

# Monthly Energy Update

May 2, 2008

## Highlights

### Bearish

- Rotary rig counts remain at five-year highs
- Economic slowdown
- Moderate winter weather
- Quiet hurricane season

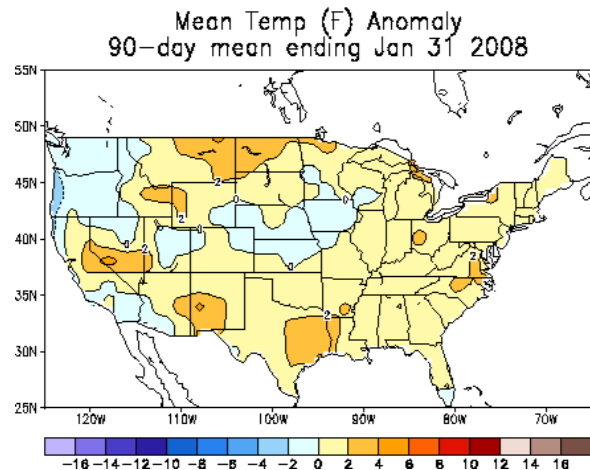
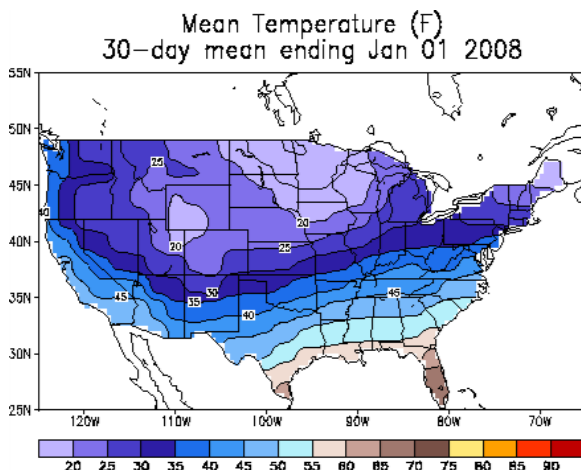
### Bullish

- Weak dollar
- Very little excess production capacity
- Continuing geopolitical uncertainty
- Nigerian unrest
- Increasing Chinese demand

## Price Trends

Crude oil prices still appear to be moving independently from natural gas prices and are driven primarily by geopolitical tensions, a lack of surplus capacity, and a weak dollar.

The weather over the past year has also caused a number of major price surges and dips, but they have all been relatively brief. Mild fall and early winter weather allowed natural gas storage figures to return to their five-year highs. This, together with long range forecasts calling for a warmer than normal winter, tempered the normal early winter surge in natural gas prices.

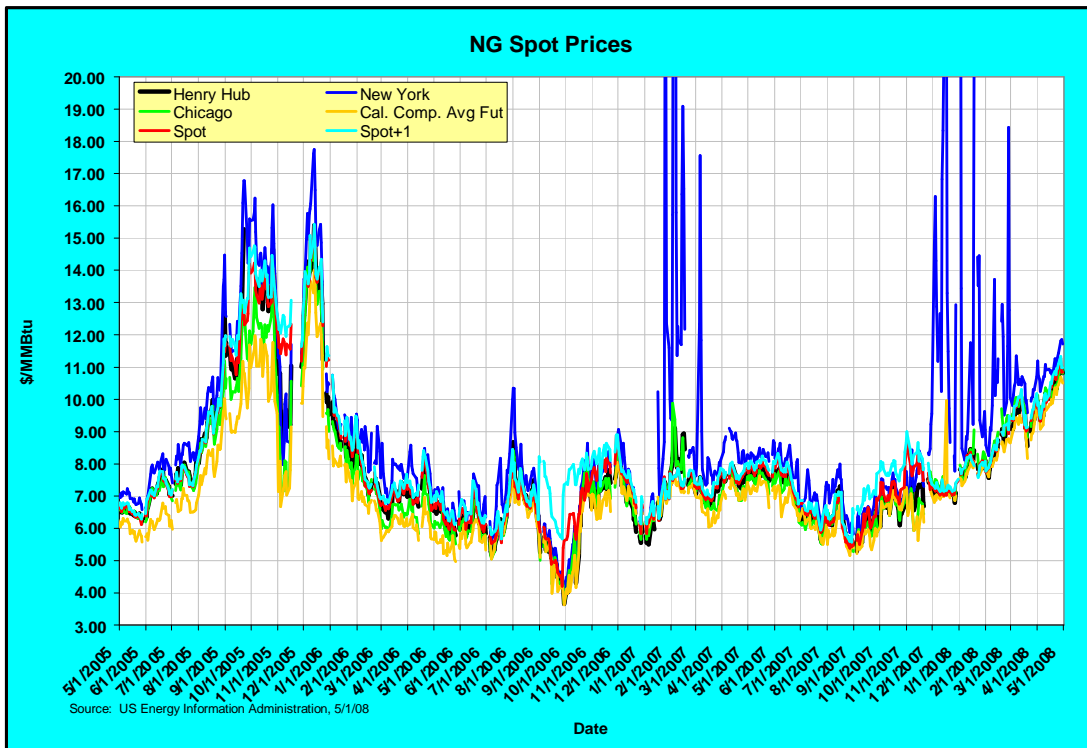


The exception to this is the blasts of severe winter weather that hit the Northeast in December and January. The cold snaps increased the demand for natural gas while disrupting some of its supply. This resulted in large, but brief, surges in spot prices for natural gas in New York.

