

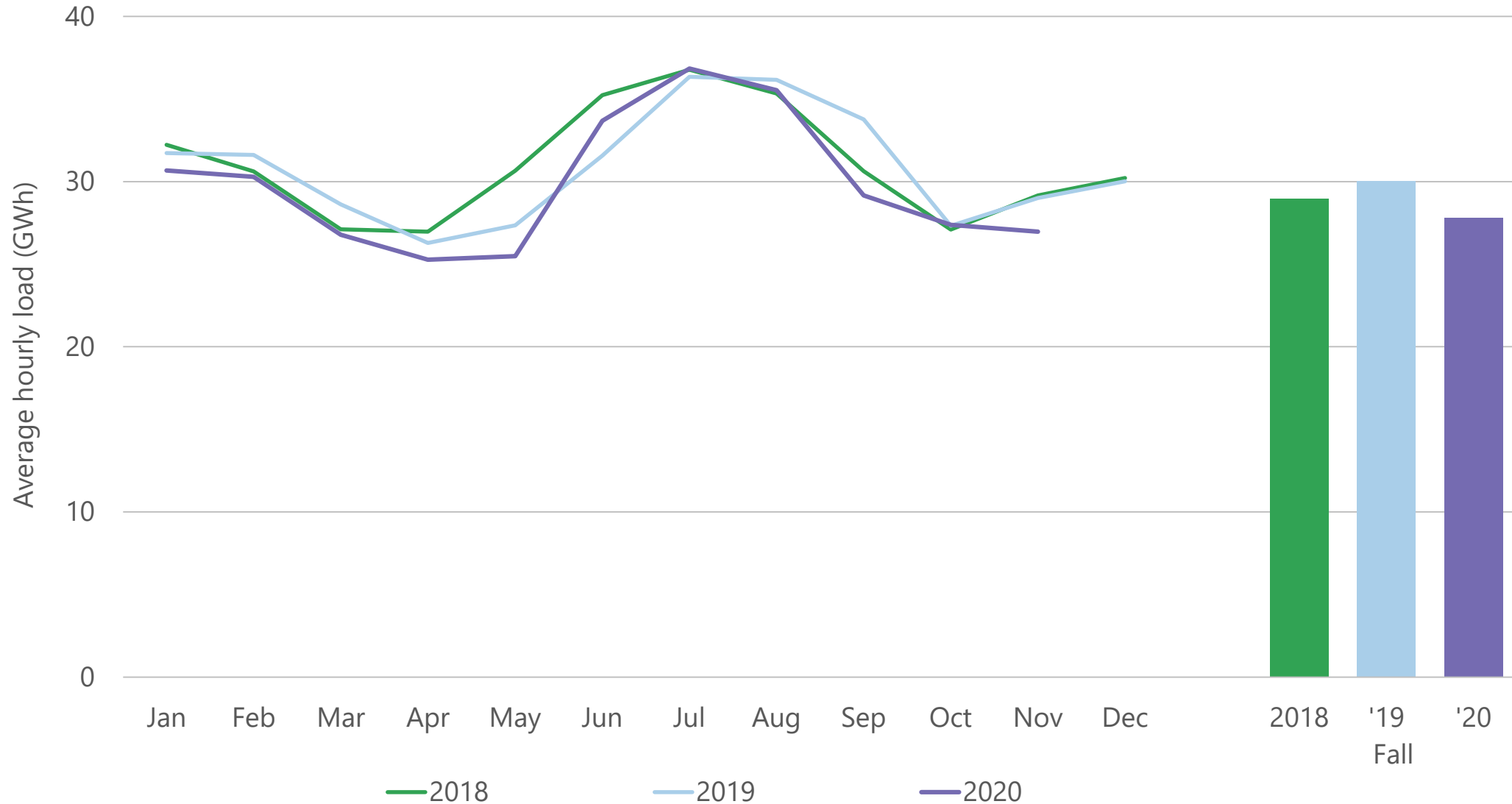
FALL 2020

QUARTERLY REPORT

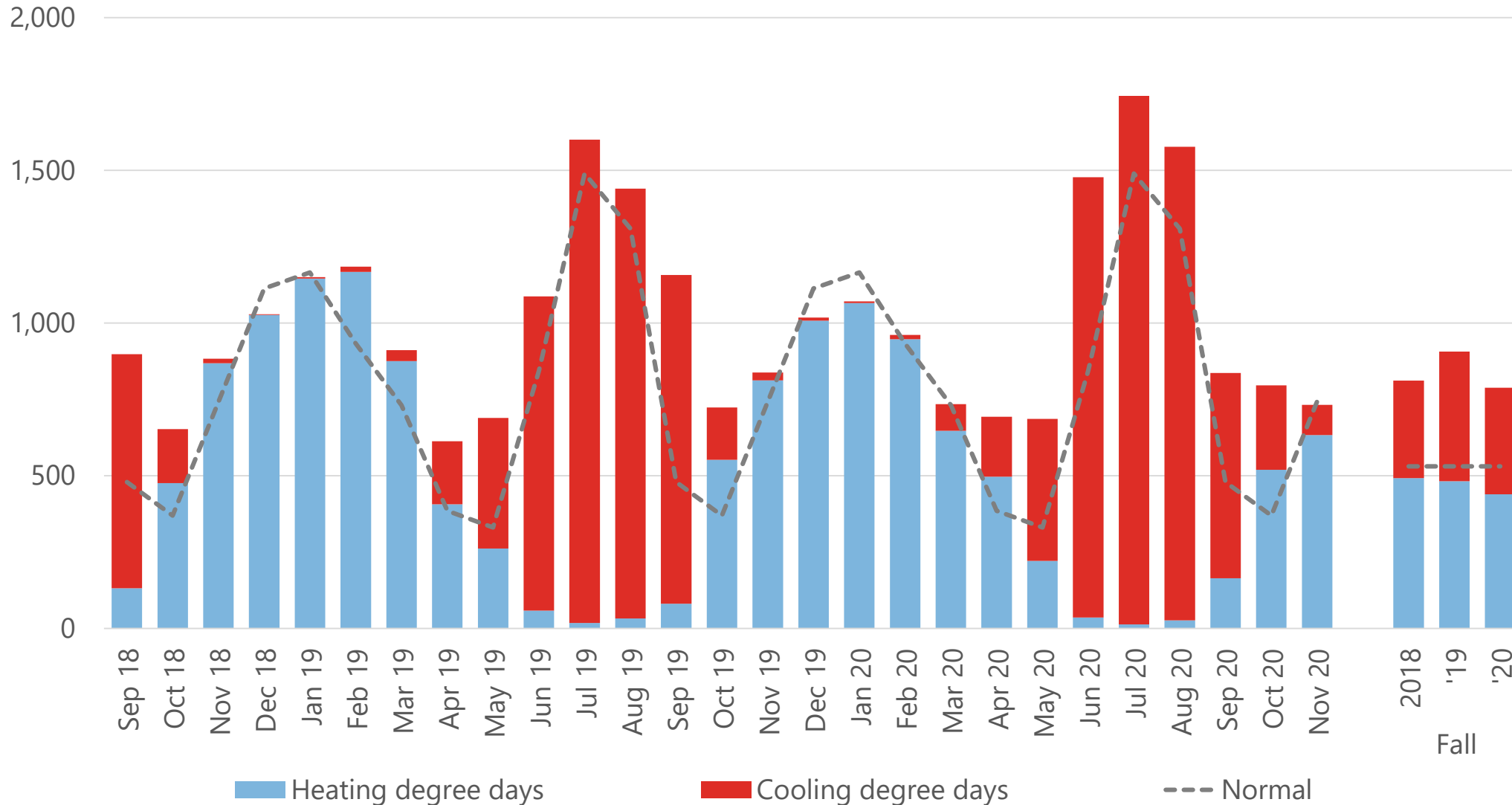
FALL 2020 HIGHLIGHTS

- Overall, load and generation were both down from 2019.
- Generation by wind resources provided the largest share of total generation, followed by coal resources.
- Net market-to-market payments for November were the highest since the start of the market-to-market process.
- November saw the highest level of profit for virtual transactions since the start of the market.
- Areas with the highest prices – and most congestion – were around the southeast portion of the SPP footprint.
- The special issues section reviews the Coordinated Transaction Scheduling process.

