

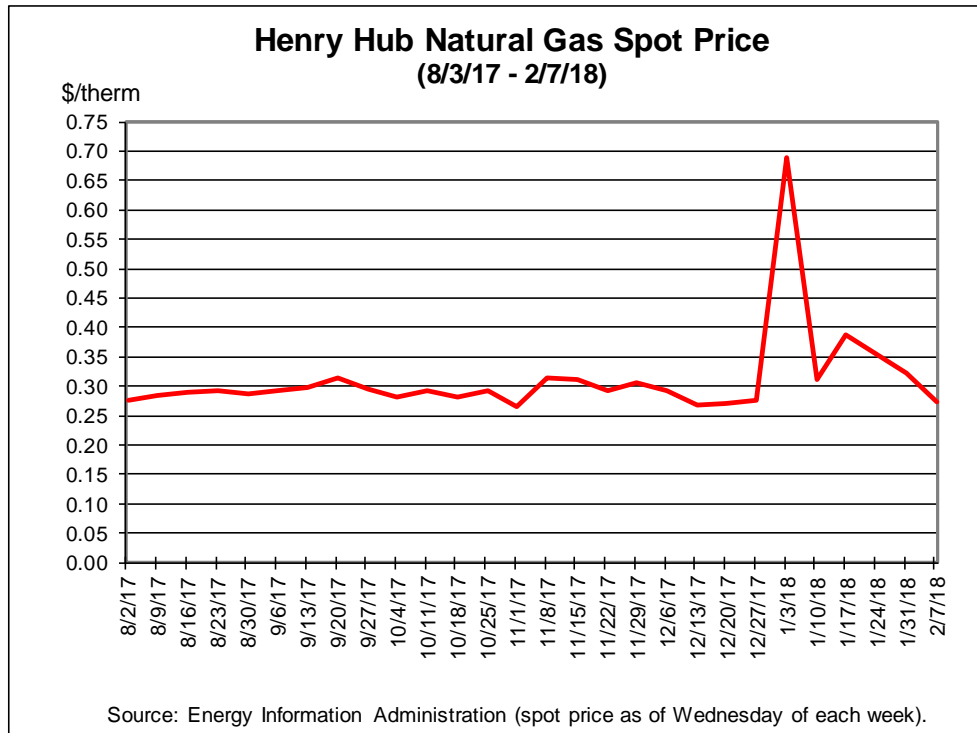
WHOLESALE NATURAL GAS MARKET ASSESSMENT

Wholesale Natural Gas Futures Prices as of February 5, 2018

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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 5, 2018.¹ OTRA's current assessment of the natural gas market suggests that wholesale natural gas prices may remain around \$0.30 per therm, or less, during March 2018 (see Henry Hub Spot Price figure). Recent natural gas spot prices are down at least 5 percent from prices for the same period a year ago.



Data from the Energy Information Administration ("EIA") indicates that the average Henry Hub natural gas spot price for January 2018 was about \$0.39 per therm, significantly higher than the \$0.30 per therm in the month of December 2017.² However, EIA expects natural gas prices, on average, to be fairly stable over the forecast period despite new natural gas export capabilities and growing domestic natural gas consumption. Henry Hub natural gas prices averaged about \$0.30 per therm in 2017 and the forecasted price is expected to average \$0.32 per therm in 2018 and \$0.31 per therm in 2019.³

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, *Natural Gas Weekly Update* (various issues).

³ EIA, *Short-Term Energy Outlook* (February 2018) at 2.

As of February 2, 2018, natural gas in storage stood at 2,078 billion cubic feet (“Bcf”). The working gas in storage is down about 20 percent from the same period a year ago, and is down by roughly 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 higher 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 2018 is 50.93 cents (\$0.51) per therm, compared with 50.32 cents (\$0.50) per therm for the same period a year ago—up about 1 percent. The PGC for February 2018 was up by nearly 18 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 18, 2018, the National Oceanic and Atmospheric Administration (“NOAA”) indicated that its outlook for the period March through May 2018 favors above normal temperatures for the Southwest and southern portions of the nation, but stretching into some of the Mid-Atlantic states.⁵ Below normal temperatures are likely for portions of the Northwest. The expected weather for March may generally be neutral on natural gas prices.

Economic Conditions

National economic factors also contribute to the formation of wholesale natural gas prices. The Federal Open Market Committee (“FOMC”) continued to hold its target range for short-term interest rates at a relatively low 1-1/4 to 1-1/2 percent.⁶ **“Information received since the [FOMC] met in December indicates that the labor market has continued to strengthen and that economic activity has been rising at a solid rate. Gains in employment, household spending, and business fixed investment have been solid, and the unemployment rate has stayed low[–4.1 percent in January 2018 compared to 4.8 percent in January 2017]. On a 12-month basis, both overall inflation and inflation for items other than food and energy have continued to run below 2 percent.”**⁷ Thus, at present, the current state of economic activity may still be relatively neutral for natural gas prices.

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/>.

