



U.S. Department of Energy
Emergency Support Function 12

Hurricane Gustav Situation Report # 8

September 5, 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	25,819	2%
Louisiana	685,760	32%
Mississippi	28,854	2%
TOTAL:	740,433	
Petroleum & Natural Gas		
	Amount	% Capacity Out*
Crude Oil Production Shut-In (b/d)	1,238,167	95.2%
Natural Gas Production Shut-in (mmcf/d)	6,477	87.5%
Refinery Capacity Shut down (b/d)	2,427,563	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 5, there are 740,433 customers reported without power, including 685,760 in Louisiana, 28,854 in Mississippi, and 25,819 in Arkansas. This represents a decrease of 248,291 customers without power from Situation Report #7 when 988,724 customer outages were reported. Since that report, power has been restored to about 210,990 customers in Louisiana, about 30,330 customers in Arkansas, and about 6,960 customers in Mississippi.
- As of 10:00 PM EDT September 4, Entergy had restored power to 429,971 customers who had lost power due to Hurricane Gustav in Louisiana, Arkansas, and Mississippi. See Restoration Updates section below for Entergy’s estimated restoration schedule. The transmission damage across the Entergy system includes 122 transmission lines and 118 substations. Entergy added two more lines on September 4th, bringing to four the number of transmission lines serving the area south of Lake Pontchartrain which had been isolated due to the hurricane damage.



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- As of 10:00 AM EDT September 5, the LOOP reported that it has resumed tanker offloading and made its first pipeline delivery.
- Shell reports that it is moving crude oil through the Capline from Liberty, MS to the pipeline's termination point in Patoka, IL. Shell expects to restart the remaining parts of its pipeline in Louisiana over the weekend using a combination of portable generators and local utility power as it comes online.
- As of 4:00 PM EDT, September 4, the Sabine Pipeline reports the Port Neches compressor stations is down which is impacting 3 points along the mainline system. Available compression at the Henry Hub remains limited as temporary generators maintain operations. Sabine Pipeline's force majeure remains in effect for those points along the mainline.
- As of 5:00 AM EDT, September 5, Entergy's Waterford 3 and River Bend nuclear power plants remain shut down.
- As of 6:00 PM EDT September 4, the Strategic Petroleum Reserve (SPR) reports that the status of its facilities has not changed. The Bryan Mound, TX, Big Hill, TX, and West Hackberry, LA facilities are operational. Its facility in Bayou Choctaw, LA, remains shut down due to lack of commercial power.
- As of 9:30 AM EDT September 5, the Gulf Intracoastal Waterway is open from the Louisiana/Mississippi border (mile marker 40) east to St. Marks, FL. It is still closed at alternate route Baptiste Collete Mississippi River Gulf Outlet. The Mississippi River is open, with drafts restricted to 42 feet on the lower Mississippi. The Houma Navigational Canal is closed. The Morgan City: Port Allen alternate route is open; but effectively closed at the Bayou-Sorrel Pontoon Bridge. Mobile Harbor, AL is open with drafts restricted to 42 feet in the channel; Mobile Bay through the Mobile Bar drafts is restricted to 39 feet in the Mobile River.

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.
- 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.



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)	1,238,167	1,300,000	95.2%
Natural Gas (MMCF/D)	6,477	7,400	87.5%

Source: Minerals Management Service

- As of 12:30 PM EDT, September 4, , the Minerals Management Service (MMS) reports 6,477 million cubic feet per day of the Gulf’s natural gas production remains shut-in, equivalent to 87.5 percent of the Gulf production. MMS reports 1,238,167 barrels/day of the Gulf’s crude production remains shut-in, equivalent to 95.2 percent of the Gulf’s crude production. A total of 527 production platforms, or 73.5 percent of the Gulf’s 717 manned platforms, have been evacuated. Personnel from 63 rigs, representing 52.1 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) that were 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 5, there is no change in the status of the refineries impacted by Gustav. Twelve refiners remain shut down. Entergy reports that it expects to have power restored to 11 of the 12 refiners shut down by Hurricane Gustav by midnight tonight, September 5.
- Plantation has received generators and expects to increase flows on the line. Colonial pipeline is operating on reduced flows. In addition, Centennial pipeline is working to restart its operations.

