



U.S. Department of Energy
Office of Electricity Delivery & Energy Reliability

Hurricane Isaac Situation Report # 12
September 3, 2012 (3:00 PM EDT)

http://www.oe.netl.doe.gov/emergency_sit_rpt.aspx

Highlights:

- Hurricane Isaac made its first landfall on Tuesday, August 28 at 7:45 pm EDT in Plaquemines Parish, LA. Isaac made a second landfall along the coast of southeast Louisiana, just west of Port Fourchon, at 3:15 am EDT on Wednesday, August 29.

Summary

Electric Outages by State				
Impacted State	Current Customer Outages	Percentage of Customers Without Power	Peak Outages Reported in DOE SitReps	Customers Restored Since Peak
Louisiana	117,696	5%	889,517	771,821
TOTAL:	117,696			
Petroleum & Natural Gas				
	Amount	% Capacity Out*		
Crude Oil Production Shut-In (b/d)	804,335	58.29%		
Natural Gas Production Shut-in (mmcf/d)	1,737.8	38.62%		
Refinery Capacity Shut down (b/d)	247,000	NA		

Note: States with fewer than 1,000 outages are not included in the table. Due to a large number of service providers, including investor owned utilities and cooperatives, the number of customer outages reported may not be comprehensive.

Sources: Outages obtained from company web sites and DOE communications. Total State customers are based on 2010 EIA Customer Data.

* % capacity out represents percent of production capacity in the Gulf of Mexico.

- As of 2:00 pm EDT September 3, the impacted State reports a total of 117,696 customers without power; this is a decrease from the 256,794 customer outages reported in Situation Report #11 at 3:00 pm September 2. In both Arkansas and Mississippi, less than 1,000 customers who can receive power are without power. Restoration estimates and efforts by electric utilities are reported below.
- As of 1:00 pm EDT, September 3, one refinery in the path of Isaac is shut down representing 247,000 barrels per day (B/D) of refining capacity, or 3 percent of total Gulf Coast refining capacity (7,671,585 B/D). Nine additional refineries in the path of the storm are restarting or at reduced rates. One refinery has returned to normal operations.

ESF 12 Actions:

- ESF 12 is staffing the FEMA National Response Coordination Center (NRCC) in Washington, DC, the FEMA Region VI Regional Response Coordination Center (RRCC) in Denton, TX, and the Baton Rouge, LA Incident Management Assistance Team (IMAT). **ESF 12 has been demobilized from the Mississippi Emergency Operations Center (EOC).**



Petroleum & Natural Gas Information:

Oil & Gas Offshore Production Shut-In Status for Gulf of Mexico <i>as of 12:30 pm EDT 9/3/12</i>			
Location	Amount Shut-In	Pre-Event Production	Percent (%) Shut-In
Crude Oil (B/D)	804,335	1,380,000	58.29
Natural Gas (MMCF/D)	1,737.8	4,500	38.62

Source: Bureau of Safety and Environmental Enforcement (BSEE)

- As of 12:30 pm EDT, September 3, the Bureau of Safety and Environmental Enforcement (BSEE) reports 804,335 barrels per day (B/D) of the Gulf of Mexico (GOM) crude oil production is shut-in, equivalent to 58.29 percent of the GOM crude oil production. BSEE reports 1,737.8 million cubic feet per day (MMCF/D) of the GOM natural gas production is shut-in, equivalent to 38.62 percent of the GOM natural gas production. Personnel have been evacuated from a total of 71 production platforms, or 11.91 percent of the 596 manned platforms in the GOM. Personnel have been evacuated from 6 rigs, representing 7.89 percent of the 76 rigs currently operating in the GOM.

Refineries

- For a list of refineries impacted by Hurricane Isaac, see table below.

Refineries in the Path of Isaac <i>as of 1:00 pm EDT 9/3/12</i>						
Refinery Impacted	Location	Capacity (B/D)				
		Operating Capacity	Shut Down	Restarting	Reduced Runs	Normal
Chevron	Pascagoula, MS	330,000			X	
Shell	Saraland, AL	80,000			X	
Alon	Krotz Springs, LA	80,000			X	
Chalmette Refining	Chalmette, LA	192,500		X		
ExxonMobil	Baton Rouge, LA	502,500				X
Marathon	Garyville, LA	490,000			X	
Motiva	Convent, LA	235,000		X		
Motiva	Norco, LA	233,500		X		
Phillips 66	Belle Chasse, LA	247,000	X			
Placid Refining	Port Allen, LA	57,000		X		
Valero	Norco, LA	205,000		X		
TOTAL		2,652,500	247,000	923,000	980,000	502,500

Sources: Confirmed by company or on company web site.

Note: Valero's Meraux refinery has been excluded from the table as it was already shutdown due to reasons unrelated to Isaac.

