



Winter 2005 - 2006 Natural Gas Market Update

Item No.: A-1
November 17, 2005

Good morning Mr. Chairman and Commissioners.

Jeff Wright of the Office of Energy Projects and I would like to present you an update on natural gas market issues as we enter the winter.

Winter Energy Prices Face Continued Challenges

- Main drivers for energy prices:
 - **Weather**
 - **Gulf production recovery**
- Volatile market – “spikes” possible
- Several recent developments have been positive
- Role of imports is limited

At your last meeting, Tom Pinkston presented staff's Winter Assessment, which underscored the significant challenges faced by U.S. natural gas markets for the coming winter. While there have been some changes in the situation, the most significant drivers remain largely the same. Prices and availability of supply will be dependent on weather with any significant cold weather likely to drive prices higher, possibly much higher over short periods. Also important is the industry's ability to recover production lost in the Gulf Coast due to Hurricanes Katrina and Rita during the late summer. These conditions have resulted in volatile markets where price spikes are likely. Over the past three weeks, however, there has been some good news regarding our ability to face challenges this winter. I'll review those recent developments in more detail next, and then Jeff will discuss the limited ability of increased imports this winter to make up for Gulf production losses.

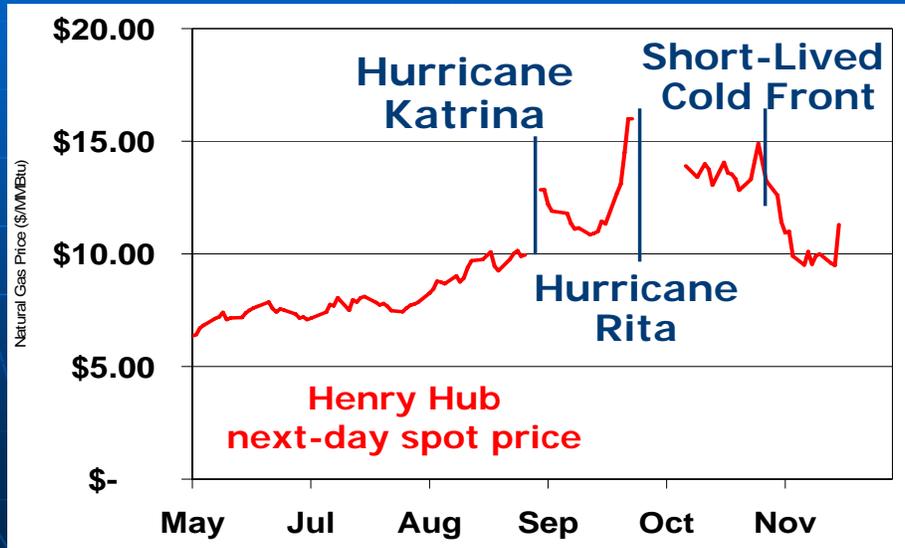
Natural Gas Market Update

- **Spot prices weakened in past 3 weeks to pre-hurricane levels**
 - **Gulf production recovery accelerated**
 - **November weather extremely mild**
 - **Storage relatively full**
- **Futures remain strong into winter**

Over the past 3 weeks, spot prices weakened considerably due to a variety of factors. First, we began to see real progress in recovery from Gulf production. In addition, weather in late October and November – until today here in Washington – has been extremely mild. This fortuitous weather pattern has given an extra boost to storage inventories; allowing for continued injections despite the Gulf reductions.

Still, prices for futures with delivery across the rest of the winter have remained relatively strong compared to spot physical markets, signaling the expectation that prices will rise over the next few months.

