

OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY (OE)
U.S. DEPARTMENT OF ENERGY
Hurricane Katrina Situation Report #18
September 3, 2005 (10:00 AM EDT)

HIGHLIGHTS

- Approximately 1.4 million customers remain without electric power due to Hurricane Katrina in Alabama, Louisiana, and Mississippi, or 29 percent of customers. (See table below). Inaccessibility as well as extensive damage from flooding and saltwater continue to be major issues impacting electricity restoration.
- A group of 26 countries, including the United States, yesterday agreed to release oil, gasoline or other petroleum products from their emergency reserves in an attempt to bring down soaring prices and avert domestic shortages. This could eventually stabilize retail prices and help alleviate scattered shortages in some parts of the U.S. International Energy Agency members countries unanimously agreed to sell on the market a total of 2 million barrels of crude oil and petroleum products per day to make up for disruptions caused by Hurricane Katrina. Sales may last for 30 days but could be extended if needed.
- Colonial Pipeline continues to add capacity to both its gasoline and distillate Main Lines. Lines 1 and 2, which run from Houston, TX, to Greensboro, NC, are now operating at approximately 70% of normal capacity. Distributed generating equipment is now being brought on line, and additional power generation will continue to be brought on line over the next 24 hours. Colonial expects to achieve 77% of normal capacity by midnight Saturday (9/3/05), and 86% of normal capacity by midnight Sunday (9/4/05.)
- The Plantation Pipeline is now running at 100 percent capacity.
- The President temporarily waived restrictions on foreign flagged vessels to ship fuels between US ports. The Jones Act, requiring U.S.-flag coastwise qualified vessels, has been waived for crude oil and refined petroleum products from September 1 through 19 because of Hurricane Katrina.
- The Department of Energy has entered **into five** 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. The second 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 fourth and fifth loans were to BP for 2 million barrels and Marathon 1.5 million (one million sweet and .5 million sour) barrels respectively.** 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 total loan volume is 12.6 million barrels.

- 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

- According to the Friday's MMS reports, 40.1 percent of the 819 manned platforms and 39.6 percent of the 137 rigs are currently operating in the Gulf of Mexico (GOM). Shut-in oil production is at 1,327,953 barrels of oil per day. This shut-in oil production is equivalent to 88.5% of the daily oil production in the GOM, which is currently approximately 1.5 million barrels of oil per day. Shut-in gas production is 7.248 billion cubic feet per day. This shut-in gas production is equivalent to 72.5 percent of the daily gas production in the Gulf of Mexico, which is currently approximately 10 billion cubic feet per day. The cumulative shut-in gas production is 49 billion cubic feet, which is equivalent to 1.3 percent of the yearly production of gas in the GOM (approximately 3.65 TCF).
- The Captain of the Port New Orleans has established a safety zone on the Lower Mississippi River from the Southwest Pass sea buoy to mile marker 235 (190 Highway bridge). All vessels with a draft of greater than 35 feet are prohibited from entering this safety zone unless they have been granted permission by the Captain of the Port New Orleans. All vessels transiting within this safety zone are restricted to daylight hour only transits, and are restricted to one-way traffic in some areas. The Gulf Intra Coastal Waterway (GICW) remains closed from mile 55, West of Harvey Lock (Houma) to mile 60, East of Harvey Lock. The Inner Harbor Navigational Canal (IHNC) lock is currently non-operational. Baptiste Collette is navigable for vessels with drafts of 9 feet 6 inches or less. Navigation is also limited to daylight hours.
- The Intracoastal Waterway from Mobile to Carabelle, Fla., is open, and tug and barge traffic has resumed in the Port of Mobile. All other ports and waterways from Mobile to New Orleans remain closed. The Port of Mobile is open to vessels with 12 feet of draft or less.
- Enterprise Product Partners has reported that the majority of the firm's five major gas processing plants in Louisiana were waiting for the return of power knocked out by Katrina, a process that local electric utility Entergy has said could take from seven to 10 days.
- Columbia Gulf Transmission, a natural gas pipeline company, reported that it has essentially resumed normal operations, with the exception of some communication failures in Louisiana and a lack of electric service at our Houma, La., compressor station. Crews conducted an assessment of offshore and onshore facilities following the

hurricane, and reported no significant damage to company facilities. Like other natural gas pipeline operators in the region, Columbia Gulf experienced significantly reduced natural gas flow from offshore as many producers shut in their wells. Although offshore portions of Columbia Gulf's gas supply were significantly reduced, the NiSource pipelines on the other hand are able to meet all firm customer commitments.

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, may restart Sunday
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 but may take up to two weeks to be operational
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 operations but attempting to return to full operations
Marathon	Catlettsburg	KY	222,000	Reduced operations but attempting to return to full operations
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

* 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 (1)
Alabama	127,748	5%
Louisiana	678,850	63%
Mississippi	591,548	42%
Total	1,398,146	29%

*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.

STATE REPORTS

Alabama

- In Alabama, 127,748 customers remain without power. This represents 5 percent of total customers in the state.
- Alabama Power has restored power to 82 percent of customers statewide who were affected by Hurricane Katrina. As of 4 p.m. Friday 9/2/05, 116,253 customers remained without power statewide, down from a peak of 636,400. The company anticipates ninety-nine percent of all Alabama Power customers will be restored by September 7. Alabama Power outages by division are as follows: Birmingham: 5,676, Tuscaloosa: 10,393, and Mobile: 100,184.
- Cooperatives and Municipals report two percent or less of customers remain without power.

	Total # of Customers	Peak Outage	Current Outage	% Outage	% from peak
Alabama Power	1,400,000	636,400	116,253	8.3%	-82%
Coops	491,500	116,409	8,495	1.7%	-92%
Municipals	495,000	115,000	5,000	2%	-96%
TOTAL	2,386,500	867,809	127,748	5.4%	-85%

Mississippi and Louisiana

- Louisiana has 678,850 customers remaining without power as reported by the Louisiana Public Service Commission (9:00AM 9/3).
- In Mississippi approximately 591,548 customers are without power, 42 percent of customers in the state. Of these, 95,103 are Entergy customers; 159,570 are Mississippi Power customers; 317,363 are Mississippi Electric Power Association customers; and 19,512 are TVA customers. Mississippi Power estimates that it may take as long as four weeks to restore power in hard-hit areas. See table below for outages by county in Mississippi.
- Mississippi Electric Power Associations has 5,350 workers involved in the restoration. More than 50,000 utility poles were destroyed. Mississippi Power reports more than 4,000 outside workers have arrived in the company's service area to assist with the effort, with another 3,000 scheduled to arrive within the next two days. New damage assessments indicate more than 750 miles of lines are on the ground across Mississippi Power's system. Nearly 5,000 poles will have to be replaced, and thousands more repaired.
- Entergy crews in Mississippi have turned their attention to making repairs to electrical facilities that will return service to the largest number of customers in the shortest period of time. In Louisiana, crews are working their way into the most heavily damaged areas, restoring service as they go. At 9 p.m. Sept. 2, Entergy's transmission system had 77 lines and 74 substations out of service.
- Entergy now has 9,650 line and vegetation workers, plus other support, working to restore 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

- The Florida Reliability Coordinating Council is continuing its Generating Capacity Alert from September 2 through September 5, and is calling for public appeals for conservation of electricity. Thirty to thirty-five percent of the region generates electricity from natural gas, which normally enters Florida via two pipelines originating in the Gulf of Mexico. Also, Florida does not have any major underground storage facilities from which to withdraw natural gas reserves. Supply and distribution of natural gas from the Gulf have been significantly reduced.