

## Eye On **ENERGY**

A periodic publication of American Energy.<sup>®</sup>  
Providing insight for making better energy decisions.

### **COMMODITIES UPDATE**

By *Mike Granstaff*

## **May 2010 Natural Gas Report**

The NYMEX Natural Gas spot month futures price dropped below \$4.00 again on April 29<sup>th</sup> and subsequently set new contract lows before rebounding to \$4.50 on a short-covering inspired rally. Traders sent the market into a tailspin downward on a bearish working storage report and the much anticipated EIA revision of their 914 monthly report on U.S. natural gas production. Several months ago the Energy Information Administration (EIA) announced that they will be using an entirely new methodology to estimate production based on more recent historical data designed to better capture the current market. The first report to use this new methodology was the April 29<sup>th</sup> release of EIA's February 2010 production estimates which also included recalculations for all of 2009 using the new methodology. There had been a great deal of controversy over this report as many independent analysts believed the EIA was seriously overstating U.S. natural gas production. Some were estimating the overstatement to be as much as 3 Bcf/d. Quick math says that would be approximately 1,000 Bcf of natural gas that may not have been produced!

As you might imagine, there were a lot of traders with their finger on the trigger when the report was released. As soon as it was released, it landed with a big thud. The total revision of 2009 production based on EIA's new methodology was a reduction of only 175 Bcf. And, to add insult to injury for those that were expecting a much, much larger revision, EIA estimated February 2010 production to be at a record high of 58.58 Bcf/d. Traders immediately spanked the market.

### **Working Storage**

The EIA reported that 76 Bcf was injected into working storage the week ending May 14<sup>th</sup>. We would normally expect to see an injection of 93 Bcf for this reporting period. Working storage is now 2,165 Bcf which is 308 Bcf greater than the 5 year average and 73 Bcf greater than last year. As we predicted in our last newsletter, new record high working storage levels have been reached in May and we expect to stay at, or above record high territory at least up until hurricane season if not through the end of 2010.

### **Weather**

So far May has been warmer than normal on a population-weighted cooling degree day basis. The warmth has been located in the Southeast and Northeast. The balance of May will continue to be cooler than normal out West and warmer than normal in the Northeast and Midwest.

April 2010 was 2.3 degrees F above the long-term (1901-2000) average (14th warmest April on record) according to NOAA. It was generally warm and dry for most states east of the Rocky Mountains. Only three states (California, Nevada and Oregon) had cooler-than-average temperatures in April. Regionally, both the Northeast and the East North Central Region near the Great Lakes experienced their second warmest April on record. The Central climate region also saw above-normal temperatures, resulting in the fourth warmest April for that region.

Based on NOAA's Residential Energy Demand Temperature Index (REDTI), the contiguous U.S. temperature-related energy demand was 12.1 percent below average for April which is the 2nd lowest April value in 116 years.

Globally things are really heating up. The combined global land and ocean surface temperature was the warmest on record for both April and for the period from January-April, according to NOAA. Additionally, last month's average ocean surface temperature was the warmest on record for any April, and the global land surface temperature was the third warmest on record.

### Gulf of Mexico Oil Spill

This environmental catastrophe has had no effect on the price of natural gas in the near-term and I don't believe it will have long-term implications either. It may cause the cost of off-shore oil production to go higher in the future however due to more regulations. BP claims they are now recovering 3,000 Bbls/d from the flow which is estimated to be at least 5,000 Bbls/d. Satellite imagery shows that some of the oil has moved southeast from the Deepwater Horizon oil spill and entered the Gulf of Mexico's Loop Current. The Loop Current is an ocean current that transports warm Caribbean water through the Yucatan Channel between Cuba and Mexico. The current flows northward into the Gulf of Mexico, then loops southeastward just south of the Florida Keys (where it is called the Florida Current), and then along the west side of the western Bahamas. Here, the waters of the Loop Current flow northward along the U.S. coast and become the Gulf Stream. Once oil gets into the Loop Current, the 1 - 2 mph speed of the current should allow the oil to travel the 500 miles to the Florida Keys in 10 - 20 days. Portions of the Loop Current flow at speed up to 4 mph, so the transport could be just 4 - 5 days.

### 2010 Hurricane Season

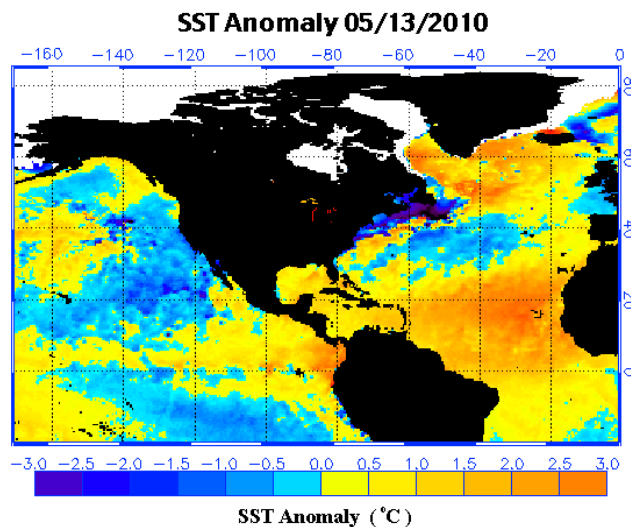
Below is a table that surveys what the main hurricane experts are forecasting for the 2010 hurricane season.

It is shaping up to be a whopper for two main reasons: One; neutral to cool tropical Pacific waters, and two; extremely warm tropical Atlantic waters.

