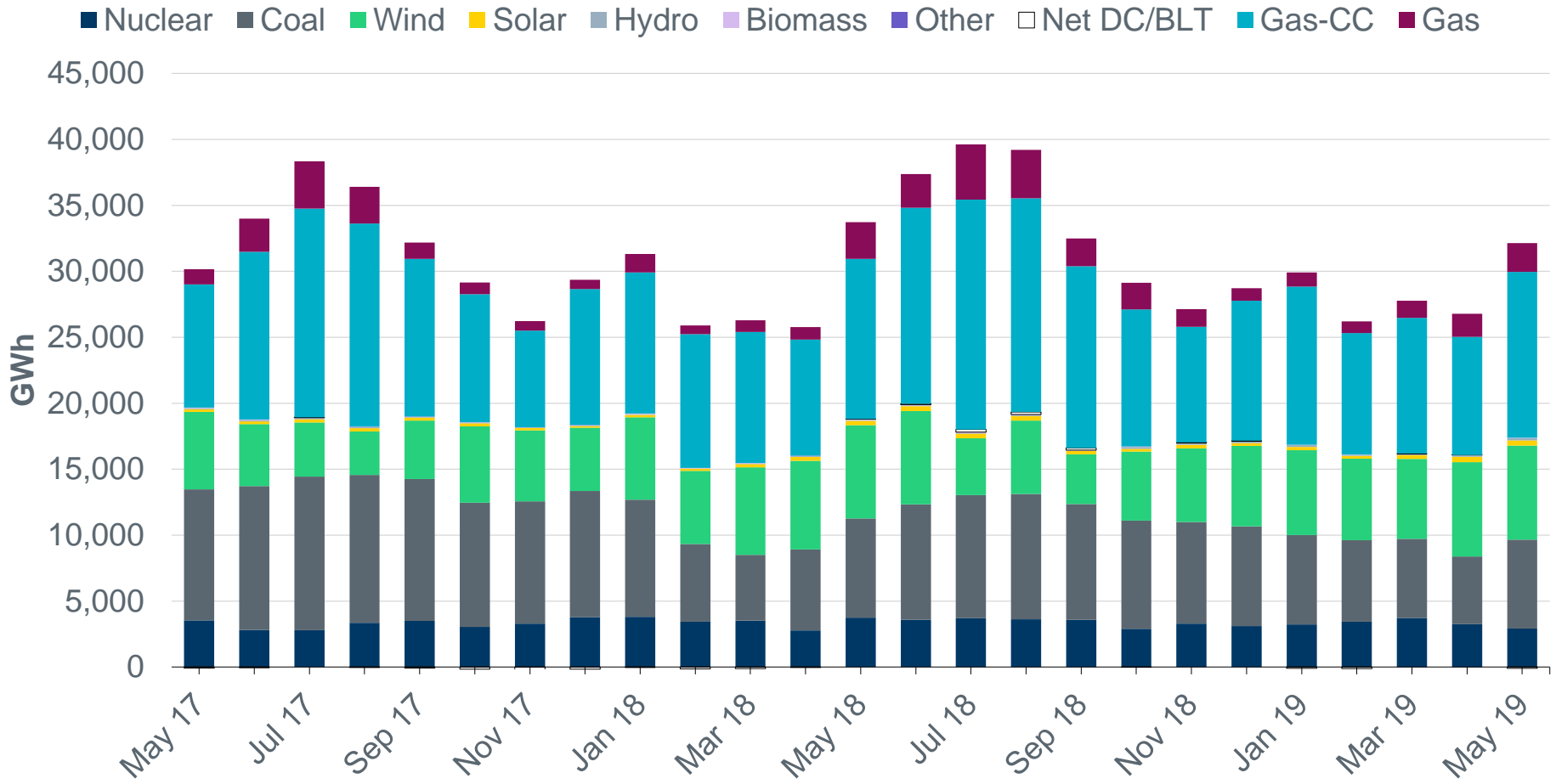
ERCOT Public  
June 15, 2019

# Monthly Highlights

- The maximum demand in May 2019 was 60,817 MW\*, a 6.4 GW decrease from the May demand record set last year (67,265 MW).
- On May 30, momentary telemetry issues from one QSE's portfolio caused one SCED execution to produce a \$9,001/MWh system lambda. After investigating, ERCOT issued a Public Notice that no price correction was warranted based on ERCOT price correction rules.
- ERCOT issued five notifications:
  - Two Advisories issued for postponement of the deadline for the posting of the DAM Solution.
  - One Advisory issued for a geomagnetic disturbance of K-7.
  - One Watch issued due to DRUC not completing by 1800 due to delay of the Day Ahead Market.
  - One OCN issued due to ERCOT modifying a Generic Transmission Constraint due to dynamic voltage stability issues that become more limiting than steady state voltage issues, under Transmission Outage conditions for the Panhandle Generic Transmission Constraint (GTC).

\* Preliminary value from June release of Demand and Energy 2019 report.

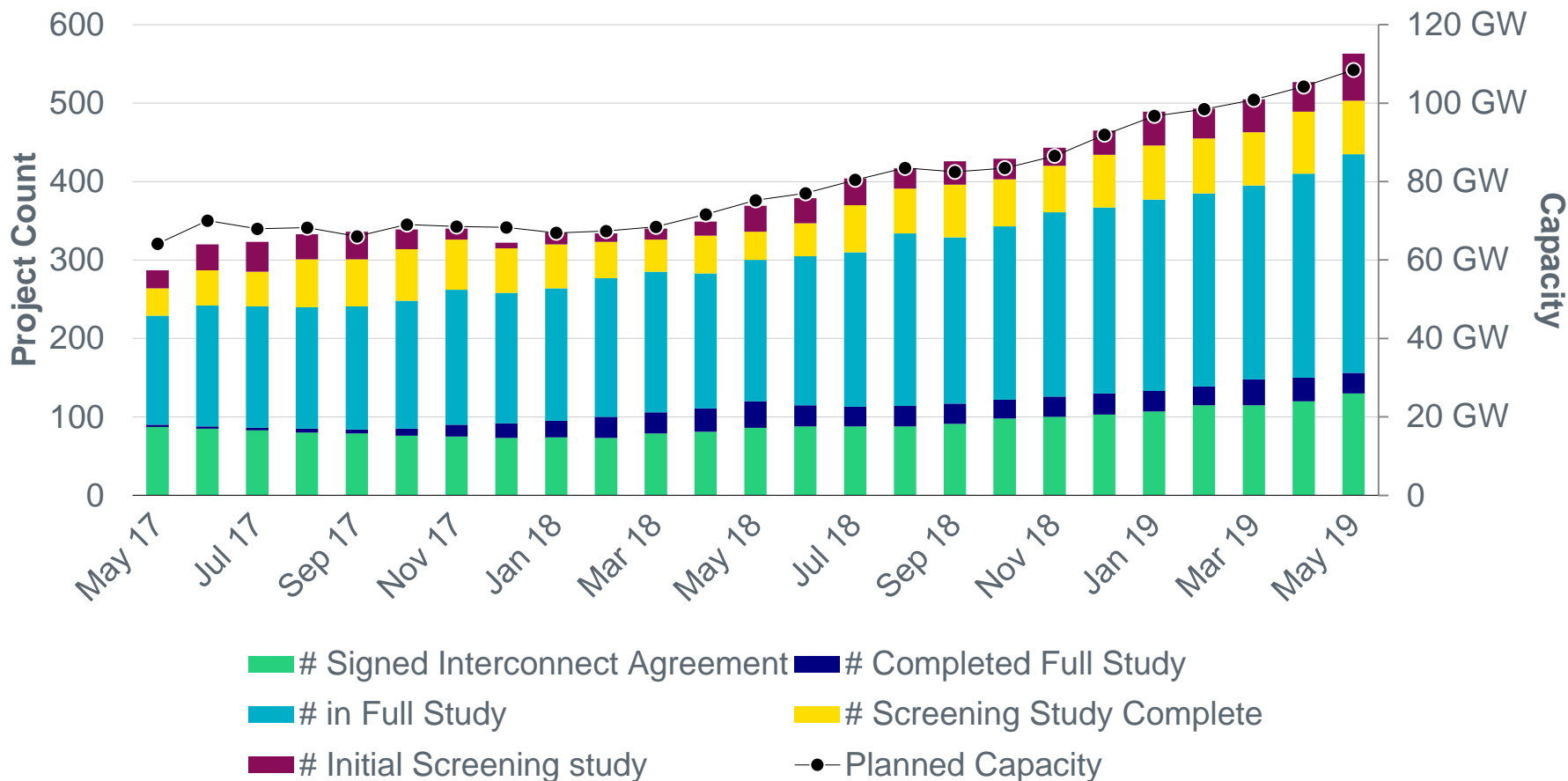
# Monthly energy generation by fuel type



Data for latest two months are based on preliminary settlements.



