

OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY (OE)
U.S. DEPARTMENT OF ENERGY
Hurricane Katrina Situation Report #17
September 2, 2005 (6:00 PM EDT)

HIGHLIGHTS

- Approximately 1.5 million customers remain without electric power due to Hurricane Katrina. These are primarily in Louisiana, Mississippi, and Alabama – 26% percent of customers in the three states are without power (see table below).
- 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. 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.
- The Secretary of Energy announced today the International Energy Agency (IEA) will support the United States disaster relief by supplying additional crude and refined products to the United States.
- Colonial Pipeline is now operating at 66% of normal operating capacity. 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 has announced that they will be 100 percent operational by late this evening. Plantation pipeline moves about 620,000 barrels of gasoline, diesel and jet fuel per day.
- 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. 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.

- WTI crude oil spot price dropped from \$69.50 yesterday afternoon to \$66.91 today. Unleaded gasoline futures dropped from \$2.409 yesterday to \$2.175 at closing – a drop of 9.7 percent on news of the SPR and IEA petroleum releases.
- 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

- According to the latest 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 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 LOOP reports operational capability at 60% via St. James terminal. Facilities at Clovelly continue to operate on auxiliary power.
- The Strategic Petroleum Reserve at New Orleans Elmwood office complex remains shut down.
- Capline, a crude oil pipeline serving the Midwest, was restarted yesterday at a rate of 720,000 barrels a day and will operate at reduced rates until the LOOP is fully operational. Capline runs roughly 1.2 millions barrels a day of crude oil to the Midwest.
- 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, may start in one week
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	151,598	6%
Louisiana	731,758	59%
Mississippi	653,556	46%
Total	1,536,912	31%

*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

- Over 151,000, or 6 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 ninety-nine percent of all Alabama Power customers will be restored by September 7.

	Total # of Customers	Peak Outage	Current Outage	% Outage	% from peak
Alabama Power	1,400,000	636,400	124,000	8.8%	-81%
Coops	491,500	116,409	22,598	4.5%	-80%
Municipals	495,000	115,000	5,000	1%	-97%
TOTAL	2,386,500	867,809	151,598	5.3%	-83%

- For cooperatives, the worst hit counties for coops are Monroe, Choctaw, Clarke, Baldwin, and Marion.

Mississippi and Louisiana

- Louisiana has 731,758 customers remaining without power as reported by the Louisiana Public Service Commission (11:00AM 9/2).
- In Mississippi 653,556 customers are without power, 46 percent of customers in the state. Of these, 137,705 are in the Entergy service area; 175,000 are in the Mississippi Power service area (not update from last report); 323,995 are in the Mississippi Electric Power Association service area; and 16,896 are in the TVA area. Mississippi Power estimates that it may take as long as four weeks to restore power in hard-hit areas.

- Entergy reports that continued 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. The company website reports that fuel supply, housing for line workers and security issues will make restoration more difficult.
- 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

- 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.