



Spring 2020

Quarterly Report

*Helping our members work together to
keep the lights on... today and in the future.*



SouthwestPowerPool



SPPorg

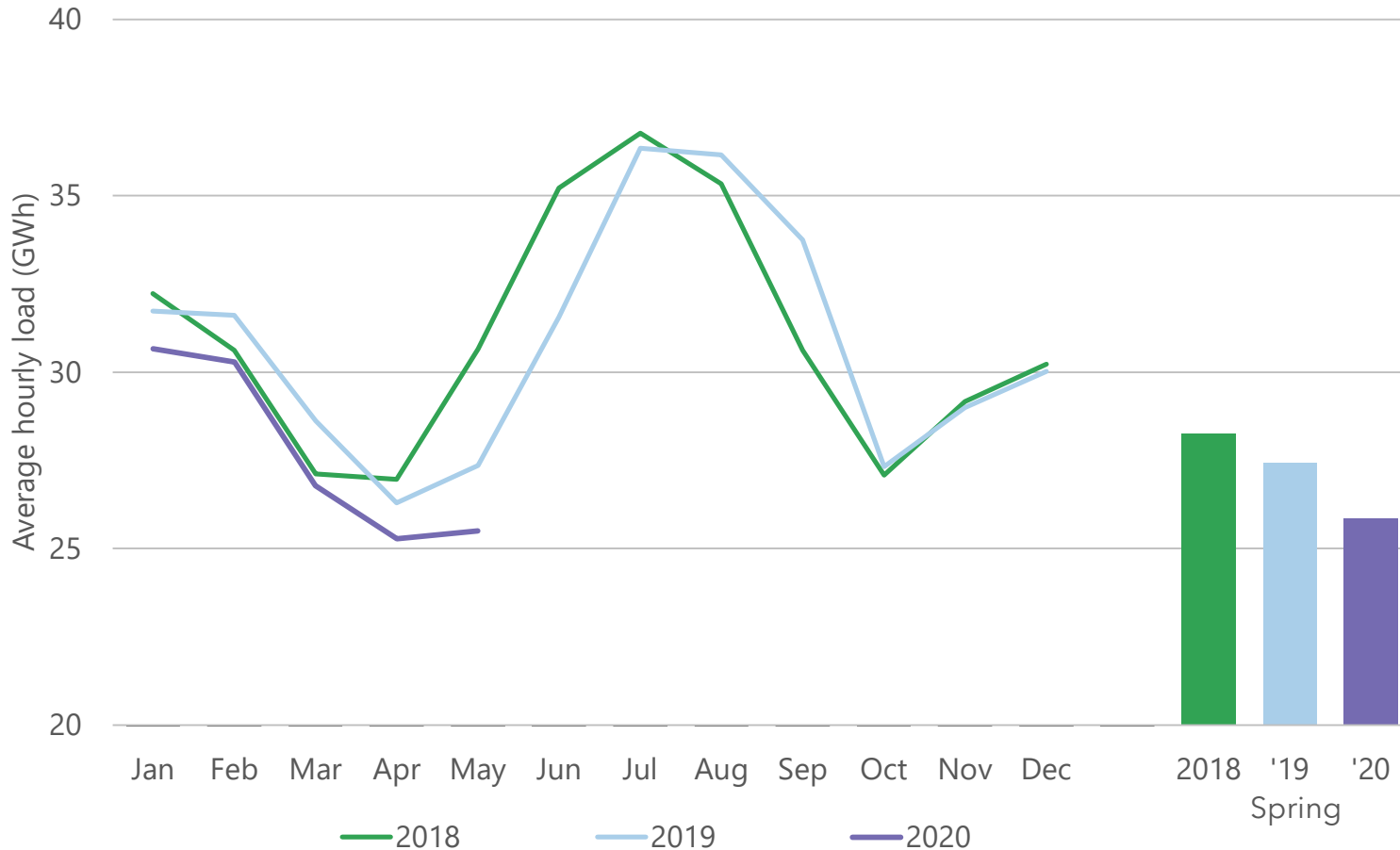


southwest-power-pool

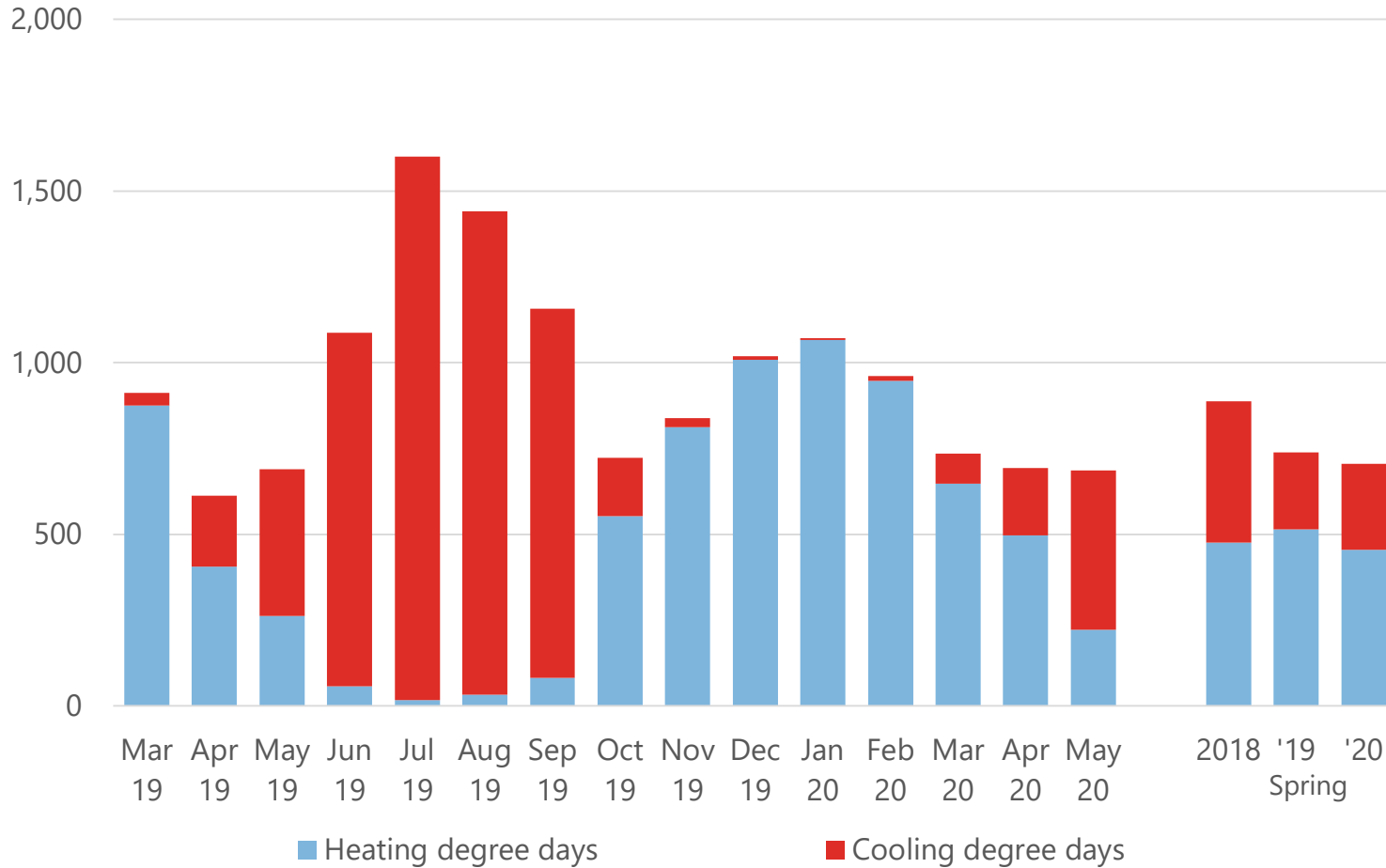
Spring 2020 highlights

- Average hourly load down six percent
- Generation by coal resources declined, offset by wind and gas generation
- Energy prices and gas costs decreased from prior spring period
- Generation outages decreased
- Discussion of major maintenance cost component for mitigated offers

