

Natural Gas Annual 2008 Summary Highlights

Overview

Throughout 2008, U.S. natural gas prices increased across all sectors compared with 2007 levels and mirrored significant increases in the price of oil. Prices also displayed relatively greater variation between the summer and winter months. Prices in most sectors peaked in June and July, before declining between 25 and 45 percent by the end of the year. Although the 2008 hurricane season was the most active since 2005, natural gas prices showed relatively little response to Hurricanes Gustav and Ike.

Total marketed production rose for the third consecutive year to the highest level since 1974. This substantial growth was largely because of a 13-percent increase in Texas. Production in the Gulf of Mexico (GOM) declined for the seventh consecutive year, dropping 16.9 percent compared with 2007. The decrease in GOM production was largely because of hurricane-induced production shut-ins. Total cumulative shut-ins from Hurricanes Gustav and Ike were estimated at 413 billion cubic feet (Bcf), with GOM losses comprising 87 percent of the total. Despite these production shut-ins, underground working gas in storage levels remained above the 5-year (2004-2008) average for the majority of the year. However, storage inventories in 2008 remained below the unusually high 2007 levels.

In 2008, total consumption rose for the second consecutive year, by 0.6 percent to the near-record level of 23.2 trillion cubic feet (Tcf), second only to the 23.3 Tcf consumed in 2000. This increase was largely because of a 5.6-percent increase in heating degree-days. Residential and commercial consumption increased by 3.2 percent and 4.1 percent from year-prior levels, respectively. Industrial consumption rose less than 1 percent. Electric power sector consumption decreased 2.5 percent in 2008, partly because of an 8.7-percent decrease in cooling degree-days.

Natural Gas Supply

U.S. marketed production increased for the third consecutive year, rising 5.2 percent to 21.2 Tcf in 2008. Production in 2008 was the highest since 1974 and the sixth-largest annual total on record, 1.4 Tcf below the record-high set in 1973. A 798-Bcf increase in Texas production more than offset the GOM decline. Gains in the Barnett Shale formation contributed to the highest Texas production level since 1980. Many other major gas-producing States, including Colorado, Wyoming, and Oklahoma, also exhibited large increases in marketed production, rising by 11.8, 11.1, and 7.3 percent, respectively. Louisiana's production was relatively close to that of the previous 2 years, increasing by less than 1 percent since 2007. Production in New Mexico declined for the third consecutive year, decreasing by 4.7 percent. The total number of natural gas and condensate wells continued its upward trend of recent years, rising 5.7 percent to a record-breaking 478,562.

The average wellhead price for natural gas rose to a record-high of \$7.96 per thousand cubic feet (Mcf) in 2008, which was a 27.4-percent increase from the 2007 wellhead price of \$6.25 per Mcf. Wellhead prices also exhibited the widest monthly range in history, dropping from the June peak of \$10.82 per Mcf to \$5.87 per Mcf in December. This increase and subsequent end-of-year decline in wellhead prices resembled the price pattern of oil, and filtered down to city gate, commercial, industrial, and electric power prices for natural gas.

Total imports decreased 13.5 percent to 3,984 Bcf for the year, the lowest level since 2003. Pipeline imports decreased 5.3 percent to 3,633 Bcf, while liquefied natural gas (LNG) imports decreased 54.4 percent to 352 Bcf, the lowest level since 2002. The decrease in imports is attributable to a 193-Bcf decrease in imports from Canada and a 181-Bcf decrease in LNG imports from Trinidad and Tobago. Despite the decline, Trinidad and Tobago continued to be the leading supplier of LNG to the U.S. for the eighth consecutive year. In 2008, net imports decreased 21.3 percent to 2,979 Bcf and total exports increased 22.3 percent to a record-high of 1,006 Bcf.

During the latter half of 2008, working gas volumes in underground storage remained above the previous 5-year (2004-2008) average, but averaged 8.7 percent lower than the record setting levels of 2007. Active storage fields in the lower 48 States totaled 401 in 2008, up from 400 in 2007. Total underground storage capacity increased 1.1 percent, from 8,402 Bcf in 2007 to 8,499 Bcf in 2008, of which 4,211 Bcf represented working gas capacity.

Total interstate gas movements for 2008 were 70.3 Tcf, a 4.9-percent increase from the 67.1-Tcf total in 2007. GOM transfers to the mainland decreased by 17.1 percent to 2,225 Bcf. However, an 18.2-percent increase in movements from the Rocky Mountain States offset this decline. Wyoming and Colorado led this increase, with transfers of 3,169 Bcf and 3,072 Bcf, respectively. Increased movements in these States are largely attributable to the opening of the Rockies Express Pipeline in 2008. The system connects the increasing natural gas production of Wyoming and Colorado to Midwestern markets and will eventually extend to the northeastern United States.

Natural Gas Consumption

In 2008, total natural gas consumption rose to 23.2 Tcf, second only to the record level of 23.3 Tcf in 2000. Winter temperatures in 2008 were colder than in 2007, with 5.6 percent more heating degree-days. Colder weather contributed to residential natural gas consumption rising 3.2 percent to 4,872 Bcf and commercial consumption rising 4.1 percent to 3,136 Bcf. The industrial sector saw a much smaller increase of less than 1 percent to 6,650 Bcf. The electric power sector consumption decreased 2.5 percent to 6,668 Bcf, likely because of the 8.7 percent decrease in cooling degree-days in 2008. As a percentage of total consumer deliveries, the electric power sector accounted for 31.2 percent of consumption; the industrial sector accounted for 31.1 percent; the residential sector for 22.8 percent; and the commercial sector for 14.7 percent.

After a slight decrease in most consuming sectors' prices in 2007, natural gas consumer prices increased across all sectors in 2008. The electric power and industrial sectors both had significant increases. Yearly average prices rose 26.7 percent to \$9.26 per Mcf in the electric power sector and 25.9 percent to \$9.67 per Mcf in the industrial sector. The average city gate price rose to \$9.18 per Mcf, a 12.5-percent increase. Average prices for the residential and commercial sectors exhibited smaller increases of 6.2 percent and 7.8 percent to end the year at \$13.89 and \$12.23 per Mcf, respectively. The average price of natural gas used for vehicle fuel jumped from \$8.50 per Mcf in 2007 to \$11.75 per Mcf in 2008, a 38.2 percent increase.