



U.S. Department of Energy  
Emergency Support Function 12

Hurricane Gustav Situation Report # 13

September 9, 2008 (12:00 PM EDT)

[http://www.oe.netl.doe.gov/emergency\\_sit\\_rpt.aspx](http://www.oe.netl.doe.gov/emergency_sit_rpt.aspx)

### Summary

Electricity		
Impacted State	Electric Customer Outages	% of State Out
Arkansas	0	0%
Louisiana	191,158	9%
Mississippi	315	< 1%
<b>TOTAL:</b>	<b>191,473</b>	
Petroleum & Natural Gas		
	Amount	% Capacity Out*
Crude Oil Production Shut-In (b/d)	1,032,612	79.4%
Natural Gas Production Shut-in (mmcf/d)	4,748	64.2%
Refinery Capacity Shut down (b/d)	247,000	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 8:00 AM EDT September 9, there are 191,473 customers reported without power, including 191,158 in Louisiana, and 315 in Mississippi. This represents a decrease of 75,874 customers without power from Situation Report #12 when 267,347 customer outages were reported. Since that report, power has been restored to 75,469 customers in Louisiana and 405 customers in Mississippi. 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.



# U.S. Department of Energy Emergency Support Function 12

- As of 10:00 AM September 9, the U.S. Coast Guard reports that in the New Orleans area, there is a safety zone in from the locks of the Inner Harbor Navigation Canal to mile marker 11 East of Harvey Locks. The Lower Mississippi River is open with regular draft restrictions to mile marker 303. A safety zone has been established restricting vessels with drafts greater than 30 feet above Mile Marker 175 to mile marker 301 for daylight transit only. The Morgan City - Port Allen alternate route is open including through the Bayou-Sorrel Pontoon Bridge

## ESF 12 Actions:

- ESF-12 personnel began staffing the FEMA Region VI Regional Response Coordination Center (RRCC) today, September 9, in preparation for Hurricane Ike. ESF-12 is also staffing the FEMA Region VI Joint Field Office (JFO) in Baton Rouge, LA, the FEMA Region IV RRCC in Atlanta, GA, and the National Response Coordination Center (NRCC) in Washington, DC. The FEMA Region III RRCC in Philadelphia, PA 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)	1,032,612	1,300,000	79.4%
Natural Gas (MMCF/D)	4,748	7,400	64.2%

Source: Minerals Management Service

- As of 12:30 PM EDT, September 8, the Minerals Management Service (MMS) reports 4,748 million cubic feet per day of the Gulf’s natural gas production remains shut-in, equivalent to 64.2 percent of the Gulf production. MMS reports 1,032,612 barrels/day of the Gulf’s crude production remains shut-in, equivalent to 79.4 percent of the Gulf’s crude production. A total of 200 production platforms, or 27.9 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.
- Plantation and Colonial pipelines are both operating on reduced flows
- On the evening of September 8, 2008, DOE initiated the delivery of 250,000 barrels of oil from the Strategic Petroleum Reserve to Marathon Petroleum Company’s Midwest refineries along the Capline pipeline system. The oil was requested by Marathon because of disruptions in supply caused by Hurricane Gustav.
- As of 10:00 AM EDT September 9, three refineries have restarted – Motiva Convent, Shell Saint Rose, and Alon Krotz Springs. Only one refinery remains shut down in the Gulf Coast due to Hurricane Gustav. (See table below).



## U.S. Department of Energy Emergency Support Function 12

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				
<b>TOTAL</b>		<b>7,503,309</b>	<b>247,000</b>	<b>1,146,403</b>	<b>3,145,380</b>	<b>1,276,000</b>

**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 9, there are three natural gas pipelines reporting no gas flow from offshore points and the pipelines' force majeure remains in effect for:
  - 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 9, there four processing plants that are ready to operate (capable to restart) once power is restored and/or gas flow from upstream commences service. Currently, 21 plants that have resumed operations either at reduced or normal levels (12 plants reporting reduced levels and 9 plants that are operating at normal levels). There are six 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. The number of shut downs is an increase over yesterday's report due to one plant experiencing restart problems. There is no timeline of when the other shut down facilities will return to service. See table below.



**U.S. Department of Energy  
Emergency Support Function 12**

- As of 10:00 PM EDT, September 8, Nautilus Pipeline Co. lifted the force majeure and will begin to flow gas at all points today (September 9).
- As of 3:00 PM EDT, September 8, Trunkline Gas Pipeline was notified that the Calumet Processing Plant operated by Enterprise Products Operating, LLC and the Patterson II Plant operated by CDM Max LLC have commercial power restored and are ready to accept gas flow today (September 9).
- As of 4:48 PM EDT September 8, Sea Robin Pipeline notified its customers that the Sea Robin natural gas processing plant operated by Hess Corporation commenced processing at reduced levels.

Natural Gas Processing Plants in the Path of Gustav						
Plant Name	Location	Capacity (million cubic feet per day) <sup>1</sup>				
		Design System Operation	Shut Down	Capable to Restart <sup>2</sup>	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

<sup>1</sup> The capacity in each column represents the design capacity of the plants and does not represent the actual gas flow through these plants.

<sup>2</sup> 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:**



**U.S. Department of Energy  
Emergency Support Function 12**

- As of 6:00 AM EDT September 9, Entergy has restored power to more than 808,000 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 9, 2008 7:00 AM EDT\***

Utility Name	Peak Outages	Customers Restored	Current Outages	Percent Restored
Entergy Gulf States, Entergy Louisiana, and Entergy New Orleans (combined)	828,982	673,990	154,992	81%
CLECO Power	246,092	245,567	525	99 %
SWPCO	8,562	8,562	0	100%
All Cooperatives	272,327	236,688	35,641	87%
<b>Totals</b>	<b>1,355,963</b>	<b>1,164,805</b>	<b>191,158</b>	<b>86%</b>

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

- Entergy reports as of 6:30 AM EDT September 9, most of the remaining outages are in heavily damaged areas requiring more extensive repairs. The pace of restoration will likely be slower from this point forward as crews address these hard-hit areas.
- Entergy reports as of 6:30 AM EDT September 9, remaining damage to the transmission system includes 47 lines and 28 substations, 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 currently has nearly 13,000 workers continuing restoration work in Louisiana.
- 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 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