CHOICE! ENERGY SERVICES

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NYMEX OUTLOOK

BULLS & BEARS REPORT

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PAPER TOPIC: NATURAL GAS

INTRODUCTION

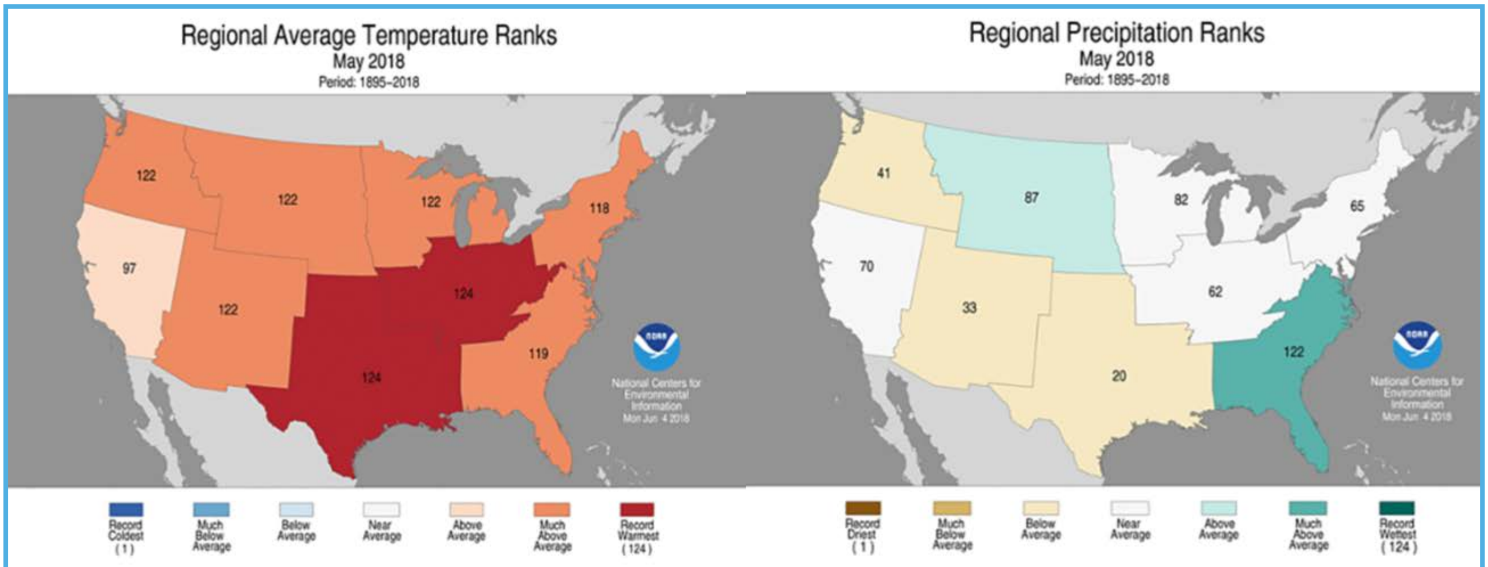
The month of May continued the elevated natural gas demand trend, and allowed the short run Bulls to continue fighting overall bearish sentiments. Price is typically less volatile in the shoulder months, and there have been a few powerful Bullish and Bearish fundamentals in the market that are keeping things balanced. Increased heating demand from an abnormally cold April was quickly replaced by increased power burn demand from the nationally hottest May on record. This abnormal heat slightly increased the storage deficit versus the 5 year average. So again we pose the question, a storage level this low should indicate higher NYMEX prices, correct? Theoretically yes, fundamentally no. The June settlement price of 2.875/MMBtu is an indication that the storage level being too low is on the radar of traders, but the ability for production to ramp up if price gets high enough is keeping a lid on any rally. Dry production supply levels have leveled off at 80 BCF/Day, and increased pipleine takeaway capacity will allow for growth if needed throughout the year. The bearish impact of increased associated gas from oil drilling will be met with the growing potential for natural gas fired electricity. There is uncertainty about whether the abnormal May temperatures will continue throughout the summer, keeping gas demand elevated. If the natural gas market has such a bearish supply outlook, why are we seeing prices pivot around $2.90/MMBtu? This issue of the Bulls and Bears will explore some of the views that are keeping the market balanced.

