



U.S. Department of Energy
Emergency Support Function 12

Hurricane Gustav Situation Report # 2
September 2, 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
Louisiana	1,050,549	49%
Mississippi	93,070	6%
TOTAL:	1,143,619	32%
Petroleum & Natural Gas		
	Amount	% Capacity Out*
Crude Oil Production Shut-In (b/d)	1,300,000	100.0%
Natural Gas Production Shut-in (mmcf/d)	7,062	95.4%
Refinery Capacity Shut down (b/d)	2,659,563	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:

- According to the National Hurricane Center, as of 5:00 AM EDT September 2, 2008, Gustav is a Tropical Depression with maximum sustained winds of 35 miles per hour. The center of the depression is located 135 miles northwest of Lafayette, LA and is moving northwest at approximately 10 miles per hour.
- In the States of Louisiana and Mississippi, as of approximately 7:30 AM EDT September 2, 2008, there are 1,143,619 customers reported without power, including 1,050,549 in Louisiana and 93,070 in Mississippi. This represents 32 percent of the total customers in Louisiana and Mississippi.
- At of 11:00 AM EDT August 30, 2008 the Louisiana Offshore Oil Port (LOOP) suspended onshore and offshore operations. 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 have been shutdown. Each of these lines has an operating capacity of 1.2 million barrels per day. The Centennial pipeline, a 210,000 barrel per day product line, has also shut down. **The Colonial pipeline, which supplies the East Coast and has an operating capacity of 2.4 million barrels a day, is operating at reduced rates.** See list of pipelines in table below.
- **As of 9:00 AM EDT, September 2, the force majeure declared by Sabine Pipeline on August 31 has not been lifted and all facilities connected to the system remain shut-in, including the Henry Hub operations.** The Henry Hub is the largest centralized point for natural gas spot and futures trading in the United States. The New York Mercantile Exchange (NYMEX) uses the Henry Hub as the point of delivery for its natural gas futures contract.
- **Entergy reports that its Waterford 3 Nuclear Plant near New Orleans completed a controlled shut down on August 31, 2008 in anticipation of Hurricane Gustav, with the plant taken off line at 11:30 PM EDT. At 6:00 PM EDT September 1, 2008, the River Bend Nuclear Plant in St. Francisville, Louisiana was also taken offline with a controlled shut down.**
- As of 11:00 AM EDT August 31, 2008, the Strategic Petroleum Reserve (SPR) facilities at Bayou Choctaw, LA, West Hackberry, LA, and Big Hill, TX have all been shut down. The SPR facility in Bryan Mound, TX is operational.
- On August 29, 2008, the Environmental Protection Agency (EPA) issued a fuel waiver for the sixteen parishes in Louisiana who have a requirement to use 7.8 Reid Vapor Pressure (RVP) gasoline. The waiver extends until 11:59 pm on September 8, 2008.
- On September 1, 2008, EPA issued a fuel waiver for areas in Texas to use conventional gasoline in lieu of reformulated gasoline (RFG) or 7.8 RVP gasoline. The waiver extends until 11:59 pm on September 10, 2008.
- **As of 8:50 AM EDT September 2, 2008, the Houston, Galveston/Texas City, and Freeport Ships Pilots Associations resumed operations for the Houston Ship Channel, Texas City/Galveston, and Freeport. All ports from Pensacola, FL to Port Arthur, TX remain closed, including New Orleans, the Port of Baton Rouge, and Port Fourchon.**

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 VI Austin Interim Operation Facility in Austin, TX, 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.



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)	1,300,000	1,300,000	100.0%
Natural Gas (MMCF/D)	7,062	7,400	95.4%

Source: Minerals Management Service

- As of 12:30 PM EDT, September 1, 2008, the Minerals Management Service (MMS) reports 7,062 million cubic feet per day of the Gulf's natural gas production have been shut-in, equivalent to 95.4 percent of the Gulf production. MMS reports 1,300,000 barrels/day of the Gulf's crude production has been shut-in, equivalent to 100 percent of the Gulf's crude production. A total of 626 production platforms, or 87.3 percent of the Gulf's 717 manned platforms, have been evacuated. Personnel from 100 rigs, representing 82.6 percent of those operating in the region, had been removed
- Companies are currently assessing damage to their Gulf of Mexico production facilities, refineries, pipelines, and terminals in the wake of the storm. Ramp up rates will vary at each facility.
- As of 7:00 PM EDT September 1, 2008, fourteen refineries were shutdown, totaling 2.7 million barrels per day of capacity. Nine refineries in the Gulf Coast region also reduced runs. See table below.
- On the Colonial pipeline, two central Louisiana booster stations were not operating yesterday, September 1, and a third has been operating intermittently due to unreliable power. None of these issues are expected to be long in duration, and service could resume on Tuesday. Parts of the Colonial system not directly impacted by Hurricane Gustav continue to operate normally



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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
Refineries Impacted						
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	2,715,563	0	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.