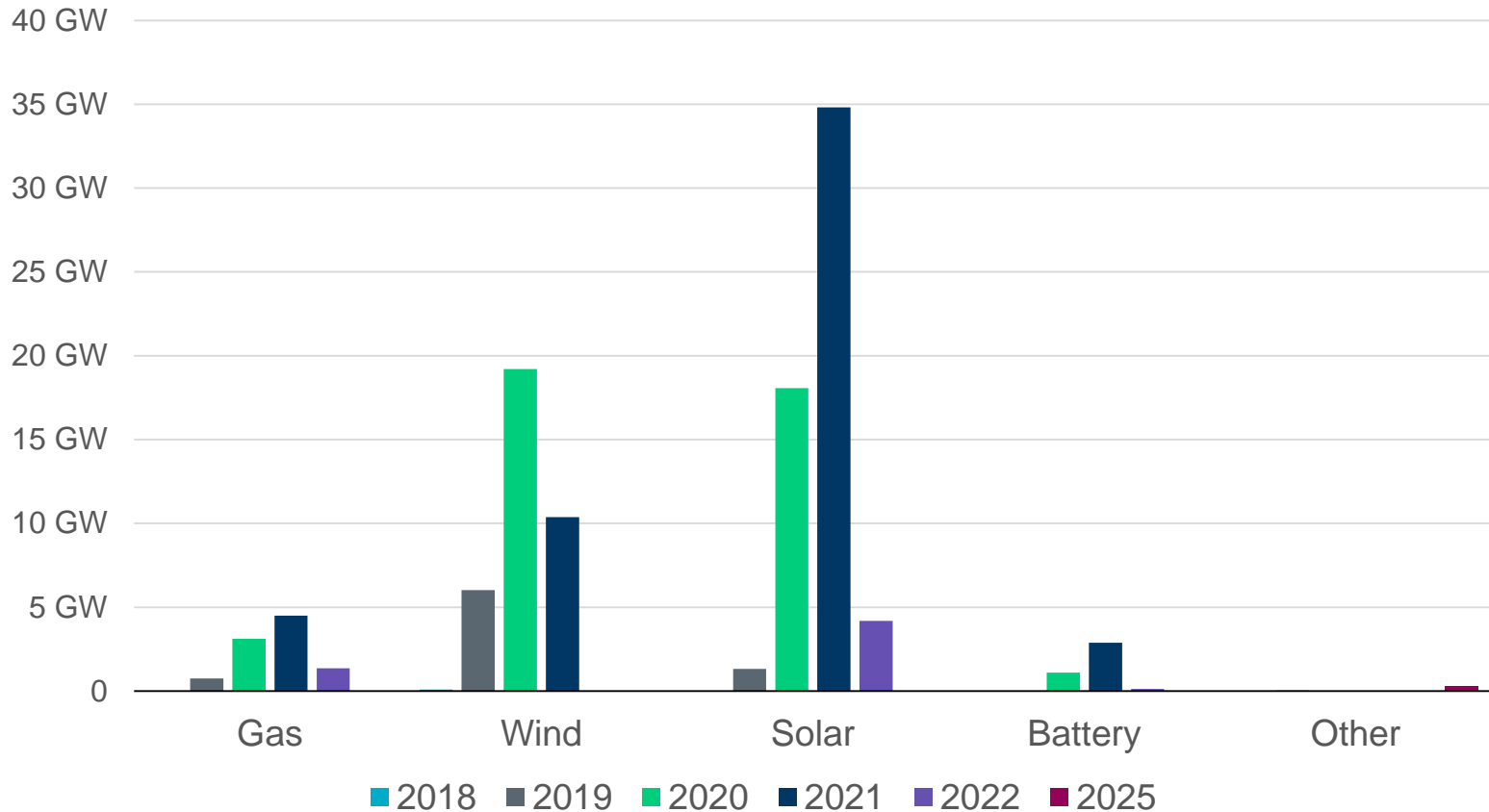
# Generation Interconnection activity by project phase



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 59 GW (54%), Wind 36 GW (33%), Gas 10 GW (9%), Battery 4 GW (4%)

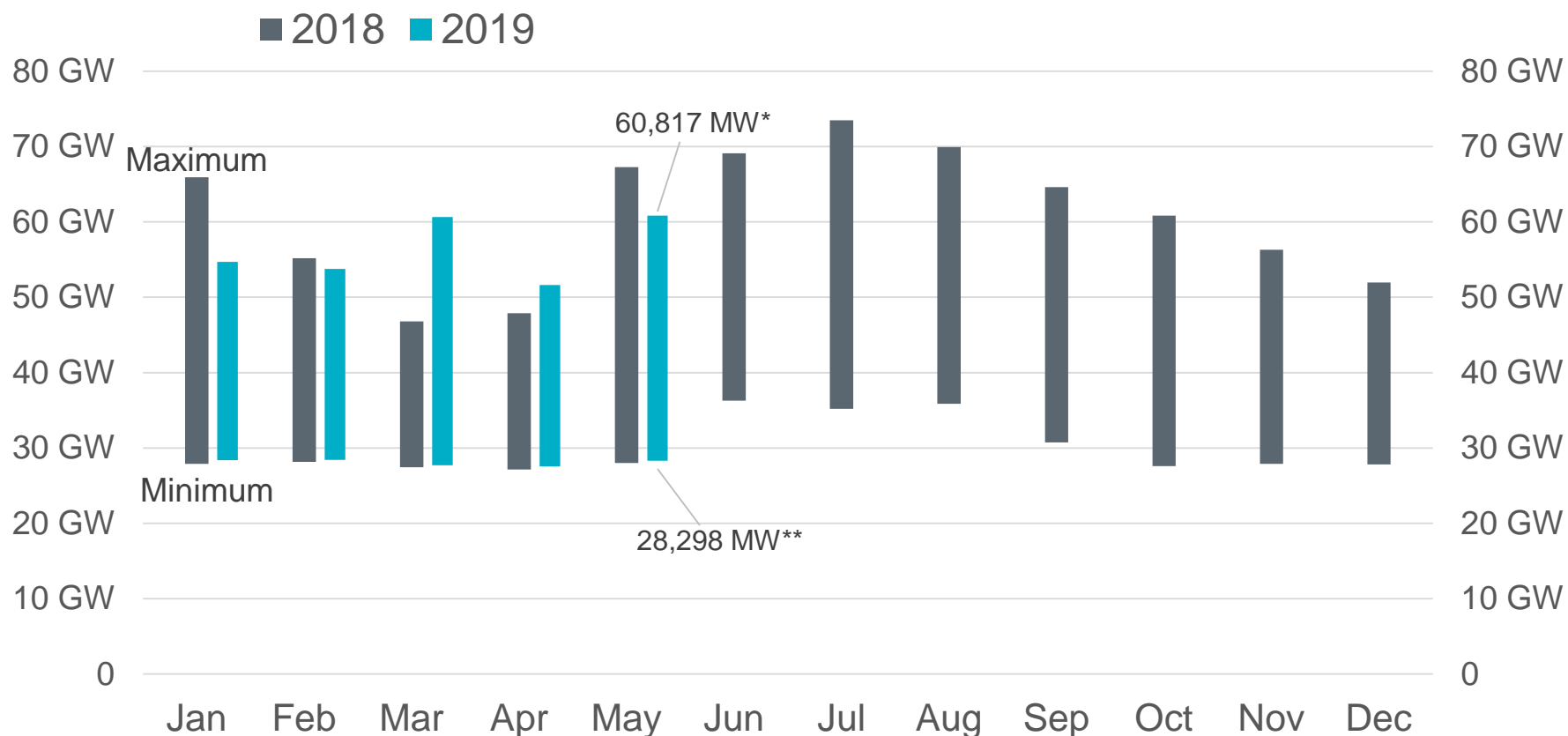


A break out by zone can be found in the monthly Generator Interconnection Status (GIS) reports available on the ERCOT Resource Adequacy Page: <http://www.ercot.com/gridinfo/resource>

# Planning Summary

- ERCOT is currently tracking 563 active generation interconnection requests totaling 108,471 MW. This includes 58,579 MW of solar projects and 35,689 MW of wind projects as of May 31, 2019.
- ERCOT is currently reviewing proposed transmission improvements with a total estimated cost of \$1,149.1 Million as of May 31, 2019.
- Transmission Projects endorsed in 2019 total \$192.4 Million as of May 31, 2019.
- All projects (in engineering, routing, licensing and construction) total approximately \$5.07 Billion as of March 1<sup>st</sup>, 2019.
- Transmission Projects energized in 2019 total about \$89.98 Million as of March 1<sup>st</sup>, 2019.

