## OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY (OE) U.S. DEPARTMENT OF ENERGY Hurricane Katrina Situation Report #23 September 6, 2005 (11:00 AM EDT)

# **HIGHLIGHTS**

- Less than 971,360 customers remain without electric power due to Hurricane Katrina in Louisiana and Mississippi. This is down more than 1.7 million from a peak of about 2.7 million customers that were without power after Hurricane Katrina struck the region. Alabama has less than 9,000 (1%) of customers remaining without electric power and is no longer reporting.
- The Department of Energy has mobilized its DC-9 alert aircraft to support DoD in the transportation of troops and evacuees. Other DOE aviation assets are currently being utilized by DoD for other purposes in the affected region.
- As of 3:45 PM 9/5, Mississippi Power restored power to the tank farms in the Collins area of Mississippi. This was a key restoration for the southern half of MS since most fuel trucks in the region typically receive their fuel from one of a handful of terminals in the Collins area.
- There is extensive damage to Entergy's gas system which has affected service to many of Entergy's 147,000 natural gas customers in New Orleans. On Sunday, Entergy Gas Operations sent damage control personnel into Algiers and some other areas of Orleans Parish and will move into other areas of the city as they become accessible enough for damage assessment and repairs over the following days and weeks.
- Most of New Orleans remains without power; however, Entergy crews have returned to the city for the first time since the hurricane hit to assess the situation. Limited service was returned to the Central Business District (CBD) and downtown New Orleans yesterday by crews restoring the Market Street substation. Restoration continues to the underground networks in the CBD today.
- DOE continues to work with the FEMA HQ Fuel Task Force to examine and mitigate emergency fuel supply issues. Currently there are no major issues in supplying fuel to first responders.
- According to Colonial Pipeline officials, full power was restored to the pipeline yesterday and they are running at 100 percent capacity.
- The LOOP has been operating at almost full capacity today but Entergy has not yet restored power to the Clovelly storage facility. The LOOP expects to be at full capacity when Fourchon gets power, which should occur in about 7 days. LOOP currently is delivering crude oil to the Capline pipeline. Tankers are making crude deliveries to the

LOOP. The US Navy is using sonar to help identify obstructions near the marine terminal so safe paths for large vessels can be marked.

- The Capline pipeline system is now running at 960,000 barrels a day, which is over 80 percent of capacity.
- ESF-12 was activated by the Federal Emergency Management Agency to support multiple locations. OE staff are at the National Response Coordination Center (NRCC) at FEMA HQ, FEMA Regions IV and VI, and the State Emergency Operation Centers (EOC) in Louisiana and Mississippi.

## PETROLEUM AND GAS INFORMATION

- According Monday's MMS reports, 27.83 percent of 819 manned platforms and 27.61 percent of 137 rigs have been evacuated in the Gulf of Mexico (GOM). Yesterday's shutin oil production was 1,043,681 BOPD. The shut-in oil production is equivalent to 69.57% of the daily oil production in the GOM, which is currently approximately 1.5 million BOPD. This represents a 5 percent improvement from yesterday's figures. Monday's shut-in gas production was 5.225 BCFPD. This shut-in gas production is equivalent to 54.13% of the daily gas production in the GOM, which is currently approximately 10 BCFPD. This represents a 2 percent improvement from previous day's figures.
- There are media reports that Katrina may have damaged key natural gas processing facilities on the Gulf Coast, which could delay a recovery of gas supplies. Several plants may have been affected. We are following up on these reports.
- According to the Association of Oil Pipelines, the Dixie Pipeline (a propane line) is operating at approximately 50% (2 million gallons per day) of normal capacity.
- As of 9:00 pm last night at least 55 miles of the Gulf Intracoastal Waterway was still closed to navigation (from Mile Marker 15 to Mile Marker 70.) This is in the area between the Lower Mississippi and Gulfport, Mississippi. The US Coast Guard is surveying the waterway and replacing navigational aids at a rate of about 20 miles per day. At this rate the entire waterway should be open between the Lower Mississippi and all points east by the end of Wednesday. The Port of Gulfport is still closed and the Port of Pascagoula is only allowing vessels to operate in the day, if they have draughts of less than 12 feet. Other ports east of Pascagoula (in AL and FL) are open.
- Port of Mobile is operating during daylight hours only with temporary navigation aids in place. The Mississippi River is now officially open to ships with a draft of 35 feet during daylight hours. The US Army Corps of Engineers is currently dredging the channel so that Shell Oil company's dock can receive a 40-foot draught crude oil tanker (arriving in a few days), to traverse channel and safely dock and unload. Currently the channel to Shell can only take ships with a draught of 38 feet or less.

• The Table below shows, as of September 5, the current status of the refineries impacted by Hurricane Katrina. Refineries in the Midwest are now receiving crude oil supplies off the Capline pipeline.