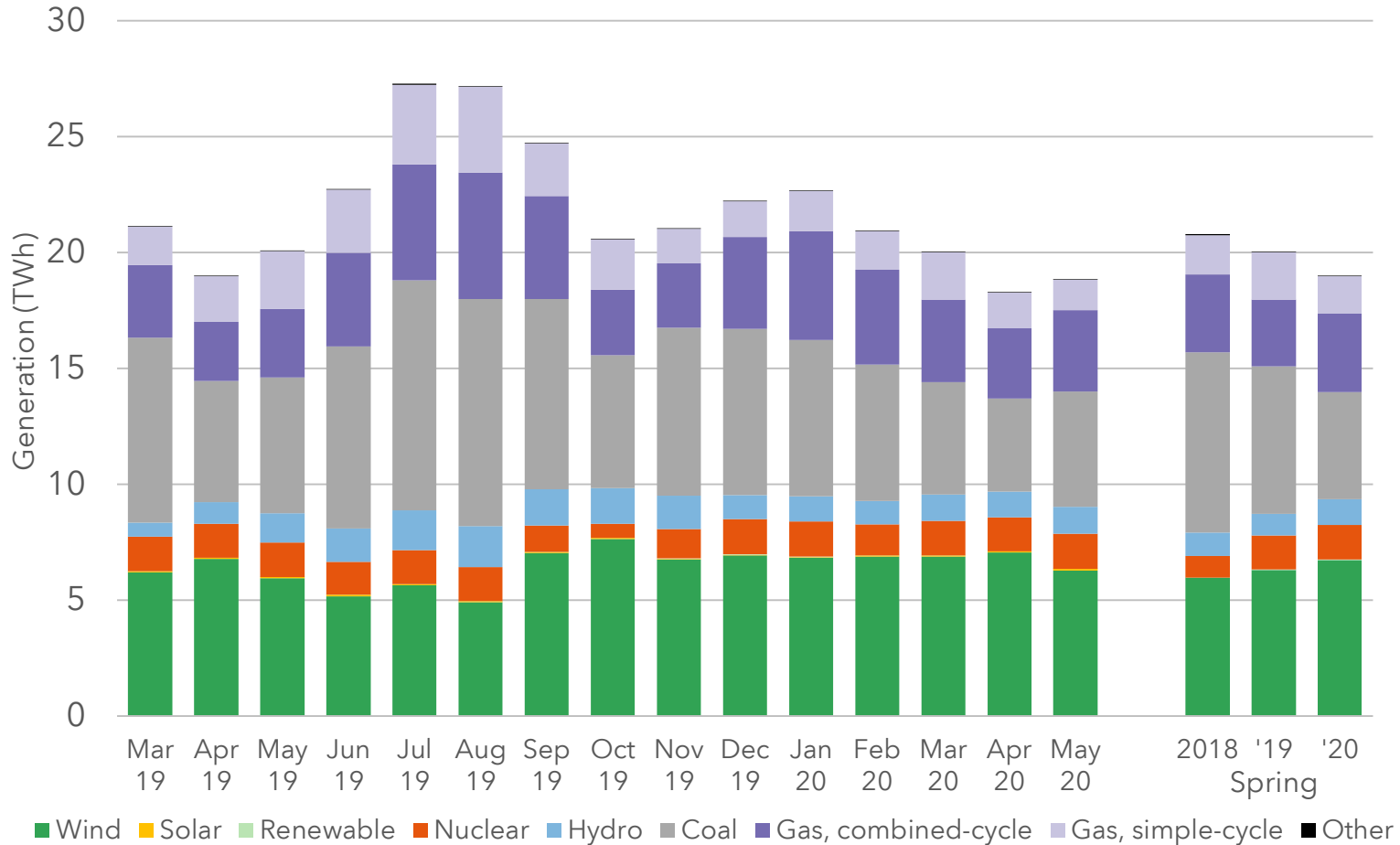
Overall load decreased



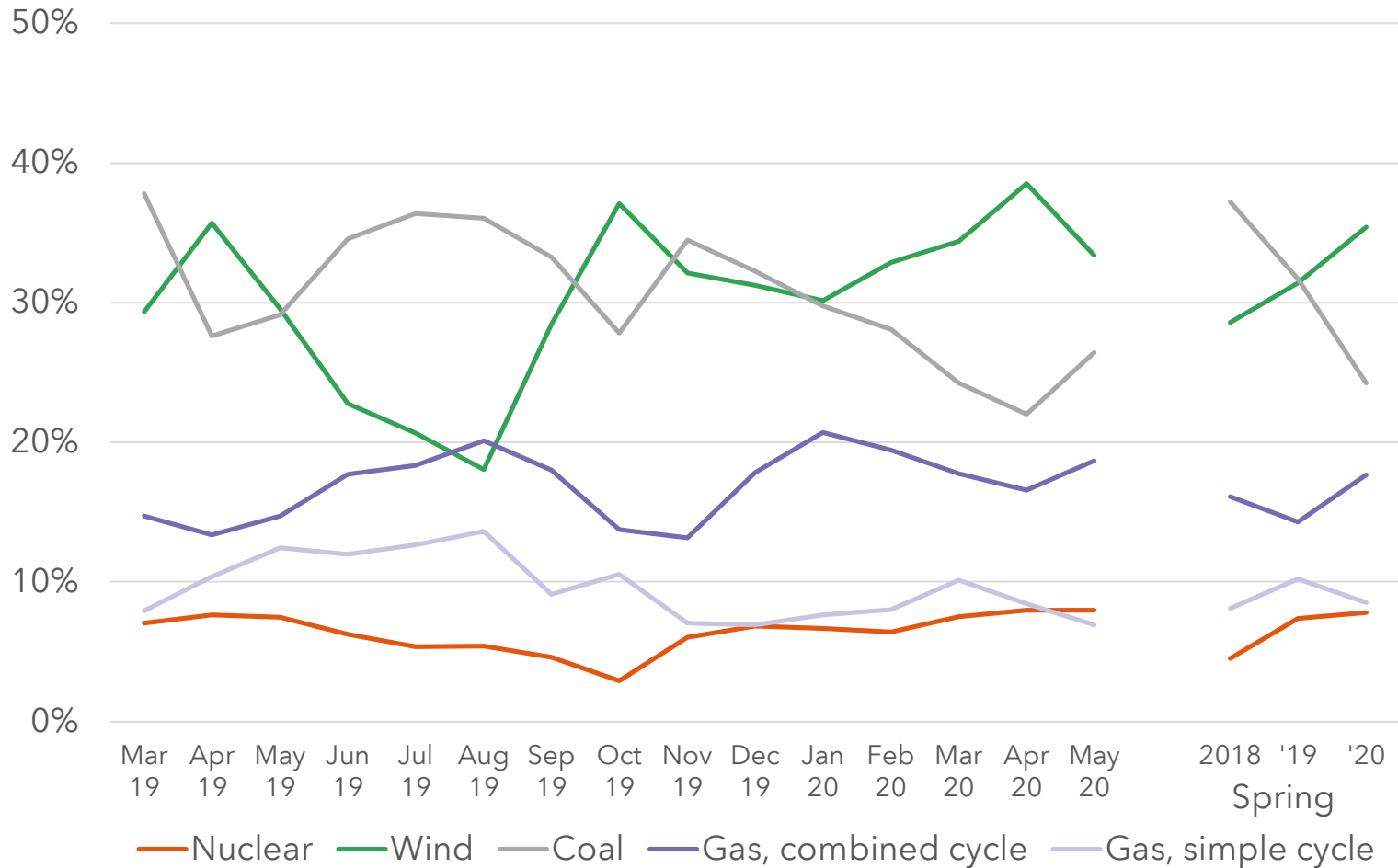
Warmer temperatures



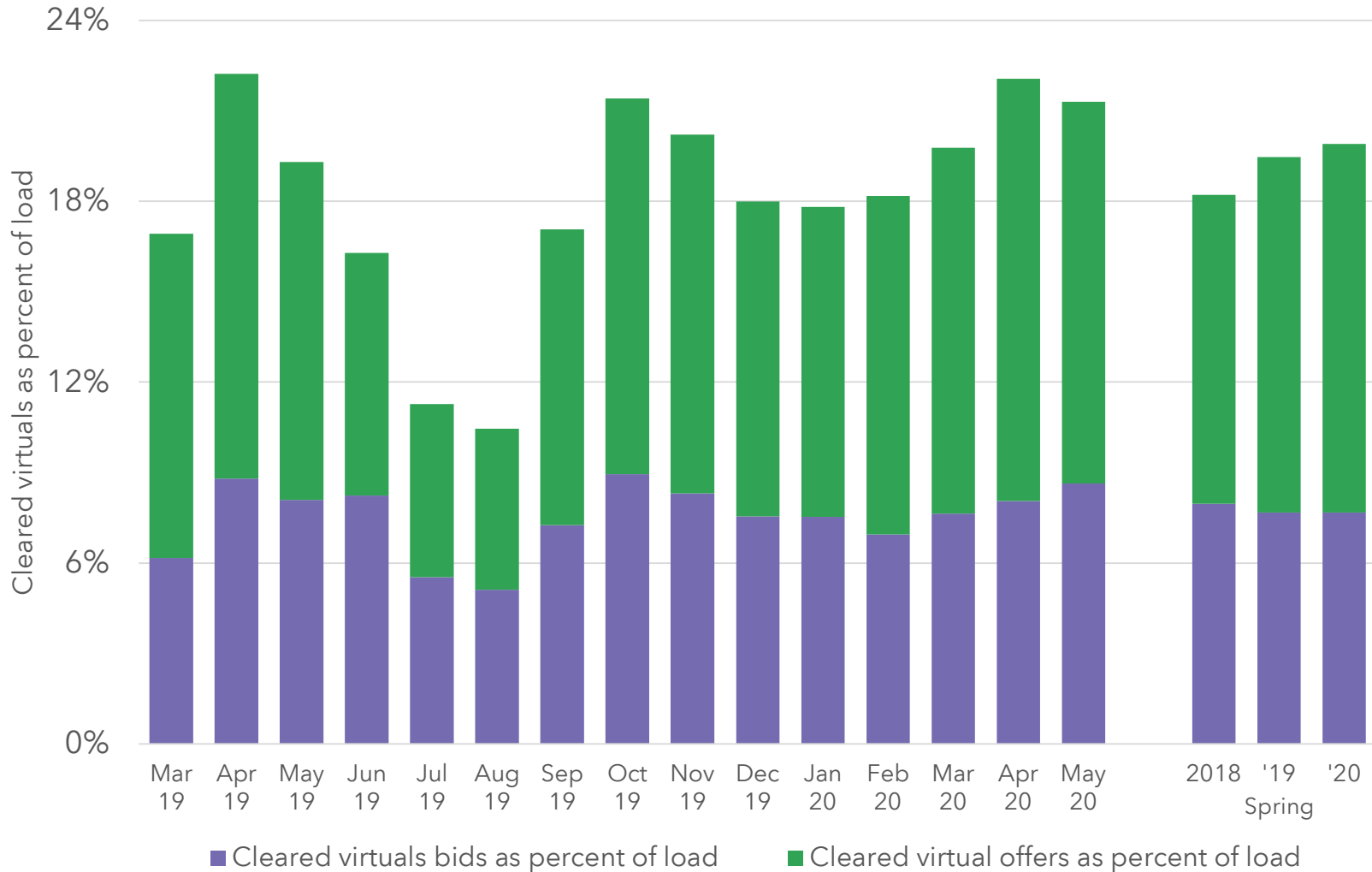