The SSTs in the tropical Pacific influence hurricane activity in the Gulf of Mexico. When SSTs are warm (El Nino) it creates a strong west-to-east upper level wind flow over the GOM and shears the top off of storms as they develop. Although we did not have an El Nino during the 2009 hurricane season, we did have wind shear and steering currents that inhibited development and pushed any storms out of the GOM.

Atlantic Basin Seasonal Hurricane Forecast 2010			
Forecaster	Named Storms	Hurricanes	Intense Hurricanes
CSU	15	8	4
TSR	16	9	4
WSI	16	9	5
AccuWeather	17	7	5
Earthsat	16	8	5
CWG	14	8	3
60 Yr Ave 1950-2009	10.4	6.1	2.7
2009 Observed	9	3	2
2010 to date	0	0	0

This winter we were under the influence of a strong El Nino but it has since died and the tropical Pacific waters are now showing rapid cooling. Forecasters expect SSTs to be neutral to cool (La Nina) during the 2010 hurricane season which should allow hurricanes in the Atlantic and GOM to develop, strengthen and depending on steering currents, get into the GOM.



In the Atlantic it's just the opposite. Sea Surface Temperatures (SSTs) in the Atlantic's Main Development Region for hurricanes had their warmest April on record, according to an analysis of historical SST data from the UK Hadley Center. SST data goes back to 1850. The area between 10°N and 20°N, between the coast of Africa and Central America (20° W - 80°W), is called the Main Development Region (MDR) because virtually all African waves originate in this region.

These African waves account for 85% of all Atlantic major hurricanes and 60% of all named storms. When SSTs in the MDR are much above average during hurricane season, a very active season typically results (if there is no El Niño event present.) SSTs in the MDR were an eye-opening 1.46°C above average during April. This is the third straight record warm

month, and the warmest anomaly measured for any month--by a remarkable 0.2°C. The previous record warmest anomalies for the Atlantic MDR were set in June 2005 and March 2010, at 1.26°C.

We are also in the warm phase of a decades-long natural oscillation in Atlantic Ocean temperatures called the Atlantic Multi-decadal Oscillation (AMO). This warm phase began in 1995, and has been partially responsible for the high levels of hurricane activity we've seen since 1995.

The high April SST anomaly does not bode well for the coming hurricane season. The three past seasons with record warm April SST anomalies all had abnormally high numbers of intense hurricanes. Past hurricane seasons that had high March SST anomalies include 1969 (0.90°C anomaly), 2005 (1.19°C anomaly), and 1958 (0.97°C anomaly). These three years had 5, 7, and 5 intense hurricanes, respectively. Just two intense hurricanes occur in an average year. The total averaged activity for the three seasons was 15 named storms, 11 hurricanes, and 6 intense hurricanes (an average hurricane season has 10, 6, and 2.) Both 1958 and 2005 saw neutral El Niño conditions, while 1969 had a weak El Niño.

Bottom-line, now that I've gotten you all worked up about hurricane season here's how I see it playing out.

- I will defer to the experts and assume we will see a lot of hurricanes (although they were wrong last year). Predicting where they go is practically impossible but I will figure some will get into the GOM.
- GOM E&P companies pretty much shut 'er down and get their workers back to shore when that happens so this could be as much as 6.5 Bcf/d of production temporarily shut-in or 11% of total US production (To put this in perspective, in 2002 that would have been 13 Bcf/d of production shut-in or 25% of total US production. Obviously a much bigger deal back then than it is now).
- We will likely be entering peak hurricane season with record high levels of natural gas in working storage (Based on our models probably something north of 3,300 Bcf compared to the 5 year average of around 2,800 Bcf).
- The infrastructure enhancements on-shore in the US have been tremendous over the last few years so production (namely shale), pipelines, storage, and deliverability have vastly improved (Hurricane activity in the GOM will have much less of an effect therefore on the physical ability of natural gas satisfying market demand).
- During hurricane events pipeline curtailments will likely be announced however we believe there will be plenty of suppliers with plenty of gas to sell and therefore price spikes will be limited and short-lived.
- It would be prudent to hedge a comfortable percentage of your demand through the hurricane season at current price levels but probably not 100% as index prices may continue to stay weak in this environment.

### **Technical Analysis**

NYMEX July contract

Upside resistance is \$4.85, \$6.11, \$6.72

Downside support is \$3.81, \$3.15, \$2.41

## **EXECUTIVE INSIGHT**

*By Shawn Rash, Senior Vice President*

### **Michael Moore, President of American Energy Solutions, Inc. spoke at ABB's Automation and Power World 2010 conference in Houston on May 19, 2010.**

According to their website: "Automation & Power World was designed with a specific focus – to provide engineers and business leaders with a single event where they can experience and learn the latest in Automation and Power technology, and more importantly how it can benefit their business' profitability.

Automation & Power World is held every year to help companies improve their bottom line. Come, join us and 4,000 of your colleagues from more than 40 countries to find out how ABB and our technology partners can help you not just survive, but thrive in this economy."

Mr. Moore spoke on the topic:

#### **Energy Management – A Practical Approach**

In the presentation he pointed out the last 10 years has seen a lot of change in the energy industry.

Energy markets are complicated and, as a result, companies are re-thinking how they manage these expenses. Complex market factors affect risk and pricing, deregulation varies from state to state, carbon emissions are becoming an issue, and limited capital dollars are available for energy conservation projects.

As a result, leading companies are taking a comprehensive approach to developing an energy strategy making sure that all aspects of the energy equation are a part of the plan. American Energy's practical and comprehensive approach assists clients with identifying and implementing a strategy that maximizes energy pricing alternatives and gaining the best return on invested capital dollars.

We congratulate ABB on a successful conference and their commitment to help businesses be successful.



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