



U.S. Department of Energy
Emergency Support Function 12

Hurricane Ike Situation Report # 18

September 25, 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 Ohio, Texas, TOTAL, and Petroleum & Natural Gas sub-section with rows for Crude Oil Production Shut-In, Natural Gas Production Shut-in, and Refinery Capacity Shut down.

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 9:30 AM EDT September 25, there are 485,640 customers without power in Ohio and Texas. The majority are in Texas where 482,840 customer outages remain. In Ohio 2,800 customer outages remain. Across all States affected by Ike, power has been restored to nearly 37,500 customers since Ike Situation Report No. 17 yesterday. Outages in heavily impacted Texas counties as reported by the Texas PUC as of 9:30 AM September 25 include: Harris - 393,251, Galveston - 37,106, Brazoria - 24,293, Jefferson - 1,844. As of 8:00 AM EDT September 25, Texas City is open at all times to vessels with drafts of less than 16 feet and open to project depth for daylight only transits. Sabine Pass Channel going into waterways leading to Port Arthur and Beaumont is now open to vessels with drafts of 36 feet or less during daylight hours and 30 feet or less at all times. Part of the Gulf Intracoastal Waterway in TX has re-opened, but it is still closed from mile marker 350 to 319 and has some closures in LA as well. The Calcasieu River is again restricted to vessels with drafts of 39 feet or less, which is just below its project depth of 40 feet. Nighttime transit above mile marker 190 on the Lower Mississippi River is still restricted to vessels with drafts of 30 feet or less). The



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Pascagoula, Channel in MS is still limiting vessels with drafts over 36 feet to occasional daylight transits.

ESF 12 Actions:

- ESF-12 is staffing the FEMA National Response Coordination Center (NRCC) in Washington, DC. The FEMA Region VI Joint Field Office (JFO) in Austin, TX and the FEMA National Incident Management Assistance Teams in Houston and San Antonio have 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)	812,657	1,300,000	62.5%
Natural Gas (MMCF/D)	4,222	7,400	57.1%

Source: Minerals Management Service

- As of September 24, the Minerals Management Service (MMS) reports 4,222 million cubic feet per day (MMcf/d) of the Gulf’s natural gas production remains shut-in, equivalent to 57.1 percent of the Gulf production. MMS reports 812,657 barrels/day of the Gulf’s crude production remains shut-in, equivalent to 62.5 percent of the Gulf’s crude production. A total of 179 production platforms, or 25.8 percent of the Gulf’s 694 manned platforms, remain evacuated. Personnel from 3 rigs, representing 2.6 percent of the 116 operating in the region, remain evacuated. Percents in prior situation reports were calculated based on 717 manned platforms and 121 operating rigs but were changed based on the confirmed number of platforms and rigs destroyed by Hurricane Ike.
- On September 24, the Louisiana’s Department of Natural Resources reports that 52,916 b/d or 34 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 69,446 b/d and the status of remaining 33,405 b/d is unknown. The estimated amount of restored gas production is 574 MMcf/d or 35 percent of the daily gas production capacity, which is 1,642 MMcf/d. The estimated amount of shut-in gas production is 755 MMcf/d; the status of the remaining 312 MMcf/d has not been confirmed.
- From September 8 through September 24, DOE has released 3.3 million barrels of oil from the Strategic Petroleum Reserve (SPR) to five different oil companies due to disruptions from hurricanes Gustav and Ike. The companies receiving SPR oil are Alon, Citgo, ConocoPhillips, Marathon, and Placid. The latest announcements include a delivery of 250,000 barrels of oil to Marathon Oil through Shell’s Redstick Pipeline (announced on September 23) and a delivery of 250,000 barrels of oil to Citgo’s Lake Charles, LA refinery (announced on September 24.)



