

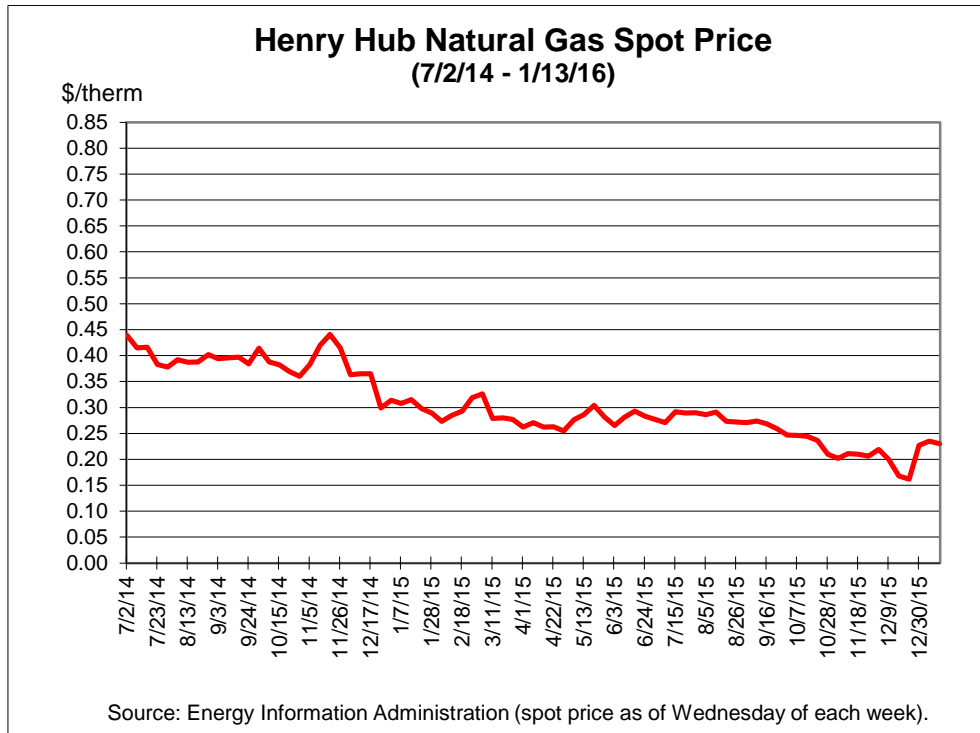
WHOLESALE NATURAL GAS MARKET ASSESSMENT

Wholesale Natural Gas Futures Prices as of January 5, 2016

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Outlook for Wholesale Natural Gas Prices

This report presents the Office of Technical and Regulatory Analysis' ("OTRA") assessment of wholesale natural gas supply and prices for January 2016.¹ OTRA's current assessment of the natural gas market suggests that wholesale natural gas prices may remain around \$0.25 per therm, or less, during January 2016 (see Henry Hub Spot Price figure). Recent natural gas spot prices are at least 15 percent lower than prices from the same period a year ago.



The Energy Information Administration ("EIA") indicates that the average Henry Hub natural gas spot price for December 2015 was about \$0.19 per therm, down from about \$0.21 per therm for the previous month.² In its Short-Term Energy Outlook ("STEO") for January 2016, EIA indicates that **"[w]armer-than-normal temperatures in the first half of the heating season, record inventory levels, production growth, and forecasts for a warm winter contributed to spot prices remaining low. Monthly average Henry Hub spot prices are forecast to rise through 2016, but they remain less than [\$0.30 per therm] until December.**

¹ This assessment is based on information collected from various sources. Projecting future conditions is a difficult task at best, so these comments are subject to change as new information becomes available.

² EIA, *Short-Term Energy Outlook* (January 2016) at 10.

Forecast Henry Hub natural gas price average [\$0.265 per therm] in 2016 and [\$0.322 per therm] in 2017.”³ Natural gas prices averaged \$0.263 per therm in 2015.

As of January 8, 2016, natural gas in storage stood at 3,475 billion cubic feet (“Bcf”). The working gas in storage is up 20 percent from the same period a year ago, and is up by about 16 percent compared to the 5-year average.

Commodity prices, together with the costs Washington Gas Light (“WGL”) incurs for storage, peaking, and balancing, have resulted in a lower retail price than what was experienced last year. Specifically, the costs WGL incurs to acquire and deliver natural gas to customers are reflected in WGL’s retail commodity price, called the Purchased Gas Charge (“PGC”).⁴ The PGC for January 2016 is 33.39 cents (\$0.33) per therm—the lowest PGC since May 1999 when it stood at 33.92 cents—compared with 58.66 cents (\$0.59) per therm for the same period a year ago—down 43.0 percent. The PGC for January 2016 is down 11 percent from the previous month.

