

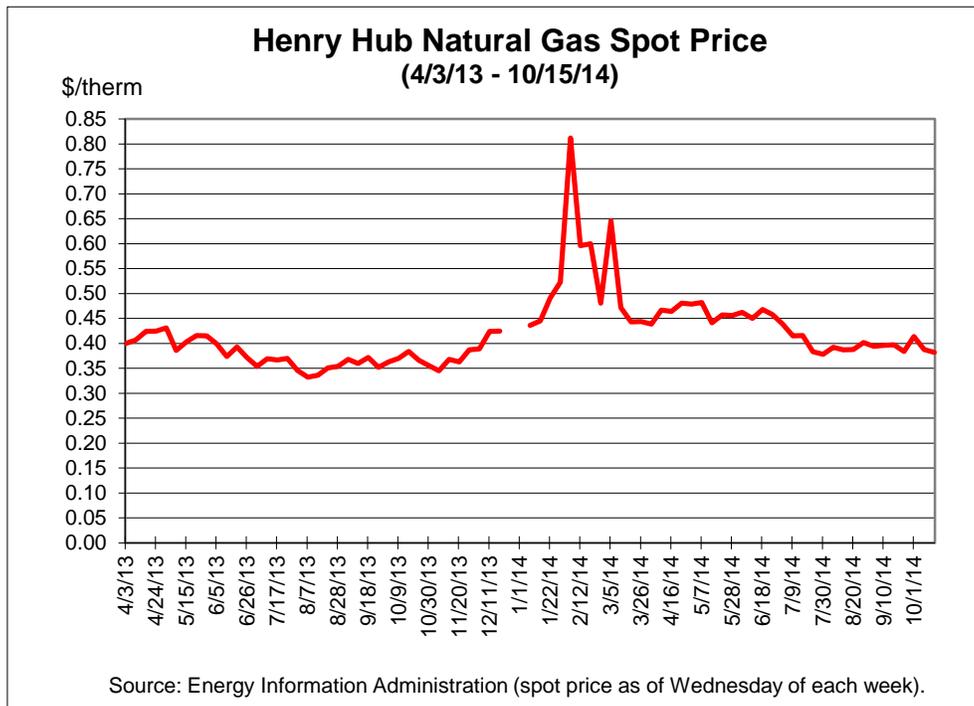
# WHOLESALE NATURAL GAS MARKET ASSESSMENT

## Wholesale Natural Gas Futures Prices as of October 6, 2014

by Roger Fujihara  
Office of Technical and Regulatory Analysis

### 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 October 2014.<sup>1</sup> OTRA's current assessment of the natural gas market suggests that wholesale natural gas prices may remain around \$0.40 per therm, or less, during October 2014 (see Henry Hub Spot Price figure). Recent natural gas spot prices are less 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 September 2014 was about \$0.39 per therm, nearly the same as the previous month.<sup>2</sup> In its Short-Term Energy Outlook ("STEO") for October 2014, EIA expects that **"spot prices [will] remain below [\$0.40 per therm] through November, before rising with winter heating demand. Projected Henry Hub natural gas prices [are expected to] average [\$0.445 per therm] in 2014 and [\$0.384 per therm] in 2015."**<sup>3</sup> Natural gas prices averaged \$0.373 per therm in 2013.

<sup>1</sup> 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.

<sup>2</sup> EIA, *Short-Term Energy Outlook* (October 2014) at 9.

<sup>3</sup> Ibid.

As of October 10, 2014, natural gas in storage stood at 3,299 billion cubic feet (“Bcf”). The working gas in storage is down about 9 percent from the same period a year ago, and is also down by 10 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”).<sup>4</sup> The PGC for October 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 October 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 October 16, 2014, the National Oceanic and Atmospheric Administration (“NOAA”) indicated that its outlook for the remainder of October generally calls for above normal temperatures for the central and western portion of the U.S.<sup>5</sup> Near to below normal temperatures are generally expected for the eastern portion of the U.S. The expected weather for the remainder of October is likely to be neutral for 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 October 16, 2014, there have been seven (7) 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 one of the seven storms entered the Gulf of Mexico, but that did not result in any significant impact to the nation’s natural gas infrastructure.

## **Economic Conditions**

National economic factors also contribute to the formation of wholesale natural gas prices. The Federal Reserve’s Beige Book provides anecdotal information on current economic conditions from various regions—twelve Federal Reserve Districts—in the nation.<sup>6</sup> Reports from the twelve Districts suggested modest to moderate economic growth, with most regions reporting overall growth in consumer spending that ranged from slight to moderate. Several

---

<sup>4</sup> 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.

