WHOLESALE NATURAL GAS MARKET ASSESSMENT
Wholesale Natural Gas Futures Prices as of May 14, 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 May 2014. OTRA’s current assessment of the natural gas market suggests that wholesale natural gas prices may remain below $0.50 per therm during May 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 April 2014 was about $0.47 per therm, down from the $0.49 per therm average for the previous month, due to warmer weather in much of the nation. In its Short-Term Energy Outlook (“STEO”) for May 2014, EIA expects that “[p]rojected Henry Hub natural gas prices [are expected to] average [$0.474 per therm] in 2014 and [$0.433 per therm] in 2015.” Natural gas prices averaged $0.373 per therm in 2013.

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 (May 2014) at 6.

3 Ibid at 6.
As of May 9, 2014, natural gas in storage stood at 1,160 billion cubic feet ("Bcf"). The working gas in storage is down about 41 percent from the same period a year ago, and is also down by 45 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 May 2014 is 73.24 cents ($0.73) per therm compared with 79.66 cents ($0.80) per therm for the same period a year ago—down 8 percent. The PGC for May 2014 was down nearly 12 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 May 14, 2014, the National Oceanic and Atmospheric Administration ("NOAA") indicated that its outlook for the second half of May generally calls for above normal temperatures for the far western portion of the nation but expanding eastward somewhat as we head into the latter part of the month. Above normal temperatures are also likely for the central Plains and central Mississippi Valley into the interior Southeast and up to northern New England. Below normal temperatures are expected from Arizona northward and northeastward to Montana and the Dakotas then into Minnesota and the northern portion of Wisconsin, as well as along the central and western Gulf Coast. Elsewhere, there are equal chances of below, near, or above normal temperatures. Relatively warmer weather, will tend to allow natural gas prices to ease.

Economic Conditions

National economic factors also contribute to the formation of wholesale natural gas prices. The latest release (April 30, 2014) from the Federal Open Market Committee ("FOMC") indicated that growth in economic activity has picked up recently, after having slowed sharply during the winter in part because of adverse weather conditions. Labor market indicators were mixed but, on balance, showed further improvement, although the unemployment rate remains elevated. Household spending appears to be rising more quickly. However, business fixed investment eased and the recovery in the housing sector remained

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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 May 2013 PGC came out higher than the current PGC mainly because of a true-up adjustment.

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. The FOMC believes that there is sufficient underlying strength in the broader economy to support ongoing improvement in labor market conditions. The FOMC will continue its accommodative monetary policy until the outlook for the labor market has improved substantially in the context of price stability. 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 1,160 Bcf as of May 9, 2014, a net increase of 105 Bcf from the previous week. Stocks were 790 Bcf lower than the same period a year ago—down 40.5 percent—and down 959 Bcf from the 5-year average of 2,119 Bcf—a decrease of 45.3 percent.

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 May 15, 2014)

Statement of the Federal Open Market Committee (released April 30, 2014).

EIA indicates that the “injection season has started somewhat slowly, but EIA expects injections will pick up over the summer to end October at just over 3,400 Bcf. EIA projects the rate of injections between April 25 and the end of October will average about 90 Bcf per week, which is 20 Bcf greater than the average weekly injection during the past five years.”9 Warmer weather and a stronger 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 May 2014 STEO, EIA indicated that “natural gas marketed production will grow by an average rate of 3.0% in 2014 and 1.8% 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 even with or 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. Liquefied natural gas (LNG) imports have declined 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 the Lower 48 states for export. The facility has a total liquefaction capacity of 3 Bcf/d and is scheduled to come online in stages beginning in late 2015. Growing domestic production over the past several years has displaced some pipeline imports from Canada, while exports to Mexico have increased. 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. Over the longer term, the EIA Annual Energy Outlook 2014 projects the United States will be a net exporter of natural gas beginning in 2018.”10

National Security

As noted in previous reports, we see little danger to the natural gas supply.11 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 $0.73 per therm for May 2014 is down 11.6 percent from the previous month, and is also down 8.1 percent compared to the same period a year ago. Last month, OTRA suggested that the May 2014 PGC (assuming that the commodity market adjustment factor is zero) may be around $0.60 per therm, based, in part, on the expectation

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9 EIA, STEO (May 2014) at 6.
10 Ibid.
11 As of May 15, 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.
that near-term NYMEX futures prices trade between $0.42 and $0.47 per therm, as well as other cost assumptions.\textsuperscript{12} For April 2014, the near-term NYMEX futures prices ranged between $0.43 and $0.48 per therm and the adjusted PGC for May 2014 was about $0.63 per therm.

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

\textsuperscript{12} The commodity market adjustment factor for the May 2014 PGC was $0.10 per therm, resulting in the adjusted PGC (excluding the commodity market adjustment factor) being equal to $0.6324 per therm.
Wholesale Natural Gas Price/Supply Assessment Information
Current for May 14, 2014

Price Information

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<th>Twelve Month NYMEX Strip Components</th>
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Wholesale Natural Gas Futures Prices
(cents per therm)

![Wholesale Natural Gas Futures Prices Chart](chart.png)
The current PGC for May 2014 is about $0.73 per therm. Assuming, among other things, that near-term futures prices remain around $0.42 to $0.47 per therm, the PGC rate (excluding the commodity market adjustment factor) for June 2014 may be around $0.60 per therm. However, given the uncertainty about the weather, as well as other factors, this assessment could easily change. The assessment for May 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**  
**May 15, 2014**

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