



Laura, Sally, and Beta | Update #26

REPORT TIME & DATE: 10:00 AM EDT | Thursday, September 24, 2020

REPORT DISTRIBUTION: Public

EXECUTIVE SUMMARY

Laura made landfall around 2:00 AM EDT on August 27, near Cameron, Louisiana as a Category 4 hurricane. Sally made landfall around 5:45 AM EDT on September 16, near Gulf Shores, Alabama as a category 2 hurricane. Tropical Storm Beta made landfall around 11:00 PM on September 21 near the Matagorda Peninsula. 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 Tropical Storm Beta.

Electricity Sector Summary

- As of 8:30 AM EDT, there were approximately 19,000 customer outages reported across Louisiana and Alabama, approximately 12,000 remain from Laura and 7,000 remain from Hurricane Sally.
- Restoration efforts are underway across the affected regions. 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

- Gulf Coast refineries plan to continue operating through Tropical Storm Beta. Refineries in Lake Charles are anticipated to remain shut down for several weeks pending repairs and power restoration following impacts from Hurricane Laura.
- As of 12:30 PM EDT September 22, 0.132 million barrels per day (b/d) (7.12%) of the oil production and 0.130 billion cubic feet per day (Bcf/d) (4.8%) 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 18, overall U.S. stocks of gasoline and distillate were 0.9% and
 21.1% above the seasonal 5-year average. Jet fuel is slightly below the average. Across the Gulf
 Coast, stocks of gasoline and distillate were 7% and 40% above the 5-year average respectively.
 Stocks of crude oil were 18.4% above the 5-year average in the Gulf Coast (not including the SPR).

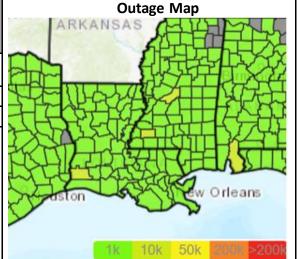
ELECTRICITY SECTOR

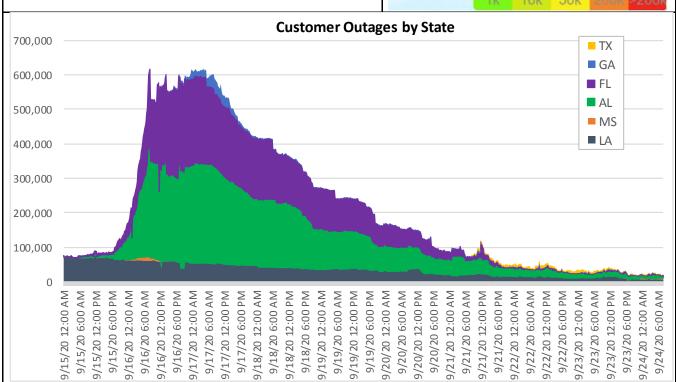
POWER OUTAGES

• As of 8:30 AM EDT, there are a total of 18,960 outages across Louisiana and Alabama. Approximately 12,000 of these outages are customers still without power in Louisiana from Hurricane Laura and 7,000 outages remain due to Hurricane Sally.

Customer Power Outages as of 8:30 AM EDT 9/24/2020 % of State Storm Current Without Peak State Restored **Outages** Power Outages from Peak Louisiana* 12,137 <1% 613,350 98% Alabama** 6,823 <1% 322,793 98% 18,960 Total

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







^{*}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.

^{**}Peak and continuing power outages in Alabama are due to Hurricane Sally.

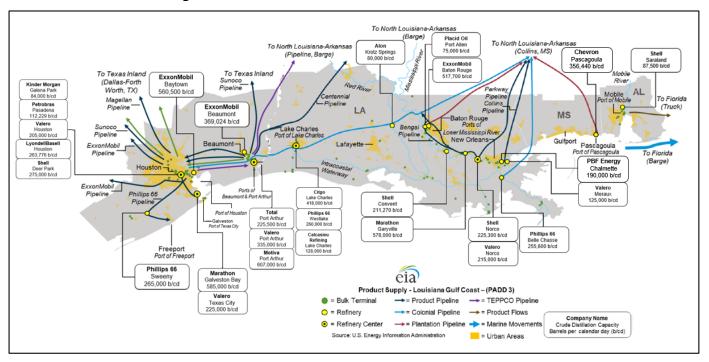
RESTORATION OVERVIEW

- 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 continue to impede access to some locations.
- 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.
- As utilities complete restorations within their service areas, they are coordinating the release of crews with neighboring utilities to support efforts in the hardest-hit areas.



