

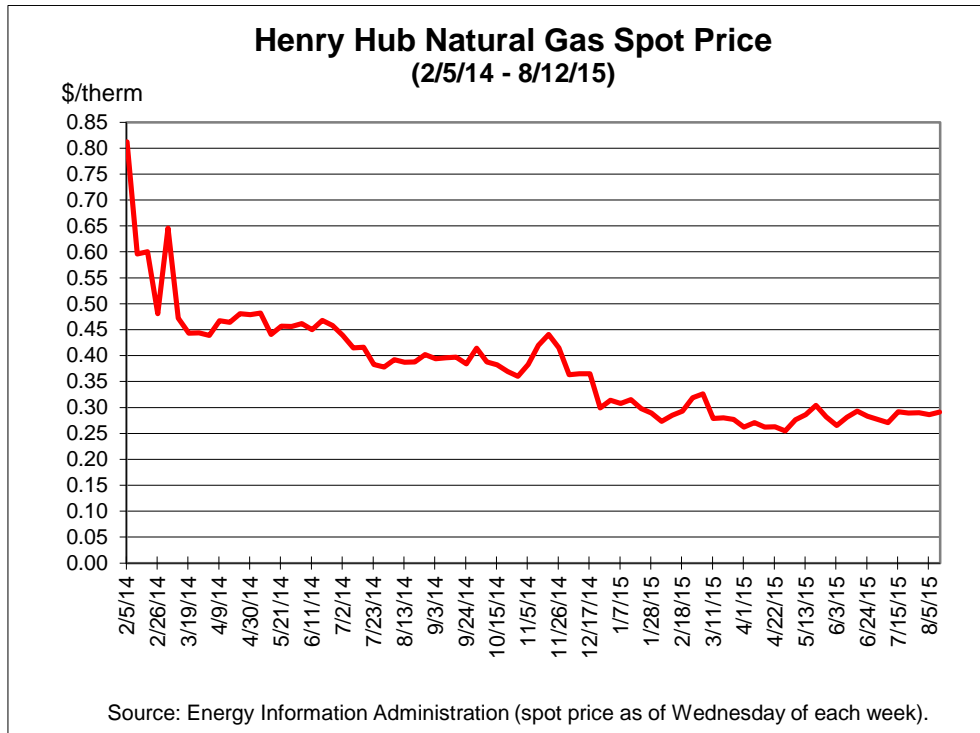
WHOLESALE NATURAL GAS MARKET ASSESSMENT

Wholesale Natural Gas Futures Prices as of August 4, 2015

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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 August 2015.¹ 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 August 2015 (see Henry Hub Spot Price figure). Recent natural gas spot prices are at least 20 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 July 2015 was about \$0.28 per therm, nearly unchanged from the previous month.² In its Short-Term Energy Outlook ("STEO") for August 2015, EIA expects **"monthly average spot prices [to] remain lower than [\$0.30 per therm] through October, and lower than [\$0.40 per therm] through the remainder of the forecast. The projected Henry Hub natural gas prices [are expected to average \$0.289 per therm] in 2015 and [\$0.321 per therm] in 2016."**³ Natural gas prices averaged \$0.437 per therm in 2014.

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* (August 2015) at 10.
³ Ibid.

As of August 7, 2015, natural gas in storage stood at 2,977 billion cubic feet (“Bcf”). The working gas in storage is up 21 percent from the same period a year ago, and is up by about 3 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 August 2015 is 46.01 cents (\$0.46) per therm compared with 54.20 cents (\$0.54) per therm for the same period a year ago—down 15 percent. The PGC for August 2015 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 August 12, 2015, the National Oceanic and Atmospheric Administration (“NOAA”) indicated that its outlook for the remainder of August generally calls for above normal temperatures for the eastern and western portions, as well as areas below the Northern Plains.⁵ Below normal temperatures are generally expected for the Northern Plains. The expected weather for the remainder of August may provide some upward pressure for natural gas prices.

