



U.S. Department of Energy Emergency Support Function 12

Hurricane Ike Situation Report # 23

October 6, 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 continues to support FEMA Region VI with energy restoration support for Hurricane Ike. On September 30, FEMA Region VI requested ESF-12 support to assist with connecting temporary housing units to the electricity distribution system. ESF-12 personnel deployed to Austin, TX on October 1 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) | 600,679 | 1,300,000 | 46.2% |
| Natural Gas (MMCF/D) | 3,001 | 7,400 | 40.6% |

Source: Minerals Management Service

- As of October 6, the Minerals Management Service (MMS) reports 3,001 million cubic feet per day (MMcf/d) of the Gulf's natural gas production remains shut-in, equivalent to 40.6 percent of the Gulf production. MMS reports 600,679 barrels per day (b/d) of the Gulf's crude production remains shut-in, equivalent to 46.2 percent of the Gulf's crude production. A total of 94 production platforms, or 13.5 percent of the Gulf's 694 manned platforms, remain evacuated. All of the 116 rigs operating in the region have been manned.
- On October 3, the Louisiana's Department of Natural Resources reports that 70,714 b/d or 45 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 57,946 b/d and the status of remaining 27,107 b/d is unknown. The estimated amount of restored gas production is 749 MMcf/d or 46 percent of the daily gas production capacity, which is 1,642 MMcf/d. The estimated amount of shut-in gas production is 611 MMcf/d; the status of the remaining 282 MMcf/d has not been confirmed



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- As of 8:00 AM EDT October 6, some limitations to operations still exist on some critical waterways. These include draft restrictions of 38 feet or less in Galveston/Texas City and Lake Charles waterways. **Nighttime transit on the Lower Mississippi River is limited to vessels with drafts of 40 feet or less at mile marker 191 (Baton Rouge, LA is at mile marker 233.4). The Gulf Intracoastal Waterway has a temporary closure by the Causeway Bridge near Galveston, Texas from 1:00 PM to 5:00 PM EDT today.**
- On October 5, the U.S. Department of Energy announced it was delivering 300,000 barrels of emergency exchange oil from the Strategic Petroleum Reserve (SPR) to Placid Oil's refinery at Port Allen, Louisiana through the Shell pipeline system. Over 5 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 (550 thousand barrels).
- Two refineries remain shut down as of 10:00 AM EDT October 6 with a total operable capacity of 0.4 million b/d. Valero's Houston, TX refinery shut down to perform more extensive turn around maintenance while the fluid catalytic cracker was being repaired. See table below for status of refineries.



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| Refineries in the Path of Gustav / Ike as of 10/6/08 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 | 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 | 348,500 | 0 | 574,000 | 232,000 |
| 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 | 83,000 | 0 | 914,320 | 1,343,300 |
| 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 | 0 | 679,126 |
| TOTAL | | | 7,503,309 | 431,500 | 0 | 2,075,820 | 4,909,989 |

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



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- As of October 3, Venice Gathering System (VGS) notified its customers that the Venice processing plant in Plaquemines, LA is running at reduced levels and gas flow has resumed at limited volumes at two receipt points. VGS continues to repair damaged facilities offshore and expects all repairs to be completed by mid-October. Once repairs are completed, operations on the pipeline gathering system as well as the processing plant will begin to increase gas flow.
- As of October 3, Discovery Gas Transmission (DGT) informed their customers that repairs to its 30-inch diameter mainline are on track to meet the original completion date, which is expected to be completed within 60 days. DGT also reports that the 18-inch diameter tie-in gathering line to the mainline that was severed and displaced due to Hurricane Ike is currently undergoing additional damage assessments. The pipeline expects repairs to be completed 30 days after the 30-inch diameter mainline is completed. DGT continues to accept gas flow from receipt and delivery points onshore.
- As of 6:15 PM EDT October 3, Tennessee Gas Pipeline (TGP) reports that portions of the Bluewater segment and associated facilities of the pipeline system are expected to be repaired and operational by mid to late-October. This segment of pipeline experienced significant damage including leaks along the pipeline, damage to platform interconnects, and damage to the separation and dehydration facility. TGP also reports that Yscloskey processing plant in St. Bernard Parish, LA is anticipated to be operational by mid-October. In addition, the Sabine processing plant in Cameron Parish, LA has notified TGP that the plant will be shut down until at least the first week of December. 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 10:00 AM EDT October 6, 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). In addition, EIA reports 30 plants have resumed operations at reduced or normal levels with a total operating capacity of 12.22 Bcf/d. Three plants report that they are capable to restart (totaling 2.06 Bcf/d operating capacity) once upstream gas flow are sufficient. See table below.



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| Force Majeure / Critical Notice Posting by Natural Gas Pipelines as of 10/06/08 10:45 AM 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. 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) | 10/1/08 | UTOS facilities remain under Force Majeure and all points are shut-in. UTOS Station 44 sustained flood damage. 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. |
| Garden Banks Gas Pipeline | 10/1/08 | 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 | 10/2/08 | 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. There is partial service to 3 points along a lateral not impacted that can flow gas but all other offshore points remain shut-in. Two delivery points are now available – ANR & Tennessee. |
| Manta Ray Offshore Gathering | 10/3/08 | Four receipt points and one delivery point are available to flow gas. Four receipt points and six delivery points remain unavailable and remain under Force Majeure. |
| Nautilus Pipeline Co. | 10/1/08 | Declared Force Majeure on Oct. 1. Due to excessive amount of liquids in pipeline system, Nautilus has informed customers that entire pipeline has been shut-in. |
| Sabine Pipe Line (Henry Hub) | 10/1/08 | Force Majeure has been lifted for some additional points along the system and gas flow can commence on 3 points (KM Texas, Houston Pipeline, and KM Tejas). |
| 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 is in process of isolating segment of Bluewater Southwest Leg due to damage and may become available as early as Oct 18th if the separation and dehydration facility is repaired and operational. Repairs to the Bluewater East Leg are ongoing and should be completed by Oct 22nd 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 | 10/6/08 | Unplanned outage at Kaplan Compressor Station began on Sept 30. Limited gas flow is being accepted to Henry Hub and Acadian-Trunkline interconnects. 32 receipt points have been cleared for flow from the Terrebonne Offshore System. |
| Venice Gathering System | 10/3/08 | Venice Processing plant came online on Oct 2 and accepted gas flow from 2 points. Repairs to the pipeline are not expected to be completed until mid-October. |



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| Natural Gas Processing Plants in the Path of Ike & Gustav as of 10/06/08 10:00 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 company web site. Various trade press sources