



U.S. Department of Energy
Emergency Support Function 12

Hurricane Gustav/Ike Situation Report # 16
September 12, 2008 (12:00 PM EDT)

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

Summary

Table with 3 columns: Impacted State, Electric Customer Outages, % of State Out. Includes sub-sections for Electricity and Petroleum & Natural Gas with rows for Louisiana, TOTAL, Crude Oil Production Shut-In, Natural Gas Production Shut-in, and Refinery Capacity Shut down.

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:

- As of 8:00 AM EDT September 12, the National Hurricane Center reports that the Center of Hurricane Ike is about 230 miles southeast of Galveston, TX moving to the west-northwest at 13 mph. Ike is a Category 2 hurricane with maximum sustained winds near 105 mph. On the forecast track, the center of Ike will be very near the upper Texas coast by late today, September 12 or early Saturday September 13. Because Ike is a very large Hurricane, weather will deteriorate along the coastline today long before the center reaches the coast.
In the State of Louisiana, as of approximately 10:00 AM EDT September 12, there are 149,172 customers reported without power. This represents an increase of 67,649 customers without power from Situation Report #15 when 81,523 customer outages were reported. The increase in outages is due to storm damage related to Hurricane Ike.
On September 11, 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 Hurricane Ike. EPA waived the 7.0/7.8 and 9.0 psi Reid Vapor Pressure (RVP) maximums and ethanol additive



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federal requirement for gasoline in the States of AL, FL, GA, LA, MS, NC, SC, TN and TX and the reformulated gasoline requirement in TX through September 30. AL, FL, GA, LA, NC and TX all received extensions to their previous waivers. The waivers will allow the use of 11.5 psi RVP fuel and conventional gasoline.

- All ports in Texas from Freeport west to the Louisiana border are closed as the coast is beginning to be battered by gale force winds this morning. The Port of Lake Charles in Louisiana is also closed. The Port of Corpus Christi, Texas is officially open as of the morning of September 12, but the Pilot’s Association has suspended all boardings.
- As of September 11, the LOOP has suspended all operations on- and off-shore.

ESF 12 Actions:

- ESF-12 is staffing the FEMA Region VI Regional Response Coordination Center (RRCC) in Denton, TX, the FEMA Region VI Joint Field Office in Austin, TX, the FEMA Region VI Joint Field Office (JFO) in Baton Rouge, LA, 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)	1,260,243	1,300,000	96.9%
Natural Gas (MMCF/D)	6,906	7,400	93.3%

Source: Minerals Management Service

- As of 12:30 PM EDT, September 11, the Minerals Management Service (MMS) reports 6,906 million cubic feet per day (MMcf/d) of the Gulf’s natural gas production remains shut-in, equivalent to 93.3 percent of the Gulf production. This is an increase of 1,501 MMcf/d from what was reported September 10. MMS reports 1,260,243 barrels/day of the Gulf’s crude production remains shut-in, equivalent to 96.9 percent of the Gulf’s crude production. This is an increase of 13,648 barrels/day from what was reported September 10. A total of 562 production platforms, or 78.4 percent of the Gulf’s 717 manned platforms, have been evacuated. Personnel from 93 rigs, representing 76.9 percent of those operating in the region, have been removed.
- As of 10:00 AM EDT September 12, thirteen Texas refineries have shut down due to Hurricane Ike. These refineries located in Port Arthur, Houston/Texas City, and Corpus Christi regions have a total operable capacity of 3.6 million b/d. All refineries shut down by Hurricane Gustav are either restarting or operating. The last remaining refinery shut down by Hurricane Gustav – ConocoPhillips Belle Chasse – had power restored on September 11, and has entered restart procedures. (See table below).



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- As of 11:00 AM EDT September 11, the Strategic Petroleum Reserve (SPR) sites at Bryan Mound, TX, Big Hill, TX, and West Hackberry, LA have been shut down. The Bayou Choctaw SPR site is operational.
- On September 11, the Strategic Petroleum Reserve announced that it will deliver 130,000 barrels of crude oil to Placid Port Allen via the Shell pipeline and an additional 250,000 barrels of crude oil to Marathon’s Midwest refineries via the Capline pipeline.
- Major crude pipelines originating in Texas and Louisiana have shut down operations. Petroleum product and natural gas liquids pipelines have either shut or partially shut their operations as of September 12, 10:00 AM EDT. Most offices located near Houston have been evacuated making it difficult to confirm all impacted pipelines. (See table below.).

