

## Some more natural gas information

Posted by Heading Out on November 16, 2005 - 1:32am

Topic: Supply/Production

Tags: consumption, gulf of mexico, natural gas, production [list all tags]

In digging just a little further into the natural gas situation, let's first have a quick glance at the current status on GOMEX production according to the DOE, which also includes information that all the customers in Florida who lost power during Wilma have now been reconnected.

The current lost production is given by the table

Damage to GOM Oil & Gas Infrastructure

Ivan vs. Katrina vs. Rita

	Rita	Katrina	Ivan	
Platforms Destroyed	66	47	7	
Platforms Extensive	9	1	10	
Damage	32	20	20	
Rigs Adrift	13	6	5	
Rigs Extensive Damage	10	9	4	
Rigs Destroyed	4	4	1	
Rigs Unaccounted For	2 (Missing / Presumed Sunk - Added in With Destroyed)	0	0	
Number of Pipelines Damaged	56	77	102	
Shut-in Production High	26-Sep	30-Aug	16-Sep 2004	
Gas (BCF)	8.623	9.418	6.515	
Oil (bbls)	1,564,679	1,557,981	1,410,002	
Cumulative (To Date)	Combined Rita / Katrina		9/13/04 - 02/14/05	
Gas (BCF)		Combined Rita / Katrina 442.045		

While the refinery situation, which has a little good and bad news, is also updated.

## REFINERY IMPACTS FROM HURRICANE RITA

Company	Location	Capacity (B/D)	Status
PORT ARTHUR/	LAKE CHARLES		
ConocoPhillips	West Lake, LA	239,400	Reduced rate
Total		239,400	
HOUSTON/TEXA	S CITY		
Lyondell Citgo	Houston, TX	270,200	Reduced rate
BP	Texas City, TX	437,000	Shut down – gasoline production slated for mid-December; full production by year end/early 2006
Total		707,200	Shut down - 437,000
TOTAL from above		946,600	
Two refineries in L. remain shut down – • ConocoPhillip full power	A from Hurricane Katrina	367,000	Shut down Total (Katrina + Rita)= 804,000

Sources: Confirmed by company or on company web site. Various trade press sources.

In the same way as oil must be refined before it can be used, after gas comes from the ground it has to be processed.

Thus along with the loss in well production and pipelines, the EIA notes that

Even if platforms and pipelines are either unaffected or readily restored to service, the gas may not be able to flow to market without treatment. However, bypassing inoperable plants and redirecting flow to operational plants has mitigated the impact of the shut-ins. In 2003 (the latest year with complete data), almost three-fourths of total U.S. marketed gas production was processed prior to delivery to market.

A number of processing plants in Louisiana and Texas, with capacities equal to or greater than 100 million cubic feet per day, are not active. These plants have an aggregate capacity of 6.45 billion cubic feet per day (Bcf/d), and they had a total prehurricane flow volume of 3.81 Bcf/d.

A number of non-operating plants with a total capacity of 0.90 Bcf/d are operational, but are not active owing to upstream or downstream infrastructure problems or supplies being unavailable. These plants had flowed 0.28 Bcf/d before the hurricanes. A number of the inactive plants are expected to be operating within 2 weeks. Based on updated data, the incremental available capacity at that time would be 2.30 Bcf/d with pre-hurricane flow of 1.06 Bcf/d. Based on updated company information, pre-hurricane flow volumes indicate that the average utilization of the non-operating plants was roughly 59 percent.

At present the US has 3,229 Bcf/d (3.229 Tcf) in storage (4% above the 5 year average). The <u>EIA</u> expects that natural gas production will be around 19.1 Tcf in 2005. Demand was originally expected to increase by 3.7% this year, but, due to the high prices is now expected to drop about

0.8%, over the 22 Tcf consumed in 2004, which included about 4.1 Tcf of imports, about 0.65 Tcf of which is LNG. Note that while this averages 60 Bcf/day demand is quite seasonal. This leads to stock draw downs being required in January and February. In 2003 these were 841 Bcf and 676 Bcf respectively leaving, by the end of March, only 730 Bcf in working storage. Industrial demand is however dropping due to the high prices, by about 8%, while residential demand can also be expected to decline.

While these declines will reflect a switch to other fuels (unless the companies move abroad where the gas, used as a feedstock, is cheaper) that change may, in turn, impose unanticipated loads on other parts of the energy network.

Incidentally, while these last couple of posts have shown that the situation in this country is shaky at best the <u>IEA</u> is expecting that the demand for natural gas will exceed that for coal by 2015. They see the production coming from the Middle East and North Africa (MENA) where production will grow from 14 Tcf in 2003 to 22 Tcf in 2010, and this will then be exported as LNG. However they throw in the caveat that domestic demand in the source countries may also rise considerably (particularly if they take in the industries that are fleeing the US because of prices).

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