



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

Hurricane Isaac Situation Report # 4**August 29, 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, around 3:15 am EDT on Wednesday, August 29. **As of 2:00 pm EDT August 29, the National Hurricane Center (NHC) has downgraded Isaac to a Tropical Storm located reports the center of Hurricane Isaac is 55 miles south-southeast of Baton Rouge, LA. Isaac is moving northwest at 6 mph with maximum sustained winds of 70 mph. The NHC forecasts Isaac to move farther inland over Louisiana today and tomorrow (August 30) and over southern Arkansas by early Friday (August 31).**
- A State of Emergency has been declared for Alabama, Florida, Louisiana, and Mississippi.

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
Alabama	4,404	< 1%	7,507	3,103
Florida	4,243	< 1%	65,459	61,216
Louisiana	683,233	30%	683,233	0
Mississippi	24,188	2%	24,188	0
TOTAL:	716,068			
Petroleum & Natural Gas				
			Amount	% Capacity Out*
Crude Oil Production Shut-In (b/d)			1,307,076	94.72%
Natural Gas Production Shut-in (mmcf/d)			3,223.92	71.64%
Refinery Capacity Shut down (b/d)			936,500	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 August 29, the impacted States report a total of 716,068 customers without power; this is an increase from the 563,991 customer outages reported in Situation Report #3 at 9:00 am August 29. Restoration estimates and efforts by electric utilities are reported below.**



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- Yesterday (August 28), the US Environmental Protection Agency (EPA), in consultation with the US Department of Energy, issued an emergency waiver of the federal 7.8 psi Reid Vapor Pressure (RVP) gasoline requirement for fourteen parishes in Louisiana. The waiver is issued in response to gasoline supply concerns as a result of Hurricane Isaac. The waiver will be in effect until September 6, 2012.
- **As of 1:00 pm EDT August 29**, five refineries in the path of Isaac are shut down representing 936,500 barrels per day (B/D) of refining capacity, or 12 percent of total Gulf Coast refining capacity (7,671,585 B/D). **Six additional refineries in the path of the storm with an aggregated capacity of 1,716,000 B/D are operating at reduced rates.**
- Yesterday evening (August 28), the Nuclear Regulatory Commission (NRC) reported that Entergy's 1,075 MW Waterford Nuclear Generating Station, located about 20 miles west of New Orleans, has shutdown due to the possibility of adverse conditions generated by the storm. **As of 2:00 pm EDT today (August 29)** both River Bend (St. Francisville, LA.) and Grand Gulf (Port Gibson, MS.) Nuclear Generating Stations, also owned by Entergy, remain at full power.

ESF 12 Actions:

- ESF 12 is staffing the FEMA National Response Coordination Center (NRCC) in Washington, DC, the FEMA Region IV Response Coordination Center (RRCC) in Atlanta, GA, the FEMA Region VI RRCC in Denton, TX, the Baton Rouge, LA Incident Management Assistance Team (IMAT) and 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 8/29/12</i>			
Location	Amount Shut In	Pre-Event Production	Percent (%) Shut In
Crude Oil (B/D)	1,307,076	1,380,000	94.72
Natural Gas (MMCF/D)	3,223.92	4,500	71.64

Source: Bureau of Safety and Environmental Enforcement (BSEE)

- **As of 12:30 pm EDT August 29**, the Bureau of Safety and Environmental Enforcement (BSEE) reports 1,307,076 barrels per day (B/D) of the Gulf of Mexico (GOM) crude oil production is shut-in, equivalent to 94.72 percent of the GOM crude oil production. BSEE reports 3,223.92 million cubic feet per day (MMCF/D) of the GOM natural gas production is shut-in, equivalent to 71.64 percent of the GOM natural gas production. Personnel have been evacuated from a total of 505 production platforms, or 84.73 percent of the 596 manned platforms in the GOM. Personnel have been evacuated from 50 rigs, representing 65.79 percent of the 76 rigs currently operating in the GOM.

Refineries

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



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Refineries in the Path of Isaac as of 1:00 pm EDT 8/29/12

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	936,500	0	1,716,000	0

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 11:30 am EDT, August 29, all Louisiana Offshore Oil Port (LOOP) operations are suspended. When conditions improve, facility assessments will be conducted and plans will be implemented to bring the operation back online.
- Shell reported its St. James crude oil terminal was temporarily shut down on August 27.
- As of 1:00 pm EDT, August 29, the U.S. Coast Guard reported in Sector Mobile the ports of Mobile and Pascagoula are closed and the Port of Panama City remains open with restrictions. In Sector New Orleans, all ports along the Lower Mississippi River south of mile 233 are closed, including the ports of New Orleans and Baton Rouge. The Gulf Intercoastal Waterway remains open with restrictions. All ports in Sector Morgan City are closed, including the LOOP, Port Fourchon, and Houma.

Petroleum Pipelines

- As of August 29, the Capline Pipeline, the Ho-Ho Pipeline, LOOP's LOCAP pipeline, Shell's Offshore Gulf pipeline network, and William's Mountaineer pipeline have been shut-in due to weather conditions.

