ENERGY MARKET

Monthly Update

April 2020

Market Commentary

Powered by Luke Nemes, Transparent Energy and Gary Graham, Director of Energy Management

Yesterday, the EIA released a report showing that in 2019, US energy production exceeded consumption for the first time in 62 years. Another notch on the belt of an historic 2019. Unsurprisingly, the largest jump in total energy production by source was from natural gas, which increased from a 25% to 35% share. The commodity also saw the greatest surge as a source in energy consumption, up from 24% to 32%. The production growth was well-documented throughout 2019 and was reflected in massive storage reserves (still at 63% above last year at this time) and some of the lowest market settles in decades during the past few months – the March 2020 spot price, for example, averaged $1.74/MMBtu. Abundance, for the end-user, has provided unprecedented opportunities to secure historically low commodity supply agreements for the better part of a year. However, for every winner there is a loser – and this case, a multitude of casualties are underway.

Fast-forward to today, and we find that several of the fundamentals have been significantly altered, both by COVID-19 demand destruction and OPEC+ production. Prior to each of these course-altering global events, US natural gas prices were already very weak, which had triggered a series of capex cuts, divestment, and reduced drilling activities from exploration and production companies. As this data began to work its way into the daily balance, and production forecasts were revised significantly to the downside (decreased supply), price support began to surface in parts of Feb and Mar, albeit slightly and intermittently – and there existed a glimmer of hope for producers that low prices would begin to cure low prices. And they did, for a while – until the COVID-19 pandemic quickly altered demand patterns on a global level, and with domestic industrial and commercial demand significantly impacted overnight (and continuing be to uncertain extents) any support gained from anticipated supply reductions was met with even greater demand reductions in the near term. This brought the prompt month settles back down to previous lows, while the futures contracts continued their steady climb, resulting in drastic contango conditions wherein the spread between the prompt month contract and the upcoming winter contracts was upwards of $1/MMBtu. These contango conditions persist to this day, but at elevated price points. In other words, the entire curve has moved up in unison over the past week, and the oil crash has everything to do with it.

Monday, April 20th, will go down in history as the first time ever that WTI plunged into negative territory, settling at -$37.63 per barrel. Granted, the contract did bounce back in a big way the following day (when the contract also expired), settling at $10/barrel, and the spot pricing has remained relatively stable at around $13/barrel since – a far cry from the $46/barrel that commodity commanded a little over a month prior. OPEC+ flooding the market ahead of/in the midst of demand decreases and the resulting supply glut simply cannot be mopped up with production cuts that are, likely, too little too late – the damage has been done and the picture remains bleak for May and June. The oil price scenario and lack of demand is leading to a situation in which the increasingly limited ability to store oil, particularly in Cushing, the largest storage facility in the US, will result in production shut-ins as soon as May.

This is particularly important for natural gas, as it means associated gas production will drop off dramatically. Associated gas, which describes natural gas produced by oil wells, has been a major driver of growth in natural gas production in recent years, contributing to the oversupply that has depressed prices.

Market Commentary continued…

This loss of associated gas production is the main driver of the upward trajectory in natural gas pricing presently and is outweighing any demand destruction arising from LNG export shut-ins (which is as many as 25 cargoes presently). We are now entering a technically under-supplied market, a complete reversal from 2018-2019, and future prices are already reflecting that. We have moved from abundance to expected scarcity, out of necessity, and there is very little in the immediate future that can influence this new reality. It will take time for the economy, energy demand, and market activity to return to normalized levels.

The EIA forecasts that Henry Hub natural gas spot prices will average $2.11/MMBtu in 2020 and then increase in 2021, reaching an annual average of $2.98/MMBtu because of even lower natural gas production compared to 2020. We should expect to see increased volatility heading into this summer in natural gas and power prices – a return to $3/MMBtu is well within reach, with potential upside to $4/MMBtu. Remember to prepare for scarcity and adjust your tolerances.

