# Natural Gas Market Indicators

American Gas Association

**July 31, 2015**

***Reported Prices*** – natural gas pricing at Henry Hub surged to over $2.90 by mid-July, retreated once more into the $2.70s, and then moved up again. Forward prices for Henry Hub natural gas ultimately break above $3 per MMBtu—but not until the first months of the 2015-16 winter heating season. August oil prices slipped below $50 per barrel for West Texas Intermediate during the week of July 20, leaving some analysts wondering if there's still some downward pressure left. Oil isn't the only commodity getting dragged down, however. Precious metals, agricultural, and fuels have shown weakness in recent months. The Bloomberg Commodity index, which tracks a basket of 24 commodities, neared a 13-year low and is down 25 percent for the year. US natural gas contracts are included in this index. One can speculate whether this soft market is a forward indicator for a weak economy, or maybe it indicates the coming end of a decades-long "commodity super cycle." Whatever the reason, we will continue to watch how these macro indicators influence domestic natural gas markets.

***Weather*** – temperatures have not relented during this typically-warmest period of the summer. Cooling degree days are now 13 percent above normal, cumulatively, going back to the first week of May 2015. This helps to explain why, in part, the strong volumes of gas to power generation so far this summer have persisted. Only the East North Central and West North Central areas (Midwest) have seen cooler than normal conditions this summer; every other portion of the country has posted higher than average cooling degree days.

***Working Gas in Underground Storage*** – working gas injections increased for the week ending July 10 to 99 Bcf, bringing national inventories to 2,767 Bcf. A small reclassification of working to base gas (7 Bcf) contributed to slowing the following week's injection but with totals now at 2,880 Bcf working gas is still 3.0 percent above the five year average and 25.5% higher than this time last year.

***Natural Gas Production*** – US natural gas production has posted 72+ Bcf per day on average this July – an increase of 3.4 Bcf or 4.9 percent higher than July 2014. With that said, the Energy Information Administration points out that production from Appalachian shales has grown 12.6 Bcf per day during the past 3.5 years and accounts for 85 percent of total US production growth during that period.

***Shale Gas*** – a group of researchers led by West Virginia University's Appalachian Oil and Gas Research Consortium estimates that the Utica shale (specifically in the United States) has as much as 782 Tcf of technically recoverable natural gas resources and 2 billion barrels of recoverable oil. The report points to only 3 percent of oil in-place as recoverable with today's technology but 28 percent of gas resources as recoverable. This evaluation of Utica gas resources is generally larger than most estimates of the prodigious Marcellus gas play, which is exciting given the success of shale gas extraction from the Marcellus in Pennsylvania and West Virginia during the past decade. Geologically, the Utica shale is older and deeper by comparison to the Marcellus and is geographically widely distributed, extending into Canada (Quebec).

***Rig Counts*** – last month, the *"*Market Indicators" noted a possible bottom to the decline in oil rig counts. So far July saw two straight weeks of oil rig count *increases*, followed by a third week ending July 17 where rigs declined to 638. This level is still above the recent floor of 628 hit nearly one month ago. Does this mean oil-directed activity is still bouncing off the bottom, or will rigs continue to collapse now that oil prices have softened again? Time will tell. Meanwhile, gas rigs operating total 218, which is the second lowest level since gas rigs began their own decline late last year. If natural gas prices also remain soft, questions remain whether the rig count will sustain or will need to drop lower.

***Pipeline Imports and Exports*** – exports to Mexico continue to surge along, relatively speaking. Although low in volume compared with other end uses, at 3.0 Bcf per day this July, net pipeline exports to Mexico are 25 percent higher than last year. Additionally, US imports are up this July. At 5.6 Bcf per day, import volumes from Canada are 0.9 Bcf per day or 19 percent higher than last year. Imports have often tracked gas for power requirements in the US. A significant portion of the month of month increase is due to higher requirements in the West as hydroelectric output has fallen amid the drought conditions.

***LNG Markets*** – the environmental review process for three LNG projects near Brownsville, Texas has been initiated by the Federal Energy Regulatory Commission and the public comment period has been opened for each. The US Department of energy is reviewing Texas LNG's request (among the Brownsville projects) for export to non-Free Trade agreement countries at this time, also. LNG sendout volumes to the pipeline grid have been in the 0.2 to 0.4 Bcf per day range during the past week.

***Natural Gas Market Summary*** – daily natural gas volumes to power generation reached 36.8 Bcf on July 20, then 37.4 Bcf on July 28—both strong daily numbers. Previously, we have reported that volumes of natural gas to power have also been peaking during winter months. With that said, the daily winter peak for gas-fired electricity in 2015 was 30 Bcf back in January. Overall, the power sector is the primary reason that demand in 2015 exceeds that of 2014. Average consumption of natural gas to power generation year to date has been 25.4 Bcf per day, which is 3.8 Bcf per day higher than in 2014. As has been discussed several times in these *Market Indicators*, structural changes in the national generation mix and market hub prices for natural gas below $3 per MMBtu help to account for the year over year difference. This year, in particular, power sector natural gas consumption has been impacted by record low hydro-generation in the Pacific Northwest, too.