



U.S. Department of Energy
Emergency Support Function 12

Hurricane Gustav Situation Report # 5

September 3, 2008 (3:00 PM EDT)

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

Summary

Electricity		
Impacted State	Electric Customer Outages	% of State Out
Arkansas	89,775	6%
Louisiana	1,088,923	51%
Mississippi	43,361	3%
TOTAL:	1,222,059	
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 2:00 PM EDT September 3, 2008, there are 1,222,059 customers reported without power, including 1,088,923 in Louisiana, 43,361 in Mississippi, and 89,775 in Arkansas.
- Entergy reports that as of 11:30 AM September 3, 2008, the timeline for full restoration remains uncertain but could take several weeks due to extensive damage and difficulty in accessing affected areas. Continued bad weather also is preventing damage assessment by air. Entergy reports that 13 of the 14 transmission lines serving the New Orleans metropolitan area are out of service due to the storm.
- As of 9:30 AM EDT September 3, the Louisiana Offshore Oil Port (LOOP) onshore and offshore operations remain suspended. According to LOOP personnel, the company is currently performing damage assessments.



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- According to the Association for Oil Pipelines, the Capline and LoCap crude lines and Centennial pipeline remain shut down. The Colonial and Plantation pipelines, which supply the East Coast, are both operating at reduced rates. See list of pipelines in table below.
- As of 10:00 AM EDT, September 3, 2008, the Sabine Pipeline reports that initial assessments of the Henry Hub reveal no serious damage; however, power to the Hub remains unavailable. Sabine is setting up temporary generators to maintain necessary measures of operations until power is restored. Sabine has lifted the force majeure at the Henry Hub and will be accepting gas flow today. Lastly, Sabine Pipeline reports that assessments on the mainline of the system are still in progress, therefore all points along the mainline are still shut-in.
- As of this morning, September 3, 2008, Entergy's Waterford 3 and River Bend nuclear power plants remain shut down. Personnel at both plants are performing site assessments and working closely with the Nuclear Regulatory Commission and Federal Emergency Management Agency to determine a timeline for restart.
- As of 10:00 AM EDT September 3, 2008, the Strategic Petroleum Reserve (SPR) facilities at Bryan Mound, TX and Big Hill, TX are fully operational. The SPR facility in West Hackberry, LA, has electricity and has sustained no structural damage. The SPR facility in Bayou Choctaw, LA, remains shut down due to lack of power.
- As of 11:00 AM EDT September 3, 2008, conditions have improved at Mobile, AL, Gulfport, MS, and Pascagoula, MS ports, allowing ships to exit the port with maximum drafts of 15 feet, 28 feet, and 12 feet, respectively. As of 8:30 AM EDT, the Lake Charles/Calcasieu Channel are open with restrictions to 33 feet draft. The U.S. Army Corps of Engineers is performing depth surveys. 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.

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.



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.
- As of 3:00 PM EDT September 3, 2008, there is no change to the status of the refineries impacted by Gustav. See table below.
- Plantation pipeline is experiencing loss of power at its Baton Rouge facility with more than half of the flow along the line reduced. Petroleum product flow from Collins, MS and Chevron's Pascagoula refinery is unaffected.
- 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	3,099,220	0

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.

Pipelines in the Path of Gustav							
Type	Name	Start	Terminus	Capacity (barrels/day)	Shut Down	Reduced Rates	Operating
Crude	Capline	LA	IL	1,200,000	1,200,000		
Crude	LOOP/Locap	LA	LA	1,200,000	1,200,000		
Crude	Marathon gathering	GOM	LA/TX	NA	NA		
Product	Centennial	TX	IL	210,000	210,000		
Product	Central Florida	FL	FL	115,000			115,000
Product	Colonial	TX	NJ	2,400,000		2,400,000	
Product	Explorer	LA/TX	IN	700,000			700,000
Product	Magellan	TX	CO, MN, WI, IL	120,000			120,000
Product	NuStar/Texas Gulf Coast Ref'd	TX	TX	~100,000			~100,000
Product	Plantation	LA	VA	600,000		600,000	

Source: Status of pipelines from Association of Oil Pipe Lines; Capacity data from company web sites.



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- As of 2:00 PM EDT, September 3, many pipelines have reported expected times to restore service as early as tomorrow September 4. Damage assessments are continued to be performed both on onshore and offshore facilities.
- As of September 3, 2008, twenty-two major natural gas processing plants that were shut down have reported no major damage to their facilities and are expected to resume operations as gas begins to flow. The loss of commercial power is one of the most significant challenges the plants are facing.
- None of the liquefied natural gas (LNG) import terminals located in the Gulf Coast region reported any major damage upon personnel returning to the facilities, however more complete inspections will occur in the next few days before operations resume

