



Thursday, Aug. 27, 2009

## As Oil Explodes, Why Natural Gas Prices Stay Low

By Ari J. Officer

ORIGINAL

N.H.P.U.C. Case No. DE 09-180

Exhibit No. #16

Witness: Baumann + Errichetti

If Best Buy had a big sale on Blu-ray discs, would you go out and buy a Blu-ray player? The energy markets are kind of like that — natural gas is really cheap, for now, but does that mean we should build infrastructure for a natural-gas-fueled economy?

Bargains last only so long, even in this recession. Sorry, T. Boone Pickens.

To delve deeper, let's examine why gas prices have deflated so much: natural gas prices and oil prices are no longer bedfellows in our present economy. As crude oil has skyrocketed from about \$30 per bbl. in December 2008 to more than \$70, natural gas has plummeted from nearly \$6 per million BTU to under \$3, recently hitting a seven-year low. To put these numbers in perspective, this makes oil more than four times as expensive as natural gas to produce the same amount of energy, according to the U.S. government's Energy Information Administration (EIA). ([Read "Clean Energy: U.S. Lags in Research and Development."](#))

Long story short, this year we are going to have more natural gas than we need — or potentially even store.

That's no reason to party. Here's why: unlike the global crude-oil market, the market for natural gas is incredibly localized. The U.S. produces nearly 90% of what it consumes, and the rest is imported from Canada or from overseas — the latter amounting to only about 2.5% of U.S. consumption. Thus, a glut of domestic gas doesn't really affect imports.

Nor can we quickly expand gas consumption. At this stage, anyone who can use natural gas instead of crude oil is already burning gas, as the price goes lower still. There is really only one other form of energy that natural gas will replace — coal. Yes, in some geographic areas, it is currently cheaper to use natural gas than coal. Shocking, right

So demand for gas, despite its low price, stays relatively low. Then layer on the effects of the recession: gas-intensive industrial production is down 12.8% since this time last year, according to Barclays Capital bank estimates. On top of that, there's weather: this has been a cool summer in much of the U.S., so less natural gas has been burned for electricity to power air-conditioning than in recent years. ([Read "America's Untapped Energy Resource: Boosting Efficiency."](#))

On the supply side, gas output from drilling has been much greater than anticipated, leading to a surplus that has deflated prices. This in turn has made many drilling operations unprofitable. The number of natural gas rigs operating in the U.S. has fallen well over 50% in the past year, according to EIA data. Because a given well's

output decreases over time, producers need to drill new wells continually to keep up production. Thus, the falling rig count raises concern about the longer-term-supply outlook.

For now, though, there is abundant gas and limited capacity for storage. The U.S. is on track to store 3.8 to 4.0 trillion cu. ft. this year. The contiguous U.S. has never put more than 3.6 trillion cu. ft. of gas in storage.

Take no comfort in that excess. Unlike crude, natural gas cannot be stored just anywhere we want; we also cannot transport it very easily. Gas is typically stored in underground reservoirs. The pressure of the gas and the type of reservoir can make injection and extraction cycles difficult and lengthy processes. Until traders see extra storage realized, the natural gas market will be priced in steep contango, meaning prices of natural gas for future delivery will hang far above the current price. The low prices now represent the abundance of unusable and potentially unstorable gas, a situation that will not last. ([Read "Can Steven Chu Win the Fight Over Global Warming?"](#))

Producers who cannot sell or store their gas will have limited options: cap their wells, which could be bad for them in the long term; give gas away for free, which has happened before when producers did not want to halt production; or flare it — burn it off into the atmosphere. With production decreasing because of low price incentives and a great deal of gas likely being lost from capping wells and flaring gas, the oversupply will not last, and the price will be pushed higher by supply and demand fundamentals. The natural gas futures traded on the New York Mercantile Exchange (NYMEX) imply that natural gas prices will more than double in the next year.

Just as in the case of crude oil, supply and demand do not paint the full picture. As of Aug. 24, the U.S. Natural Gas Fund, an exchange-traded fund listed as UNG on the NYSE, held about 10% of the contracts in the October 2009 futures market traded on NYMEX. Combine that position with its over-the-counter swap holdings, and UNG held the equivalent of more than 50% of the October contract's open interest. In following its plan to buy and hold natural gas, UNG keeps rolling its position into the next futures month. In other words, every month, UNG sells its enormous long position in the front month — representing the price of natural gas closest to the present — and buys back as much as it can in the next contract month. The idea is that UNG is always trading the most liquid natural gas contract, but the problem is that UNG has become too large for the market — and for its own good. In a bear natural gas market, UNG's massive monthly gas sell-off accelerates the fund's losses and brings down the price of natural gas with it.


UNG's equivalent position in the October futures contract amounts to over a trillion cu. ft. of gas. Given that the U.S. consumes an average of about 2 trillion cu. ft. of gas per month, UNG's position in the front month — at over half of that month's consumption — seems too large for a purely speculative fund.

A great pricing inefficiency arises because this natural gas speculator is following a predefined plan — and the plan is publicly known. Plus, it's a foolish one. A fund that invests in long-term natural gas prices is taking needless risk in placing significant money in the short-term futures market.

What's next for natural gas? Most likely, more weird volatility. As UNG continues to roll month to month, the front month will continue to get pounded down. The markets will not hit a true support on the bottom until traders know for sure how much storage the U.S. can actually handle. Whatever happens, this will be a volatile time for natural gas, as traders battle out prices amid uncertainty of true storage capacity. ([See the video "The Truth About Solar Power."](#))

One thing is for sure: UNG is too big to succeed. And the government is in the business of bailing out only financial institutions that inflate energy prices — not those that lower them.

*Ari Officer is director of automated trading and analytics at Traditum LLC, a Chicago-based proprietary trading firm*

 Click to Print

**Find this article at:**

<http://www.time.com/time/business/article/0,8599,1918674,00.html>