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- On September 23, the EPA (in consultation with DOE) issued a waiver of the federally enforceable gasoline sulfur averaging requirements in Georgia which has a unique fuel for 45 counties in the Atlanta, Georgia area. This area will still need to meet the federal standards for sulfur in gasoline, just not the more stringent Atlanta specification. This waiver will continue through October 12, 2008.
- As of 4:00 PM EDT September 24, TEPPCO reported that it has resumed normal deliveries with the resumption of electricity service to two marine terminals in Freeport and its Beaumont terminal. In the late evening of September 23, a fire broke out at Kinder Morgan's Pasadena, TX oil storage terminal. The fire was extinguished this morning. The terminal is one of the largest petroleum product terminals in TX. As a result of the fire, Longhorn pipeline has temporarily stopped shipments from its Galena Park terminal. See table below for pipeline status.

Pipelines in the Path of Gustav / Ike as of 9/25/08 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/refine	TX, MS, AL	TX, MS, AL	NA	NA			
Crude	Marathon gathering	GOM	LA/TX	NA	NA			
Crude	Sunoco Logistics/Wester	TX	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

- Four refineries remain shut down as of 10 AM EDT September 25 in the Port Arthur and Texas City areas, with a total operable capacity of 0.9 million b/d. Shell reported on September 24 at 3:00 PM EDT that its Motiva Port Arthur refinery has restarted and that units continue to be brought back on-line. As of 3:00 PM EDT September 24, Marathon's Texas City refinery continues to repair a cooling tower that was damaged during Hurricane Ike. It is anticipated that the refinery will restart during the first week of October. See table below for status of refineries.



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Refineries in the Path of Gustav / Ike as of 9/25/08 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	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	80,000	2,086,163
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	746,900	0
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	869,500	0	285,000	
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	76,000	1,168,320	1,096,300	
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	945,500	1,168,320	2,301,200	3,002,289

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 10:30 AM EDT September 25, seven major natural gas pipelines in the Gulf Coast area continue to report complete shut-in of their systems. The remaining pipelines report that portions of their systems remain at reduced levels of gas flow due to Hurricane Ike. Damage assessments continue to be performed both at onshore and offshore facilities and the pipelines continue to provide updates to their customers on those points along the systems that were



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impacted and are now approved to flow gas as the integrity of the line was verified. See table below.

- As of 10:40 AM EDT September 24, High Island Offshore System (HIOS) reports that the Force Majeure declared on September 10 remains in effect. The pipeline has informed its customers that the 42-inch diameter mainline has been damaged and detached. The length of line that needs to be replaced is being determined at this time. HIOS also states that 3 points along a lateral that were not damaged by Ike have been cleared to flow gas and only one of the four delivery points (interconnection with ANR Pipeline) is currently available.
- As of 12:00 PM EDT September 24, both Manta Ray Offshore Gathering and Nautilus Pipeline have lifted their Force Majeures' and report that gas flow can resume. Manta Ray states that only the delivery point to Nautilus is open for gas flow and the other three delivery points (ANR, Transco, and Trunkline) remain unavailable at this time. In addition, Nautilus reports that gas flow to Louisiana Intrastate Gas and Gulf South interconnects are available at this time. As gas flow increases on the system additional delivery points will become available.
- 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). As of 10:30 AM EDT September 25, the Energy Information Administration (EIA) has confirmed that 7 plants remain shut down which includes those plants still impacted from Gustav, totaling an operating capacity of 4.68 Bcf/d (26 percent of the capacity in Hurricane Ike's path). In addition, EIA reports 24 plants have resumed operations at reduced or normal levels with a total operating capacity of 9.20 Bcf/d. The only change from Situation Report #16 is the La Grange plant in Fayette, TX has reported that the plant is now operating at normal levels prior to Ike. Seven plants continue to report that they are capable to restart (totaling 3.59 Bcf/d operating capacity) once power is restored and/or upstream gas flow are sufficient. See table below.