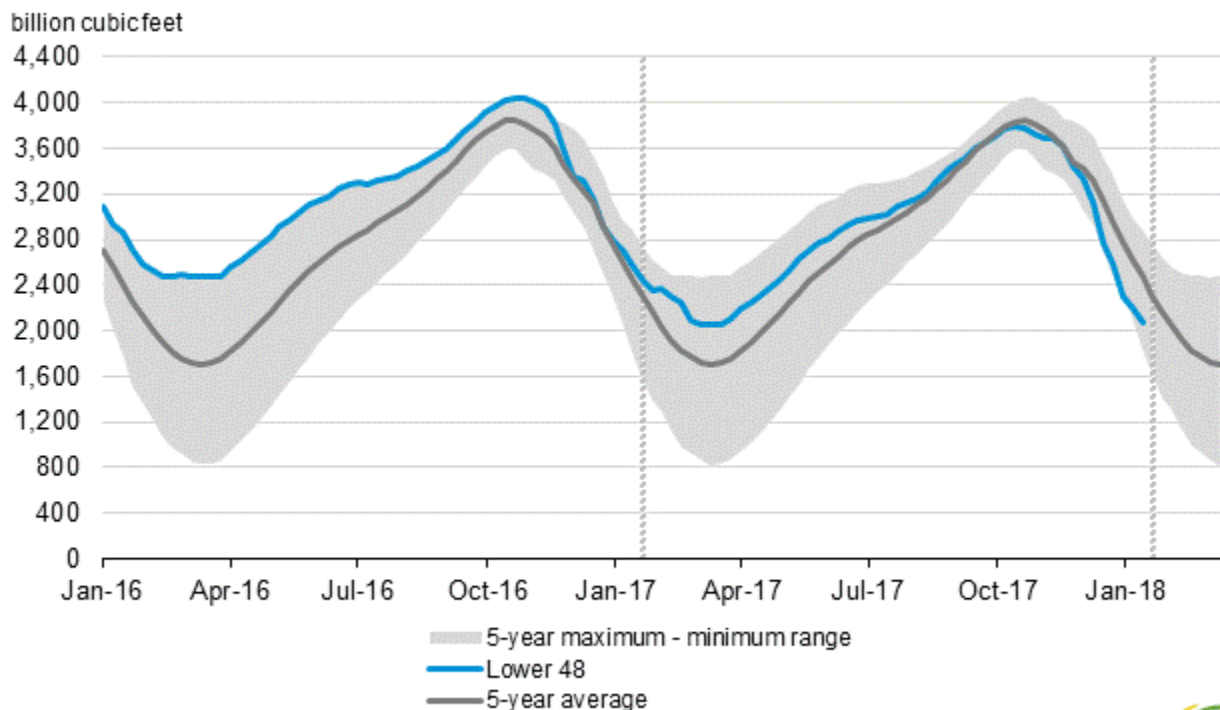
⁶ Statement of the Federal Open Market Committee (released January 31, 2018).

⁷ Ibid.

Storage

EIA reports that the working gas in storage was 2,078 Bcf as of February 2, 2018, a net decrease of 119 Bcf from the previous week. Stocks were 503 Bcf lower than the same period a year ago—down 19.5 percent—and down 393 Bcf from the 5-year average of 2,471 Bcf—a decrease of 15.9 percent.⁸ The colder weather expected in the central and eastern portions of the nation may contribute to larger storage withdrawals. Thus, the current storage picture tends to put some upward pressure on natural gas prices at this time.

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 2013 through 2017. The dashed vertical lines indicate current and year-ago weekly periods.

Source: EIA, *Weekly Natural Gas Storage Report* (released February 8, 2018)

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 2018 STEO, EIA notes that “[c]old weather east of the Rockies, record-level withdrawals from storage, and record demand contributed to substantial increases in prices in January. These demand factors likely outweighed EIA estimates of U.S. dry natural gas production reaching 77.6 billion cubic feet per day (Bcf/d) in January, a year-over-year increase of 7.0 Bcf/d.... Because of cold weather east of the Rockies, inventories fell relative to the five-year average in all regions except the Pacific region during the first four weeks of January. January saw the two largest withdrawals on record: 359 Bcf for the week ending January 5 and 288 Bcf for the week ending January 19. The cold weather

⁸ EIA, *Weekly Natural Gas Storage Report* (released February 8, 2018).

had a significant effect on the South Central region, where the Henry Hub national benchmark is located. Withdrawals in that region comprised between 42% and 43% of total U.S. withdrawals in both of the record-breaking weeks because of increased natural gas-fired electricity generation for heating.... Since 2014, the U.S. demand profile has changed with the addition of liquefied natural gas (LNG) export facilities and increased pipeline exports. Total exports in January 2018 are estimated to account for 9% of combined consumption and exports compared with 4% in January 2014. However, rising production contributes to EIA’s forecast that inventories will end the withdrawal season (end of March) at 1,429 Bcf, 17% below the five-year average.”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 \$0.51 per therm for February 2018 is up 17.5 percent from the previous month, and is up 1.2 percent compared to the same period a year ago.¹¹ The March 2018 PGC (assuming that the commodity market adjustment factor is zero) may be around \$0.43 per therm, based, in part, on the expectation that near-term NYMEX futures prices trade between \$0.26 and \$0.32 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 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).

