



U.S. Department of Energy
Emergency Support Function 12

Hurricane Ike Situation Report # 13

September 20, 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	12,114	1%
Kentucky	93,935	4%
Indiana	14,333	0%
Pennsylvania	2,533	1%
Ohio	238,760	4%
Texas	1,204,474	11%
TOTAL:	1,566,149	
Petroleum & Natural Gas		
	Amount	%Capacity Out*
Crude Oil Production Shut-In (b/d)	1,160,174	89.2%
Natural Gas Production Shut-in (mmcf/d)	5,576	75.4%
Refinery Capacity Shut down (b/d)	2,268,320	NA

Notes:

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 9:00 AM EDT September 20, there are an estimated 1,566,149 customers without power. The largest outages remain in Texas where 1,204,474 customers are without power. Across all states affected by Ike, power has been restored to over 324,000 customers since Ike Situation Report No. 12. Outages in heavily impacted Texas counties as reported by the Texas PUC as of 9:00 AM September 20 include:
 - Harris - 816,537
 - Galveston - 72,649
 - Jefferson - 70,330
 - Orange - 7,287



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- On September 19, DOE announced it was delivering 561,000 barrels of emergency exchange oil from the Strategic Petroleum Reserve to ConocoPhillips Company’s Wood River, IL refinery along the Capline pipeline system.
- As of 7:00 PM EDT September 19, there were 76 ships still in queue waiting to enter one of the following ports: Texas City, Houston, Port Arthur, or Lake Charles. No oil tankers were in queue for Texas City, Port Arthur or Lake Charles. Houston may have up to three oil tankers in queue. As of 8:00 AM EDT September 20, vessels in the Houston ship channel turning basin area are limited to drafts 34 feet or less. Vessels in the Sabine and Neches Rivers going into the Port Arthur area are limited to drafts of 36 feet in the day and 30 feet at night. Part of the Gulf Intracoastal Waterway (GIWW) in TX has re-opened, but it is still closed from mile marker 350 to 289 and has some closures in LA as well. The Calcasieu Channel and Lake Charles is limited to vessels with drafts of less than 39 feet for daylight transit and only 16 feet at all other times. On September 19, a safety zone went into effect for the Lower Mississippi River above mile marker 191 to about mile marker 230 for vessels with a draft greater than 30 feet; they are limited to daylight hours only.
- The U.S. Coast Guard has noted that there are a large number of oil and chemical spills along the coast from Houston, TX to Lake Charles, LA. The Coast Guard is working closely with State and Federal agencies to expedite clean-up efforts.

ESF 12 Actions:

- ESF-12 is staffing the FEMA Region VI Joint Field Office (JFO) in Austin, TX, the Region V RRCC in Chicago, IL, 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. The FEMA Region VI JFO in Baton Rouge, LA and the FEMA Region VI Regional Response Coordination Center in Austin, 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)	1,160,174	1,300,000	89.2%
Natural Gas (MMCF/D)	5,576	7,400	75.4%

Source: Minerals Management Service



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- As of September 19, the Minerals Management Service (MMS) reports 5,576 million cubic feet per day (MMcf/d) of the Gulf's natural gas production remains shut-in, equivalent to 75.4 percent of the Gulf production. MMS reports 1,160,174 barrels/day of the Gulf's crude production remains shut-in, equivalent to 89.2 percent of the Gulf's crude production. A total of 262 production platforms, or 36.5 percent of the Gulf's 717 manned platforms, remain evacuated. Personnel from 6 rigs, representing 5.0 percent of those operating in the region, remain evacuated.
- On September 18, the Louisiana's Department of Natural Resources reports that 26,945 b/d or 17 percent of the normal Louisiana oil 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). Shut-in oil production is 95,416 b/d and the status of remaining 33,405 b/d is unknown. The estimated amount of restored gas production is 434 MMcf/d or 27 percent of the daily gas production capacity, which is 1,642 MMcf/d. The estimated amount of shut-in gas production is 894 MMcf/d; the status of the remaining 312 MMcf/d has not been confirmed.
- No changes have been reported on the status of the petroleum pipelines since Situation Report #12.
- As of 9:00 AM EDT September 20, nine refineries in Texas, with a total operable capacity of 2.3 million b/d, remain shut down due to Hurricane Ike. Valero reported restarting its Houston refinery late on September 17. ExxonMobil reported that it initiated restart procedures at its Baytown refinery on September 18. As of 11:30 am EDT September 19, ConocoPhillips reported its Lake Charles refinery back to normal operations. Flint Hills Resources has decided to delay planned maintenance from late September to late October at its Corpus Christi Refinery, which is running at normal rates. (See table below.)