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Force Majeure / Critical Notice Posting by Natural Gas Pipelines as of 9/25/08 10:00 AM EDT		
Pipeline Name	Time Stamp	Notice (Status)
ANR Pipeline Co.	9/25/08	Additional points along the Southeast Area and all upstream points of the Grand Chenier compressor station have been inspected and cleared to flow gas. The Cameron Meadows lateral segment remains shut-in. Inspections continue on both offshore and onshore facilities.
Chandeleur Pipeline Co.	9/23/08	Operationally Scheduled Volumes indicates pipeline is flowing at almost 80% of pre hurricane levels.
Columbia Gulf Transmission	9/23/08	Flow from offshore points has been reduced to approximately 60% 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	9/22/08	Damage to offshore system that will prevent the receipt of all offshore gas for a minimum of one month. The damage has occurred on the 18 ST 200 lateral, which has been torn away from the 30" mainline at ST 231. Onshore delivery & receipt points will continue to accept flow.
Enbridge (UTOS)	9/22/08	All UTOS facilities remain under Force Majeure and are currently down and all points are shut-in. Crew is assessing damage at the UTOS Station 44 and no time estimate on availability.
Garden Banks Gas Pipeline	9/22/08	Garden Banks' pipeline facilities are essentially ready for return to service; however, the pipeline remains shut-in because there is no current availability of downstream outlets for condensate, which includes interconnects with ANR, Tennessee, Transco, and Sea Robin all of which are unavailable.
High Island Offshore System	9/24/08	Force Majeure from Sept 10 remains in effect - 42-inch diameter line on system has been severed and HIOS is determining the length that will need to be replaced. 3 points along a lateral not impacted can flow gas but all other offshore points remain shut-in. Currently only one of the four delivery point is available on the system which is the interconnection with ANR Pipeline.
KinderMorgan (Texas & Tejas)	9/20/08	All firm storage customers can resume injections at 100% of their firm injection rights. There is no interruptible space available at this time.
Manta Ray Offshore Gathering	9/24/08	Force Majeure is lifted as of Sept 24. Gas flow is available for delivery to Nautilus Pipeline but all other delivery points (ANR, Transco, & Trunkline) remain unavailable at this time. Only portion of receipts offshore can flow gas at this time.
Mississippi Canyon Pipeline	9/25/08	Force Majeure is lifted; however, no flow has commenced at this time.
Natural Gas Pipeline Co of America	9/24/08	Power has been restored to Compressor Station 343 and the leaks discovered on the LA line have been repaired and is now in service. Force Majeure still in effect for Station 342 and Station 302.
Nautilus Pipeline Co.	9/24/08	Force Majeure has been lifted as of Sept 24. Deliveries to Louisiana Intrastate Gas & Gulf South are available. As gas flow increases to processing plant the other delivery points will be available in order to meet gas quality requirements at these points.
Sabine Pipe Line (Henry Hub)	9/22/08	Force Majeure has been lifted for some additional points along the system. Henry Hub continues to operate on partial compression and the pipeline is closely monitoring its system.
Sea Robin Pipeline Co.	9/24/08	Sea Robin commenced flow on Sept 22 at reduced levels. The Hess Processing Plant has completed repairs to its equipment but continues to operate at a minimum volume of 250 MMcf/d.
Southern Natural Gas Co.	9/24/08	Southern has issued its final update. Six receipt points remain shut-in totaling 62 MMcf/d. The restart of these points is dependent on third parties repairing damage and it is unknown when these points will return.
Stingray Pipeline Co.	9/22/08	Force Majeure remains in effect and all receipt points remain shut-in. Road access is now open and crews have arrived on site. Some offshore facilities have been repaired and other repairs continue specifically at the WC 509. No time frame for restoration of service at this time.
Tennessee Gas Pipeline	9/24/08	The East Leg of the Bluewater System can commence gas flow.
Texas Eastern Transmission	9/23/08	TE estimates that producers have shut-in 400-500 MMcf/d of supply on its system. Damage assessments continue on facilities impacted by Gustav and Ike. Receipt points along the Cameron System and South Pass line remain at zero flow. Several compressor stations continue to run on backup generators as commercial power is unavailable.
Texas Gas Transmission	9/17/08	All systems on the pipeline are operational, but they are closely monitoring receipt points.
Transcontinental Gas Pipe Line	9/23/08	Further inspections are needed for the Southeast LA lateral resulting in shut-in gas flow from multiple points along this segment. Pipeline estimates that 575 MMcf/d remains shut-in due to Ike.
Trunkline Gas Pipeline	9/24/08	The Kaplan Compressor Station has one unit now available to flow gas raising the capacity to the Henry Hub. 30 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	9/22/08	Matagorda Offshore Pipeline System accepting gas flow at normal levels.