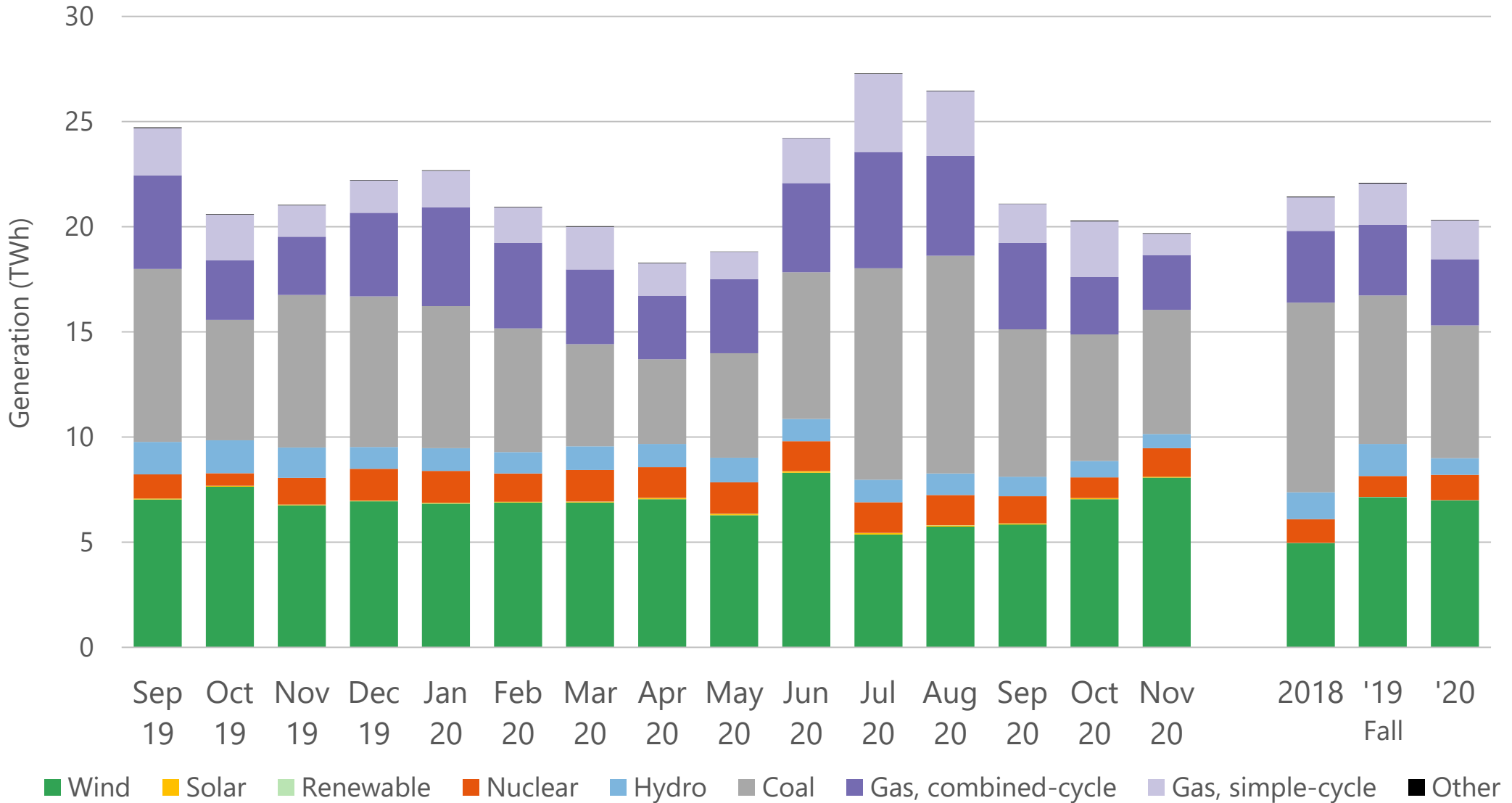
OVERALL LOAD DOWN SLIGHTLY



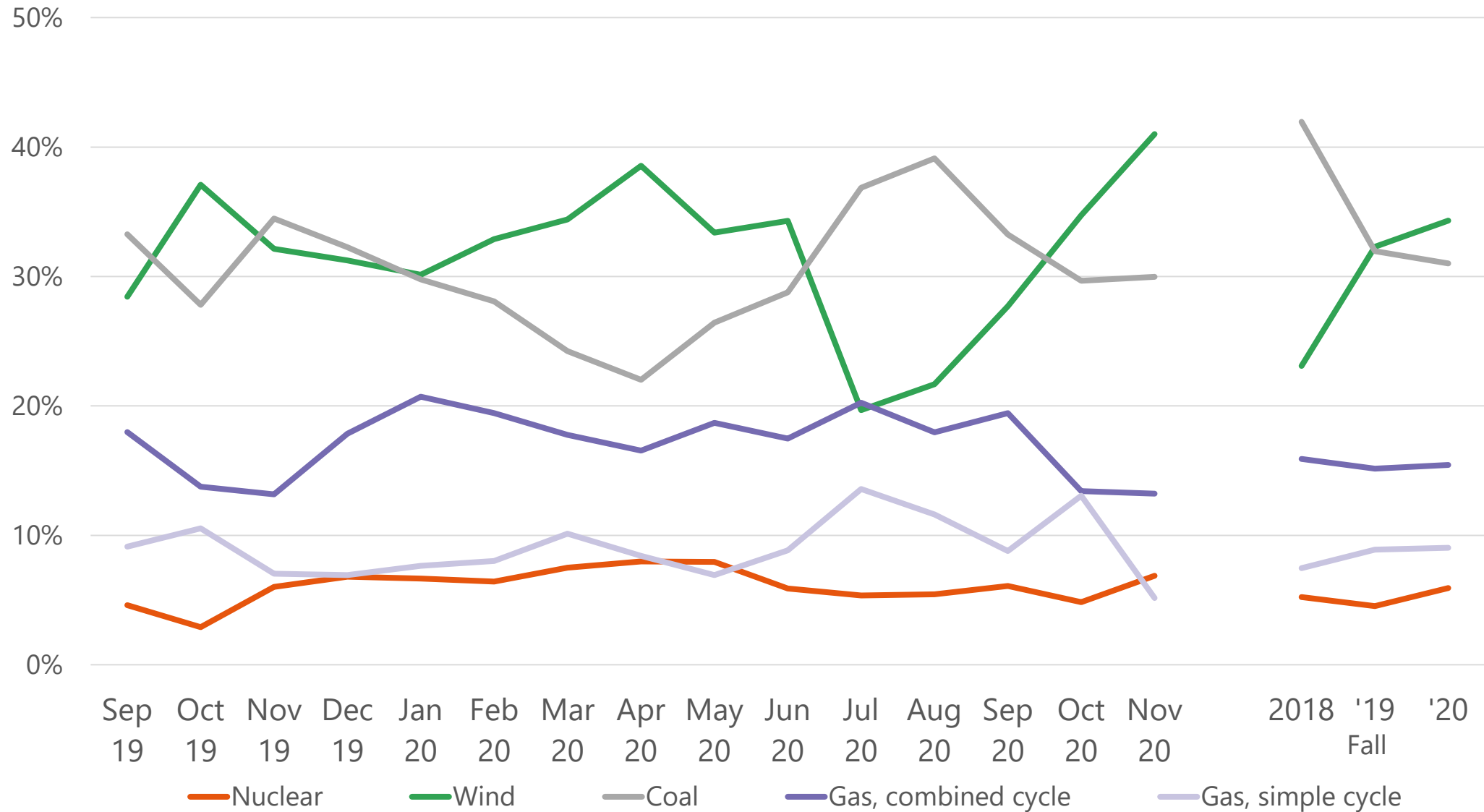
TEMPERATURES WERE COOLER IN SEPTEMBER, WARMER IN NOVEMBER



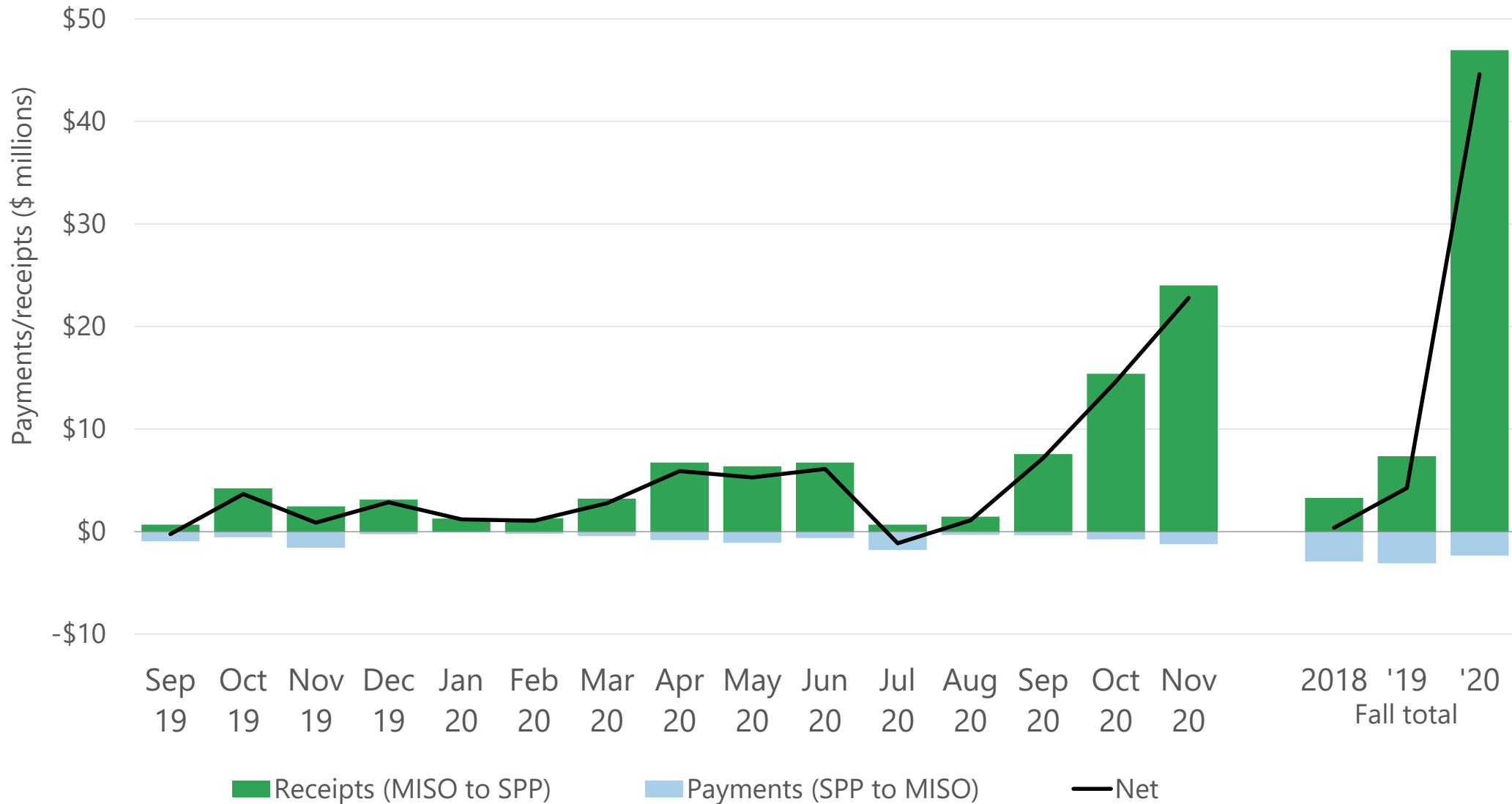
