

#### Hurricane Ike Situation Report # 24

October 9, 2008 (2:00 PM EDT) http://www.oe.netl.doe.gov/emergency\_sit\_rpt.aspx

# **Highlights:**

• In Texas, Centerpoint reports it has restored electricity to all customers that can receive power. The company is currently addressing individual customer locations and working to restore locations that sustained damage.

# **ESF 12 Actions:**

• ESF-12 personnel are deployed to Austin, TX and are currently working with Disaster Housing Operations (DHOPS) at the FEMA Region VI Joint Field Office (JFO) in Austin, 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)	563,980	1,300,000	43.4%		
Natural Gas (MMCF/D)	2,853	7,400	38.6%		

Source: Minerals Management Service

- As of October 9, the Minerals Management Service (MMS) reports 2,853 million cubic feet per day (MMcf/d) of the Gulf's natural gas production remains shut-in, equivalent to 38.6 percent of the Gulf production. MMS reports 563,980 barrels per day (b/d) of the Gulf's crude production remains shut-in, equivalent to 43.4 percent of the Gulf's crude production. A total of 85 production platforms, or 12.3 percent of the Gulf's 694 manned platforms, remain evacuated. All of the 116 rigs operating in the region have been manned.
- On October 8, the Louisiana's Department of Natural Resources reports that 88,275 b/d or 57 percent of the normal Louisiana oil production has been restored. Operators in 17 parishes and in-State offshore areas normally produce 155,767 b/d (the numbers are in addition to MMS reports of Federal offshore production). Shut-in oil production is 50,320 b/d and the status of remaining 17,172 b/d is unknown. The estimated amount of restored gas production is 877 MMcf/d or 53 percent of the daily gas production capacity, which is 1,642 MMcf/d. The estimated amount of shut-in gas production is 565 MMcf/d; the status of the remaining 199 MMcf/d has not been confirmed
- As of 8:00 AM EDT October 9, some minor limitations to operations still exist on some critical waterways. These include draft restrictions of 38 feet or less in Galveston/Texas City, TX and Lake Charles, LA waterways.



- On October 8, the U.S. Department of Energy announced it was delivering 100,000 barrels of emergency exchange oil from the Strategic Petroleum Reserve (SPR) to Alon's Krotz Springs, Louisiana refinery. About 5.2 million barrels of emergency exchange oil from the SPR has now been released or delivered due to hurricanes Gustav and Ike. The companies that have been receiving the oil are: Marathon (1.5 million barrels), Placid (1 million barrels), Citgo (1 million barrels), ConocoPhillips (1 million barrels), and Alon (650 thousand barrels).
- One refinery remains shut down as of 10:00 AM EDT October 9 with a total operable capacity of 0.349 million b/d. Valero reports that its Houston, TX refinery is restarting. As of Monday evening October 6, Calcasieu Refining's and Citgo's Lake Charles, LA refineries are back to normal operations. See table below for status of refineries.



Refi	neries in the Path	of Gus	tav / Ike as				
Definence lasse estad		0			apacity (B/D		
Refinery Impacted	Location	Storm	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				
Pasca	goula/Mobile Total		416,000	0	0	0	330,000
Lower Mississppi 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 Mis	sissppi River Total		2,166,163	0	0	80,000	2,086,163
Lake Charles Region	••				L L	· · ·	, ,
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	0	746,900
Port Arthur Region			- ,	-		-	-,
ExxonMobil	Beaumont, TX	G+I	348,500	348,500			
Motiva	Port Arthur, TX	G+I	285,000	010,000		285,000	
Total Petrochemicals	Port Arthur, TX	G+I	232,000			200,000	232,000
Valero (formerly Premcor)	,	G+I	289,000			289,000	202,000
	Port Arthur Total	0	1,154,500	348,500	0	574,000	232,000
Houston/Galveston Regi			.,,	0.10,000	Ţ	01 1,000	,
BP	Texas City, TX		467,720			467,720	
ConocoPhillips	Sweeny, TX		247,000			407,720	247,000
Deer Park	Deer Park, TX		329,800				329,800
ExxonMobil	Baytown, TX		567,000				567,000
Houston Refining	Houston, TX		270,600			270,600	507,000
Marathon	Texas City, TX		76,000			76,000	
Pasadena Refining	Pasadena, TX	G+I	100,000			100,000	
Valero *	Houston, TX		83,000		83,000	100,000	
Valero	Texas City, TX		199,500		03,000		199,500
	on/Galveston Total	1	2,340,620	0	83,000	914,320	1,343,300
Corpus Christi Region			2,0-10,020	0	33,000	514,020	1,0-10,000
, v	Corpus Christi, TX	1	156 000			I	156 000
Citgo Flint Hills Resources			156,000				156,000
	Corpus Christi, TX		288,126				288,126
Valero	Corpus Christi, TX		142,000				142,000
Valero	Three Rivers, TX		93,000			-	93,000
	orpus Christi Total		679,126	0	÷	0	679,126
TOTAL	in aluda all rafin arias i		7,503,309	348,500	83,000	1,568,320	5,417,489