Ports and Terminals

- As of 1:00 pm EDT, September 3, the U.S. Coast Guard reports that all ports are open in Sector Mobile. In Sector New Orleans, Gulf Intercoastal Waterway, New Orleans, Baton Rouge, and ports along the Lower Mississippi River below mile marker 130 are open. Lower Mississippi River ports above mile marker 130 are open with restrictions. In Sector Morgan City, the LOOP, and the Port of Houma are open. Port Fourchon is open with restrictions.



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Petroleum Pipelines

- As of 1:00 pm EDT, September 3, the Capline, Ho-Ho, and the LOOP’s LOCAP pipelines are operating. Sections of Shell’s Offshore Gulf pipeline have resumed operation and other sections are expected to return to service over the next few days.

Status of Petroleum Pipelines as of 1:00 pm EDT 9/3/12					
Type	Name	Start	Terminus	Capacity (barrels/day)	Status
Crude	Capline Pipeline	LA	IL	1,200,000	Operating
Crude	Ho-Ho (Houma-to-Houston)	LA	TX	325,000	Operating
Crude	LOOP LOCAP	LA	LA	1,200,000	Operating
Crude	Shell Offshore Gulf Pipeline Network	GOM	LA	NA	Sections of the offshore pipeline have restarted. Other sections expected to return over the next few days.

Sources: Confirmed by company or on company web site

Natural Gas Pipelines

- As of 1:00 pm EDT, September 3, Dauphin Island Gathering System, Destin Pipeline Company, Florida Gas Transmission Company, Mississippi Canyon Gas Pipeline, and Venice Gas Gathering System have declared Force Majeure on their pipeline systems due to production shut-ins in the GOM.
- Several companies have reported shut-ins in parts of their system. These include ANR Pipeline Company, Columbia Gulf Transmission Company, Gulf South Pipeline Company, Nautilus Pipeline Company, Sea Robin Pipeline Company, Southern Natural Gas, Stingray Pipeline Company, Tennessee Gas Pipeline Company, Transcontinental Gas Pipe Line Company, and Trunkline Gas Company.



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Force Majeure / Critical Notice Posting by Natural Gas Pipelines as of 1:00 pm EDT 9/3/12		
Name	Time Stamp	Notice (Status)
ANR Pipeline Company	8/28/2012	Scheduled maintenance and TS Isaac related capacity curtailment between Eunice and Patterson delivery points.
Columbia Gulf Transmission Company	8/27/2012	Curtailment at Venice, Acadia and Erath plant delivery points.
Dauphin Island Gathering System	8/27/2012	Force Majeure
Destin Pipeline Company	8/30/2012	Assessment and recovery operations have begun; Force Majeure on offshore receipt points remains.
Florida Gas Transmission Company	8/28/2012	Force Majeure at Napoleonville Storage Rec.
Garden Banks Gas Pipeline	9/2/2012	Force Majeure is no longer in effect.
Manta Ray Offshore Gathering Company	9/2/2012	Force Majeure is no longer in effect.
Mississippi Canyon Gas Pipeline	8/27/2012	Force Majeure
Nautilus Pipeline Company	9/1/2012	The pipeline has begun accepting nominations for delivery to Acadian Gas Pipeline, Anaconda, ANR, Cleopatra, Cypress, Gulf South, Manta Ray, and Tenn 800 LEG receipt points. Force Majeure remains at other portions.
Gulf South Pipeline Company	9/2/2012	Duke-Mobile Bay location remains shut but other locations have been approved to flow.
Sea Robin Pipeline Company	9/1/2012	Inspections have been completed at facilities. Many locations have been cleared to flow.
Southern Natural Gas	9/2/2012	Facility inspections at several facilities have been completed. Main Pass, Sea Robin and Burns Point delivery points have been approved for flow.
Stingray Pipeline Company	8/20/2012	Stingray's facilities at West Cameron 509 platform have resumed operation. Other portions continue to remain shut-in.
Tennessee Gas Pipeline Company	9/2/2012	Some stations and delivery points have resumed. Inspections continue at other facilities.
Transcontinental Gas Pipe Line Company	9/2/2012	Portions of the Southeast Louisiana Lateral have resumed flows.
Trunkline Gas Company	9/1/2012	Inspections have been completed at facilities. Many locations have been cleared to flow.
Venice Gathering System	8/27/2012	Force Majeure

Sources: Confirmed by company or on company web site.

Natural Gas Processing Plants

- As of 1:30 pm EDT September 3, 10 processing plants with capacities greater than 100 million cubic feet per day (MMcf/d) are shut down due to Isaac. However, 7 of these plants are capable of restarting pending resumption of pipeline flows. The shut down plants have a combined capacity of 6.7 billion cubic feet per day (Bcf/d), and the plants capable of restarting account for 3.8 Bcf/d of this capacity. One of the plants shut down is undamaged and will be capable to restart once power returns. Additionally, there are 10 plants, with a combined capacity of 4.6 Bcf/d, operating at reduced levels, and 1 plant back to normal operations. There are 28 gas processing plants (with a combined processing capacity of 13.5 Bcf/d) with capacities exceeding 100 MMcf/d that are located in the Gulf of Mexico coastal area and in the path of Isaac. The shut-in capacity of the 3 plants currently incapable of restarting due to Isaac accounts for 21 percent of total capacity of plants in Isaac's path. Most operators anticipate gas flows resuming over the next few days.