The major factors that contribute to this outlook are described below. These factors include the weather, the economy, the storage situation, the supply situation, and national security.

Weather

Weather variations always have an effect on natural gas price formation. As of January 14, 2016, the National Oceanic and Atmospheric Administration (“NOAA”) indicated that its outlook for the remainder of January generally calls for above normal temperatures across the western portion of the nation.⁵ Above normal temperatures are also favored for most of the northern and central portions of the nation. Below normal temperatures are likely for the coastal region of the Southeast, extending from South Carolina to Central Florida. The expected weather for the remainder of January may be neutral for natural gas prices.

Economic Conditions

National economic factors also contribute to the formation of wholesale natural gas prices. The Federal Reserve’s Beige Book provides anecdotal information on current economic conditions from various regions—twelve Federal Reserve Districts—in the nation.⁶ Reports from the twelve regions indicated that economic activity expanded in nine of the Districts since the previous report in December 2015. Growth of consumer spending ranged from slight to moderate in most regions, while auto sales were somewhat mixed, as activity has begun to drop off from previously high levels in some Districts. With the exception of motor vehicles and aerospace, most manufacturing sectors displayed a weakening in activity. Also, fewer regions reported increases in manufacturing activity than decreases during the latest reporting period.

³ Ibid.

⁴ The current Purchased Gas Charge reflects current market conditions and current collections. The current cost of gas (including commodity, demand, and other cost adjustments) reflects the seasonal market. Alternative suppliers’ newer fixed price offers should generally reflect the PGC benchmark, with anticipated price changes as well, over the next twelve months.

⁵ NOAA at <http://www.cpc.ncep.noaa.gov/>.

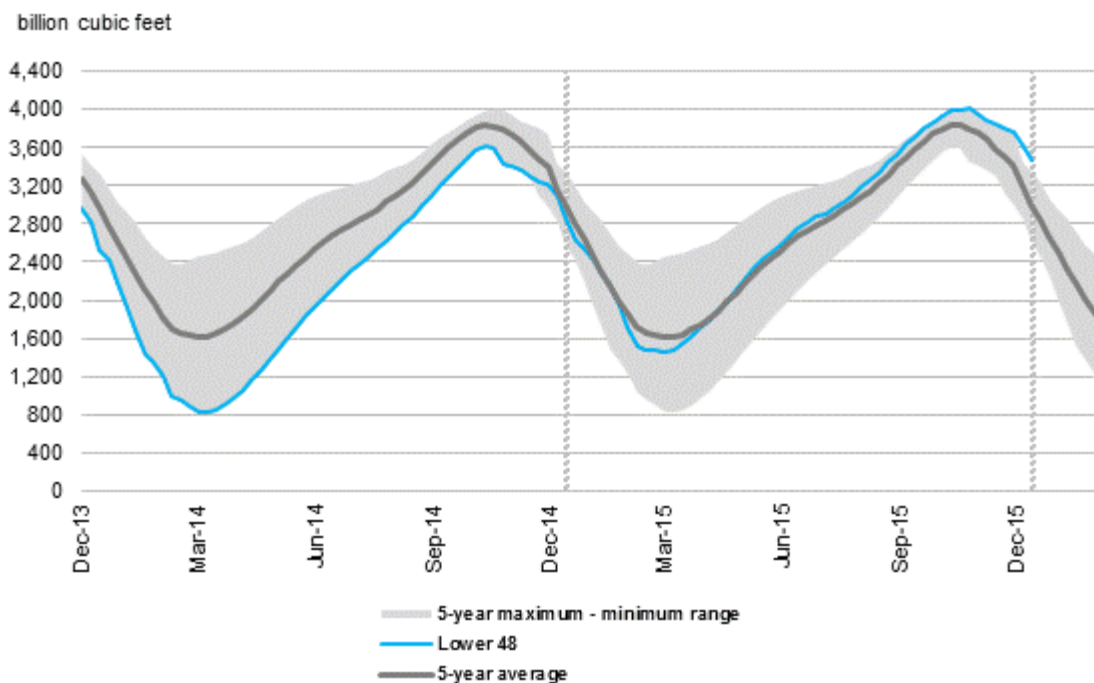
⁶ Beige Book (released January 13, 2016).

Several Districts reported the strong dollar's negative impact on demand, while some noted that low energy prices have had a smaller, mixed effect. Residential and commercial real estate activity generally improved, according to regional reports, with stronger activity generally cited for multifamily construction and commercial real estate. Labor markets continued to improve, with employment increases evident in reports from seven Districts. However, the various regions reported little overall change in wage and price pressures, with wage increases running from flat to moderate, while price increases tended to be minimal. Thus, at present, the current state of economic activity may still be relatively neutral for natural gas prices.