Pipelines in the Path of Gustav / Ike as of 9/12/08 10:00 AM EDT								
Type	Name	Start	Terminus	Capacity (barrels/day)	Shut Down	Partial 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	Genesis gathering/refinery	TX, MS, AL	TX, MS, AL	NA	NA			
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	CP Seaway Products	TX	OK	85,000	85,000			
Product	CP Sweeny to Pasadena	TX	TX	115,000	115,000			
Product	Explorer	LA/TX	IN	700,000	700,000			
Product	Longhorn	TX	TX	72,000	72,000			
Product	Magellan	TX	CO, MN, WI, IL	120,000		120,000		
Product	NuStar/Texas Gulf Coast	TX	TX	~100,000	~100,000			
Product	Plantation	LA	VA	600,000			600,000	
Product	TEPPCO	TX	PA, NY	330,000		330,000		
NGL	Dixie	TX	NC	100,000		100,000		
NGL	Enterprise	TX	IL, MN	641,000	641,000			

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



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Refineries in the Path of Gustav / Ike as of 9/12/08 10:00 AM EDT							
Refinery Impacted	Location	Storm	Capacity (B/D)				
			Operating	Shut Down	Restarting	Reduced Runs	Back to Normal
Pascagoula/Mobile Region							
Chevron	Pascagoula, MS	G	330,000			330,000	
Shell	Saraland, AL	-	86,000				
Pascagoula/Mobile Total			416,000	0	0	330,000	
Lower Mississippi River Region							
Alon (Formerly Valero)	Krotz Springs, LA	G	80,000			80,000	
Chalmette Refining	Chalmette, LA	G	192,760				192,760
ConocoPhillips	Belle Chasse, LA	G	247,000		247,000		
ExxonMobil	Baton Rouge, LA	G	503,000			503,000	
Marathon	Garyville, LA	G	256,000			256,000	
Motiva	Norco, LA	G	236,400			236,400	
Motiva	Convent, LA	G	235,000		235,000		
Murphy Oil	Meraux, LA	G	120,000		120,000		
Placid Refining	Port Allen, LA	G	56,000			56,000	
Shell	Saint Rose, LA	G	55,000		55,000		
Valero	Norco, LA	G	185,003		185,003		
Lower Mississippi River Total			2,166,163	0	842,003	1,131,400	192,760
Lake Charles Region							
Calcasieu	Lake Charles, LA	G	78,000				78,000
Citgo	Lake Charles, LA	G	429,500			429,500	
ConocoPhillips	Westlake, LA	G	239,400			239,400	
Lake Charles Total			746,900	0	0	668,900	78,000
Port Arthur Region							
ExxonMobil	Beaumont, TX	G+I	348,500	348,500			
Motiva	Port Arthur, TX	G+I	285,000	285,000			
Total Petrochemicals	Port Arthur, TX	G+I	232,000		232,000		
Valero (formerly Premcor)	Port Arthur, TX	G+I	289,000	289,000			
Port Arthur Total			1,154,500	922,500	232,000	0	
Houston/Galveston Region							
BP	Texas City, TX	I	467,720	467,720			
ConocoPhillips	Sweeny, TX	I	247,000	247,000			
Deer Park	Deer Park, TX	I	329,800	329,800			
ExxonMobil	Baytown, TX	I	567,000	567,000			
Houston Refining	Houston, TX	I	270,600	270,600			
Marathon	Texas City, TX	I	76,000	76,000			
Pasadena Refining	Pasadena, TX	G+I	100,000	100,000			
Valero	Houston, TX	I	83,000	83,000			
Valero	Texas City, TX	I	199,500	199,500			
Houston/Galveston Total			2,340,620	2,340,620	0	0	
Corpus Christi Region							
Citgo	Corpus Christi, TX	I	156,000			156,000	
Flint Hills Resources	Corpus Christi, TX	I	288,126	288,126			
Valero	Corpus Christi, TX	-	142,000				
Valero	Three Rivers, TX	-	93,000				
Corpus Christi Total			679,126	288,126	0	156,000	
TOTAL			7,503,309	3,551,246	1,074,003	2,286,300	270,760

Note: The table does not include all refineries in the PADD III, Gulf Coast Region.

Storm column indicates hurricanes impacting refineries: G = Gustav; I = Ike, G+I = Both storms, and - = no impact.

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

- As of 10:00 AM EDT September 12, there are multiple offshore natural gas pipelines that continue to experience gas flow reductions or complete shut-in of their systems due to Gustav. As Hurricane Ike approaches the Gulf of Mexico, many pipelines have declared force majeure



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and have shut-in operations. A table providing updated critical notices posted by pipelines is below.