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Natural Gas Processing Plant¹ Status for Affected Area as of 1:30 PM EDT 9/3/12

Plant Name	Location	Capacity (million cubic feet per day) ²				
		Design System Operation	Shutdown	Capable to Restart	Operating at Reduced Levels	Normal
Yscloskey Gas Plant	St. Bernard, LA	1,850	X			
North Terrebonne Plant	Gibson, LA	1,100			X	
Pascagoula Gas Processing Plant	Jackson, MS	1,100		X		
Toca Gas Plant	St. Bernard, LA	1,100		X		
Venice Gas Plant	Plaquemines, LA	750	X			
Sea Robin Gas Plant	Vermillion, LA	660			X	
Neptune Plant	St. Marys, LA	650			X	
Larose Plant	Lafourche, LA	600			X	
Pelican Plant	St. Marys, LA	600			X	
Williams Mobile Bay Processing Plant	Mobile Bay, AL	600		X		
Mobile Bay Processing	Mobile, AL	300		X		
Sabine Pass Plant	Cameron, LA	300		X ³		
Stingray Gas Plant	Cameron, LA	300			X	
Lowry Gas Plant	Cameron, LA	240			X	
Baton Rouge Gas Plant	West Baton Rouge, LA	225		X		
Plaquemine Plant	Iberville Parish, LA	225	X			
Yellowhammer Gas Plant	Mobile, AL	200		X		
Paterson II Plant	St. Marys, LA	180			X	
Burns Point Plant	St. Marys, LA	160			X	
PSI Kaplan Plant	Vermillion, LA	125				X
Gibson Plant	Terrebonne, LA	110			X	

Source: EIA-757B

Note: There are two plants that are inactive for reasons unrelated to Isaac.

¹ List only includes plants with processing capacity greater than or equal to 100 million cubic feet per day.

² The capacity represents the design capacity of the plants and does not represent the actual gas flow through these plants.

³ Sabine Pass Plant cannot resume operations due to a connecting pipeline undergoing maintenance.

Restoration Information

- Entergy stated yesterday evening (September 2) that there are seven substations in Louisiana out of service, three which remain flooded, and seventeen damaged transmissions lines, sixteen in Louisiana and one in Mississippi. The company is using portable substations and building new lines to restore service to customers while the damaged substations are repaired. The company’s preliminary damage estimates released Saturday (September 1) show the following impacts in Louisiana: 6,200 damaged poles, 6,000 spans of wire down, 2,000 damaged transformers, 4,000 broken cross arms, 3,000 damaged service lines to customers, and 5,500 spans with trees fallen on them.
- Entergy reported yesterday (September 2), there are 2,000 personnel in the city of New Orleans. Today the company said that repairs will begin to be made in Plaquemines parish, as flood waters have receded. Entergy stated Saturday (September 1) that it had 16,000 total response personnel.

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- In Mississippi, Entergy stated today (September 3) they have restored power to all customers who can receive power.
- Entergy released the following restoration estimates for Louisiana Saturday night (September 1):
 - Restoration is complete in the Acadia, Iberia, Lafayette, St. Landry, St. Martin, St. Martin, and Vermilion parishes.
 - Ascension, E. Baton Rouge, E. Feliciana, Iberville, Livingston, Pointe Coupee, Terrebonne, W. Baton Rouge, and W. Feliciana parishes were estimated to have 90 percent of all customers who can receive power restored by yesterday (September 2).
 - Ascension (Donaldsonville), Assumption (Labadieville), Iberville (Plaquemine/White Castle), St. Helena, Tangipahoa/North, and Washington parishes are estimated to have 90 percent of all customers who can receive power restored by today (September 3).
 - Jefferson (Grand Isle), Lafourche, and St. Charles parishes are estimated to have 90 percent of all customers who can receive power restored by Tuesday (September 4).
 - East Jefferson, Livingston, Orleans, St. James, St. Tammany, and Tangipahoa/South parishes are estimated to have 90 percent of all customers who can receive power restored by Wednesday (September 5).
 - St. John the Baptist and Jefferson parishes are estimated to have 90 percent of all customers who can receive power restored by Thursday (September 6).
 - St. Bernard parish is estimated to have 90 percent of all customers who can receive power restored by Friday (September 7).
 - Plaquemines parish is estimated to have 90 percent of all customers who can receive power restored by Saturday (September 8).
- Cleco Power, a Louisiana-based utility, reported September 2 at 7:30 pm they have restored power to all customers who can accept power at this time. Cleco will monitor the remaining customers on an individual basis and will be ready to provide service when flood waters recede and their facilities are safe.
- Magnolia Electric Power Association in Mississippi reported today (September 3) they had 250 personnel in the field finishing the restoration.
- Coast Electric Power Association, a cooperative serving Mississippi, reported crews have restored power to all of customers who can receive it.