



U.S. Department of Energy
Emergency Support Function 12

Hurricane Gustav Situation Report # 6

September 4, 2008 (10:00 AM EDT)

http://www.oe.netl.doe.gov/emergency_sit_rpt.aspx

Summary

Electricity		
Impacted State	Electric Customer Outages	% of State Out
Arkansas	66,132	4%
Louisiana	925,963	43%
Mississippi	37,408	3%
TOTAL:	1,029,503	
Petroleum & Natural Gas		
	Amount	% Capacity Out*
Crude Oil Production Shut-In (b/d)	1,245,708	95.8%
Natural Gas Production Shut-in (mmcf/d)	6,777	91.6%
Refinery Capacity Shut down (b/d)	2,483,563	NA

Total state customers are based on 2006 EIA Customer Data.

Note: due to a large number of service providers, including investor owned utilities and cooperatives, the number of customer outages reported may not be comprehensive.

Source:

Crude Oil and Natural Gas Production Data from Minerals Management Service.

Refinery Status confirmed by company or on company web site and through various trade press sources.

* % capacity out represents percent of production capacity in the Gulf of Mexico.

Highlights:

- In the States of Arkansas, Louisiana and Mississippi, as of approximately 8:30 AM EDT September 4, 2008, there are 1,029,503 customers reported without power, including 925,963 in Louisiana, 37,408 in Mississippi, and 66,132 in Arkansas. This represents a decrease of 192,556 customers without power since yesterday's 3:00 PM EDT Situation Report #5 when 1,222,059 customer outages were reported. Since that report, power has been restored to 163,000 customers in Louisiana, over 23,000 customers in Arkansas, and 6,000 customers in Mississippi.
- The damage to the Entergy system is extensive and it is the largest damage to have ever occurred in the Baton Rouge area. Entergy is continuing to assess damage in order to estimate when electricity will be restored to specific locations. The "islanded" portion of the transmission system in southeast Louisiana, south of Lake Pontchartrain, was reconnected to the Entergy system by restoring transmission line connections to the east and west. In some areas where the damage is the most extensive or where access is the most difficult, it could be several weeks before necessary repairs are completed and customers are restored.



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- The LOOP reports that they have several days of normal throughput in storage and will begin moving that crude oil when power is restored. Damage to Entergy's coastal transmission system is delaying power from reaching the LOOP and its offshore facilities. LOOP officials are starting up generators once transportation and communications logistics improve.
- As of 11:30 PM EDT September 3, 2008, Entergy's Waterford 3 and River Bend nuclear power plants remain shut down. Entergy reports personnel at both plants have completed site assessments and are working closely with the Nuclear Regulatory Commission and Federal Emergency Management Agency to complete all necessary regulatory requirements in order to start up the plants.
- As of 6:00 PM EDT September 3, 2008, the following Strategic Petroleum Reserve (SPR) facilities are operational: Bryan Mound, TX and Big Hill, TX, and West Hackberry, LA. The SPR facility in Bayou Choctaw, LA, remains shut down due to lack of commercial power.
- As of 17:30 EDT September 3, 2008, conditions have improved at Mobile, AL, port with ship up to 35 feet draft permitted to exit the port. The Coast Guard is working on a case-by-case basis allowing vessels to enter the ports of Pascagoula, MS and New Orleans, LA. Over 200 miles of the Mississippi River from Harvey Canal Lock in New Orleans to Baton Rouge and the Gulf Inter-coastal Waterway from New Orleans to Pensacola remain closed, with the exception of shallow draft vessels. The Coast Guard and U.S. Army Corps of Engineers expect to complete all surveys and open the Lower Mississippi River to all traffic later today, September 4.

ESF 12 Actions:

- ESF-12 personnel are staffing the FEMA Region VI Regional Response Coordination Center (RRCC) in Denton, TX, FEMA Region VI Joint Field Office (JFO) in Baton Rouge, LA, the FEMA Region IV RRCC in Atlanta, GA, the FEMA Region III RRCC in Philadelphia, PA and the National Response Coordination Center (NRCC) in Washington, DC. The FEMA Region VI Austin Interim Operation Facility has been demobilized.
- U.S. Department of Energy ESF-12 assisted Entergy in gaining the use of aircraft capable of making the much needed damage assessments of transmission lines.



