Fiscal Year 2014 in Review

Overview:

The domestic crude oil, natural gas, and coal markets each had unique situations in Fiscal Year (FY) 2014 (October 2013 through September 2014). All volumes included in this review are royalty bearing.

Crude Oil

Oil prices were up and down, with the New York Mercantile Exchange (NYMEX) West Texas Intermediate (WTI) price climbing to a monthly average high of $105.15/barrel in June 2014 followed by a decrease to a monthly average of $93.03 in September 2014. (This precipitous downward trend continued well into FY 2015.) The average FY 2014 NYMEX WTI crude oil price was $99.11, a $3.44 (4 percent) per barrel increase over the FY 2013 average. Federal and Indian crude oil production increased 11 percent during FY 2014 from 559.99 million barrels in FY 2013 to 619.72 million barrels, with increases from both Onshore and the Gulf of Mexico (GOM)

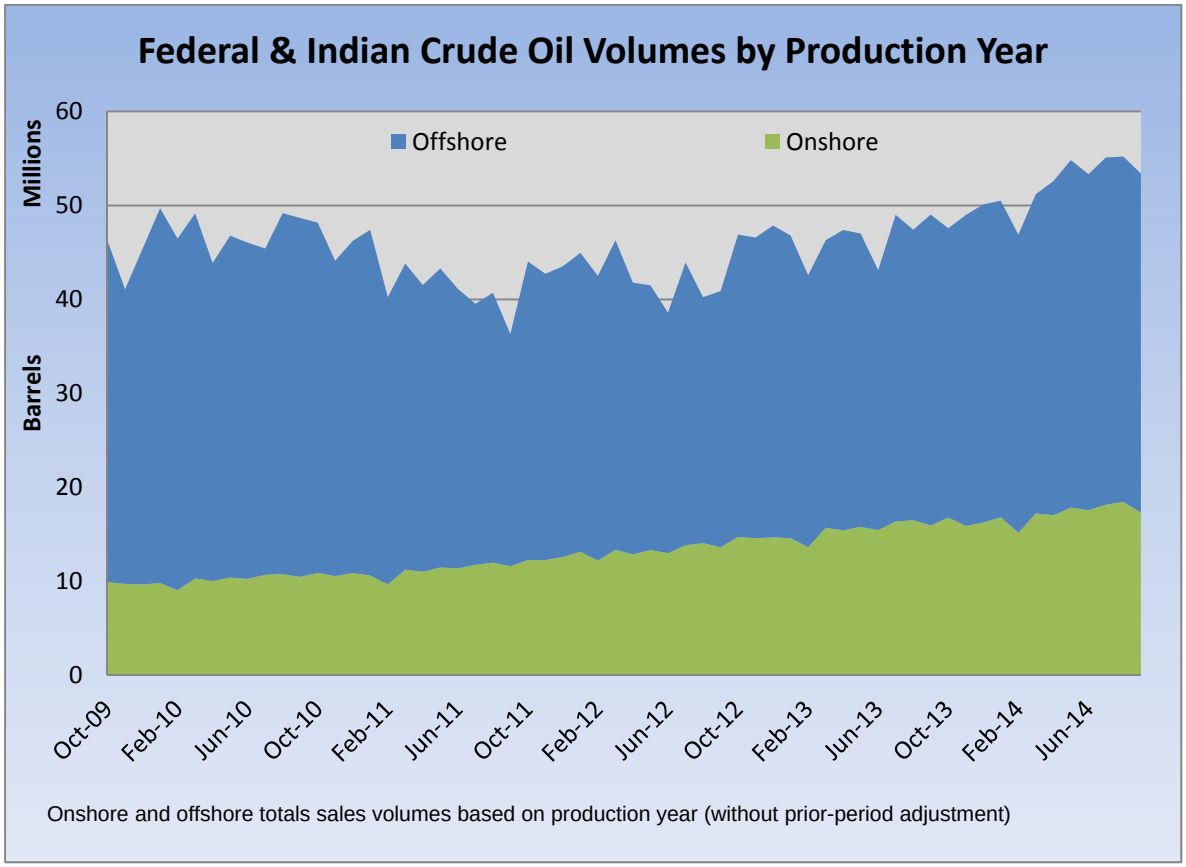
Natural Gas

Natural gas prices trended somewhat higher during FY 2014 with a spike to $5.56/MMBtu in February 2014 driven by heating demand from cold temperatures and increased electricity generation. The average FY 2014 New York Mercantile Exchange (NYMEX) Henry Hub natural gas price was $4.32, a $0.72 (20 percent) per MMBtu increase over the FY 2013 average. Federal and Indian natural gas production decreased approximately 6 percent during FY 2014 from 4.05 billion MMBtu in FY 2013 to 3.82 billion MMBtu.

Coal

Coal prices in Wyoming and Montana, primarily from the Powder River Basin (PRB), were relatively stable during FY 2014 averaging $13.72/ton with a range of about $0.60. The average coal price for all other states was less stable, averaging $41.07/ton with a range of about $8.00. Federal and Indian coal production was relatively flat increasing approximately 500 thousand tons or less than 1 percent.