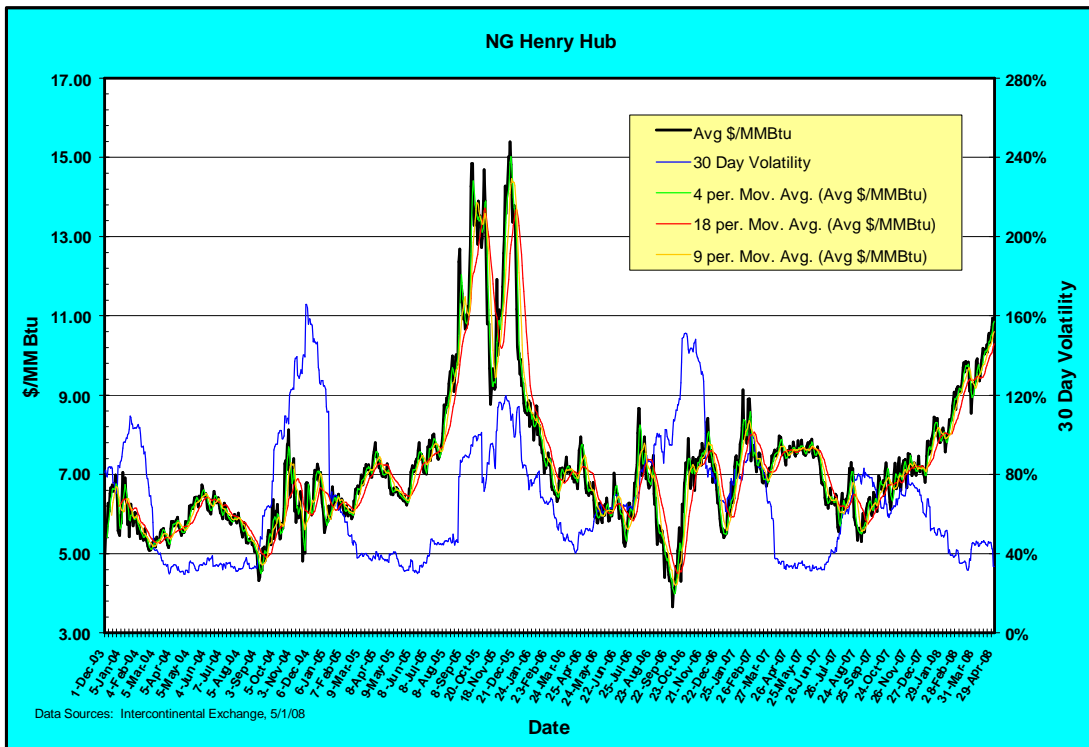
Together, these forces are driving oil prices to record highs. It appears that, despite the high crude prices, fading hopes that they will decline are resulting in near normal imports. This follows an early winter period of reduced imports and storage levels.

Since electricity prices are influenced much more by natural gas prices than crude oil prices, electricity prices have remained relatively stable, except in New York, but are gradually increasing. The high oil prices and weakening dollar are now pulling natural gas prices up and this is causing electricity prices to climb as well.

