

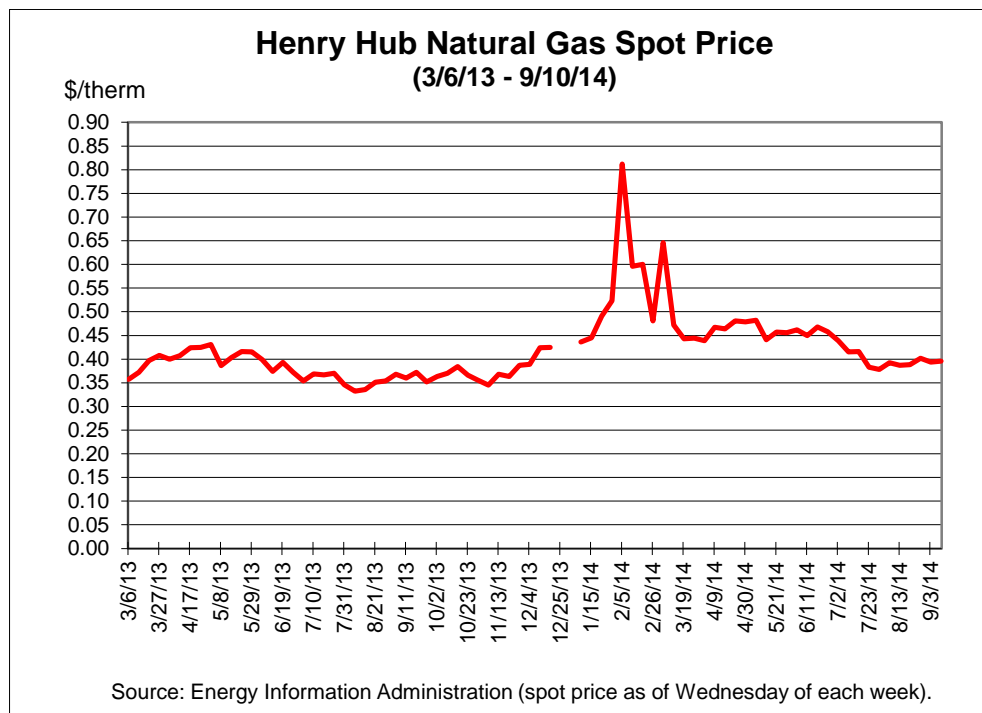
WHOLESALE NATURAL GAS MARKET ASSESSMENT

Wholesale Natural Gas Futures Prices as of September 4, 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 September 2014.¹ 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 September 2014 (see Henry Hub Spot Price figure). Recent natural gas spot prices are about 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 August 2014 was about \$0.39 per therm, down from the \$0.40 per therm average for the previous month.² In its Short-Term Energy Outlook ("STEO") for September 2014, EIA expects that **"spot prices will remain below [\$0.40 per therm] through October, before rising with winter heating demand. Projected Henry Hub natural gas**

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* (September 2014) at 7.

prices [are expected to] average [\$0.446 per therm] in 2014 and [\$0.387 per therm] in 2015.”³ Natural gas prices averaged \$0.373 per therm in 2013.

As of September 5, 2014, natural gas in storage stood at 2,801 billion cubic feet (“Bcf”). The working gas in storage is down about 14 percent from the same period a year ago, and is also down by 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 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 September 2014 is 55.42 cents (\$0.55) per therm compared with 60.32 cents (\$0.60) per therm for the same period a year ago—down 8 percent.⁵ However, the PGC for September 2014 was up 2 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 September 16, 2014, the National Oceanic and Atmospheric Administration (“NOAA”) indicated that its outlook for the remainder of September generally calls for above normal temperatures for the western half of the U.S., Northern Plains, and most of Florida.⁶ Near to below normal temperatures are expected for the northeastern U.S. and Southern Plains. Elsewhere, there are equal chances of below, near, or above normal temperatures. To the extent that very warm weather is not sustained, this will tend to keep natural gas prices from rising, as there is less of a demand for fuel for cooling purposes.

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 September 17, 2014, there have been five (5) named storms, of which four (4) have reached hurricane strength. Only one of the five storms entered the Gulf of Mexico, but that did not result in any significant impact to the nation’s natural gas infrastructure.

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 Although the commodity price of natural gas is currently higher by about 15 percent relative to a year ago, the August 2014 PGC is down from the same period a year ago mainly because of the true-up adjustment.

⁶ NOAA at <http://www.cpc.ncep.noaa.gov/>.

