

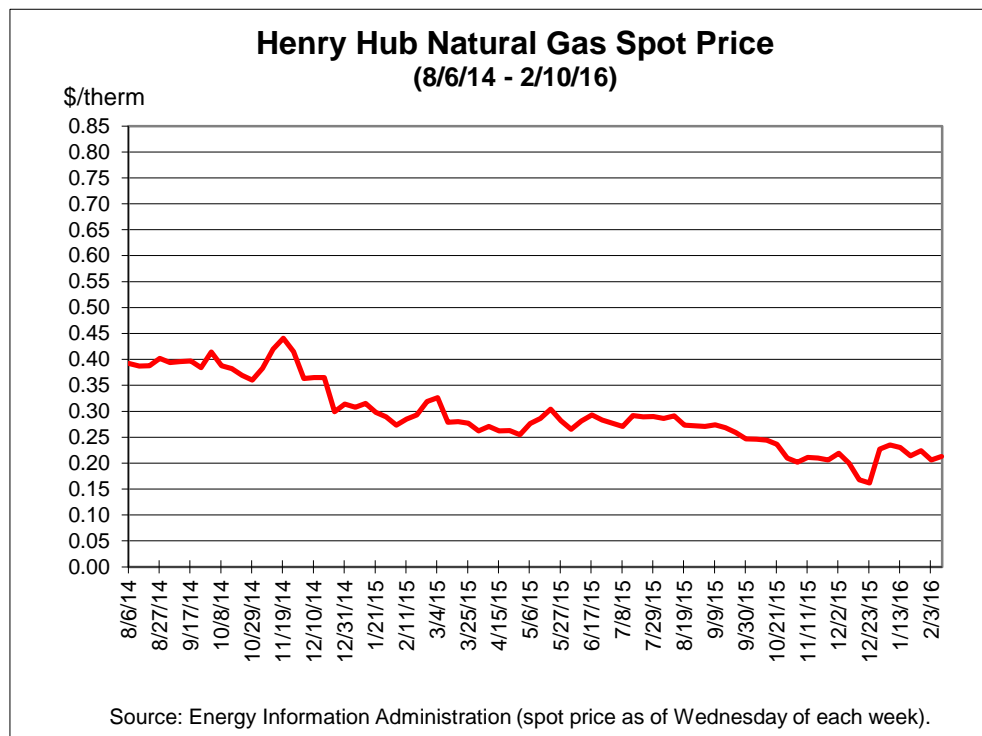
WHOLESALE NATURAL GAS MARKET ASSESSMENT

Wholesale Natural Gas Futures Prices as of February 4, 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 February 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 February 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 January 2016 was about \$0.23 per therm, up from about \$0.19 per therm for the previous month.² In its Short-Term Energy Outlook ("STEO") for February 2016, EIA indicates that **"[w]armer-than-normal temperatures in the first half of the heating season, record inventory levels, and production growth contributed to spot prices remaining low through December, but seasonably cold weather in the beginning of 2016 and increases in consumption likely contributed to the price increase in January. Monthly**

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* (February 2016) at 9.

average Henry Hub spot prices are forecast to rise through 2016, but they remain lower than [\$0.30 per therm] until December. Forecast Henry Hub natural gas price average [\$0.264 per therm] in 2016 and [\$0.322 per therm] in 2017.”³ Natural gas prices averaged \$0.263 per therm in 2015.

As of February 5, 2016, natural gas in storage stood at 2,864 billion cubic feet (“Bcf”). The working gas in storage is up 25 percent from the same period a year ago, and is up by about 23 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 February 2016 is 33.39 cents (\$0.33) per therm—the lowest PGC since May 1999 when it stood at 33.92 cents—compared with 50.66 cents (\$0.51) per therm for the same period a year ago—down 34.1 percent. The PGC for February 2016 is unchanged 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 February 15, 2016, the National Oceanic and Atmospheric Administration (“NOAA”) indicated that its outlook for the remainder of February generally calls for above normal temperatures across the western two-thirds of the nation, as well as portions of the northeastern region.⁵ Below normal temperatures are likely for the southeastern region of the nation, extending into the Mid-Atlantic region. The expected weather for the remainder of February may be neutral for natural gas prices.