Generation declined



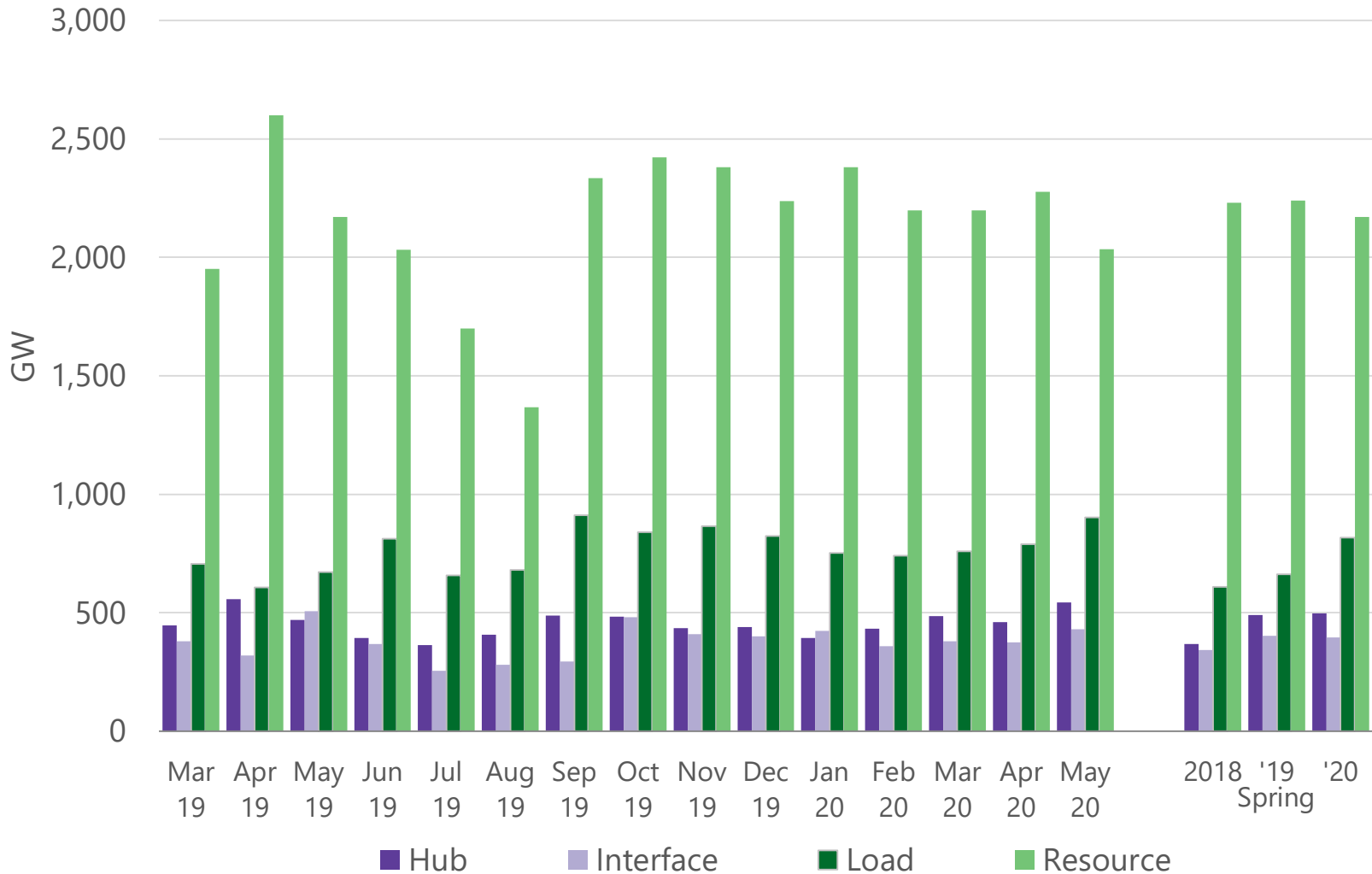
Coal generation continued decline



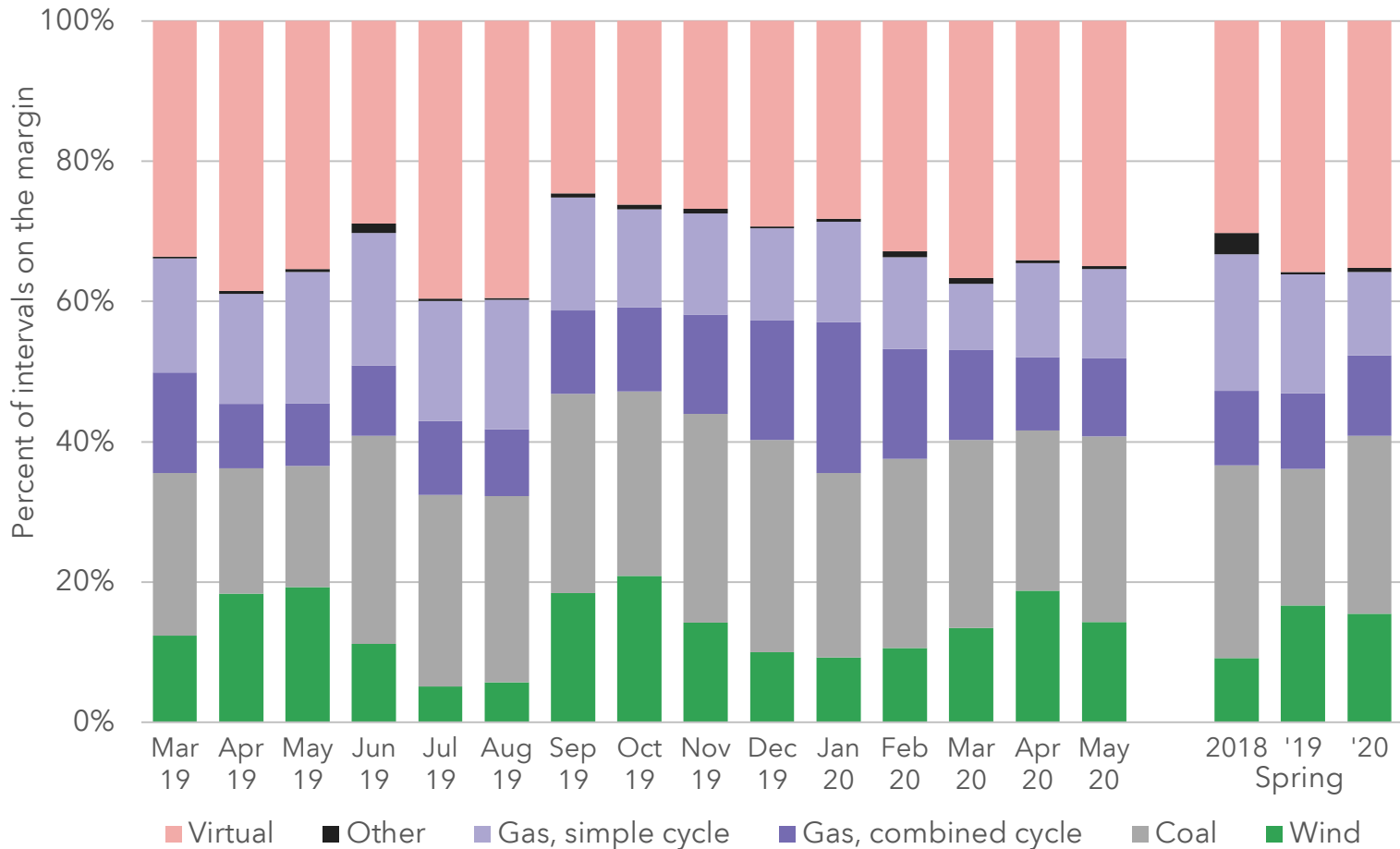
Virtual transactions continued to grow