To the extent hurricane activity affects natural gas operations in the Gulf of Mexico region, this can produce upward pressure on natural gas prices. In particular, as mentioned in a previous Outlook, **“EIA’s simulation results indicate a 69% probability of offshore natural gas production experiencing outages during the 2014 hurricane season that are equal to or larger than the 6.7 Bcf of production shut in last season. Despite the potential for significant outages if a strong hurricane were to pass through the [Gulf of Mexico (GOM)] producing region, the overall effect on U.S. supply would not be as severe as in past years because the share of total U.S. natural gas production originating in the GOM has declined sharply. In 1997, 26% of the nation’s natural gas was produced in the federal Gulf of Mexico; by 2013, that share had fallen to 5%.”**⁷

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.⁸ Reports from the twelve Districts suggest economic activity continued to expand across most regions and sectors. General consumer spending grew in most regions, with rates ranging from slight to moderate. Most Districts reported a continued expansion of auto sales and the manufacturing sector indicated growth across a broad base of industries. Moreover, the manufacturing outlook remained generally upbeat, among regions reporting on their firms’ near-term expectations. Residential real estate activity, particularly sales of existing homes and construction of new homes, generally expanded or held steady in about half of the Districts. In addition, about half of the regions also reported some growth in construction and sales or leasing of nonresidential properties. 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 2,801 Bcf as of September 5, 2014, a net increase of 92 Bcf from the previous week. Stocks were 443 Bcf lower than the same period a year ago—down 13.7 percent—and down 463 Bcf from the 5-year average of 3,264 Bcf—a decrease of 14.2 percent.⁹

EIA indicates that the **“injection season began somewhat slowly in April, but has continued at a strong pace, with injections averaging above the five-year average throughout most of the injection season. EIA expects working gas stocks will reach 3,477 Bcf at the end of October, 339 Bcf lower than at the same time last year.”**¹⁰ A strong storage build will help place downward pressure on natural gas prices.

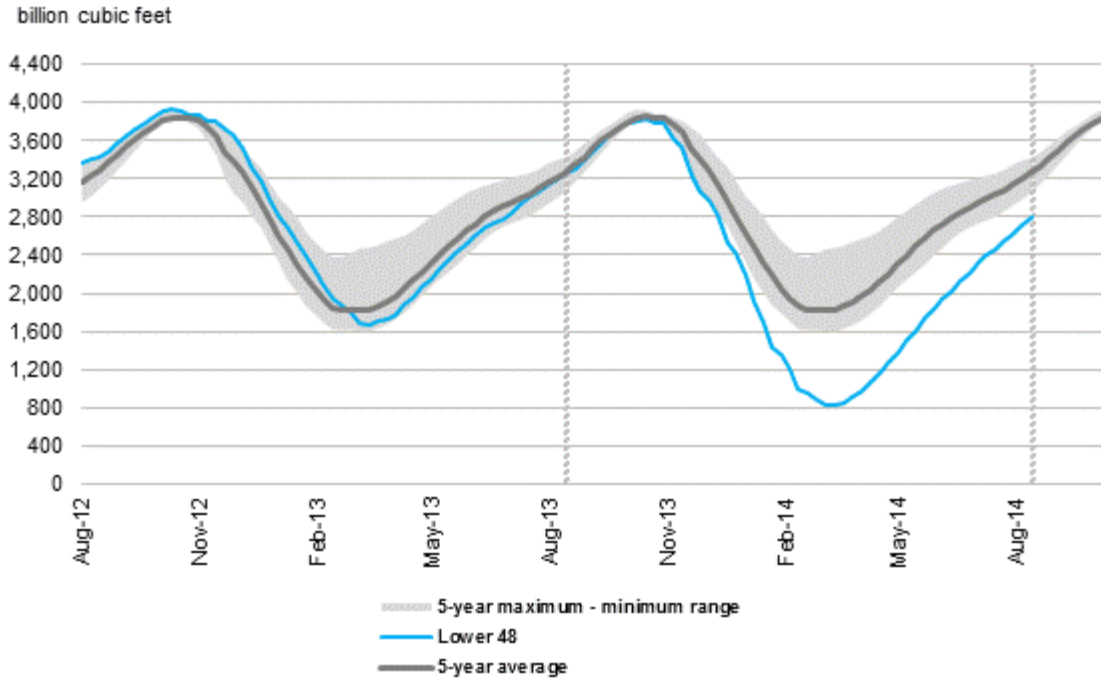
⁷ EIA, *STEO* (June 2014) at 6 and 7.

⁸ Beige Book (released September 3, 2014).

⁹ EIA, *Weekly Natural Gas Storage Report* (released September 11, 2014).