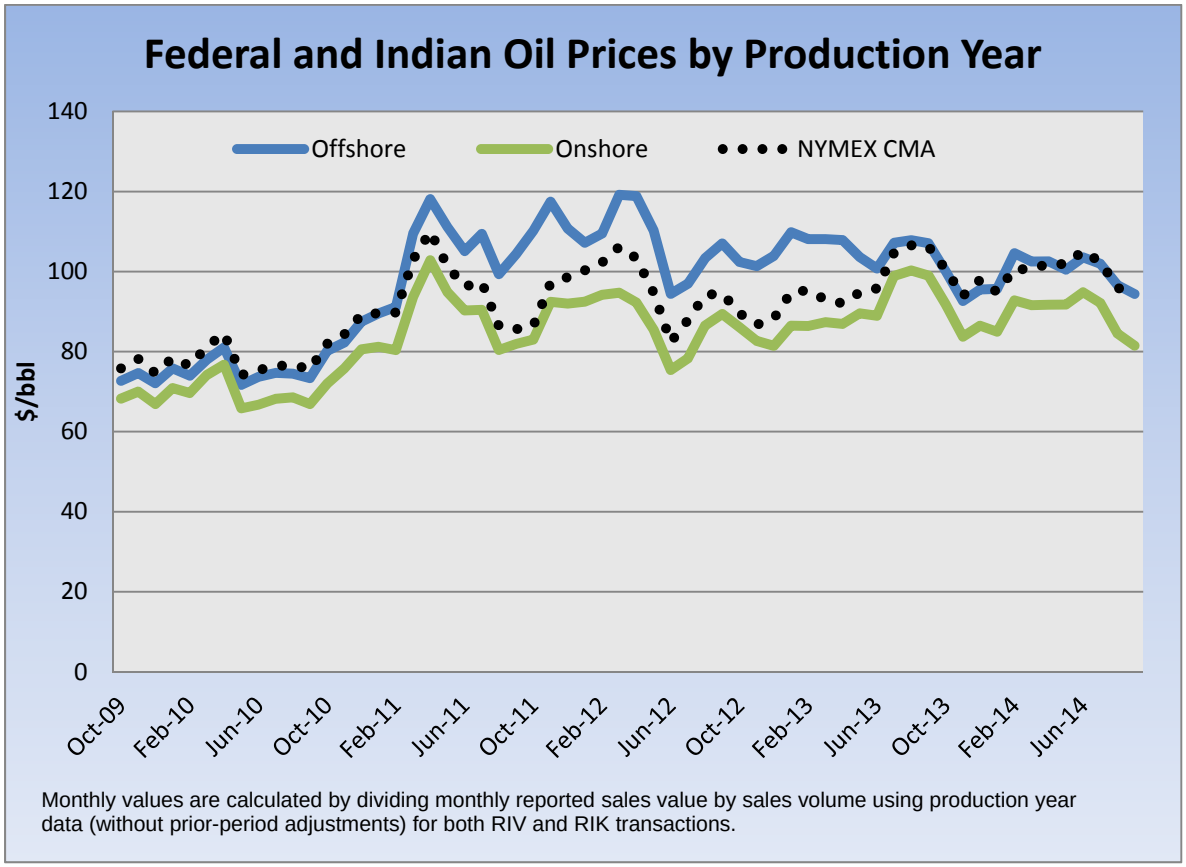
Federal and Indian Oil Volumes



Onshore Federal and Indian crude oil production rose 12 percent, increasing from an average of 15.29 million barrels per month in FY 2013 to 17.05 million barrels per month in FY 2014. Increases in year over year production from North Dakota (18 percent) and New Mexico (16 percent) drove the onshore production increase. These two states comprised 57 percent of total onshore Federal and Indian production in FY 2014.

Federal offshore crude oil volumes increased in FY 2014, rising by almost 3.2 million barrels per month, or 10 percent. Offshore production was driven by an increase in Federal GOM production (11 percent), which offset declines in the OCS Pacific and Alaska areas. Large projects such as Shell's Olympus platform and Shell's Cardamom development contributed to the offshore oil production increase. Total offshore oil production in FY 2014 was the highest since FY 2010.