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

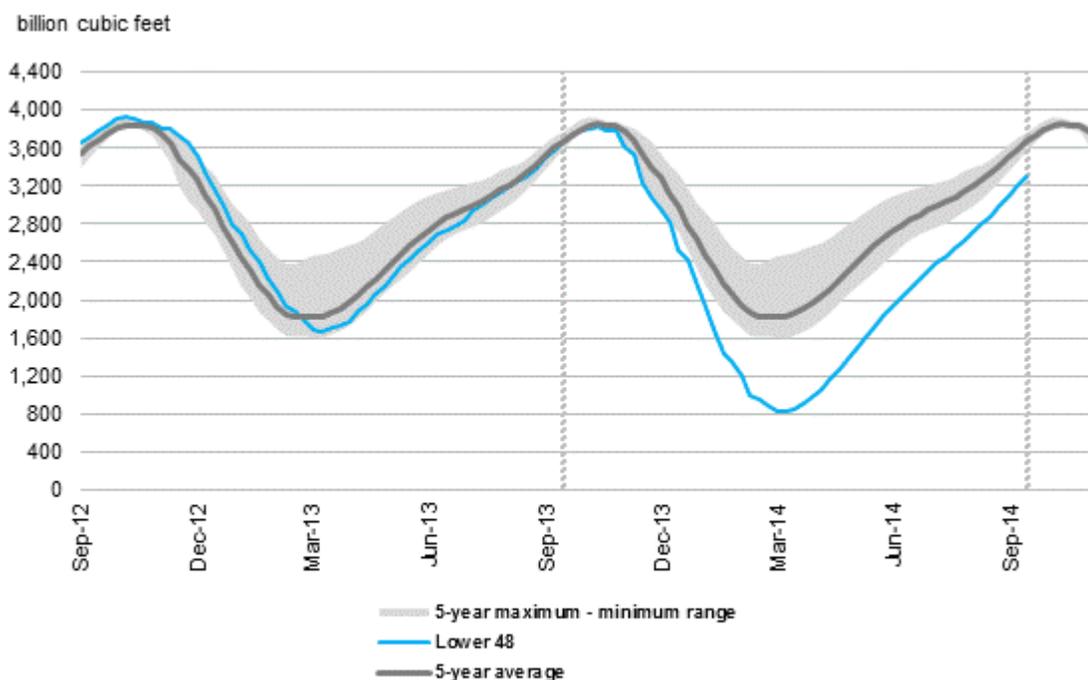
<sup>6</sup> Beige Book (released October 15, 2014).

District reports, however, indicated that retailers were relatively optimistic about the remainder of the year. Residential construction and real estate activity were mixed, while commercial construction and real estate activity grew in most regions. Employment continued to expand and most Districts reported that some employers had difficulty finding qualified workers for certain positions. A number of regions characterized overall wage growth as modest, but reported upward wage pressures for particular industries and occupations, such as skilled labor in construction and manufacturing. Price pressures remained subdued, with Districts reporting little to no change in price levels or modest increases. At present, the current state of economic activity may be relatively neutral for natural gas prices.

## Storage

EIA reports that the working gas in storage was 3,299 Bcf as of October 10, 2014, a net increase of 94 Bcf from the previous week. Stocks were 344 Bcf lower than the same period a year ago—down 9.4 percent—and down 362 Bcf from the 5-year average of 3,661 Bcf—a decrease of 9.9 percent.<sup>7</sup>

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 October 16, 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. EIA expects working gas stocks will reach 3,532 Bcf at the end of**

<sup>7</sup> EIA, *Weekly Natural Gas Storage Report* (released October 16, 2014).

**October, 283 Bcf lower than at the same time last year.”<sup>8</sup>** A strong storage build will help place 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 October 2014 STEO, EIA expects **“natural gas marketed production to grow by an annual rate of 5.4% in 2014 and 2.0% in 2015. STEO projects that the strong increases already seen in the Lower 48 states this year will continue, offsetting declines in the Gulf of Mexico. As of July [2014], the most recent month for which EIA data are available, marketed production was 4.2 Bcf/d greater than it was in July 2013.”<sup>9</sup>** 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.”<sup>10</sup>**

## National Security

As noted in previous reports, we see little danger to the natural gas supply.<sup>11</sup> 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 October 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 October 2014 PGC (assuming that the commodity market adjustment factor is zero) may remain around \$0.54 per therm, based, in part, on the expectation that near-term NYMEX futures prices trade between \$0.36 and \$0.41 per therm, as well as other cost assumptions.<sup>12</sup> For September 2014, the near-term NYMEX futures prices ranged between \$0.38 and \$0.41 per therm and the adjusted PGC for October 2014 was about \$0.55 per therm.

