# OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY (OE) U.S. DEPARTMENT OF ENERGY Hurricane Katrina Situation Report #12 August 31, 2005 (10:00 AM EDT)

#### **HIGHLIGHTS**

- Some 2.26 million customers have reported outages due to Hurricane Katrina in Louisiana, Mississippi, Alabama, Florida, and Georgia (see table below). Louisiana reports approximately 853,700 customers without power. Mississippi has about 958,000 customers without power, and Alabama has approximately 433,500 customers without power.
- Extensive flooding continues as a major issue for electricity restoration. Availability of line crews is also an issue due to the extent of the damage in the area. As Florida utilities finish their restoration work their crews will begin to head towards other states.
- 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.
- The Waterford III Nuclear Power plant sustained no damage except to buildings off site.
   Post disaster preparations are being initiated by FEMA and the NRC to clear the facility for a restart.
- Electricity outages are a major issue in restoration of the Colonial Pipeline and the Plantation Pipeline. Key pump stations in LA and MS are without power. The LA Public Service Commission is working with power companies to assess the situation and provide guidance on priorities. FEMA Region IV is working with the MS EKOC on the same issue. OE is working closely with companies, states, and other Federal agencies to deal with these issues -- a key issue has to do with generators needed by the Colonial Pipeline. DOT, FEMA, and the Corps of Engineers are working with OE on this issue. In addition, OE has worked with the Mississippi State Highway Patrol to develop a procedure whereby the crews making emergency deliveries of those generators can cross state lines closed to normal traffic.

- EPA issued waivers for Florida, Alabama, Mississippi and Louisiana to make available to first responders fuel that is currently restricted due to Clean Air Act restrictions. EPA will allow all parties in the fuel distribution system to supply and sell a 9.0. RVP gasoline and a 500 ppm-sulfur diesel with visible red dye. OE worked with EPA to obtain the waiver, which is effective immediately and will run through Sept. 15.
- Secretary Bodman announced that DOE is working closely with companies who have submitted requests for loans of crude oil from the Strategic Petroleum Reserve.

#### PETROLEUM AND GAS INFORMATION

- According to MMS, shut-in <u>oil production</u> is at 1,427,969 barrels per day. This production is equivalent to 95% of the daily oil production in the Gulf of Mexico, which is usually approximately 1.5 million barrels per day. Shut-in <u>gas production</u> is currently at 8,798 billion cubic feet per day, equivalent to 88% of daily gas production in the Gulf of Mexico.
- According to the press, the following operators have reported:
  - Royal Dutch Shell said its Mars platform sustained significant damage
  - BP observed no damage to several of its facilities from helicopter flyovers
  - Kerr-McGee plans to restart half of its 130,000 bbl/day production over the weekend
  - ExxonMobil, Conoco, and Apache are inspecting their facilities
- The Strategic Petroleum Reserve at New Orleans Elmwood complex remains shut down. Bayou Choctaw, Bryan Mound, Big Hill and West Hackberry sites, however, are operational and will be able to provide crude oil in the loan program noted above.
- Colonial and Plantation petroleum product pipelines, which provide the majority of gasoline, diesel fuel, and jet fuel to the Southeast, Mid-Atlantic, and Northeast states, are currently not operating due to loss of power at key pump stations in LA and MS.
- Dixie pipeline (a propane line) is also shut down. Other product pipelines are not experiencing any problems: TEPPCO is moving products from Texas into the Northeast and Centennial is moving products from Texas into Illinois. Capline, a crude oil pipeline serving the Midwest, is shut down.

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

### Refineries Located in States Impacted by Hurricane Katrina

			Bbl/day	
COMPANY_NAME	STATE	SITE	(calendar)	Status
Shell Chemical	Alabama	Saarland	80,000	Not available
Citgo Petroleum Corp. *	Louisiana	Lake Charles	324,300	Loss of supply from Calcasieu Channel closing. May reduce runs tomorrow
ConocoPhillips *	Louisiana	Belle Chasse	247,000	Shutdown; expect water damage
ConocoPhillips *	Louisiana	Lake Charles	239,400	Loss of supply from Calcasieu channel closing
Chalmette Refining LLC	Louisiana	Chalmette	187,200	Shutdown; expect water damage
ExxonMobil Refining & Supply Co. *	Louisiana	Baton Rouge	493,500	Was at reduced runs for a short time; back to normal operations.
Marathon Ashland Petroleum LLC.	Louisiana	Garyville	245,000	Shutdown
Murphy Oil USA Inc.	Louisiana	Meraux	120,000	Shutdown – expect water damage
Motiva Enterprises LLC	Louisiana	Convent	235,000	Shutdown
Motiva Enterprises LLC	Louisiana	Norco	226,500	Shutdown
Placid Oil *	Louisiana	Port Allen	48,500	Shutdown – plant on warm circulation
Valero Refining Co Louisiana	Louisiana	Krotz Springs	80,000	Reduced runs
Valero Saint Charles Refinery	Louisiana	Norco	185,000	Shutdown – out 1 or 2 weeks; expect water damage
Chevron USA Inc. *	Mississippi	Pascagoula	325,000	Shutdown
Premcor	Tennessee	Memphis	180,000	Loss of Capline supply; Reduced runs
Koch *	Texas	Corpus Christi	156,000	None
Total *	Texas	Port Arthur	285,000	Loss of supply; Reduced runs