GENERATION WAS DOWN



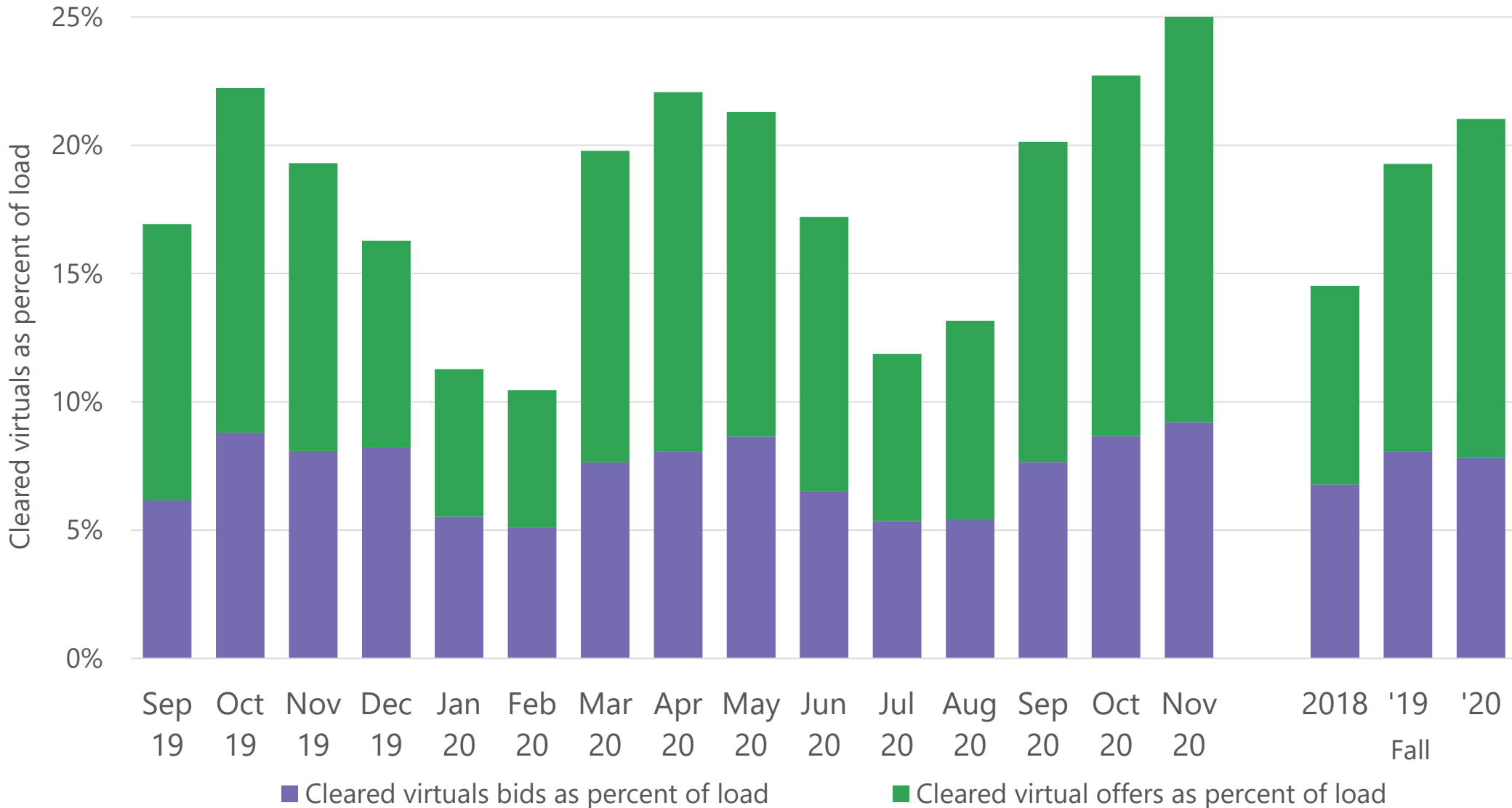
WIND HAD HIGHEST GENERATION BY FUEL TYPE



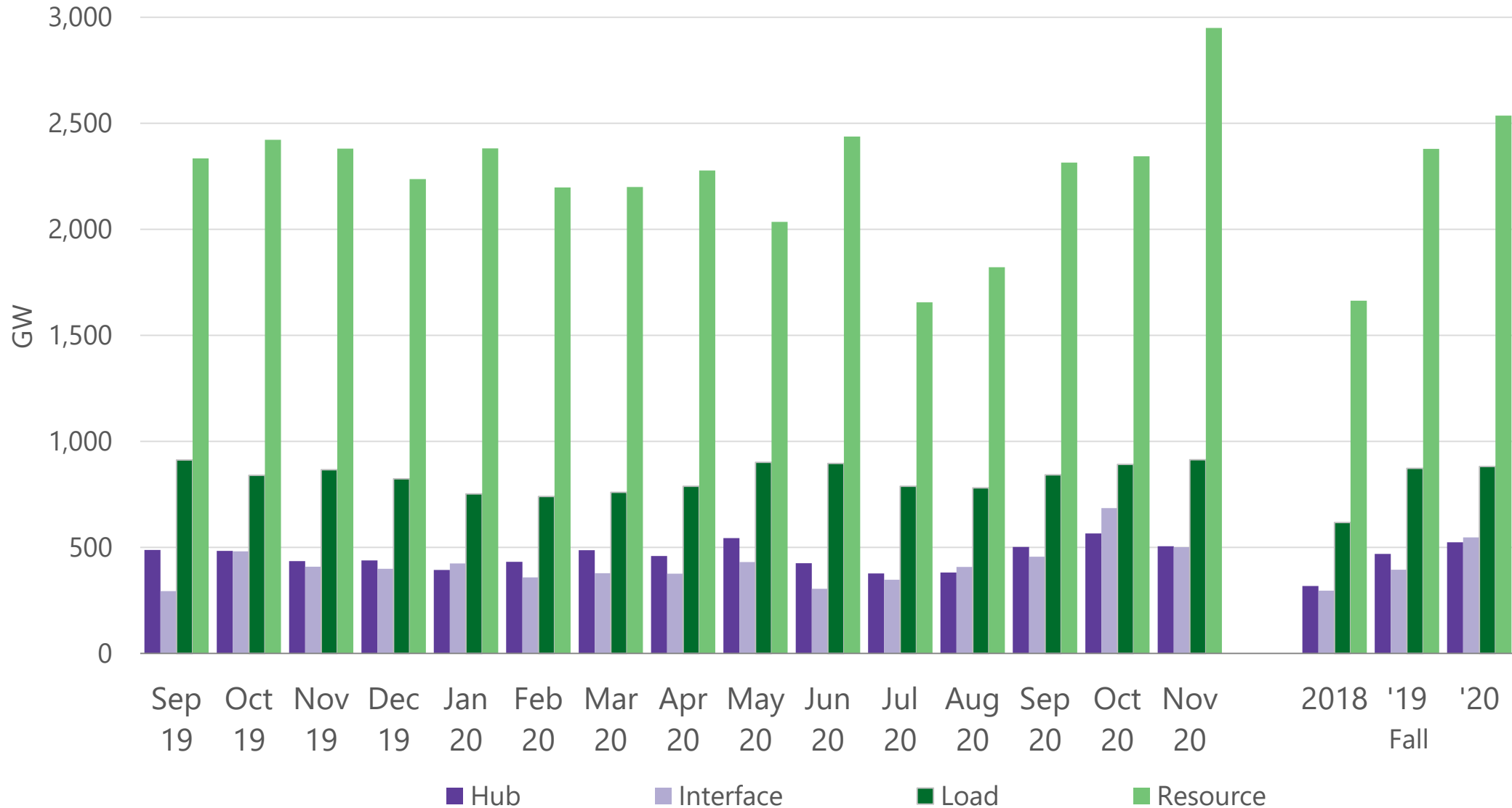
HIGH MARKET-TO-MARKET PAYMENTS FROM MISO



