

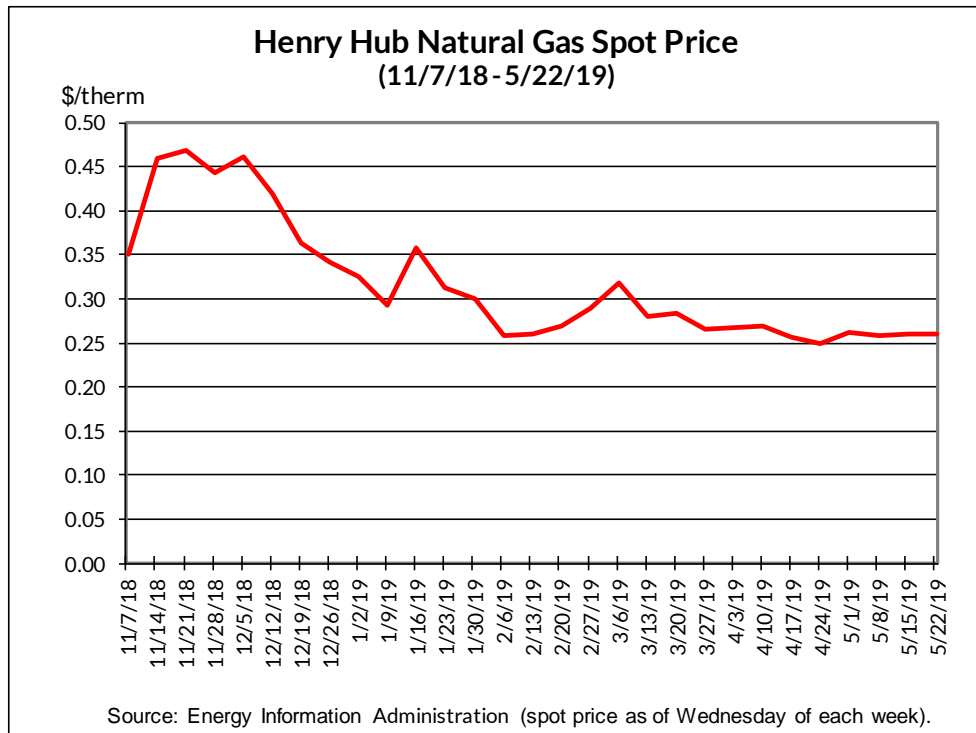
WHOLESALE NATURAL GAS MARKET ASSESSMENT

Wholesale Natural Gas Futures Prices as of May 6, 2019

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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 May 6, 2019.¹ OTRA's current assessment of the natural gas market suggests that wholesale natural gas prices may remain below \$0.30 per therm during June 2019 (see Henry Hub Spot Price figure). Recent natural gas spot prices are around 6 percent lower than 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 April 2019 was about \$0.26 per therm, down from roughly \$0.29 per therm in March 2019.² EIA expects natural gas prices, on average, to experience some downward pressure on prices over the forecast period, due to strong growth in natural gas production, despite new natural gas export capabilities and growing domestic natural gas consumption—with electric power generation being a leading contributor. Henry Hub natural gas prices averaged about \$0.32 per therm in 2018 and the price is expected to average \$0.28 per therm in 2019 and \$0.28 per therm in

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).

2020.³ As of May 17, 2019, natural gas in storage stood at 1,753 billion cubic feet (“Bcf”). The working gas in storage is up over 8 percent from the same period a year ago, but is down by roughly 14 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 May 2019 is 57.23 cents (\$0.57) per therm, compared with 43.67 cents (\$0.44) per therm for the same period a year ago—up roughly 31 percent. The PGC for May 2019 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 May 16, 2019, the National Oceanic and Atmospheric Administration (“NOAA”) indicated that its outlook for June 2019 favors above normal temperatures for the Northwest, the Gulf Coast and up through the Northeast.⁵ Below normal temperatures are more likely for the Plains, from South Dakota to Texas. The expected weather for June may be neutral for natural gas prices.

On May 23, 2019, NOAA’s Climate Prediction Center released its forecast for the 2019 Atlantic Hurricane Season. NOAA indicates that there is a 70 percent chance of a near-normal to above-normal season. In particular, NOAA predicts a 70-percent likelihood of 9 to 15 named storms, of which 4 to 8 could develop into hurricanes. About 2 to 4 of the potential hurricanes could become major hurricanes (Category 3 or higher), with winds of 111 miles per hour or more. An average hurricane season typically yields 12 named storms, of which 6 become hurricanes, including 3 major hurricanes. As of May 23, 2019, there has been one named storm. The Atlantic hurricane season generally runs from June 1 through November 30. Any significant storm-related disruption to the energy infrastructure—in the Gulf of Mexico, for example—can contribute to upward pressure 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”) maintained its target range

³ EIA, *Short-Term Energy Outlook* (May 2019) at 1 and 2.

