



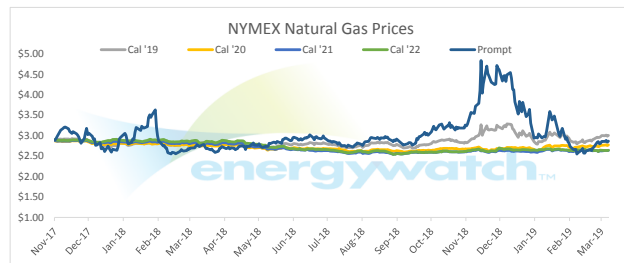
Week Ending: 3/7/2019

Weekly Update:

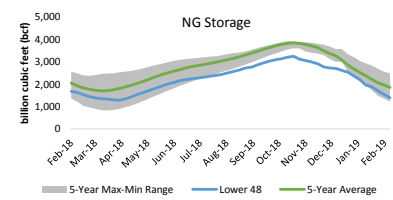
Front month natural gas traded on the NYMEX closed yesterday at \$2.866/MMBtu, up 0.24% from last week's closing price of \$2.859/MMBtu. At the Transcontinental Pipeline Zone 6 trading point for New York City, prices increased 18¢ from \$2.92/MMBtu last Wednesday to \$3.10/MMBtu this past Wednesday, with a high of \$4.98/MMBtu on Monday (EIA). Natural Gas stockpiles decreased by 149 bcf while the market consensus was a withdrawal of 150 bcf. This same week last year saw a withdrawal of 60 bcf and the five-year average is 109 bcf. The total 1,390 bcf in storage is 14.9% below last year and 25.0% below the five-year average. The end-of-season storage estimates are currently at 1,050 bcf and only once in the last decade (2014) have storage levels been lower than where we are expecting to end up this year.

EIA's Natural Gas Weekly Update stated "total U.S. consumption averaged 100.2 Bcf/d for the week, 32% higher than the same week last year. The residential and commercial sectors saw the largest increases as consumption rose by 16%. Natural gas consumed for power generation climbed by 9% week over week". Exports to Mexico decreased 1% and the total daily demand exceed 100 bcf since February 24th (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.

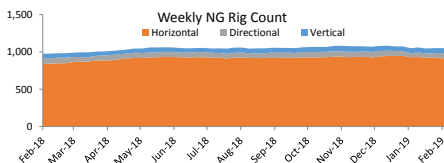


Natural Gas Storage	
Week Ending 3/1/2019	
Current Week Stocks (bcf)	1,390
Previous Week Stocks (bcf)	1,539
Implied Net Change (bcf)	-149
Expected Net Change (bcf)	-150
Variance (bcf)	1
Year-Ago Stocks (bcf)	1,633
Variance vs Prev. Year (%)	-14.9%
5-Year Average (bcf)	1,854
Variance vs 5-YR Avg (%)	-25.0%



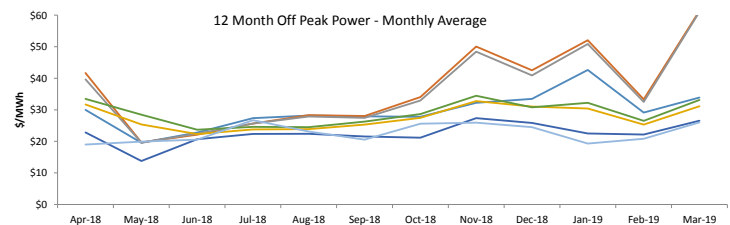
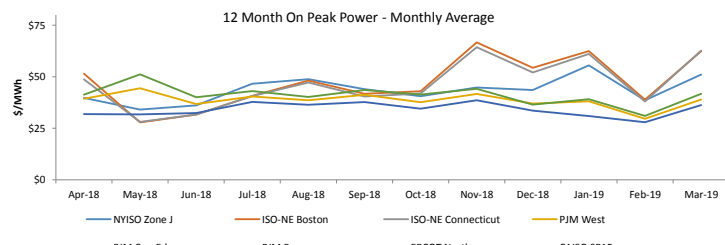
	\$/MMBtu	W-o-W Δ	Y-o-Y Δ
Prompt Month	\$2.866	0.5%	4.0%
12-Month	\$3.005	0.5%	2.8%
24-Month	\$2.857	0.5%	-0.2%
Cal 19	\$3.011	0.5%	6.7%
Cal 20	\$2.774	0.3%	0.7%
Cal 21	\$2.640	0.3%	-5.3%
Cal 22	\$2.643	0.1%	-6.5%

Week Ending:	2/22/2019	W-o-W Δ	Y-o-Y Δ
Oil Rigs	853	-0.5%	6.8%
Gas Rigs	194	0.0%	8.4%
Vertical	63	-4.5%	-6.0%
Horizontal	916	0.1%	8.8%
Directional	68	-2.9%	-1.4%



	Price	W-o-W Δ	Y-o-Y Δ	\$/MMBtu
Natural Gas (\$/MMBtu)	\$2.866	\$0.01	4.0%	\$2.87
WTI Crude Oil (\$/bbl)	\$56.66	-\$0.28	-5.8%	\$9.68
#2 Heating Oil (\$/gal)	\$1.96	-\$0.07	5.2%	\$14.12

	Avg. Temp	Past 10 Weeks	Departure From Normal	CDD	HDD
Boston	23		-13	0	42
Chicago	20		-15	0	45
Columbus	20		-21	0	45
Dallas	50		-14	0	15
Denver	22		-16	0	43
Detroit	19		-17	0	46
Hartford	20		0	0	45
Houston	53		-16	0	12
Indianapolis	23		-20	0	42
Las Vegas	59		0	0	6
Los Angeles	57		0	0	8
Miami	64		-9	0	1
Minneapolis	12		-14	0	53
New York City	25		-16	0	41
Philadelphia	26		-16	0	39
Phoenix	69		8	5	0
Salt Lake City	46		7	0	19
San Diego	62		4	0	3
San Francisco	53		0	0	12
Seattle	38		-8	0	27
St. Louis	30		-18	0	35
Washington D.C.	27		-16	0	38



2014 - 2019 YTD Locational Marginal Pricing (LMPs)