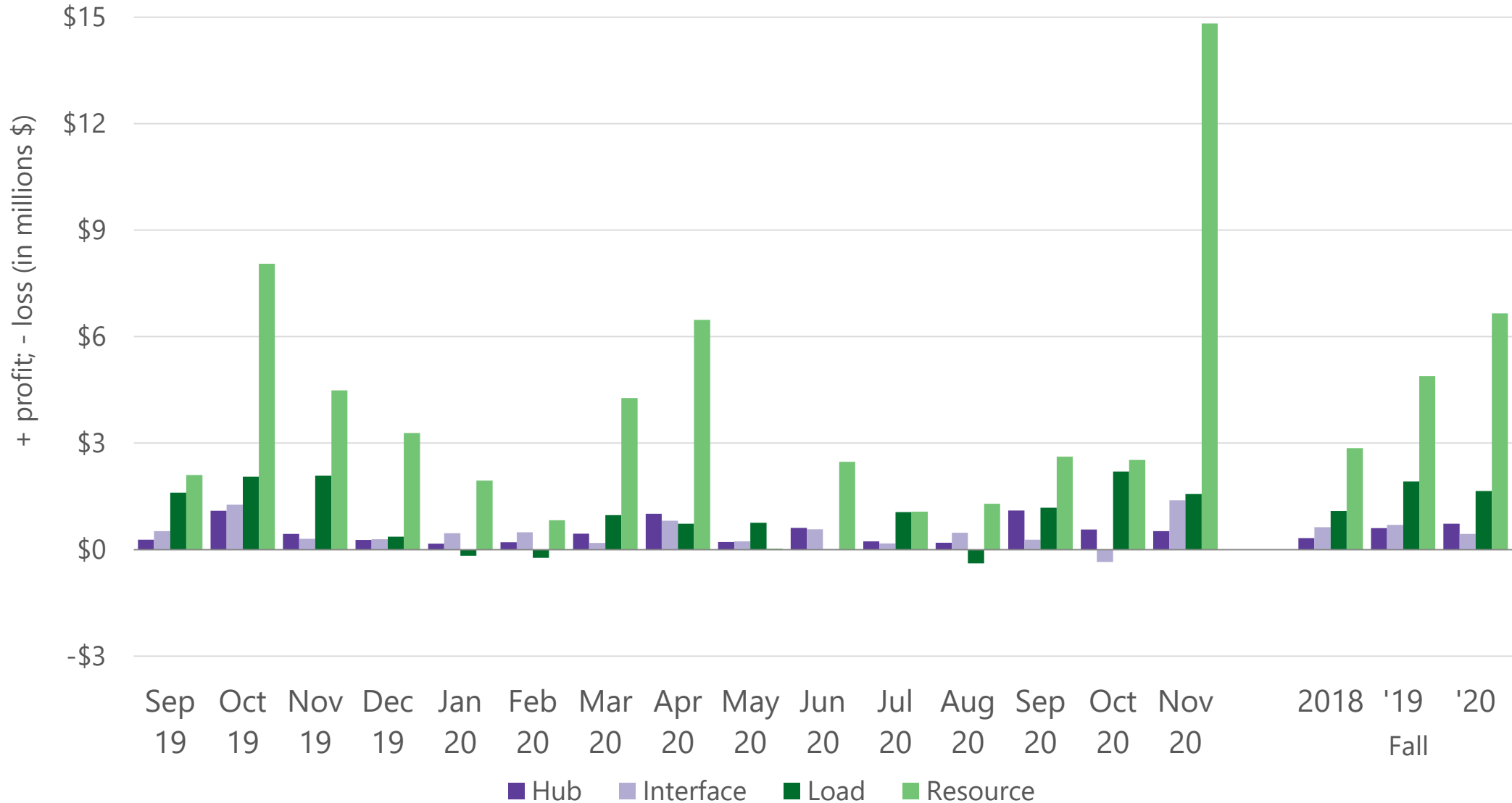
VIRTUAL TRANSACTIONS CONTINUED TO GROW



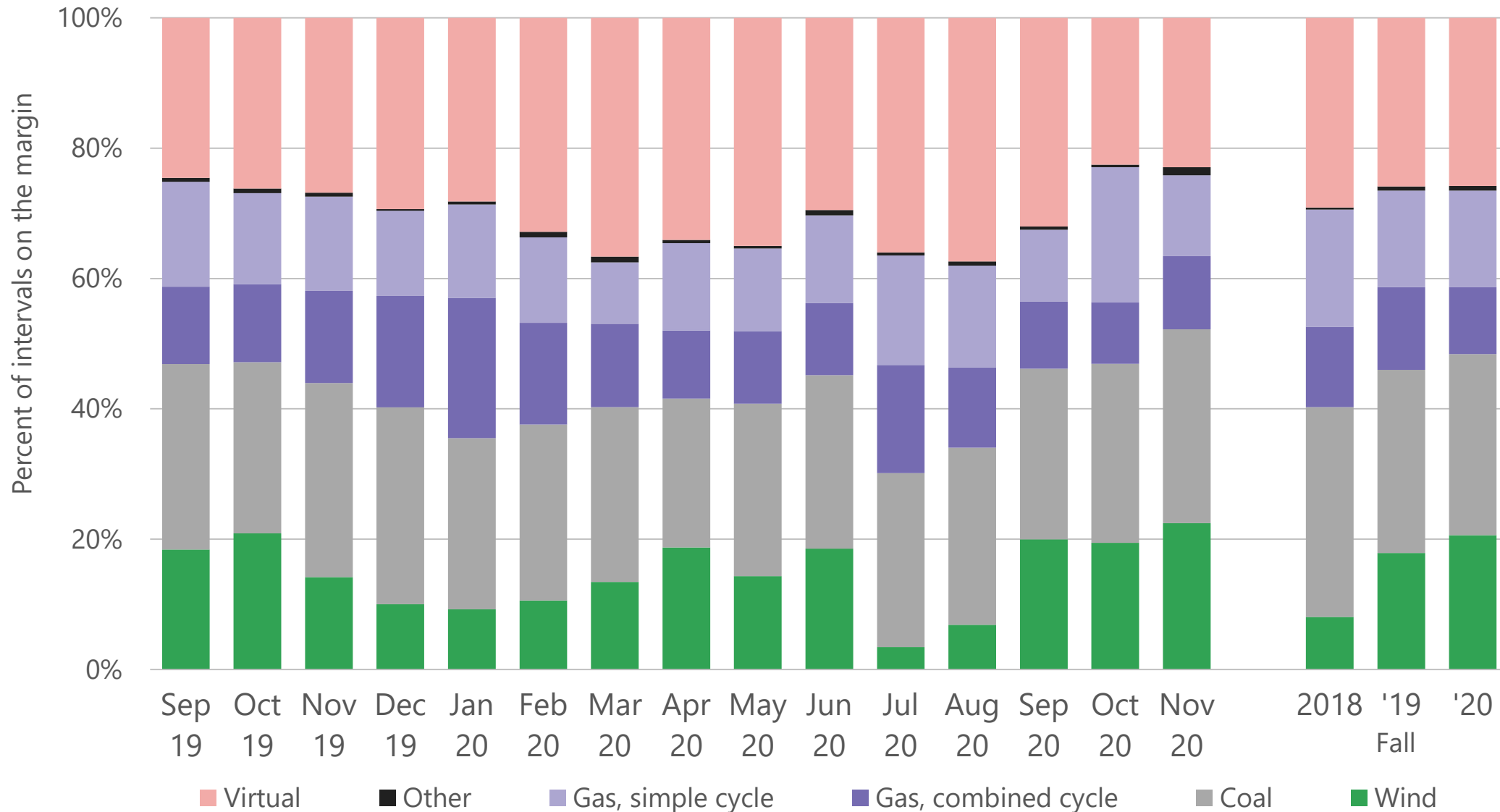
MOST VIRTUALS AT RESOURCE LOCATIONS



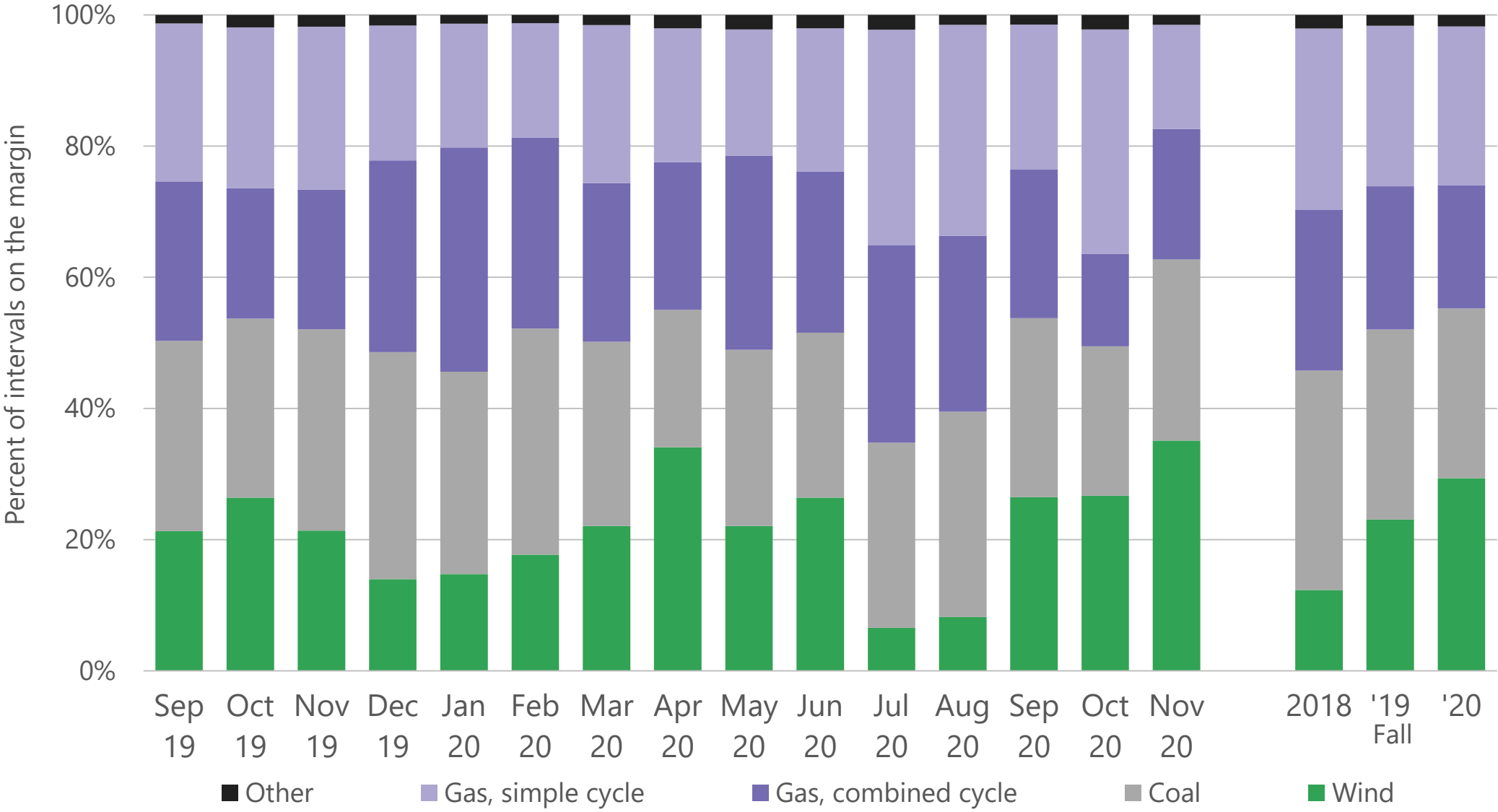
NOVEMBER HIGHEST MONTH FOR VIRTUAL PROFITS



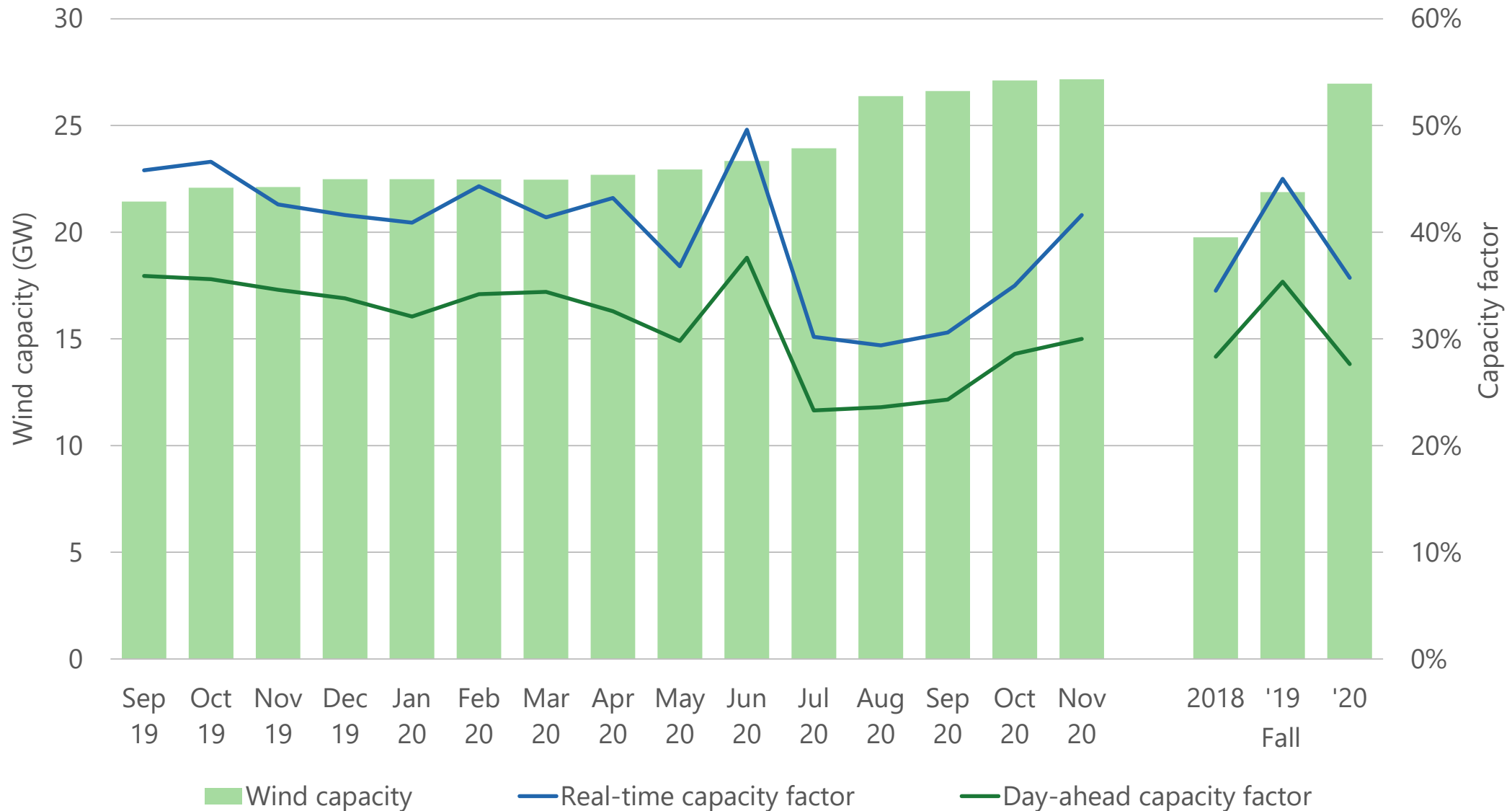
COAL SET PRICES MOST FREQUENTLY IN DAY-AHEAD