Prices Have Fallen to Pre-Hurricane Levels



SOURCE:
Intercontinental
Exchange

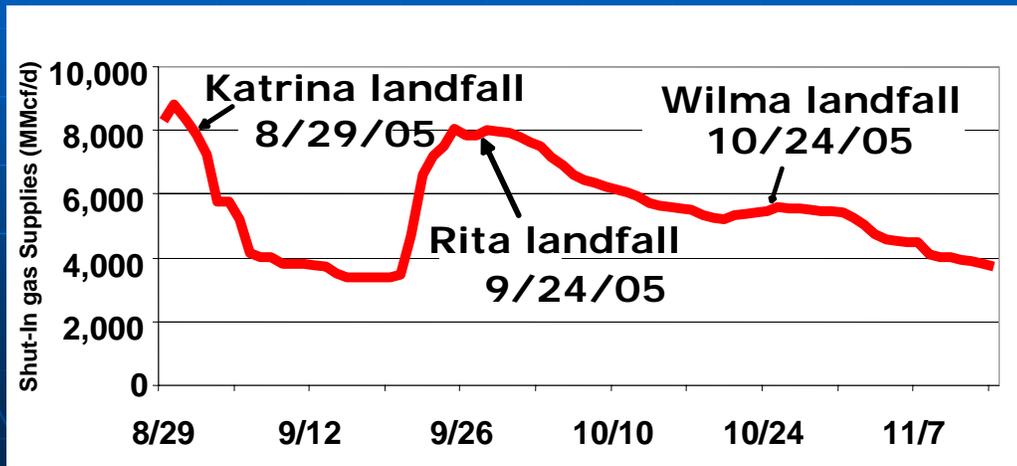
Yesterday, spot gas prices across the northeast U.S. surged by 25 percent with the approach of the cold front we're feeling in Washington this morning. Spot prices at Henry Hub, Louisiana, shown in the Figure now on the screen, rose a little less – about 20 percent – but the effect of volatility is clear here as well.

This graph starts in May, and shows the Henry Hub spot price rising through the summer due largely to increased electric generation demand. The effects of Katrina and Rita are clearly marked. The red line disappears briefly after Katrina and longer after Rita because Henry Hub was not physically operating so trading wasn't taking place during that period. Approximately 3 weeks ago, spot prices peaked again on a variety of factors including a quick cold front. Since then, with the exception of yesterday, spot prices dropped at Henry from their high close to \$15.00 per MMBtu to close to \$9.00. Yesterday's increase brought the price back to about \$11.00.

While these prices can't be considered low in an historical context, they are now closer to late summer pre-hurricane prices than post-hurricane prices.

I should note that today's trading could be interesting as the traders work out their expectations of the duration and effect of this cold front as well as the significance of today's storage report from the Energy Information Administration.

Gulf Supply Recovery Continues

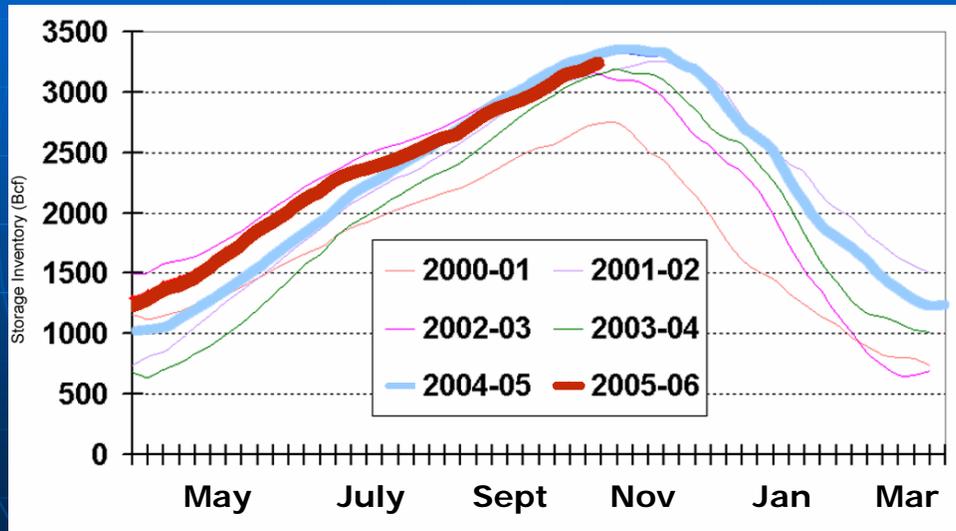


SOURCE: Minerals Management Service reports.

