



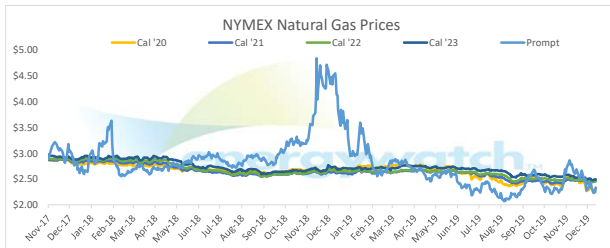
Week Ending: 12/6/2019

Weekly Update:

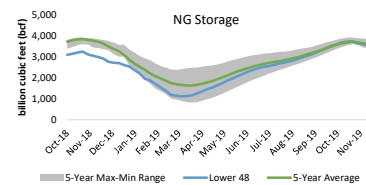
Prompt month (January 2020) natural gas prices hit an all time low during Monday's trading session. At one point, almost trading \$1 per MMBtu lower than the same time last year. Weather was the single most determining factor for this sharp decrease. Another potential weather shift for the later half December is expected to usher in warmer than previously expected temperatures. Prices are currently trading around \$2.30/MMBtu. 2020 Calendar strip decreases slightly as well, with prices also around \$2.30/MMBtu. Calendar Strip 2021/2022/2023 are all priced around \$2.45/MMBtu.

NY power prices are trading around \$30/MWh, no significant changes from last week. Prices in ISONE decreased by over \$5/MWh after significant snowfall hit the region in prior weeks. Those that live within the PJM market did not experience much of a change in power prices with West Hub trading around \$33/MWh. For customers looking to enter into a supply contract for either natural gas or electricity, now would be the time to consider it. With prices at or near 3 year lows, there would be value in locking in long term rates for the future years.

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 has grown and surpassed any speculation that production would not be able to keep up with demand due to LNG and Mexican exports.

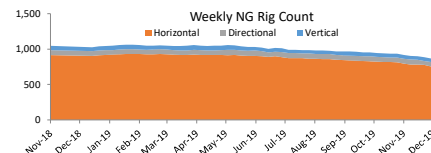


Natural Gas Storage Week Ending 12/6/2019	
Current Week Stocks (bcf)	3,518
Previous Week Stocks (bcf)	3,591
Implied Net Change (bcf)	-73
Expected Net Change (bcf)	-74
Variance (bcf)	1
Year-Ago Stocks (bcf)	2,925
Variance vs Prev. Year (%)	20.3%
5-Year Average (bcf)	3,532
Variance vs 5-YR Avg (%)	-0.4%

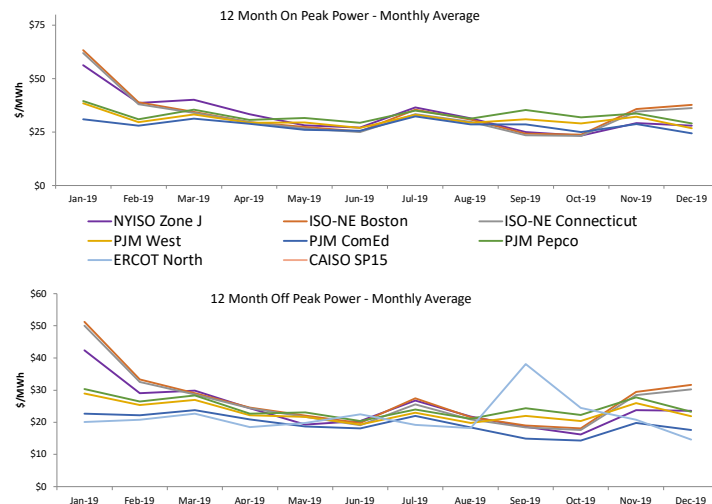


	\$/MMBtu	W-o-W Δ	Y-o-Y Δ
Prompt Month	\$2.328	1.4%	-38.3%
12-Month	\$2.323	1.2%	-23.9%
24-Month	\$2.392	0.8%	-16.8%
Cal 20	\$2.323	1.2%	-13.9%
Cal 21	\$2.462	0.5%	-6.1%
Cal 22	\$2.467	0.4%	-6.9%

Week Ending:	12/6/2019	W-o-W Δ
Oil Rigs	663	-6.6%
Gas Rigs	133	-7.6%
Vertical	51	-1.9%
Horizontal	752	0.4%
Directional	57	5.6%



	Avg. Temp	Past 10 Weeks	Departure From Normal	CDD	HDD
Boston	36		0	0	29
Chicago	19		-10	0	46
Columbus	24		-10	0	41
Dallas	43		-5	0	22
Denver	35		0	0	30
Detroit	21		-8	0	44
Hartford	34		0	0	31
Houston	51		-4	0	14
Indianapolis	25		-8	0	40
Las Vegas	51		3	0	14
Los Angeles	58		1	0	7
Miami	79		14	0	0
Minneapolis	0		-21	0	65
New York City	37		-3	0	28
Philadelphia	36		-3	0	29
Phoenix	59		4	0	6
Salt Lake City	35		4	0	30
San Diego	58		2	0	7
San Francisco	57		6	0	8
Seattle	47		6	0	18
St. Louis	35		-1	0	30
Washington D.C.	36		-2	0	29



2014 - 2019 YTD Locational Marginal Pricing (LMPs)