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Natural Gas Processing Plants in the Path of Ike & Gustav as of 9/25/08 10:30 AM 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 (M)	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				150
CENTRAL EAST TX							
Houston Central	Colorado, TX	-	700				700
Markham	Matagorda, TX	G + I	300		300		
Matagorda ³	Matagorda, TX	G + I	250	-	-	-	-
Armstrong	De Witt, TX	I	250				250
Point Comfort	Calhoun, TX	I (M)	200	200			
Old Ocean	Brazoria, TX	I	200				200
Wilcox	Lavaca, TX	I	220				220
La Grange	Fayette, TX	I	200				200
Waskom	Harrison, TX	-	270				270
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, M = Maintenance, and - = no impact
 "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.

³ The Matagorda processing plants has been idle (mothballed) prior to Hurricane Gustav/Ike.

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



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Electricity Updates:

Texas:

As of: 9/25/2008 9:30 AM EDT



Electricity Outages: Utility Detail			
Texas			
Utility	Outages	Total Utility	% w/o Power
SWEPCO	293	84,696	0.3%
Entergy Texas	8,774	397,451	2.2%
CenterPoint	451,096	2,076,978	21.7%
ONCOR	415	179,442	0.2%
TX New Mexico Power Co	12,779	113,370	11.3%
All Cooperatives	9,483	462,645	2.0%
TOTAL	482,840	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 9:30 AM EDT September 25, there are 482,840 customers reported without power in Texas. Over 31,100 customers had power restored since Ike Situation Report No. 17.

Restoration Updates:

- As of 9:00 AM EDT September 25, CenterPoint has restored power to over 1.65 million customers of the 2.1 million that lost power due to Ike. CenterPoint estimates that the majority of customers should have power resorted by September 28.
- CenterPoint reports that 10,000 mutual assistance crews plus 4,200 internal crews and contractors are involved in the restoration.
- Restoration updates from CenterPoint include:
 - 76 of 77 hospitals restored.
 - 1,076 circuits have been restored out of the original 1,379 that were out.
 - 303 distribution circuits, out of a total of 1,492, are out.
- As of 5:30 PM EDT September 24, Entergy reports restoration progress to transmission and distribution lines affected by Ike:
 - 215 of 238 transmission lines restored
 - 361 of 383 substations restored
- In Texas, Entergy restoration estimates by area are:



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- September 26 - Beaumont, Bevil Oaks, Sour Lake, Dayton, Ames, Daisetta, Batson, Saratoga, Port Arthur, Port Neches, Nederland, Groves, Lumberton, Kountze, Winnie, Anahuac
- Damaged, destroyed or flooded – no date determined- Bolivar Peninsula and other impacted communities. Entergy reports as of September 24, that 7,300 customers are unable to receive power due to service locations that were damaged, destroyed or made inaccessible due to Ike.
- **In Ohio, customer outages have dropped from over 1 million to 2,800 (less than one percent of customers) as of 8:00 AM September 25.** The majority of outages are in the Dayton Power and Light (DP&L) service area where 1,700 crews from 10 states are restoring service. DP&L has the necessary materials such as transformers, poles, cross-arms and wire, to make the repairs and these materials are staged throughout the DP&L service area. Restoration to individual pockets of outages is expected by mid-week.