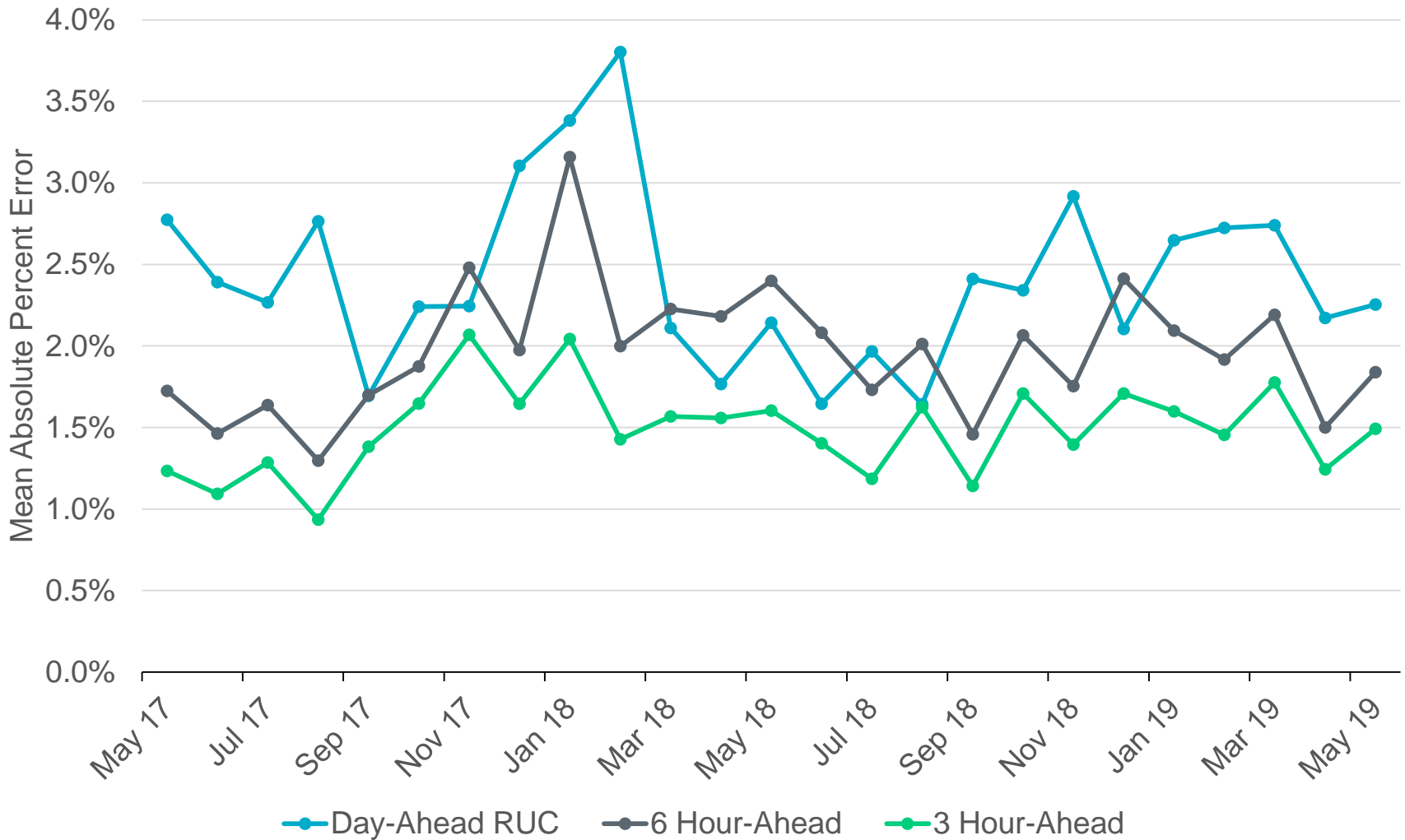
**The maximum demand in May 2019 was 60,817 MW\*, a 6.4 GW decrease from the May demand record set last year (67,265 MW)**



\*Value based on net system hourly data from June release of Demand and Energy 2019 report.

\*\*Value based on 15-minute metered data from June release of Demand and Energy 2019 report. Data for latest two months are based on preliminary settlements.

# Mid-Term Load Forecast Performance

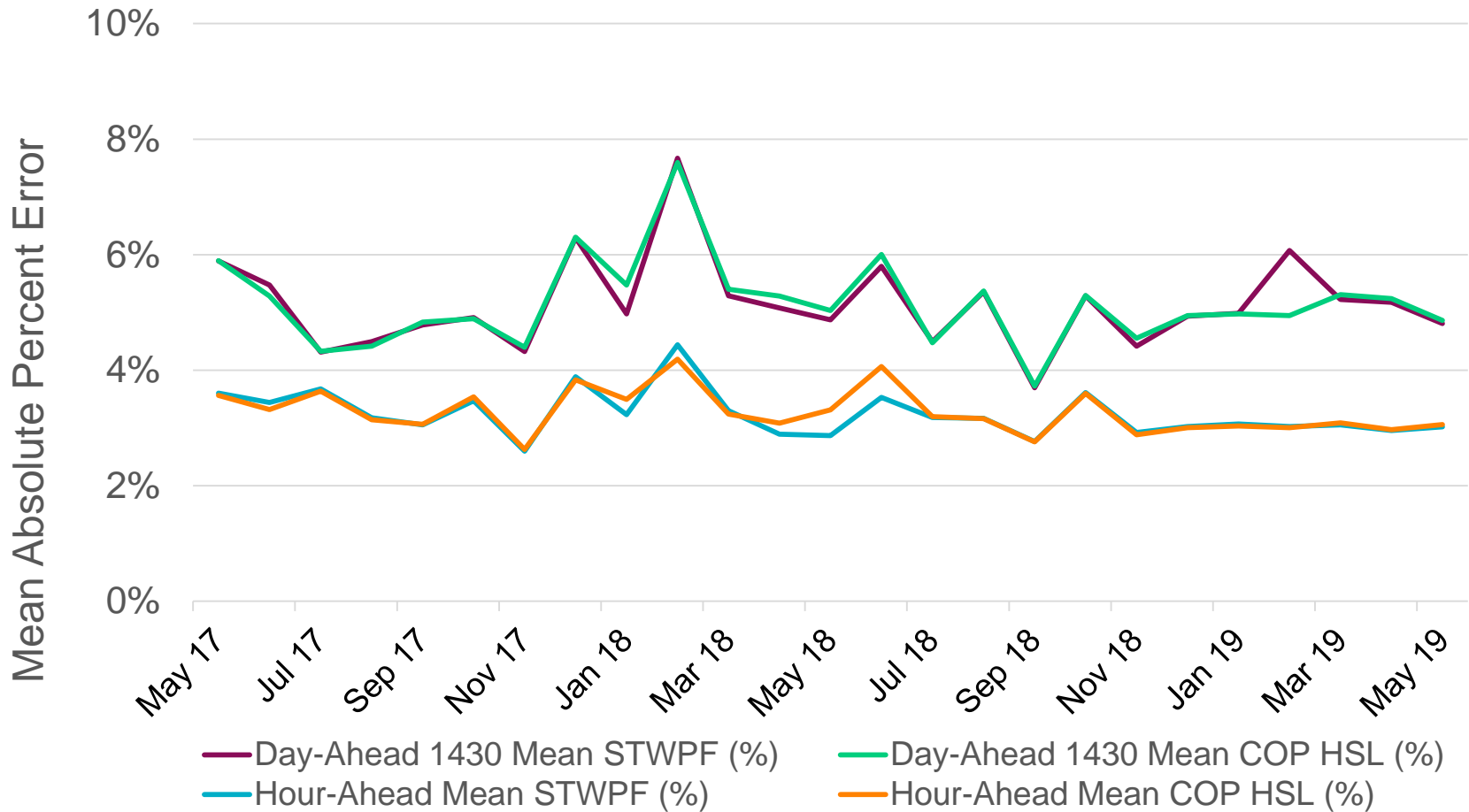


The Mid-Term Load Forecast is an hourly forecast that looks 7 days into the future