NOAA provided its updated outlook for the Atlantic hurricane season on August 6, 2015.⁶ NOAA expects a below normal hurricane season, with 6 to 10 named storms, 1 to 4 hurricanes, and 0 to 1 major hurricanes. As reported last month, on July 1, 2015, researchers at Colorado State University provided an updated report on the 2015 Atlantic hurricane season and continue to expect a below average hurricane season—due to a strong El Niño underway and cooler than normal temperatures for the tropical Atlantic.⁷ They estimate that 2015 will have eight (8) named storms (median is 12.0), about three (3) hurricanes (median is 6.5), and only one (1) major hurricane (median is 2.0) rated at Category 3 or above. As of August 13, 2015, there have been three (3) named storms, none of which developed into hurricanes. Any significant storm-related disruption to the energy infrastructure—in the Gulf of Mexico, for example—will tend to contribute to upward pressure on 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 NOAA, *2015 Atlantic Hurricane Season Outlook* (August 6, 2015).

⁷ Department of Atmospheric Science, Colorado State University, *Forecast of Atlantic Seasonal Hurricane Activity and Landfall Strike Probability for 2015* (July 1, 2015).

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 growth has expanded moderately in recent months.⁸ The FOMC noted growth in household spending has been moderate and the real estate sector has shown additional improvement, while business fixed investment and net exports stayed soft. The labor market continued to improve, with solid job gains and declining unemployment—the unemployment rate for July was 5.3 percent, down from 5.7 percent in January 2015. Overall, a range of labor market indicators suggests that underutilization of labor resources has diminished since early this year. Inflation remains below the Committee's longer-run objective, partly reflecting earlier declines in energy prices and decreasing prices of non-energy imports, while survey-based measures of longer-term inflation expectations have remained stable. To support continued progress toward maximum employment and price stability, the FOMC reaffirmed its view that the current low target range for the short-term interest rate remains appropriate. 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 2,977 Bcf as of August 7, 2015, a net increase of 65 Bcf from the previous week. Stocks were 521 Bcf higher than the same period a year ago—up 21.2 percent—and up 81 Bcf from the 5-year average of 2,896 Bcf—an increase of 2.8 percent.⁹

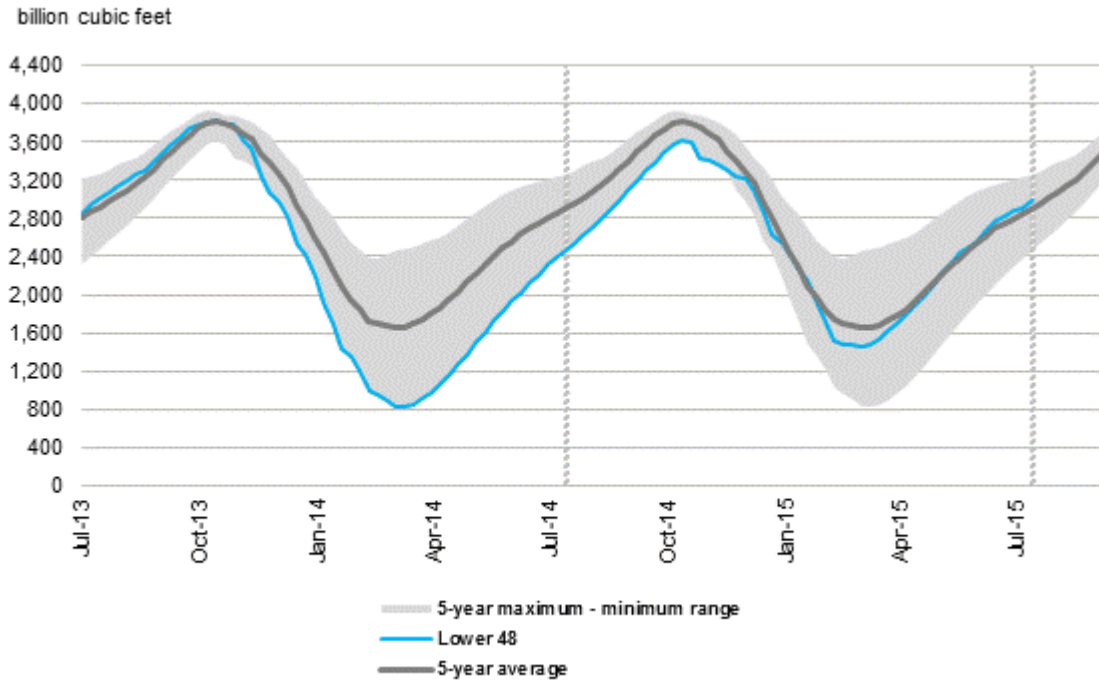
EIA indicates that **“[t]o this point in the inventory refill season, injections have surpassed the five-year average by a wide margin. EIA projects end-of-October 2015 inventories will total 3,867 Bcf, 69 Bcf (1.8%) above the five-year average for that time.”**¹⁰ Although unexpected hot weather during the summer cooling season could slow the storage build, the current picture suggests some downward pressure for natural gas prices.

