

Natural Gas Market Indicators



June 15, 2016



Reported Prices – for the first half of June, oil prices continued to hold at or just below \$50 per barrel while natural gas at Henry Hub firmed to over \$2.60 per MMBtu. Winter strip pricing for gas popped above \$3.30 per MMBtu, reflecting bullish sentiments. We will see how this holds through the summer. In the short term, there seems to be a recognition of a tightening of supply and demand. How much are the fundamentals driving this upward movement in prices versus other factors like financial instrument position taking driving the market?

Weather – only one week into June and already there were three named storms for 2016. To be fair, the first named instance, Hurricane Alex, atypically formed in January—the first January storm since 1938. Months later, during late May and much closer to the start of the hurricane season, Tropical Storm Bonnie formed and steered up the southeast Atlantic coast before dissipating. Finally there was Tropical Storm Colin, named on June 5, which started as a tropical depression in the Gulf of Mexico and tracked across Florida and into the Atlantic. No hydrocarbon production disruptions were reported due to these early-season storms. Turning to temperatures, US cooling degree days (CDD) tallied 47 percent above (warmer than) normal for the week ending June 4 and 21 percent above normal for the week of June 11. Cumulative CDDs are up 17.2 percent from the 1981–2000 average.

Working Gas in Underground Storage – net storage injections for the week ending June 3, 2016 totaled 65 Bcf, bringing total working gas to 2,972 Bcf. One must go back to early June 2012 to see this much gas in underground storage so early in the storage injection season. Weekly injections have been modest so far this spring and summer, but they need to be. With 150 days left in the injection season, an average of just 7 Bcf per day would put the country back in record territory for storage inventories. That daily average is very modest when history tells us that double-digit daily injections have materialized in the past during this period. Continued declines in production and increases in volumes to power generators may provide the balance necessary.

Natural Gas Production – a study initiated by the Our Nation's Energy (ONE) Future Coalition has taken more refined look at the costs associated with reducing methane emissions in the gas value chain. The new study, conducted by ICF International, found that if recovered methane can produce a value of \$2.25 per MMBtu that the overall cost of reducing emissions may still be \$3.35 per Mcf—a cost considerably higher than demonstrated by a similar 2014 report from ICF initiated by the Environmental Defense Fund. The intent of the new report is to give guidance to producers and others as to where the most cost-effective reduction opportunities may be found. With that noted, production remains generally between 70 and 71 Bcf per day, having averaged 70.5 Bcf per day to date this month. Compared to one year ago, monthly average volumes per day are 1.5 Bcf lower. Year-to-date volumes have also moved slightly lower when compared to 2015—the first time that has happened in years and suggesting that we might be finally seeing the full impacts of less drilling investment.

Shale Gas – the United States Geological Survey (USGS) has completed a resource assessment of the Mancos Shale in the Piceance basin of Colorado and concluded that the 4,000 foot thick formation

may hold up to 66 trillion cubic feet (Tcf) of natural gas and more than 110 million barrels of liquids. The assessment updates a 2003 USGS assessment of the Mancos and includes information from more than 2,000 wells that have been drilled in the formation.

Rig Count – the US rotary rig count gained 6 for the week ending June 10 as oil and gas rigs both added three. Market observers, including those of us here, will be closely watching to see if the rig count stabilizes or increases in coming weeks, which would offer one indication that rising oil and gas commodity prices may be finally inducing a drilling response. Just as likely is that industry is not yet ready to resume exploration and production activities given anticipated market pricing and that further gains in prices will be necessary for the rig count to climb again.

Pipeline Imports and Exports – current imports of pipeline natural gas from Canada are running about 0.4 Bcf per day higher this June than the same period in 2015, though year-to-date volumes (at 5.4 Bcf) are now 0.2 Bcf per day lower than this time last year. On the flip side of the ledger, exports to Mexico have been strong during the first half of 2016 with year-to-date pipeline volumes averaging 3.4 Bcf per day, which exceeds the same period last year by 0.9 Bcf per day. Feedgas for LNG exports has also averaged 0.4 Bcf per day year to date, bringing natural gas exports (pipeline and LNG) to nearly 4 Bcf per day on average since January.

LNG Markets – Kinder Morgan received approval from FERC for its Elba Island LNG export facility in Georgia. While the project has received automatic DOE approval for exports to free trade agreement countries, it must still get the DOE's authorization for its non-FTA application. Imports of LNG year to date remain modest at 0.3 Bcf per day.

Natural Gas Market Summary – the market is showing clear signs of tightening. Slowly falling production is eating into supplies while strengthening demand from power burn and exports means the balance into storage this June has been well below average. This deficit gives a little relief to a market with storage stocks at levels about two months ahead of schedule for a typical injection season. The market has rationalized itself with rising prices, up now \$0.60 from that \$2 sticking point witnessed through much of the winter. Key to this balance, as always, will be summer weather. If temperatures drive more cooling demand, the bullish injection deficit is likely to persist. Conversely, mild temperatures could mean additional volumes into storage, which would likely prove bearish for this market. However, the potential for additional exports through year-end may offer some additional flexibility on the demand side. As these factors adjust in relation to each other, it's important to step back and recognize that given the diversity and strength of demand and the rapid evolution in upstream activity just how resilient this market has been, as evidenced by lower and relatively stable prices for natural gas.

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