Economic Conditions

National economic factors also contribute to the formation of wholesale natural gas prices. The Federal Open Market Committee (“FOMC”) maintained a low target range for short-term interest rates.⁶ The FOMC indicated that information received since the Committee last met in December suggests that labor market conditions improved further even as economic growth slowed late last year. Household spending and business fixed investment have been increasing at moderate rates in recent months, and the housing sector has improved further. However, net exports have been soft and inventory investment slowed. A range of recent labor market indicators, including strong job gains, points to some additional decline in

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/>.

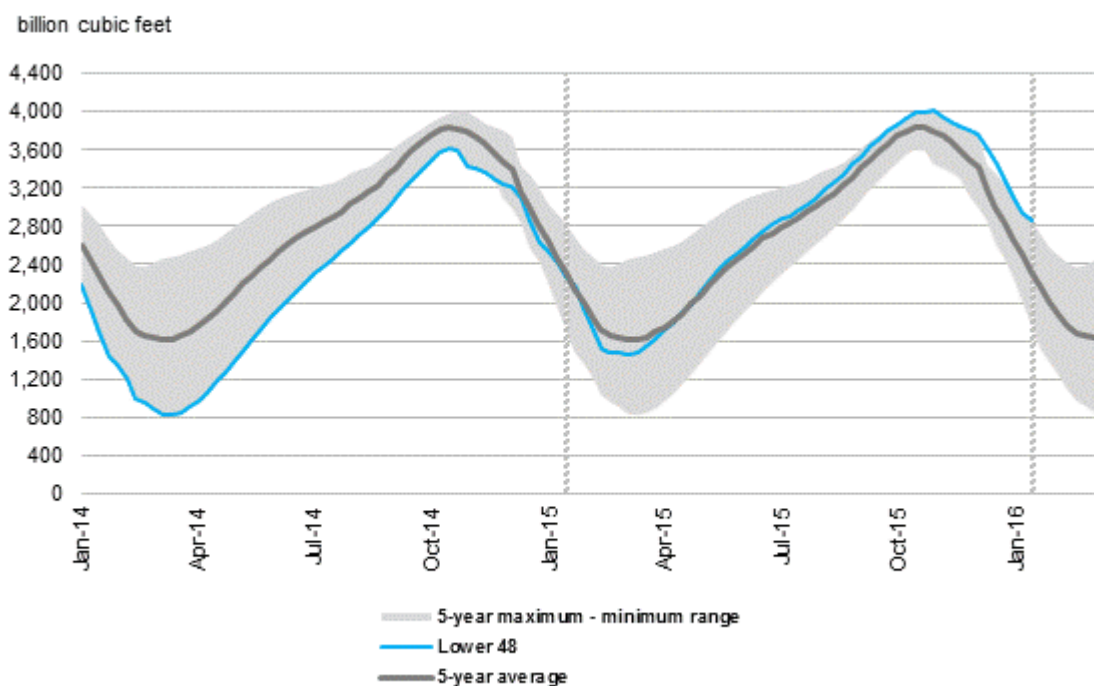
⁶ *Statement of the Federal Open Market Committee* (released January 27, 2016).

underutilization of labor resources—with the unemployment rate for January 2016 at 4.9 percent, compared to 5.7 percent a year ago. Inflation has continued to run below the FOMC's 2 percent longer-run objective, partly reflecting declines in energy prices and in prices of non-energy imports. 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 2,864 Bcf as of February 5, 2016, a net decrease of 70 Bcf from the previous week. Stocks were 573 Bcf higher than the same period a year ago—up 25.0 percent—and up 543 Bcf from the 5-year average of 2,321 Bcf—an increase of 23.4 percent.⁷ EIA indicates that “[w]ithdrawals during the heating season were relatively low until the end of December because of warmer-than-normal temperatures, but even as withdrawals accelerated in January, inventories remained well above the five-year (2011-15) average. January 29 inventories were 490 Bcf (20%) above year-ago levels and 445 Bcf (18%) above the five-year average for that week. Inventories are forecast to be 2,096 Bcf at the end of March 2016, which would be 474 Bcf above the five-year average for the end of March.”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 February 11, 2016)

⁷ EIA, *Weekly Natural Gas Storage Report* (released February 11, 2016).

⁸ EIA, *STEO* (February 2016) at 9.

