



Eye On ENERGY

A periodic publication of American Energy.[®]
Providing insight for making better energy decisions.

COMMODITIES UPDATE

By Mike Granstaff

June 2010 Natural Gas Report

NYMEX Natural Gas futures finally surged through the top of a three month trading range as hot weather, positive economic forecasts, approaching hurricane season, and short-covering have all combined to create at least a temporary bullish sentiment to the market. Traders made several attempts last week to push the spot month futures contract above \$5.20 but have been unsuccessful so far. Just getting outright long this market still has its risks as working storage remains at record high levels for this time period. That will make longs very nervous particularly if weather forecasts begin to cool off.



There is talk of another hedge fund that is potentially in trouble. We have seen this several times in the past where a hedge fund gets in a bad position and its unwinding can have an effect on the market price. The most notable case was Amaranth's collapse four years ago that sent the market into a tailspin from \$8.50 to \$4.00 in two months time. Of course Amaranth was extremely long the market and was forced to sell. This time a hedge fund named SandRidge Capital is reportedly short the market and must buy to unwind. SandRidge is significantly smaller than Amaranth however so we don't anticipate a massive short-covering rally.

The six month deepwater drilling moratorium has few short-term implications but, if maintained, will likely reduce offshore natural gas production .1 Bcf/d to .6 Bcf/d by the end of the year. Total offshore production is currently 6.68 Bcf/d. On-shore production increases can offset this decline

but prices will need to go higher to encourage more onshore drilling.

Working Storage

The EIA reported that 87 Bcf was injected into working storage the week ending June 11th. We would normally expect to see an injection of 84 Bcf for this reporting period. Working storage is now 2,543 Bcf which is 313 Bcf greater than the 5 year average and 2 Bcf greater than last year.

Weather

June has been quite hot overall. The core of the heat in a corridor from St. Louis to the Mid-Atlantic is driving record breaking cooling demand. For this month overall, the population weighted cooling degree day (PWCDD) forecast stands at 286.8, which would easily break the current record for June (271.8 in 1994).

During May cooler-than-normal temperatures in the western U.S. were counterbalanced by warmer-than-normal temperatures in the east, creating a national temperature near the long-term average.

Regionally, a persistent pattern with a high-pressure ridge (associated with warmer conditions) in the east and a western trough (cooler conditions) was especially evident. The Northeast and Southeast Climate regions each had their tenth warmest May on record, while the Northwest and West had their fifth and tenth coolest May, respectively. The Northeast region experienced record warmth for the March-May spring season.

Based on NOAA's Residential Energy Demand Temperature Index (REDTI), the contiguous U.S. temperature-related energy demand was 0.3 percent above average for May. The unusual warm spring in the highly populated Northeast resulted in the seventh lowest spring REDTI value in 116 years, 11.2 percent below average.

The combined global land and ocean surface temperature was the warmest on record for May, March-May (Northern Hemisphere spring-Southern Hemisphere autumn), and the period January-May according to NOAA. Worldwide average land surface temperature for May and March-May was the warmest on record while the global ocean surface temperatures for both May and March-May were second warmest on record, behind 1998.

2010 Hurricane Season

A concentrated region of intense thunderstorms associated with a tropical wave has developed in the central Caribbean, a few hundred miles south of Puerto Rico. This disturbance was designated **Invest 93L** by the National Hurricane Center this morning, June 21st, and has the best chance to become Tropical Storm Alex of any system we've seen so far this year. The high wind shear associated with the strong winds of the subtropical jet stream is over the northern Caribbean, too far north to interfere with development. Sea Surface Temperatures are plenty warm, a record 29 - 30°C.

The National Hurricane Center is giving 93L a 20% chance of developing into a tropical depression by Wednesday morning, June 23rd. The most aggressive forecasting model is taking this system into the Gulf of Mexico as a hurricane next week. Less aggressive models keep the storm weak and farther south, predicting that 93L will bring heavy rains to northern Honduras as a tropical disturbance or tropical depression on Friday and Saturday.

Gulf of Mexico Oil Spill

Hurricane season is upon us, and the Deepwater Horizon blowout is still spewing a geyser of oil into the Gulf of Mexico. With this year's hurricane season forecasted to be a severe one, with much above average numbers of hurricanes, we have the unwholesome prospect of a hurricane churning through the largest accidental oil spill in history. A hurricane has never passed over a sizable oil spill before, so there are a lot of unknowns about what might happen.

The strong winds and powerful ocean currents that a hurricane's winds drive will bring oil to large stretches of coast that otherwise would not have gotten oil which is exactly what occurred in the case of the Exxon Valdez disaster. We have seen that if a sandy beach is already fouled by oil, a hurricane can help clean up the mess. However, the situation is different along shores with marshlands, where the many shoreline plants offer crevices and tangled roots for the oil to accumulate in. A hurricane will help scour some of the oil out of marshlands, but the majority of it will probably remain stuck. This is also true of rocky beaches. Rocky shores fouled by the Exxon Valdez oil spill in 1989 have been pounded by many hurricane-strength storms over the years, but these storms have not been able to clean the beaches of oil.

