WHOLESALE NATURAL GAS MARKET ASSESSMENT
Wholesale Natural Gas Futures Prices as of March 11, 2015

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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 March 2015. OTRA’s current assessment of the natural gas market suggests that wholesale natural gas prices may remain around $0.30 per therm during March 2015 (see Henry Hub Spot Price figure). Recent natural gas spot prices are at least 40 percent lower 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 February 2015 was about $0.29 per therm, down from $0.30 per therm in the previous month. In its Short-Term Energy Outlook (“STEO”) for March 2015, EIA expects “monthly average spot prices to remain less than [$0.30 per therm] through May, and less than [$0.40 per therm] through the remainder of the forecast. The projected Henry Hub natural gas prices are expected to average $0.307 per therm in 2015 and [$0.348 per therm] in 2016.” Natural gas prices averaged $0.437 per therm in 2014.

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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 (March 2015) at 9.

3. Ibid.
As of March 6, 2015, natural gas in storage stood at 1,512 billion cubic feet ("Bcf"). The working gas in storage is up 47 percent from the same period a year ago, but is down by about 13 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 March 2015 is 63.91 cents ($0.64) per therm compared with 93.98 cents ($0.94) per therm for the same period a year ago—down 32 percent. The PGC for March 2015, however, is up about 26 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 March 12, 2015, the National Oceanic and Atmospheric Administration ("NOAA") indicated that its outlook for the remainder of March generally calls for below normal temperatures for the eastern half of the nation. Above normal temperatures are generally expected for the western portion of the U.S. The expected weather for the remainder of March may provide some upward pressure on natural gas prices.

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. Reports from the twelve regions indicate that economic activity continued to expand across most Districts and sectors from early January through mid-February. Consumer spending rose in most regions, and reports were generally optimistic about near-term sales. Manufacturing activity generally showed gains across the Districts, although at varying rates. Home sales increased in most regions, while reports on residential construction were mixed. Commercial real estate market conditions remained stable or improved across the Districts. Payrolls remained stable or expanded across the regions, and reports noted employment gains in a broad range of sectors. Wage pressures remained moderate and were limited largely to workers in skilled occupations. Thus, at present, the current state of economic activity may still be relatively neutral for natural gas prices.

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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.
6 Beige Book (released March 4, 2015).
Storage

EIA reports that the working gas in storage was 1,512 Bcf as of March 6, 2015, a net decrease of 198 Bcf from the previous week. Stocks were 483 Bcf higher than the same period a year ago—up 46.9 percent—and down 225 Bcf from the 5-year average of 1,737 Bcf—a decrease of 13.0 percent.\(^7\)

![Diagram showing working gas in underground storage compared with the 5-year maximum and minimum](image)

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 2010 through 2014. The dashed vertical lines indicate current and year-ago weekly periods.


EIA indicates that “[f]ollowing the extremely cold weather last winter, inventories were 1,000 Bcf below the five-year average in mid-April 2014. After strong builds over the summer and weak draws during the early winter, natural gas working inventories briefly surpassed the five-year average in mid-February. However, recent cold temperatures have contributed to inventory levels falling back below the five-year average. EIA projects that end-of-March 2015 inventories will total 1,587 Bcf, close to the five-year average and 730 Bcf more than at the end of last March.”\(^8\) Unless colder weather for the remainder of the winter heating season draws down storage at a faster rate, the current picture may be neutral for natural gas prices.

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\(^7\) EIA, *Weekly Natural Gas Storage Report* (released March 12, 2015).

\(^8\) EIA, *STEO* (March 2015) at 8 and 9.
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 March 2015 STEO, EIA expects natural gas marketed production to grow by an annual rate of 5.0% in 2015 and 2.0% in 2016. EIA indicates that this is a reflection of “continuing production in the Lower 48 states, which more than offsets the long-term declining production in the Gulf of Mexico. Although natural gas prices have fallen dramatically in recent months, EIA expects that increases in drilling efficiency and growth in oil production (albeit at a slower rate) will continue to support growing natural gas production in the forecast. With most growth expected to come from the Marcellus Shale, a backlog of drilled but uncompleted wells will continue to support production growth, as new pipelines come online in the Northeast. Increases in domestic natural gas production are expected to reduce demand for natural gas imports from Canada and to support growth in exports to Mexico. EIA expects exports to Mexico, particularly from the Eagle Ford Shale in South Texas, to increase because of growing demand from Mexico’s electric power sector, coupled with flat Mexican natural gas production. Liquefied natural gas (LNG) imports have fallen over the past five years because higher prices in Europe and Asia are more attractive to LNG exporters than the relatively low prices in the United States. Forecast LNG gross imports average 0.2 Bcf/d in both 2015 and 2016. EIA projects that LNG gross exports will increase from an average of 0.04 Bcf/d in 2014 to almost 0.8 Bcf/d in 2016.”

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 $0.64 per therm for March 2015 is up 26.2 percent from the previous month, but is down 32.0 percent compared to the same period a year ago. The April 2015 PGC (assuming that the commodity market adjustment factor is zero) may remain around $0.48 per therm, based, in part, on the expectation that near-term NYMEX futures prices continue to trade between $0.26 and $0.30 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.

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9 EIA, STEO (March 2015) at 8.
10 As of March 13, 2015, 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.
11 The commodity market adjustment factor for the March 2015 PGC was $0.15 per therm, resulting in the adjusted PGC (excluding the commodity market adjustment factor) being equal to $0.4891 per therm. Last month, OTRA suggested that the March 2015 PGC (assuming that the commodity market adjustment factor is zero) may be around $0.48 per therm, based, in part, on the expectation that near-term NYMEX futures prices trade between $0.26 and $0.30 per therm, as well as other cost assumptions. For February 2015, the near-term NYMEX futures prices ranged between $0.26 and $0.30 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 March 11, 2015

Price Information

Twelve Month NYMEX Strip Components
3/11/15, cents per therm

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Wholesale Natural Gas Futures Prices
(cents per therm)

![Graph of Wholesale Natural Gas Futures Prices](image-url)
The current PGC for March 2015 is about $0.64 per therm. Assuming, among other things, that near-term futures prices remain around $0.26 to $0.30 per therm, the PGC rate (excluding the commodity market adjustment factor) for April 2015 may remain around $0.48 per therm. However, given the uncertainty about the weather, as well as other factors, this assessment could easily change. The assessment for March 2015 is that wholesale prices may remain around $0.30 per therm, resulting in wholesale prices that are lower by at least 40 percent, 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
### March 13, 2015

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