Refinery	Location	State	Capacity (bbl/day)	Current Status
Shell Chemical	Saraland	AL	80,000	No information – unable to contact
ConocoPhillips*	Belle Chasse	LA	247,000	No power - major damage
ExxonMobil	Chalmette	LA	187,200	No power - water damage
Marathon	Garyville	LA	245,000	Restarting – will be fully operational by the end of today
Motiva (Shell)	Convent	LA	235,000	Restarting – may be fully operational in a few days
Motiva (Shell)	Norco	LA	226,500	Limited damage, continue to make repairs - may restart by mid-week
Murphy	Meraux	LA	120,000	No power – water is starting to recede, currently making assessment of damage, leaking crude oil tank repaired
Shell Chemical	St Rose	LA	55,000	No information – unable to contact
Valero	St. Charles	LA	185,000	Restarting; may take up to two weeks to be operational – unable to contact
ChevronTexaco*	Pascagoula	MS	325,000	Major damage – currently has power

#### Table 1. Shutdown Refineries

#### Table 2. Refineries with Reduced Runs

Refinery	Location	State	Capacity (bbl/day)	Current Status	
Marathon	Catlettsburg	KY	222,000	Maintenance; will be at full capacity by	
				Tuesday morning	
ConocoPhillips*	Lake Charles	LA	239,400	Returning to full rate	
ExxonMobil*	Baton Rouge	LA	493,500	Ok – fully operational, receiving SPR	
Valero	Krotz Springs	LA	80,000	Close to 100 percent; fully operational	
				tomorrow Expecting full rate by Tuesday -	
				receiving SPR	
Total*	Port Arthur	TX	211,500	OK - fully operational, receiving SPR	

Refinery	Location	State	Capacity (bbl/day)	Current Status
ConocoPhillips	Wood River	IL	306,000	OK
ExxonMobil*	Joliet	IL	238,000	OK
PDV Midwest	Lemont	IL	160,000	OK
Marathon	Robinson	IL	192,000	OK
BP	Whiting	IN	410,000	OK – receiving SPR
Citgo*	Lake Charles	LA	324,300	OK
Placid Oil*	Port Allen	LA	48,500	OK – receiving SPR
Marathon	Detroit	MI	74,000	OK
BP	Toledo	OH	160,000	OK – receiving SPR
Marathon	Canton	OH	73,000	OK
Premcor	Lima	OH	158,400	OK – receiving SPR
Premcor*	Memphis	TN	180,000	OK – receiving SPR
ExxonMobil*	Beaumont	TX	348,500	OK
Motiva (Shell)*	Port Arthur	TX	285,000	OK
Premcor	Port Arthur	ТХ	247,000	ОК

Table 3. Refineries at Normal Production

\* Refineries with company owned and operated on-site power generation.

## **ELECTRICITY INFORMATION**

### **STATE OUTAGE DATA**

Utility	Customers w/o Power	% Customers w/o Power from Katrina
Louisiana	588,606	56%
Mississippi	382,754	27%

\*Louisiana data is reported by the Louisiana Public Service Commission and their percentage outage numbers are used in the table and in calculating the percentage of total outage. Alabama outages are now less than 1% of customers.

### STATE REPORTS

#### Mississippi and Louisiana

 Louisiana has 588,606 customers remaining without power, as reported by the Louisiana Public Service Commission (5:00 PM 9/5/05). This represents about 56 percent of customers in the state. About 462,000 of these are serviced by Entergy. See table below.

Louisiana	<b>Outage</b> <sup>†</sup>	Data
Louisiana	Outage .	Data

UTILITY	OUTAGES	% customers w/o power
Entergy Louisiana	261,812	62%
Entergy Gulf States	420	<1%
Entergy New Orleans	200,749	93%
DEMCO	8,264	12%
SLECA	362	3%
Wash-St. Tammany	44,799	99%
CLECO	72,200	89%
Total	588,606	56%

- As of 9:30 PM September 5, Mississippi has 382,754 customers without power, 27 percent of customers in the state, including 41,358 Entergy customers (9:30 PM 9/5); 119,910 Mississippi Power customers (6:00 AM 9/5); and 221,486 Mississippi Electric Power Association customers (Noon 9/5)
- As of 6:00 AM Monday 9/5/05, Mississippi Power had restored service to more than 44 percent of its customers. It re-energized several substations on Sunday including Picayune, Bay St. Louis and Waveland, Richton, Poplarville, Shubuta and Carriere. Transmission service to substations serving the company's wholesale rural electric customers continues. The few remaining delivery points are expected to be completed in the next day or two. Mississippi Power expects to have nearly 9,200 outside workers overall. The company plans to re-evaluate restoration estimates due to significant progress. The company reports, however, that it will take months to restore the system to normal.
- Entergy continues consolidating resources into southern Mississippi and southeast Louisiana.
- At 9 PM 9/5, Entergy's transmission system had 54 lines and 46 substations out of service. Overall, restoration of the transmission system is progressing well except in the areas impacted by flood waters or security issues. All of the Entergy Mississippi area substations are restored and transmission lines continue to be energized.
- In New Orleans East and St. Bernard Parish, aerial assessments revealed there is major structural damage to lines. On the westbank of Jefferson Parish, transmission lines connecting Westwego to Harvey to Gretna were restored.
- As noted above, Entergy reports that there has also been extensive damage to Entergy's gas distribution system which has affected service to many of Entergy's 147,000 natural gas customers in New Orleans. Entergy will have to shut off gas service in many areas of the New Orleans before repairs can be made. This will help reduce gas leakage in the city which will help with public safety and aid in restoration of the gas system. Entergy says that it is working to preserve gas flow to the New Orleans Sewage and Water Board (SWB) in order to allow power generation for SWB pumps that are critical to the mission of pumping water out of flooded areas of the city.

# <u>Florida</u>

 Utilities in Florida report that although natural gas supplies are tight the situation continues to improve. The FRCC State Capacity Emergency Coordinator is continuing its Generating Capacity Alert through, September 6, 2005 due to the continued uncertainty of restoration of natural gas production facilities in the Gulf of Mexico. Petroleum supplies to utilities are considered to be adequate.