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Hurricanes Laura and Sally | Update #23

REPORT TIME & DATE: 10:00 AM EDT | Monday, September 21, 2020

REPORT DISTRIBUTION: Public

EXECUTIVE SUMMARY

Sally made landfall around 5:45 AM EDT on September 16, near Gulf Shores, Alabama as a category 2 hurricane. Laura made landfall around 2:00 AM EDT on August 27, near Cameron, Louisiana as a Category 4 hurricane. The system began to weaken as it moved inland but caused significant impacts across portions of Louisiana and eastern Texas. The DOE Energy Response Center remains activated to manage Emergency Support Function #12 activities and to coordinate with industry partners in response to Hurricanes Sally and Laura and in preparation for Tropical Storm Beta.

Electricity Sector Summary

- As of 8:30 AM EDT, there were approximately 77,000 customer outages reported across Louisiana, Alabama, and Florida, down from a Sally peak of over 600,000 customer outages.
 Approximately 26,000 of the remaining outages are customers without power in Louisiana, from Hurricane Laura.
- Restoration efforts are underway across the affected region. Hurricane Sally restoration efforts are being supported by over 11,000 personnel from multiple states. Restoration efforts also continue in southwest Louisiana, following Hurricane Laura.
- Hurricane Laura caused significant damage to transmission infrastructure in portions of Louisiana and Texas. Restoration of transmission systems is a priority to help enable other phases of restoration. Full restorations for the most significantly damaged areas in western Louisiana will be extended, taking up to several weeks for some portions of southwest Louisiana.

Oil & Natural Gas Sector Summary

- Due to power outages, flooding, and access constraints from Hurricane Sally, there may be localized retail fuel station disruptions. There are no fuel supply issues at this time. Suppliers are working to keep available retail stations supplied.
- As of 12:30 PM EDT September 20, 0.179 million barrels per day (b/d) (9.69%) of the oil
 production and 0.209 billion cubic feet per day (Bcf/d) (7.72%) of the natural gas production in
 the federally administered areas of the U.S. Gulf of Mexico continue to be shut-in, according to
 estimates by the Bureau of Safety and Environmental Enforcement (BSEE).
- The refinery and offshore platform shut-ins are not anticipated to cause immediate supply issues. For the week ending on September 11, overall U.S. stocks of gasoline and distillate were 2.8% and 22.4% above the seasonal 5-year average. Jet fuel is slightly below the average. Across the Gulf Coast, stocks of gasoline and distillate were 9% and 41% above the 5-year average respectively. Stocks of crude oil were 18.2% above the 5-year average in the Gulf Coast (not including the SPR).



ELECTRICITY SECTOR

POWER OUTAGES

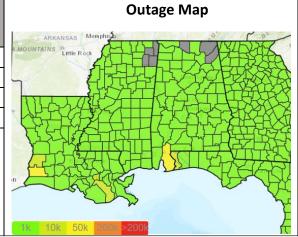
As of 8:30 AM EDT, there are a total of 76,875 outages across Louisiana, Alabama, and Florida. Approximately 26,000 of these outages are customers still without power in Louisiana from Hurricane Laura.

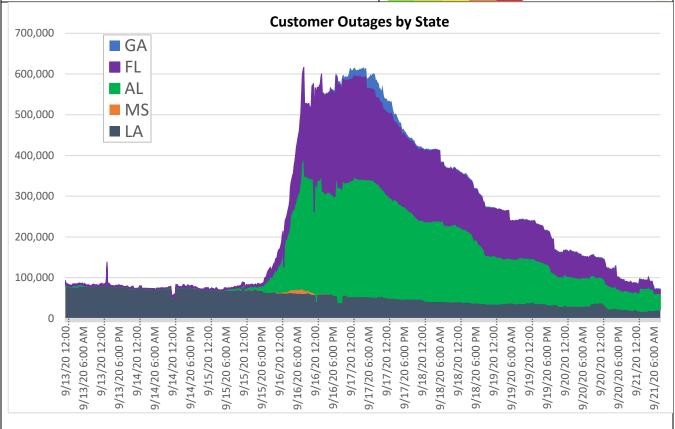
/21/2020

			Custome as of 8:30 A	r Power O AM EDT 9/	_
State	Current Outages	% of State Without Power	Storm Peak Outages	% Restored from Peak	AF
Louisiana*	25,984	<1%	613,350	96%	A MOUNTAIN
Alabama	40,507	2%	322,793	87%	7
Florida	10,384	<1%	256,620	96%	
Total	76,875	-	-	-	

^{*}Louisiana customer outages include continuing power outages as a result of Hurricane Laura. Its peak outage was caused by Hurricane Laura. Louisiana outage numbers also include estimated customer outages for Jefferson Davis Electric Co-op.