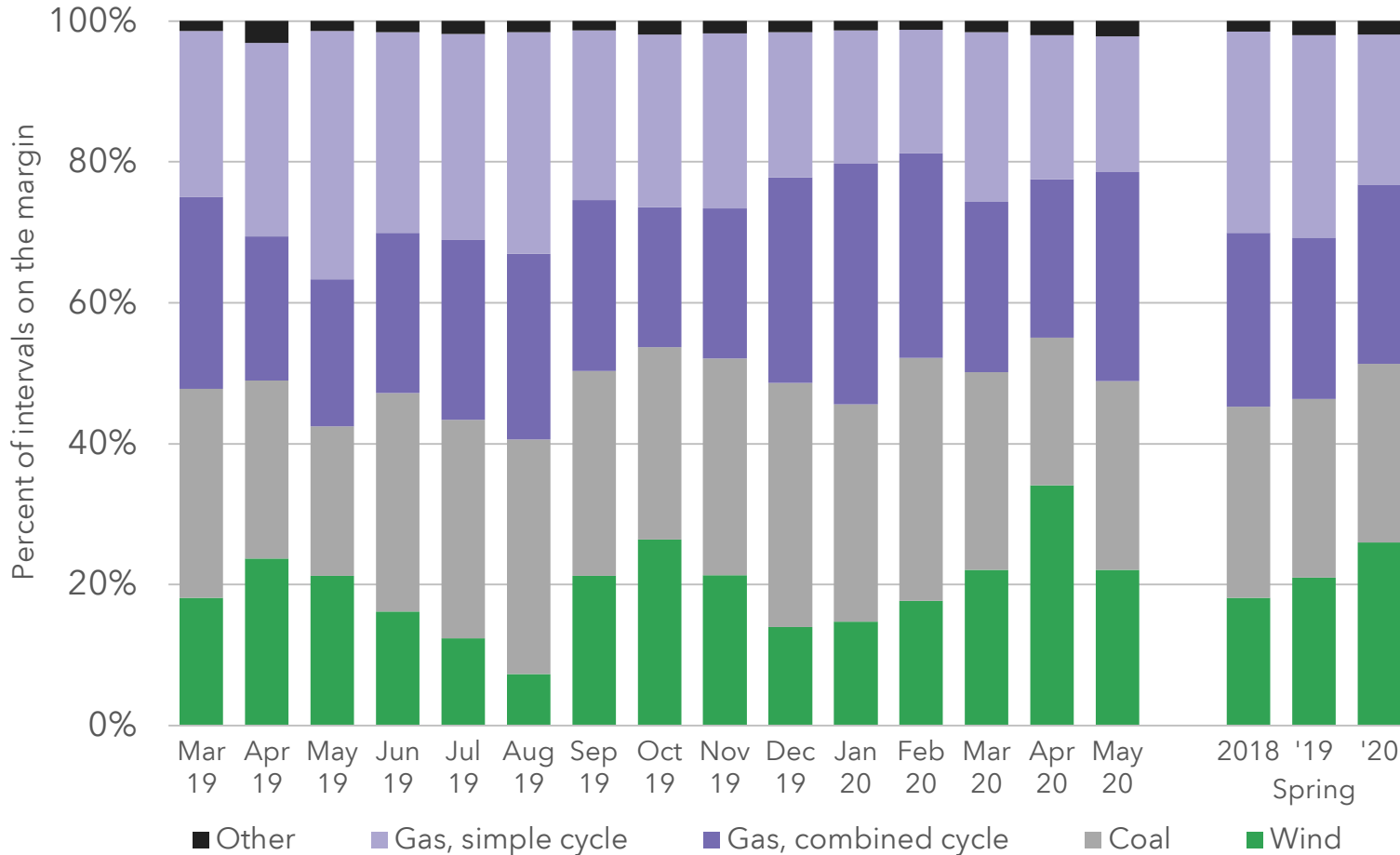
Most virtuals placed at resource locations



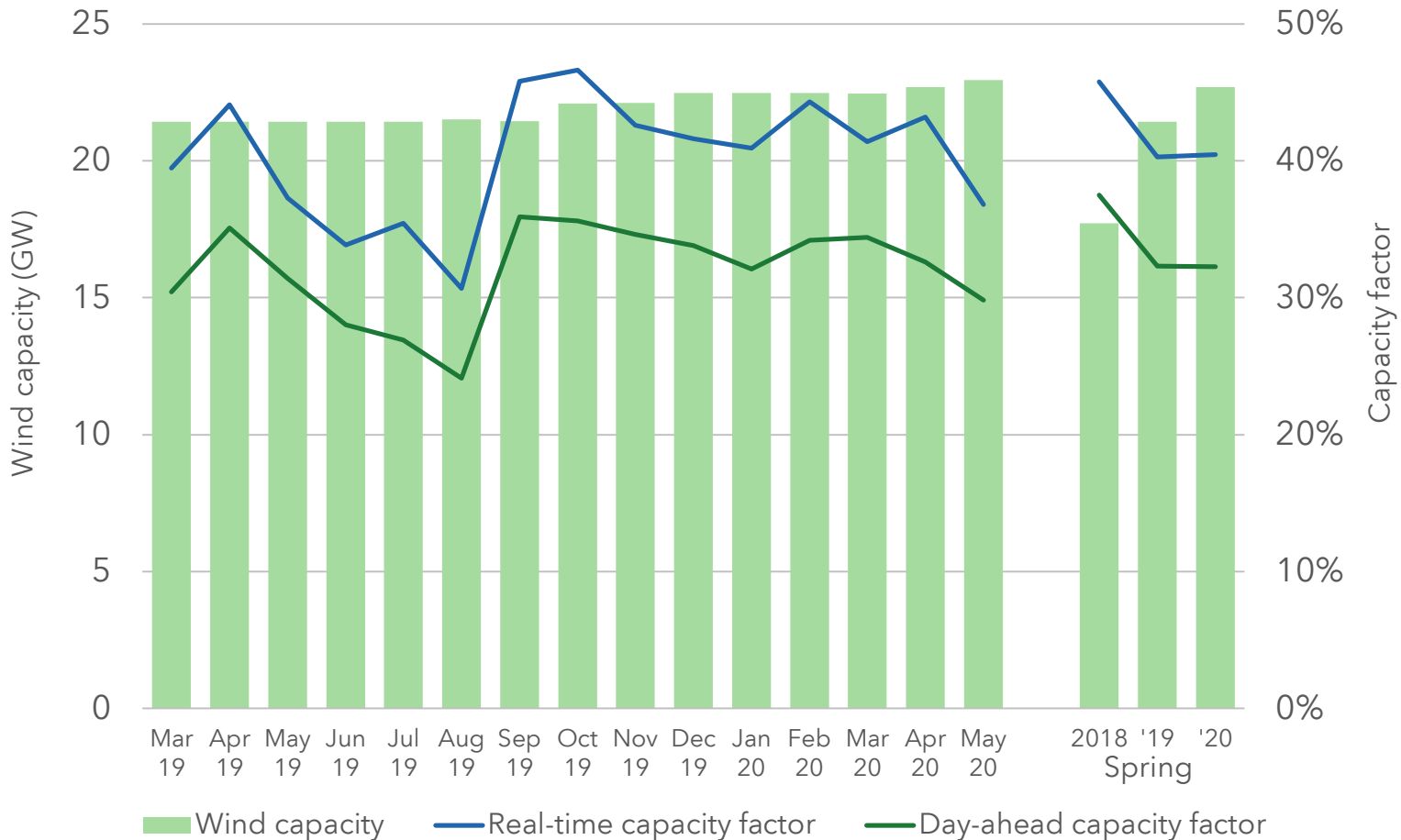
Virtuals set prices more frequently in day-ahead market



