

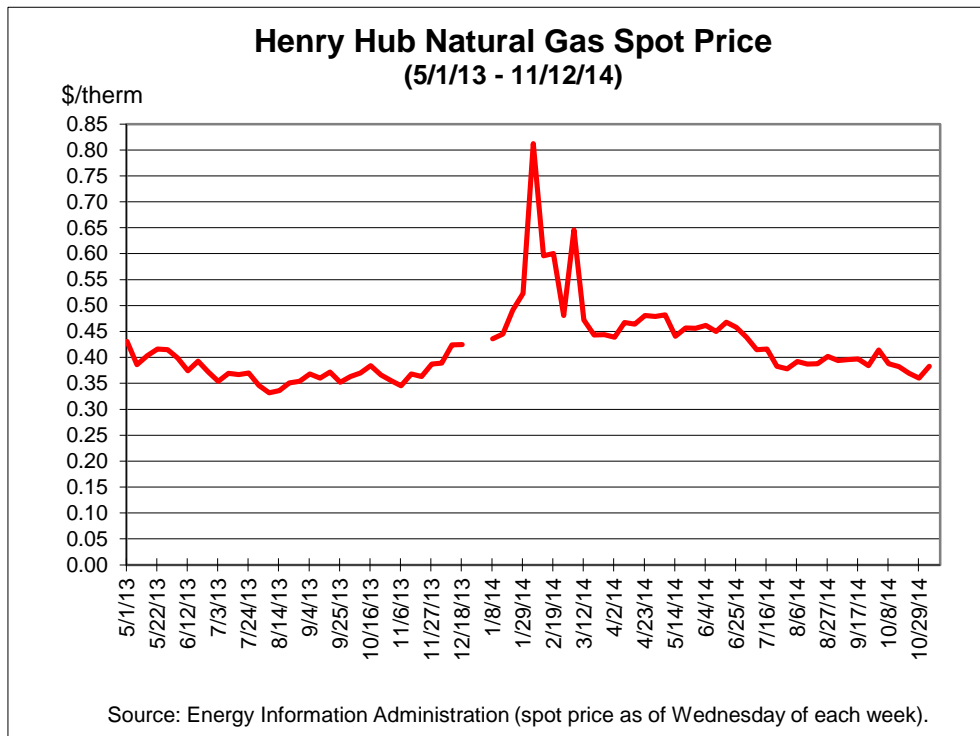
WHOLESALE NATURAL GAS MARKET ASSESSMENT

Wholesale Natural Gas Futures Prices as of November 5, 2014

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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 November 2014.¹ OTRA's current assessment of the natural gas market suggests that wholesale natural gas prices may remain around \$0.40 per therm during November 2014 (see Henry Hub Spot Price figure). Recent natural gas spot prices are more than 10 percent higher 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 October 2014 was about \$0.38 per therm, down from \$0.39 per therm in the previous month.² In its Short-Term Energy Outlook ("STEO") for November 2014, EIA expects **"spot prices to remain relatively low but to rise slightly with winter heating demand. Projected Henry Hub natural gas prices [are expected to] average [\$0.444 per**

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* (November 2014) at 8.

therm] in 2014 and [\$0.383 per therm] in 2015.”³ Natural gas prices averaged \$0.373 per therm in 2013.

As of November 7, 2014, natural gas in storage stood at 3,611 billion cubic feet (“Bcf”). The working gas in storage is down about 6 percent from the same period a year ago, and is also down by 6 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 November 2014 is 55.42 cents (\$0.55) per therm compared with 64.50 cents (\$0.65) per therm for the same period a year ago—down 14 percent. However, the PGC for November 2014 was 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 November 13, 2014, the National Oceanic and Atmospheric Administration (“NOAA”) indicated that its outlook for the remainder of November generally calls for below normal temperatures initially for most of the central and eastern portions of the U.S., but retreating to the north-central and northeastern portions of the nation toward the end of the month.⁵ Above normal temperatures are generally expected for the western portion of the U.S. The expected weather for the remainder of November is likely to provide some upward pressure on natural gas prices.

As mentioned in a previous Outlook, NOAA released an update to the 2014 Atlantic Hurricane Season Outlook on August 7, 2014. The revised outlook for the current season calls for a below-normal hurricane season, with 7-12 named storms, 3-6 hurricanes, with 0-2 major hurricanes. As of November 13, 2014, there have been eight (8) named storms, of which six (6) have reached hurricane strength, with two of those hurricanes classified as major hurricanes (Category 3 or higher, with a wind speed exceeding 110 mph). Only two of the eight storms reached the Gulf of Mexico, but did not result in any significant impact to the nation’s natural gas infrastructure. With the hurricane season approaching an end, the focus will be on colder weather.

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/>.

