Natural Gas Market Indicators

American Gas Association

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Reported Prices – despite the first net withdrawal from underground storage not occurring until the week of November 18, Henry Hub futures pricing for January has firmed to more than $3.20 per MMBtu. Storage inventories are high and some analysts believe that coal will regain some share in the power sector as natural gas prices recover. Now we wait to see if any winter events break natural gas out of its relatively modest pricing position. Meanwhile, crude oil trades within a narrow $48–$49.25 range for West Texas Intermediate and Brent spots as the world watches this week's meeting of OPEC in Vienna.

Weather – temperatures have been cumulatively warmer than normal for every region of the country for the months of October and November according to the National Oceanographic and Atmospheric Administration. Individually, regions have been cumulatively 27 to 60 percent warmer than normal with the collective heating degree day picture for the country showing 31.0 percent fewer HDDs, or warmer-than-normal conditions. This is a significant deviation from the norm and if it were to persist would place the emerging winter heating season of 2016–17 in record warm territory. However, indications are that cold may be coming (which may be evident in recent firmer natural gas pricing). For the nation, the US moved closer to near-normal (see: colder) temperatures. Temperatures were only 2.6 warmer than normal for the most recent week ending November 26 as colder temperatures in the eastern US were offset by warmth in the west.

Working Gas in Underground Storage – underground storage finally swung around to a net withdrawal with 2 Bcf pulled from stocks for the week ending November 18. A new high-water mark for underground storage volumes was therefore established the week prior with 4,047 Bcf of working gas available headed into the winter heating season. Supplies are robust: Volumes are 6.3 percent higher than the five-year average and 1.0 percent above last year's inventories.

Natural Gas Production – as much as low commodity prices have pounded at natural gas producers in 2016, the country has entered the current winter heating season with 71.5 Bcf per day of dry gas production on average during November 2016, only 0.5 Bcf per day less than November 2015. Year-to-date production volumes only trail last year by 0.2 Bcf per day, according to Bentek Energy. Even with relatively low commodity prices during much of 2016, natural gas production has remained stable and even, in plays such as the Marcellus and Utica shales, continued to grow

Shale Gas – data from the Energy Information Administration's "Drilling Productivity Report" shows a steady and consistent increase in new-well gas production per rig. Every shale zone is projected to increase by this key metric in December, which has helped sustain production despite the decline in drilling rigs. The Utica and Marcellus have grown steadily since reporting began. Even the Haynesville, which began to see declines in new-well gas production per rig as recently as last year, has rebounded and continued to improve during the past ten months.

Rig Count – rigs continue to rise. Baker Hughes reported a gain of 5 for US drilling activity bringing the total action to 593 rigs. Oil gained 3 and natural gas ticked up 2; all were designated horizontal rigs. Overall in November, the rig count netted a gain of 36 and the past two weeks have both shown net addition to activity. Going back to August shows us a net gain of 130 rigs. It certainly seems that operators have responded to price, or necessity, and gotten back into the field.

Pipeline Imports and Exports – the US is now a net exporter of natural gas. According to S&P Global Platts, the US began seeing small net volumes of natural gas exports this month. Bentek data showed small amounts of net exports as volumes from Canada and imports from LNG together fell below 5.0 Bcf per day while exports to Mexico plus LNG export feedgas together exceeded 5.0 Bcf per day. This remarkable milestone will only become more salient as new additions to export capacity come online in the coming months and years. The rise of shale gas supplies has reshaped how the US will position itself in a global energy market. It's not over yet.

LNG Markets – five liquefaction trains at Sabine Pass are in different states of progress: Two are operating, one is undergoing commissioning, and trains 4 and 5 are under construction. Meanwhile, two trains at Cheniere's Corpus Christi are also under construction and about 40 percent complete, and Dominion Resources' Cove Point liquefaction plant in Maryland is about 75 percent to completion. All of this points to continued momentum in establishing a LNG supply profile for the US in the world market. In fact, a recent report by McKinsey and Co. anticipates that the US and Canada alone will be responsible for about 55 percent of capital expenditures ($80–100 billion) directed to LNG on a global scale between now and 2026. LNG export feedgas, as reported by Bentek LLC, shows a steady 1.4 to 1.6 Bcf per day of gas shipped to the Louisiana facility to prepare for export. Concurrently, however, *imported* volumes of LNG sent to the grid are concentrated in the Northeast and total about 0.2 Bcf per day.

Natural Gas Market Summary – usually by this point in November the weather has turned and we are typically looking ahead in anticipation of future supply-demand balances and even reading analyses on expectations for season-ending storage inventories and pricing. With such a moderate start to the winter heating season, reflective of warmer-than-normal temperatures throughout country, some analysts are already looking at storage expectations for next summer skipping right over this winter—that, in fact, the 2017 injection season is where the next market story will be. Remarkable! But hold on a second. We will see how predictable Mother Nature is the next few months. Market pricing is telling us that a strong supply picture is still dominating the supply/demand balance with strong inventories in record territory and sustained, stable production. But prices have firmed recently, perhaps on future weather expectations. Thus we are back at a familiar place visited often during the past several years: *Where is the demand?* Perhaps now it's Mother Nature's turn to reply.