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 June 2014. OTRA’s current assessment of the natural gas market suggests that wholesale natural gas prices may remain below $0.50 per therm during June 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 May 2014 was about $0.46 per therm, down slightly from the $0.47 per therm average for the previous month. In its Short-Term Energy Outlook (“STEO”) for June 2014, EIA expects that “[p]rojected Henry Hub natural gas prices [are expected to] average [$0.474 per therm] in 2014 and [$0.449 per therm] in 2015.” Natural gas prices averaged $0.373 per therm in 2013.

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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 (June 2014) at 7.

3 Ibid at 7.
As of June 13, 2014, natural gas in storage stood at 1,719 billion cubic feet ("Bcf"). The working gas in storage is down about 29 percent from the same period a year ago, and is also down by 33 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 June 2014 is 70.51 cents ($0.71) per therm compared with 76.09 cents ($0.76) per therm for the same period a year ago—down 7 percent.\(^5\) The PGC for June 2014 was down nearly 4 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 June 17, 2014, the National Oceanic and Atmospheric Administration ("NOAA") indicated that its outlook during the second half of June generally calls for above normal temperatures for the western, eastern, and north central portions of the nation.\(^6\) Below normal temperatures are expected for some areas of the central and southern Plains. Elsewhere, there are equal chances of below, near, or above normal temperatures. Hotter weather will tend to allow natural gas prices to rise, to the extent that more fuel is used for cooling purposes.

NOAA also released its 2014 Atlantic Hurricane Season Outlook on May 22, 2014. The current Outlook calls for a near-normal or below-normal hurricane season, predicted to produce 8-13 named storms, 3-6 of which are expected to become hurricanes and 1-2 becoming major hurricanes. 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, “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

\(^4\) 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 relative to a year ago, the June 2014 PGC is lower than the PGC from the same period a year ago mainly because of a true-up adjustment.

1997, 26% of the nation’s natural gas was produced in the federal Gulf of Mexico; by 2013, that share had fallen to 5%.”

Economic Conditions

National economic factors also contribute to the formation of wholesale natural gas prices. The latest release (June 18, 2014) from the Federal Open Market Committee (“FOMC”) indicated that growth in economic activity has rebounded in recent months. Labor market indicators generally showed further improvement, although the unemployment rate, though lower, remains relatively high—6.3 percent in May 2014 compared to 7.5 percent in May 2013. Household spending appears to be rising moderately and business fixed investment resumed its advance, while the recovery in the housing sector remained slow. Fiscal policy continues to restrain economic growth, although the extent of restraint is diminishing. Inflation has been running below the Committee’s longer-run objective, but longer-term inflation expectations have remained stable. Separately, private analysts suggest that further improvement in the housing recovery is important to further economic expansion. 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 1,719 Bcf as of June 13, 2014, a net increase of 113 Bcf from the previous week. Stocks were 706 Bcf lower than the same period a year ago—down 29.1 percent—and down 851 Bcf from the 5-year average of 2,570 Bcf—a decrease of 33.1 percent.

EIA indicates that the “injection season began April somewhat slowly, but has picked up in May, with injections over the last four weeks totaling 444 Bcf. EIA expects working gas stocks will reach 3,424 Bcf at the end of October, 392 Bcf lower than at the same time last year.” An improving storage build will help place downward pressure on natural gas prices.

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7 EIA, STEO (June 2014) at 6 and 7.
8 Statement of the Federal Open Market Committee (released June 18, 2014).
10 EIA, STEO (June 2014) at 7.
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 June 2014 STEO, EIA expected “natural gas marketed production to grow by an average rate of 4.0% in 2014 and 1.3% in 2015. Rapid natural gas production growth in the Marcellus formation is contributing to falling natural gas forward prices in the Northeast, which often fall below Henry Hub prices outside of peak winter demand months. Consequently, some drilling activity may move away from the Marcellus back to Gulf Coast plays such as the Haynesville and Barnett, where prices are closer to the Henry Hub spot price.” EIA goes on to say that “[g]rowing domestic production is expected to continue to put downward pressure on natural gas imports from Canada. EIA projects net imports of 3.6 Bcf/d in 2014 and 3.1 Bcf/d in 2015, which would be the lowest level since 1987. Liquefied natural gas (LNG) imports have fallen over the past several years because higher prices in Europe and Asia are more attractive to sellers than the relatively low prices in the United States. Several companies are planning to build liquefaction capacity to export LNG from the United States. Cheniere Energy’s Sabine Pass facility is

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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 June 19, 2014)

11 EIA, STEO (June 2014) at 6.
expected to be the first to liquefy natural gas produced in the Lower 48 states for export. It is scheduled to come on line in stages beginning in late 2015.”

National Security

As noted in previous reports, we see little danger to the natural gas supply. 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 $0.71 per therm for June 2014 is down 3.7 percent from the previous month, and is also down 7.3 percent compared to the same period a year ago. Last month, OTRA suggested that the June 2014 PGC (assuming that the commodity market adjustment factor is zero) may be around $0.60 per therm, based, in part, on the expectation that near-term NYMEX futures prices trade between $0.42 and $0.47 per therm, as well as other cost assumptions. For May 2014, the near-term NYMEX futures prices ranged between $0.43 and $0.49 per therm and the adjusted PGC for June 2014 was about $0.61 per therm.

The July 2014 PGC (assuming that the commodity market adjustment factor is zero) may remain around $0.61 per therm, based, in part, on the expectation that near-term NYMEX futures prices trade between $0.43 and $0.48 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).

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12 EIA, STEO (June 2014) at 7.
13 As of June 19, 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 June 2014 PGC was $0.10 per therm, resulting in the adjusted PGC (excluding the commodity market adjustment factor) being equal to $0.6051 per therm.
**Wholesale Natural Gas Price/Supply Assessment Information**

Current for June 5, 2014

**Price Information**

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<th>Twelve Month NYMEX Strip Components</th>
<th>Henry Hub Spot Market Price</th>
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<td>6/5/14, cents per therm</td>
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**Wholesale Natural Gas Futures Prices**

(cents per therm)

![Wholesale Natural Gas Futures Prices](image_url)
The current PGC for June 2014 is about $0.71 per therm. Assuming, among other things, that near-term futures prices remain around $0.43 to $0.48 per therm, the PGC rate (excluding the commodity market adjustment factor) for July 2014 may be around $0.61 per therm. However, given the uncertainty about the weather, as well as other factors, this assessment could easily change. The assessment for June 2014 is that wholesale prices may remain below $0.50 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

**June 19, 2014**

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<tr>
<th>Factors</th>
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**Code:**
- Red - Upward Pressure
- Blue - Downward pressure
- Yellow - No Change
- No color - Not Applicable
- N.A. - Not Applicable