Federal and Indian Imputed Crude Oil Prices



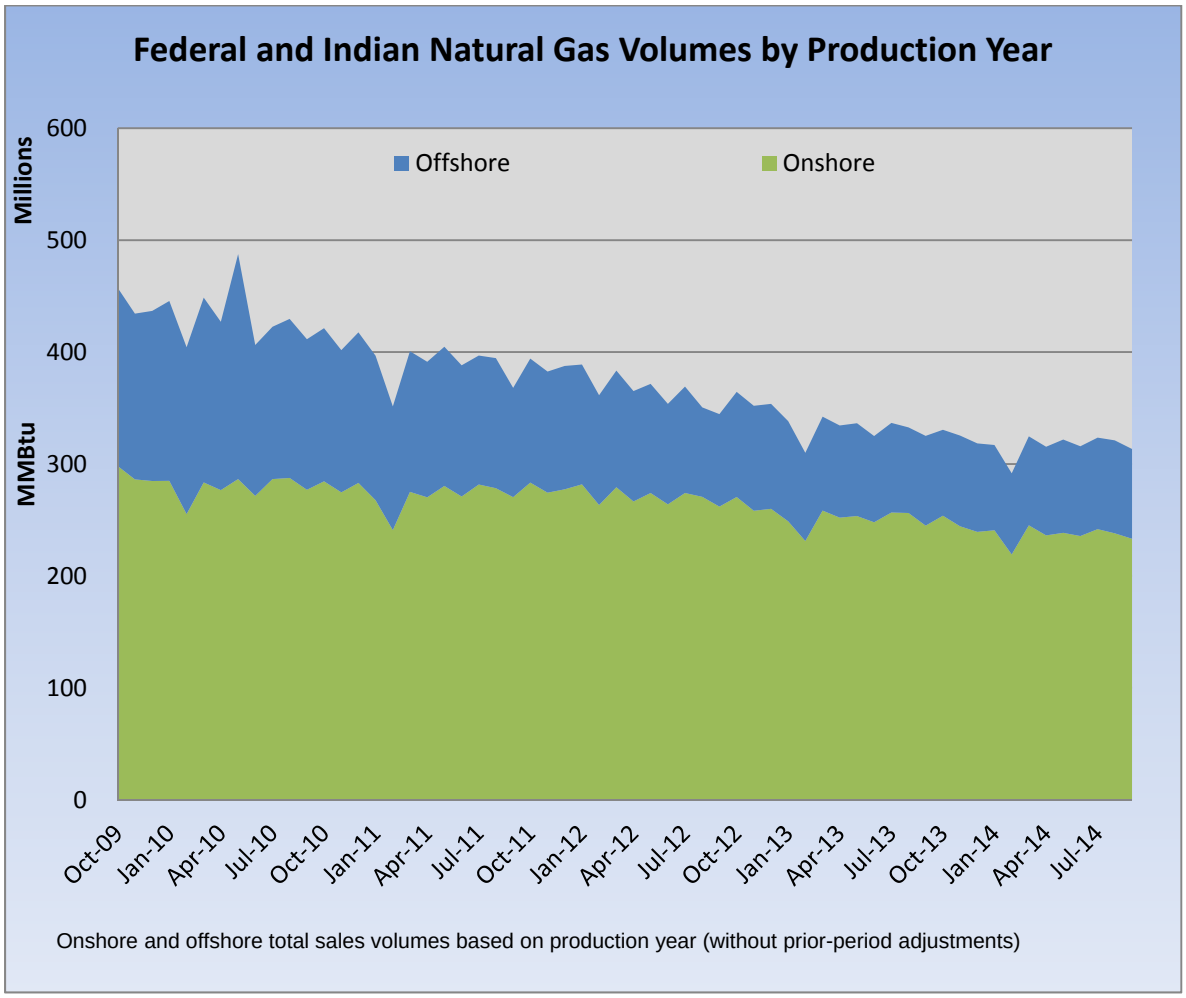
The average FY 2014 NYMEX WTI price was $3.44 per barrel higher than in FY 2013. During FY 2014, the NYMEX WTI and GOM Offshore average prices were very closely aligned ($0.15 difference). The narrowing of the NYMEX and offshore prices marks a noticeable shift from recent years. For the first time since FY 2010, several offshore crude types were priced below the NYMEX due in part to increased gulf coast crude supplies. New pipeline projects, such as the Marketlink Pipeline and Seaway Pipeline, resulted in crude oil being transported from Cushing to gulf coast refineries. Additionally, the continuation of crude-by-rail from North Dakota and other states to gulf coast refineries resulted in the closely aligned prices.