The following states have fewer than 2,000 storm-related outages and have been removed from the table: Mississippi, Georgia.







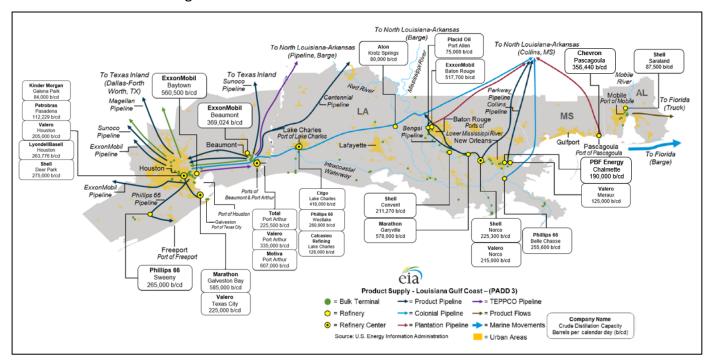
RESTORATION OVERVIEW

- Restoration efforts are underway across the affected region. Restoration efforts related to Hurricane Sally are being supported by over 11,000 personnel from multiple states.
- Debris and flooding are impeding access to some locations. Areas with limited access are experiencing significant traffic and utilities are encouraging residents minimize non-essential travel to help facilitate movement of restoration crews.
- Restorations from Hurricane Laura also continue across portions of western Louisiana. The
 hardest-hit areas, where distribution and transmission systems is being rebuilt, will be a multiweek effort. While full restoration in the hardest-hit areas will take several weeks, customers will
 be restored as repairs are complete and transmission is available. A significant number of
 customers may not be able to receive power at this time due to damage to customer equipment
 and/or damage to the customer's structure.
- Restorations for outages from Hurricane Laura also continue across portions of southwestern Louisiana, supported by mutual assistance from several states. At the peak, over 29,000 personnel from over 29 states, the District of Columbia, and Canada were supporting restoration efforts. The hardest-hit areas in Louisiana, where distribution and transmission systems are being rebuilt, will be a multi-week effort. While full restoration in the hardest-hit areas will take several weeks, customers will be restored as repairs are complete and transmission is available. A significant number of customers may not be able to receive power at this time due to damage to customer equipment and/or damage to the customer's structure.
- Fluctuation in the outage numbers is expected and normal during large-scale restoration efforts.
- Utilities follow an overall plan to restore service to customers. After power is restored to
 essential services and facilities critical to public health and safety, crews focus on repairing lines
 that will return service to the largest number of customers in the least amount of time. Power is
 restored systematically to neighborhoods, industries, and businesses and then to individual
 homes and small groups of customers.



OIL AND NATURAL GAS SECTOR

Just over half of total U.S. refining capacity is located in the Gulf Coast (PADD 3) region. Gulf Coast refinery production is critical for supplying fuels to markets in the high-demand East Coast (PADD 1) region. Products move out of the Gulf Coast region on the Colonial and Plantation pipeline systems to Southeast and Central Atlantic markets, and via tanker and barge to Florida. The Gulf Coast refineries export approximately 20% of production to foreign countries. This provides a significant "export buffer," allowing refiners to shift fuel production away from exports to make up for shortages in domestic markets. The map below highlights the petroleum supply chain in the Louisiana, Mississippi, and Alabama Gulf Coast regions.





PORTS

• The U.S. Coast Guard (USCG) has set the following conditions for ports and waterways as a result of Laura, Sally, and/or Tropical Storm Beta. Listed in the table are select ports that receive petroleum products.

Status of Gulf Coast Ports as of 8:30 AM EDT 09/21/2020							
Port Sector	Port	Inbound Petroleum * (b/d)	Status	Date Stam p			
Corpus Christi	Corpus Christi, TX	226,000	Port condition Yankee in anticipation of Tropical Storm Beta. Open.	9/20			
	Freeport, TX	94,000					
Houston	Galveston, TX	32,000	Port condition Zulu in anticipation of	9/20			
	Houston, TX	894,000	Tropical Storm Beta. Closed.				
	Texas City, TX	113,000					
Port Arthur	Lake Charles, LA	394,000	Part condition 7ulu in anticipation of	9/20			
and Lake	Beaumont, TX	365,000	Port condition Zulu in anticipation of Tropical Storm Beta. Open with restrictions.				
Charles	Port Arthur, TX	358,000	Tropical Storm Beta. Open with restrictions.				
Houma	Morgan City, LA	Port condition X-Ray in anticipation of Tropical Storm Beta. Open with restrictions.		9/19			
New Orleans	New Orleans, LA	201,000	Open.	9/18			
	Baton Rouge, LA 83,000		Open.				
	Gramercy, LA	110,000	Open.	9/18			
Mobile	Pascagoula, MS	131,000	Open.	9/17			
	Mobile, AL	191,000	Open with restrictions.				
	Pensacola, FL	10,000	Open with restrictions.	9/20			