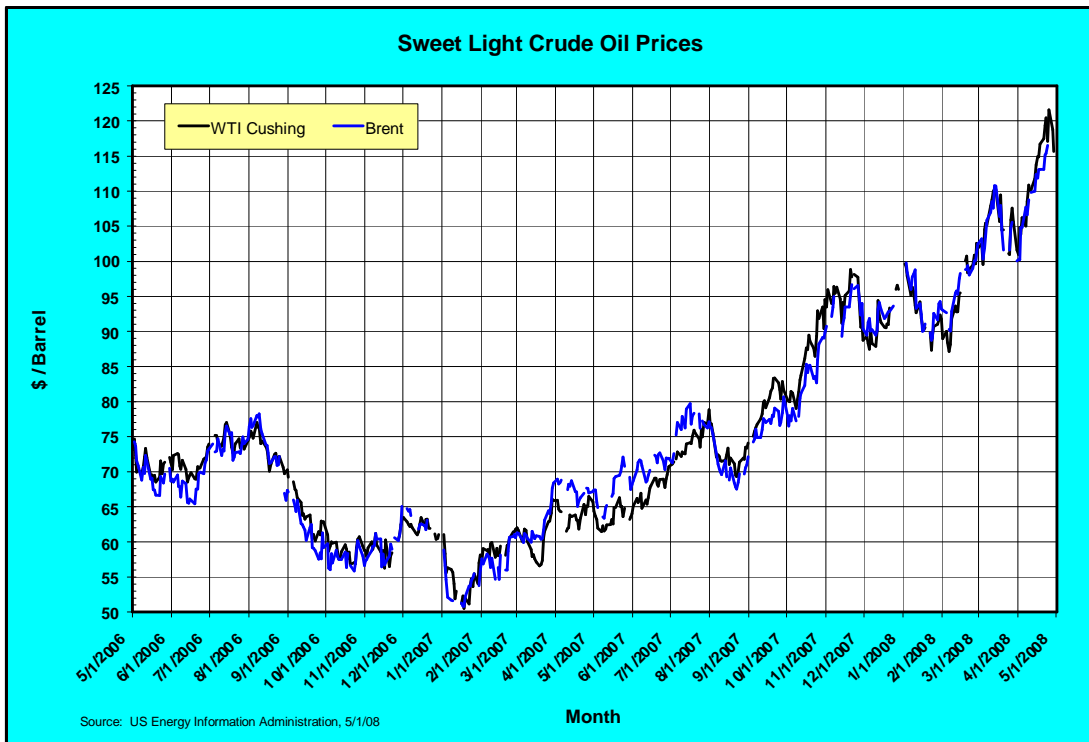
The charts that follow illustrate the movement of the energy markets. The first chart clearly illustrates the dramatic spikes in New York natural gas prices when severe winter weather strikes the Northeast. Now, with the plummeting value of the dollar, prices of both natural gas and oil are climbing.



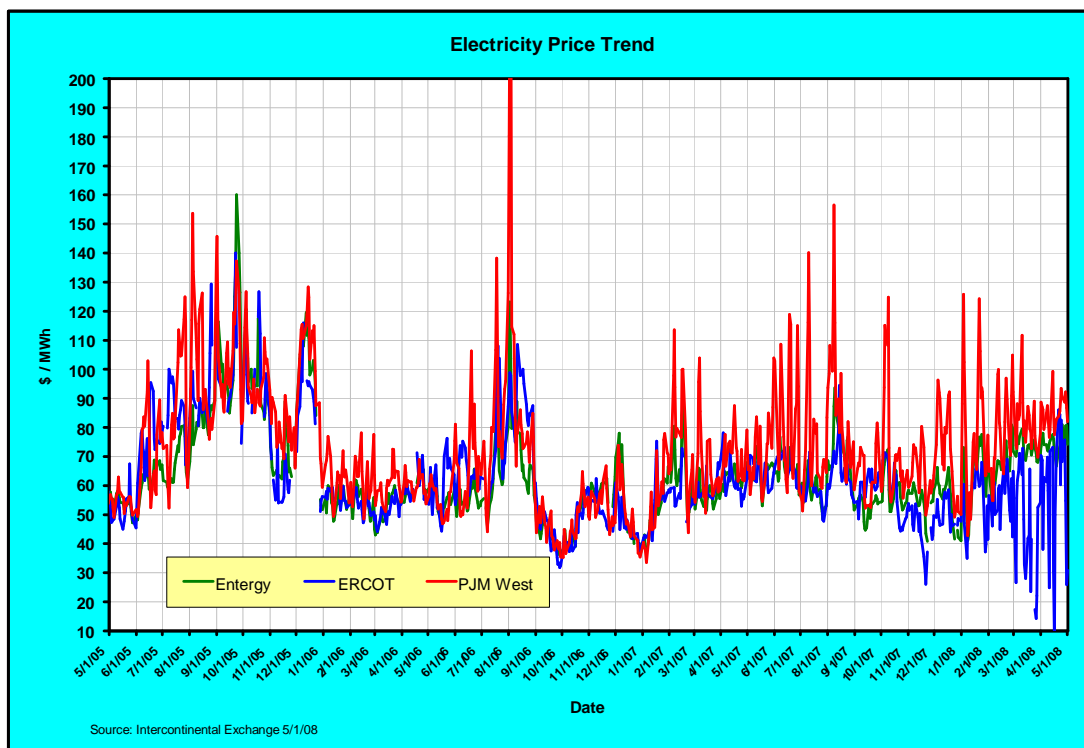
The weather induced price variations also brought higher volatility to natural gas prices. The heat wave of last summer and the late winter cold snap were both accompanied by increased volatility in natural gas prices. In recent months, natural gas prices have stabilized and price volatility has been declining while the prices themselves are steadily increasing.