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Refineries in the Path of Gustav / Ike as of 9/20/08 9:00 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	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	0	1,120,000	1,046,163
Lake Charles Region							
Calcasieu	Lake Charles, LA	G+I	78,000			78,000	
Citgo	Lake Charles, LA	G+I	429,500			429,500	
ConocoPhillips	Westlake, LA	G+I	239,400				239,400
Lake Charles Total			746,900	0	0	507,500	239,400
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	1,113,820	1,226,800	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	I	142,000				142,000
Valero	Three Rivers, TX	I	93,000			93,000	
Corpus Christi Total			679,126	0	0	93,000	586,126
TOTAL			7,503,309	2,268,320	1,226,800	1,720,500	2,201,689

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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- Tennessee Gas Pipeline (TGP) continues its damage assessments from Hurricane Ike. The company has notified customers along various segments of its system that they can accept gas flows.
- The status of gas processing plants remains unchanged from Situation Report #12. There are 39 major natural gas processing plants in the path of Hurricane Ike with a total operating capacity of 17.7 billion cubic feet per day (Bcf/d).¹ The Energy Information Administration (EIA) has confirmed that 8 plants remain shut down which includes those plants still impacted from Gustav, totaling an operating capacity of 5.08 Bcf/d (just under 30 percent of the capacity in Hurricane Ike's path). In addition, EIA reports that 20 plants have resumed operations at reduced or normal levels totaling 7.35 Bcf/d operating capacity with one of the plants only conditioning the natural gas and not processing at this time. Ten plants are capable to restart totaling 5.03 Bcf/d operating capacity once power is restored and/or upstream gas flow commences.



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Force Majeure / Critical Notice Posting by Natural Gas Pipelines as of 9/20/08 7:00 AM EDT

