

This Week in Petroleum: December 17, 2008

Large Production Increases in Store for the Gulf of Mexico

When it comes to oil production, what's bigger than the state of Louisiana, made of metal and concrete, and floats? Thunder Horse!

EIA's Short Term Energy Outlook (STEO) is forecasting increasing 2009 oil production for the United States (December 2008 STEO). Most of this increase will come from three Federal Offshore Gulf of Mexico platforms. The Thunder Horse, Atlantis, and Tahiti platforms will account for two-thirds of the total national increase in 2009.

All three platforms are in the deep waters of the Gulf of Mexico. Only large deposits with high flow rate wells are economic in deep water, and production rates from these platforms far exceed most other production facilities. The fewer than 30 wells planned for Thunder Horse are expected to produce more oil than the 18,000 oil wells in the State of Louisiana. By early 2010, the three platforms should reach their combined designed production capacity of 575 thousand barrels per day. The Minerals Management Service reports that the entire Federal Offshore Gulf of Mexico was producing about 1,300 thousand barrels per day before the 2008 Hurricanes Gustav and Ike.

Figure 1. The Thunder Horse Semi-Submersible Platform

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Source: Oil Rig Photos Image Library, www.oilrig.photos.com/picture/number103.asp

Three Platforms' Production Projected to Exceed Production for Most States

EIA expects that the combined production for the Thunder Horse, Atlantis, and Tahiti platforms in 2010 will exceed production in 2007 for all but the top three producing States in the United States. In fact, Thunder Horse, if it were a State, would rank as the fourth largest producing State. Of course, the Federal Offshore Gulf of Mexico as a whole produces considerably more oil than any single State.

Figure 2. Planned 2010 Production, Thunder Horse, Atlantis, and Tahiti Platforms Compared to Actual 2007 Production, Gulf of Mexico and the Top 10 Producing States

Major Contributing Platforms

The Thunder Horse platform is in the Mississippi Canyon area about 150 miles southeast of New Orleans, Louisiana. It is a semi-submersible platform located in 6,050 feet of water with wells drilled to a depth of about 29,000 feet. (A semi-submersible platform is a floating platform moored on location using ballast tanks in the hull for vertical positioning.) The Thunder Horse platform began commissioning in late 2008 and produced 40 thousand barrels per day during August testing. Operators have scheduled the platform to start commercial production in December 2008 or January 2009, and the platform may reach its designed production capacity of 250 thousand barrels per day as early as the first part of 2010.

The Atlantis platform is in the Green Canyon area about 190 miles south of New Orleans. It is a semi-submersible located in 7,070 feet of water with wells drilled to a depth of about 18,700 feet. Operators expect to connect 18 wells to the platform, which began commercial production in October 2007. It was producing about 100 thousand barrels per day as of August 2008, prior to Hurricane Gustav. Operators may increase production to about 200 thousand barrels per day by the end of 2009.

The Tahiti platform is in the Green Canyon area about 190 miles south of New Orleans. It is a spar platform located in 4,250 feet of water with wells drilled to a depth of about 25,800 feet. (A spar platform is also a floating platform, in this case, supported by a single buoyant cylindrical hull composed of a buoyant upper hull and a bottom ballast tank.) Operators have planned 6 initial wells for this platform, with more to be drilled later. Operators have scheduled the Tahiti platform to begin commercial production in the first quarter of 2009 and the platform may reach its designed capacity of 125 thousand barrels per day in January 2010.

Figure 3. Featured Oil Platforms in the Gulf of Mexico

Figure 3. Locations of Platforms

References

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Residential Heating Fuel Prices Sink Even Lower

Residential heating oil prices decreased for the tenth consecutive week since the start of the heating season during the period ending December 15, 2008. The average residential heating oil price shed another 4.2 cents last week to reach 247.0 cents per gallon, which left the price 82.8 cents lower than it was this same time last year. Wholesale heating oil prices rose by 5.8 cents, reaching 157.7 cents per gallon, which was a decrease of 110.3 cents compared to the same period last year.

The average residential propane price dipped 2.9 cents lower to reach 234.0 cents per gallon. This was a decrease of 14.7 cents from the 248.7 cents per gallon average for this same time last year. Wholesale propane prices increased 8.7 cents per gallon, rising from 70.3 cents to 79.0 cents per gallon. This was a decrease of 82.1 cents from the December 17, 2007 price of 161.1 cents per gallon.

