

Hurricane Gustav Situation Report # 11 September 7, 2008 (11:00 AM EDT)

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

Summary

	Dummary					
Electricity						
Impacted State	Electric Customer Outages	% of State Out				
Arkansas	916	< 1%				
Louisiana	378,256	18%				
Mississippi	5,225	< 1%				
TOTAL:	384,397					
	Petroleum & Natural Gas					
	Amount	% Capacity Out*				
Crude Oil Production Shut-In (b/d)	1,136,843	87.5%				
Natural Gas Production Shut-in (mn	ncf/d) 5,485	74.1%				
Refinery Capacity Shut down (b/d)	922,003	NA				
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Total state customers are based on 2006 EIA Customer Data. Data obtained from State agencies and company websites. 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.

Highlights:

- In the States of Arkansas, Louisiana and Mississippi, as of approximately 7:00 AM EDT September 7, there are 384,397 customers reported without power, including 378,256 in Louisiana, 5,225 in Mississippi, and 916 in Arkansas. This represents a decrease of 160,794 customers without power from Situation Report #10 when 545,191 customer outages were reported. Since that report, power has been restored to 147,869 customers in Louisiana, 8,284 customers in Arkansas, and 4,641 customers in Mississippi. See Restoration Updates below.
- On September 5, the Environmental Protection Agency (EPA), in collaboration with the Department of Energy, issued a multi-state emergency fuel waiver, due to the consequences of Hurricane Gustav and the pending shortages and damage expected from Tropical Storm Hanna. EPA moved to waive the 7.0/7.8 psi Reid Vapor Pressure (RVP) maximum and ethanol additive federal requirement for gasoline in the States of AL, FL, GA, LA and NC through September 15. Both FL and LA received extensions to their previous waivers. The waivers will allow the use of 9 psi RVP fuel. The justification for the EPA waiver is that shutdowns of several Gulf Coast area petroleum refiners and widespread power outages in LA caused the curtailment in

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



production and delivery of low volatility gasoline. On August 31, EPA waived the requirement for reformulated gasoline in the state of Texas through September 8.

- Shell reports that it is moving crude oil through the Capline from its origin in St. James, LA to the pipeline's termination point in Patoka, IL. Crude oil movements from St. James, LA are at limited rates using local utility power. Capline will ramp up as other systems come online.
- As of 3:00 PM EDT September 6, Shell reports that several segments of the Houma-to-Houston Crude Oil System are running and making deliveries of crude oil. Shell anticipates that the system will have nearly all capabilities on September 7.
- As of 10:00 AM EDT, September 7, the U.S. Coast Guard reports that the Gulf Intracoastal Waterway (GIW) is fully open. Use of the Inner Harbor Navigation Canal in New Orleans is limited. The Mississippi River is open with regular draft restrictions from mile 303 to mile 20, but movement is restricted in some areas of the lower Mississippi above mile 150 to daylight hours for vessels with drafts greater than 30 feet. The Houma Navigational Canal is now open. The Morgan City Port Allen alternate route is open; but effectively closed at the Bayou-Sorrel Pontoon Bridge. Mobile Harbor, AL is open, but with 44 feet draft restrictions. Port Fourchon has opened for vessels with drafts less than 18 feet.

ESF 12 Actions:

• ESF-12 personnel are staffing the FEMA Region VI Joint Field Office (JFO) in Baton Rouge, LA, the FEMA Region IV Regional Response Coordination Center (RRCC) in Atlanta, GA, the FEMA Region III RRCC in Philadelphia, PA and the National Response Coordination Center (NRCC) in Washington, DC. The FEMA RRCC VI in Denton, TX 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)	1,136,843	1,300,000	87.5%		
Natural Gas (MMCF/D)	5,485	7,400	74.1%		

Source: Minerals Management Service

• As of 12:30 PM EDT, September 6, the Minerals Management Service (MMS) reports 5,485 million cubic feet per day of the Gulf's natural gas production remains shut-in, equivalent to 74.1 percent of the Gulf production. MMS reports 1,136,843 barrels/day of the Gulf's crude production remains shut-in, equivalent to 87.5 percent of the Gulf's crude production. A total of 226 production platforms, or 31.5 percent of the Gulf's 717 manned platforms, have been evacuated. Personnel from 15 rigs, representing 12.4 percent of those operating in the region, have been removed.



- As of September 6, six refineries remain shut down in Louisiana: ConocoPhillips' Alliance in Belle Chasse, Motiva's Convent, Murphy's Meraux, Shell's Saint Rose, Alon's Krotz Springs, and Valero's Norco.
- Plantation pipeline has full commercial power. Colonial pipeline is operating on reduced flows. Centennial pipeline is back to normal operations.
- As of 12:00 PM EDT September 6, electrical power has been restored to the Strategic Petroleum Reserve (SPR) in Bayou Choctaw. All SPR sites are now operational and drawdown ready.
- As of 7:00 AM EDT, September 7, there are five natural gas pipelines reporting no gas flow from offshore points: Manta Ray Offshore Gathering (restart estimated Sep. 8), Mississippi Canyon Pipeline (restart estimated Sep. 10), Nautilus Pipeline Co. (restart estimated Sep. 9), Venice Gathering System (restart TBD), and offshore points along Destin Pipeline Co. Garden Banks Gas Pipeline is fully operational and ready to flow gas; however, the interconnecting pipelines upstream are not accepting flow at this time. The pipelines, currently flowing at reduced rates or have portions of their system shut-in, continue to conduct inspections at their facilities.
- As of 6:00 PM EDT, September 5, there are 10 confirmed natural gas processing plants that remain shut down, but are ready to operate once power is restored and/or gas flow from upstream commences service. Currently, 15 plants that have resumed operations either at reduced or normal levels. Four plants that are shut down have reported that clean up and restoration efforts are underway. Currently, there is no timeline of when these facilities will return to service.

Restoration Updates:

- As of 6:30 AM EDT September 7, Entergy has restored power to more than 600,000 customers in Louisiana, Mississippi, and Arkansas who lost power due to Hurricane Gustav. Entergy reports that its restoration rate surpasses that accomplished following either Katrina or Rita. Entergy is monitoring the path of Hurricane Ike.
- Entergy reports as of 6:30 AM EDT September 7, remaining damage to the transmission system includes 64 lines and 62 substations out of service, down from a peak of 241 transmission lines and 352 substations immediately following the storm.
- Power has been restored to nearly all customers in Arkansas and Mississippi. See table below on restoration progress in Louisiana.



Restoration Progress in Louisiana as of September 7, 2008 10:00 AM EDT*

Utility Name	State	Peak Outages	Customers Restored	Current Outages	Percent Restored
Entergy Gulf States,					
Entergy Louisiana, and					
Entergy New Orleans					
(combined)	LA	828,982	538,139	290,843	65%
CLECO Power	LA	246,092	229,663	16,429	93%
SWEPCO	LA	8,562	8,562	0	100%
All Cooperatives	LA	272,327	201,343	70,984	74%
Totals		1,355,963	977,707	378,256	72%

^{*}Peak totals based on LA State PSC reports with the exception of Entergy. Entergy peak outages are based on Entergy's website.

- Over 14,000 workers are assisting in restoration of the Entergy system. This includes 3,000 Entergy workers and contract employees plus 11,000 from 27 states, the District of Columbia and Canada.
- Entergy estimates electric power service will be restored to New Orleans customers by Monday night September 8. Electric power restoration estimates for all Entergy customers are shown in the table below.

Electric Power Restoration Estimates for Entergy Customers

Estimated date for 100% restoration	Parishes	
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	
October 1	Terrebonne, Lafourche	