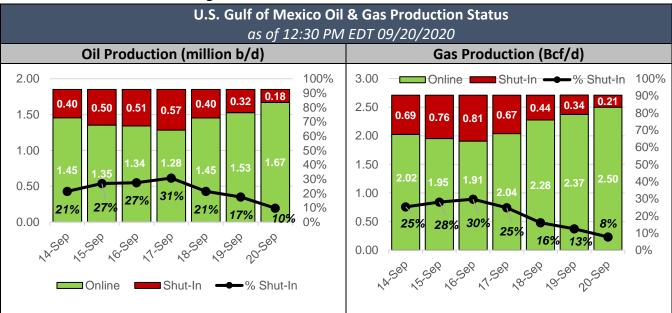
^{*}Crude oil and products from foreign and domestic sources (2018).

Source: Receipt data from EIA Company Level Imports, U. S. Army Corps of Engineers Waterborne Commerce Statistics Center

- As of September 17, Port Condition Recovery remains in effect for the Calcasieu Waterway.
 Shoaling in the Calcasieu Bar and River is restricting the draft of transiting vessels. Two swing bridges east of the Calcasieu Lock are open from 6 PM to 7 AM daily to allow inland traffic until normal operations are restored.
- As of 3:00 PM EDT September 15, Port Condition Zulu is in effect for the Gulf Intracoastal Waterway from mile marker 20 to 93 and eastbound traffic from mile marker 93 to 108.

OFFSHORE PRODUCTION

- As of 12:30 PM EDT September 20, 0.179 million barrels per day (b/d) (9.69%) of the oil
 production and 0.209 billion cubic feet per day (Bcf/d) (7.72%) of the natural gas production in
 the federally administered areas of the U.S. Gulf of Mexico have been shut-in, according to
 estimates by the Bureau of Safety and Environmental Enforcement (BSEE).
- In addition, BSEE reports that 23 out of 643 manned platforms have been evacuated. All nondynamically positioned rig personnel have returned, and all dynamically positioned rigs have returned to their working locations.

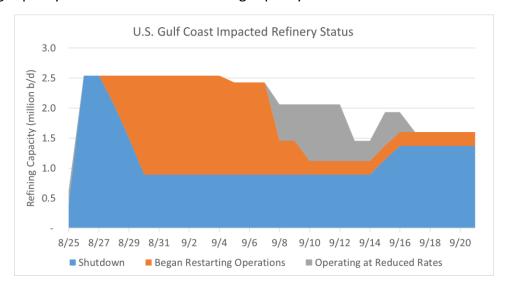


Source: BSEE



PETROLEUM REFINERIES

- As of 8:00 AM EDT, September 21, six refineries in the Gulf Coast region were reported shut down, according to public reports. These refineries have a combined refining capacity of 1.4 million b/d, equal to 14% of total Gulf Coast (PADD 3) refining capacity and 7% of total U.S. refining capacity.
- One refinery is in the process of restarting after being shut down. Restart may take several days. The restarting refinery has a capacity of 0.23 million b/d, equal to 2% of total Gulf Coast (PADD 3) refining capacity and 1% of total U.S. refining capacity.

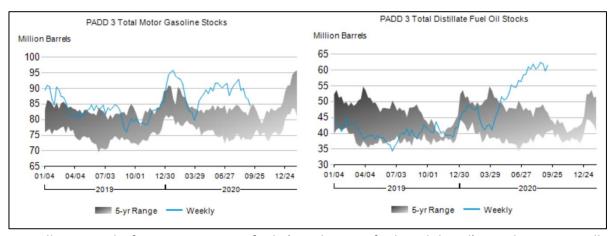


The above chart summarizes impacts to Gulf Coast refining capacity as a result of Hurricane Laura and Hurricane Sally over time, as reported in DOE's Situation Reports. Impacted refining capacity is aggregated into three categories: 1) shutdown refineries (blue), 2) refineries that were shut down and have begun restarting (orange), and refineries that are operating at reduced rates (gray). Refinery statuses are updated based on various news outlets and company websites.



FUEL STOCKS

For the week ending on September 11, 2020, the Gulf Coast (PADD 3) had 84.4 million barrels of total gasoline stocks (down 2.2 million barrels from last week), according to the Energy Information Administration (EIA). This is 9% higher than the 5-year average for this time of year. For the week ending on September 11, the Gulf Coast had 61.5 million barrels of total distillate stocks (up 1.8 million barrels from last week), according to EIA. This is 41% higher than the 5-year average for this time of year.