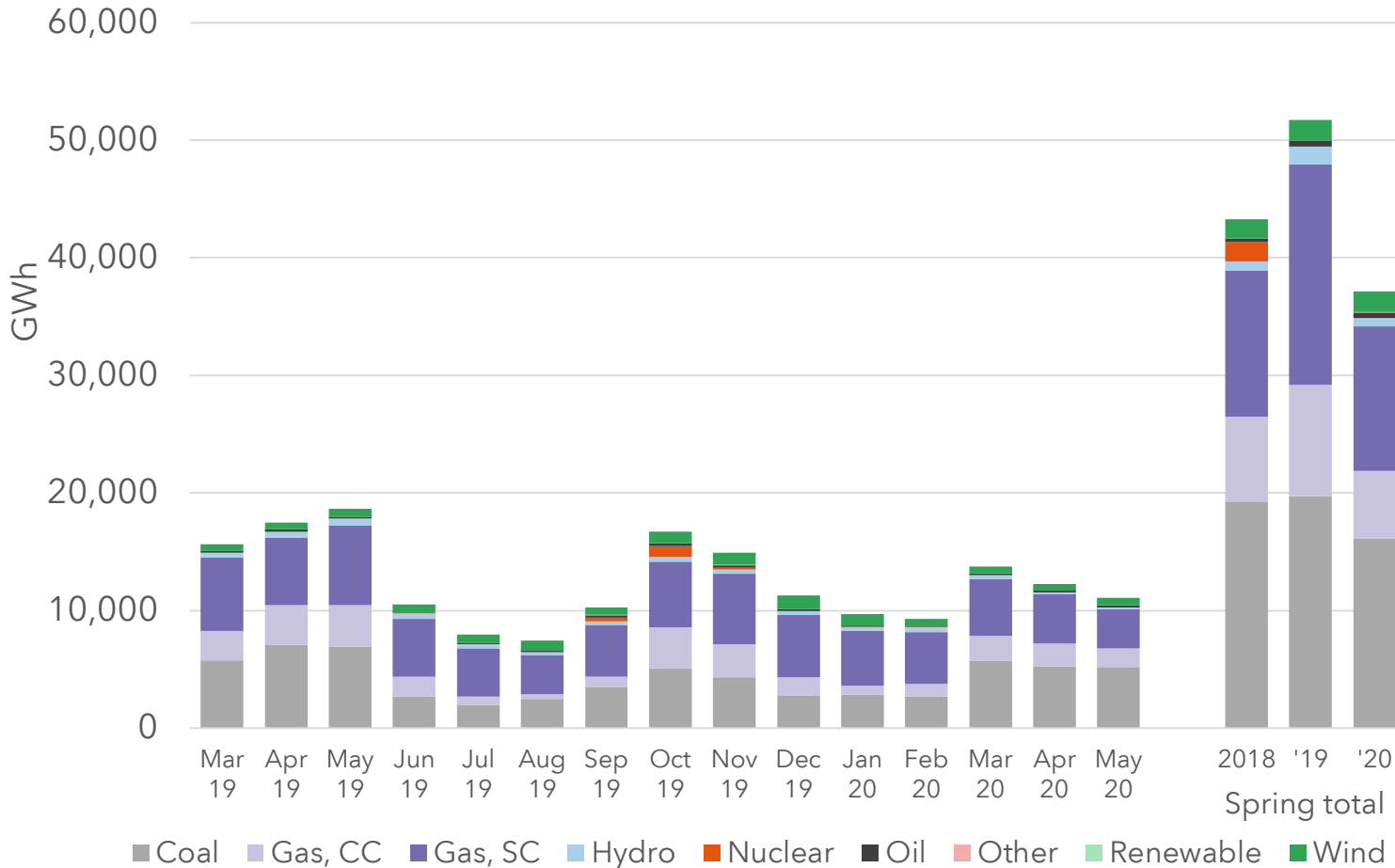
Wind set prices more frequently in real-time market



