October 15, 2015

**Reported Prices** – while crude oil markets in early October held $46 and $49 per barrel for West Texas Intermediate and Brent crude, respectively, prompt-month pricing (November 2015) for natural gas slipped to under $2.50 per MMBtu several times, perhaps revealing pressure on Henry Hub pricing from October declines in power generation requirements and a strong underground storage position.

**Weather** – hurricane Joaquin dominated television weather forecasts along the US east coast to begin October and was responsible for epic flooding in South Carolina, as well as severe water levels in other east coast locations. Temperature wise the seasonal trend dating back to April sustained itself with national conditions 40.9 percent above normal cooling degree day counts (warmer than normal) for the week ending October 3 and aggregate cooling degree days 16.5 percent higher than normal since early May 2015. Every region of the country has been cumulatively warmer than normal for that six-month period this year. The early season accounting for the transition to heating degree days, as the winter heating season approaches, shows for early October conditions to be 25 percent warmer than normal for the country as a whole – no surprise given continuing trends.

**Working Gas in Underground Storage** – with the injection season pace of flows already well above average this summer, it’s not hard to envision a scenario with 3.9 or 4.0 Tcf of gas in place by the beginning of November. Current working gas volumes in underground storage are high enough such that, if the pace of injections into early November meets five-year average levels, then a new record will be set for end-of-season inventories. At the beginning of October, if injections averaged 92 Bcf per week until the beginning of November, then working gas would surpass 4.0 Tcf – a remarkable amount of gas in place headed into the winter. So far early October weekly injections have exceeded the aforementioned metric. For the week ending October 9, working gas inventories stood at 3,733 Bcf – 13.6 percent higher than this time last year and 4.7 percent above the five year average.

**Natural Gas Production** – year to date dry natural gas production at 72.0 Bcf per day on average exceeds last year’s comparable volume by 3.7 Bcf. That said, US production has flattened during the second half of 2015 and the current analytical debate is whether 2016 will bring an incremental decrease in national production totals given producer slowdowns attributable to pricing or whether incremental increases will continue albeit at a less vigorous pace. In the world of energy analytics there is always something to look forward too as far as confirming a vision for the future.

**Shale Gas** – current accounting for production from shale plays in the United States places the daily natural gas production volume at more than 40 Bcf per day, according to the Energy Information Administration. By all counts that is more than 50 percent of all natural gas being produced in the United States, today. Most analysts believe that the shale portion of total production will continue to grow with time.
Rig Counts – total rotary rig counts in the United States are currently only 41 percent of levels compared to one year ago – 735 versus 1,930. Oil operations are down 1,004 rigs and gas-directed drilling not so much – only down 131. That said, it is clear that commodity pricing has taken its toll on producer development budgets not only in the US but in Canada, also. At 180 rigs operating, drilling activity north of the border, today, is likewise at 43 percent of levels this time last year.

Pipeline Imports and Exports – natural gas volumes from Canada on a given day have increased once more to over 5.0 Bcf and, in fact, have averaged just that for the month of October. That is down about 0.3 Bcf per day from October 2014 but the current year to date average of 5.5 Bcf per day exceeds that of 2014 by 0.4 Bcf. Exports to Mexico remain solid at 2.9 Bcf per day for the month of October and are 35 percent higher year to date compared to 2014.

LNG Markets – a formal application has been filed by Cameron LNG with the Federal Energy Regulatory Commission (FERC) to expand the LNG export facility with trains 4 and 5, which would add approximately 1.4 Bcf per day of additional capacity and include the addition of a fifth LNG storage tank on site. Cameron proposes a start to construction in mid-2016 and to make facilities operational by 2019, however, buyers must be found to take the extra output capacity. Some analysts believe that actual signed contracts may not be possible until after 2020, as the whole LNG supply/demand pictures sorts itself out not only in North America but around the world. In other LNG related news, the Jordan cove LNG project at Coos Bay Oregon and the 232-mile, 36-inch pipeline to serve the project have been given a positive environmental impact finding by FERC given the mitigation strategy of the company and the recommendations from the commission. Final FERC approval may come in mid-2016 and if so, would be followed by a final investment decision by Veresen, Inc. Current imports of LNG and subsequent injection into the US pipeline grid are running no more than 0.1 Bcf per day.

Natural Gas Market Summary – residential/commercial demand for natural gas will begin to increase as the eastern United States begins to flip from warmer than normal conditions back to seasonal norms. However, that usually means that power generation requirements for gas slip as less is required for air conditioning loads and that, of course, has happened. With a Henry Hub price of $2.50 for November futures, the clear signal is that the latter is having a greater influence than the former in this equation, which is no surprise in a supply strong market.

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