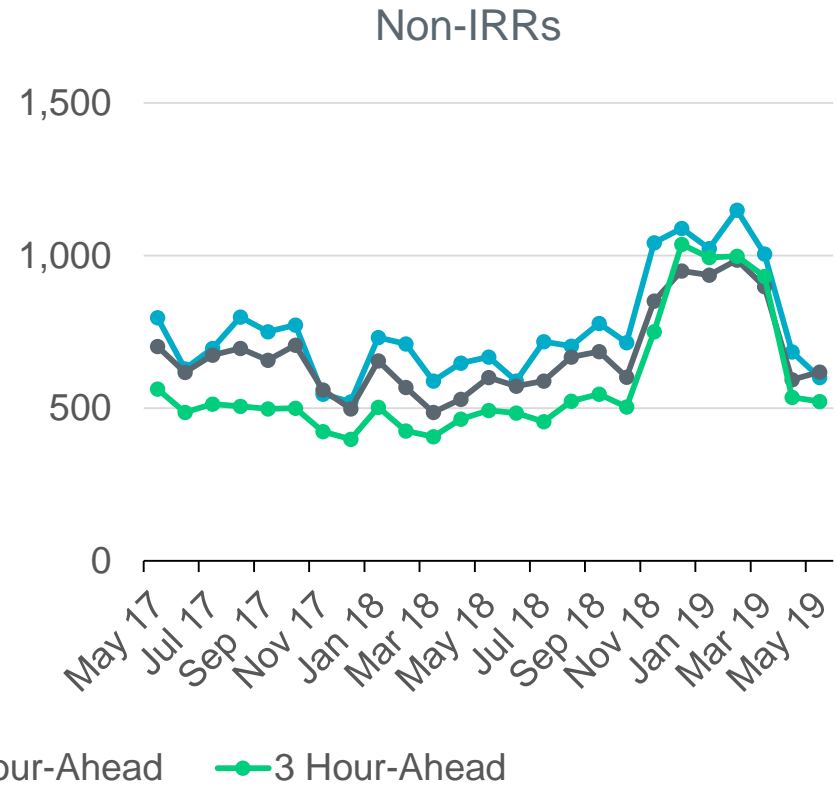
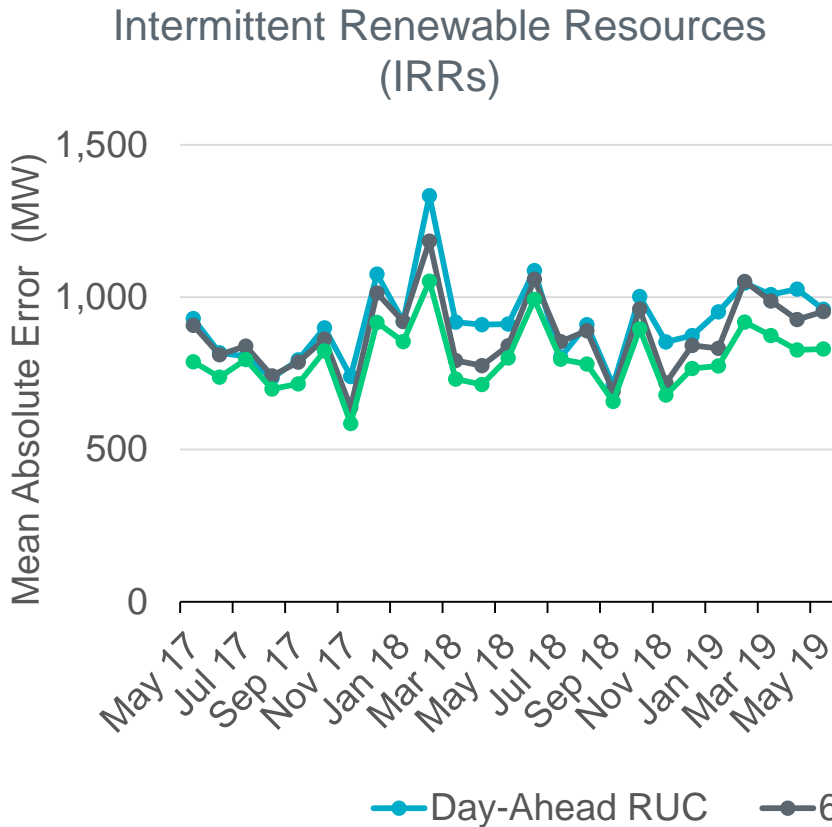


# Wind Forecast Performance



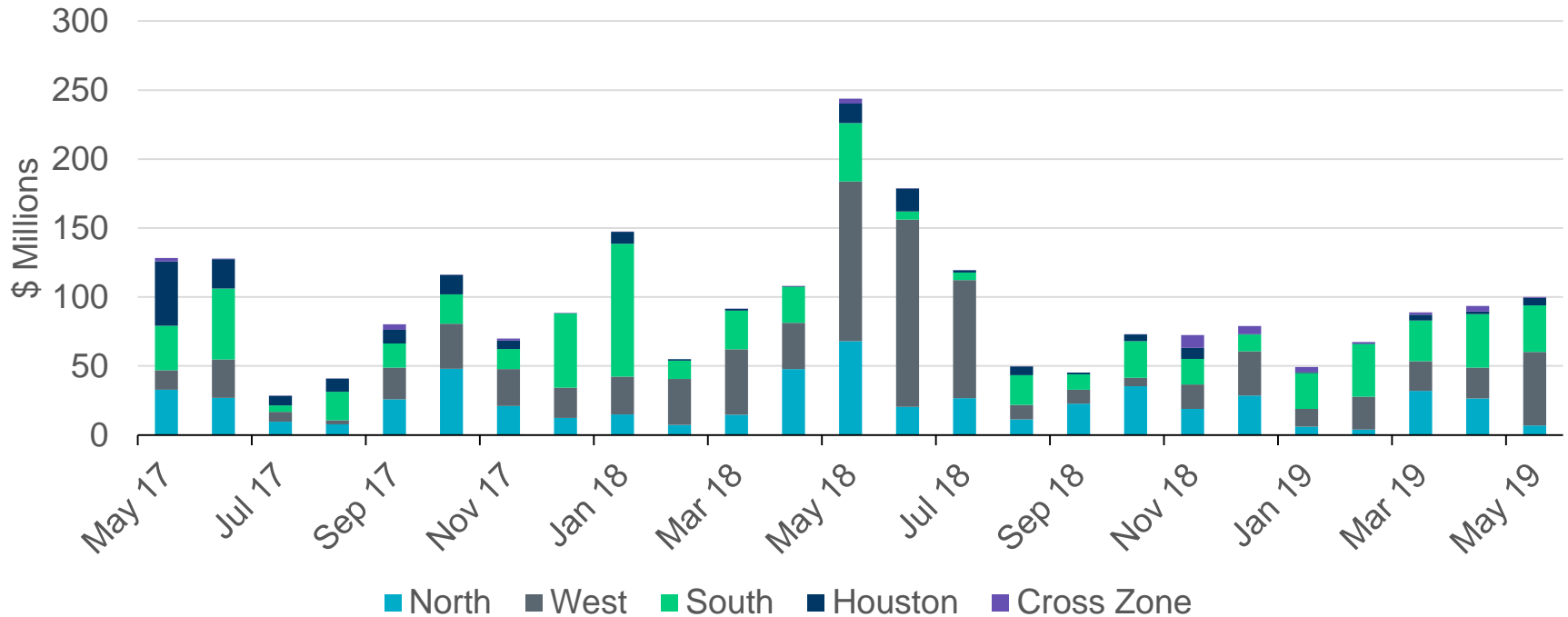
The Short-Term Wind Power Forecast (STWPF) is an ERCOT produced hourly 50% probability of exceedance forecast of the generation in MWh per hour from each Wind Generation Resource.