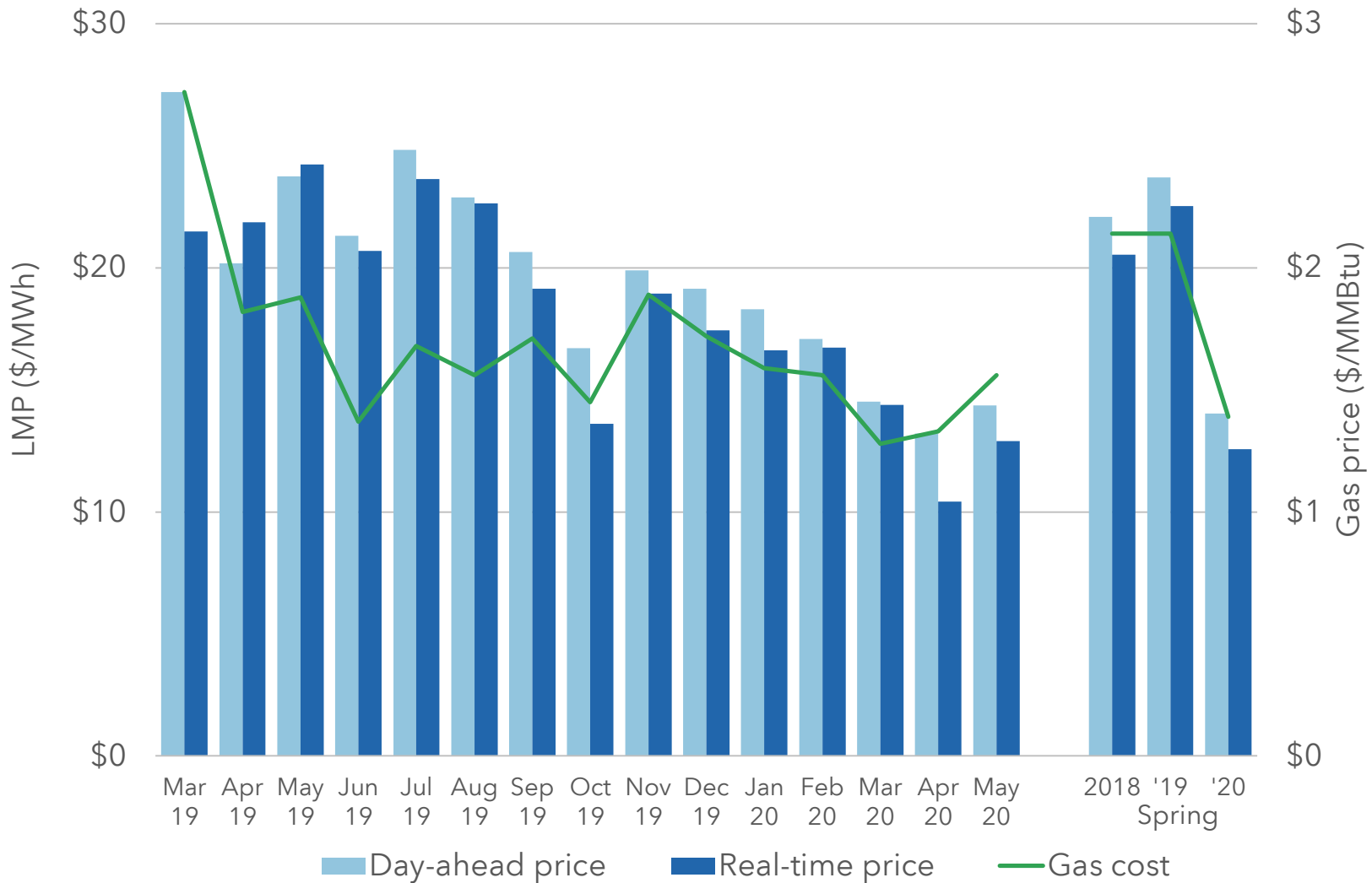
Wind capacity continued to grow



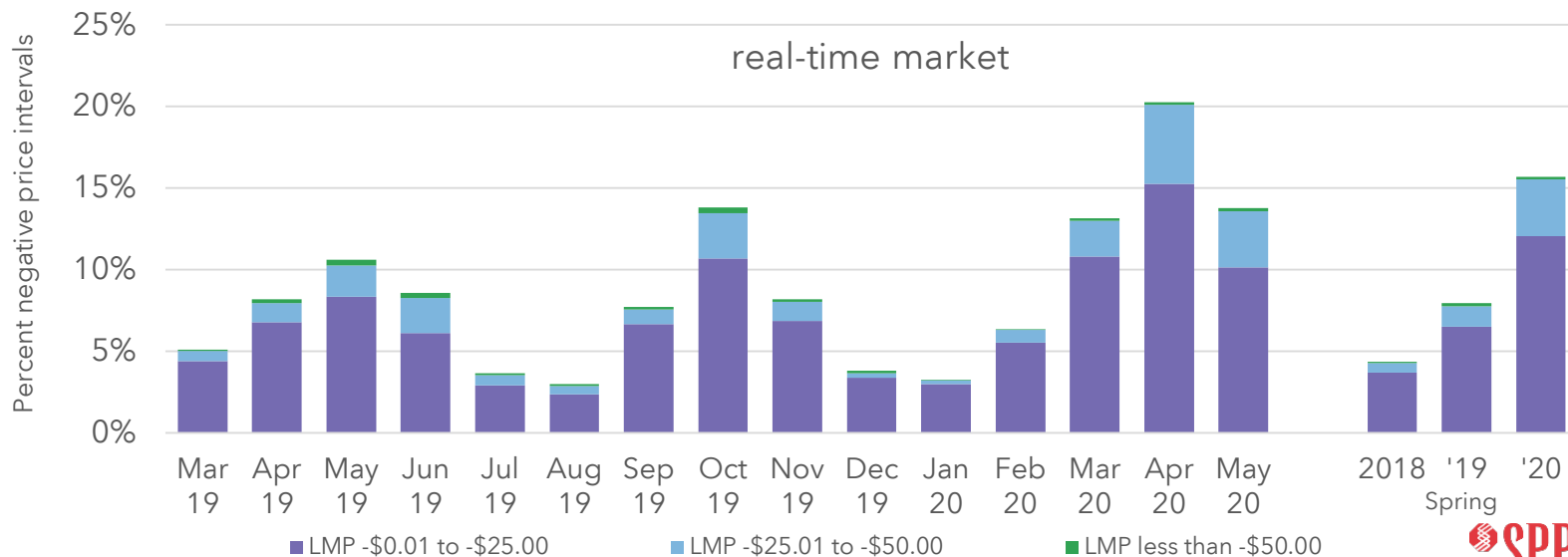
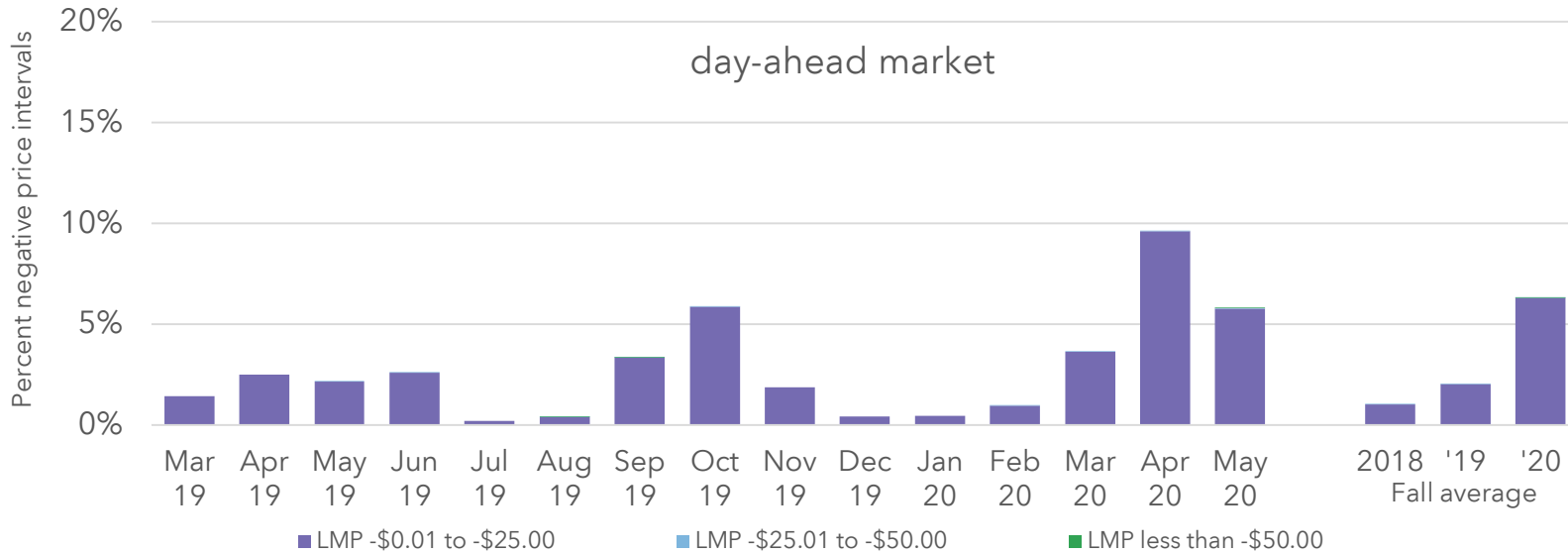
Outages have decreased