⁸ Statement of the Federal Open Market Committee (released July 29, 2015).

⁹ EIA, *Weekly Natural Gas Storage Report* (released August 13, 2015).

¹⁰ EIA, *STEO* (August 2015) at 9.

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 2010 through 2014. The dashed vertical lines indicate current and year-ago weekly periods.
 Source: EIA, *Weekly Natural Gas Storage Report* (released August 13, 2015)

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 August 2015 STEO, EIA expects natural gas marketed production to grow by an annual rate of 5.4% in 2015 and 2.3% in 2016. EIA indicates that “[d]espite data showing month-over-month production declines in May and June, natural gas production remains higher than year-ago levels. EIA expects moderate growth through 2016, with increases in the Lower 48 states expected to more than offset long-term production declines in the Gulf of Mexico. Increases in drilling efficiency will continue to support growing natural gas production in the forecast despite relatively low natural gas prices. Most of the growth is expected to come from the Marcellus Shale, as the backlog of uncompleted wells is reduced and as new pipelines come online to deliver Marcellus natural gas to markets in the Northeast. Increases in domestic natural gas production are expected to reduce demand for natural gas imports from Canada and are expected to support growth in exports to Mexico. EIA expects natural gas exports to Mexico, particularly from the Eagle Ford Shale in South Texas, to increase because of growing demand from Mexico's electric power sector, coupled with flat Mexican natural gas production. EIA projects LNG gross exports will increase to an average of 0.79 Bcf/d in 2016, with the startup of a major LNG liquefaction plant in the Lower 48 states.”¹¹

¹¹ EIA, *STEO* (August 2015) at 9.

National Security

As noted in previous reports, we see little danger to the natural gas supply.¹² 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 \$0.46 per therm for August 2015 is unchanged from the previous month, and is also down 15.1 percent compared to the same period a year ago.¹³ The September 2015 PGC (assuming that the commodity market adjustment factor is zero) may remain around \$0.46 per therm, based, in part, on the expectation that near-term NYMEX futures prices continue to trade between \$0.26 and \$0.30 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).

¹² As of August 13, 2015, 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.

¹³ The commodity market adjustment factor for the August 2015 PGC was \$0.0 per therm, resulting in the adjusted PGC (excluding the commodity market adjustment factor) being equal to \$0.4601 per therm.