⁹ EIA, *STEO* (February 2018) at 10 and 11.

¹⁰ The Department of Homeland Security (“DHS”) issued its last advisory bulletin on November 9, 2017, which highlighted the continuing threat from homegrown terrorists, many of whom are inspired online to violence by foreign terrorist organizations. The bulletin went on to indicate that an informed, vigilant, and engaged public remains one of the greatest assets to identify potential homegrown terrorists and prevent attacks. The National Terrorism Advisory System, or NTAS, replaces the color-coded Homeland Security Advisory System.

¹¹ The commodity market adjustment factor for the February 2018 PGC was \$0.08 per therm, resulting in the adjusted PGC (excluding the commodity market adjustment factor (“CMAF”)) being equal to \$0.4293 per therm.

Wholesale Natural Gas Price/Supply Assessment Information

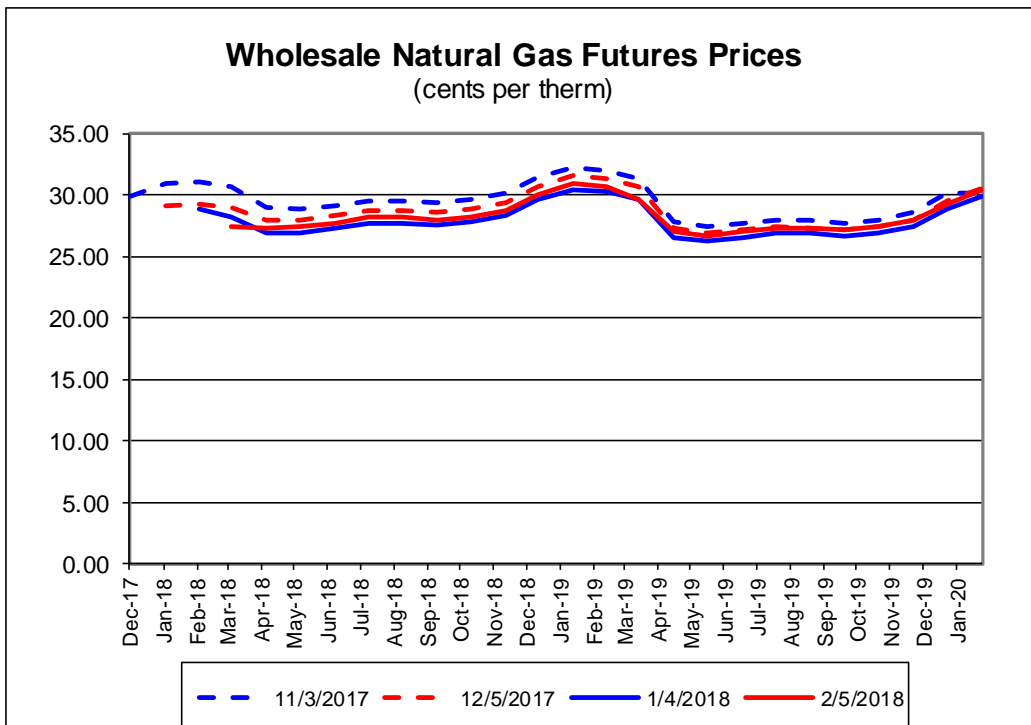
Current for February 5, 2018

Price Information

Twelve Month NYMEX Strip Components
2/5/18, cents per therm

Henry Hub Spot Market Price
2/5/18, cents per therm

	<u>Current Month</u>	<u>Previous Month</u>	<u>Current Only Available</u>
Mar 18	27.47	Mar 18 28.13	27.9
Apr 18	27.26	Apr 18 26.96	
May 18	27.37	May 18 26.92	
Jun 18	27.72	Jun 18 27.30	
Jul 18	28.13	July 18 27.65	
Aug 18	28.15	Aug 18 27.69	
Sep 18	27.99	Sep 18 27.52	
Oct 18	28.22	Oct 18 27.76	
Nov 18	28.68	Nov 18 28.31	
Dec 18	30.04	Dec 18 29.59	
Jan 19	30.98	Jan 19 30.43	
Feb 19	30.69	Feb 19 30.21	



The current PGC for February 2018 is about \$0.51 per therm. Assuming, among other things, that near-term futures prices are around \$0.26 to \$0.32 per therm, the PGC rate (excluding the commodity market adjustment factor) for March 2018 may remain around \$0.43 per therm. However, given the uncertainty about the weather, as well as other factors, this assessment could easily change. The assessment for March 2018 is that wholesale prices may remain around \$0.30 per therm, or less, resulting in wholesale prices that are comparable 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 12, 2018

Factors	Next Month	Winter Season
Oil Prices	Yellow	Yellow
Weather - Temperature	Yellow	Red
Weather - Hurricanes	No color - Not Applicable	No color - Not Applicable
Economic Conditions	Yellow	Yellow
Storage	Yellow	Red
Natural Gas Supply	Yellow	Yellow
National Security	Yellow	Yellow
Overall	Yellow	Red

Code: Red - Upward Pressure
Blue - Downward pressure
Yellow - No Change
No color - Not Applicable
N.A.