



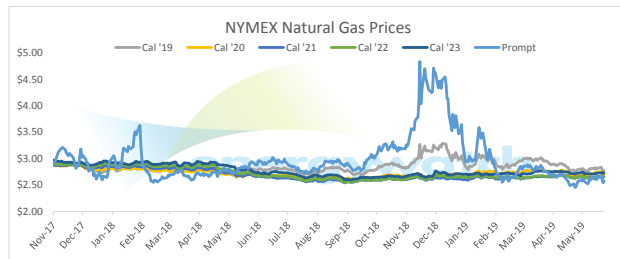
Week Ending: 5/23/2019

### Weekly Update:

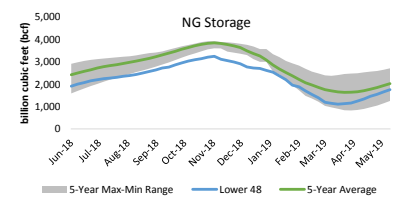
The front month natural gas contract traded on the NYMEX closed on Thursday at \$2.578/MMBtu. Stockpiles increased by 100 bcf, which is slightly lower than the 103 bcf injection expected by analysts. The total 1,753 bcf in storage is currently at 40.1% of its total capacity and 8.5% above last year's level but 13.5% below the five-year average. At the Transco Zone 6 pipeline servicing NYC, prices decreased from \$2.33/MMBtu last Wednesday to \$2.27/MMBtu this past Wednesday (EIA). Natural gas supply has remained flat, averaging 93.6 bcf/d this report week as demand had fallen 3% due to a decrease in the residential and commercial sector's demand for heating because of moderate temperatures. Exports to Mexico decreased 4%.

Con Edison announced a moratorium on new natural gas connection in most of Westchester County, effective March 16. "Demand for natural gas in the New York City area has increased in recent years, leading to concerns about reliability of service. Con Edison claimed it cannot guarantee uninterrupted service to new natural gas connections" (EIA). "Despite an increase in natural gas production in the Northeast, regional demand for natural gas—driven both by population growth and switching from heating oil—has grown even faster, causing concern about the ability to provide service to new customers" (EIA). Natural gas utilities in the Northeast have used most available pipeline capacity to transport natural gas to high demand areas during recent winters.

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.

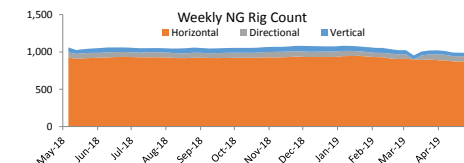


Natural Gas Storage	
Week Ending 5/17/2019	
Current Week Stocks (bcf)	1,753
Previous Week Stocks (bcf)	1,653
Implied Net Change (bcf)	100
Expected Net Change (bcf)	103
Variance (bcf)	-3
Year-Ago Stocks (bcf)	1,616
Variance vs Prev. Year (%)	8.5%
5-Year Average (bcf)	2,027
Variance vs 5-YR Avg (%)	-13.5%

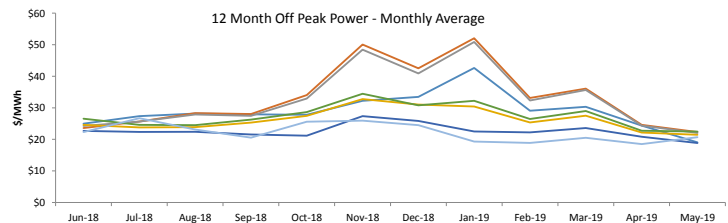
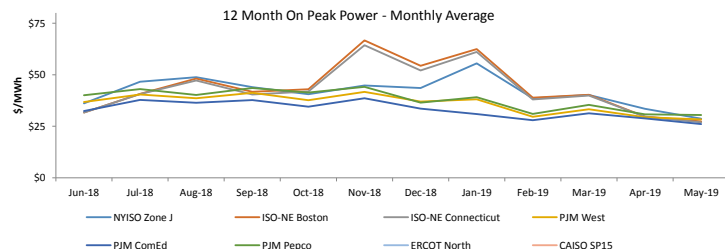


	\$/MMBtu	W-o-W Δ	Y-o-Y Δ
Prompt Month	\$2.578	-1.9%	-11.4%
12-Month	\$2.691	-2.5%	-8.4%
24-Month	\$2.684	-1.7%	-5.3%
Cal 19	\$2.770	-1.6%	-0.7%
Cal 20	\$2.690	-1.7%	-0.3%
Cal 21	\$2.656	-0.2%	-0.6%
Cal 22	\$2.660	0.2%	-1.3%

Week Ending:	5/17/2019	W-o-W Δ
Oil Rigs	802	-0.4%
Gas Rigs	185	1.1%
Vertical	48	6.7%
Horizontal	866	-0.7%
Directional	73	2.8%



	Avg. Temp	Past 10 Weeks	Departure From Normal	CDD	HDD
Boston	62		2	0	3
Chicago	67		5	2	0
Columbus	71		5	6	0
Dallas	80		1	15	0
Denver	38		-21	0	27
Detroit	66		3	2	1
Hartford	62			0	4
Houston	84		7	19	0
Indianapolis	71		2	6	0
Las Vegas	61		-18	0	4
Los Angeles	62		-2	0	3
Miami	83		2	19	0
Minneapolis	55		-6	0	10
New York City	67		2	2	0
Philadelphia	67		-1	2	0
Phoenix	67		-15	2	0
Salt Lake City	50		-13	0	15
San Diego	62		-3	0	3
San Francisco	61		-1	0	4
Seattle	63		6	0	2
St. Louis	75		5	10	0
Washington D.C.	67		0	5	3



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