# Current Operating Plan (COP) Performance



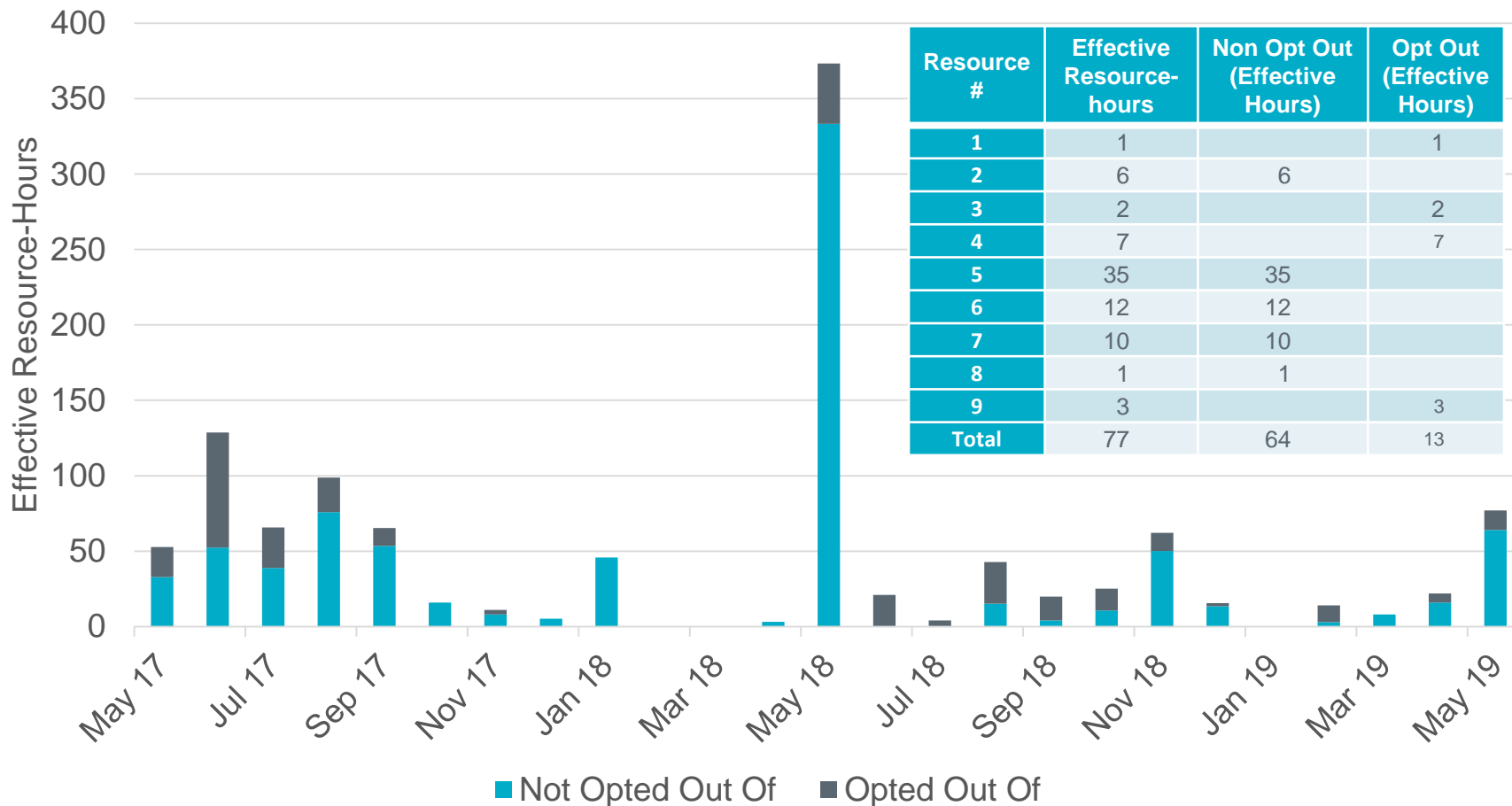
- COPs for IRRs are derived from wind and solar forecasts from ERCOT with any adjustments from Qualified Scheduling Entities.
- The installed capacity of approved IRRs is 23,996 MW (as of May 31, 2019).

# Real-Time Congestion Rent by Zone



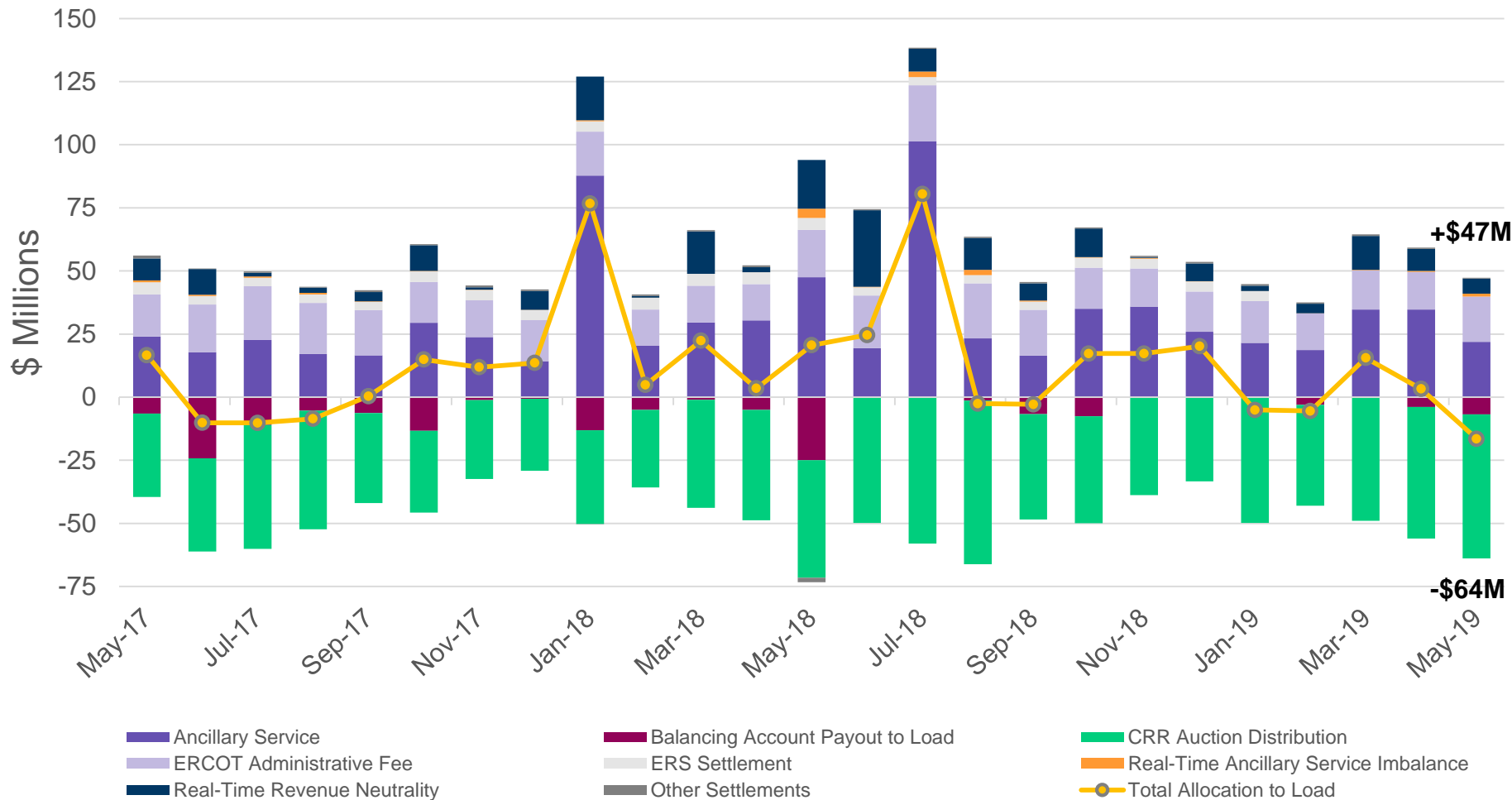
- Congestion rent in the West zone increased in May compared to April in part due to an outage in the West zone. Congestion rent in the North zone decreased in May compared to April in part due to an outage in the North zone ending.
- Congestion Rent is determined using the shadow prices and MW flows for individual constraints in SCED as well as the length in time of SCED intervals.
- The “Cross Zone” category includes cases where the substations on either end of the constraint are in different zones.

# 9 Unique Resources Committed in May for Congestion



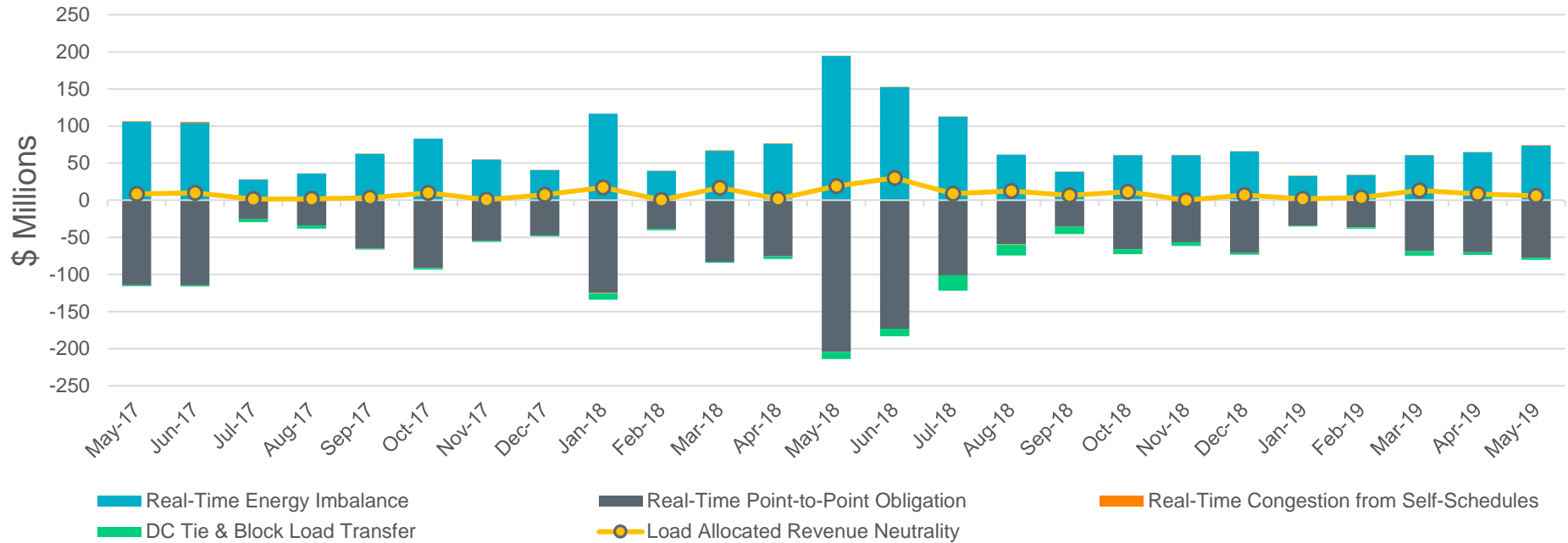
“Effective Resource-Hours” excludes any period during a Reliability Unit Commitment hour when the RUC-committed Resource was starting up, shutting down, or off-line.