Force Majeure / Critical Notice Posting by Natural Gas Pipelines

Pipeline Name	Time Stamp	Notice (Status)
ANR Pipeline Co.	9/2/08	Assessing impacts/conditions of system; running at reduced level.
Chandeleur Pipeline Co.	9/2/08	Assessing impacts/conditions of system. All operations remain shut-in.
Destin Pipeline Co.	9/3/08	Assessing impacts to offshore points; Onshore points remains in operation.
Discovery Gas Transmission	9/2/08	Assessing impacts/conditions of system. No power to restart pipeline system.
Enbridge (UTOS)	9/3/08	Expected in service by Sept 4th. No major damage and power is available.
Garden Banks Gas Pipeline	9/3/08	Awaiting assessment on impacts/conditions of system & transportation to offshore platforms. All operations remain shut-in.
High Island Offshore System	8/30/08	All production has been shut-in resulting in zero flow.
Manta Ray Offshore Gathering	9/3/08	Expected in service by Sept 6th. Awaiting assessment on impacts/conditions of system. All operations remain shut-in.
Mississippi Canyon Pipeline	9/3/08	Awaiting assessment of onshore facilities & restoration of power. All operations remain shut-in.
Natural Gas Pipeline Co of Am.	9/3/08	Compressor station 342 & 346 are fully available. No damage was found & force majeure lifted.
Nautilus Pipeline Co.	9/3/08	Expected in service by Sept 6th. Possible flooding at Burns Point meter which is being assessed. No power to some portions of system.
Sabine Pipe Line	9/3/08	Henry Hub operations back in service. No power at Hub but running on backup generators. Sabine mainline system remains shut-in.
Sea Robin Pipeline Co.	9/2/08	Assessing impacts/conditions of system. All operations remain shut-in.
Southern Natural Gas Co.	9/3/08	Initial assessments have found no major damage to system including the Toca processing plant.
Stingray Pipeline Co.	9/3/08	Expected in service by Sept 4th. No major damage and power is available.
Tennessee Gas Pipeline	9/2/08	Assessing impacts/conditions of system. Supply loss remains at 1.5 bcf.
Texas Eastern Transmission	9/2/08	Assessing impacts/conditions of system; running at reduced level; compressors in area running on backup generators.
Texas Gas Transmission	9/1/08	Youngsville compressor station offline
Transcontinental Gas Pipe Line	9/2/08	Emergency Supply Allocation instituted for certain laterals along their system; running at reduced levels.
Trunkline Gas Pipeline	9/2/08	Assessing impacts/conditions of system; running at reduced level.
Venice Gathering System	8/29/08	Venice Plant shutdown; all operations shut-in
Black Marlin Pipeline	8/29/08	Plans to notify customers when nominations can be reinstated.

Source: Informational postings from company web sites.



**Electricity Updates:
Louisiana:**



As of: 9/3/2008 2:00 PM EDT

Electricity Outages: Utility Detail			
Louisiana			
Utility	Outages	Total Utility	% w/o Power
Cleco Power LLC	167,071	265,556	62.9%
Entergy Gulf States, Entergy Louisiana, and Entergy New Orleans (combined)	701,102	1,140,194	61.5%
Southwestern Electric Power	295	174,213	0.2%
All Cooperatives	220,455	413,231	53.3%
All Municipal		156,155	0.0%
TOTAL	1,088,923	2,149,349	50.7%

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: 9/3/2008 2:00 PM EDT

Electricity Outages: Utility Detail			
Mississippi			
Utility	Outages	Total Utility	% w/o Power
Entergy Mississippi	16,464	428,036	3.8%
Mississippi Power	1	181,208	0.0%
Total Cooperative	26,896	695,781	3.9%
Total Municipal Power		128,421	0.0%
TOTAL	43,361	1,433,446	3.0%

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: 9/3/2008 8:00 AM EDT



Electricity Outages: Utility Detail			
Arkansas			
Utility	Outages	Total Utility	% w/o Power
Entergy Arkansas	89,399	681,298	13.1%
Southwestern Electric Power	100	111,109	0.1%
Empire District Electric		4,289	0.0%
Oklahoma Gas and Electric	339	63,020	0.0%
Total Cooperative		453,001	0.0%
Total Municipal Power		173,243	0.0%
TOTAL	89,838	1,485,960	6.0%

Restoration Updates:

- Entergy reports that as of 6:30 AM EDT, September 3, 2008 that outages caused by Hurricane Gustav are the second highest in company history, peaking at 850,000. Restoration remains uncertain but could take several weeks due to extensive damage and difficulty in accessing affected areas. Continued bad weather also is preventing damage assessment by air. Entergy has more than 10,000 workers from more than 25 states restoring service to the system.
- Entergy is reporting extensive damage to its transmission system in Louisiana, with 191 transmission lines and 210 substations out of service, 40 percent of the transmission lines and 27 percent of the substations in the affected area. Entergy reported that 13 of the 14 transmission lines serving the New Orleans metropolitan area are out of service due to the storm.
- Entergy’s Waterford 3 Nuclear Plant near New Orleans and the River Bend Nuclear Station were brought offline Sunday and Monday respectively and currently remain offline. Personnel at both plants are performing site assessments this morning and working closely with the Nuclear Regulatory Commission and Federal Emergency Management Agency to determine a timeline for restart.
- 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.
- The Electric Power Association of Mississippi reports that emergency work forces of more than 1,700 people are assisting with the restoration effort.



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- CLECO has secured more than 2,500 line mechanics, tree trimmers and transmission line crews to assist after the storm. Southwestern Electric Power Company has crews in place to begin restoration.
- SERC Reliability Corporation (SERC) 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.