Storage

EIA reports that the working gas in storage was 3,475 Bcf as of January 8, 2016, a net decrease of 168 Bcf from the previous week. Stocks were 587 Bcf higher than the same period a year ago—up 20.3 percent—and up 474 Bcf from the 5-year average of 3,001 Bcf—an increase of 15.8 percent.⁷ EIA indicates that “[w]ithdrawals during the heating season have been relatively low because of warmer-than normal weather. January 1 inventories were 535 Bcf (17%) above year-ago levels and 464 Bcf (15%) above the five-year (2011-15) average. Inventories are forecast to be 2,043 Bcf at the end of March 2016, which would be 421 Bcf above the five-year average.”⁸ The current storage picture remains relatively neutral for natural gas prices.

Working gas in underground storage compared with the 5-year maximum and minimum



Source: U.S. Energy Information Administration

Note: The shaded area indicates the range between the historical minimum and maximum values for the weekly series from 2011 through 2015. The dashed vertical lines indicate current and year-ago weekly periods.

Source: EIA, *Weekly Natural Gas Storage Report* (released January 14, 2016)

⁷ EIA, *Weekly Natural Gas Storage Report* (released January 14, 2016).

⁸ EIA, *STEO* (January 2016) at 10.

Supply

Flexibility in the nation's domestic production has helped to soften upward price pressure, especially with the continued development of natural gas in shale formations. In the January 2016 STEO, EIA indicates that **“marketed natural gas production averaged 79.1 Bcf/d in 2015, an increase of 4.2 Bcf/d (5.7%) from 2014. EIA projects growth will slow to 0.7% in 2016, as low natural gas prices and declining rig activity begin to affect production. In 2017, however, forecast production growth increases to 1.8%, as forecast prices rise and more demand comes from industrial sectors and liquefied natural gas (LNG) exporters. Although demand growth levels off, production remains high, which is expected to reduce demand for natural gas imports from Canada and to support growth in exports to Mexico. EIA expects natural gas exports to Mexico to increase because of growing demand from Mexico's electric power sector coupled with flat natural gas production in Mexico. EIA projects LNG gross exports will increase to an average of 0.7 Bcf/d in 2016, with the start-up of Cheniere's Sabine Pass LNG liquefaction plant planned for early this year. EIA projects gross exports will average 1.4 Bcf/d in 2017, as Sabine Pass ramps up its capacity.”**⁹

National Security

As noted in previous reports, we see little danger to the natural gas supply.¹⁰ Most of the U.S. supply is secure, in that it is generally domestically produced or imported from Canada.

Future Natural Gas Prices

The PGC rate of roughly \$0.33 per therm for January 2016 is down 10.6 percent from the previous month, and is down 43.1 percent compared to the same period a year ago.¹¹ The February 2016 PGC (assuming that the commodity market adjustment factor is zero) may be around \$0.39 per therm, based, in part, on the expectation that near-term NYMEX futures prices continue to trade between \$0.18 and \$0.24 per therm, among other things. OTRA's assessment of natural gas prices may be significantly different from actual market prices if: (i) there are significant variations in weather-related factors, (ii) crude oil prices change significantly, (iii) other substantial disruptions to the energy market occur, or (iv) certain cost-related assumptions are significantly different.

As always, investments in energy efficiency and conservation measures are important ways toward reducing energy consumption and lowering energy bills. Ratepayers are encouraged to invest in measures such as insulation, weather stripping, or replacing an old

⁹ EIA, *STEO* (January 2016) at 10.

¹⁰ As of January 14, 2016, the Department of Homeland Security (“DHS”) has not issued any new bulletins. On December 16, 2015, DHS issued a bulleting indicating that, while there were no specific or credible impending threats against the United States, DHS was providing additional guidance to state and local authorities on increased security measures in light of recent attacks in San Bernardino, California and Paris. The National Terrorism Advisory System, or NTAS, replaces the color-coded Homeland Security Advisory System.

¹¹ The commodity market adjustment factor for the January 2016 PGC was -\$0.05 per therm, resulting in the adjusted PGC (excluding the commodity market adjustment factor (“CMAF”)) being equal to \$0.3839 per therm. Last month, OTRA estimated a PGC of \$0.40 per therm for December 2015, excluding the CMAF.

inefficient water heater and/or furnace. Finally, for those residential consumers whose budgets are severely challenged, arrangements for assistance should be made as soon as possible in anticipation of need. Contact either the District Department of the Environment's Energy Office or the D.C. Public Service Commission's Office of Consumer Services for advice and/or solutions as well as programs such as the Washington Area Fuel Fund (888-318-9233).