National Average Gasoline and Diesel Prices Continue to Drop

The downward trend of the past 13 weeks continued at the national level and in most regions of the country. The national average price for regular gasoline slipped 4.0 cents to 165.9 cents per gallon, 133.9 cents below the price a year ago and the lowest price since February 16, 2004. The price is now 245.5 cents below the all-time high set on July 7 of this year. The average price on the East Coast slipped 7.5 cents to 168.2 cents per gallon. In the Midwest, for the first time in any region since September 15, the average price did not fall. Instead, the price increased 4.2 cents to 164.4 cents per gallon. The average price in the Gulf Coast fell the most among the major regions, dropping 8.3 cents to 155.6 cents per gallon, the lowest of any region. In the Rocky Mountains, the price slipped 6.4 cents to 155.9 cents per gallon. The price on the West Coast dropped 7.8 cents to 175.1 cents per gallon. In California, the price slipped 6.7 cents, to 173.8 cents per gallon, the lowest there since the last week of January 2004.

For the eleventh week in a row, diesel prices fell in all regions of the country. The U.S. average dropped 9.3 cents to 242.2 cents per gallon, 88.7 cents below the price a year ago and the lowest since January 29, 2007. On the East Coast, the average price slipped 9.8 cents to 253.4 cents per gallon, 82.5 cents below the price a year ago. The price in the Midwest fell 8.5 cents to 240.6 cents per gallon. The average price in the Gulf Coast dipped 8.7 cents to 237.8 cents per gallon. The price in the Rocky Mountains slumped 9.7 cents to 235 cents per gallon. On the West Coast, the average price plunged 11.8 cents to hit 230.3 cents per gallon. Once again, that drop was the largest of any region and consequently, for the third week in a row, the price on the West Coast was the lowest of any region. The average price in California dipped 11 cents to 229.2 cents per gallon, the lowest average price for the State since February 21, 2005.

Propane Inventories Tumble

Following the prior week's unexpected gain, propane inventories reversed course last week, tumbling lower by about 2.4 million barrels to settle at an estimated 58.8 million barrels as of December 12, 2008. All regions contributed to the weekly decline, with the Midwest leading with a loss of 1.6 million barrels. The Gulf Coast followed with a 0.5 million-barrel decline last week while the combined Rocky Mountain/West Coast region lost 0.1 million barrels during this same time. Finally, East Coast inventories shed 0.1 million barrels last week. Propylene non-fuel use inventories reported a 0.2 million-barrel decline last week, although its share to total propane/propylene remained unchanged at 6.2 percent, compared with the prior week's share.

Summary of Weekly Petroleum Data for the Week Ending December 12, 2008

U.S. crude oil refinery inputs averaged nearly 14.6 million barrels per day during the week ending December 12, down 415 thousand barrels per day from the previous week's average. Refineries operated at 84.1 percent of their operable capacity last week. Gasoline production rose last week, averaging about 9.2 million barrels per day. Distillate fuel production decreased last week, averaging 4.6 million barrels per day.

U.S. crude oil imports averaged nearly 9.7 million barrels per day last week, down 286 thousand barrels per day from the previous week. Over the last four weeks, crude oil imports have averaged 10.0 million barrels per day, 98 thousand barrels per day above the same four-week period last year. Total motor gasoline imports (including both finished gasoline and gasoline blending components) last week averaged 802 thousand barrels per day. Distillate fuel imports averaged 175 thousand barrels per day last week.

U.S. commercial crude oil inventories (excluding those in the Strategic Petroleum Reserve) increased 0.5 million barrels from the previous week. At 321.3 million barrels, U.S. crude oil inventories are near the upper limit of the average range for this time of year. Total motor gasoline inventories increased by 1.3 million barrels last week, and are near the lower boundary of the average range. Both finished gasoline and gasoline blending components inventories increased last week. Distillate fuel inventories increased by 2.9 million barrels, and are in the lower half of the average range for this time of year. Propane/propylene inventories decreased last week by 2.3 million barrels and are in the lower half of the average range. Total commercial petroleum inventories decreased by 2.7 million barrels last week and are in the upper half of average range for this time of year.

Total products supplied over the last four-week period has averaged 19.6 million barrels per day, down by 4.9 percent compared to the similar period last year. Over the last four weeks, motor gasoline demand has averaged nearly 9.0 million barrels per day, down by 2.7 percent from the same period last year. Distillate fuel demand has averaged 3.9 million barrels per day over the last four weeks, down by 4.5 percent from the same period last year. Jet fuel demand is 12.4 percent lower over the last four weeks compared to the same four-week period last year.