# OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY (OE) U.S. DEPARTMENT OF ENERGY Hurricane Katrina Situation Report #16

**September 2, 2005 (11:30 AM EDT)** 

## **HIGHLIGHTS**

- Approximately 1.6 million customers remain without electric power due to Hurricane Katrina. These are primarily in Louisiana, Mississippi, and Alabama 28% percent of customers in the three states are without power (see table below). Restoration of electricity in Florida is essentially complete.
- Inaccessibility as well as extensive damage from flooding and saltwater are major issues impacting electricity restoration. Well over 10,000 outside crews have arrived to provide assistance; however, availability of line crews remains an issue. As Florida utilities finish their restoration work their crews have begun to move to other states. Entergy reports that its single biggest problem to restoring power in the Greater New Orleans area is the lack of food, water and shelter for its repair crews who are literally sleeping in their trucks. The Department is coordinating with FEMA and AMTRAK to provide sleeper cars for emergency response crews in New Orleans.
- Colonial Pipeline is now operating at 66% of normal operating capacity. Once additional generators are activated at inactive pump stations, production will increase to 1.2 to 1.3 million barrels per day. Both gasoline and distillates are currently being transported and delivered. The line was full when it went down, so deliveries were possible within hours not days of restart. The company anticipates that it may be able to achieve approximately 74% of normal operating capacity by Sunday and 75% to 86% by early or mid-next week if additional electricity can be supplied to critical pump stations. Further increases cannot be made until normal power is restored. The capacity of Colonial is about 2.4 million barrels per day. Solutions for power restoration are underway.
- Plantation pipeline restored power to Collins last night. Plantation throughput will increase from 25 percent to approximately 95 percent as a result. At capacity, Plantation pipelines move about 620,000 barrels of gasoline, diesel and jet fuel.
- Entergy reports that it has restored electricity to all but three of the refineries in the New Orleans area it supplies with power. According to Entergy, the refineries still without power are the ConocoPhillips 250,000 b/d Alliance refinery in Belle Chasse, the ExxonMobil/PDVSA 187,000 b/d Chalmette refinery and the Murphy Oil 125,000 b/d refinery in Meraux.
- The President yesterday temporarily waived restrictions on foreign flagged vessels to ship fuels between US ports. Gasoline shipments from Houston to East Coast ports are anticipated.

- The Department of Energy has entered into three separate agreements to loan oil from the Strategic Petroleum Reserve. The first agreement, between the Department of Energy and ExxonMobil Corp. is for a loan of 3 million barrels of "sweet" crude and 3 million barrels of "sour" crude oil, and is larger than the 5.4 million barrels loaned during Hurricane Ivan. The second, an agreement between the Department of Energy and Placid Refining is for one million barrels of sweet crude oil. The third is for 1.5 million barrels of sweet crude to Valero. The crude oil will be loaned from the SPR under short-term contractual agreements and returned to the Reserve once supply conditions return to normal. The Department of Energy is working to finalize other loan agreements to loan oil from the SPR.
- ESF-12 has been activated by the Federal Emergency Management Agency to support multiple locations. OE staff are now at the National Response Coordination Center (NRCC) at FEMA HQ, FEMA Regions IV and VI, and the State Emergency Operation Centers (EOC) in Alabama, Louisiana, and Mississippi. OE has issued a call to secure additional staff to supplement and/or replace current, on-site personnel in certain areas with special emphasis on electrical engineers within the Power Marketing Administrations.

#### PETROLEUM AND GAS INFORMATION

- A report from MMS will be in the next Situation Report. <u>www.mms.gov</u>
- The LOOP is operational from St. James terminal. Entergy reports that they will restore electricity to Clovelly in 7-9 days.
- The Strategic Petroleum Reserve at New Orleans Elmwood office complex remains shut down. Bayou Choctaw, Bryan Mound, Big Hill and West Hackberry storage sites, however, are operational and will be able to provide crude oil in the loan program noted above.
- Capline, a crude oil pipeline serving the Midwest, was restarted yesterday at a rate of 720,000 barrels a day and can operate at reduced rates until the LOOP is fully operational.
- The Seaway Interstate Pipeline to Cushing, OK, is operating at full capacity (350,000 barrels a day). From Cushing, the Enbridge (Ozark) pipeline to Wood River and the BP pipeline to Chicago are operating at full capacity.

The following table displays refineries located in states impacted by Hurricane Katrina:

LA/MS/AL – Gulf Coast Refiner Impacts

Refinery	Location	State	Capacity (bbl/day)	Impact
ExxonMobil*	Baton Rouge	LA	493,500	Reduced Runs – increasing (SPR)
Valero	Krotz Springs	LA	80,000	Reduced Runs – (SPR)
Placid Oil*	Port Allen	LA	48,500	Reduced Runs – increasing (SPR)
ConocoPhillips*	Belle Chasse	LA	247,000	Shutdown – major damage
Marathon	Garyville	LA	245,000	Restarting
Motiva (Shell)	Convent	LA	235,000	Shutdown – no major damage/
				may restart in one week
Motiva (Shell)	Norco	LA	226,500	Shutdown – limited damage
Shell Chemical	St Rose	LA	55,000	Shutdown – no information
Exxon	Chalmette	LA	187,200	Shutdown – water damage
Valero	St. Charles	LA	185,000	Restarting
Murphy	Meraux	LA	120,000	Shutdown – water damage
ChevronTexaco*	Pascagoula	MS	325,000	Shutdown major damage
Shell Chemical	Saraland	AL	80,000	Shutdown – has power