# Net Allocation to Load in May 2019 was -\$16.5 Million



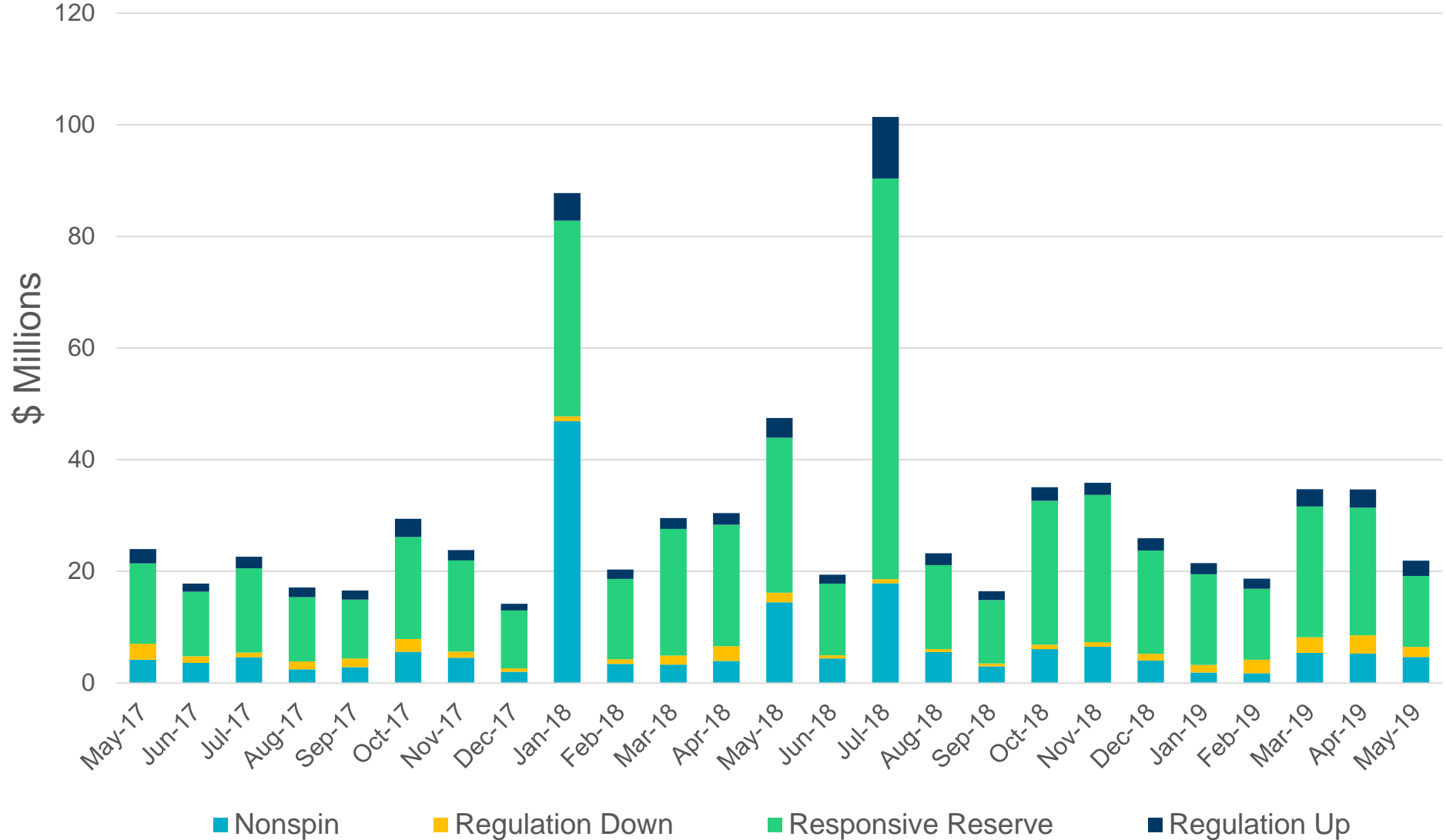
This information is available in tabular form in the Settlement Stability Report presented quarterly to the [Market Settlement Working Group](#) and [Wholesale Market Subcommittee](#)

# Real-Time Revenue Neutrality Allocated to Load was \$5.97M for May 2019

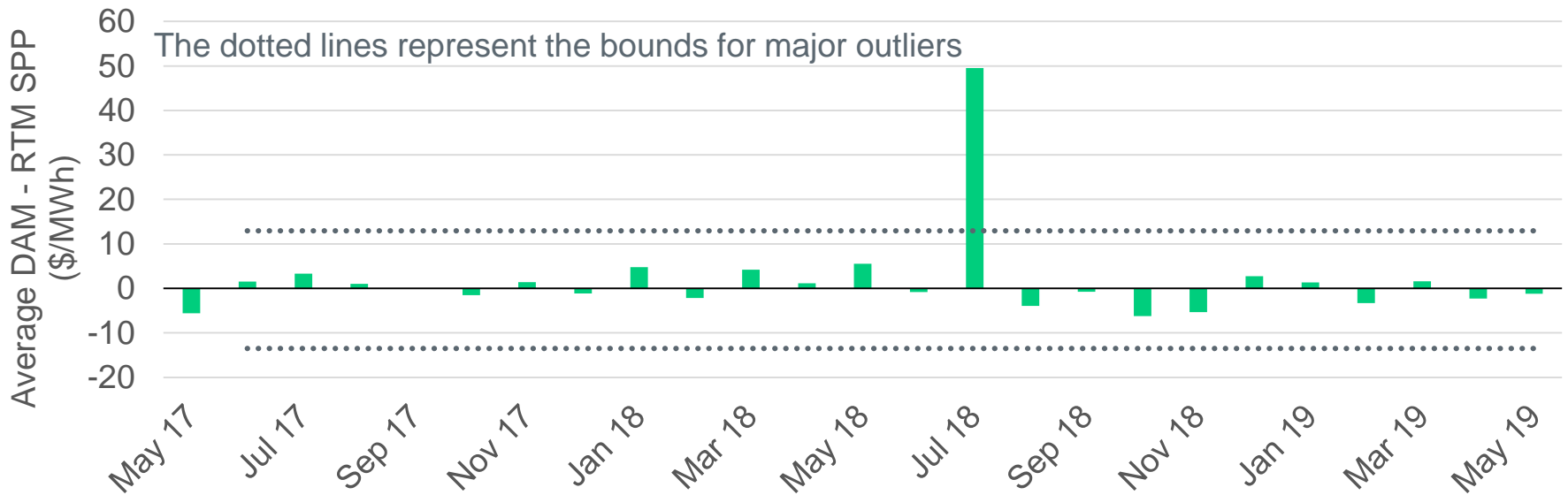
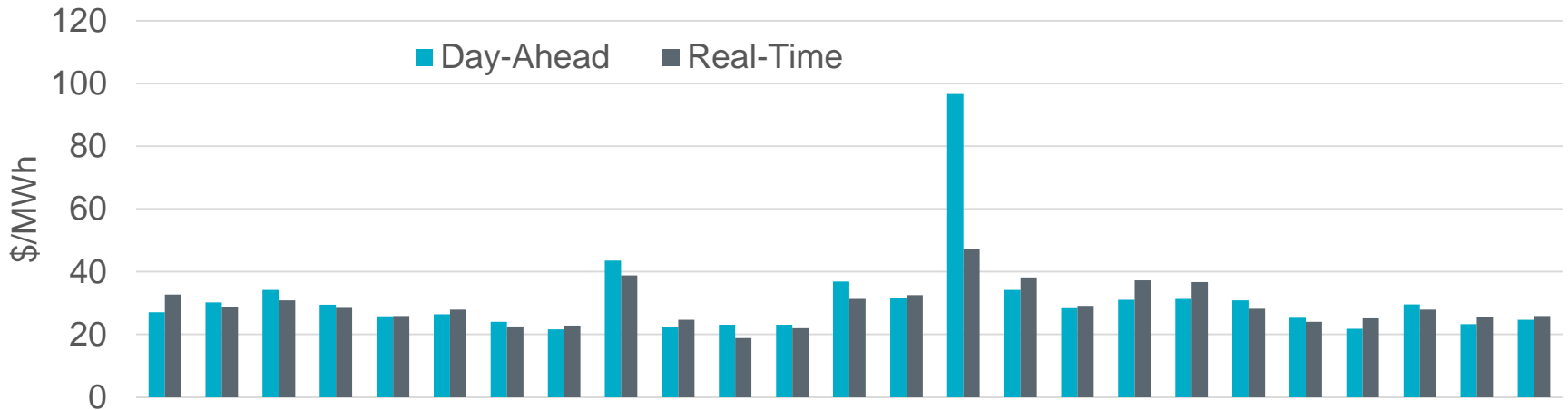