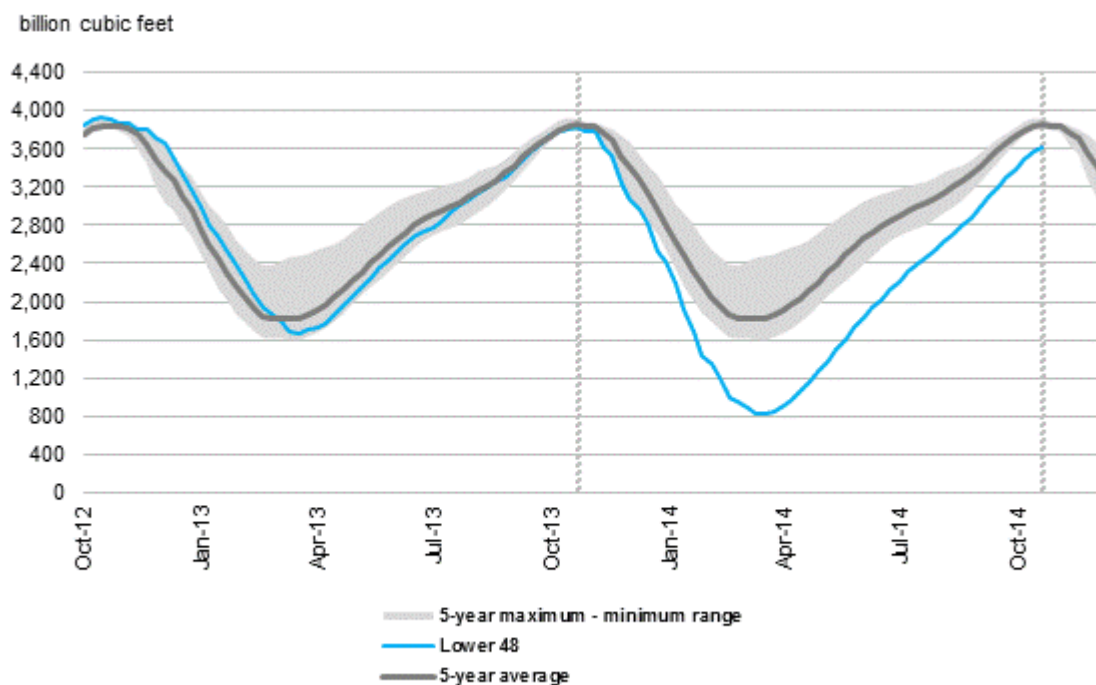
Economic Conditions

National economic factors also contribute to the formation of wholesale natural gas prices. The Federal Open Market Committee (“FOMC”) indicated in its latest statement that economic activity is expanding at a moderate pace.⁶ Labor market conditions improved somewhat further, with solid job gains and a lower unemployment rate—at 5.8 percent in October 2014, down from 6.6 percent in January 2014—and a range of labor market indicators suggesting that underutilization of labor resources is gradually diminishing. Household spending is also rising moderately and business fixed investment is advancing, while the recovery in the housing sector remains slow. Inflation has continued to run below the FOMC’s longer-run objective of 2 percent. As a result, the FOMC maintained its low short-term interest rate target range. 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 3,611 Bcf as of November 7, 2014, a net increase of 40 Bcf from the previous week. Stocks were 220 Bcf lower than the same period a year ago—down 5.7 percent—and down 237 Bcf from the 5-year average of 3,848 Bcf—a decrease of 6.2 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 2009 through 2013. The dashed vertical lines indicate current and year-ago weekly periods.
Source: EIA, *Weekly Natural Gas Storage Report* (released November 14, 2014)

⁶ Statement of the Federal Open Market Committee (released October 29, 2014).

⁷ EIA, *Weekly Natural Gas Storage Report* (released November 14, 2014).

EIA indicates that the **“injection season began somewhat slowly in April, but has continued at a strong pace, with injections above the five-year average throughout most of the injection season. The deficit to the five-year average and to last year’s level has narrowed over the injection season with substantial weekly stock builds.”**⁸ The pace of withdrawal from storage will impact 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 November 2014 STEO, EIA expects **“natural gas marketed production to grow by an annual rate of 4.8% in 2014 and 2.3% in 2015. EIA projects that the strong increases already seen in the Lower 48 states for most of this year will continue, more than offsetting the long-term declining trend in the Gulf of Mexico. As of August [2014], the most recent month for which EIA data are available, dry natural gas production was 3.4 Bcf/d greater than it was in August 2013. Production usually declines in September; however, preliminary data indicate that growth has continued, with new production offsetting maintenance declines.”**⁹ EIA goes on to say that **“[g]rowing domestic production is expected to continue to put downward pressure on natural gas imports from Canada and spur exports to Mexico. Exports to Mexico, particularly from the Eagle Ford Shale in South Texas, are expected to increase because of growing demand from Mexico’s electric power sector and flat Mexican production.”**¹⁰

National Security

As noted in previous reports, we see little danger to the natural gas supply.¹¹ 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 \$0.55 per therm for November 2014 is unchanged from the previous month, and is down 14.1 percent compared to the same period a year ago. Last month, OTRA suggested that the November 2014 PGC (assuming that the commodity market adjustment factor is zero) may remain around \$0.55 per therm, based, in part, on the expectation that near-term NYMEX futures prices trade between \$0.37 and \$0.42 per therm, as well as other cost assumptions.¹² For October 2014, the near-term NYMEX futures prices ranged between \$0.36 and \$0.42 per therm and the adjusted PGC for November 2014 was about \$0.55 per therm.