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

# **ELECTRICITY INFORMATION**

# **STATE OUTAGE DATA (8/31/05 7:00 AM)**

Utility	Customers w/o Power	Total Customers	% Customers w/o Power from Katrina
Alabama	433,500	2,339,004	18.5%
Florida	80,705	9,075,577	<1%
Georgia	12,500	4,156,052	<1%
Louisiana	853,713	2,130,925	40%

Mississippi	957,815	1,420,571	67%
Total	2,257713	19,122,129	12%

#### **STATE REPORTS**

#### **Alabama**

- 433,500 customers (as of 7:15 AM CDT 8/31/05) are without power in Alabama due to Katrina. Of these, 335,984 are in the Alabama Power service area. In addition, 77,558 Co-op customers have reported outages and 20,000 Municipal customers have reported outages. Alabama Power Company has crews arriving from South Carolina and North Carolina. Alabama Power has at least 700 poles down and almost 6,400 spans of distribution wire down. The company has warned customers that although crews have already restored power to many of the customers who lost power during Katrina, remaining outages may take longer to restore. In addition, the company has commitments from utilities in New York, New Jersey, Massachusetts, Ohio and Oklahoma to support restoration efforts. The Co-op Association stated that fuel for their restoration crews is becoming an issue. Suppliers are allocating fuel based on the "Regulation of Allocation", and the Co-ops are concerned they may not have enough fuel to keep all their crews operating.
- Alabama Public Service Commission- Gas Pipeline Safety staff reported that Mobile Gas cut off service to about 40 customers in the Bayou la Batre area last night. Coden, along with areas in and around the river, has been shut in at the regulator station. Many of their facilities in downtown Mobile are under 12 feet of water but pressure is being maintained in order to minimize damage by keeping water out of the piping. No leaks or damage has yet been detected in the downtown areas.
- Legacy (an offshore drilling company) reported that the US Coast Guard has blocked all
  channels. They are not able to assess the damage to rigs in the Dauphin Island area as
  there are no helicopters available for hire.
- An oil rig which broke away and struck a bridge also sheared a pipeline owned by Plains Marketing.

#### Mississippi and Louisiana

- 957,815 (as of 8:30 AM 8/31/05) customers are without power in Mississippi due to Katrina. Of these, 236,876 are in the Entergy service area, 196,000 are in the Mississippi Power service area, and 425,939 are in the Mississippi Electric Power Association service area. This is an increase from the last report due to a report of 100,000 outages from TVA.
- Louisiana Public Service Commission reports approximately 853,713 customers, or 40% of customers in the state, are without power (as of 2:00 AM 8/31/05). This number includes all utility, cooperatives, and municipal power providers affected by hurricane Katrina.

Louisiana Outages by Major Utility (8/31/05 2:00 AM)

Electric Utility	Customers w/o Power	Number of Consumers (1)	% customers w/o power
Entergy Louisiana Inc	421,447	653,929	64%
Entergy Gulf States Inc	80,445	342,443	23%
Cleco Power LLC	79,672	257,299	31%
Entergy New Orleans Inc	198,762	215,163	92%
Dixie Electric Membership Corp	39,415	85,307	46%
Washington-St Tammany E C, Inc	20,000	41,304	48%
South Louisiana Elec Coop Assn	13,912	19,180	73%
City of Morgan	60	6,000	<1%

■ Just under 1 million Entergy customers remain without power (as of 5 AM 8/31/05) in Louisiana and Mississippi. Hurricane Katrina caused extensive damage in the Entergy service area and, due to the scope and amount of damage to its electrical system, Entergy expects a long and difficult restoration. Entergy has 4,000 line workers committed to restoring service and is working to bring in more. 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.

#### **Florida**

Approximately 80,700 customers, 1 percent of customers in the state, remain without power in Florida due to Katrina. This includes 69,450 Florida Power & Light customers and 11,255 Gulf Power customers. All Cooperative customers have been restored. FPL has restored power to 95 percent of its customers as of 6:00 AM 8/31. FPL expects to restore all of

Broward County customers by Thursday night, and all of Miami-Dade by Friday night. They report that as soon as work is completed in Florida line personnel and contractors will be joining other utility companies and contractors who will be headed to the Gulf Coast area to support that restoration effort.

• Gulf Power estimates that power will be restored to all customers who can take power by Wednesday evening (8/31). Gulf Power plans to send crews on 9/1 to support Mississippi Power restoration efforts.

# <u>Georgia</u>