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 9:00 AM EDT, September 5, assessments of natural gas pipelines continue but no reports of major damage. There are nine pipelines that have lifted the force majeure notice and have resumed normal operations along their systems. Seven pipelines report a force majeure is still in effect that continues to shut-in all points along their systems. The remaining offshore pipelines are flowing gas but have limited capabilities or portions of their system remain shut-in. See table below

Force Majeure / Critical Notice Posting by Natural Gas Pipelines		
Pipeline Name	Time Stamp	Notice (Status)
ANR Pipeline Co.	9/4/08	No impact to system. All capacity restrictions have been lifted.
Chandeleur Pipeline Co.	9/4/08	Assessments done -gas flow can resume. Force Majeure Lifted.
Destin Pipeline Co.	9/4/08	Force Majeure in effect - offshore points remain shut-in due to power impacts onshore.
Discovery Gas Transmission	9/4/08	Force Majeure in effect - all system points remain shut-in.
Enbridge (UTOS)	9/5/08	Force Majeure Lifted - Sabine Plant will not accept nominations.
Garden Banks Gas Pipeline	9/5/08	Force Majeure in effect - all downstream delivery points unavailable.
High Island Offshore System	9/5/08	Force Majeure Lifted.
Manta Ray Offshore Gathering	9/5/08	Force Majeure in effect - expected in service by Sept. 6th.
Mississippi Canyon Pipeline	9/5/08	Force Majeure in effect - unknown at time to return to service.
Natural Gas Pipeline Co of Am.	9/4/08	All points back to normal capacity.
Nautilus Pipeline Co.	9/5/08	Force Majeure in effect - expected in service by Sept. 7th.
Sabine Pipe Line	9/5/08	Force Majeure in effect - three mainline system points remain shut-in.
Sea Robin Pipeline Co.	9/5/08	Force Majeure Lifted.
Southern Natural Gas Co.	9/5/08	Estimated supply loss dropped from max of 960 MMcf to now 600 MMcf. Assessments continue on offshore facilities.
Stingray Pipeline Co.	9/5/08	Force Majeure Lifted. Stingray plant remains unavailable - flow is limited on pipeline.
Tennessee Gas Pipeline	9/5/08	Assessments to offshore points continue.
Texas Eastern Transmission	9/4/08	Venice System remains shut-in including Venice processing plant.
Texas Gas Transmission	9/4/08	Force Majeure Lifted.
Transcontinental Gas Pipe Line	9/5/08	Southeast Louisiana Lateral remains shut-in - Central Louisiana Lateral operational.
Trunkline Gas Pipeline	9/4/08	Assessments to offshore points continue.
Venice Gathering System	9/5/08	Force Majeure in effect - Venice Plant being assessed today; all operations remain shut-in
Dauphin Island Gathering Partners	9/3/08	Mobile Bay Plant down until Sept 10. Deliveries will be reduced & rerouted.
Black Marlin Pipeline	9/5/08	Force Majeure Lifted - resumed operations.

- As of 9:00 AM EDT, September 5, there are 11 confirmed natural gas processing plants that remain shut down, but are ready to operate once power is restored or gas flow from upstream commences service. In addition, there are 12 plants that have resumed operations either at reduced or normal levels. See table below.



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Natural Gas Processing Plants in the Path of Gustav						
Plant Name	Location	Capacity (million cubic feet per day)				
		System Operating	Shut Down	Capable to Restart ¹	Operating at Reduced Level	Back to Normal
Yscloskey	St. Bernard, LA	1,850	1,850			
Calumet	St. Mary, LA	1,680		1,680		
North Terrebone	Terrebonne, LA	1,350		1,350		
Venice	Plaquemines, LA	1,300		1,300		
Eunice	Acadia, LA	1,200			1,200	
Toca I & II	St. Bernard, LA	1,100		1,100		
Bluewater	Acadia, LA	950			950	
Sea Robin	Vermilion, LA	950		950		
Neptune	St. Mary, LA	650		650		
Larose	Lafourche, LA	600		600		
Pelican	St. Mary, LA	600		600		
Patterson II	St. Mary, LA	600		600		
Cameron Meadows	Cameron, LA	500				500
Iowa Gas	Jefferson Davis, LA	500				500
Grand Chenier II	Cameron, LA	400				400
Sabine Pass	Cameron, LA	300			300	
Stingray	Cameron, LA	300		300		
Lowry	Cameron, LA	265	265			
Barracuda	Cameron, LA	225				225
Baton Rouge	W. Baton Rouge, LA	225	NA	NA	NA	NA
Plaquemine	Iberville, LA	225		225		
Gillis	Calcasieu, LA	180	NA	NA	NA	NA
Dubach Plant	Lincoln, LA	175	NA	NA	NA	NA
Burns Point	St. Mary, LA	160	NA	NA	NA	NA
Mobile Bay (Williams)	Mobile, AL	700			700	
Mobile Bay (Duke)	Mobile, AL	300	300			
Yellowhammer	Mobile, AL	200	NA	NA	NA	NA
Pascagoula	Jackson, MS	1,500			1,500	
Port Arthur	Jefferson, TX	200			200	
Markham	Matagorda, TX	300			300	
West Beaumont	Jefferson, TX	100			100	