The June NYMEX contract is now off the board, settling at 2.875/MMBtu (up $0.05 from May), and July is currently trading at $2.96/MMBtu. Currently, Gas Weighted Cooling Degree Days are forecasted to be 50% higher than the 30-Year average for much of June. Will a hot summer finally push prices over the $3 mark, or will mild temperatures allow a break through to the down side? This report will take a closer look into these questions by discussing the fundamentals that are impacting the natural gas market. Since we continue to see the Bulls help support gas prices, we will begin with these fundamentals...

• THE BULLS •

WEATHER UPDATE: HOT

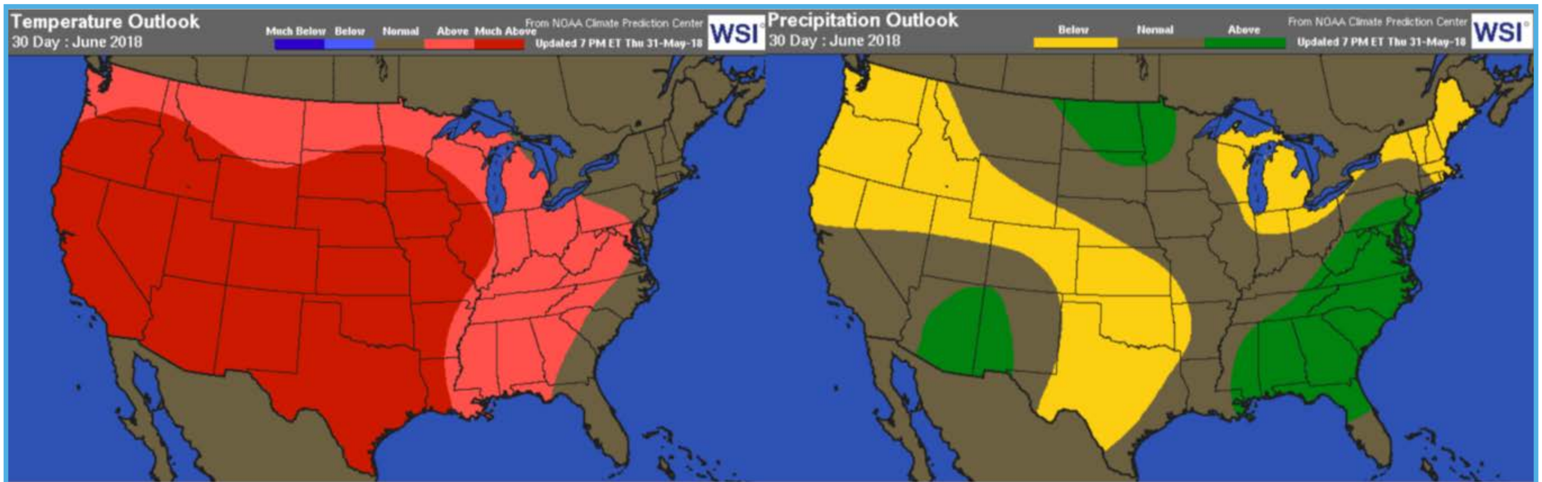
There could not have been any more of a dramatic shift in weather for much of the United States from April to May. This April was one of the coldest recorded, and it has been followed by the officially hottest May on record for the United States. The National Oceanic and Atmospheric Administration (NOAA) reported that most of the country experienced a top 3 hottest May on record (see below). No region escaped the heat and Texas and the Midwest felt the brunt of the much above average temperatures. The "year without a spring" had harsh implications for the natural gas market. Usually, we see a nice transition period for temperatures, which allows a break from natural gas-fueled heating and cooling demand, but this period never came. The shoulder season for demand was non-existent and the weather has counteracted our much increased gas production figures. Drought conditions have started in Texas and this will become a crucial indicator for potentially higher summer power burn demand. The sudden switch in temperatures has kept natural gas prices stable, despite increased supply.