Average offshore imputed oil prices decreased by an average of $6.47 per barrel from FY 2013 to FY 2014. Average onshore imputed prices decreased by $0.76 per barrel from FY 2013 to FY 2014.

Crude supplies, which had been causing a supply glut at Cushing, recently shifted to the gulf coast as new infrastructure brought crude to gulf coast area refineries. This supply shift changed the market price dynamics in FY 2014 and narrowed the differentials of the offshore crude prices to the onshore WTI price. This along with location and quality differentials are why onshore imputed

prices reported to ONRR decreased in FY 2014 as WTI serves as the benchmark for onshore crude production.

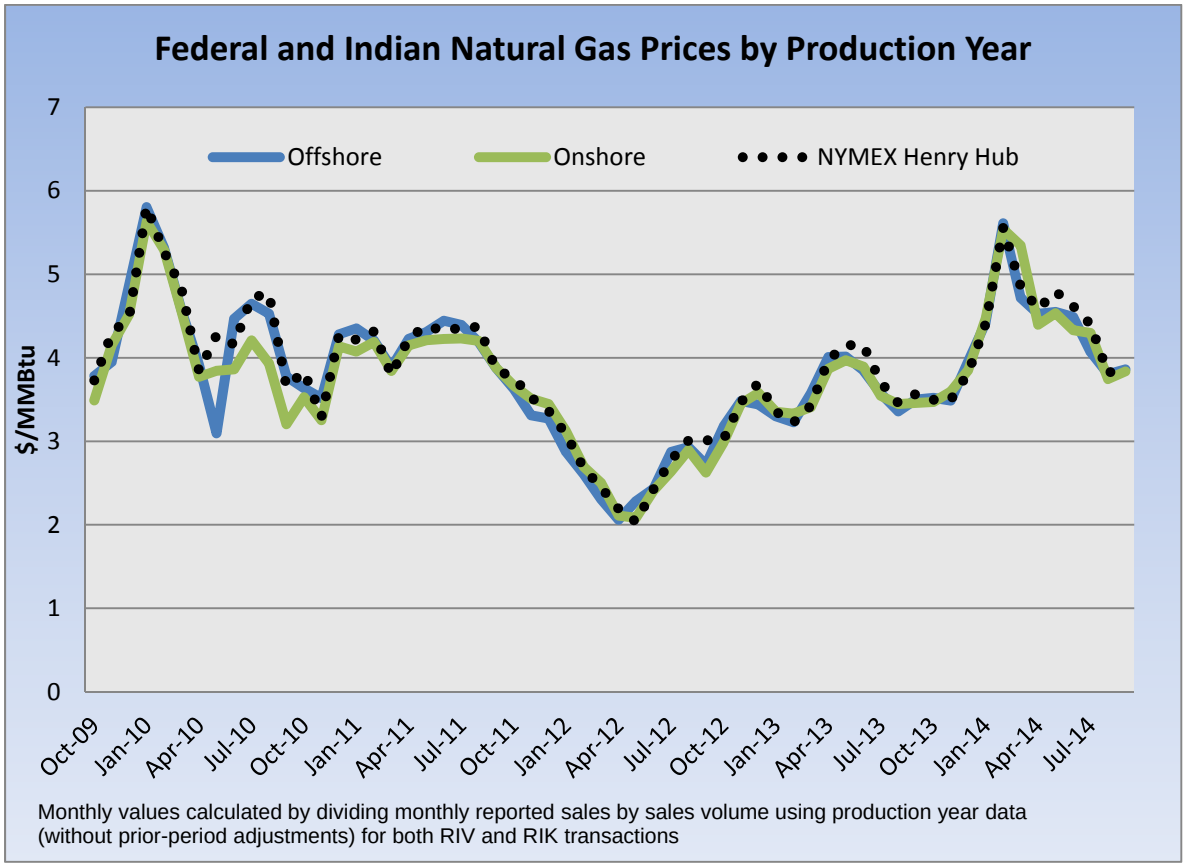
Federal and Indian Natural Gas Volumes



As in recent years, Federal and Indian natural gas production continued to decline, but the rate of decrease moderated. Production decreased from FY 2013 levels at similar rates both onshore and offshore. FY 2014 onshore production decreased by 5.7 percent and offshore decreased by 5.9 percent. Recent offshore startups and anticipated additional offshore projects should result in increased offshore natural gas production in the next few years. However, many of these new developments could be eligible for deepwater royalty relief.

Total U.S. natural gas production increased approximately 4 percent from FY 2013 to FY 2014 (EIA). The Marcellus and Utica areas in the Appalachian Basin experienced substantial production growth in FY 2014. These areas do not contain significant Federal or Indian lands.