**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.

\* Valero's Houston, TX refinery shut its FCC on September 29 for repairs as it was attempting to restart.

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



- As of 9:24 AM EDT October 7, Mississippi Gas Canyon Pipeline reports that three delivery points, including the delivery to the Venice processing plant are now available to flow gas. The pipeline informs its customers that service has now been fully restored to pre-hurricane levels.
- As of 3:20 PM EDT October 7, High Island Offshore System (HIOS) reports that natural gas flow will be accepted for certain producers at limited volumes along HIOS system in order for the producers to resume operations of their associated shut-in oil production that will be delivered to other pipelines while the HIOS 42-inch diameter pipeline is being repaired. The producers plan to offer HIOS the gas at no cost for operational purposes during the Force Majeure event and HIOS will accept the limited volume to use for operational gas.
- As of 6:30 PM EDT October 8, Tennessee Gas Pipeline (TGP) reports that after further assessment of the Bluewater Southwest Leg, the 30-inch diameter mainline also sustained damage due to Hurricane Ike along with the 16-inch diameter lateral line. As a result, 14 receipt points along this portion are affected and remain shut-in. The remainder portions of the Bluewater System remain under Force Majeure and only two areas have been approved to commence gas flow. Due to the sustained damage to the Bluewater System on TGP's system, the Garden Banks Gas Pipeline remains shut-in as the pipeline is waiting for availability of downstream interconnects which includes the tie-in to the Bluewater West Leg portion of TGP's system. See table below.
- 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 1:00 PM EDT October 9, the Energy Information Administration (EIA) has confirmed that 5 plants remain shut down which includes those plants still impacted from Gustav, totaling an operating capacity of 3.18 Bcf/d (18 percent of the capacity in Hurricane Ike's path). Four of the five plants that remain shut down are located in Cameron Parish, LA. In addition, EIA reports 31 plants have resumed operations at reduced or normal levels with a total operating capacity of 13.17 Bcf/d. Two plants report that they are capable to restart (totaling 1.11 Bcf/d operating capacity) once upstream gas flow are sufficient. See table below



