



U.S. Department of Energy
Emergency Support Function 12

Hurricane Gustav Situation Report # 12

September 8, 2008 (12:00 PM EDT)

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

Summary

Electricity		
Impacted State	Electric Customer Outages	% of State Out
Arkansas	0	0%
Louisiana	266,627	12%
Mississippi	720	< 1%
TOTAL:	267,347	
Petroleum & Natural Gas		
	Amount	% Capacity Out*
Crude Oil Production Shut-In (b/d)	1,136,843	87.5%
Natural Gas Production Shut-in (mmcf/d)	5,485	74.1%
Refinery Capacity Shut down (b/d)	617,000	NA

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.

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

Highlights:

- In the States of Louisiana and Mississippi, as of approximately 9:00 AM EDT September 8, there are 267,347 customers reported without power, including 266,627 in Louisiana, and 720 in Mississippi. This represents a decrease of 117,050 customers without power from Situation Report #11 when 384,397 customer outages were reported. Since that report, power has been restored to 111,629 customers in Louisiana, 3,921 customers in Mississippi. Power has been restored to all customers in Arkansas. See Restoration Updates below.
- As of 5:00 AM EDT, September 8, Entergy’s Waterford 3 and River Bend nuclear power plants remain shut down. Entergy reports that repairs of the extensive wind damage to River Bend’s turbine building siding are being expedited through special arrangements with the manufacturer. Bringing the two nuclear plants online will be closely coordinated with utility company personnel to maintain the reliability of the power grid.



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- 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 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.
- As of Midnight September 8, the U.S. Coast Guard reports that the Gulf Intracoastal Waterway (GIW) is fully open. **In the New Orleans area, there is a safety zone in effect in parts of the Inner Harbor Navigation Canal, the Industrial Canal in New Orleans, and for vessels with drafts greater than 30 feet above mile marker 175. The entire Lower Mississippi River is open with regular draft restrictions to mile marker 303. The Houma Navigational Canal is open. The Morgan City - Port Allen alternate route is open including through the Bayou-Sorrel Pontoon Bridge.** Port Fourchon has opened for vessels with drafts less than 18 feet. **There are still some minor restrictions to vessel traffic for Pascagoula and Gulfport, MS and Mobile, AL**

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.



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- 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.
- 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 10:00 AM EDT September 8, two refineries have restarted – Murphy Meraux and Valero Norco. Four refineries remain shut down in the Gulf Coast. (See table below).**

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	617,000	2,020,563	1,901,220	1,276,000



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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 7:00 AM EDT September 8, there are four natural gas pipelines reporting no gas flow from offshore points and the pipelines' force majeure remains in effect for:
 - Nautilus Pipeline Co. (restart estimated Sep. 9),
 - Mississippi Canyon Pipeline (restart estimated Sep. 10),
 - Venice Gathering System (restart TBD), and
 - Offshore points along Destin Pipeline Co.
- As of 10:00 AM EDT September 8, there seven processing plants that are ready to operate (capable to restart) once power is restored and/or gas flow from upstream commences service. Currently, 19 plants that have resumed operations either at reduced or normal levels (10 plants reporting reduced levels and 9 plants that are operating at normal levels). There are five plants that are shut down which includes one plant that remains shut down due to scheduled maintenance, The latter expects to restart by September 10. Currently, there is no timeline of when the other four shut down facilities will return to service. See table below.
- As of 4:00 PM EDT September 5, Sea Robin Pipeline reports that the Sea Robin natural gas processing plant operated by Hess Corporation is expected to have power restored today (September 8) and resume operations.
- As of 1:30 PM EDT, September 7, Tennessee Gas Pipeline reports that production upstream of the Yscloskey processing plant may resume; however, due to the shut down of the plant, all gas flow must be processed at the Toca plant via Southern Natural Pipeline.



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Natural Gas Processing Plants in the Path of Gustav						
Plant Name	Location	Capacity (million cubic feet per day) ¹				
		Design System Operation	Shut Down	Capable to Restart ²	Operating at Reduced Level	Back to Normal
Yscloskey	St. Bernard, LA	1,850	1,850			
Calumet	St. Mary, LA	1,680		1,680		
North Terrebonne	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	225			
Plaquemine	Iberville, LA	225		225		
Gillis	Calcasieu, LA	180				180
Dubach Plant	Lincoln, LA	175				175
Burns Point	St. Mary, LA	160			160	
Mobile Bay (Williams)	Mobile, AL	700			700	
Mobile Bay (Duke)	Mobile, AL	300	300			
Yellowhammer	Mobile, AL	200				200
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 The capacity in each column represents the design capacity of the plants and does not represent the actual gas flow through these plants.

² Those plants that are capable to restart after electricity is restored or when upstream gas flow commences service.

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

Restoration Updates:

- As of 6:00 AM EDT September 8, Entergy has restored power to more than 767,000 customers in Louisiana, Mississippi, and Arkansas who lost power due to Hurricane Gustav. Power has been restored to all Entergy customers in Arkansas and Mississippi. See table below on restoration progress in Louisiana. Entergy reports that its restoration rate surpasses that accomplished following either Katrina or Rita.

Restoration Progress in Louisiana as of September 8, 2008 7:00 AM EDT*



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Utility Name	Peak Outages	Customers Restored	Current Outages	Percent Restored
Entergy Gulf States, Entergy Louisiana, and Entergy New Orleans (combined)	828,982	632,280	196,702	76%
CLECO Power	246,092	242,577	3,515	99%
SWEPCO	8,562	8,562	0	100%
All Cooperatives	272,327	205,917	66,410	76%
Totals	1,355,963	1,089,336	266,627	80%

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

- Utilities in the Gulf Coast region are monitoring the path of Hurricane Ike and making advance preparations.
- Entergy reports as of 6:30 AM EDT September 7, remaining damage to the transmission system includes 56 lines and 39 substations out of service, down from a peak of 241 transmission lines and 352 substations immediately following the storm. More than 8,200 poles, 12,500 spans of wire and 1,900 transformers have been confirmed as damaged or destroyed.
- Entergy reports that repairs of the extensive wind damage to River Bend nuclear plant's turbine building siding are being expedited through special arrangements with the manufacturer. Bringing the plant online will be closely coordinated with utility company personnel to maintain the reliability of the power grid.
- Electric cooperatives were heavily affected by Hurricane Gustav in Louisiana and Mississippi. Electric cooperative crews from 13 states assisted in restoring power to cooperative utility customers in Louisiana and Mississippi.
- 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, DC and Canada.
- Entergy estimates electric power service will be restored to New Orleans customers by tonight September 8. 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