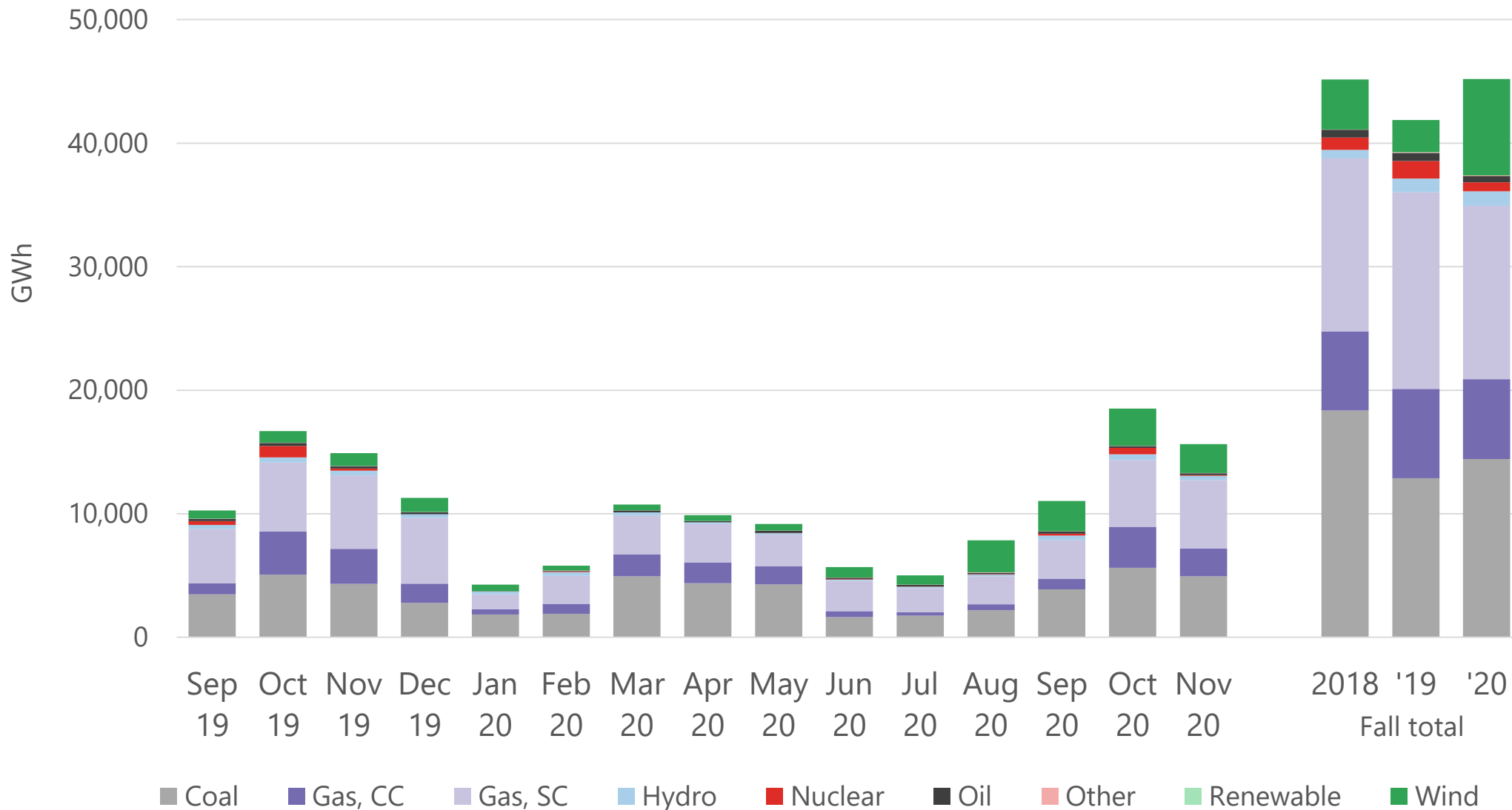
PRICES SET MOST BY WIND IN REAL-TIME



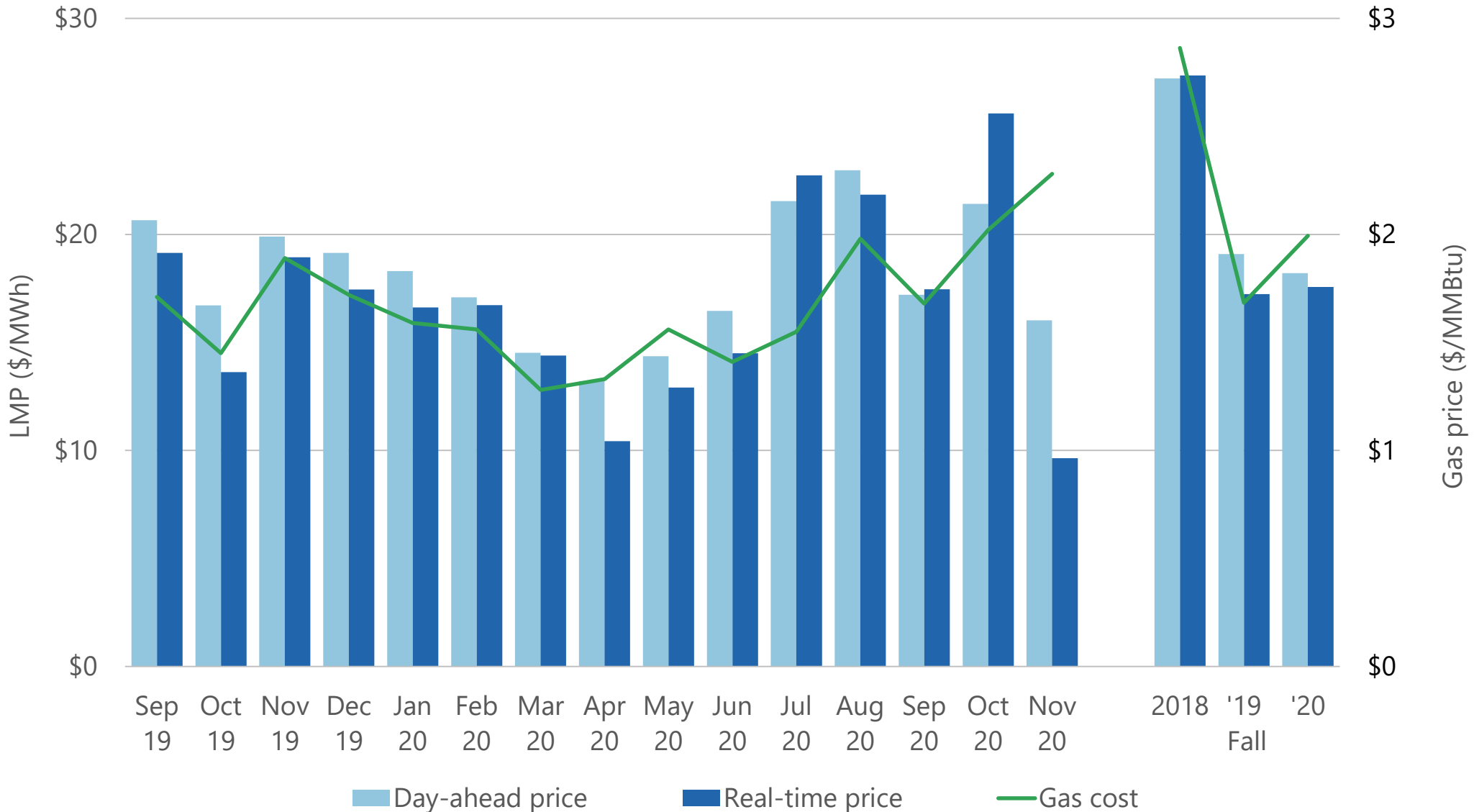
WIND CAPACITY CONTINUED TO GROW