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.

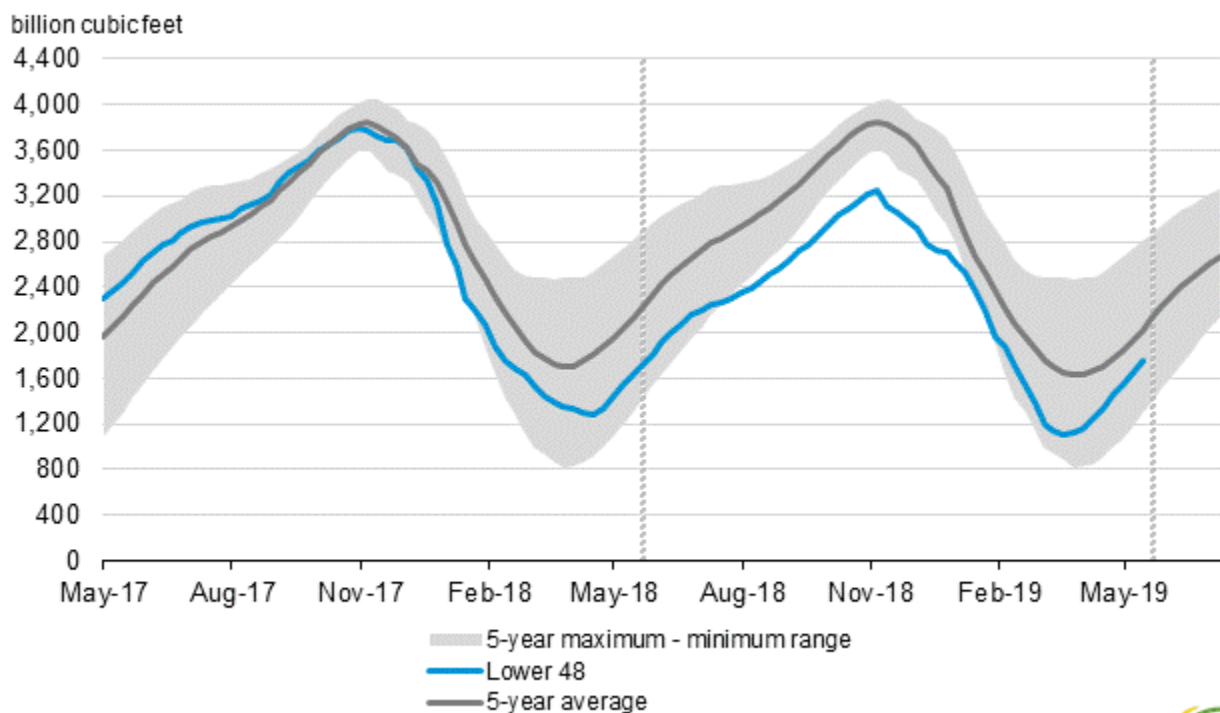
⁵ NOAA at <http://www.cpc.ncep.noaa.gov/>.

for short-term interest rates at, a still relatively low, 2-1/4 to 2-1/2 percent. “Information received since the Federal Open Market Committee met in March indicates that the labor market remains strong and that economic activity rose at a solid rate. Job gains have been solid, on average, in recent months, and the unemployment rate has remained low. Growth of household spending and business fixed investment slowed in the first quarter. On a 12-month basis, overall inflation and inflation for items other than food and energy have declined and are running below 2 percent. On balance, market-based measures of inflation compensation have remained low in recent months, and survey-based measures of longer-term inflation expectations are little changed.”⁶ Thus, 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 1,753 Bcf as of May 17, 2019, a net increase of 100 Bcf from the previous week. Stocks were 137 Bcf higher than the same period a year ago—up 8.5 percent—and down 274 Bcf from the 5-year average of 2,027 Bcf—a decrease of 13.5 percent.⁷

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 2014 through 2018. The dashed vertical lines indicate current and year-ago weekly periods.

Source: EIA, *Weekly Natural Gas Storage Report* (released May 23, 2019)

⁶ Statement of the Federal Open Market Committee (released May 1, 2019).

⁷ EIA, *Weekly Natural Gas Storage Report* (released May 23, 2019).

In its May 2019 Short-Term Energy Outlook, EIA forecasts that higher natural production during the storage injection season, April-through-October, will continue to reduce the storage deficit relative to the five-year average and contribute to Henry Hub spot prices remaining below \$0.27 per therm, on average in the second and third quarters of this year.⁸ Thus, the current storage picture tends to support some downward pressure on natural gas prices.

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 May 2019 Short-Term Energy Outlook ("STEO"), EIA expects that **"dry natural gas production will average 90.3 billion cubic feet per day (Bcf/d) in 2019, up 6.9 Bcf/d from 2018. EIA expects natural gas production will continue to grow in 2020 to an average of 92.2 Bcf/d."**⁹ Continued high natural gas production help improve the working gas in storage, which contributes to downward pressure on natural gas prices.