Supply concerns, a weak dollar, and little excess capacity continue to drive up crude oil prices. In 2006, a sense of increasing stability along with high production and storage levels started a steady decline in oil prices. The falling prices prompted OPEC production cuts which tended to arrest the decline. This, along with the arrival of cold weather in February of 2007, and the other factors mentioned above, triggered steadily increasing crude oil prices, interrupted only by brief, and small, declines.



Since natural gas is the primary fuel used to meet variable electricity demand (base demand is typically met with coal, hydro, and nuclear), its cost is reflected in the price of electricity.



Together, these charts illustrate the relationship between natural gas and crude oil prices and their impact on electricity costs. A number of factors, including those mentioned earlier, have contributed to these price trends. Other factors are examined in more detail below.

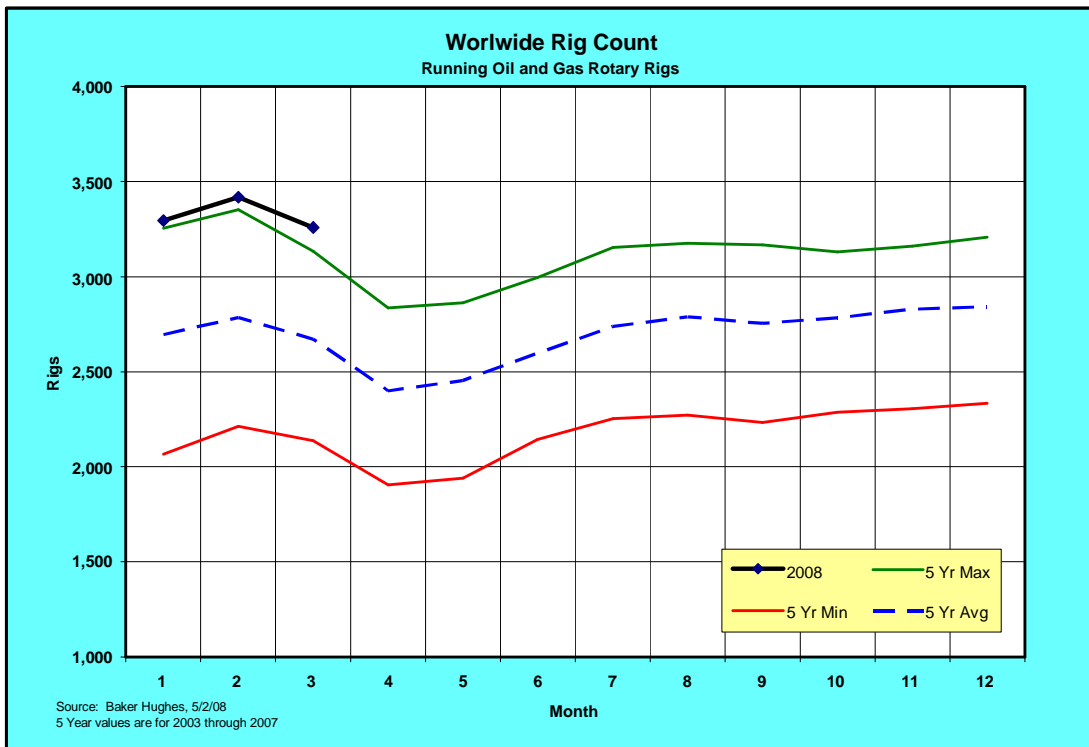
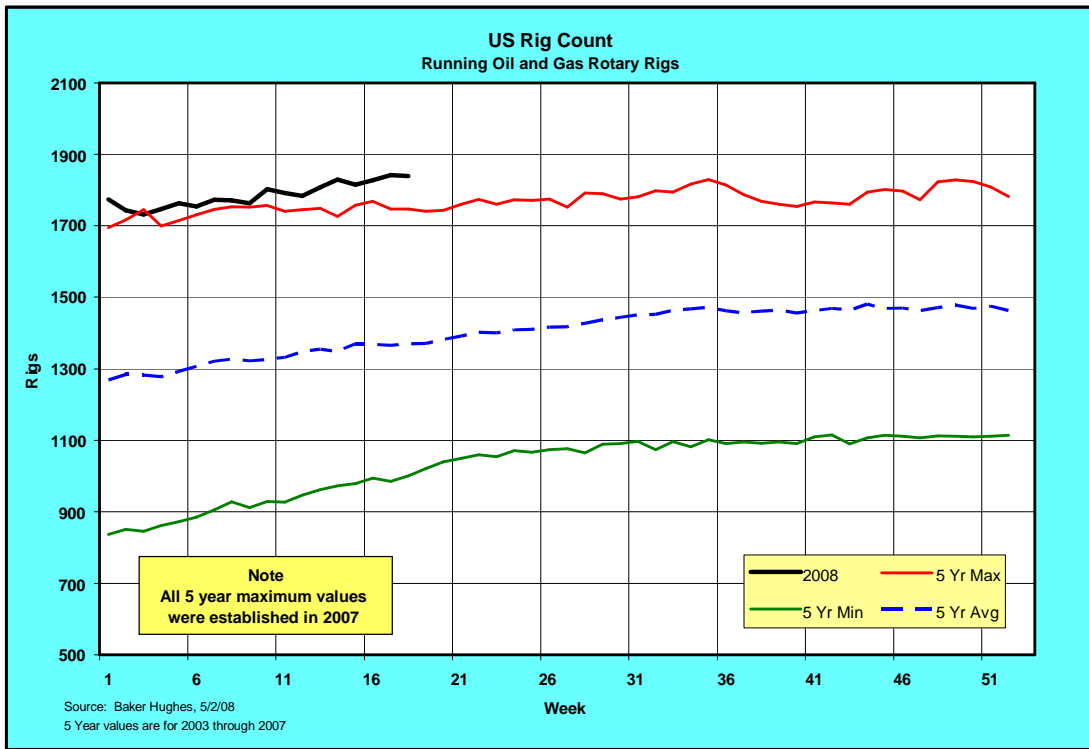
## Production Trends