This graph shows the effects of the hurricanes on Gulf production plotted over time. The red line shows how much production was not available due to the Hurricanes, starting with Katrina. The initial effect of Katrina was to reduce deliveries by close to 9 billion cubic feet (or Bcf) of natural gas per day. That fell over a few weeks to less than 4 Bcf per day, before increasing again with Rita to about 8 Bcf per day. Reductions after Rita dropped to between 5 and 6 Bcf per day, with some additional supply shut in as preparation for hurricane Wilma. That level did not drop significantly until the last two weeks, when close to 2 Bcf per day of shut-in production returned. As of yesterday's report from the Minerals Management Service, shut-in Gulf gas is now less than 4 Bcf per day.

4 Bcf per day is a significant reduction in supply, and clearly concerns in the natural gas spot and futures markets are driven by this statistic. We will continue to watch the recovery of these supply sources throughout the winter.

Storage Inventories Have Grown With Mild Weather



SOURCE: Energy Information Administration weekly storage reports.

Nevertheless, the effects of mild weather have largely overcome the effects of reduced gulf production for the past few weeks, resulting in lower prices. This graph plots storage inventories for the past 5 years at the same time of the injection and withdrawal cycle – starting on April 1st. The red line is the storage inventory this year, and you can see that inventories remain quite high – currently higher than any of the past 5 years with the exception of last year, which was slightly higher. [Either: “I’m informed that EIA just announced an injection of ___ Bcf for last week a few minutes ago.” or “EIA will announce storage builds for last week shortly.”] At these high storage inventories, it is harder to inject as much into storage. Consequently, recent injections indicate extremely weak demand contrasted with the weak supply situation.

The past 3 [or 4 if EIA data are available] reports of continued injections have effectively put the country in a stronger position to manage cold weather for the rest of the winter – though storage alone may not be able to make up for continuing severe supply reductions in the Gulf. The remaining options include increasing imports and decreasing demand through emphasizing conservation efforts. At last month’s meeting, you heard from a panel of state officials about conservation efforts. Now, I’d like to turn the presentation over to Jeff Wright to discuss the limitations on the ability for increasing imports to satisfy demand needs this winter.

Prospects for Imports

- **Canadian pipeline imports are not expected to increase this winter.**
- **Additional LNG imports will not be the answer to any gas shortages this winter.**
- **Capacity at existing LNG facilities not fully utilized.**
- **Significant new LNG capacity not available until 2008.**

Steve noted that the shut-in production in the Gulf of Mexico is slightly less than 4 Bcf per day. Given that average daily gas consumption in the United States is approximately 60 Bcf, this is not an insignificant amount. Some expect these volumes to be replaced by imported gas – either pipeline imports from Canada or increased LNG imports. This will probably not be the case. Traditionally, Canadian gas has accounted for nearly all of our imported amounts. However, through August of this year we are actually seeing imports from Canada lagging behind the same period in 2004. Canadian gas production is flattening while at the same time Canadian demand is growing, resulting in less gas being available for consumption in the United States.

It does not appear that there will be a significant increase in LNG imports during this winter to cover any production shortfalls. Currently, the aggregate capacity of the existing LNG terminals in the Lower 48 is not being fully utilized and LNG import levels are lagging behind 2004 levels. There are indications, however, that LNG shipments to the United States will increase over the next several months. There is new terminal capacity being constructed, but this will not be available until 2008 at the earliest.