⁸ EIA, *STEO* (November 2014) at 7 and 8.

⁹ EIA, *STEO* (November 2014) at 7.

¹⁰ *Ibid.*

¹¹ As of November 14, 2014, there were no credible or impending threats against the United States. The National Terrorism Advisory System, or NTAS, replaces the color-coded Homeland Security Advisory System.

¹² The commodity market adjustment factor for the November 2014 PGC was \$0.0 per therm, resulting in the adjusted PGC (excluding the commodity market adjustment factor) being equal to \$0.5542 per therm.

The December 2014 PGC (assuming that the commodity market adjustment factor is zero) may be around \$0.57 per therm, based, in part, on the expectation that near-term NYMEX futures prices trade between \$0.39 and \$0.45 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).

Wholesale Natural Gas Price/Supply Assessment Information

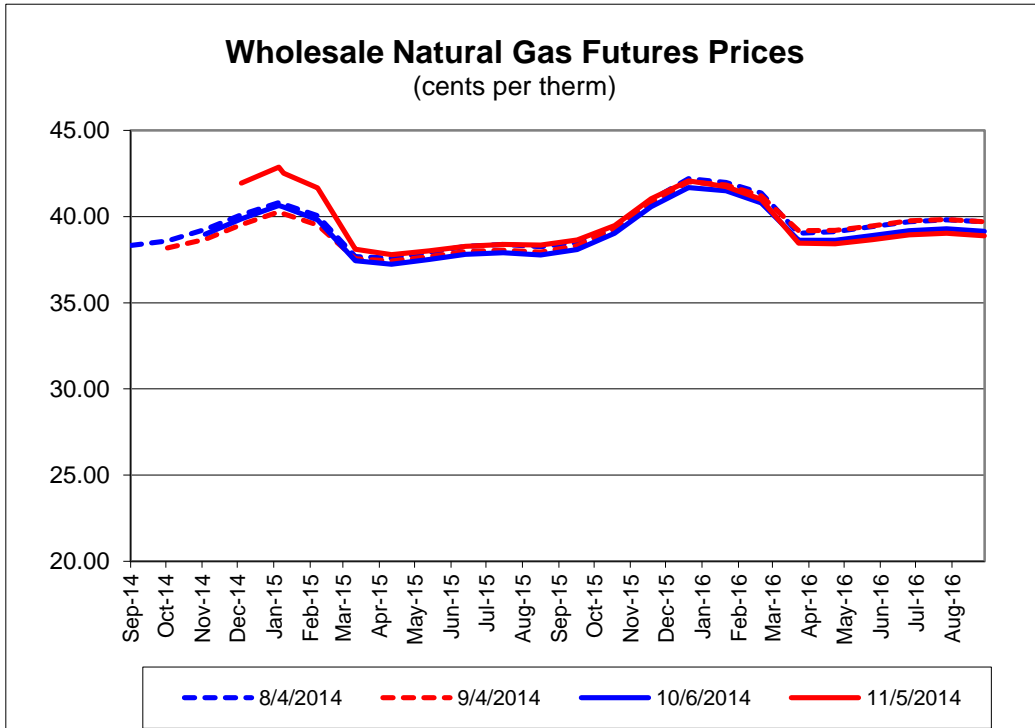
Current for November 5, 2014

Price Information

Twelve Month NYMEX Strip Components
11/5/14, cents per therm

Henry Hub Spot Market Price
11/5/14, cents per therm

	<u>Current Month</u>	<u>Previous Month</u>	<u>Current Only Available</u>
Dec 14	41.94	Dec 14 39.87	38.3
Jan 15	42.87	Jan 15 40.64	
Feb 15	42.53	Feb 15 40.55	
Mar 15	41.67	Mar 15 39.81	
Apr 15	38.10	Apr 15 37.44	
May 15	37.80	May 15 37.23	
Jun 15	38.01	Jun 15 37.52	
Jul 15	38.27	Jul 15 37.82	
Aug 15	38.39	Aug 15 37.91	
Sep 15	38.35	Sep 15 37.78	
Oct 15	38.64	Oct 15 38.09	
Nov 15	39.49	Nov 15 39.04	



The current PGC for November 2014 is about \$0.55 per therm. Assuming, among other things, that near-term futures prices remain around \$0.39 to \$0.45 per therm, the PGC rate (excluding the commodity market adjustment factor) for December 2014 may be around \$0.57 per therm. However, given the uncertainty about the weather, as well as other factors, this assessment could easily change. The assessment for November 2014 is that wholesale prices may remain around, or slightly higher than, \$0.40 per therm, resulting in wholesale prices that are higher by roughly 10 percent, or more, 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
November 14, 2014

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 - Not Applicable
N.A.