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 February 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 2.0%, as forecast prices rise, industrial demand grows, and liquefied natural gas (LNG) exports increase. Production of dry natural gas is forecast to grow by 0.4% in 2016 and by 2.0% in 2017. EIA expects U.S. production growth in the forecast period will reduce demand for natural gas imports from Canada and will 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 0.5 Bcf/d in 2016, with the start-up of Cheniere's Sabine Pass LNG liquefaction plant in Louisiana planned for early this year. EIA projects gross LNG exports will average 1.3 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 February 2016 is unchanged from the previous month, and is down 34.1 percent compared to the same period a year ago.¹¹ The March 2016 PGC (assuming that the commodity market adjustment factor is zero) may be around \$0.38 per therm, based, in part, on the expectation that near-term NYMEX futures prices continue to trade between \$0.19 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* (February 2016) at 8 and 9.

¹⁰ As of February 16, 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 February 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 \$0.39 per therm, 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

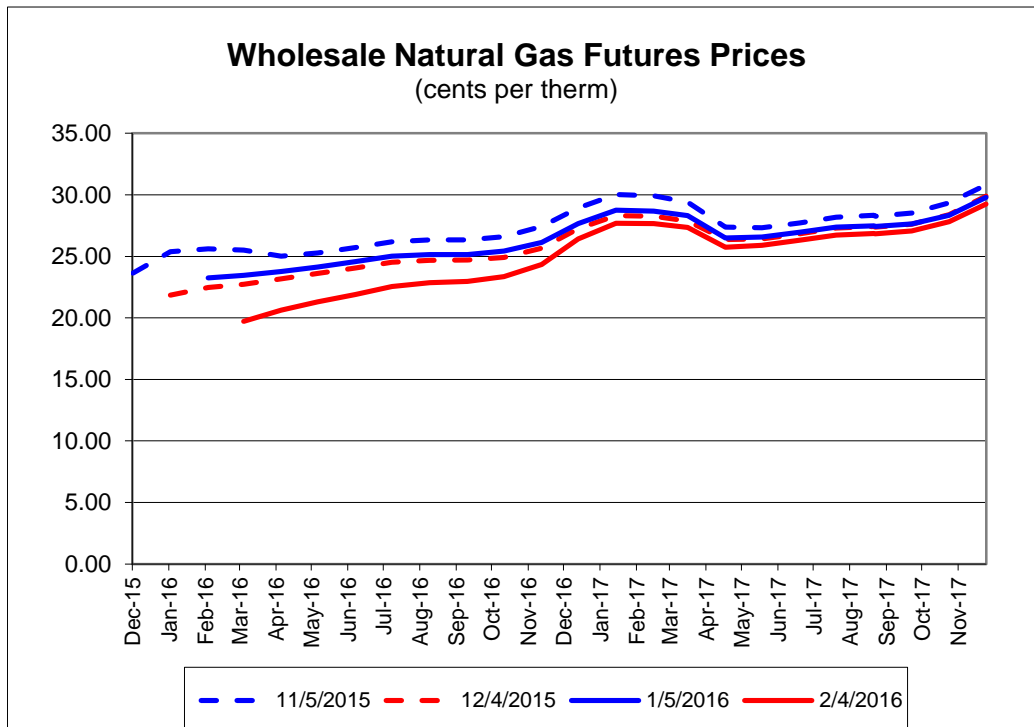
Current for February 4, 2016

Price Information

Twelve Month NYMEX Strip Components
2/4/16, cents per therm

Henry Hub Spot Market Price
2/4/16, cents per therm

<u>Current Month</u>	<u>Previous Month</u>	<u>Current Only Available</u>
Mar 16 19.72	Mar 16 23.46	20.5
Apr 16 20.62	Apr 16 23.76	
May 16 21.30	May 16 24.13	
Jun 16 21.91	Jun 16 24.58	
Jul 16 22.56	Jul 16 25.01	
Aug 16 22.87	Aug 16 25.15	
Sep 16 22.97	Sep 16 25.15	
Oct 16 23.34	Oct 16 25.43	
Nov 16 24.35	Nov 16 26.14	
Dec 16 26.41	Dec 16 27.65	
Jan 17 27.68	Jan 17 28.74	
Feb 17 27.66	Feb 17 28.67	



The current PGC for February 2016 is about \$0.33 per therm. Assuming, among other things, that near-term futures prices remain around \$0.19 to \$0.24 per therm, the PGC rate (excluding the commodity market adjustment factor) for March 2016 may be around \$0.38 per therm. However, given the uncertainty about the weather, as well as other factors, this assessment could easily change. The assessment for February 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 February 16, 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