¹⁰ EIA, *STEO* (September 2014) at 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 September 11, 2014)

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 September 2014 STEO, EIA expects **“natural gas marketed production to grow by an annual rate of 5.3% in 2014 and 2.1% in 2015. STEO projects that strong increases already seen in the Lower 48 states will continue, offsetting declines in the Gulf of Mexico. As of June [2014], the most recent month for which EIA data are available, marketed production was more than 4.6 Bcf/d greater than it was in June 2013. Rapid natural gas production growth in the Marcellus formation has contributed to low natural gas forward prices in the Northeast, and as a result new infrastructure has been proposed to flow gas to other market regions. In June, the eastward-flowing Rockies Express Pipeline (REX) began service on its Seneca Lateral, which flows Marcellus gas westward to the Midwest. REX's parent company, Tallgrass Energy, plans to add bi-directional capability on a significant portion of REX's easternmost segment.”**¹¹ 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 have been increasing in recent months because of growing demand from Mexico's electric power

¹¹ EIA, *STEO* (September 2014) at 6 and 7.

sector and flat Mexican production. Mexico has been an outlet for U.S. production, particularly from the Eagle Ford Shale in South Texas.”¹²

National Security

As noted in previous reports, we see little danger to the natural gas supply.¹³ 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 September 2014 is up 2.3 percent from the previous month, and is down 8.1 percent compared to the same period a year ago. Last month, OTRA suggested that the September 2014 PGC (assuming that the commodity market adjustment factor is zero) may be 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.¹⁴ For August 2014, the near-term NYMEX futures prices ranged between \$0.38 and \$0.41 per therm and the adjusted PGC for September 2014 was about \$0.55 per therm.

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, 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 EIA, *STEO* (September 2014) at 7.

¹³ As of September 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.

¹⁴ The commodity market adjustment factor for the September 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.

Wholesale Natural Gas Price/Supply Assessment Information

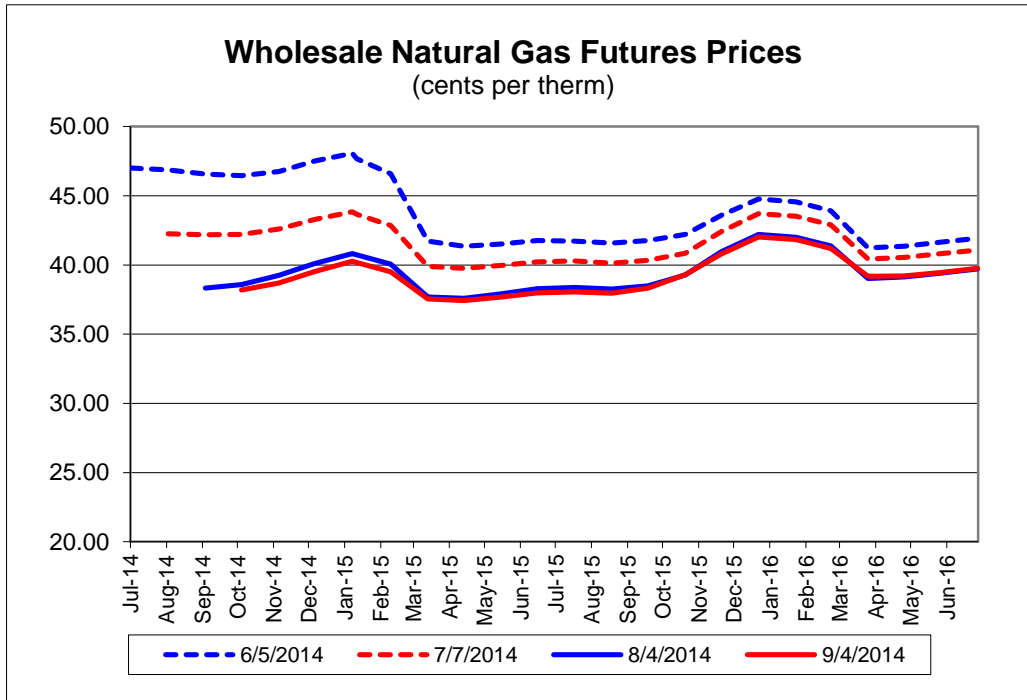
Current for September 4, 2014

Price Information

Twelve Month NYMEX Strip Components
9/4/14, cents per therm

Henry Hub Spot Market Price
9/4/14, cents per therm

<u>Current Month</u>		<u>Previous Month</u>		<u>Current Only Available</u>
Oct 14	38.19	Oct 14	38.59	39.1
Nov 14	38.69	Nov 14	39.26	
Dec 14	39.53	Dec 14	40.11	
Jan 15	40.27	Jan 15	40.82	
Feb 15	40.17	Feb 15	40.73	
Mar 15	39.51	Mar 15	40.06	
Apr 15	37.55	Apr 15	37.69	
May 15	37.43	May 15	37.59	
Jun 15	37.68	Jun 15	37.92	
Jul 15	37.98	Jul 15	38.28	
Aug 15	38.06	Aug 15	38.38	
Sep 15	37.95	Sep 15	38.25	



The current PGC for September 2014 is about \$0.55 per therm. Assuming, among other things, that near-term futures prices remain around \$0.36 to \$0.41 per therm, the PGC rate (excluding the commodity market adjustment factor) for October 2014 may be around \$0.54 per therm. However, given the uncertainty about the weather, as well as other factors, this assessment could easily change. The assessment for September 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
September 17, 2014

Factors	This Month	Summer Season
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