

## NATURAL GAS' IMPACT ON ELECTRIC PRICES

Electric rates peaked in July 2008 and have fallen precipitously since then. With the economy slipping into a recession last Fall, the drop in demand for power has been deemed entirely responsible for the sustained drop in electric prices.

However, there is another contributing factor that has gone largely unnoticed. The supply of natural gas has been growing consistently over the last two years. This has held down gas prices, despite a 53% reduction in the number of drilling rigs.

Natural gas prices strongly influence the price of electricity. In some parts of the country, the correlation is as high as 90%. Natural gas is the second largest source of power generation at 20%.

Because natural gas is cleaner, over 50% of the new generation capacity built in the US in 2009 will be fired by natural gas.

Historically, when natural gas prices drop, energy companies reduce the amount of gas

pumped. But this time, things are different. With prices down over 30% from a year ago, production has continued to grow. Storage is high, and prices are likely to remain soft.

One contributing factor to this increased production are new drilling technologies which allow previously trapped natural gas to be recovered.

Until recently, drilling was primarily vertical: straight down. However, newly perfected horizontal drilling now allows sideways drilling, opening up a much larger area of the resource-bearing formation.

The other technology is known as "fracking". The producer injects a mixture of water and sand at high pressure to create multiple fractures throughout the rock, liberating the trapped gas.

These two technologies have greatly increased the production of previously trapped or "unconventional" gasses. In 1990, these gases accounted for

10% of US production, but now comprise 40% of total US production. This led to an unexpected 15% jump in production in the continental US from 2007 to mid 2008.

This new production has contributed to the drop in prices in natural gas in 2008 and 2009 and should mitigate some of the upward pressure on prices when the economy recovers.

More abundant natural gas will also help facilitate the transition to "greener" power sources. Because wind and solar are intermittent, some other source needs to fill the vacuum when the sun doesn't shine. That source is likely to be natural gas.