WHOLESALE NATURAL GAS MARKET ASSESSMENT
Wholesale Natural Gas Futures Prices as of July 7, 2014

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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 July 2014. OTRA’s current assessment of the natural gas market suggests that wholesale natural gas prices may remain below $0.50 per therm during July 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.

![Henry Hub Natural Gas Spot Price](1/2/13 - 7/9/14)

The Energy Information Administration (“EIA”) indicates that the average Henry Hub natural gas spot price for June 2014 was about $0.46 per therm, unchanged from the $0.46 per therm average for the previous month. In its Short-Term Energy Outlook (“STEO”) for July 2014, EIA expects that “spot prices will remain near current levels until the start of the next winter heating season. Projected Henry Hub natural gas prices [are expected to]

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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 (July 2014) at 7.
average [$0.477 per therm] in 2014 and [$0.450 per therm] in 2015.”

As of July 4, 2014, natural gas in storage stood at 2,022 billion cubic feet (“Bcf”). The working gas in storage is down about 24 percent from the same period a year ago, and is also down by 28 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”). The PGC for July 2014 is 70.51 cents ($0.71) per therm compared with 69.01 cents ($0.69) per therm for the same period a year ago—up 2 percent. The PGC for July 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 July 10, 2014, the National Oceanic and Atmospheric Administration (“NOAA”) indicated that its outlook during the remainder of July generally calls for above normal temperatures for the parts of southern Texas and Florida, as well as the western portion of the U.S. Below normal temperatures are expected for the northern central and eastern portions of the nation. Elsewhere, there are equal chances of below, near, or above normal temperatures. Cooler weather will tend to allow natural gas prices to ease, to the extent that less fuel is used for cooling purposes.

As noted in the previous Outlook, NOAA released its 2014 Atlantic Hurricane Season Outlook on May 22, 2014. The outlook for the current season 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

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3 Ibid at 7.
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 10 percent relative to a year ago, the July 2014 PGC is up by a lower amount from the same period a year ago mainly because of a true-up adjustment.
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%.”

Economic Conditions

National economic factors also contribute to the formation of wholesale natural gas prices. Labor market indicators generally showed further improvement, with employers adding 288,000 net new jobs in June and the unemployment easing to 6.1—down from 6.3 percent in May 2014 and 6.6 percent in January 2014. The addition to jobs were broad-based and hopefully signals increased business confidence in the durability of the economic recovery. An improving employment outlook will also help household spending and business fixed investment to advance. 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 2,022 Bcf as of July 4, 2014, a net increase of 93 Bcf from the previous week. Stocks were 653 Bcf lower than the same period a year ago—down 24.4 percent—and down 769 Bcf from the 5-year average of 2,791 Bcf—a decrease of 27.6 percent.8

EIA indicates that the “injection season began somewhat slowly in April, but picked up in May and June with more than 1 [trillion cubic feet] was added to storage. EIA expects working gas stocks will reach 3,430 Bcf at the end of October, 380 Bcf lower than at the same time last year.”9 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.
9 EIA, STEO (July 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 July 2014 STEO, EIA expects “natural gas marketed production to grow by an average rate of 4.1% in 2014 and 1.2% in 2015. Rapid natural gas production growth in the Marcellus formation is contributing to low natural gas forward prices in the Northeast, and as a result new infrastructure has been proposed to take gas to other market regions. In June, the eastward-flowing Rockies Express Pipeline (REX) began service on its Seneca Lateral pipeline, which will take Marcellus gas westward to the Midwest. REX’s parent company, Tallgrass Energy, plans to add bidirectional capability on a significant portion of REX’s easternmost segment.”

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 3.7 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 expected to be the first to liquefy natural gas produced in

\[\text{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.}
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Source: EIA, Weekly Natural Gas Storage Report (released July 10, 2014)

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the Lower 48 states for export. It is scheduled to come online 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 July 2014 is unchanged from the previous month, and is up 2.2 percent compared to the same period a year ago. Last month, OTRA suggested that the July 2014 PGC (assuming that the commodity market adjustment factor is zero) may be 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, as well as other cost assumptions. For June 2014, the near-term NYMEX futures prices ranged between $0.44 and $0.48 per therm and the adjusted PGC for July 2014 was about $0.61 per therm.

The August 2014 PGC (assuming that the commodity market adjustment factor is zero) may ease to around $0.58 per therm, based, in part, on the expectation that near-term NYMEX futures prices trade between $0.40 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).

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11 EIA, STEO (July 2014) at 7.
12 As of July 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.
13 The commodity market adjustment factor for the July 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 July 7, 2014

Price Information

Twelve Month NYMEX Strip Components

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<th>Current Month</th>
<th>Previous Month</th>
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<td>Jul 15</td>
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The current PGC for July 2014 is about $0.71 per therm. Assuming, among other things, that near-term futures prices remain around $0.40 to $0.45 per therm, the PGC rate (excluding the commodity market adjustment factor) for August 2014 may be around $0.58 per therm. However, given the uncertainty about the weather, as well as other factors, this assessment could easily change. The assessment for July 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

**July 14, 2014**

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<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  

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