Federal and Indian Natural Gas Imputed Prices



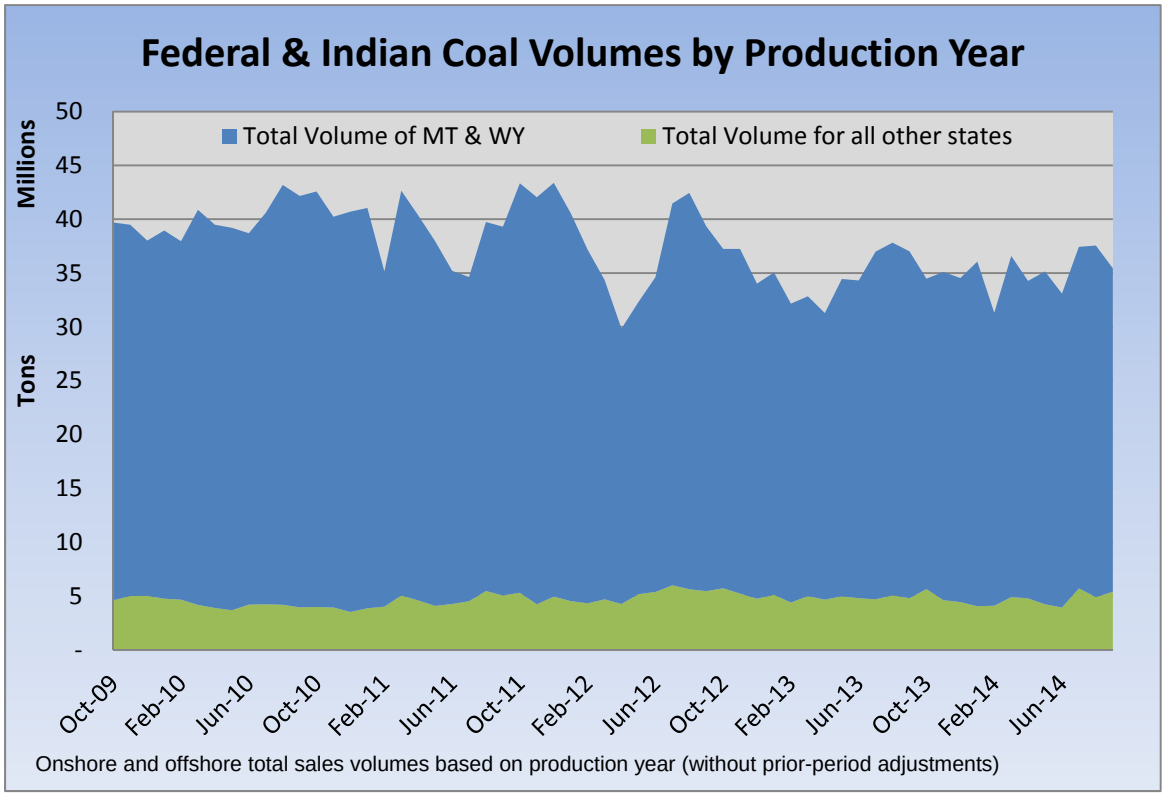
The average monthly price for reported Federal and Indian natural gas was $4.32/MMBtu during FY 2014. This is approximately 20 percent higher than the FY 2013 average monthly price. The FY 2014 average royalty price generally tracked the NYMEX Henry Hub price, with some variations due to geographic differences in prices. Two main factors contributed to this observed price increase.

Natural gas prices spiked during the winter of 2014 due to extreme weather conditions known as Polar Vortices. Much of the United States experienced persistent cold temperatures beginning in mid-November 2013 and continuing through March of 2014. During the winter of 2014, the Northeast, Midcontinent, and Midwest regions had, respectively, 77, 33, and 50 percent more days below freezing than the past five winters.

Natural gas prices during FY 2014 were also affected by lower than normal storage levels. Large storage draws to supply heating demand and the power sector during the Polar Vortex events resulted in storage levels well below the five year average, which persisted through the remainder of FY 2014. This helped maintain higher prices despite higher production in many areas of the country.