Pipeline Name	Time Stamp	Notice (Status)
ANR Pipeline Co.	9/19/08	ANR Southeast Area locations can now resume gas flow but not accepting liquids from these points. WC 167 the Interconnect with UTOS and HIOS is down until further notice. Pipeline is not accepting gas from Barracuda, Stingray and Johnson Bayou Plants.
Chandeleur Pipeline Co.	9/16/08	Operationally Scheduled Volumes indicates pipeline is flowing at 75% of pre hurricane levels.
Columbia Gulf Transmission	9/18/08	Flow from offshore points has been reduced to approximately 25% of normal operating capacity.
Destin Pipeline Co.	9/18/08	Pascagoula processing plant Force Majeure declared Sept. 15 now lifted and flows will resume to normal.
Discovery Gas Transmission	9/19/08	Larose processing plant fully operational. Offshore receipts remain unavailable pending assessments; Pipeline is accepting flow from: Tennessee Gas Pipeline and all Paradis Gas Gathering producers (PGGS), Tetco, Transco, Bridgeline and GulfSouth .
Enbridge (UTOS)	9/19/08	All UTOS facilities remain under Force Majeure and are currently down and all points are shut-in. Damage assessments are still underway. .
Garden Banks Gas Pipeline	9/19/08	Assessment and repair continue. Garden Banks' pipeline facilities are essentially ready for return to service; availability of downstream outlets for gas and condensate will determine when pipeline operation will resume.
High Island Offshore System	9/18/08	Force Majeure from Sept 10 remains in effect - HIOS is currently securing equipment to locate a potential leak on its 42-inch line north of HIA-264. The equipment is expected to be on location in three (3) days.
KinderMorgan (Texas & Tejas)	9/17/08	Force Majeures remains in effect from Friday, Sept 12. All firm storage customers can resume injections at 50% of their firm injection rights until further notice
Manta Ray Offshore Gathering	9/19/08	Assessments continue on offshore platforms and facilities. A significant amount of repair work is expected to be completed by Sep 25, 2008. Partial service expected by Friday, Sept 26.
Mississippi Canyon Pipeline	9/19/08	There are no major updates to MCGS at this time. Assessments and repairs continue as planned. Enbridge continues to seek out further details from downstream pipelines as to their availability. Earliest expected date for restoration of service: Sunday, September 21, 2008
Natural Gas Pipeline Co of America	9/18/08	Notified customers that some delivery points along the LA line are available to flow gas. Natural is continuing to evaluate the extent of any damage to the facilities, as well as waiting for the power company to restore necessary power supply to the affected facilities.
Nautilus Pipeline Co.	9/19/08	Due to upstream restrictions and ongoing damage assessment at Burns Point, Nautilus Pipeline Company, LLC (Nautilus) remains under Force Majeure. Nautilus is not accepting nominations at this time.
Sabine Pipe Line (Henry Hub)	9/18/08	Force Majeure has been lifted for some additional points along the system. Partial compression has been restored at the Henry Hub complex and the pipeline is closely monitoring its system.
Sea Robin Pipeline Co.	9/17/08	Sea Robin will begin accepting flow on Sep 22, 2008. The Hess Processing Plant will operate at a minimum volume of 150,000 Dth/d until at least Sep 24, 2008.
Southern Natural Gas Co.	9/19/08	Southern's flowing supply impact has decreased to approximately 340,000 Mcf/d. Southern's line inventory remains at adequate levels and pressures remain steady across our market area.
Stingray Pipeline Co.	9/19/08	Some onshore facilities (office building) sustained water damage; offshore facilities have minor damage and crews are working to repair visual damage and will perform further inspections in the coming days. Crews are being flown into onshore facilities due to the hazardous road conditions. System repairs could take up to 2 weeks.
Tennessee Gas Pipeline	9/19/08	TGP has completed assessments of multiple facilities with most having minimal damage. Tennessee estimates current supply loss at this time to be at approximately 0.9 Bcf.
Texas Eastern Transmission	9/19/08	TE estimates that producers have shut-in 400-500 MMcf/d of supply on its system. Investigations of TE's pipeline facilities, third party gas processing plants in Louisiana and offshore infrastructure are not complete. Until these investigations are complete, these facilities will remain shut-in.
Texas Gas Transmission	9/17/08	All systems on the pipeline are operational, but they are closely monitoring receipt points.
Transcontinental Gas Pipe Line	9/19/08	Supply impact at 700 MMcf/d that remains shut-in. Southwest, Central and Southeast, LA laterals of system remain at zero flow.
Trunkline Gas Pipeline	9/19/08	Declared Force Majeure event impacting gas flow deliveries on the ELA (East Louisiana). Flooding at Centerville Compressor Station limiting gas flow to Henry Hub. Pipeline integrity to Patterson has been confirmed and 11 receipt points have been cleared for flow.
Venice Gathering System	9/18/08	Remains shut-in from the effects of Gustav. Processing plant will not be available until first week in October – gas flow will remain at zero until plant is fully operational.
Dauphin Island Gathering	9/16/08	Force Majeure lifted as Mobile Bay (Duke) processing plant completed maintenance. System will resume normal operations.
Black Marlin Pipeline	9/15/08	Force Majeure declared Friday, Sept 12. - No gas flow being accepted.
Gulf South Pipeline	9/18/08	Critical Period has been lifted as of gas day Sept 18.
Northern Natural	9/16/08	Scheduled gas flow through portions of the Matagorda Offshore Pipeline System.