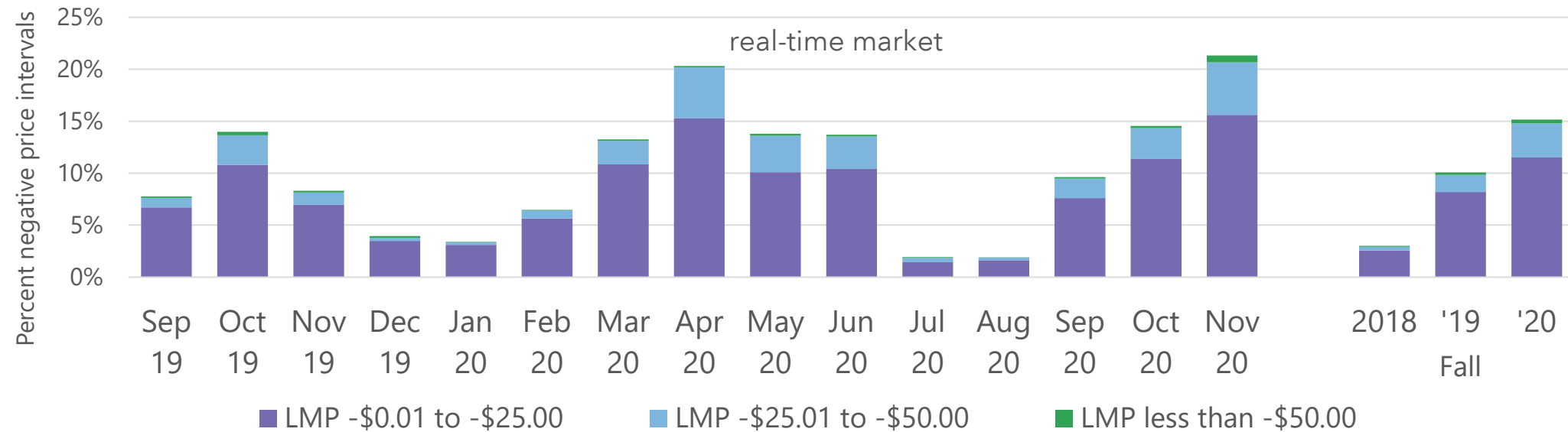
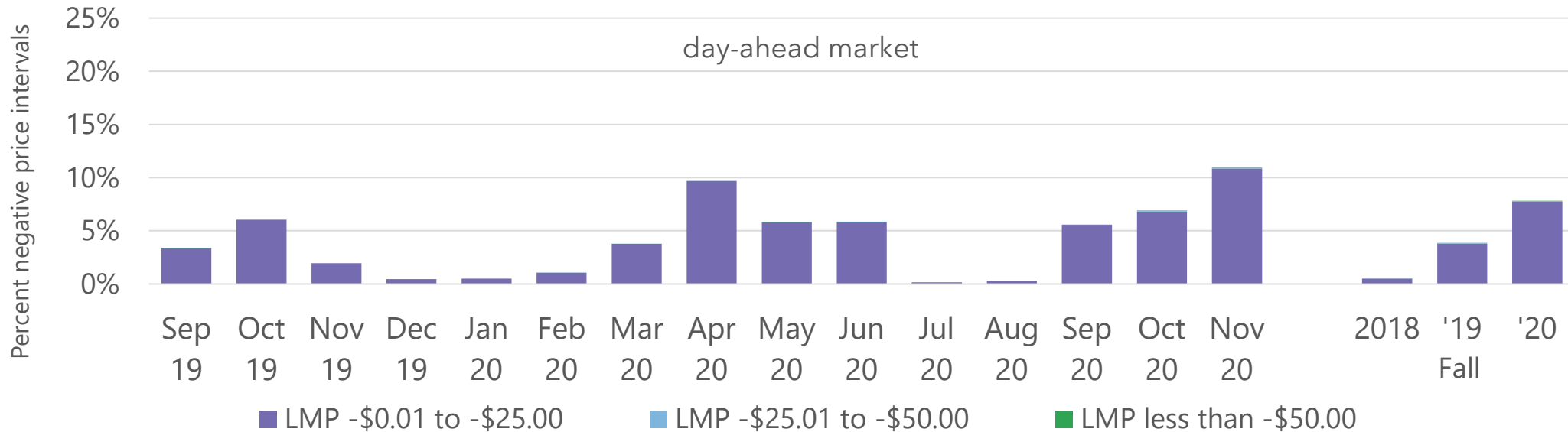
OUTAGES GREW SLIGHTLY



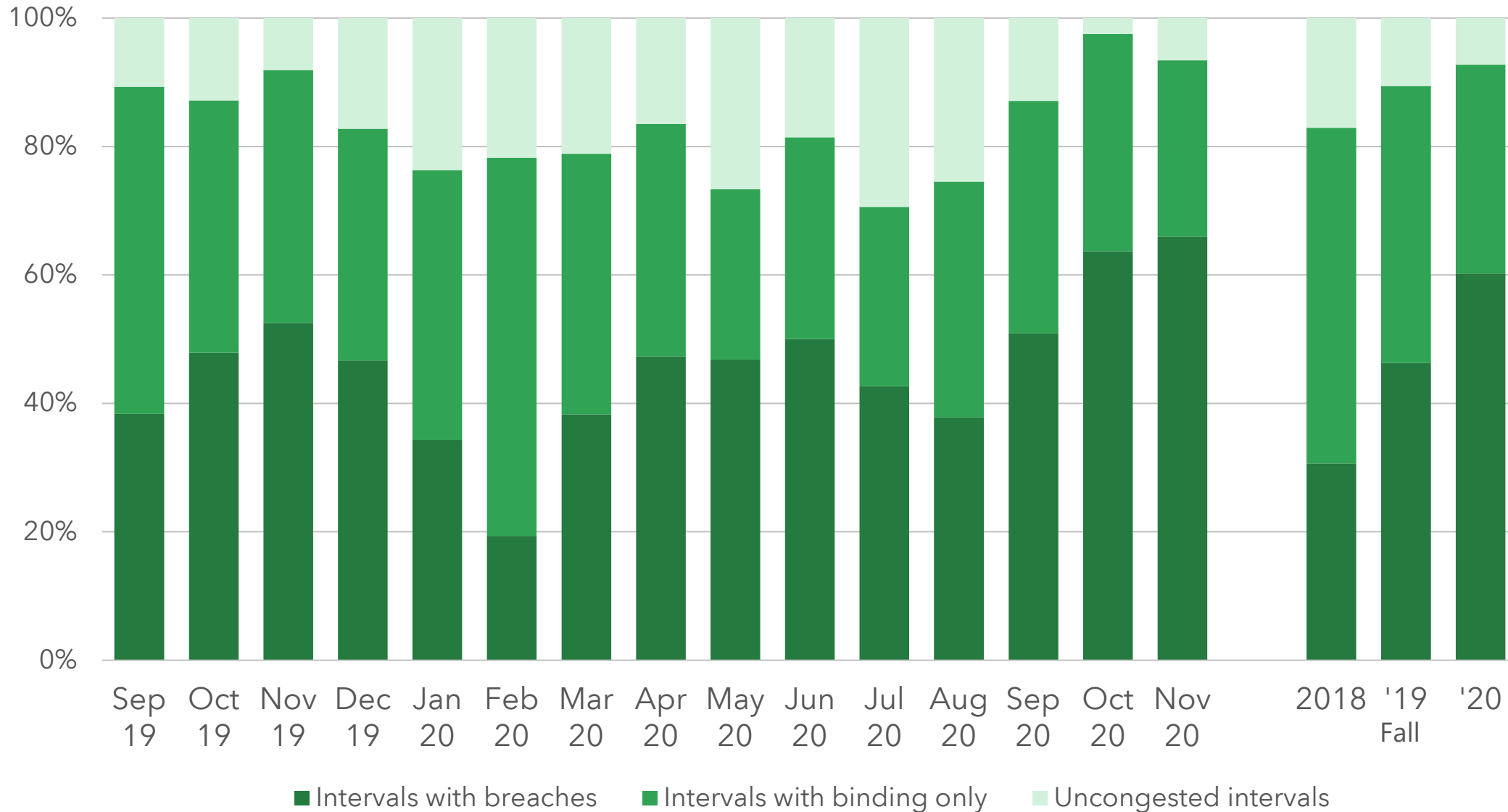
ON AVERAGE, PRICES REMAINED STEADY FROM 2019