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Situation Report Detail

Petroleum & Gas Information

Oil & Gas Offshore Production Shut In Status for Affected Area			
Location	Amount Shut In	Pre-event Production	% Shut In
Crude Oil (B/D)	1,245,708	1,300,000	95.8%
Natural Gas (MMCF/D)	6,777	7,400	91.6%

Source: Minerals Management Service

- As of 12:30 PM EDT, September 3, 2008, the Minerals Management Service (MMS) reports 6,777 million cubic feet per day of the Gulf’s natural gas production remains shut-in, equivalent to 91.6 percent of the Gulf production. MMS reports 1,245,708 barrels/day of the Gulf’s crude production remains shut-in, equivalent to 95.8 percent of the Gulf’s crude production. A total of 559 production platforms, or 83.5 percent of the Gulf’s 717 manned platforms, have been evacuated. Personnel from 91 rigs, representing 75.2 percent of those operating in the region, had been removed.
- Shell, ExxonMobil, and other operators report that they have redeployed personnel on September 3 to most production and drilling assets in the Gulf of Mexico (GOM) not in the direct path of Gustav. Restart and production ramp up procedures will commence at most locations today and into the weekend. Timing of production ramp up at each facility will vary.
- As of 9:00 AM EDT September 4, 2008, there is minor improvement in the status of the refineries impacted by Gustav. Three refineries in reduced runs have returned to normal operations: ExxonMobil in Baytown, Valero in Houston, and Valero in Texas City. See table below.
- Plantation pipeline is working on procuring generators for their Baton Rouge facility which remains shut down due to lack of power. The pipeline is currently on reduced flows. In addition, Centennial pipeline remains shutdown due to maintenance unrelated to the hurricane.
- Colonial's main distillate line between Houston and Greensboro resumed service Tuesday morning after being idle for several hours due to a lack of supply. The main gasoline line continues to operate at reduced rates as do stub lines on the Colonial system. Colonial reports that there have been supply improvements as they have begun product injections from Lake Charles. Visual inspections of the three pumping stations without power in central Louisiana -- Krotz Springs, Baton Rouge and Felixville – find them to be in good condition.



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Refineries in the Path of Gustav						
Refinery Impacted	Location	Capacity (B/D)				
		Operating	Shut Down	Restarting	Reduced Runs	Back to Normal
Shell	Saraland, AL	86,000				
Calcasieu	Lake Charles, LA	78,000	78,000			
Chalmette Refining	Chalmette, LA	192,760	192,760			
Citgo	Lake Charles, LA	429,500			429,500	
ConocoPhillips	Belle Chasse, LA	247,000	247,000			
ConocoPhillips	Westlake, LA	239,400	239,400			
ExxonMobil	Baton Rouge, LA	503,000	503,000			
Marathon	Garyville, LA	256,000	256,000			
Motiva	Convent, LA	235,000	235,000			
Motiva	Norco, LA	236,400	236,400			
Murphy Oil	Meraux, LA	120,000	120,000			
Placid Refining	Port Allen, LA	56,000	56,000			
Shell	Saint Rose, LA	55,000	55,000			
Alon (Formerly Valero)	Krotz Springs, LA	80,000	80,000			
Valero	Norco, LA	185,003	185,003			
Chevron	Pascagoula, MS	330,000			330,000	
BP	Texas City, TX	467,720			467,720	
Citgo	Corpus Christi, TX	156,000				
ConocoPhillips	Sweeny, TX	247,000				
Deer Park	Deer Park, TX	329,800				
ExxonMobil	Baytown, TX	567,000				567,000
ExxonMobil	Beaumont, TX	348,500			348,500	
Flint Hills Resources	Corpus Christi, TX	288,126				
Houston Refining	Houston, TX	270,600				
Marathon	Texas City, TX	76,000				
Motiva	Port Arthur, TX	285,000			285,000	
Pasadena Refining	Pasadena, TX	100,000			100,000	
Total Petrochemicals	Port Arthur, TX	232,000		232,000		
Valero (formerly Premcor)	Port Arthur, TX	289,000			289,000	
Valero	Corpus Christi, TX	142,000				
Valero	Houston, TX	83,000				83,000
Valero	Texas City, TX	199,500				199,500
Valero	Three Rivers, TX	93,000				
TOTAL		7,503,309	2,483,563	232,000	2,249,720	849,500

Note: The table does not include all refineries in the PADD III, Gulf Coast Region.