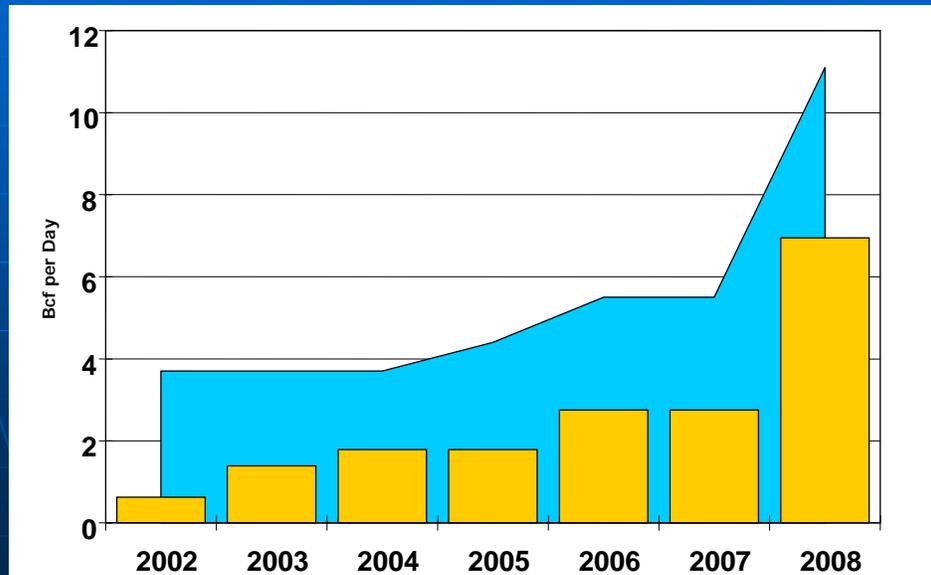
Non-Regulatory Impediments

- **World liquefaction capacity**
 - **Twice as much regasification capability as liquefaction**
- **Supply contracts**
- **Existing arrangements and commitments**

Increased levels of LNG imports are being thwarted by non-regulatory impediments. The prime impediment to increased imports is the amount of available worldwide liquefaction capacity. Currently, there is at least twice as much regasification capability as liquefaction. This leads into the next impediment which is the existence of supply contracts. Merely having a regasification facility does not guarantee that you will be able to easily obtain gas supply. Much of the U.S. LNG is imported under short-term arrangements as opposed to the rest of the LNG-consuming world that has longer-term contracts with suppliers. These existing arrangements and commitments and the willingness of non-U.S. LNG consumers to, in some instances, outbid U.S. entities for excess LNG cargoes demonstrates again that the capacity holders in U.S. LNG facilities need to negotiate supply contracts with longer-term commitments. Also, LNG capacity holders need to successfully negotiate supply contracts in the face of increased competition from developing countries like China and India whose gas demand is expected to increase exponentially.

New LNG Capacity Will Help

 LNG Sendout Capacity
 LNG Imports



This slide shows our recent levels of LNG imports vis-à-vis the sendout, or redelivery capacity. This reinforces my earlier point that capacity has not been fully utilized. However, this year a new offshore LNG terminal – Gulf Gateway – began service and Trunkline LNG’s Lake Charles facility recently increased its deliverability slightly. Next year, the Lake Charles facility will put more storage and deliverability capacity in service and Southern’s Elba Island facility will do the same. It must be pointed out that these are relatively minor additions and while an uptick in the amount of imports is expected, it will not be a near-term panacea for lost production. The earliest one can expect a major increase in LNG capacity in 2008, when three new LNG terminals will come on line. By that time, it is expected that the new facilities will have supply contracts in place that will take greater advantage of their redelivery capability.

FERC Actions

- **Hackberry Decision (2002)**
- **8 New Terminals Authorized**
- **3 Under Construction**
- **12 Applications for New or Expanded Capacity**

For its part, the FERC has acted quickly and decisively on the applications put before it. The Hackberry Decision in December 2002 which no longer required open access to terminal capacity essentially deregulated, in an economic sense, LNG terminals. This paved the way for project sponsors to seek authorization for a large number of new LNG facilities.

Since the Hackberry Decision, the Commission has approved eight new terminals with the ability to deliver up to 12 Bcf per day of regasified LNG. Currently, three of these facilities are under construction with a total deliverability of 5.6 Bcf per day. There are also 12 applications pending for another 16.7 Bcf per day of delivery capacity.

I would note that the Commission is processing these applications, on average, in less than a year's time and, with the mandatory pre-filing process required by the Energy Policy Act of 2005, these processing times should continue to decrease.

Conclusion

- Gas production from Gulf is off
- No significant change from last year in:
 - Storage inventories
 - Net pipeline imports
 - LNG imports
- Key to this winter is conservation and demand side management

In sum, the hurricane activity of the last few months has shut-in Gulf production that may not be recovered until next spring. In the interim, we do not see any significant increase in storage inventories, pipeline imports or LNG imports that will make up this production loss for this winter. Further, while the future of LNG looks promising, significant supply increases may not be realized until 2008 at the earliest.

Given this, the key to this winter and possibly the next couple of winters, besides hoping for mild weather, is for increased conservation on the part of gas users and demand side management programs to ease gas demand in the United States.

That concludes our presentation and we will be happy to answer your questions.