# Nice Time for a Dip?

***Late summer and early fall often yield opportunities in wholesale energy markets***

**By Chris Wiederspahn, Vice-President, EnergyWindow, Inc.**

You know you've got to start getting a life when you find yourself gazing out the window, wistfully contemplating what a hero you'd have been if you'd bought a 12-month gas strip at $5.95/Dth last September 2 or for $6.05 on January 3, or even $6.92 as late as May 26th. You know you need a hobby when your heart races at the prospect of having fixed a price of $49.00/MWH for on-peak electricity in PJM on March 3 or $55.03 on February 7th.

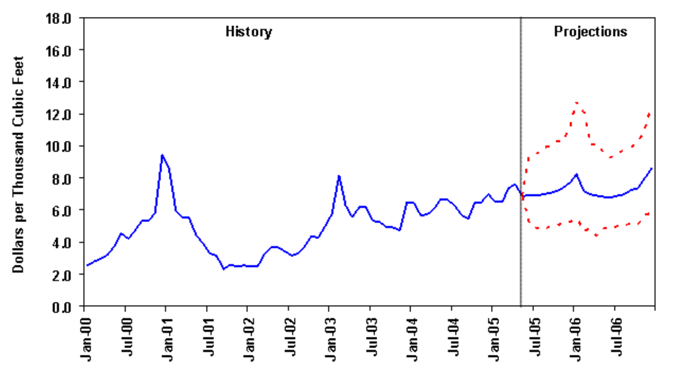
Energy prices have lurched – with some notable peaks and valleys – inexorably upward since the futures markets for energy began. Is it reasonable to expect prices to turn back to the fabled days of yesteryear? If not, when does it make sense to venture out into the market?

Hindsight is, of course, perfect. But foresight, well, that's a completely different thing, especially in what many would describe as a perverse environment where wholesale markets for natural gas seem to be disassociated from basic rules of supply and demand. And make no mistake about it. Today, whither goes natural gas, there goes electricity.

## Will the Climb Continue?

There has been much talk about the impact of crude oil and burgeoning economies in India, China and elsewhere around the globe, but this month's *Short Term Outlook* from the EIA paints an interesting and for some of us more comprehensible picture as to some things closer to home that we can expect to influence energy prices in the next couple of years in addition to those more global influences.

**Figure 9. U.S. Natural Gas Spot Prices**
**(Base Case and 95% Confidence Interval*)**




**The confidence intervals show +/- 2 standard errors based on the properties of the model. The ranges do not include the effects of major supply disruptions.*

Short-Term Energy Outlook, June 2005

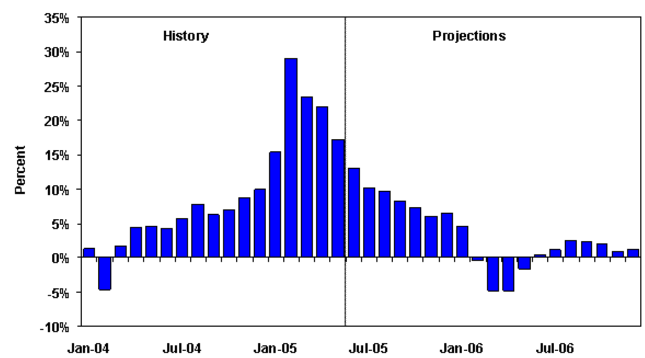
First let's look at some excerpts from the report, which can be also be found at http://www.eia.doe.gov/emeu/steo/pub/contents.html

## Natural Gas

"The [Henry Hub natural gas spot price](), which had averaged over $7.30 per thousand cubic feet (mcf) in April 2005, fell to $6.66 per mcf in May as weather in the Midwest and East moderated and crude oil prices eased."

"Although natural gas storage remains above the 5-year average…Henry Hub prices are expected to post averages of about $6.90 per mcf in 2005 and just over $7.10 per mcf in 2006. Monthly average spot prices are likely to reach to $7.50 per mcf by the end of the year."