One of the more unnerving prospects to consider if a hurricane hits the oil spill is what the hurricane's storm surge might do with the oil/dispersant mixture. The toxic mix would ride inland on top of the surge, potentially fouling residential areas and hundreds of square miles of sensitive ecosystems. The impact will be dependent on the dilution factor of sea water and rain but we could be talking about billions of dollars in clean-up effort.

We can anticipate that the strong winds of a hurricane passing over the oil spill will be able to hurl oil and toxic dispersants many miles inland during landfall. In regions where little rain falls, the concentrations of the oil and dispersants may be a problem. Again, we have no experience with this sort of situation, so the potential risks are unknown.

We do not need to worry about oil dissolving into the rain, since the oil and water don't mix. Furthermore, about 50-70% of the oil evaporates in the first 12 hours that the oil reaches the surface, so the volatile oil compounds that could potentially get dissolved into rain water won't be around.

Lightning could set an oil slick on fire, in regions where the oil is most dense and very fresh. However, the winds of a hurricane are so fierce that any surface oil slick of flaming oil would quickly be disrupted and doused by wave action and sea spray. Heavy rain would further dampen any lightning-caused oil slick fires.

Bottom-line, we busted out of the three month trading range so the recent lows of \$4.00 may be safe for awhile. Prices will go up and down with the temperature gauge and hurricane activity going forward. Hedges should already be in place.

Technical Analysis

NYMEX August contract

Upside resistance is \$5.40, \$6.11, \$6.72

Downside support is \$4.50, \$4.07, \$2.41



By Sean Franke

California Direct Access

In March, American Energy provided an update regarding the status of the electric deregulation efforts in California. On April 16, 2010 American Energy assisted many of our clients with submitting the Notice of Intent to the respective utilities to be able to request entry into the California Direct Access market. The Year 1 cap was achieved by each utility within the first minute.

On July 16, 2010 customers will have the opportunity to submit a new Notice of Intent to the utility for Year 2 of Direct Access service. The Notice of Intent will provide the utility with 6-month notice of the desire to leave the host utility. The utility will provide a notification of acceptance to those who qualified within 20 days of meeting the Direct Access cap for the second round.

If accepted the customer will have to wait six months before you can switch from utility service. The customer will then have 60 days after the 6-month period to select a supplier and enroll in Direct Access.

If you are accepted but do not enroll within those 60 days, you will return to/continue with bundled utility service, according to CPUC Direct Access switching rules.

1. Total Load Allowed

The California Direct Access market will be allowed to add a specific amount of load during the four year phase-in process. For each utility, the total load allowed over the 4 year period is shown below.

- A. Pacific Gas & Electric – 3,100,000 MWh
- B. Southern California Electric – 3,562,000 MWh
- C. San Diego Gas & Electric – 462,000 MWh

2. Phased In Re-Opening

Of the total load allowed, there will be a phased-in reopening over the 4 year period for non-residential customers as shown below.

- A. Year 1 – 35%
- B. Year 2 – 35%
- C. Year 3 – 20%
- D. Year 4 – 10%

3. Year 2 open enrollment is scheduled to start on July 16, 2010 at 11:00 a.m. PST.

4. Non-residential customers must submit a Notice of Intent to the respective utility.

The California PUC will implement the “first come, first serve” rule for participation in the Direct Access market. American Energy expects the Year 2 market cap to be achieved on the first day.

If you are interested in participating in the California Direct Access market please contact Sean Franke (smfranke@americanenergy.com).

By Greg Bair, Director, Engineering & Construction

Why settle for good when you can have great?

American Energy recently began working with a client with multiple locations throughout the country. They have a number of facilities that were all built around the same time with a very similar footprint. The client had recently completed a lighting upgrade in one of their facilities by installing T5HO High Bay fixtures and changing all of their T12 fluorescent fixtures to T8 lamps with electronic ballasts. So far, so good, right? The audit and design was completed by a reputable lighting manufacturer, and the work was completed by a local contractor. It was definitely a good project and the facility personnel were applauded for making great strides in energy efficiency. American Energy was invited to audit one of the other similar facilities and develop a lighting proposal, and our plan was generally the same, but the specifics varied a great deal. Our proposal provided substantially improved energy savings, improved lighting balance and more than \$235,000 in EXTRA savings over a five-year period after accounting for the additional costs. We were awarded the project and after the savings were verified over a number of months we were asked to visit the facility that had previously been retrofitted to see if any improvements could be made.

Many kept asking the obvious questions: why is there such a difference in savings—aren't they both basically the same project? Well, the answer is both yes and no. The project at the first facility was a good project, but it wasn't a great project. The customer unknowingly settled for a good project when a great project was only a few dollars away. There is more to the design of a great lighting system than many companies offer. Some of the major considerations are:

- The most appropriate lighting technology for the intended space
- The most efficient lighting source for the intended task
- Well-designed and supported fixture design
- Well-balanced lighting to help eliminate eye strain
- Generous use of motion sensors to turn lights off when people are out of an area
- Fixtures, sensors and lighting technologies that are maintenance-friendly

At American Energy we strive to provide your facilities with a great lighting system, not just a good lighting system, by taking into account ALL of these factors.

Questions or for more information please contact Greg Bair gbair@americanenergy.com



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