# Port Arthur/Lake Charles Refiner Impacts

Refinery	Location	State	Capacity (bbl/day)	Impact
ExxonMobil*	Beaumont	TX	348,500	OK
Motiva (Shell)*	Port Arthur	TX	285,000	OK
Premcor	Port Arthur	TX	247,000	OK
Koch*	Corpus Christi	TX	156,000	OK
Total*	Port Arthur	TX	211,500	Reduced Runs
Citgo*	Lake Charles	LA	324,300	OK receiving crude
ConocoPhillips*	Lake Charles	LA	239,400	Reduced runs

# **Capline Pipeline – Midwest Refiner Impacts**

Refinery	Location	State	Capacity (bbl/day)	Impact
BP	Whiting	IN	410,000	Reduced Runs
BP	Toledo	OH	160,000	Reduced Runs
ExxonMobil*	Joliet	IL	238,000	OK
PDV Midwest	Lemont	IL	160,000	OK
Marathon	Robinson	IL	192,000	Reduced Runs – increasing
Marathon	Catlettsburg	KY	222,000	Reduced Runs – maintenance
Marathon	Detroit	MI	74,000	OK
Marathon	Canton	OH	73,000	OK
ConocoPhillips	Wood River	IL	306,000	OK
Premcor*	Memphis	TN	180,000	Reduced Runs – minimum rate
Premcor	Lima	OH	158,400	Reduced Runs
Sun	Toledo	OH	160,000	No information available

<sup>\*</sup> Refineries with company owned and operated on-site power generation.

# **ELECTRICITY INFORMATION**

#### STATE OUTAGE DATA

		% Customers w/o Power
Utility	Customers w/o Power	from Katrina (1)
Alabama	165,703	7%
Louisiana	730,424	59%
Mississippi	704,231	50%
Total	1,600,168	28%

<sup>\*</sup> Less than 1 percent of customers in Georgia and Florida remain without power due to Katrina

#### **STATE REPORTS**

#### Alabama

• Over 165,000, or 7 percent of customers, remain without power in Alabama. This is down from a peak of 867,809. Alabama Power crews have been assisted by utilities from at least 20 states and the District of Columbia. The company anticipates that 99 percent of power will be restored in the Birmingham area by the end of the day today. Ninety-nine percent of power in Tuscaloosa will be restored by the end of the day 9/4/05, and 99 percent of all Alabama Power customers will be restored by September 7.

	Total # of	Peak	Current	%	% from
	Customers	Outage	Outage	Outage	peak
Alabama Power	1,400,000	636,400	127,500	9%	-79%
Coops	491,500	116,409	28,213	5.7%	-75.7%
Municipals	495,000	115,000	10,000	2%	-91.3%
TOTAL	2,386,500	867,809	165,713	6.9%	-81%

• For cooperatives, the worst hit counties for coops are Monroe, Choctaw, Clarke, Baldwin, and Marion. Approximately 400 crews from out of state are helping in the restoration of the co-ops.

#### Mississippi and Louisiana

- Louisiana has 730,424 customers remaining without power as reported by the Louisiana Public Service Commission (8:00AM 9/05). Electricity service in Louisiana areas not impacted by flooding is slowly being restored.
- In Mississippi 704,231 customers are without power, 50 percent of customers in the state. Of these, 142,868 are in the Entergy service area; 175,000 are in the Mississippi Power service area; 338,363 are in the Mississippi Electric Power Association service area; and 48,000 are in the TVA area. Mississippi Power estimates that about 70 percent of its 8,000 miles of transmission and distribution lines will need to be repaired or replaced. Over 2,500 outside crews arrived Tuesday to provide assistance. About 5,000 outside crews are expected to be available by today. Mississippi Power estimates that it may take as long as four weeks to restore power in hard-hit areas.

- At 9 p.m., Sept.1, Entergy's transmission system had 92 lines and 99 substations out of service. The company is working to restore service for pumping, sanitation, medical, and housing facilities in the Central Business District of New Orleans as well as Jefferson Parish. Aerial damage assessments were impeded by the FAA no-fly restriction placed on Lake Ponchartrain and New Orleans. Additionally, access to flooded facilities is limited and preventing detailed assessments and security concerns continue to be an issue for crew safety while patrolling and restoring transmission facilities. Brackish water flooding in the City of New Orleans is also expected to significantly impact substation restoration, delay damage assessment and delay restoration in the City.
- Entergy now has 9,450 line and vegetation workers restoring service. Entergy is in contact with other utilities and contract workers to bring in additional workers and pre-position as many out-of-state utility crews as possible to quickly move in to help restore service. The company website reports that flooding, fuel supply and other barriers will make restoration more difficult.

# **Florida**

As of 7:00 AM 9/2/05, approximately 2,000 customers, less than 1 percent of customers in the state, remain without power in Florida due to Katrina. Florida utilities are releasing crews to travel to the devastated Gulf states to assist in restoration efforts there. Utilities in Florida are encouraging conservation by customers due to concerns about natural gas supplies. The Florida Reliability Coordinating Council issued a generating alert, calling for conservation of electricity.