- As of 1:00 PM EDT September 11, Sabine Pipeline notified customers that Vermillion Parish is under mandatory evacuation which includes the physical location of the Henry Hub. A force majeure has been declared for three points along the Sabine Pipeline due to Hurricane Ike.

Force Majeure / Critical Notice Posting by Natural Gas Pipelines as of 9/12/08 10:00 AM EDT		
Pipeline Name	Time Stamp	Notice (Status)
ANR Pipeline Co.	9/10/08	Patterson Compressor station has shut down effectively eliminating all upstream points until further
Chandeleur Pipeline Co.	9/11/08	Notice of reduced flow.
Destin Pipeline Co.	9/9/08	Force Majeure carried over from Gustav - all offshore points remain shut-in.
Discovery Gas Transmission	9/12/08	Force Majeure declared Friday, Sept 12.
Enbridge (UTOS)	9/10/08	Force Majeure declared Thursday, Sept 11.
Garden Banks Gas Pipeline	9/10/08	Force Majeure declared Tuesday, Sept 9.
High Island Offshore System	9/10/08	Forced Majeure declared Wednesday, Sept 10.
KinderMorgan (Texas & Tejas)	9/12/08	Force Majeures declared Friday, Sept 12. No storage capability.
Manta Ray Offshore Gathering	9/9/08	Force Majeure declared Tuesday, Sept 9.
Mississippi Canyon Pipeline	9/10/08	Force Majeure carried over from Gustav - unknown at time to return to service.
Natural Gas Pipeline Co of Am.	9/11/08	Force Majeure declared Thursday, Sept 11. Compressor Station 342 shut down.
Nautilus Pipeline Co.	9/10/08	Force Majeure declared Tuesday, Sept 9.
Sabine Pipe Line	9/12/08	Force Majeure declared Friday, Sept 12 - evacuation of parish.
Sea Robin Pipeline Co.	9/11/08	Sea Robin processing plant shut down, mandatory evacuation.
Southern Natural Gas Co.	9/9/08	Noticed of reduced flow - Producers have notified SNG of evacuations of platforms.
Stingray Pipeline Co.	9/10/08	Forced Majeure declared Wednesday, Sept 10.
Tennessee Gas Pipeline	9/10/08	Tennessee Gas Pipeline 9/10/08 Flow is restricted from off-shore points until further notice impacting a decline of 1 billion cubic feet per day of gas flow.
Texas Eastern Transmission	9/8/08	Some facilities remain shut in due to Gustav; mandatory evacuation resulting in shut-in of facilities (compressor stations) impacting gas flow.
Texas Gas Transmission	9/12/08	Notice of reduced flow - Producers have notified TGT of evacuations of platforms.
Transcontinental Gas Pipe Line	9/10/08	Instituting Emergency Gas Supply Procedures on Sep 11, 2008 due to reduced flows from off-shore
Trunkline Gas Pipeline	9/10/08	Expecting producer shut-ins action will be taken as required. Houston offices closed Friday, September 12, 2008.
Venice Gathering System	9/4/08	Remains shut in from the effects of Gustav.
Dauphin Island Gathering Partners	9/10/08	Force Majeure declared. Deliveries will be unavailable until Sep 12, 2008 at the earliest and will not resume until Ike has passed.

- There are 38 major natural gas processing plants in the path of Hurricane Ike with a total operating capacity of 17.3 billion cubic feet per day (Bcf/d). As of 12:00 PM EDT, September 12, twenty of these plants have been confirmed as shut down which includes those plants still impacted from Gustav. The total shut down operating capacity is 10.5 Bcf/d. In addition, 5 plants with total capacity of 3.8 Bcf/d, have been confirmed as operating at normal levels and currently there is no status on 11 plants totaling 2.2 Bcf/d. See table below.



