



U.S. Department of Energy
Emergency Support Function 12

Hurricane Ike Situation Report # 1

September 13, 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. Rows include Louisiana (218,983 outages, 10% out), Texas (2,383,062 outages, 22% out), and TOTAL (2,602,045 outages). A second section for Petroleum & Natural Gas includes Crude Oil Production Shut-In (1,267,187 b/d, 97.5% out), Natural Gas Production Shut-in (6,985 mmcf/d, 94.4% out), and Refinery Capacity Shut down (3,783,246 b/d, 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:

- The National Hurricane Center reports that Hurricane Ike made landfall as a strong Category 2 just after 3:00 AM EDT September 13. Ike has since been downgraded to a Category 1 hurricane with maximum sustained winds of 80 mph. As of 11:00 AM EDT September 13 the center was located about 20 miles north-northeast of Huntsville, Texas. Ike is moving to the north-northeast and remains a heavy rainfall and tornado threat.
As of 10:00 AM EDT 2,602,045 customers are without power in Texas and Louisiana. This includes 2,383,062 in Texas and 218,983 in Louisiana. In Texas, the majority of these customers are served by electricity distributors that received their power from CenterPoint and Entergy customers.
The South Texas and Comanche Peak nuclear power plants in Texas did not shut down and are not expected to be affected by the storm. Sabine Station (natural gas generating facility) was taken off-line as a precaution.



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- 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 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. **On September 12, the EPA issued an emergency fuel waiver for VA allowing the use of conventional gasoline in lieu of reformulated gasoline. Ohio also received a waiver allowing the use of 9.0 RVP in 7.8 RVP markets.**
- **As of 11:00 AM EDT September 13, the following ports remain closed by the U.S. Coast Guard: Freeport, Texas City, Galveston, Port Arthur, Beaumont-Orange, Lake Charles, and Port Lavaca. Flyovers are being scheduled for September 13-14 to assess extent of damage. Ports to the south – Brownsville and Corpus Christi are open. Ports to the east of Port Arthur are open. As of 11:00 AM September 13, three Mississippi River locks operated by the U.S. Army Corps of Engineers remain closed -- Calcasieu, River Saltwater Barrier, and Leland Bowman.**
- **As of September 12 at 1:15 PM EDT, the LOOP has resumed limited operations from its Clovelly storage facility. Tanker offloadings remain suspended. Capline, which receives its crude oil from the LOOP, reported reduced movements along its pipeline.**

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 (JFO) in Austin, TX, the FEMA Region VI (JFO) in Baton Rouge, LA, and the National Response Coordination Center (NRCC) in Washington, DC. **In addition, a petroleum expert has been deployed to San Antonio, TX to serve as part of FEMA's National Incident Management Assistance Team (IMAT) and an electricity expert has been deployed to join the Region IV IMAT in Houston, TX.**

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)	1,267,187	1,300,000	97.5%
Natural Gas (MMCF/D)	6,985	7,400	94.4%

Source: Minerals Management Service

- **As of 12:30 PM EDT, September 12, the Minerals Management Service (MMS) reports 6,985 million cubic feet per day (MMcf/d) of the Gulf’s natural gas production remains shut-in, equivalent to 94.4 percent of the Gulf production. This is an increase of 79 MMcf/d from what**

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was reported September 12. MMS reports 1,267,187 barrels/day of the Gulf's crude production remains shut-in, equivalent to 97.5 percent of the Gulf's crude production. This is an increase of 6,944 barrels/day from what was reported September 11. A total of 596 production platforms, or 83.1 percent of the Gulf's 717 manned platforms, have been evacuated. Personnel from 101 rigs, representing 83.5 percent of those operating in the region, have been removed.

- On September 12, the Louisiana Department of Natural Resources reported that only 33,428 barrels/day or 21 percent of the normal production has been restored. Operators in 17 parishes and in State offshore areas normally produce 155,767 barrels/day (the numbers are in addition to MMS reports of Federal offshore production). On September 12, 86,096 barrel/day or 55 percent of the normal production remains shut-in and status is unknown for 36,242 barrels/day.
- As of 10:00 AM EDT September 13, fourteen Texas refineries were 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 3.8 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).
- As of 8:30 AM EDT September 13, the Strategic Petroleum Reserve (SPR) sites at Bryan Mound, TX, Big Hill, TX, and West Hackberry, LA remain 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.).



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Refineries in the Path of Gustav / Ike as of 9/13/08 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	1,154,500	0	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	3,783,246	842,003	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



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Pipelines in the Path of Gustav / Ike as of 9/13/08 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.

- As of 10:00 AM EDT September 13, there have been no reports of any damage to natural gas pipelines or production infrastructure. As mandatory evacuations are lifted, operators will begin the process of accessing the conditions of their facilities and systems and report when their systems can resume. All major offshore natural gas pipelines are shut in or operating at less than 25% of normal levels due to evacuations of platforms and onshore facilities. A table providing updated critical notices posted by pipelines is below.
- As of 10:00 PM EDT September 12, Sabine Pipeline notified customers that the pipeline has declared a force majeure resulting in the entire pipeline system, including the Henry Hub being shut in and all facilities evacuated.