Quick Hits

- The EIA reported Thursday morning that, for the week ending April 17, U.S. inventories increased by 43 Bcf, within the range of expected 11-57 Bcf.
- Total stockpiles now stand at 2,140 Bcf, up 63% from a year ago, and 20.5% higher when compared to the five-year average.
- Exports of natural gas from the U.S. are beginning to pick up with demand mainly coming from Asia.

Bullish Factors

- As of April 17th, Baker Hughes is reporting a rig count of 529, a change of -73 from the prior count of 602.
- Short-term weather shows cooler-than-normal in the Eastern half of the United States, increasing demand for natural gas in the short-run.
- With guidance from the federal government, some parts of the United States are beginning to reopen their economies with limited capacity, bringing back some demand for energy.

Bearish Factors

- The global pandemic continues to drive the demand for energy to all-time lows.
- Oil storage is nearly at capacity globally with demand down about 25%.
- Crude oil may be seen dipping down to zero within the coming weeks as storage has reached full capacity.

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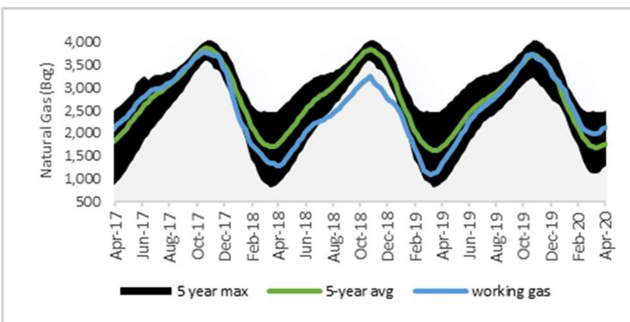
Natural Gas

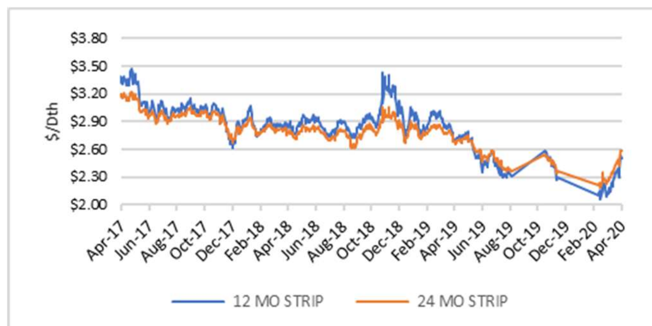
CURRENT/HISTORICAL STORAGE (Bcf)						
Region	4/17/2020	4/10/2020	% Chg.		Year Ago	5-Yr Avg.
East	400	400	0.00%	–	250	325
West	799	785	1.78%	▲	434	708
Producing	941	912	3.18%	▲	656	808
TOTAL	2140	2097	2.05%	▲	472	721

HENRY HUB PROMPT MONTH NAT GAS SETTLEMENTS							
Trade Date	Open	High	Low	Settle		% Chg.	Est. Vol
4/17/2020	1.689	1.806	1.661	1.753	▲	East	400
4/20/2020	1.774	1.970	1.701	1.924	▲	West	799
4/21/2020	1.943	1.974	1.779	1.821	▼	Producing	941
4/22/2020	1.721	1.728	1.555	1.604	▼	**TOTAL**	2140