Source: National Oceanic and Atmospheric Association

WEATHER FORECAST: HOT

The La Nina that we experienced this winter is expected to continue its' transition to neutral for the summer. Forecasters now see a 50% chance of an El Nino by winter. The forecasts we presented last month proved true, and we quickly switched temperatures, seeing the hottest May on record. The much above average temperatures are expected to continue in June but will likely not be as anomalous as May. The latest forecast model through June 22nd calls for 360 gas weighted degree days (GWDD's). This is 57% above the historical average of 229 GWDD's. So what will this mean for the natural gas market? Since we are entering summer, much above average temperatures will bring a higher demand for electricity and thus a continued demand for natural gas for power burn. [Drought conditions] remained constant in West Texas and the Southwest, but forecasts are indicating conditions could worsen. Drought conditions will now start to have a direct impact on the electricity generation load needed for a given region. Summer is upon us and natural gas demand is at the mercy of the weather.



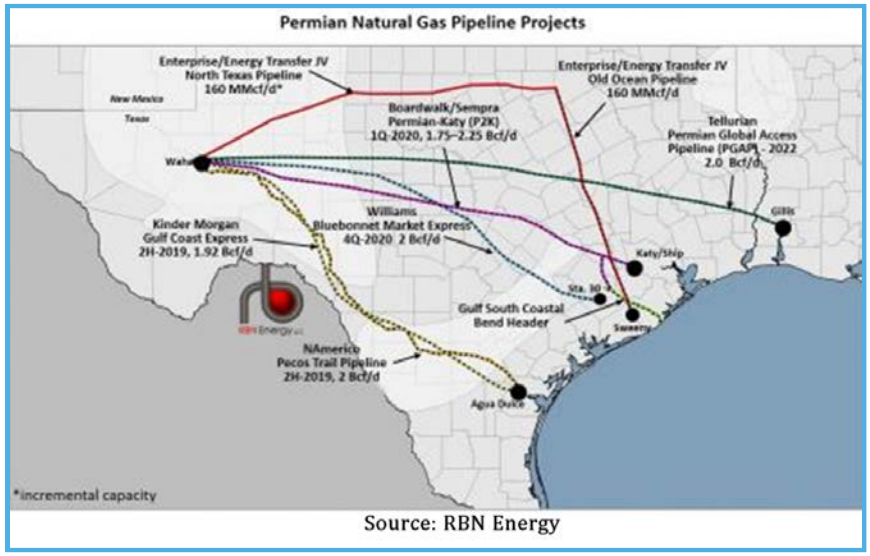
Source: National Oceanic and Atmospheric Association
Left: June Temperature Outlook, Right: June Precipitation Outlook

• THE BEARS •

PIPELINE UPDATE

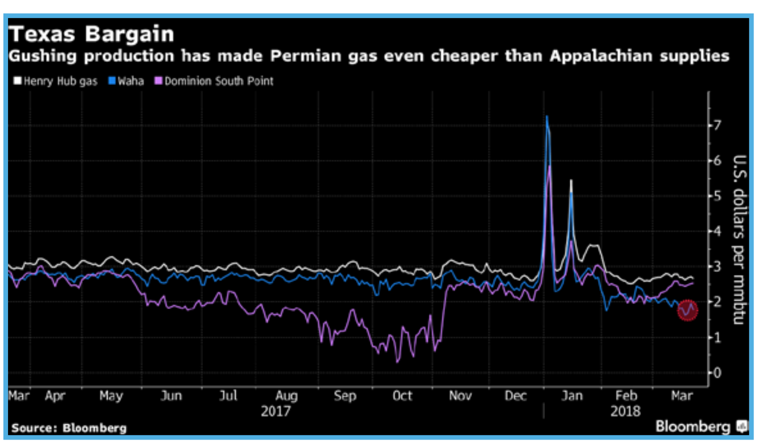
We last gave an update on the coming pipeline build out in March, and since then we have seen a few developments. Our last report gave an in depth look at the Northeast region and focused on pipelines leaving the Marcellus/Utica shale region. This report will touch on that region again, and will also look at the pipeline shortage situation in West Texas. There are numerous news stories about pipelines (or lack thereof) and this update will provide in depth information on their timing and market implications/reactions.