Figure 10. U.S. Working Natural Gas in Storage
(Percent Difference from Previous 5-Year Average)




Short-Term Energy Outlook, June 2005

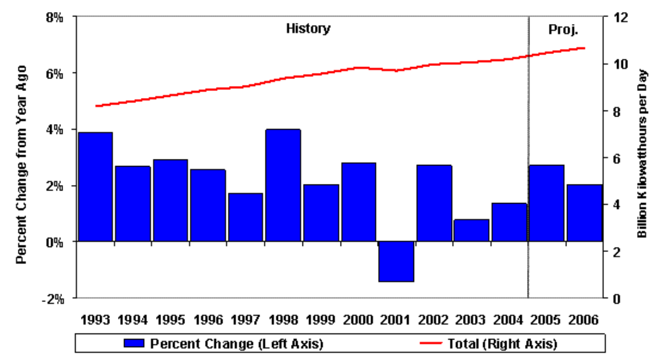
www.eia.doe.gov

[Working gas in storage]() is estimated at 1,820 billion cubic feet at the end of May, a level 12 percent higher than 1 year ago and 17 percent above the 5-year average. Natural gas demand is projected to increase by 2.0 percent in 2005 and by 2.3 percent in 2006, due largely to weather-related factors and continued strength in consumption for electric power production. Domestic natural gas production in 2005 is expected to remain near the 2004 level, despite a 12-percent increase expected in natural gas-directed well completions."

## Electricity and Coal Outlook

"[Electricity demand]() is expected to increase by 2.4 percent in 2005 and by an additional 2.0 percent in 2006 following estimated electricity demand growth of 1.6 percent in 2004. Third and fourth quarter 2005 year-over-year electricity demand growth is expected to be particularly strong, as cooling and heating demand are likely to be higher than in the mild third and fourth quarters of 2004."

Figure 11. Total U.S. Electricity Demand Growth Patterns




Short-Term Energy Outlook, June 2005

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## ***Implications***

To summarize some of the important issues in the EIA report:

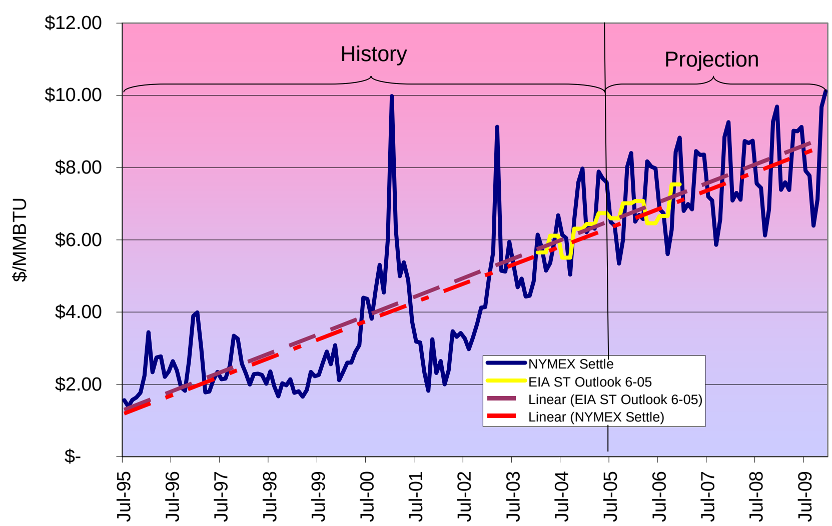
1. Natural gas inventories, though high now, are expected to plunge by the winter
2. Demand for natural gas is expected to rise 4.3% above 2004 levels by the end of 2006
4. Demand for electricity is expected to rise 4.4% above 2004 levels by the end of 2006 (after a 1.4% increase in 2004)
5. Electricity demand is anticipated to be significantly higher than the average for the third and fourth quarter 2005
3. Natural gas production is seen as being flat for 2005 despite increases in rig count

According to the report, the current oversupply in working gas will disappear by the winter due to depletion by electric generation striving to keep up with anticipated high demand in the third and fourth quarter. Futures prices are clearly and predictably rising (at least in part) due to this anticipation.

Converted from MCF to MMBTU, the EIA projects prices to average $6.72/MMBTU in 2005 and just over $6.91/MMBTU in 2006. It also calls for average spot prices to reach $7.30/MMBTU by the end of the year.

A separate projection has been developed by EnergyWindow, which uses the average increase month-by-month in Henry Hub Settle prices over the past 10 years. This projection shows Henry Hub prices averaging $6.90/MMBTU in 2005 and $7.23/MMBTU in 2006, with an average of $7.85/MMBTU for the last quarter of 2006. Figure 12 illustrates historical prices, projections and linear trends for the settle prices. It also shows the EIA short-term historical and projected figures (yellow line) from the June report and a linear projection of these through the end of 2009.