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Natural Gas Processing Plants in the Path of Ike & Gustav as of 9/12/08 12:00 PM EDT							
Plant Name	Location	Impact	Capacity (million cubic feet per day) ¹				
			Design System Operation	Shut Down	Capable to Restart ²	Operating at Reduced Level	Normal
EAST LA / AL							
Yscloskey	St. Bernard, LA	G	1,850	1,850			
Venice	Plaquemines, LA	G	1,300	1,300			
Pelican	St. Mary, LA	G	600		600		
Larose	Lafourche, LA	G + I	600	600			
Plaquemine	Iberville, LA	G	225		225		
Burns Point	St. Mary, LA	G	160	160			
Mobile Bay (Duke)	Mobile, AL	M	300	300			
WEST LA / EAST TX							
Eunice	Acadia, LA	G + I	1,200				1,200
Sea Robin	Vermilion, LA	G + I	950	950			
Bluewater	Acadia, LA	G + I	950	950			
Cameron Meadows	Cameron, LA	G + I	500	500			
Iowa	Jefferson Davis, LA	G + I	500	500			
Grand Chenier II	Cameron, LA	G + I	400	400			
Sabine Pass	Cameron, LA	G + I	300	300			
Stingray	Cameron, LA	G	300	300			
Lowry	Cameron, LA	G + I	265	265			
Barracuda	Cameron, LA	G + I	225	225			
Dubach	Lincoln, LA	G + I	175	N/A	N/A	N/A	N/A
East Texas (MarkWest)	Panola, TX	I	780	780			
East Texas (DCP)	Panola, TX	I	750				750
Port Arthur	Jefferson, TX	G + I	200	200			
Carthage	Panola, TX	I	175				175
Forth Worth II	Johnson, TX	I	170	N/A	N/A	N/A	N/A
Indian Springs	Polk, TX	I	150	N/A	N/A	N/A	N/A
CENTRAL EAST TX							
Houston Central	Colorado, TX	I	700				700
Markham	Matagorda, TX	G + I	300	300			
Matagorda	Matagorda, TX	G + I	250	250			
Armstrong	De Witt, TX	I	250	N/A	N/A	N/A	N/A
Point Comfort	Calhoun, TX	I	200	200			
Old Ocean	Brazoria, TX	I	200	N/A	N/A	N/A	N/A
Wilcox	Lavaca, TX	I	200	200			
La Grange	Fayette, TX	I	200	N/A	N/A	N/A	N/A
Waskom	Harrison, TX	I	150	N/A	N/A	N/A	N/A
SOUTH EAST TX							
King Ranch	Kleberg, TX	I	925				925
Shoup	Nueces, TX	I	290	N/A	N/A	N/A	N/A
La Gloria	Jim Wells, TX	I	265	N/A	N/A	N/A	N/A
Gregory	San Patricio, TX	I	150	N/A	N/A	N/A	N/A
Gulf Plains	Nueces, TX	I	150	N/A	N/A	N/A	N/A

Note: Storm column indicates hurricanes impacting processing plant: G = Gustav; I = Ike, G+I = Both storms, and M = Maintenance
 "N/A" (Not Available or Confirmed) identifies those plants that are in the path of Ike that have not yet been confirmed of their status.

¹ The capacity represents the design capacity of the plants and does not represent the actual gas flow through these plants.

² Confirmed plants 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:

- Entergy reports as of 6:30 AM EDT September 12, remaining damage to the transmission system includes 23 lines and 12 substations, down from a peak of 241 transmission lines and 352 substations immediately following the storm.



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- Entergy has made extensive progress in restoring power customers who lost power due to Hurricane Gustav. As a result of storm conditions from Hurricane Ike, new outages are beginning to occur in Louisiana.

Electric Power Restoration Estimates for Entergy Customers

Estimated date for 100% restoration	Parishes
September 11	East Feliciana, Livingston, St. Bernard, St. Charles and Tangipahoa
September 12	lower Jefferson, except for Grand Isle, Pointe Coupee, West Feliciana and West Baton Rouge
September 14	Iberville
September 15	Plaquemines
September 16	Terrebonne.
September 17	Assumption, East Baton Rouge and Lafourche, except Fouchon
September 20	Ascension (Donaldsonville only).
September 24	St. Martin

Note: Scattered outages remain.

- On September 10, the Waterford nuclear plant has returned to service and was reconnected to the Entergy electric system. As of the morning of September 12, it is operating at 100 percent capacity. The River Bend nuclear plant is still shut down as of morning of September 12, but according to Entergy once the damaged exterior siding is repaired, River Bend will be given the go-ahead to begin the regulatory checks and inspections needed for a gradual startup.
- In Louisiana, Entergy is moving its crews to safe areas due to storm conditions resulting from Ike. Most of the remaining Gustav outages are in heavily damaged areas requiring more extensive repairs. As a result, the pace of restoration from this point forward will now be slower. Entergy now has about 9,000 workers aiding in the restoration effort in Louisiana. The reduction is due to non-Entergy workers being recalled to home service areas to prepare for Ike. CLECO also is monitoring Ike and is making preparations.
- In Texas, Entergy, AEP, CenterPoint and other utilities are preparing for Hurricane Ike and are readying crews and materials to respond to affected areas in Texas once it is safe to do so. Entergy crews from Texas who were aiding in Gustav restoration have returned to Texas to respond to Ike. Entergy is continuing to ask for additional crews from around the country to assist in restoration for both storms. Electric Cooperatives are reporting that storm conditions could cause customers to loose power as early as the afternoon of September 12.