First we will start with the good news for natural gas pipelines. So far in 2018, we have seen an additional 5 Bcf/Day of pipeline takeaway capacity from Ohio, Pennsylvania and West Virginia. There is an additional 10 BCF/Day expected to come on line by the end of the year. The latest news in the Northeast is that the Rover II pipeline has finally been commissioned as of June 1st and will be able to move up to 1 BCF/Day to the Chicago/Michigan/Dawn, Ontario markets. The Atlantic Sunrise pipeline is progressing towards its' Q3 start date and will provide much needed price volatility relief to the Mid-Atlantic region. The Nexus pipeline is experiencing intense backlash from citizens in Ohio, but will likely not be delayed for its' commissioning in the next month. These are but a few of the high capacity pipelines that will help carry gas away from America's top producing region. Traders still believe that producers will be able to match this oncoming takeaway capacity, with the Dominion hub calendar 2019 strip trading around NYMEX (-) $0.55/MMBtu for much of the last year.



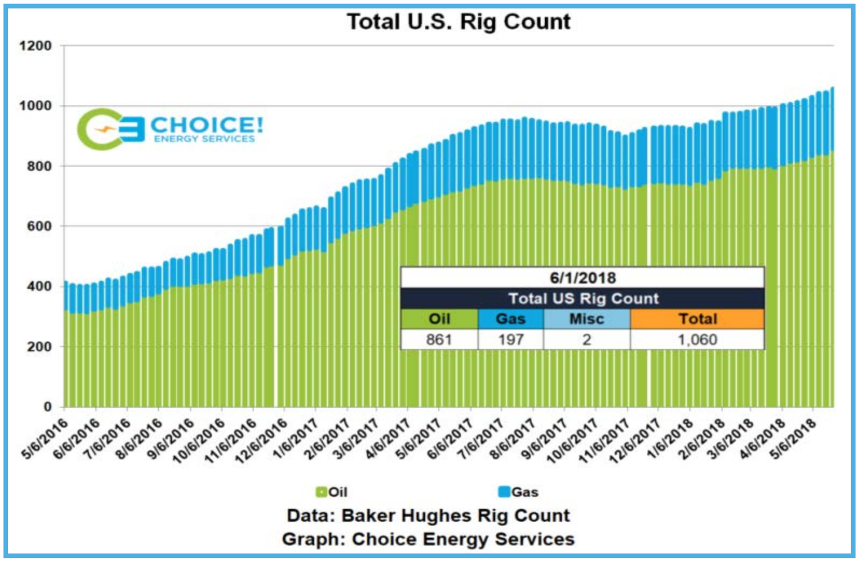
Source: RBN Energy

While years of planning and construction in the Northeast are finally coming to fruition, we are seeing the beginning of the process in Texas. The recent run-up in oil prices in Texas has exposed the lack of gas (and oil) pipelines for the region's various shale plays. In West Texas specifically, producers may have to begin curtailing oil production due to the fact that they cannot vacate associated gas from the region fast enough. Since the market has shifted in the last 5 months in Texas and pipelines take a minimum of 18 months to plan and construct, we are seeing a severe over-supply situation for natural gas in the region. Pipelines like the Gulf Coast Xpress and Pecos Trail will compete for moving gas from the West Texas Waha hub to the Aqua Dulce port on the coast. Other pipelines such as the P2K (Permian to Katy) and Permian Global Access Pipeline will aim at moving West Texas gas to Houston and Louisiana respectively. The issue is that none of these pipelines are expected to be completed for at least the next 14 months. The only other avenue out of West Texas would be to Mexico, but the process for creating a market there has been painstakingly slow. To put it simply, West Texas gas is trapped for the time being.



The Marcellus/Utica and Permian gas shale plays will continue to be the powerhouse producing regions for the United States' and the world's growing gas appetite. The pipeline takeaway capacity situations are completely different, with a different set of inputs and implications for the natural gas market. Keeping up with the news and expectations for these regions will continue to be an important market fundamental and the Bulls and Bears report will touch on these events as they develop.