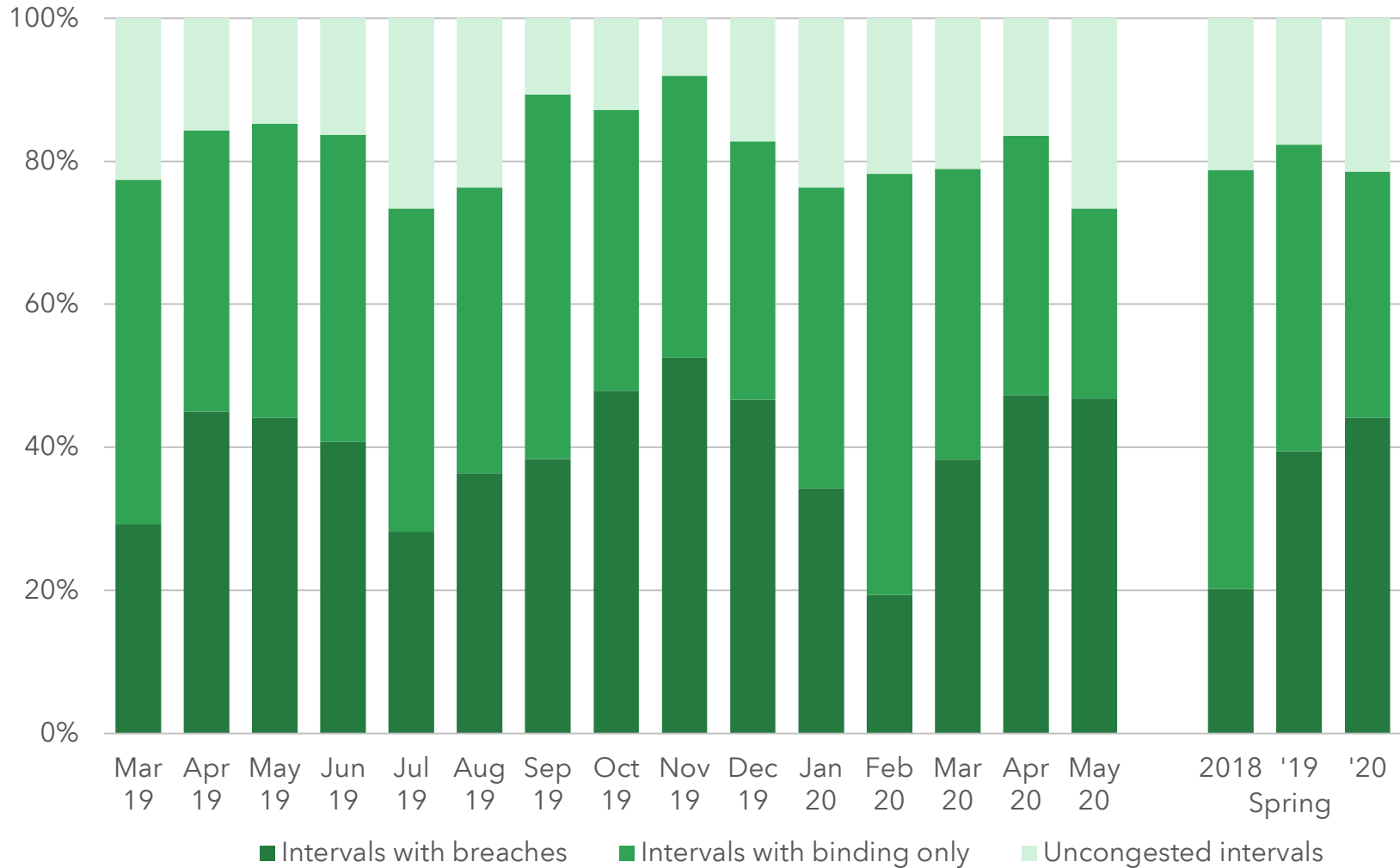
Prices continued to fall



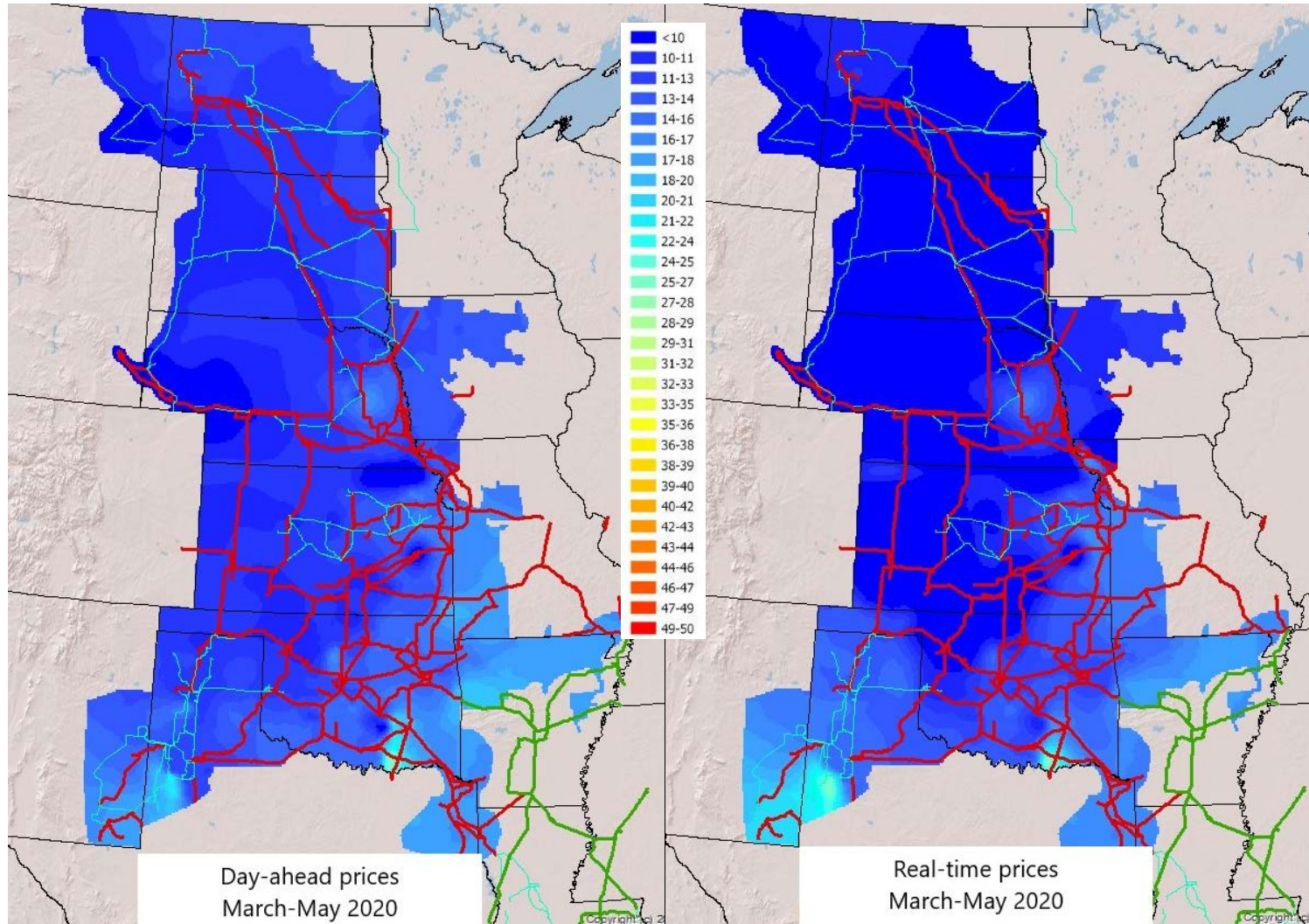
Negative price intervals increased



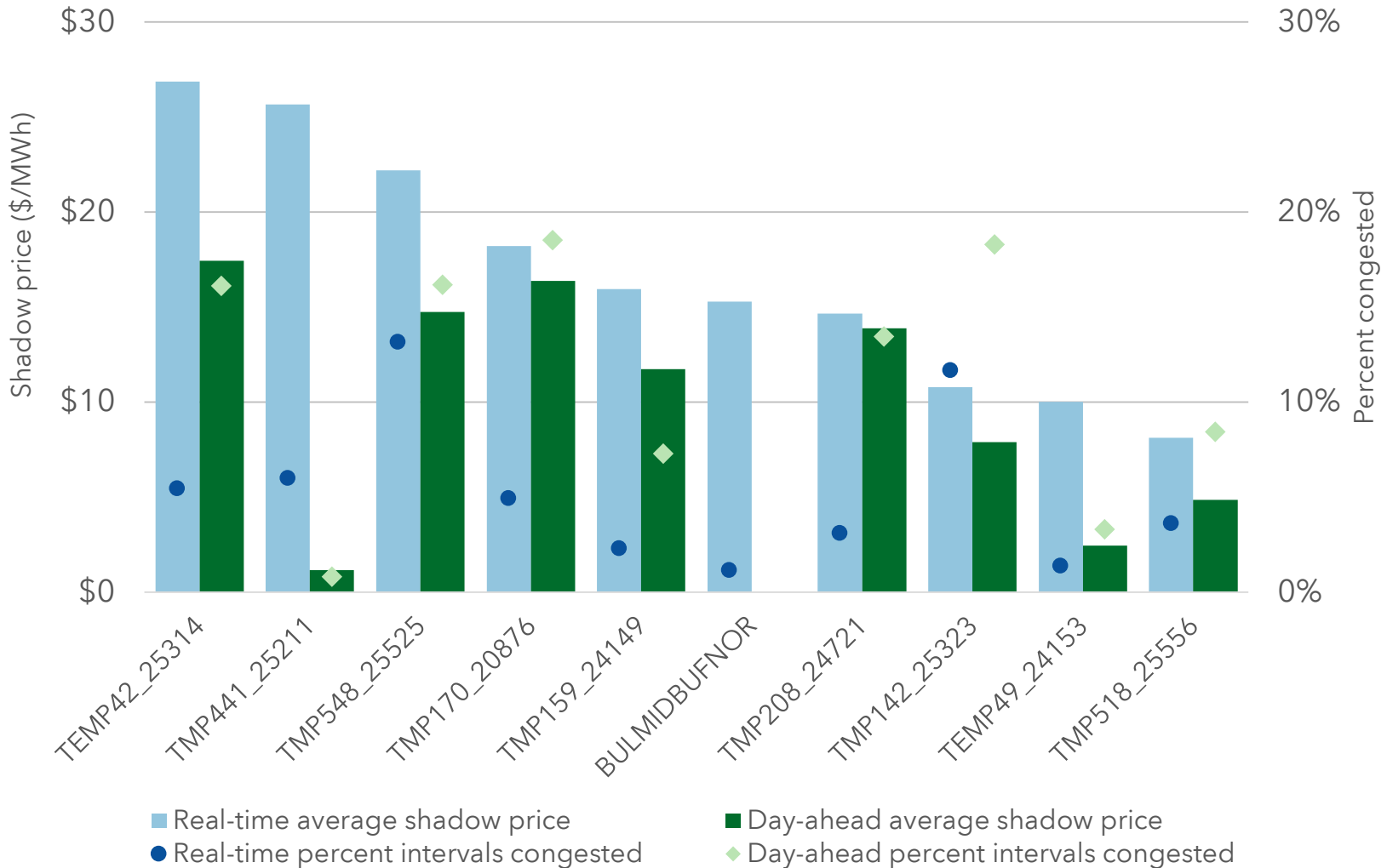
Real-time breached intervals increased



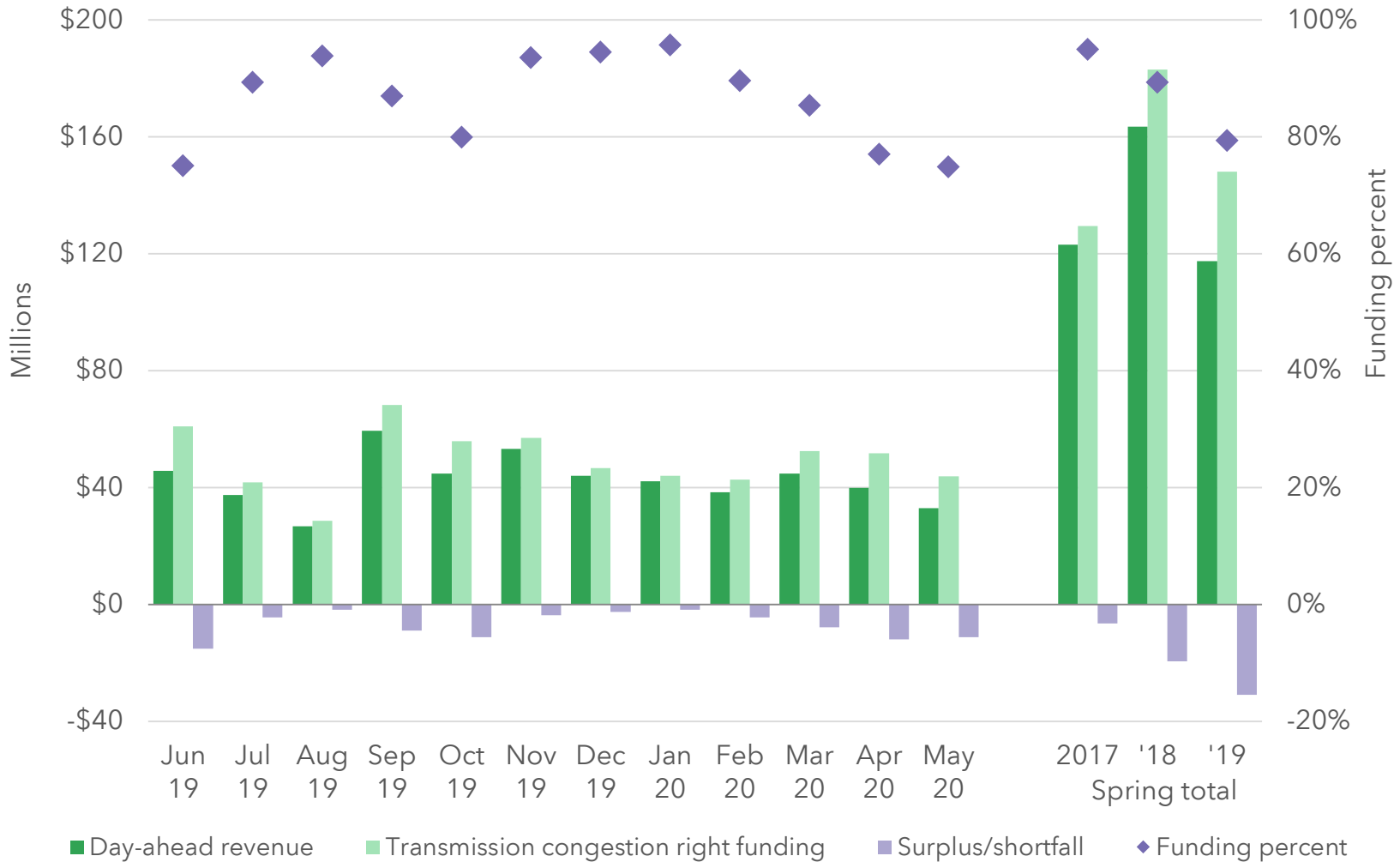
Congestion pattern similar between markets



High congestion in west Texas



TCRs remain underfunded



TCR funding at 86% for 2019 TCR year



FERC Order No. ER-1632

Major maintenance component for mitigated offers

Units eligible for major maintenance adders

- 491 thermal units eligible
 - 113 approved for major maintenance
 - 56 approved for start-up adders, average cost \$3,472
 - 94 approved for no-load adders, average cost \$197/hour
 - 26 approved for both start-up and no-load adders, average start-up cost \$2,868 and average no-load cost \$211/hour

Make-whole payments per MW

	Before major maintenance	After major maintenance	Grand total
Make-whole payments	\$99,498,096	\$101,544,759	\$201,042,856
MW cleared	13,548,964	15,594,594	29,143,557
Make-whole payments per MW	\$7.34	\$6.51	\$6.90

Make-whole payments per MW, day-ahead and real-time

	Day-ahead		Real-time		Grand Total
	Before major maintenance	After major maintenance	Before major maintenance	After major maintenance	
Make-whole payments	\$33,814,939	\$41,959,685	\$65,683,158	\$59,585,074	\$201,042,856
MW cleared	10,928,997	12,791,710	2,619,967	2,802,883	29,143,557
Make-whole payments per MW	\$3.09	\$3.28	\$25.07	\$21.26	\$6.90