Normally, natural gas and crude oil influence each other and also tend to drive the price of electricity. For this reason, their production and inventories are important, not only in their own right, but also to help understand and anticipate electricity price changes.

Several years ago, both natural gas in storage and crude oil stocks were at very low levels. This contributed to escalating prices. Higher prices encouraged production increases that brought inventories well above average levels. In September of 2004, Gulf of Mexico production shut-ins resulting from hurricane Ivan helped to quickly draw crude oil inventory levels below five-year lows. With the return of production, and steady imports, inventories were restored and stocks built to well above five-year highs. Then, in the aftermath of hurricanes Katrina and Rita, these stocks again were drawn down, but the mild winter of 2005/06 allowed them to rebuild quickly.

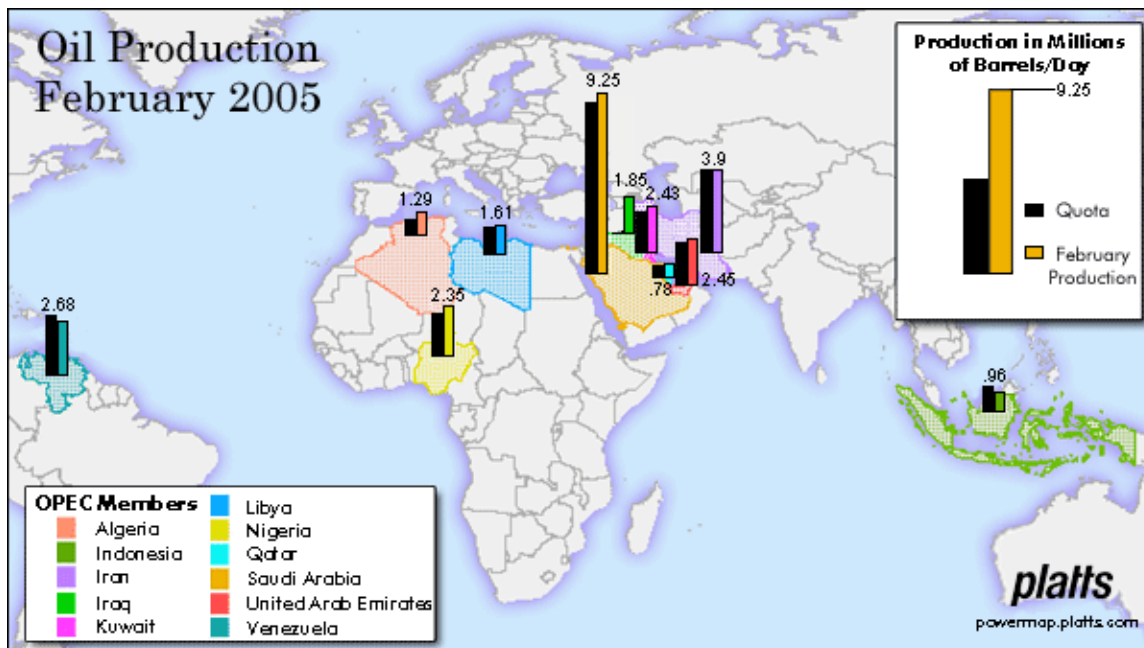
With strong inventories and quiet 2006 and 2007 hurricane seasons, the energy markets responded with some softening in natural gas and electricity prices. Crude oil prices are now influenced more by geopolitical issues, a weakening dollar, and capacity and remain high.

The following charts show that, with high prices, the number of oil and gas rigs in the U.S. and worldwide remains at, or above, five-year highs.



