### OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY (OE) U.S. DEPARTMENT OF ENERGY Hurricane Katrina Situation Report #11 August 30, 2005 (4:00 PM EDT)

# **HIGHLIGHTS**

- Some 2.6 million customers have reported outages due to Hurricane Katrina in Louisiana, Mississippi, Alabama, Florida, and Georgia (see table below). Louisiana reports approximately 890,300 customers without power. Mississippi has about 909,200 customers without power and Alabama has approximately 624,400 customers without power.
- Extensive flooding is a major issue for electricity restoration. The size of the hurricane, the extensive physical damage to property and the number of utilities impacted will significantly slow the speed of restoration efforts.
- Secretary Bodman issued a press release on August 29 noting that should circumstances warrant, the President can direct that petroleum be withdrawn from the Strategic Petroleum Reserve and sold to refineries.
- OE is currently working with EPA to issue waivers for those States impacted by Katrina. These waivers would make available to first responders fuel that is currently restricted due to Clean Air Act restrictions.
- Katrina has been downgraded to a tropical depression with sustained winds at near 35 mph. Katrina is expected to become extratropical during the next 12 to 24 hours. The center of the tropical depression is about 25 miles south of Clarksville, Tennessee and is moving toward the north-northeast near 21 mph. The latest NOAA information on the storm track is available at: <a href="http://www.nhc.noaa.gov/">http://www.nhc.noaa.gov/</a> and the National Hurricane Center has made its last public advisory on the storm. The next tropical depression in the Caribbean had degenerated but is still being monitored for possible signs of regeneration.
- 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 and Mississippi. Staff will arrive at the LA EOC this evening.

## PETROLEUM AND GAS INFORMATION

 Gulf Intercoastal Waterways are fully open along the Lower Mississippi and Port Allen Route. Dauphin Island and the Pascagoula Harbor are in good shape. The Mobile Ship Channel is passable around a mobile offshore drilling unit that is lodged under the bridge at the north end of Mobile Harbor. A BP terminal in Mobile was damaged by an adrift vessel. No problems are anticipated east of Mobile along the Gulf Intercoastal Waterway. An ocean-going barge is aground near Belle Chasse, LA.

- According to the U.S. Coast Guard, the Calcasieu Ship Channel was closed Sunday evening as a precaution. Although Hurricane Katrina did not pass over the channel, high winds associated with the storm lead officials to keep it closed until 6:08 am Tuesday morning. One inbound ship and two outbound vessels were waiting when the channel reopened. Tankers typically move crude oil, gasoline, LNG, chemicals, aggregate, bulk agricultural, and bulk pet-coke through this narrow channel. The channel, which connects Lake Charles with the Gulf of Mexico, is one of the busiest ports in the country -- 11th largest based on tonnage.
- According to press reports, the Louisiana Offshore Oil Port did NOT suffer major damage as a result of Hurricane Katrina. Both offshore and onshore LOOP operations remain suspended, however, until power is restored. Also, Port Fourchon, the Louisiana port that handles 18% of domestic oil and gas and 13% of imports, has suffered extensive damage. Floodwaters have cut off access to the port.
- 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.
- 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.
- 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.
- The LA Public Service Commission is working with the power companies to assess the situation and provide guidance on priorities. FEMA Region IV is also working with the Mississippi Emergency Operations Center on the same issues

Pump Station	Status
Baton Rouge, LA	Restored
Felixville, LA	Out of Service
McComb, MS	Out of Service
Columbia, MS	Out of Service
Collins Delivery, MS	Out of Service
Collins Injection, MS	Out of Service
Kola, MS	Out of Service

• The pump stations which lost power on the Colonial Pipeline are as follows:

• Colonial pipeline is currently looking to secure generators to power the remaining outof-service pump stations until power can be restored by the utility.

•	The pump star	tions which lost power	on the Plantation F	Pipeline are as follows:
---	---------------	------------------------	---------------------	--------------------------

Pump Station	Status
Collins, MS (also applies to Colonial)	Out of Service
Osyka, MS	Out of Service
Dock station, Baton Rouge	Out of Service
Meridian, MS	Out of Service
Pascagoula, MS	Out of Service
McClain, MS	Out of Service
Hathorn, MS	Out of Service
Fluker, MS	Out of Service

- 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:

			Bbl/day (calendar	
COMPANY_NAME	STATE	SITE		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
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

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

# **ELECTRICITY INFORMATION**

STATE OUTAGE DATA (0/50/05 5.00 TM)						
Customers			% Customers w/o			
Utility	w/o Power	<b>Total Customers</b>	Power from Katrina			
Alabama	624,427	2,339,004	27%			
Florida	194,856	9,075,577	2%			
Georgia	12,500	4,156,052	<1%			
Louisiana	890,294	2,130,925	42%			
Mississippi	909,173	1,420,571	64%			
Total	2,631,250	19,122,129	14%			