Wholesale Natural Gas Price/Supply Assessment Information

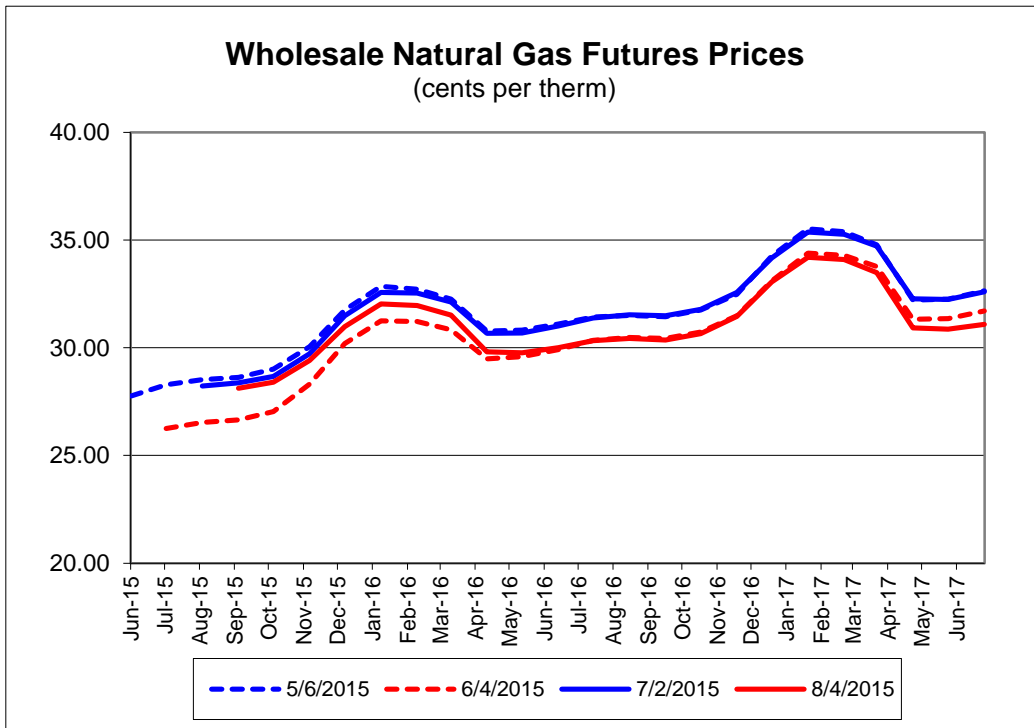
Current for August 4, 2015

Price Information

Twelve Month NYMEX Strip Components
8/4/15, cents per therm

Henry Hub Spot Market Price
8/4/15, cents per therm

	<u>Current Month</u>	<u>Previous Month</u>	<u>Current Only Available</u>
Sep 15	28.12	Sep 15 28.37	28.2
Oct 15	28.41	Oct 15 28.67	
Nov 15	29.41	Nov 15 29.72	
Dec 15	30.98	Dec 15 31.49	
Jan 16	32.04	Jan 16 32.57	
Feb 16	31.96	Feb 16 32.54	
Mar 16	31.52	Mar 16 32.13	
Apr 16	29.82	Apr 16 30.67	
May 16	29.77	May 16 30.69	
Jun 16	30.01	Jun 16 31.01	
Jul 16	30.34	Jul 16 31.38	
Aug 16	30.44	Aug 16 31.53	



The current PGC for August 2015 is about \$0.46 per therm. Assuming, among other things, that near-term futures prices remain around \$0.26 to \$0.30 per therm, the PGC rate (excluding the commodity market adjustment factor) for September 2015 may remain around \$0.46 per therm. However, given the uncertainty about the weather, as well as other factors, this assessment could easily change. The assessment for August 2015 is that wholesale prices may remain around \$0.30 per therm, or less, resulting in wholesale prices that are lower by at least 20 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
August 13, 2015

Factors	This Month	Summer Season
Oil Prices	Yellow	Yellow
Weather - Temperature	Red	Red
Weather - Hurricanes	Yellow	Yellow
Economic Conditions	Yellow	Yellow
Storage	Blue	Blue
Natural Gas Supply	Yellow	Yellow
National Security	Yellow	Yellow
Overall	Yellow	Yellow

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