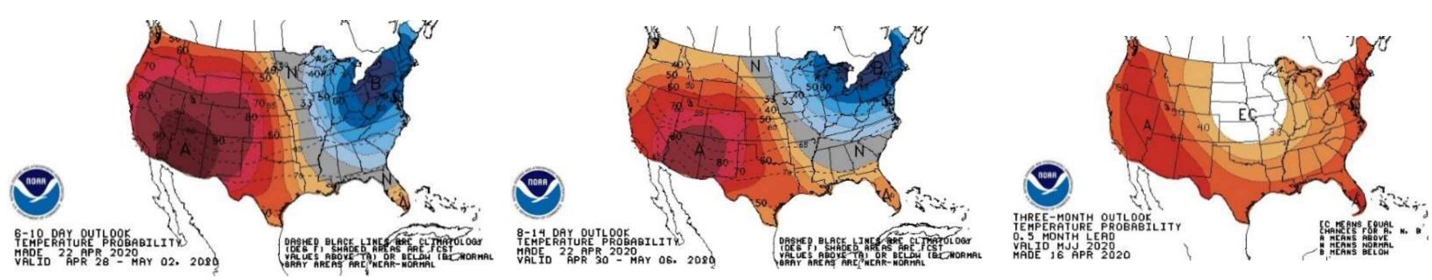
WORKING GAS IN UNDERGROUND STORAGE



ROLLING 12/24 MOS. NYMEX FORWARD STRIPS ($/DTH)



NOAA TEMPERATURE PROBABILITY



Weekly Average Retail Electricity Price Trends (May Start)

Term	New Jersey	New York (ZJ)	Massachusetts	Ohio	Illinois	Texas	DC	Pennsylvania
12-month	$0.0951	$0.0915	$0.0988	$0.0488	$0.0545	$0.0520	$0.0667	$0.0605
24-month	$0.0953	$0.0923	$0.0996	$0.0526	$0.0561	$0.0515	$0.0704	$0.0617
36-month	$0.0942	N/A	$0.0989	$0.0532	$0.0563	$0.0502	$0.0708	$0.0615

*actual rates may vary by usage. Rates are aggregated from sources reflecting the General Service (GS) rate class

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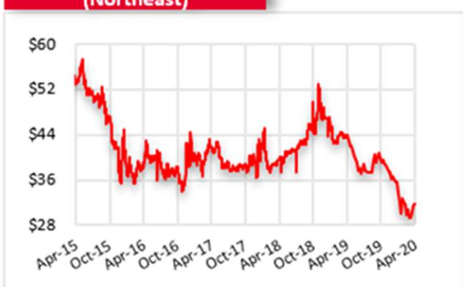
NYISO - ZJ (NYC)

PJM - PSEG (NJ)

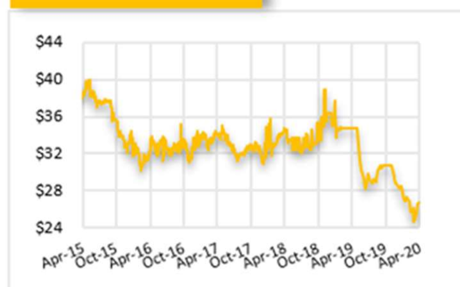
ERCOT - North (TX)

NE-ISO - MASS HUB (Northeast)



PJM - COMED (IL)

PJM - ATSI (OH & PA)



Energy Market News

New Jersey Manufacturer Nets $500K in Energy Savings through Online Reverse Auctions with Transparent Energy
https://yhoo.it/2S5zebw

ConEd COVID-19 cases grow past 350 as utilities forced to adjust pre-pandemic emergency plans
https://bit.ly/351ly6y

Oil prices extend slide one day after U.S. crude drops below zero; Dow plunges more than 600 points
https://wapo.st/2yBzW9q

Baker Hughes North American rig count
http://bit.ly/1elov2d

EIA Short Term Energy Outlook
http://www.eia.gov/forecasts/steo/

Data Highlights

WTI crude oil futures price	4/22/2020: **$19.87 /bbl**
↓ $5.22 from week earlier	↓ $44.18 from year earlier
Natural Gas Inventories	4/17/2020: **2,140 Bcf**
↑ 43 Bcf from week earlier	↑ 827 Bcf from year earlier
Natural gas futures price	4/22/2020: **$1.598/MMBtu**
↓ $0.185 from week earlier	↓ $0.974 from year earlier
Weekly coal production	4/18/2020: **8.623 million tons**
↓ 0.701 million tons week earlier	↓ 6.112 million tons year earlier

For more Information:

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