The November 2014 PGC (assuming that the commodity market adjustment factor is zero) may be 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, 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.

---

<sup>8</sup> EIA, *STEO* (October 2014) at 9.

<sup>9</sup> EIA, *STEO* (October 2014) at 8.

<sup>10</sup> *Ibid.*

<sup>11</sup> As of October 17, 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.

<sup>12</sup> The commodity market adjustment factor for the October 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.

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

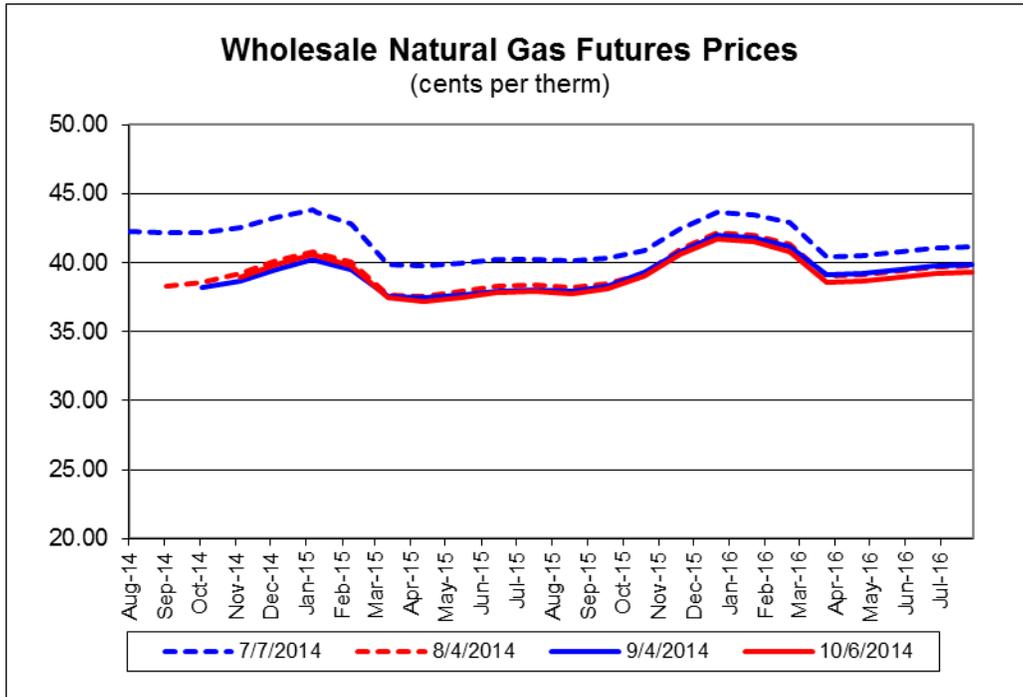
Current for October 6, 2014

## Price Information

Twelve Month NYMEX Strip Components  
10/6/14, cents per therm

Henry Hub Spot Market Price  
10/6/14, cents per therm

	<u>Current Month</u>	<u>Previous Month</u>	<u>Current Only Available</u>
Nov 14	38.98	Nov 14 38.69	38.8
Dec 14	39.87	Dec 14 39.53	
Jan 15	40.64	Jan 15 40.27	
Feb 15	40.55	Feb 15 40.17	
Mar 15	39.81	Mar 15 39.51	
Apr 15	37.44	Apr 15 37.55	
May 15	37.23	May 15 37.43	
Jun 15	37.52	Jun 15 37.68	
Jul 15	37.82	Jul 15 37.98	
Aug 15	37.91	Aug 15 38.06	
Sep 15	37.78	Sep 15 37.95	
Oct 15	38.09	Oct 15 38.32	



The current PGC for October 2014 is about \$0.55 per therm. Assuming, among other things, that near-term futures prices remain around \$0.37 to \$0.42 per therm, the PGC rate (excluding the commodity market adjustment factor) for November 2014 may be around \$0.55 per therm. However, given the uncertainty about the weather, as well as other factors, this assessment could easily change. The assessment for October 2014 is that wholesale prices may remain around, or below, \$0.40 per therm, resulting in wholesale prices that are higher by roughly 10 percent, or less, 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**  
**October 17, 2014**

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

Code: Red - Upward Pressure

Blue - Downward pressure

Yellow - No Change

No color - N.A.  
 Not Applicable