## STATE OUTAGE DATA (8/30/05 3:00 PM)

#### STATE REPORTS

#### <u>Alabama</u>

Approximately 624,427 customers (as of 2:30 PM 8/30/05) are without power in Alabama due to Katrina. Of these, 476,606 are in the Alabama Power service area. In addition, 102,821 Coop customers have reported outages and 45,000 Municipal customers have reported outages. Alabama Power Company reports that early indications are that Hurricane Katrina has caused extensive damage to the Alabama Power system including the company's transmission system and other infrastructure, and customers should expect extended outages. Katrina is the second-worst storm in Alabama Power history in terms of outages, leaving 636,891 customers without power at its peak. Company officials anticipate that restoration efforts may take far longer than those following Hurricane Ivan, which left more than 825,000 customers without power in 2004. Ivan restoration took eight days. Company emergency crews worked through the night. Damage assessment teams were out at first light today. The company hopes to have a full assessment of the damage later today. Alabama Power has commitments from outside utilities to support our restoration efforts. However, resources are limited and are also needed in hard hit areas in Mississippi and Louisiana.

## Mississippi and Louisiana

Approximately 909,200 (as of 2:30 PM 8/30/05) customers are without power in Mississippi due to Katrina. Of these, 287,234 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. Mississippi Power will begin the rebuilding process today to restore service to its customers. All of the company's 195,000 customers are without power in the aftermath of Hurricane Katrina. According to the president and CEO of Mississippi Power the company "has suffered the worst catastrophe in our company's history." The company expects later today to have an initial assessment of the extent of time necessary to restore electric service to customers." Thousands of additional personnel are poised and ready to assist our employees in beginning the work of rebuilding our electric system." Initial assessments to determine the extent of destruction began Tuesday at daybreak, and to support restoration efforts, more than 2,000 additional workers from outside the company have begun to arrive.

Louisiana Public Service Commission reports approximately 890,300 customers, or 42% of customers in the state, are without power (as of 2:00 PM 8/30/05).

Louisiana Outage	y (0/30/05 2:00 PN	1)	
Electric Utility	Customers w/o Power	Number of Consumers (1)	% customers w/o power
Entergy Louisiana Inc	420,711	653,929	64%
Entergy Gulf States Inc	97,376	342,443	28%
Cleco Power LLC	80,810	257,299	31%
Entergy New Orleans Inc	201,369	215,163	94%
Dixie Electric Membership Corp	56,056	85,307	66%
Washington-St Tammany E C, Inc	20,000	41,304	48%
South Louisiana Elec Coop Assn	13,912	19,180	72%
City of Morgan	60	6,000	<1%

## Louisiana Outages by Major Utility (8/30/05 2:00 PM)

- Entergy (Louisiana and Mississippi) has told its customers that they will experience extended power outages and that the severe damage caused by Hurricane Katrina to Entergy's system will require weeks to rebuild. Flooding, blocked access or other obstacles will hamper restoration.
- •
- The Waterford III Nuclear Power plant sustained no damage except to some buildings off site. Post disaster preparations are being initiated by FEMA and the NRC to clear the facility for a restart.

# <u>Florida</u>

- Approximately 194,900 customers, 2 percent of customers in the state, remain without
  power in Florida due to Katrina. This includes 136,300 Florida Power & Light customers,
  57,491 Gulf Power customers, and 1,065 Cooperative customers. FPL has reported its goal
  of restoring power to 90 percent of its customers by tonight has bee achieved. FPL fully
  expects to restore all of Broward County customers by Thursday night, and all of MiamiDade by Friday night.
- Gulf Power estimates that power will be restored to all customers by Wednesday evening. Gulf Power plans to send crews to support Mississippi Power restoration efforts after power has been restored to all their customers.
- The Florida port of Pensacola remains closed due to lack of power.

# Florida County Outage Data: (As of 8/30/05 3:00 PM EDT)

	Customers		% Customers w/o	
County	w/o Power	<b>Total Customers</b>	Power	
Broward	27,300	880,231	3%	
Dade	109,000	984,905	11%	
Escambia	45,005	138,969	32%	
Okaloosa	4,658	95,097	5%	
Santa Rosa	8,893	63,156	14%	

# <u>Georgia</u>

 Approximately 12,500 customers are without power in Georgia. All of those without power are Georgia Power customers. Georgia Power has stated that resources are available for quick restoration