Wholesale Natural Gas Price/Supply Assessment Information

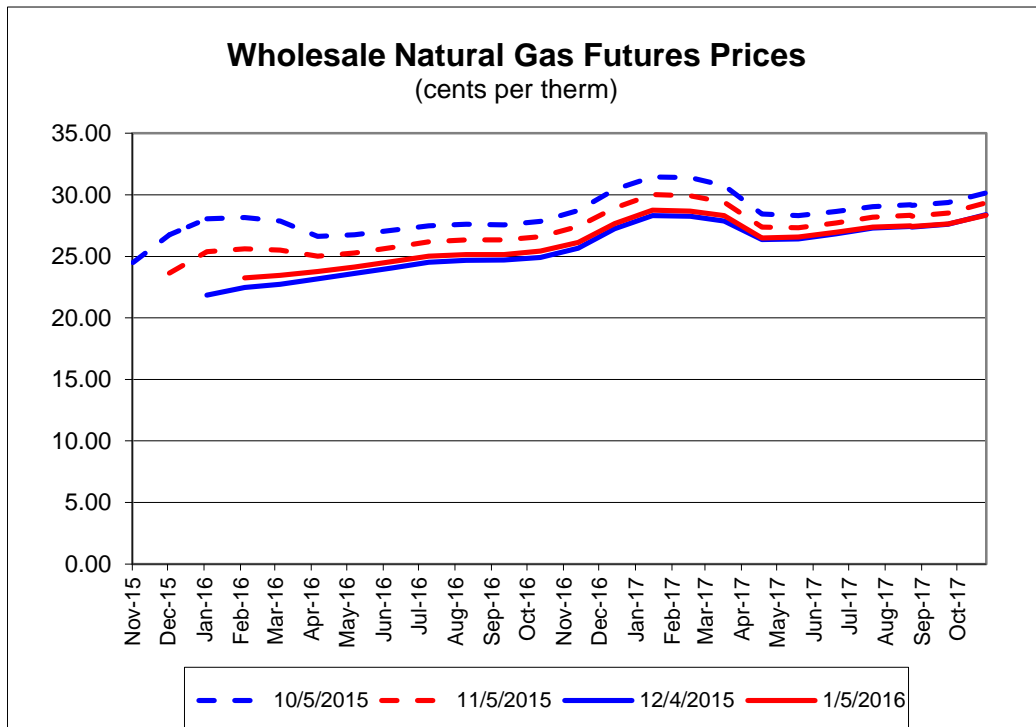
Current for January 5, 2016

Price Information

Twelve Month NYMEX Strip Components
1/5/16, cents per therm

Henry Hub Spot Market Price
1/5/16, cents per therm

	<u>Current Month</u>	<u>Previous Month</u>	<u>Current Only Available</u>
Feb 16	23.25	Feb 16 22.47	23.2
Mar 16	23.46	Mar 16 22.73	
Apr 16	23.76	Apr 16 23.16	
May 16	24.13	May 16 23.60	
Jun 16	24.58	Jun 16 24.05	
Jul 16	25.01	Jul 16 24.51	
Aug 16	25.15	Aug 16 24.68	
Sep 16	25.43	Sep 16 24.69	
Oct 16	26.14	Oct 16 24.90	
Nov 16	27.65	Nov 16 25.66	
Dec 16	28.74	Dec 16 27.24	
Jan 17	28.67	Jan 17 28.31	



The current PGC for January 2016 is about \$0.33 per therm. Assuming, among other things, that near-term futures prices remain around \$0.18 to \$0.24 per therm, the PGC rate (excluding the commodity market adjustment factor) for February 2016 may be around \$0.39 per therm. However, given the uncertainty about the weather, as well as other factors, this assessment could easily change. The assessment for January 2016 is that wholesale prices may remain around \$0.25 per therm, or less, resulting in wholesale prices that are lower by at least 15 percent, compared to year ago levels (see Market Conditions Summary).

Weather Forecast

1. Current for next few days to one week:

<http://www.cnn.com/Weather/>

<http://home.accuweather.com/>

2. National Oceanic and Atmospheric Administration Forecast for the Winter

<http://www.noaa.gov/>

3. U.S. Weather Service Atlantic Hurricane and Storm Reports

<http://www.nhc.noaa.gov/>

Wholesale Natural Gas Market Conditions Summary January 15, 2016

Factors	This Month	Winter Season
Oil Prices		
Weather - Temperature		
Weather - Hurricanes		
Economic Conditions		
Storage		
Natural Gas Supply		
National Security		
Overall		

Code: Red - Upward Pressure

Blue - Downward pressure

Yellow - No Change

No color - N.A.
Not Applicable