

Post-Gustav Landfall Resource/Open Thread

Posted by Prof. Goose on September 2, 2008 - 10:20am

Topic: Supply/Production

Tags: chuck watson, henry hub, hurricane gustav, loop, louisiana offshore oil port, methaz, oil, oil infrastructure, original, peak oil, shut-in production [list all tags]

Well, it's the day after. We need your assistance. In this thread, we would appreciate any materials, links, maps, charts, etc., that will help us all understand what Gustav did to oil and natural gas supply/production and gasoline availability, if any. Help us keep this focused, please. (Eds. Note: Please put damage related issues in this column. Please put comments on more general issues (for example, the impact on the Republican convention, or on politics in general) in Drumbeat.

Under the fold are discussions of the Louisiana Offshore Oil Port, Port Fourchon, damage model maps, the hurricane itself, and many of the other resources we had yesterday.

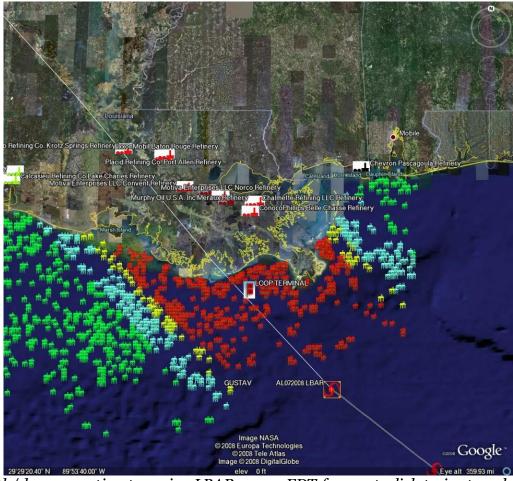
Here is <u>Chuck Watson at KAC/UCF's</u> landfall composite damage estimate for Gulf (GOM) oil and NG production, which covers the GoM loss for the month of September in to the context of overall oil production, imports, and refining. Note for those crunching the numbers that since GoM is about 25% of US production, 40% of the GOM's contribution of 25% is 10% of the total US production.

COMP ATCF Forecast Time: 2008090112

14 day: 8.21 MMBBL (52.36% normal), gas 63.50 BCF (65.91% normal) 30 day: 19.98 MMBBL (59.46% normal), gas 145.98 BCF (70.70% normal) 60 day: 43.01 MMBBL (64.00% normal), gas 304.43 BCF (73.73% normal) 90 day: 95.23 MMBBL (94.47% normal), gas 586.06 BCF (94.62% normal) 6 mon: 195.13 MMBBL (96.79% normal), gas 1205.43 BCF (97.31% normal) 1 year: 400.48 MMBBL (97.96% normal), gas 2478.60 BCF (98.67% normal)

Interpretation: the models say that **40% of GOM oil will be offline for 30 days and ~30% of GOM NG for will be offline for 30 days**--followed by marginal increases in GOM supply (both imports and production) through the next months. (E.g., the 60 day number for oil is 36% shut-in, but between 60-90 days, the number goes down to 5% of GOM oil shut-in.)

UPDATE: 10:00 EDT 9/1 - Graphic below is damage models based on LBAR hurricane forecast track, key is below. Numerical damage estimates are below the fold for oil and natural gas shut-in and damage.



Path/damage estimates using LBAR 10:00 EDT forecast-click twice to enlarge

For all graphics: Rigs/Platforms: Blue: evacuated only; Yellow will require inspection before restart; Red: damage requiring repair; Refineries: Black: operational impact (partial shutdown) Green: Operational impact (full shutdown) Red: Damage likely; Ports: standard hurricane flags for wind

The <u>Louisiana Offshore Oil Port</u>, or LOOP (*see JoulesBurn's story on the LOOP here*), and <u>Port Fourchon</u>, which has historically been a land base for offshore oil support services in the Gulf, was in the path of Gustav and is expected to be damaged. As you will see below, a good bit of oil and natural gas is also expected to be taken offline: some for weeks, some for much longer, according to Methaz' models.

Matthew Simmons, of Simmons International says this about the importance of the LOOP:

LOOP is the only facility in the Gulf to unload VLCC tankers which carry over 2 million barrels of crude. They can in theory be "litered" by unloading onto smaller tankers that can make it into the Gulf Coast ports but this is very lengthy timewise and the spare capacity of these smaller tankers is slim. We get about 1.2 million b/d of crude imports through Loop. (+/-10%)

Final forecast update from Chuck Watson at KAC/UCF:

Here's the 9/1 update:

Well, I think someone (who out of modesty shall remain nameless) forecast several days ago, Gustav would hit unfavorable conditions in the northern Gulf and never make it back to mega-storm strength. That seems to be the case. Center landfall with peak winds of 100kts or maybe slightly less looks to be at Grand Isle, at 8am ET - as of 730et the "eyewall" appears to be touching land.

I'm mostly sticking with the synthesis from last night (based on multiple models) as to impacts, and we're now in a "wait and see what the inspections bring" mode. The big question is what if any major damage the LOOP suffered and (perhaps more vulnerable than the LOOP itself) the connection pipelines to shore. Baseline estimate is 10-14 days for the port itself. Radar shot (7:30am ET) with tracks and LOOP labeled attached.

Production: Unless something broke that shouldn't have, we expect production to be back up to 60-70% within 30 days, and back to 95% by the end of the year. We expect a long-term hit of 3% or so since this swath went through some areas that Ivan, Katrina, and Rita missed and some older, less productive wells will not be restored.

Refineries and distribution: Mainly short term disruption due to precautionary shutdowns, no long term unless we get unlucky with pipelines.

All in all, my thinking is that this could have been a lot worse. Storm was disorganized crossing the OCS, so waves and storm surge will be lower than they should be for a storm of this size and intensity.

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