



Fuel prices have a significant impact on the cost of electricity. In PJM's wholesale electricity market, fuel prices and demand for electricity are reflected in electricity prices, as would be expected in a well-functioning competitive market.

Fuel costs are a major component of electricity prices because the cost of generating electricity is the primary determinant of electricity prices. The cost of generation makes up about 60 percent of the retail price of electricity, according to the federal Department of Energy's Energy Information Administration. Fuel is the electricity industry's largest single expense. Coal and natural gas are the fuels used to generate nearly 70 percent of the electricity in the U.S.

The dynamic nature of locational marginal prices in PJM's wholesale electricity market reflects the impact of fuel prices. In 2009, the average wholesale electricity price fell more than 45 percent. The 2009 average price was the lowest since 2003. The lower electricity price reflected the impact of the recession and milder weather, with both fuel prices and electricity demand down from 2008.

In 2010, the average real-time price increased about 24 percent. This reflected higher load and the increase in economic activity stemming from the start of the recovery from the recession, as well as higher fuel prices. In 2011, the average real-time price decreased about five percent, with natural gas prices falling and coal prices rising.

In 2012, the average real-time price dropped more than 23 percent from 2011, marking the lowest average price since 2002, with both coal and natural gas prices declining from the 2011 levels.

With fuel prices making up a large part of electricity industry costs, changes in fuel costs inevitably affect the cost of electricity. Because wholesale electricity markets are more efficient, fuel-price changes are reflected in electricity prices more quickly than under regulation.

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