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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

Notes: * Precautionary shutdown of Lake Charles origin only.

St.James, LA Crude oil storage terminal is shut down, according to NuStar Energy.

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

- There are fourteen natural gas pipelines in the Gulf of Mexico that have declared force majeure resulting in complete shut-in of their systems. Eight pipelines have posted notices to their shippers informing shippers of reduced supply from offshore production, shutdown of processing plants and compressor stations along their systems. In addition, six pipelines have notified their customers of no operational impacts from Gustav. See table below
- Twenty-five out of thirty-one major natural gas processing plants were shut-in in the path of the storm totaling 16.1 billion cubic feet per day. Many of the plants took action to shut down operations and remove personal from the facilities due to the mandatory evacuations



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Force Majeure / Critical Notice Posting by Natural Gas Pipelines		
Pipeline Name	Time Stamp	Notice (Status)
ANR Pipeline Co.	8/30/08	Patterson Compressor station shutdown; Pelican and Calumet plants shutdown.
Chandeleur Pipeline Co.	8/31/08	All production has been shut-in resulting in zero flow.
Destin Pipeline Co.	8/29/08	All offshore shut-in but onshore facilities remain in service.
Discovery Gas Transmission	8/30/08	All operations shut-in
Enbridge (UTOS)	8/30/08	All operations shut-in
Garden Banks Gas Pipeline	8/30/08	All operations shut-in
High Island Offshore System	8/30/08	All production has been shut-in resulting in zero flow.
Manta Ray Offshore Gathering	8/30/08	All operations shut-in
Mississippi Canyon Pipeline	8/29/08	All operations shut-in
Natural Gas Pipeline Co of Am.	8/31/08	Compressor station 342 & 346 shutdown
Nautilus Pipeline Co.	8/30/08	Neptune plant shutdown
Sabine Pipe Line	8/30/08	All operations shut-in including Henry Hub
Sea Robin Pipeline Co.	8/29/08	Sea Robin plant shutdown; all operations shut-in
Southern Natural Gas Co.	9/1/08	Supply reductions from offshore with estimated loss of 960 million cubic feet
Stingray Pipeline Co.	8/30/08	All operations shut-in
Tennessee Gas Pipeline	9/1/08	Supply reductions from offshore with estimated loss of 1.5 billion cubic feet
Texas Eastern Transmission	9/2/08	Supply reductions from offshore with estimated loss of 600-700 million cubic feet. All processing on system shutdown
Texas Gas Transmission	9/1/08	Youngsville compressor station offline
Transcontinental Gas Pipe Line	8/30/08	Emergency Gas Supply Procedures instituted with supply reductions from offshore
Trunkline Gas Pipeline	8/30/08	Calumet & Patterson II plants shutdown
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.

Restoration Updates:

- At 10:30 PM EDT September 1, 2008, Entergy reported extensive damage to its transmission system, with 134 transmission lines and 78 substations out of service. Entergy reports that the New Orleans and Baton Rouge area is essentially an island, no longer electrically connected to the rest of the system. The Waterford 1, Nine Mile Point and Little Gypsy natural gas generating plants are now supplying all power to this area because all transmission lines leading to and from the area are out of service. Entergy has 9,000 workers assisting in the restoration and restoration has already begun where it is safe to do so. In some areas, however, conditions are not yet safe to begin restoration. Entergy stated that it restored power to 30,000, New Orleans customers yesterday.
- 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.
- As of August 29, 2008, Entergy Gulf States Louisiana, Entergy New Orleans and Entergy Louisiana opened their storm command centers in preparation for Hurricane Gustav. Entergy has crews on standby outside of the predicted landfall area, prepared to restore power after the storm makes landfall. Southwestern Electric Power Company is also preparing for outages in the wake of the Hurricane.



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- Mississippi Power reports that its crews are evaluating restoration requirements in their service area.
- As of August 31, 2008, Entergy Mississippi is preparing a restoration team that will respond to Hurricane Gustav. Entergy has crews staged near the landfall area whom are prepared to begin restoration efforts after the storm passes. Entergy Mississippi has contacted suppliers to ensure the availability of poles, wire and other equipment.