Status of Petroleum Pipelines as of 1:00 pm EDT 8/29/12

Type	Name	Start	Terminus	Capacity (barrels/day)	Status
Crude	Capline Pipeline	LA	IL	1,200,000	Shut-in
Crude	Ho-Ho (Houma-to-Houston)	LA	TX	325,000	Houma to DOE Junction section shut-in.
Crude	LOOP LOCAP	LA	LA	1,200,000	Shut-in
Crude	Shell Offshore Gulf Pipeline Network	GOM	LA	NA	Shut-in
Crude	Williams Mountaineer	GOM	LA	NA	Shut-in

Sources: Confirmed by company or on company web site

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Natural Gas Pipelines

- As of August 29, Dauphin Island Gathering System, Destin Pipeline Company, Florida Gas Transmission Company, Mississippi Canyon Gas Pipeline, Southern Natural Gas 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, **Nautilus Pipeline Company**, Sabine Pipe Line, Sea Robin Pipeline Company, Southern Natural Gas, Stingray Pipeline Company and Transcontinental Gas Pipe Line Company.

Force Majeure / Critical Notice Posting by Natural Gas Pipelines as of 1:00 pm EDT 8/29/12

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	8/25/2012	Force Majeure on offshore receipt points.
Discovery Gas Transmission	8/27/2012	Not accepting nominations for Tuesday 8/28/2012.
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	8/29/2012	Force Majeure for entire system.
Sabine Pipe Line	8/28/2012	Sea Robin/Henry Hub Interconnect shut-in.
Sea Robin Pipeline Company	8/28/2012	Sea Robin Pipeline system shut-in.
Southern Natural Gas	8/28/2012	Force Majeure at numerous delivery points including Toca, Lake Washington, Main Pass, West Delta, Venice-Mississippi Canyon, Sea Robin and many others.
Stingray Pipeline Company	8/27/2012	Capacity Constraint along ANR, Bridgeline, NGPL and Tennessee meters – these delivery points are not available.
Transcontinental Gas Pipe Line Company	8/27/2012	Southeast Louisiana Lateral (SELA) shut-in at Station 62 (near Gibson, LA).
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 August 29, 15 natural gas processing plants with capacities greater than 100 Million cubic feet per day (MMcf/d) are shutdown due to Hurricane Isaac. These plants have a combined capacity of 8.9 Billion cubic feet per day (Bcf/d). Additionally, there is one plant, with a capacity of 240 MMcf/d, operating at reduced levels. There are a total of 29 gas processing plants with capacities exceeding 100 MMcf/d which are located in the Gulf of Mexico coastal area and in the path of Hurricane Isaac. These 29 plants have a combined processing capacity of 13.7 Bcf/d. The shut-in capacity accounts for 65 percent of total capacity.



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Natural Gas Processing Plant¹ Status for Affected Area as of 01:30 PM EDT 8/29/12

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			
Pascagoula Gas Processing Plant	Jackson, MS	1,100	X			
North Terrebonne Plant	Gibson, LA	1,100	X			
Venice Gas Plant	Plaquemines, LA	750	X			
Sea Robin Gas Plant	Vermillion, LA	660	X			
Larose Plant	Lafourche, LA	600	X			
Pelican Plant	St. Marys, LA	600	X			
Williams Mobile Bay Processing Plant	Mobile Bay, AL	600	X			
Blue Water Gas Plant ³	Acadia Parish, LA	350	X			
Mobile Bay Processing	Mobile, AL	300	X			
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			
Paterson II Plant	St. Marys, LA	180	X			
PSI Kaplan Plant	Vermillion, LA	125	X			

Note: 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 Blue Water Gas Plant has been inactive for 2 months and its inactivity is unrelated to Hurricane Isaac.

Sources: Confirmed by company or on company web site.

Restoration Information

Alabama

- Alabama Power reported today (August 29) that most outages are on Dauphin Island, in Bayou la Batre and in other areas in south Mobile County. The company reported crews are in the field and have the following restoration estimates:
 - All customers except Dauphin Island will be restored by end of today (August 29).
 - Dauphin Island to be restored by 5:00 pm tomorrow (August 30).

Florida

- Progress Energy Florida, reported as of 2:00 pm today, fewer than 300 customers in Progress Energy's 35-county service territory are without power. More than 15,000 customers have been restored following repeated waves of heavy rain and high winds in the region.
- Gulf Power reported yesterday (August 28) they have more than 400 out of state workers helping in the restoration effort.

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- Entergy, serving customers in Louisiana and Mississippi, reported the company is gathering a workforce of greater than 10,000 company and contract workers to help restore power. Workers from outside the company are coming 24 States: Alabama, Arizona, Arkansas, Connecticut, Florida, Georgia, Illinois, Kansas, Kentucky, Louisiana, Maryland, Mississippi, Missouri, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Virginia and Wisconsin. The company stated today (August 29) customers should be prepared for the possibility of extended power outages due to the slow-moving storm and crews may not begin restoration work until it is safe to do so.
- Cleco, a utility serving Louisiana customers, has a workforce of more than 2,400 company and contract workers from across the southeast United States ready to restore power throughout its service territory when weather permits.
- Dixie Electric Cooperative will be sending two five-person crews to Mississippi to assist with power restoration as a result of Hurricane Isaac. Crews will be leaving around 11 a.m. today, August 29, heading to Taylorsville, MS.
- Mississippi Power reported mid-day today (August 29) that their crews continue assessing damage. Crews from Georgia Power and other utilities are en route. The company also reported restoration crews cannot perform any work until wind speeds are 30 mph or less.
- Mississippi Electric Power Association reported this morning (August 29) that almost 200 additional workers are arriving to the State from Alabama and Georgia to assist Association members with the restoration efforts. As the storm moves away from us, our northern systems will also head south to help.