



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

Hurricane Isaac Situation Report # 13
September 4, 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	40,818	2%	889,517	848,699
TOTAL:	40,818			
Petroleum & Natural Gas				
	Amount	% Capacity Out*		
Crude Oil Production Shut-In (b/d)	710,866	51.51%		
Natural Gas Production Shut-in (mmcf/d)	1,308.8	29.00%		
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 4, Louisiana reports a total of 40,818 customers without power; this is a decrease from the 117,696 customer outages reported in Situation Report #12 at 3:00 pm September 3. Restoration estimates and efforts by electric utilities are reported below.
- As of 1:00 pm EDT, September 4, 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.
- Entergy reported yesterday (September 3) the 1,075 MW Waterford Nuclear Generating Station was brought back online and connected to the electrical grid. The company stated that the plant's power output will be increased in coordination with transmission grid operators. The plant sustained no damage from Hurricane Isaac.



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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).

Petroleum & Natural Gas Information:

Oil & Gas Offshore Production Shut-In Status for Gulf of Mexico <i>as of 12:30 pm EDT 9/4/12</i>			
Location	Amount Shut-In	Pre-Event Production	Percent (%) Shut-In
Crude Oil (B/D)	710,866	1,380,000	51.51
Natural Gas (MMCF/D)	1,308.75	4,500	29.00

Source: Bureau of Safety and Environmental Enforcement (BSEE)

- As of 12:30 pm EDT, September 4, the Bureau of Safety and Environmental Enforcement (BSEE) reports 710,866 barrels per day (B/D) of the Gulf of Mexico (GOM) crude oil production is shut-in, equivalent to 51.51 percent of the GOM crude oil production. BSEE reports 1,308.75 million cubic feet per day (MMCF/D) of the GOM natural gas production is shut-in, equivalent to 29 percent of the GOM natural gas production. Personnel have been evacuated from a total of 21 production platforms, or 3.52 percent of the 596 manned platforms in the GOM. Personnel have been evacuated from 2 rigs, representing 2.63 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 as of 1:00 pm EDT 9/4/12						
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.



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Ports and Terminals

- As of 1:00 pm EDT, September 4, the U.S. Coast Guard reports that the Gulf Intercoastal Waterway, New Orleans, Baton Rouge, and ports along the Lower Mississippi River below mile marker 130 are open in Sector New Orleans. 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.

Petroleum Pipelines

- As of 1:00 pm EDT, September 4, 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 9/4/12					
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 4, Dauphin Island Gathering System, Destin Pipeline Company, Florida Gas Transmission Company, Main Pass, Mississippi Canyon Gas Pipeline, South Pass, 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 9/4/12		
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	9/3/2012	Force Majeure has been lifted.
Florida Gas Transmission Company	8/28/2012	Force Majeure at Napoleonville Storage Rec.
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.
Main Pass	9/4/2012	Spectra's Main Pass has been shut-in since August 28. No damage has been found after inspections.
South Pass	9/4/2012	Spectra's South Pass has been shut-in since August 28. No damage has been found after inspections.
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	9/3/2012	Inspections have been completed and most portions of the Southeast Louisiana Lateral have resumed flow. The Mobile Bay Station is up and running.
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 4**, 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 9 plants, with a combined capacity of 4.0 Bcf/d, operating at reduced levels, and 2 plants 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.



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Natural Gas Processing Plant¹ Status for Affected Area as of 1:30 PM EDT 9/4/12

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

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

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

Restoration Information

- Entergy stated today (September 4) that there are six substations and eleven transmission lines which are out of service in Louisiana. The company is using portable substations and building new lines to restore service to customers while the damaged substations are repaired.
- Entergy estimated that most customers who are located outside of the flooded area will have their electricity restored today (September 4). The company also estimated that all customers whose homes or businesses are accessible and able to take service will be restored by Saturday (September 8).
- Entergy reported restoration began yesterday (September 3) in Plaquemines Parish and today the company's full contingency of crews will be in the parish. According to the company, work in the parish will shut down each afternoon to comply with the government-mandated exiting of the area each night.

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- On Sunday (September 2), Entergy reported there are 2,000 personnel in the city of New Orleans. The company stated Saturday that it had 16,000 total response personnel.
- In Mississippi and Arkansas, Entergy stated yesterday (September 3) they have restored power to all customers who can receive power.
- Washington-St. Tammany, a Louisiana electric cooperative, reported September 2 that service should be restored to all members except those who are inaccessible because of high water or those that have damage to their property that prevents them from being reconnected.
- Cleco Power, a Louisiana-based utility, reported Sunday night (September 2) they have restored power to all customers who can accept power at this time.
- Magnolia Electric Power Association in Mississippi reported yesterday (September 3) they had 250 personnel in the field finishing the restoration.