In fact, OPEC production remains very near their increased quotas and there is very little surplus capacity. As the following table shows, most OPEC countries are still operating near their capacity and, in November, OPEC relaxed their quotas. Only Saudi Arabia has significant surplus capacity.

The following graphic and table illustrate the relative level of OPEC oil production by country.



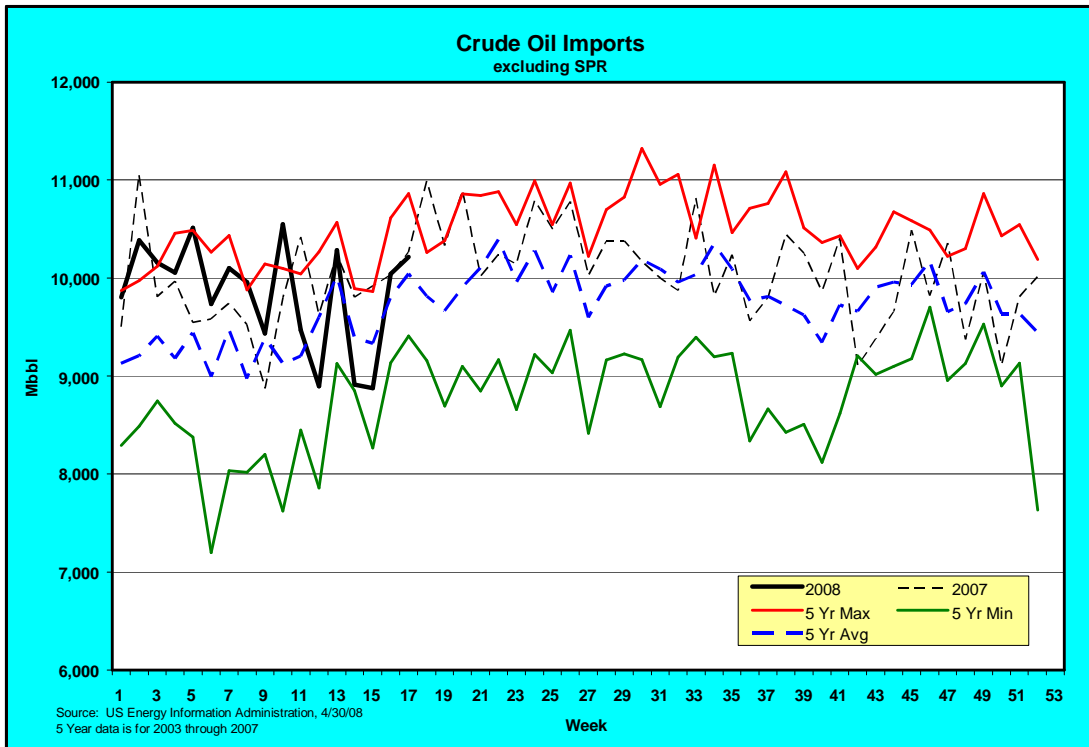
**OPEC Oil Production**  
(Thousands of Barrels per Day)

Country	Quota		OPEC Production			Over/Under Quota		March 2008	
	(10/1/2006)	(11/1/2007)	Jan-08	Feb-08	Mar-08	Tb/d	%	Capacity	Surplus
Algeria	894	1,357	1,410	1,460	1,396	502	37.0	1,396	0
Indonesia	1,451	865	830	830	881	-570	-65.9	881	0
Iran	4,110	3,817	3,800	3,800	3,963	-147	-3.9	3,963	0
Kuwait	2,247	2,531	2,550	2,650	2,511	264	10.4	2,511	0
Libya	1,500	1,712	1,740	1,740	1,743	243	14.2	1,743	0
Nigeria	2,306	2,163	2,100	2,100	2,023	-283	-13.1	2,023	0
Qatar	726	828	840	880	835	109	13.2	835	0
Saudi Arabia	9,099	8,943	9,200	9,200	9,025	-74	-0.8	10,600	1,575
UAE	2,444	2,567	2,600	2,600	2,534	90	3.5	2,534	0
Venezuela	3,223	2,470	2,400	2,400	2,333	-890	-36.0	2,333	0
<b>OPEC 10</b>	<b>28,000</b>	<b>27,253</b>	<b>27,470</b>	<b>27,660</b>	<b>27,244</b>	<b>-756</b>	<b>-2.8</b>	<b>28,819</b>	<b>1,575</b>
Angola	N/A	N/A	1,900	1,910	1,881	N/A	N/A	1,881	0
Iraq	N/A	N/A	2,150	2,300	2,399	N/A	N/A	2,399	0
<b>Total Oil</b>	<b>N/A</b>	<b>N/A</b>	<b>31,520</b>	<b>31,870</b>	<b>31,524</b>	<b>N/A</b>	<b>N/A</b>	<b>33,099</b>	<b>1,575</b>