¹ Those plants that are capable to restart after electricity is restored or when upstream gas flow begins.

Note: "NA" (Not Available or Confirmed) identifies those plants that were in the path of Gustav that have not yet been confirmed of their status.



**Electricity Updates:
Louisiana:**

As of: 9/5/2008 8:30 AM EDT



Electricity Outages: Utility Detail			
Louisiana			
Utility	Outages	Total Utility	% w/o Power
Cleco Power LLC	68,928	265,556	26.0%
Entergy Gulf States, Entergy Louisiana, and Entergy New Orleans (combined)	485,231	1,140,194	42.6%
Southwestern Electric Power	295	174,213	0.2%
All Cooperatives	131,306	413,231	31.8%
All Municipal		156,155	0.0%
TOTAL	685,760	2,149,349	31.9%

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: 9/5/2008 7:30 AM EDT



Electricity Outages: Utility Detail			
Mississippi			
Utility	Outages	Total Utility	% w/o Power
Entergy Mississippi	1,958	428,036	0.5%
Mississippi Power		181,208	0.0%
Total Cooperative	26,896	695,781	3.9%
Total Municipal Power		128,421	0.0%
TOTAL	28,854	1,433,446	2.0%

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: 9/5/2008 7:30 AM EDT

Electricity Outages: Utility Detail			
Arkansas			
Utility	Outages	Total Utility	% w/o Power
Entergy Arkansas	25,719	681,298	3.8%
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	25,819	1,485,960	1.7%

Restoration Updates:

- Entergy estimates electric power service will be restored to New Orleans customers by Monday, September 8th. Entergy expects to continue to restore power to a significant number of customers over the next week. In hard hit areas where damage is severe and access may be restricted, restoration will continue through the month of September. Electric power restoration estimates for Entergy customers are shown in the table below.

Electric Power Restoration Estimates for Entergy Customers in Louisiana

Estimated date* for 100% restoration	Parishes
September 4	Bienville, Calcasieu, Cameron, Claiborne, Franklin, Jefferson Davis, Madison, Morehouse, Tensas, Union, Webster, West Carroll
September 5	Caldwell, Catahoula, Concordia, Grant, LaSalle, Lincoln, Natchitoches, Ouachita, Richland
September 6	Avoyelles, Jackson, Sabine, Winn
September 8	Acadia, Iberia, Lafayette, Orleans, St. Landry, Vermillion
September 9	Jefferson (upper portion, including Metairie and Kenner), Livingston, St. Helena, St. Tammany, Tangipahoa, Washington
September 10	Ascension (except Donaldsonville), St. James, St. John the Baptist
September 12	Pointe Coupee, West Baton Rouge, West Feliciana
September 15	Jefferson (lower portion only), Plaquemines, St. Bernard, St. Charles
September 16	East Feliciana
September 24	Ascension (Donaldsonville only), Assumption, East Baton Rouge, Iberville, St. Martin

- Entergy is making steady progress in Arkansas and expects to restore power to most customers by September 6.



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- Over 11,000 workers are assisting in restoration of the Entergy system coming from 25 states, the District of Columbia and Canada.
- CLECO is continuing to make progress and as of 7:00 AM EDT September 5 has restored power to over 47,000 customers since yesterday.
- SWEPCO has restored power to virtually all of its customers.
- As of 8:30 PM EDT September 4, SLEMCO had restored power to nearly 60,000 of the more than 85,000 customers who lost power.
- DEMCO continues to repair the damage to infrastructure resulting from Hurricane Gustav and is receiving assistance from 2,000 workers from more than eight states. It has restored power to more than 25,000 customers.