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 \$0.57 per therm for May 2019 is unchanged from the previous month, and is up 31.1 percent compared to the same period a year ago.¹¹ The June 2019 PGC (assuming that the commodity market adjustment factor is zero) may settle around \$0.43 per therm, based, in part, on the expectation that near-term NYMEX futures prices trade between \$0.24 and \$0.27 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.

⁸ EIA, *STEO* (May 2019) at 10.

⁹ *Ibid* at 2.

¹⁰ The Department of Homeland Security ("DHS") last issued an advisory bulletin on January 18, 2019. The bulletin mentioned, among other things, threats such as foreign terrorist organizations exploiting the internet to inspire, enable, or direct individuals to commit terrorist acts. In addition, terrorist groups are urging recruits to adopt easy-to-use tools to target public places and events. 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 May 2019 PGC was \$0.10 per therm, resulting in the adjusted PGC (excluding the commodity market adjustment factor ("CMAF")) being equal to \$0.4723 per therm.

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).

Wholesale Natural Gas Price/Supply Assessment Information

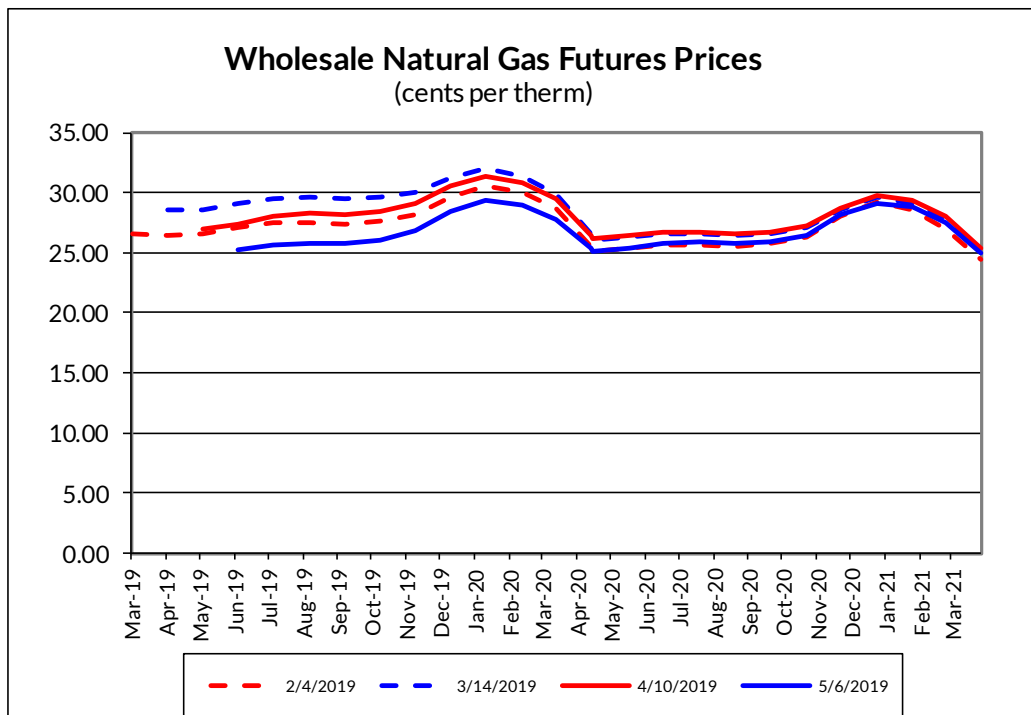
Current for May 6, 2019

Price Information

Twelve Month NYMEX Strip Components
5/6/19, cents per therm

Henry Hub Spot Market Price
5/6/19, cents per therm

	<u>Current Month</u>	<u>Previous Month</u>	<u>Current Only Available</u>
Jun 19	25.24	Jun 19 27.42	25.4
Jul 19	25.60	Jul 19 28.01	
Aug 19	25.78	Aug 19 28.27	
Sep 19	25.75	Sep 19 28.21	
Oct 19	26.08	Oct 19 28.42	
Nov 19	26.87	Nov 19 29.06	
Dec 19	28.49	Dec 19 30.58	
Jan 20	29.35	Jan 20 31.38	
Feb 20	28.91	Feb 20 30.77	
Mar 20	27.81	Mar 20 29.46	
Apr 20	25.44	Apr 20 26.50	
May 20	25.13	May 20 26.12	



The current PGC for May 2019 is about \$0.5723 per therm. Assuming, among other things, that near-term futures prices are around \$0.24 to \$0.27 per therm, the PGC rate (excluding the commodity market adjustment factor) for June 2019 may be 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 June 2019 is that wholesale prices may remain below \$0.30 per therm, resulting in wholesale prices that are roughly 6 percent lower 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 May 23, 2019

Factors	Next Month	Summer 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 - Not Applicable
N.A.