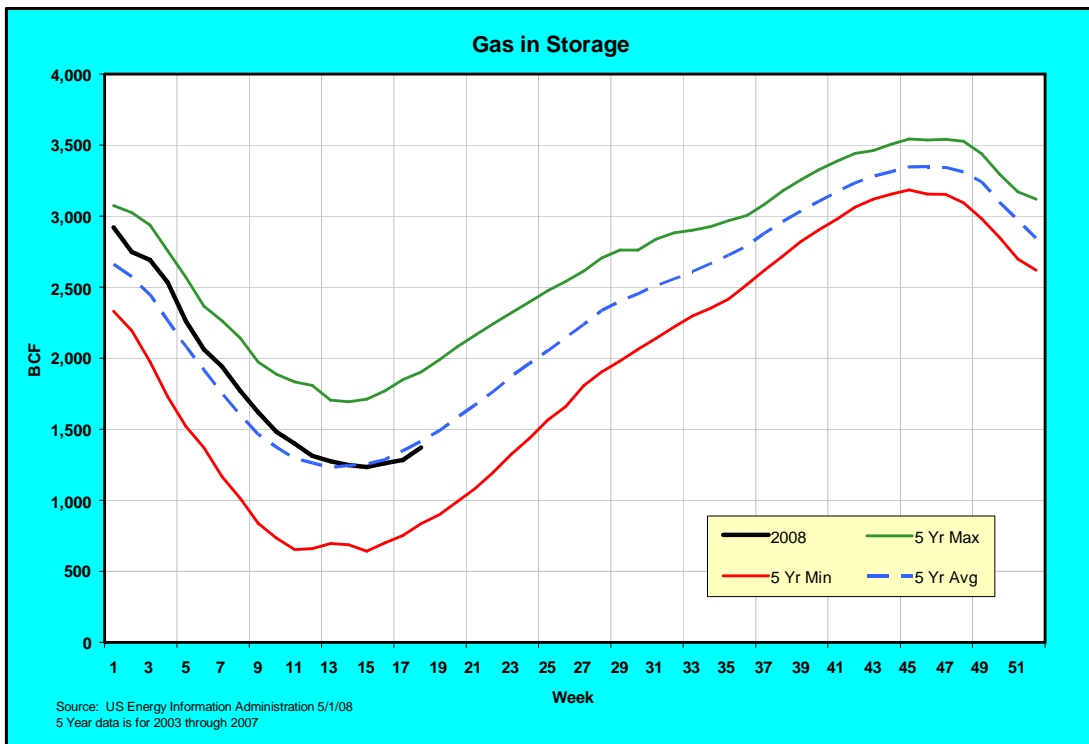
Sources: DOE / EIA Short-Term Energy Outlook (January & February)  
OPEC Monthly Oil Market Report (March)

In addition to the high rig counts, until recently oil imports remained at very high levels. In fact, they have been near the maximum level of the prior five years most weeks since the summer of 2004 except when the 2005 hurricanes interrupted access to port facilities in the Gulf of Mexico. Recently, high prices appear to have slowed imports to average levels.

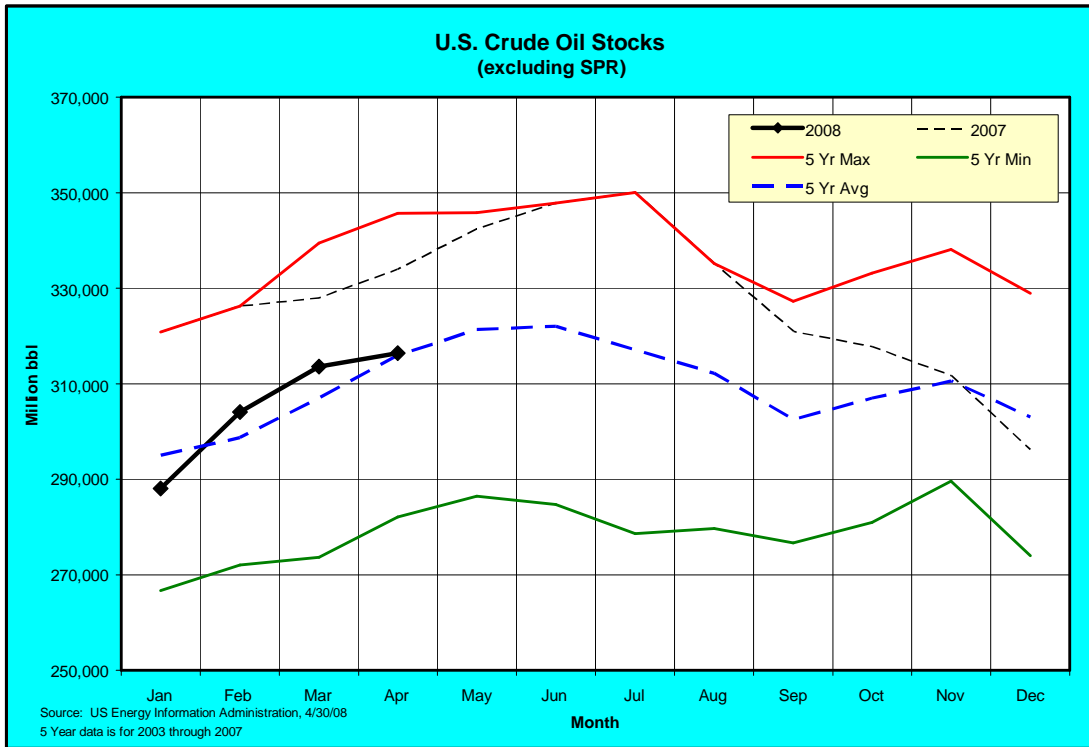
Crude oil import levels are illustrated in the following chart.