Electricity Updates:

Texas:

As of: 9/20/2008 9:00 AM EDT



Electricity Outages: Utility Detail			
Texas			
Utility	Outages	Total Utility	% w/o Power
SWEPCO	293	84,696	0.3%
Entergy Texas	139,362	397,451	35.1%
CenterPoint	983,526	2,076,978	47.4%
ONCOR	6,750	179,442	3.8%
TX New Mexico Power Co	28,605	113,370	25.2%
All Cooperatives	45,938	462,645	9.9%
TOTAL	1,204,474	3,314,582	

Total utility customers are based on TXPUC outage reports.

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 9:00 AM EDT September 20, there are 1,204,474 customers reported without power in Texas. Nearly 208,000 customers have had power restored since Ike Situation Report No. 12.

Additional State Reports:

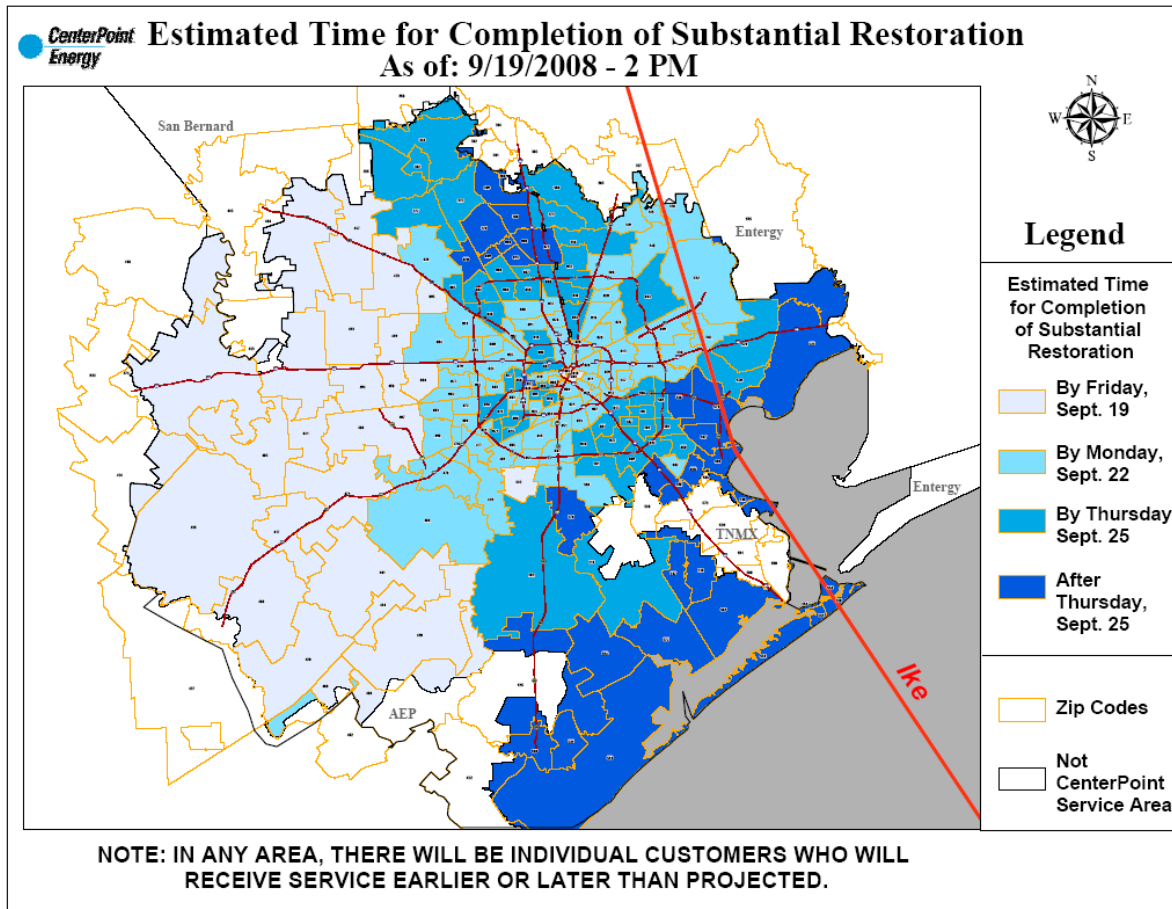
- In Louisiana, as of 6:00 AM EDT September 20, there are 12,114 customers without power. Entergy reports 4,252 outages remaining. The majority of these are due to damage from Hurricane Gustav. CLECO reports that its remaining 504 outages suffered flood damage and will be reconnected after water recedes. Cooperative utilities have a combined 7,358 customer outages as of September 18.
- In other States impacted by Ike, remaining outages as of 8:00 AM EDT September 20 include:
 - Ohio – 238,760 outages, 4 percent of total customers
 - Kentucky – 93,935 outages, 4 percent of total customers
 - Indiana – 14,333 outages, less than 1 percent of total customers
 - Pennsylvania – 2,533 outages, less than 1 percent of total customers