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Force Majeure / Critical Notice Posting by Natural Gas Pipelines as of 9/13/08 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.	9/12/08	Notified customers of loss of all offshore production.
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 late Friday, Sept 12 - entire system shut in including Henry Hub.
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	9/12/08	Mandatory evacuation of TX compressor stations reducing flow - restriction in gas flow from offshore points.
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.
Black Marlin Pipeline	9/12/08	Force Majeure declared Friday, Sept 12. - no gas flow being accepted.
Northern Natural	9/12/08	Force Majeure declared Frida, Sept. 12 - Matagorda Offshore Pipeline System.

- There are 39 major natural gas processing plants in the path of Hurricane Ike with a total operating capacity of 17.6 billion cubic feet per day (Bcf/d). As of 10:30 AM EDT, September 13, twenty-eight of these plants have been confirmed as shut down which includes those plants still impacted from Gustav. The total shut down operating capacity is 13.5 Bcf/d. In addition, 9 plants with total capacity of 3.7 Bcf/d, have been confirmed as operating at reduced or normal levels and currently there is no status on 2 plants totaling 0.4 Bcf/d. See table below.



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Natural Gas Processing Plants in the Path of Ike & Gustav as of 9/13/08 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			
Gillis	Calcasieu, LA	G + I	180	180			
Dubach	Lincoln, LA	G	175				175
East Texas (MarkWest)	Panola, TX	I	780	780			
East Texas (DCP)	Panola, TX	-	750				750
Godley (Forth Worth II)	Johnson, TX	I	300			300	
Port Arthur	Jefferson, TX	G + I	200	200			
Carthage	Panola, TX	I	175	175			
Indian Springs	Polk, TX	I	150	N/A	N/A	N/A	N/A
CENTRAL EAST TX							
Houston Central	Colorado, TX	-	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	200			
Wilcox	Lavaca, TX	I	200	200			
La Grange	Fayette, TX	I	200	200			
Waskom	Harrison, TX	-	150				150
SOUTH EAST TX							
King Ranch	Kleberg, TX	-	925				925
Shoup	Nueces, TX	-	290				290
La Gloria	Jim Wells, TX	-	265				265
Gregory	San Patricio, TX	I	150	150			
Gulf Plains	Nueces, TX	-	150				150

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.



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Electricity Updates:

Louisiana:

As of: 9/13/2008 10:00 AM EDT



Electricity Outages: Utility Detail			
Louisiana			
Utility	Outages	Total Utility	% w/o Power
Cleco Power LLC	12,090	265,556	4.6%
Entergy (Gulf States, Louisiana, New Orleans combined)	189,946	1,140,194	16.7%
All Cooperatives	16,947	413,231	4.1%
All Municipal		156,155	0.0%
TOTAL	218,983	1,975,136	

Total state and utility customers are based on 2006 EIA Customer Data; Electric Cooperative customer totals provided by Louisiana Public Service Commission.

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.

- As of 10:00 AM EDT September 13, there are 218,983 customers without power in Louisiana. Entergy reports 60,586 customer outages remaining from Gustav in plus an additional 129,360 customers without power due to Ike for a total of 189,946. Approximately 29,000 additional customers are reported without power across other Louisiana utilities and cooperatives. These numbers are expected to climb.
- Remaining Gustav damage to the Entergy transmission system included 19 lines and 11 substations out of service, down from a peak of 241 transmission lines and 352 substations immediately following Gustav. At 5:00 PM EDT September 12, Hurricane Ike had caused seven substations and three transmission lines to go out of service.



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Texas:

As of: 9/13/2008 10:00 AM EDT



Electricity Outages: County Detail			
Texas			
Utility	Outages	Total Utility	% w/o Power
AEP Texas	2,000	952,140	0.2%
Entergy Texas	381,062	382,202	99.7%
CenterPoint/Reliant	2,000,000	1,884,607	106.1%
TXU Energy		2,142,721	0.0%
Total Cooperative		1,749,644	0.0%
Total Municipal		1,599,664	0.0%
TOTAL	2,383,062	8,710,978	

Total state and utility 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.

- In Texas, over 2.4 million customers are reported without power. The majority of these customers are served by electricity distributors that received their power from CenterPoint and Entergy customers.
- ERCOT reports that the South Texas Nuclear Plant will not shut down as earlier reported since winds at the facility will not be as forecast. A walkthrough of the facility is being conducted this morning.
- The NRC reports that Comanche Peak, located in Glen Rose, Texas is not expected to be affected by the storm.
- In preparation for the storm, Entergy Texas reported Friday that it successfully shut down the Sabine Station (natural gas generating facility) in Bridge City. All five units were taken offline.
- Reuters is reporting that nearly all 2 million CenterPoint customers, or 4.5 million people, in the Houston-Galveston area were without power. CenterPoint has thousands of lineman and other crews prepared to respond to damage following the storm.
- Entergy is reporting about 381,062 customers without power.
- Hurricane Ike has had minimal impact on the AEP Texas service area. Crews are currently working to restore power to approximately 2,000 customers located mainly in the Bay City and El Campo areas.

Restoration Updates:



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- Electric utilities and cooperatives are staging thousands of workers to assist in restoration. Assessments are expected to begin this afternoon. Restoration likely will be impacted by flooding from storm surge. Full restoration is expected to take several weeks. In Louisiana, Gustav restoration is temporarily suspended in areas affected by Ike.
- Entergy is beginning to respond to outages caused by Ike. Gustav restoration efforts, particularly in low-lying areas, were temporarily suspended in areas affected by Ike. Ike's impact on the area recently affected by Gustav could be more damaging than if the system was in its normal condition. This is due to fewer redundant lines to supply multiple sources of power and weakened trees that could be more susceptible to winds.
- 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.