RIG COUNT INCREASING



This month we saw the total rig count continue to grow to 1060 rigs, up 28 since our last report. Friday 5/25/18 saw the oil rig count rise by 15 and it is now up to 861. Natural gas rigs have increased by 1 to 197 from a month ago. The rig count is climbing after being constant for so long. We have seen a 17.5% increase in oil directed rigs versus this time last year. The total Rig Count has finally broken out of its nearly yearlong range of 920-960. Following the strong argument that rig count follows the price of oil with a 19 week lag, we should be looking at continuing to increase the current rig count over the next month. The total rig count will likely level-off after the next month or so. Oil prices are currently $65/BBL for WTI and over $70/BBL for Brent. With the United States becoming an energy super power, the rig count is an indicator for a growing potential for oil and gas production dominance on the global level. Regardless, the team at Choice Energy Services will closely monitor the rig count reports in the coming weeks and how this may have a long term impact on pricing in 2018.

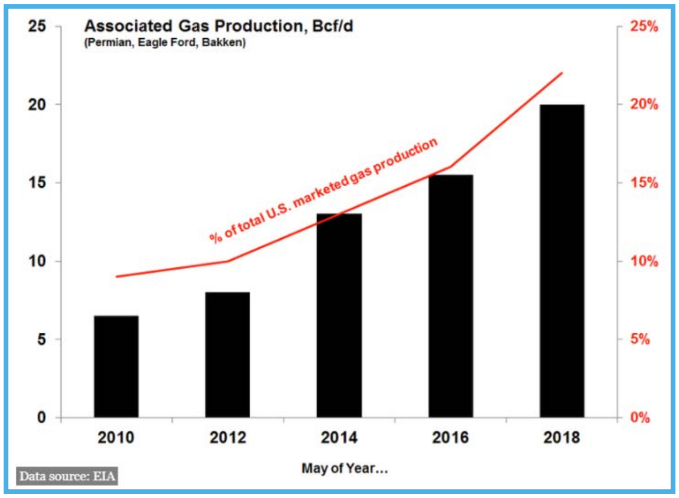
PRODUCTION LEVELING

We last touched on this topic in April and production records have continued to be set since. Dry gas production has slowed its' growth in recent weeks, and this may have implications as we enter the summer. This topic factors in heavily to other fundamentals, such as the storage topic, and this month we will give a refresher on where we currently stand in production growth and outlook.

The EIA Natural Gas Weekly Update has shown that Dry Production averaged 80.1 BCF/Day for the week ending on Thursday 4/12. The following weeks resulted in dry production totals falling back below the 80 BCF/D mark. This past week we saw a new record for natural gas dry production at 80.2 BCF/Day. In the last two months we have seen dry production levels average between 8 – 9.5 BCF/Day higher than the same weeks in 2017. While we are seeing continued high production, we are seeing a leveling off in its' growth week to week. We have averaged between 79 and 80 BCF/Day for the last two months.

Much of this new gas is coming from the Marcellus/Utica shale region and this will likely continue with the addition of the Rover Part 2 pipeline, previously discussed in this report. We are also seeing a large influx of associated gas from increased Oil production in Texas. Natural Gas and Oil pipelines are at or near capacity leaving the Permian region and this gas is causing record low prices at the Texas Waha hub. Since pipelines are nearing capacity we likely will not see much more additional gas from this region, and flaring will likely increase.

Numbers aside, what do these increased production numbers mean for the natural gas market? Obviously more production would have a bearish impact on price. Since we have seen a leveling off in production growth, we have seen price creep closer to $3. The increased winter demand has quickly switched to power burn demand for summer like temperatures. This increased demand has counteracted the increase in supply and has kept the market balanced. Whether this summer will continue its' warm trend is yet to be determined, but if it does it may send a price signal to producers indicating that we are going to need to increase production in order to have enough gas for the winter.