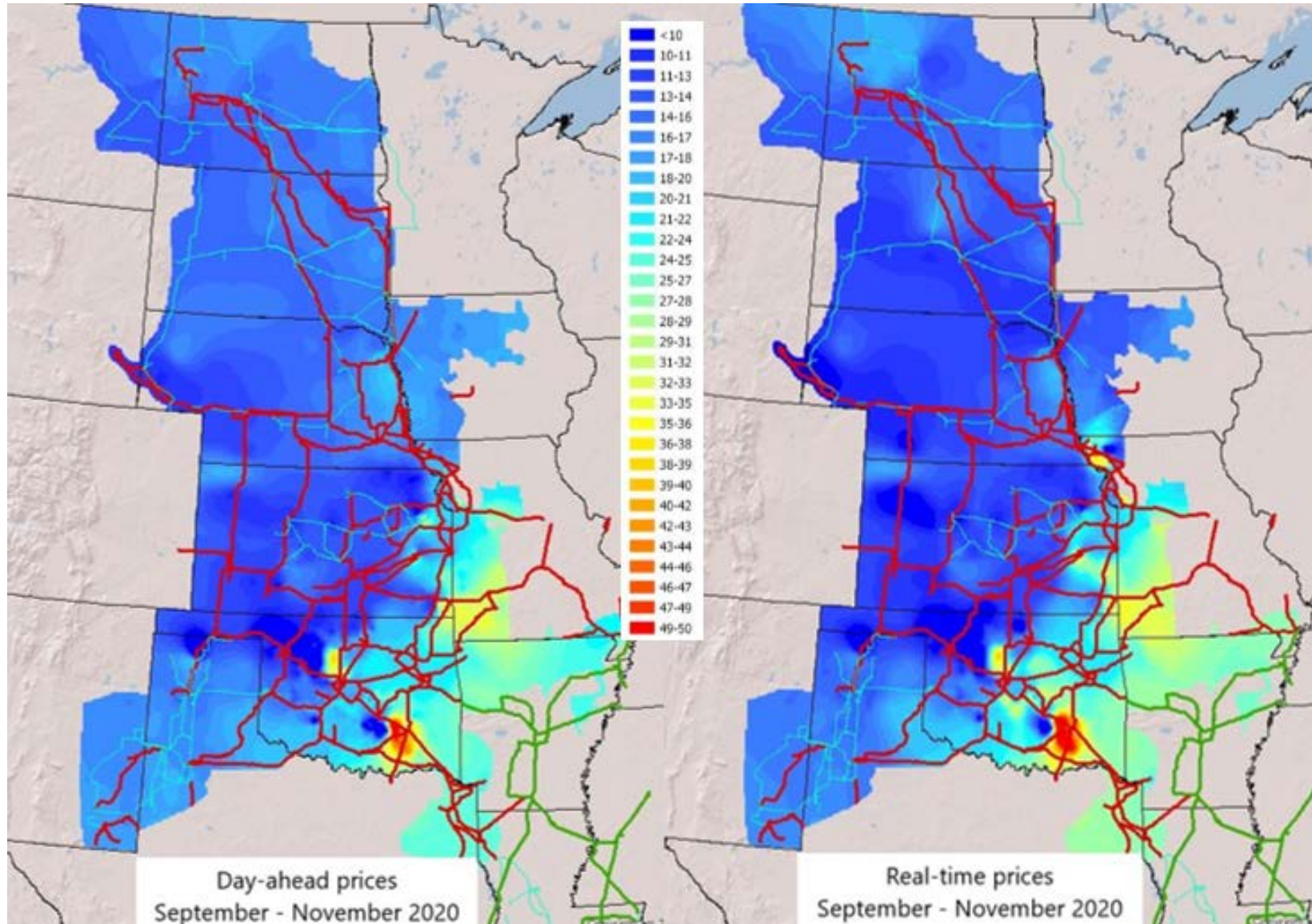
NEGATIVE PRICE INTERVALS CLIMBED



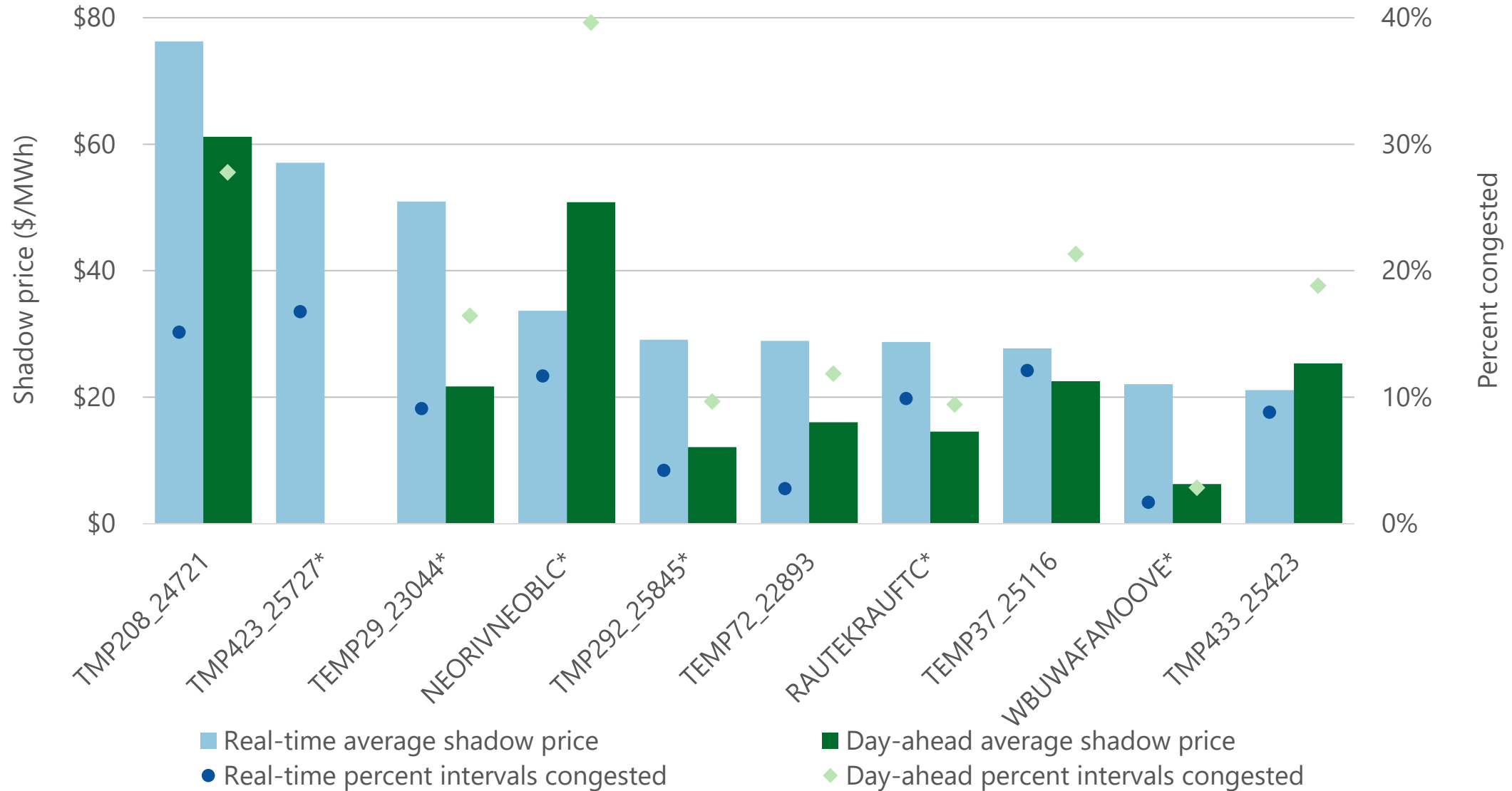
REAL-TIME BREACHED INTERVALS INCREASED



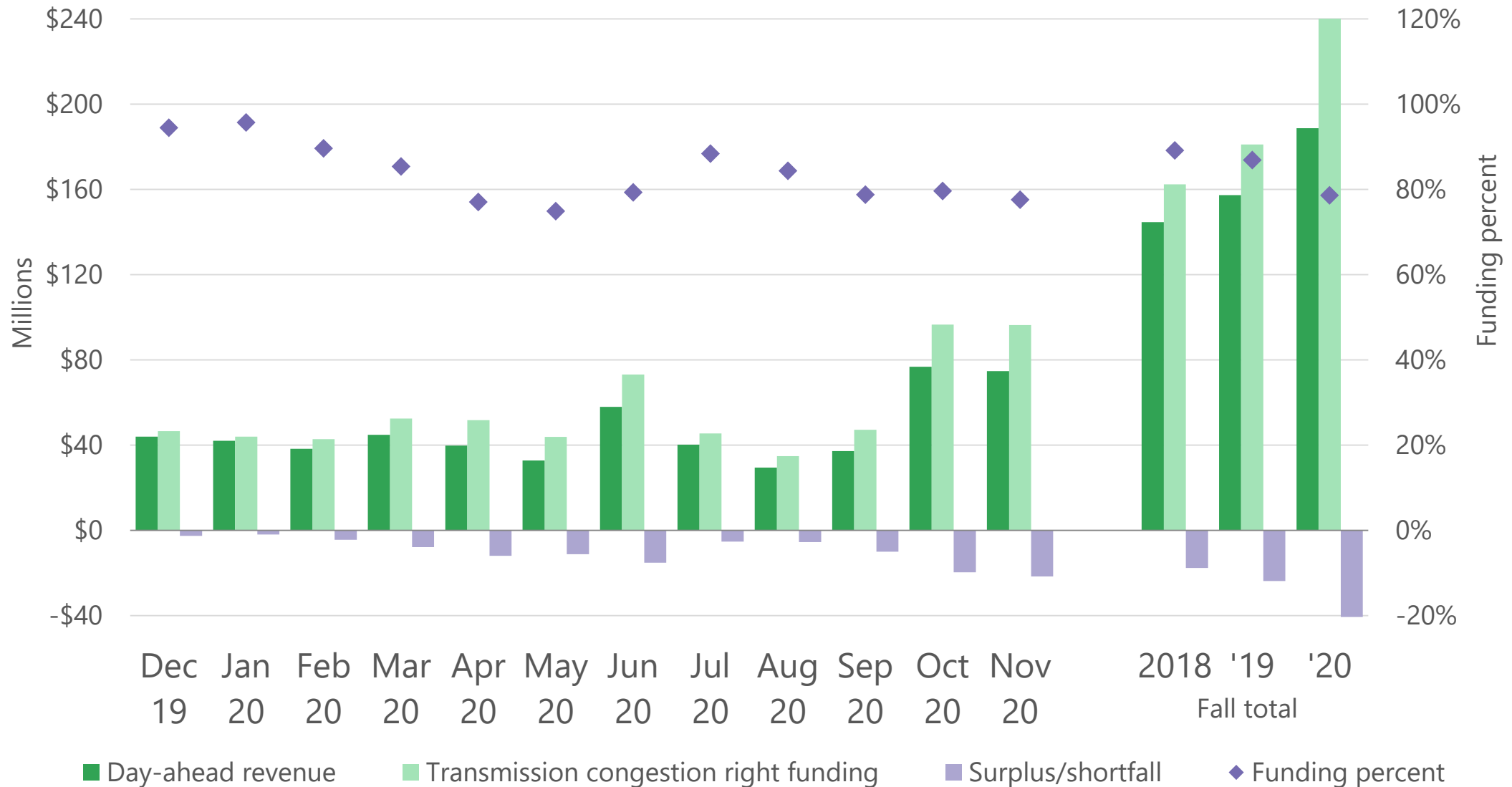
CONGESTION PATTERN SIMILAR BETWEEN MARKETS