 Overall U.S. stocks for transportation fuels (gasoline, jet fuel, and diesel) stood at 449.9 million barrels for the week ending September 11, 2020, approximately 8.6% above the 5-year average for the time of year. Gasoline and distillate stocks are 2.8% and 22.4%, above their respective seasonal 5-year averages, while jet fuel stocks are 8.3% below its respective 5-year average, but within the 5-year range.



EMERGENCY DECLARATIONS & WAIVERS

EMERGENCY DECLARATIONS

To provide vital supplies and transportation services to a disaster area in the United States, emergency declarations may be issued by the President, Governors of States, or Federal Motor Carrier Safety Administration (FMCSA). These declarations trigger the temporary suspension of certain Federal safety regulations, including Hours of Service, for motor carriers and drivers engaged in specific aspects of the emergency relief effort. See 49 CFR 390.23 for the actual emergency regulation.

Emergency Declarations and HOS Waivers as of 8:30 AM EDT 09/21/2020					
State/Torritory	Dataila	Effective Dates		Chahaa	
State/Territory	Details	Start	End	Status	
AL, FL, GA, LA, MS	FMCSA Hours of Service Waiver (Sally)	9/15	10/14	Active	
AL, AR, LA, MS, MO, OK, TN, TX	FMCSA Hours of Service Waiver (Laura)	8/27	9/23	Active	
Arkansas	State of Emergency (Laura)	8/26	Until rescinded	Active	
	Presidential Emergency Declaration (Laura)	8/27	Until rescinded	Active	
Kentucky	State Emergency Declaration (Laura)	8/27	9/10	Inactive	
Puerto Rico	State of Emergency (Laura)	8/21	Until rescinded	Active	
	Presidential Emergency Declaration (Laura)	8/21	Until rescinded	Active	
Alahama	State of Emergency (Sally)	9/14	Until rescinded	Active	
Alabama	Presidential Emergency Declaration (Sally)	9/14	Until rescinded	Active	
	Presidential Emergency Declaration (Sally)	9/15	Until rescinded	Active	
Florida	State of Emergency (Sally)	9/14	Sixty days unless extended	Active	
Mississippi	State of Emergency (Sally)	9/13	Until rescinded	Active	
	Presidential Emergency Declaration (Sally)	9/14	Until rescinded	Active	
	State of Emergency (Laura)	8/22	Until rescinded	Active	
	Presidential Emergency Declaration (Laura)	8/22	Until rescinded	Active	
	State of Emergency (Sally)	9/12	10/11	Active	
	Presidential Emergency Declaration (Sally)	9/14	Until rescinded	Active	
Louisiana	State of Emergency (Laura)	8/21	9/20	Inactive	
	Presidential Emergency Declaration (Laura)	8/23	Until rescinded	Active	
	Presidential Disaster Declaration (Laura)	8/28	Until rescinded	Active	
Texas	State of Disaster Declaration (Laura)	8/23	Until rescinded	Active	
	Presidential Emergency Declaration (Laura)	8/23	Until rescinded	Active	

 $Sources: State\ government,\ White\ House,\ and\ Federal\ Motor\ Carrier\ Safety\ Administration\ websites.$



WAIVERS

- On September 17, the Pipeline and Hazardous Materials Safety Administration (PHMSA) issued an emergency waiver <u>order</u> declaring an emergency in Alabama, Florida, Louisiana, and Mississippi in relation to Hurricane Sally. The waiver relaxes certain requirements for the transportation of hazardous materials and is intended to support the U.S. Coast Guard and EPA in their response to Sally. The order is valid for 30 days.
- On September 15, the Alabama Department of Revenue temporarily <u>suspended</u> motor fuel exporter, importer, and transporter licensing requirements associated with the Alabama Terminal Excise Tax for those supporting disaster relief efforts in Alabama or other states where a state of emergency from Hurricane Sally has been declared. This is valid for 90 days.
- On August 27, the Secretary of Energy used his authorities under section 202(c) of the Federal Power Act to issue an emergency <u>order</u> authorizing and directing CenterPoint Energy Houston Electric (CEHE) to operate an existing, permanent tie-line to assist in electricity restoration of power to Entergy Texas, Inc. and electric cooperatives and municipal customers within the State of Texas as a result of the outages caused by Hurricane Laura.
- On August 26, the Texas Department of Environmental Quality requested and received approval for the <u>suspension</u> of various air quality and other environmental rules during the storm response. The rules cover air emissions from power plants, refineries, and vehicles, in addition to other sources of pollution.
- On August 26, the Pipeline and Hazardous Materials Safety Administration (PHMSA) issued an emergency waiver <u>order</u> declaring an emergency in Louisiana, Mississippi, and Texas and suspending certain requirements for the transportation of hazardous materials. The waiver is intended to support the U.S. Coast Guard and EPA in their response to Laura.