**Figure 12. NYMEX Henry Hub Settle – EIA Projections**

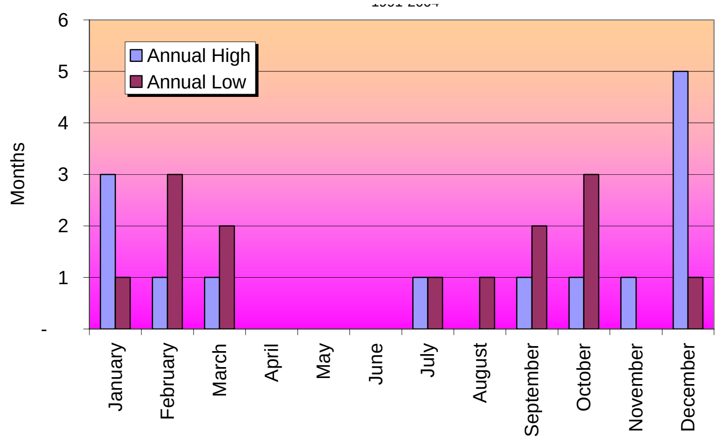



## ***Picking Your Moment***

So what does all this have to do with picking the right moment to buy energy? Well, two things should be apparent. One is that prices (historical or projected) are not linear but vary considerably over time, and expectations on the part of the futures markets for a hot summer are buoying prices now. A change in expectations will change the prices anticipated today.

How often does this happen? All day during every trading day, in fact. Over time, we can see how this impacts gas prices in particular. The chart on the left shows the number of times a given month yielded the lowest or highest monthly settle price for the Henry Hub commodity

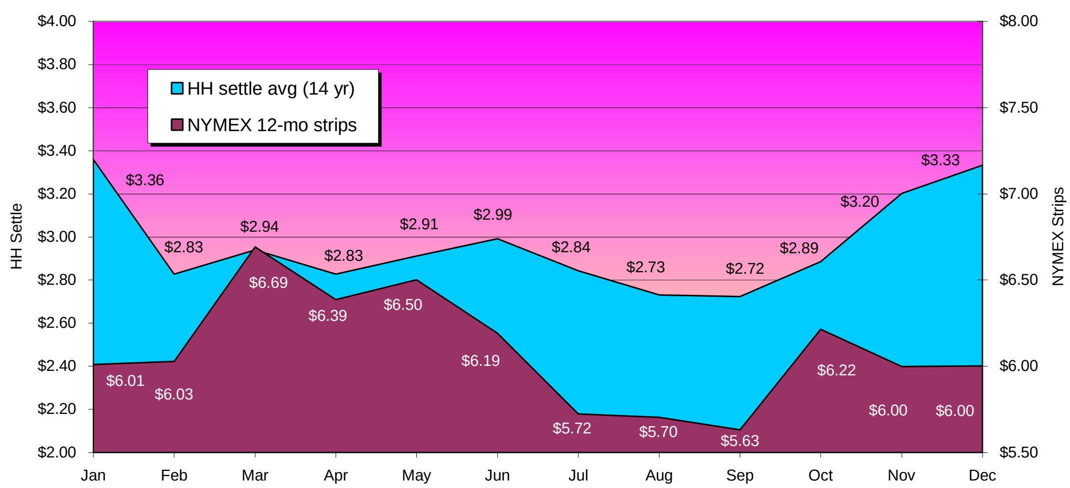
**Figure 13. Price Volatility by Month**
**NYMEX Henry Hub Settle Prices, 1991-2004**




during each year over the past 14 years. It reveals that the months of April, May and June have never yielded the annual low or high price, making these the least volatile in terms of a monthly price. The months of February, March, August, September and October tend to yield the most annual lows, despite the fact that four of these months are in winter or summer.

Figure 14 is another look at the 14-year history of HH settle prices yielded the lowest settle prices over that period. The same is true for the past 10, 5 or 2 years. Of course, this is just looking at month-by-month prices, and these are influenced by seasonal conditions. Yet, when we look at the NYMEX HH 12-month futures strips over the past two years laid into the graph (purple area at bottom), we see that the forward trends generally coincide with the settle prices, and that the best month to buy 12 months forward during that period was also September.

**Figure 14. Henry Hub Settle Prices 14-yr. History 1991-2004**
**12-month NYMEX HH Futures Strips 4/03 – 5/05**




The bottom line? Be on the watch for an energy (gas or electricity) buying opportunity in the third quarter. If natural gas spot prices dip below EIA's third quarter estimate of $6.60/MMBTU or the NYMEX HH futures 12-month strip gets below $7.00 again it may just signal a September (or August or October) to remember.

*EnergyWindow is a Boulder, Colorado-based company that offers a comprehensive suite of information technology-based tools and extensive energy industry expertise to help businesses manage every element of their energy supply cycle. Specifically, EnergyWindow offers: an online request/bid system for energy procurement; a real-time, online energy market database that tracks the best opportunities for energy procurement; an energy management information system that allows energy managers to track and analyze their company's energy usage; and energy supply strategy and management consulting. The company can be reached by visiting www.energywindow.com.*

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