Restoration Updates:

- CenterPoint has restored power to over 991,000 customers of the 2.1 million that lost power due to Ike. CenterPoint estimates that 50-75 percent of customers will have power restored by September 23. See map below for CenterPoint restoration estimates as of September 19:



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- CenterPoint reports that 8,000 mutual assistance crews plus 4,200 internal crews and contractors are involved in the restoration.
- Entergy has 14,400 crews restoring service: 10,500 in Texas, 3,200 in Louisiana and 740 in Arkansas.
- Recent restoration updates from CenterPoint as of 6:00 PM EDT September 19 include:
 - 686 circuits have been restored out of the original 1,379 that were out.
 - 693 distribution circuits, out of a total of 1,492, are out.
 - In Galveston, all eight Seawall underground circuits are hot.
 - 89 transmission lines have been restored out of the original 94 that were out.
 - 5 transmission lines are out. 3 substations on Galveston Island are without transmission service.
 - Transmission line inspections are complete on those transmission circuits that were out as a result of the storm. There were no steel transmission towers, steel poles, or concrete poles destroyed during the storm.
- As of 7:00 PM EDT September 19, CenterPoint equipment outages include:
 - Distribution circuits - 692 or 46 percent
 - Transmission circuits - 5, or 2 percent
 - Power Transformers - 16, or 3 percent



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- Auto Transformers – 2, or 3 percent
- As of 6:00 AM EDT September 19, Entergy reports transmission and distribution outages caused by Ike include:
 - 113 of 237 transmission lines
 - 138 of 378 substations
 - 132 transmission structures destroyed, and 205 damaged
 - 6,426 poles
 - 2,664 transformers
 - 4,153 cross arms
 - 5,355 service connections damaged or destroyed, and
 - 9,368 spans of wire knocked down.
- Entergy reports remaining Gustav damage in Louisiana includes 10 of 241 transmission lines and 6 of 354 substations out of service.
- As of September 18, flood waters at Entergy’s Sabine power plant have receded and safety assessment and environmental clean-up are underway.
- In Texas, 16,806 customer outages remain inaccessible due to flooding. Entergy restoration estimates by area are:
 - September 21 - Orange, Vidor
 - September 22 - Navasota
 - September 23 - Port Arthur, Port Neches, Nederland, Groves
 - September 25 - Winnie, Anahuac, Dayton, Ames, Daisetta, Batson, Saratoga, The Woodlands
 - September 29 – Woodville, Silsbee, Lumberton, Kountze, Conroe, Huntsville, Madisonville
 - October 5 - New Caney, Cleveland
 - October 6 - Beaumont, Bevil Oaks, Sour Lake
 - Flooded – no date determined- Taylor Landing, Bolivar Peninsula, and Sabine Pass
- In Louisiana, an estimated 4,700 customer outages remain inaccessible due to flooding. Entergy restoration estimates by Parish are:
 - **September 24 - Ascension (Donaldsonville), Iberville**
 - **September 27 - Terrebonne**
 - **October 1 - Jefferson (Grand Isle and Lafitte), Lafourche**