CONGESTION HIGHEST IN OKLAHOMA AND WESTERN MISSOURI

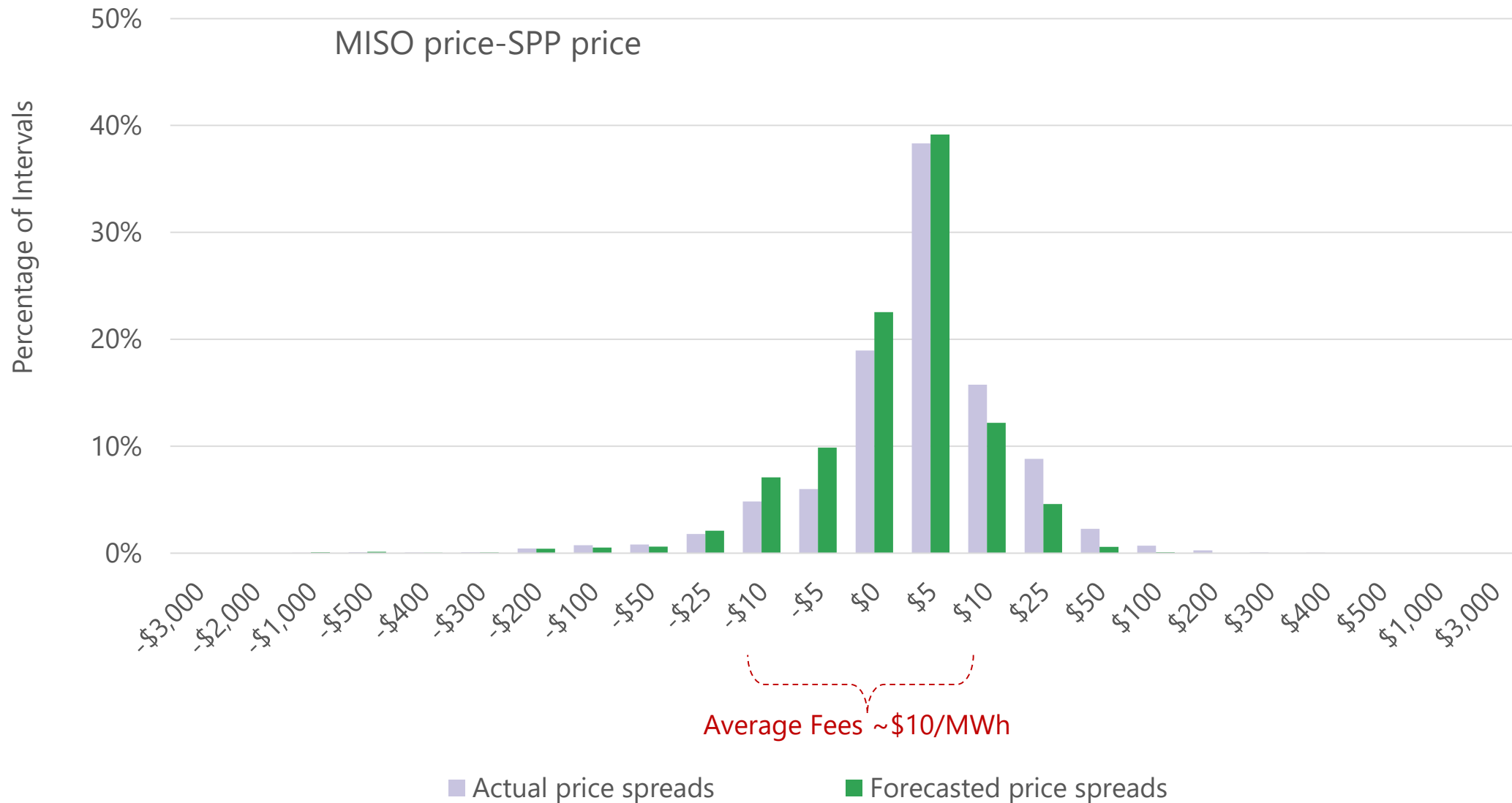


TCRs REMAIN UNDERFUNDED

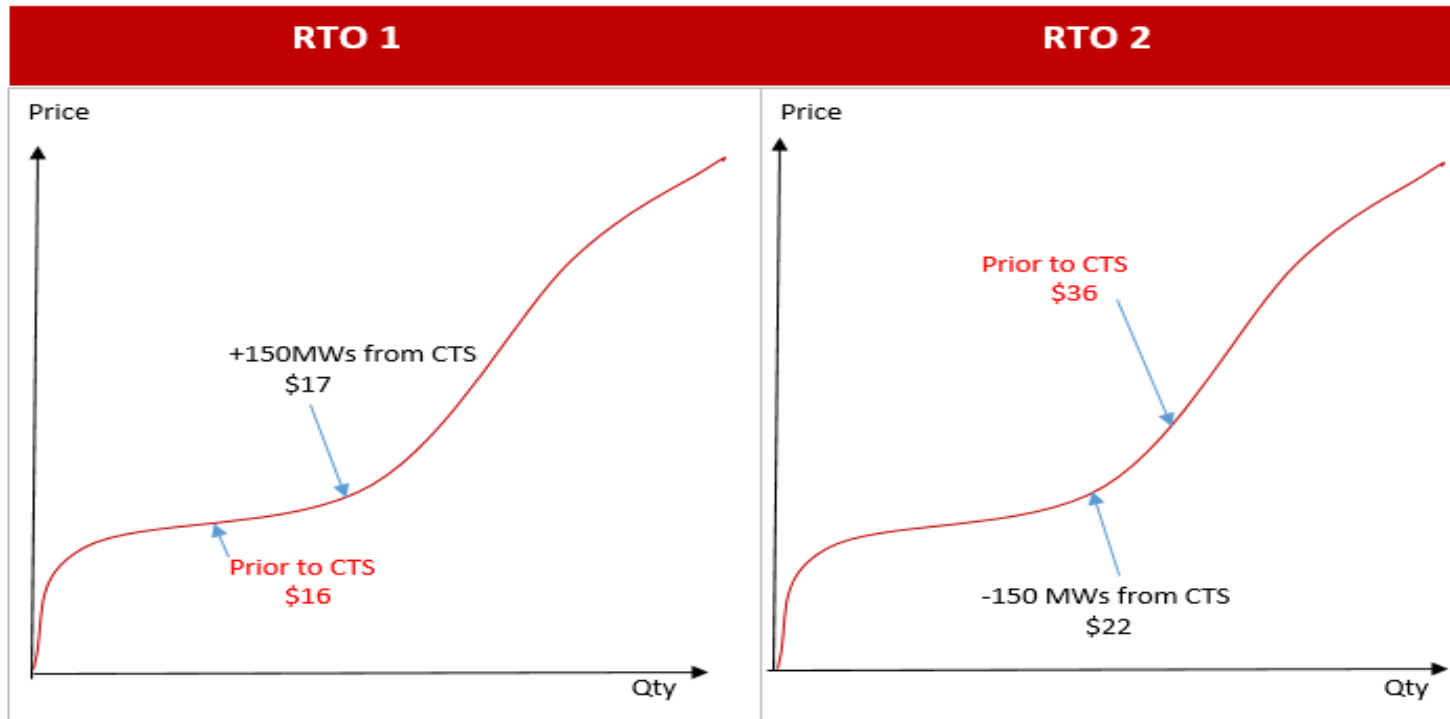


COORDINATED TRANSACTION SCHEDULING

FORECASTED AND ACTUAL PRICE SPREADS



SUPPLY CURVE SHARING EXAMPLE



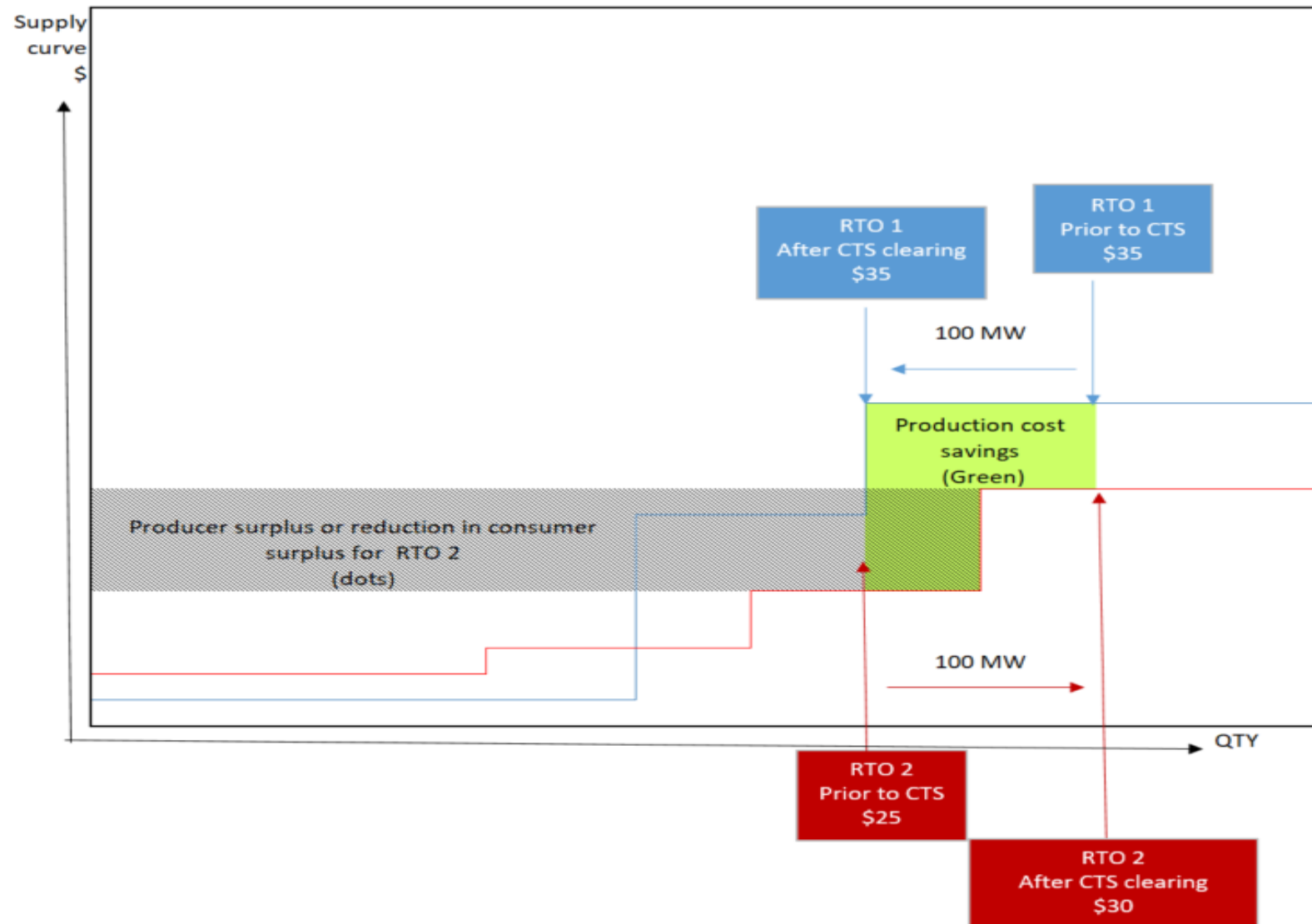
Offers

MWS offered	Required Price Spreads
0	\$0
50	\$4
100	\$5
100	\$6
100	\$10

} Eligible to clear

} NOT Eligible to clear

SUPPLY CURVE MOVEMENTS ACROSS MARKETS



CONCLUSION

- A CTS product can provide benefit, but will likely require a large reduction in the market and transmission fees.
- Tying available ramp capacity for interchange schedules to the physical ramp capacity available in the markets would be necessary.
- Current real-time price volatility and the markets' inability to forecast that volatility could lead to lower use of the CTS product, making it not cost effective.
- By reducing volatility and increasing price certainty, a CTS product can be cost effective to implement.

QUESTIONS?

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