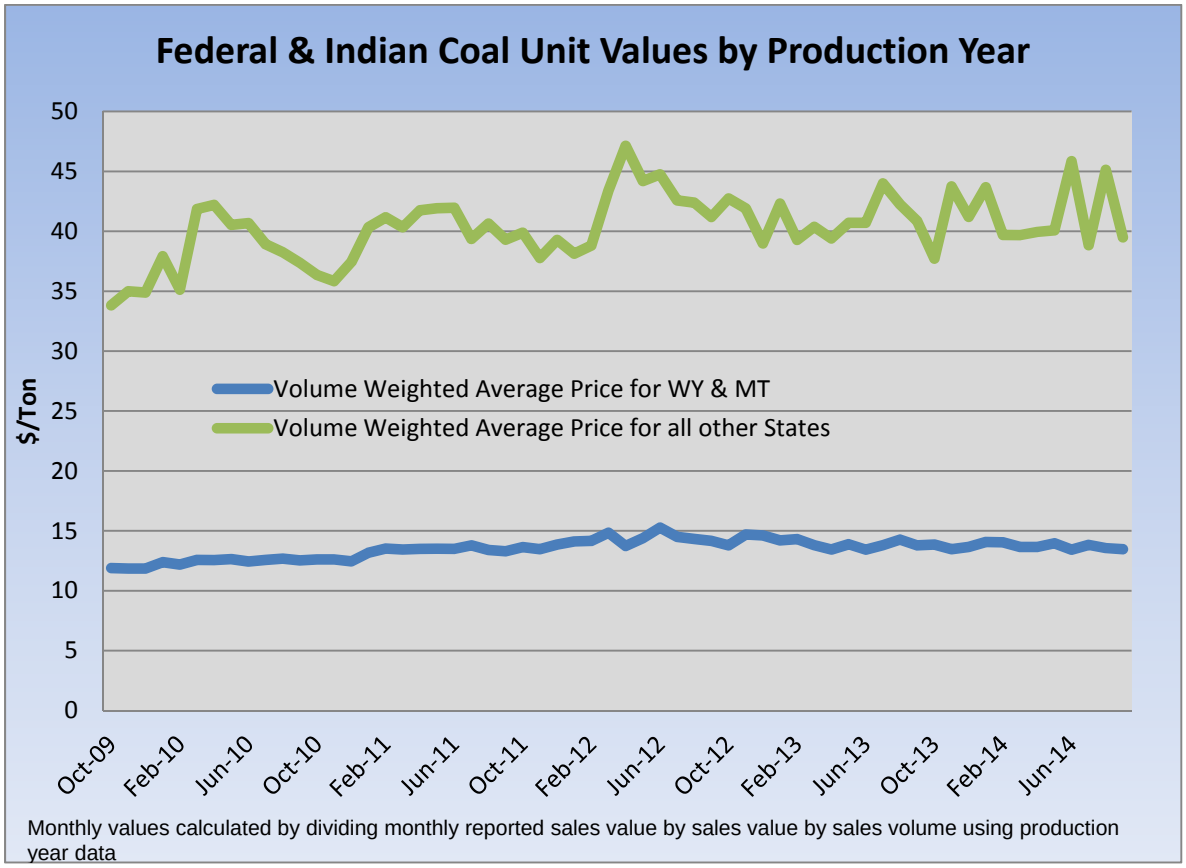
In addition to the price effect of weather conditions, other factors, such as coal to gas switching and coal fired electrical generation facility retirements, have increased demand for natural gas. U.S. Energy Information Administration (EIA) analysts expect several coal powered generators to be retired in the next few years. Some of these coal powered plants will be replaced by natural gas powered plants. As a result, natural gas demand from the electricity generation segment is expected to increase at a rate higher than overall electricity demand.

Federal and Indian Coal Volumes



Federal and Indian coal production for FY 2014 had a nominal increase of less than 1 percent or 569 thousand tons over FY 2013. Coal produced in Montana and Wyoming increased by about 3 million tons in FY 2014 however, production decreased by 2.5 million tons for Federal and Indian coal mines not located in Wyoming or Montana. Wyoming accounted for 80 percent of all Federal and Indian coal, a majority of which is produced from the PRB.

Federal and Indian Coal Imputed Prices



In FY 2014, the average selling price for coal produced in Montana and Wyoming decreased slightly to $13.72/ton from the FY 2013 price of $14.01/ton. Federal coal mined in Utah realized a price decrease of $0.97/ton to $40.09/ton. Federal coal mined in Colorado increased in price by $1.62/ton, resulting in an average selling price of $44.48 for FY 2014. The average selling price for coal produced in states other than Montana and Wyoming fell to $41.07/ton in FY 2014 from $41.18/ton in FY 2013.