Sources: Confirmed by company or on company web site. Various trade press sources.

- As of September 4, 2008, twenty-two major natural gas processing plants that were shut down have reported no major damage to their facilities.
 - o The Yscloskey, Toca, and Larose processing plants have reported that they have no significant damage to their facilities but have no power to start up operations. Enterprise, which owns or has some ownership in nine plants that shut down in LA has also reported no damage but the loss of power represents the biggest challenge to commence operations.
 - o The Venice processing plant reports that personnel can not reach the plant to conduct inspections due to debris.
 - o Three processing plants have reported the plants are ready to commence services: the Cameron Meadows, Mobile Bay (Williams) and Markham.



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- Duke's Mobile Bay plant reported no damage but will remain shut down to complete scheduled maintenance to their facility and anticipates work will be completed by September 10, 2008.

Electricity Updates: Louisiana:



As of: 9/4/2008 8:00 AM EDT

Electricity Outages: Utility Detail			
Louisiana			
Utility	Outages	Total Utility	% w/o Power
Cleco Power LLC	128,798	265,556	48.5%
Entergy Gulf States, Entergy Louisiana, and Entergy New Orleans (combined)	616,758	1,140,194	54.1%
Southwestern Electric Power	295	174,213	0.2%
All Cooperatives	180,112	413,231	43.6%
All Municipal		156,155	0.0%
TOTAL	925,963	2,149,349	43.1%

Total state and utility customers are based on 2006 EIA Customer Data; Electric Cooperative customer totals provided by Louisiana Public Service Commission.

Note: due to a large number of service providers, including investor owned utilities and cooperatives, the number of customer outages reported may not be comprehensive.

Mississippi:



As of: 9/4/2008 8:30 AM EDT

Electricity Outages: Utility Detail			
Mississippi			
Utility	Outages	Total Utility	% w/o Power
Entergy Mississippi	10,511	428,036	2.5%
Mississippi Power	1	181,208	0.0%
Total Cooperative	26,896	695,781	3.9%
Total Municipal Power		128,421	0.0%
TOTAL	37,408	1,433,446	2.6%

Total state and utility customers are based on 2006 EIA Customer Data.

Note: due to a large number of service providers, including investor owned utilities and cooperatives, the number of customer outages reported may not be comprehensive.



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Arkansas:

As of: 9/4/2008 8:00 AM EDT



Electricity Outages: Utility Detail			
Arkansas			
Utility	Outages	Total Utility	% w/o Power
Entergy Arkansas	66,032	681,298	9.7%
Southwestern Electric Power	100	111,109	0.1%
Empire District Electric		4,289	0.0%
Oklahoma Gas and Electric	0	63,020	0.0%
Total Cooperative		453,001	0.0%
Total Municipal Power		173,243	0.0%
TOTAL	66,132	1,485,960	4.5%

Restoration Updates:

- The damage to the Entergy system is extensive and it is the largest damage to have ever occurred in the Baton Rouge area. Entergy is continuing to assess damage in order to estimate when electricity will be restored to specific locations. The transmission damage across the Entergy system includes 168 transmission lines and 120 substations. The company has a team of 11,000 workers from more than 25 states assisting in the restoration
- Damage to electric cooperatives in the region was extensive. Crews from across the country are being called in to assist in restoration. Full restoration is expected to take several weeks
- CLECO has secured more than 2,500 line mechanics, tree trimmers and transmission line crews to assist after the storm.
- The Southwest Louisiana Electric Membership Corporation (SLEMCO) reports that most of its feeders are on and house-to-house repairs will begin in many areas today, September 4.
- Mississippi Power has completed restoration in its service area.
- Restoration is near complete for Southwestern Electric Power customers in Louisiana and Arkansas.
- SERC Reliability Corporation is reporting that one 115kV line remains out and one 500kV line is open but not operating for reliability reasons. Both electrical islands that were caused by the storm were reconnected, including the island where Waterford Nuclear power plant is located.