Make-whole payments, by resources with and without adders

		Before major maintenance	After major maintenance	Grand total
Non-major maintenance resources	Make-whole payments	\$66,590,322	\$75,926,319	\$142,516,641
	MW cleared	9,580,425	11,678,278	21,258,703
	Make-whole payments per MW	\$6.95	\$6.50	\$6.70
Major maintenance resources	Make-whole payments	\$32,907,774	\$25,618,440	\$58,526,214
	MW cleared	3,968,539	3,916,316	7,884,854
	Make-whole payments per MW	\$8.29	\$6.54	\$7.42

Make-whole payments, by resources with and without adders, DA & RT

		Day-ahead		Real-time		Grand total
		Before major maintenance	After major maintenance	Before major maintenance	After major maintenance	
Non-major maintenance resources	Make-whole payments	\$26,309,773	\$33,271,875	\$40,280,549	\$42,654,445	\$142,516,641
	MW cleared	8,185,233	9,928,087	1,395,192	1,750,191	21,258,703
	Make-whole payments per MW	\$3.21	\$3.35	\$28.87	\$24.37	\$6.70
Major maintenance resources	Make-whole payments	\$7,505,165	\$8,687,810	\$25,402,609	\$16,930,630	\$58,526,214
	MW cleared	2,743,764	2,863,623	1,224,774	1,052,692	7,884,854
	Make-whole payments per MW	\$2.74	\$3.03	\$20.74	\$16.08	\$7.42

Conclusion

- Despite 2019 having higher make-whole payments than usual because of higher than normal days of conservative operations, it appears as though the major maintenance adder did not increase make-whole payments on a per megawatt hour basis.

Questions?