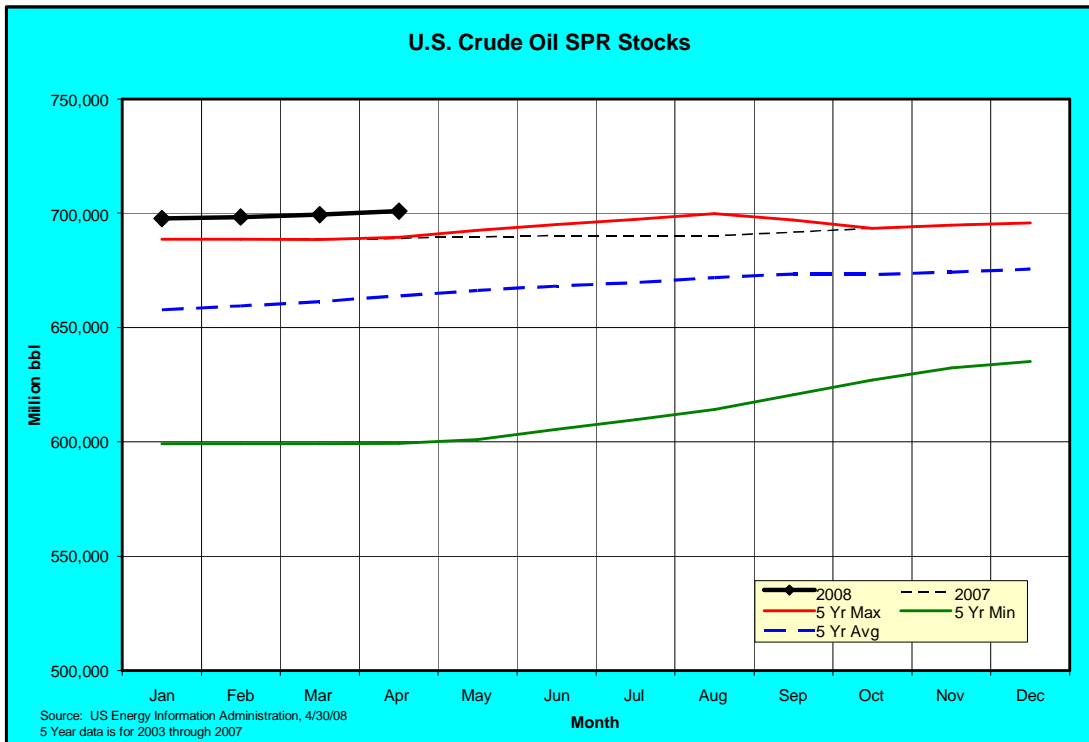
The next chart shows that severe December weather drew natural gas storage levels below their five-year highs and near their five-year averages. Record oil prices are now causing fuel switching which is drawing down storage and is strengthening prices.



Until the cold February of 2007, and resulting draw down, crude oil stocks exceeded the highest levels of the previous five years. Now, after rebuilding to a comfortable level, record high prices have slowed additions to storage and stocks are at average levels.



Despite draw downs following the hurricanes and other supply interruptions, the U.S. strategic petroleum reserve is now stable at a very high level with gradual additions.



## Conclusions

Last summer, with unusually hot weather, tensions in the Middle East, and fears associated with the start of the hurricane season and memories of Katrina, energy prices climbed. However, strong fundamentals, along with two calm hurricane seasons and a relatively mild start to the winter, moderated energy prices as we entered the heating season. Now, a plummeting dollar and continuing supply concerns are pushing oil prices to record highs.

The current prices could be pushed higher by a number of factors including:

- new supply disruptions,
- continuing weakening of the dollar,
- declining production by Russia or other major producers,
- speculation based on uncertain geopolitical and market conditions.

Considering all of these factors, if the international geopolitical situation remains relatively calm, energy prices should decline slightly with the arrival of spring.

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