Force Majeure / Critical Notice Posting by Natural Gas Pipelines as of 10/09/08 1:15 PM EDT				
Pipeline Name	Time Stamp	Notice (Status)		
ANR Pipeline Co.	10/3/08	All points upstream of Grand Chenier compressor station are available to flow gas. Some points along the Cameron Meadows lateral segment have become available. All points upstream of Block 188 remain unavailable.		
Discovery Gas Transmission	10/3/08	Pipeline is on track to meet original completion date of repairs needed to the 30-inch diameter mainline – anticipated to be 60 days. The 18-inch diameter tie-in gathering line is still undergoing additional damage assessments and the pipeline expects repairs to be completed 30 days after the 30-inch mainline is completed. Onshore delivery & receipt points will continue to accept flow.		
Enbridge (UTOS)	10/7/08	UTOS facilities remain under Force Majeure and all points are shut-in. Station 44 repairs will take up to 3- 4 weeks. Both Sabine and Barracuda processing plants remain shut down and no estimate of return has been given at this time. Transco & ANR continue to assess the damage on their interconnecting lines and remain unavailable.		
Garden Banks Gas Pipeline	10/7/08	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 Tennessee, Transco, and Sea Robin. The ANR interconnect is available and ready to receive gas.		
High Island Offshore System	10/7/08	Force Majeure from Sept 10 remains in effect - 42-inch diameter line on system has been severed. A vessel is scheduled to start repair work on Monday Oct. 6. All repairs will be completed and system restored by Nov. 20. Gas flow from producers is being used as operational gas in order for producers to begin producing associated oil production for delivery to other pipelines as HIOS continues to repair the damage done by Ike.		
Manta Ray Offshore Gathering	10/8/08	Eight receipt points and three delivery points are now available to flow gas. All other receipt and three delivery points remain shut-in and remain under Force Majeure.		
Nautilus Pipeline Co.	10/8/08	Remains under Force Majeure since Oct. 1 due to excessive amount of liquids in pipeline system. Three receipt points are available to flow gas; however, are limited in volume capability.		
Sea Robin Pipeline Co.	10/2/08	Eleven points along the West Leg and 17 points along the J Leg remain shut-in and are not cleared to flow gas until appropriate repairs are made. Sea Robin expects return of service to segments by Nov. 24.		
Stingray Pipeline Co.	10/1/08	Force Majeure remains in effect and all receipt points remain shut-in. Stingray estimates it will take 4-8 weeks to complete repairs to its onshore facilities including the separation facility.		
Tennessee Gas Pipeline	10/3/08	Force Majeure for the Bluewater Header system is still in effect. Pipeline reports that after further investigation of subsea tie-in with 16-inch diameter pipeline, the 30-inch diameter pipeline was also damaged by Ike. All portions of the Bluewater System (Header, East Leg, West Leg and Southwest Leg) remain shut-in. Repairs to the Bluewater East Leg are ongoing and should be completed by Oct 22 <sup>nd</sup> with additional time to remove sea water from the pipeline.		
Transcontinental Gas Pipe Line	10/3/08	Many receipt points along the Southeast LA lateral remains shut-in due to damage from a drilling rig hitting the pipeline. Owner of rig estimates 12-13 weeks before it can be removed. Additional points along lateral not impacted by drilling rig may be back in service within 2-3 weeks. Compressor Station 44 on the Southwest LA lateral sustained flood damage and repairs are estimated to be complete within 3 weeks.		
Trunkline Gas Pipeline	10/8/08	Unplanned outage at Kaplan Compressor Station began on Sept 30. Limited gas flow is being accepted to Henry Hub and Acadian-Trunkline interconnects. <u>35</u> receipt points have been cleared for flow from the Terrebonne Offshore System.		



Na	ural Gas Processin	g Plants in Impact	n the Path of Ike & Gustav as of 10/09/08 1:00 PM EDT Capacity (million cubic feet per day) <sup>1</sup>				
Plant Name	Location		Design System	Capacity (m Shut Down	Capable to	Operating at	Normal
			Operation		Restart <sup>2</sup>	Reduced Level	
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				22
Burns Point	St. Mary, LA	G	160		160		
Mobile Bay (Duke)	Mobile, AL	М	300				30
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			
lowa	Jefferson Davis, LA	G + I	500				50
Grand Chenier II	Cameron, LA	G + I	400				40
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				17
East Texas (MarkWes	,	, i	780				78
East Texas (DCP)	Panola, TX	-	750				75
Godley (Forth Worth I	,	1	300			300	70
Port Arthur	Jefferson, TX	G + I	200			000	20
Carthage	Panola, TX		175				17
Indian Springs	Polk, TX		173				15
CENTRAL EAST TX		<u> </u>	100				13
Houston Central	Colorado, TX	-	700				70
Markham	Matagorda, TX	G + I	300				30
Matagorda <sup>3</sup>			250	-	-		- 30
	Matagorda, TX De Witt, TX	G + I	250	-	-	-	
Armstrong	,						25
Point Comfort	Calhoun, TX	I (M)	200				20
Old Ocean	Brazoria, TX	<u> </u>	200				20
Wilcox	Lavaca, TX		220				22
La Grange	Fayette, TX		200				20
Waskom	Harrison, TX	-	270				27
SOUTH EAST TX							
King Ranch	Kleberg, TX	-	925				92
Shoup	Nueces, TX	-	290				29
La Gloria	Jim Wells, TX	-	265				26
Gregory	San Patricio, TX	I	150				15
Gulf Plains	Nueces, TX	-	150				15

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.

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

<sup>2</sup> Confirmed plants capable to restart after electricity is restored or when upstream gas flow commences service.

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

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