May 2019 (\$M)	
Real-Time Energy Imbalance	\$73.69
Real-Time Point-to-Point Obligation	(\$77.15)
Real-Time Congestion from Self-Schedules	\$0.55
DC Tie & Block Load Transfer	(\$3.06)
<b>Load Allocated Revenue Neutrality</b>	<b>\$5.97</b>

# Ancillary Services for May 2019 totaled \$21.92M

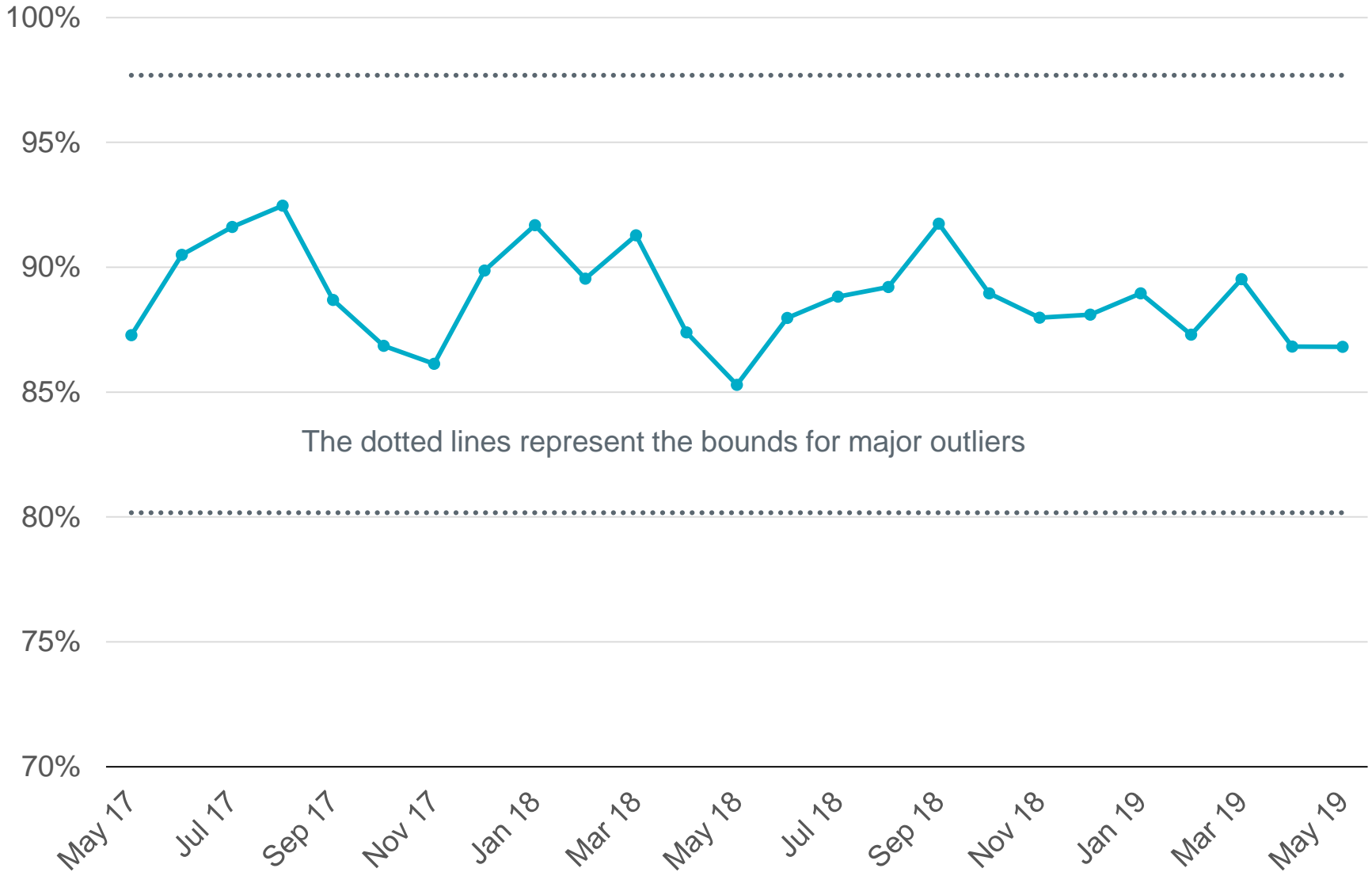


# Day-Ahead and Real-Time Market Price Differences

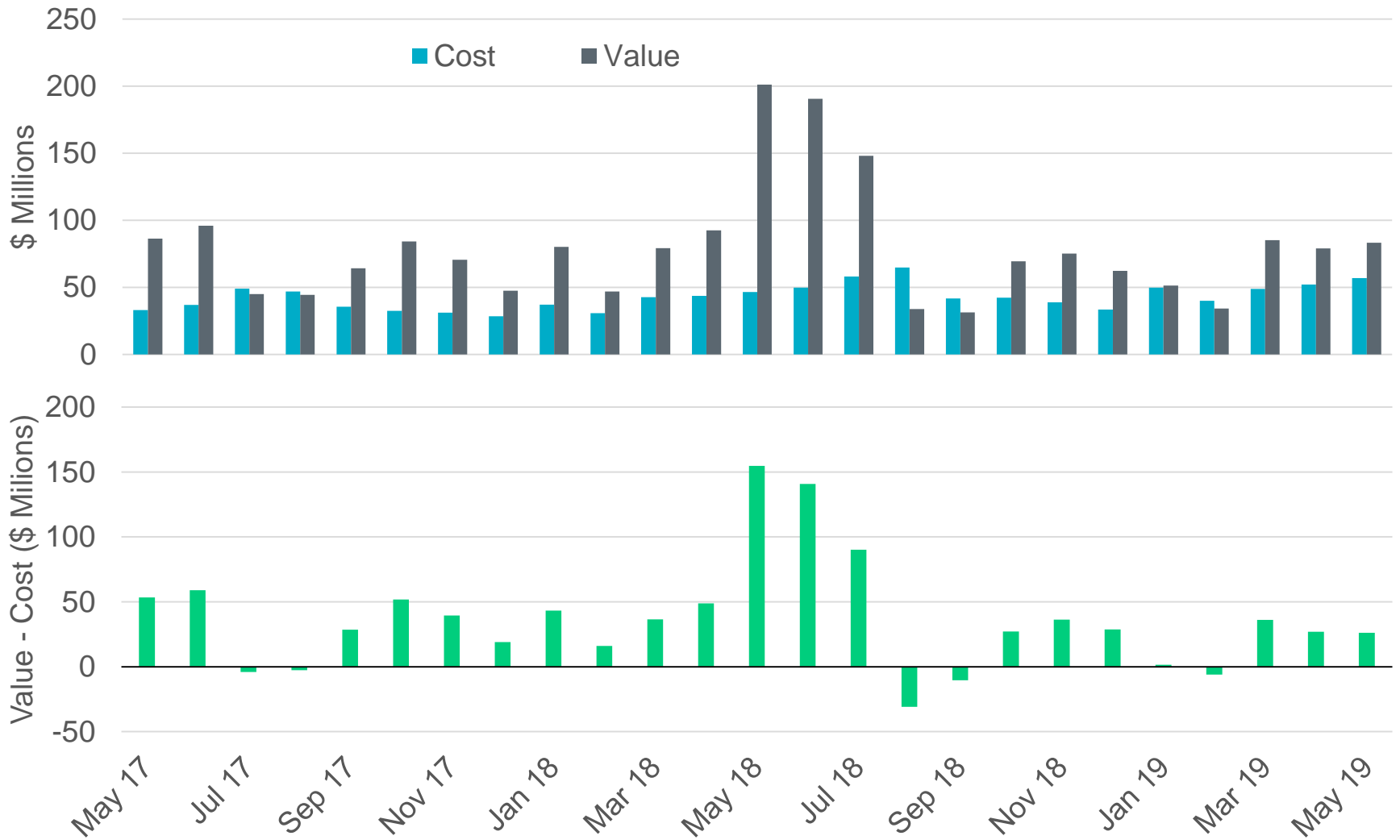




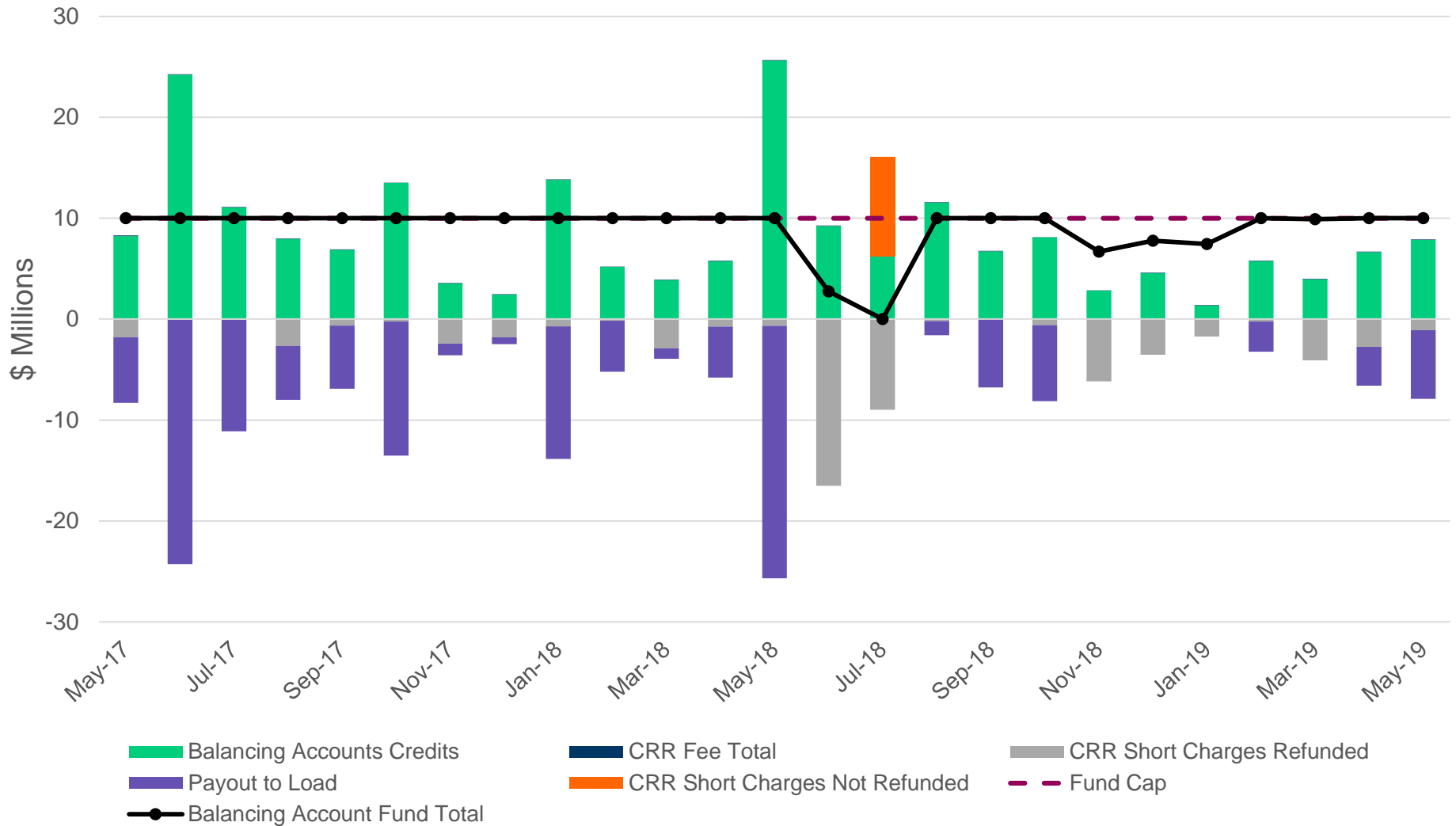
# Percentage of Real-Time Load Transacted in the Day-Ahead Market



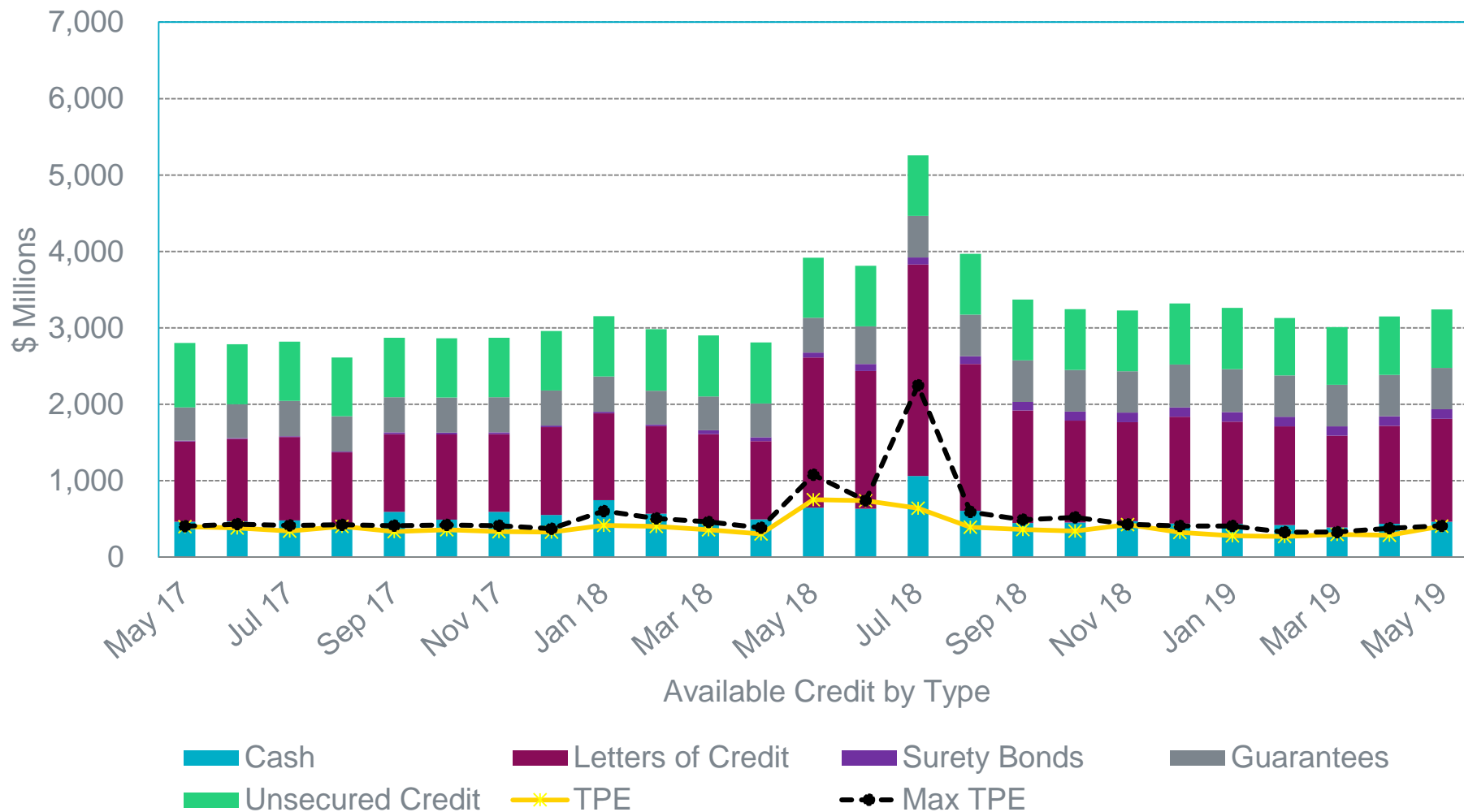
# CRR Value and Cost Differences



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



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



# Retail Transaction Volumes – Summary – May 2019

Transaction Type	Year-To-Date		Transactions Received	
	May 2019	May 2018	May 2019	May 2018
Switches	561,018	438,330	145,059	96,828
Acquisition	0	0	0	0
Move - Ins	1,183,475	1,139,790	253,622	244,431
Move - Outs	547,632	558,889	123,888	124,403
Continuous Service Agreements (CSA)	533,293	293,644	67,292	99,016
Mass Transitions		0	0	0
<b>Total</b>	<b>2,825,418</b>	<b>2,439,697</b>	<b>589,861</b>	<b>573,712</b>