

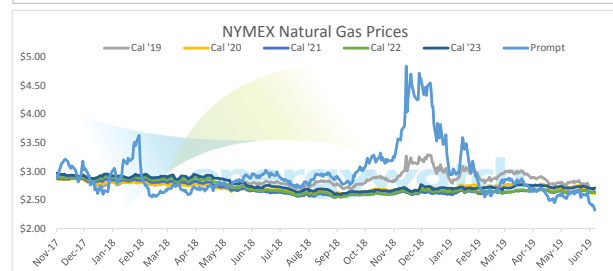
Week Ending: 6/6/2019

### Weekly Update:

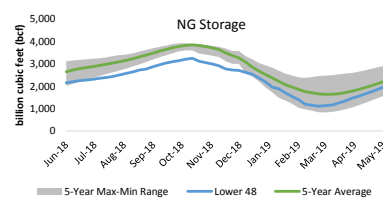
The July 2019 natural gas contract closed yesterday at \$2.324/MMBtu, which is the lowest point since 2016. Analysts expected a 109 bcf injection into storage for the week ending 5/31/19, but we ended up with a 119 bcf increase. The total 1,986 bcf in storage is 45.4% of the total storage capacity with 21 weeks left in the injection season. Stockpiles are 182 bcf above last year (10.1%), and 240 bcf below the five-year average, -10.8%. "Natural gas prices fell at most locations this report week... at the Transcontinental Pipeline Zone 6 trading point for New York City, prices decreased 9¢ from a high of \$2.33/MMBtu last Wednesday to \$2.24/MMBtu yesterday" (EIA).

The current market level is due to wild weather across the U.S. Normal temperatures are expected in the Northeast in the 6-10 and 8-14 day outlook. "Natural gas consumed for power generation climbed by 10% week over week. Industrial sector consumption increased by 2% week over week. In the residential and commercial sectors, consumption declined by 11%. Natural gas exports to Mexico increased by 1%" (EIA).

Natural gas pricing plays a key role in electricity power pricing due to the increasing reliance on natural gas fired generators as nuclear, coal, and oil generation is retired and mothballed. As the marginal unit of generation, gas prices are directly correlated to power pricing (more so in some regions such as NYC vs. others such as parts of PJM). We keep an eye on natural gas market fundamentals in order to provide insights into forward power pricing for our clients. Gas production is expected to continue to grow, however, there is speculation that demand growth will outpace supply primarily due to LNG and Mexican exports and increased power burn, presenting upside risk to power pricing in the future.

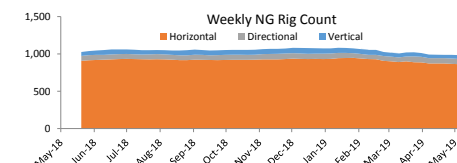


Natural Gas Storage	
Week Ending 5/31/2019	
Current Week Stocks (bcf)	1,986
Previous Week Stocks (bcf)	1,867
Implied Net Change (bcf)	119
Expected Net Change (bcf)	109
Variance (bcf)	10
Year-Ago Stocks (bcf)	1,804
Variance vs Prev. Year (%)	10.1%
5-Year Average (bcf)	2,226
Variance vs 5-YR Avg (%)	-10.8%

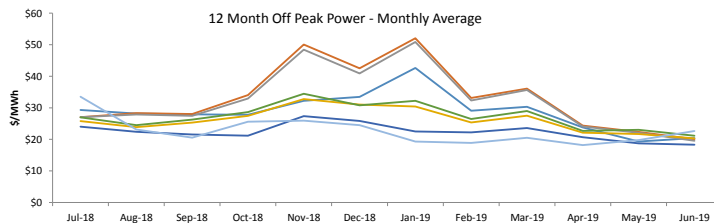
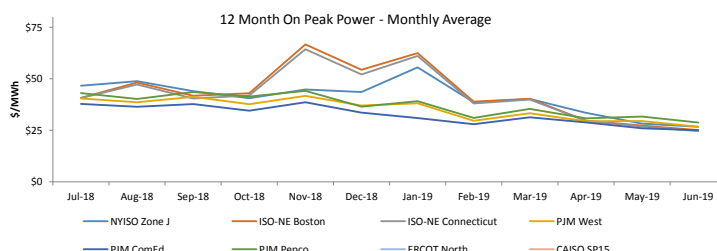


	\$/MMBtu	W-o-W Δ	Y-o-Y Δ
Prompt Month	\$2.324	-4.6%	-20.7%
12-Month	\$2.507	-3.1%	-13.8%
24-Month	\$2.570	-1.8%	-8.7%
Cal 19	\$2.651	-2.0%	-5.0%
Cal 20	\$2.603	-1.3%	-3.0%
Cal 21	\$2.635	-0.2%	-0.6%
Cal 22	\$2.639	0.2%	-0.9%

Week Ending:	5/31/2019	W-o-W Δ
Oil Rigs	800	0.4%
Gas Rigs	184	-1.1%
Vertical	52	2.0%
Horizontal	862	-0.1%
Directional	70	1.4%



	Avg. Temp	Past 10 Weeks	Departure From Normal	CDD	HDD
Boston	72		8	7	0
Chicago	68		6	4	0
Columbus	73		6	8	0
Dallas	79		-1	14	0
Denver	64		0	0	1
Detroit	72		10	7	0
Hartford	72			7	0
Houston	81		-5	16	0
Indianapolis	76		8	11	0
Las Vegas	90		6	25	0
Los Angeles	65		1	0	0
Miami	86		4	21	0
Minneapolis	73		7	8	0
New York City	76		5	11	0
Philadelphia	77		4	12	0
Phoenix	90		1	25	0
Salt Lake City	74		7	10	0
San Diego	64		-1	0	1
San Francisco	61		2	0	5
Seattle	58		-1	0	7
St. Louis	79		8	14	0
Washington D.C.	74		-1	9	0



## 2014 - 2019 YTD Locational Marginal Pricing (LMPs)