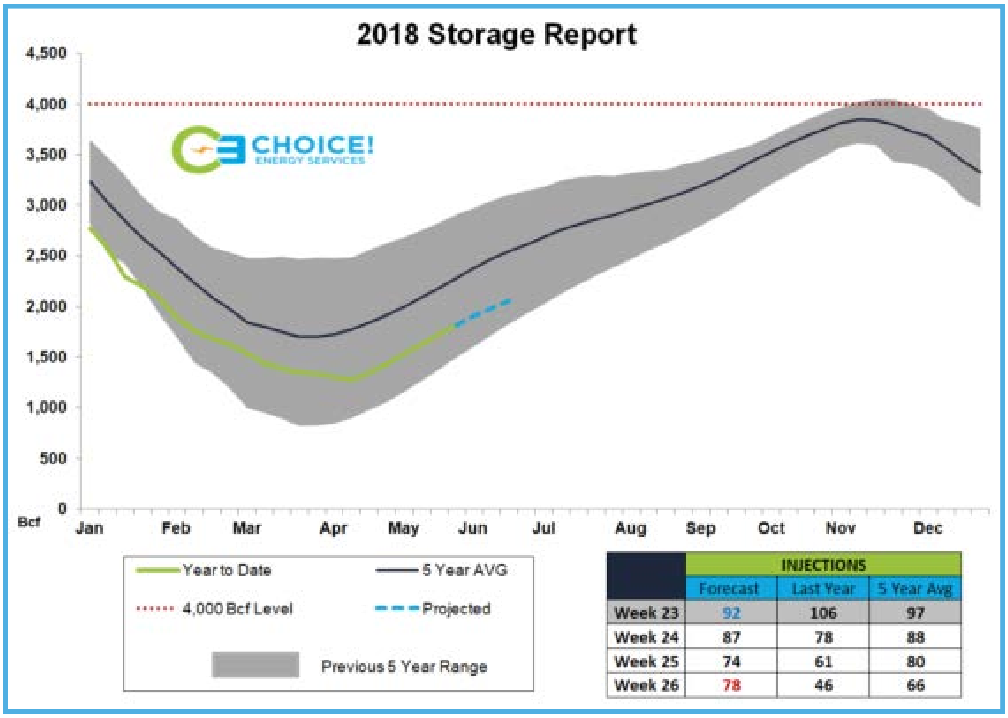


• NEUTRAL •

STORAGE

The month of May managed to keep demand elevated, which maintained the storage total deficit. If we begin to see hot summer temperatures, and potential summer withdrawals from storage, traders may push prices higher despite record production totals. Historically, the month of May sees the largest injection totals in to the ground with a five-year average total injection of 366 BCF. This May we injected 382 BCF in to storage. This stat becomes less impressive once you factor in the record high production numbers we have seen. So in summary, the weather was hot enough this past month to keep storage injection totals near the average. The current storage level is 1.817 TCF, after a 92 BCF injection on June 7th. Since natural gas is a forwardly traded commodity, traders are looking at supply and demand scenarios that will play in to the injection season. We are now 512 BCF behind the five-year average storage level and 799 BCF behind last year.

So why aren't we seeing a run up in gas prices? This answer is found in the [supply and demand scenarios](#) for the rest of 2018. On the demand side, analysts are expecting a 2 BCF/Day increase in exports, a 2 BCF/Day increase from power burn (assuming a normal summer), and about .5 BCF/Day increase in industrial demand, all versus 2017 figures. On the supply side, we are currently producing about 80.2 BCF/Day and after this week we will need to average storage injections ~92.7 BCF/Day during the injection season to reach the five-year pre-winter storage level of 3,829 BCF. We will likely not reach the five year average storage end. EOS futures predictions have storage ending at 3,545 BCF. If any of these fundamentals start to stray from their projections, we could begin to see serious volatility.



SUMMARY

With the weather aiding gas power burn through all of May, we were able to break out in to the $2.90 range for prompt month. The June contract settlement was indicative of its' trading range settling at $2.875/MMBtu. As you can tell from this report, the bears have remained in charge but uncertainty still looms. Is it possible that the weather is the only thing aiding the Bulls? Certainly, but this effect is hard to quantify. The prompt month has moved to the July contract and has been hovering near $2.90. The forward market prices have diverged from last month with Cal '19 up a dime and Cal '20 prices holding near

$2.67 (See Below). Any strong long term Bullish movements in the market continue to be squashed by the Bearish fundamentals that have been discussed in this report. The Bulls' only near term hope for a sustained rally rests with either undelivered production projections and/or a hot summer forecast. Attention is now fully focused on the summer months, as this year should see an increase in power burn from natural gas fired power plants, ESPECIALLY if NYMEX prices begin to fall. In the current short run, the Bulls are balancing out the Bears, and a serious shake up in the fundamentals will be needed to challenge the status quo.

Source: EOX Live
Graph: Morningstar Commodities