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 09/24/2020								
Port Sector	Port	Inbound Petroleum * (b/d)	Status	Date Stam p				
Corpus Christi	Corpus Christi, TX	226,000	Port Condition Recovery. Open with restrictions. Matagorda Ship Channel is limited to 32 foot draft.	9/23				
Houston	Freeport, TX	94,000		9/23				
	Galveston, TX	32,000	Port Condition Passyony Onen					
	Houston, TX	894,000	Port Condition Recovery. Open.					
	Texas City, TX	113,000						
Port Arthur	Lake Charles, LA	394,000	Port Condition Possyony Onen with	9/22				
and Lake Charles	Beaumont, TX	365,000	Port Condition Recovery. Open with restrictions.					
	Port Arthur, TX	358,000	restrictions.					
Houma	Morgan City, LA	208,000	Port Condition Normal. Open with restrictions in Cat Island Pass.					
Mobile	Pascagoula, MS	131,000	Open.					
	Mobile, AL	191,000	Open with restrictions.					
	Pensacola, FL	10,000	Open with restrictions.					

*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 22, 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 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.

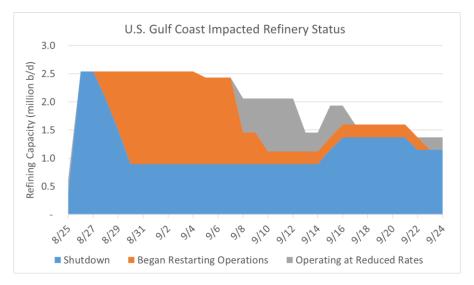
OFFSHORE PRODUCTION

As of 12:30 PM EDT September 22, 7% of the oil production and 5% of the natural gas
production in the federally administered areas of the U.S. Gulf of Mexico remain shut-in (down
from Sally peaks of 31% and 30% respectively), according to estimates by the Bureau of Safety
and Environmental Enforcement (BSEE). In addition, BSEE reports that 21 out of 643 manned
platforms remain evacuated.



PETROLEUM REFINERIES

- As of 8:00 AM EDT September 24, five refineries in the Gulf Coast region were reported shut down, according to public reports. These refineries have a combined refining capacity of 1.1 million b/d, equal to 12% of total Gulf Coast (PADD 3) refining capacity and 6% of total U.S. refining capacity.
- One refinery is in the process of restarting after being shut down and is now running at reduced rates. Restart may take several days to weeks. 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.

STRATEGIC PETROLEUM RESERVE (SPR) SITE STATUS:

• The Bayou Choctaw, Big Hill, and Bryan Mound sites are drawdown capable within the 13-day requirement.

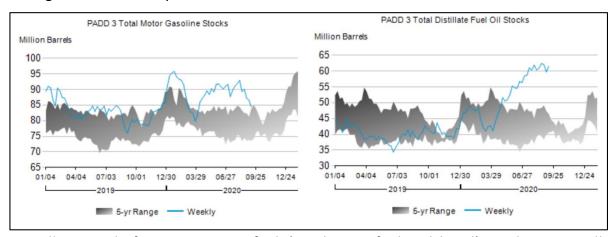
Status of SPR Sites as of 11:30 AM EDT 09/23/2020							
Site	Location	Hurricane Alert Level	Drawdown Capability				
New Orleans Office	New Orleans, LA	Normal Operations	N/A				
Bayou Choctaw	Plaquemine, LA	Normal Operations	Drawdown Ready				
West Hackberry	Hackberry, LA	Normal Operations	Pending Reconstitution				
Big Hill	Winnie, TX	Normal Operations	Drawdown Ready				
Bryan Mound	Freeport, TX	Normal Operations	Drawdown Ready				

Source: Office of Petroleum Reserves



FUEL STOCKS

• For the week ending on September 18, 2020, the Gulf Coast (PADD 3) had 84.2 million barrels of total gasoline stocks (down 0.2 million barrels from last week), according to the Energy Information Administration (EIA). This is 7% higher than the 5-year average for this time of year. For the week ending on September 18, the Gulf Coast had 61.5 million barrels of total distillate stocks (essentially same as last week), according to EIA. This is 40% 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 442.5 million barrels for the week ending September 18, 2020, approximately 6.8% above the 5-year average for the time of year. Gasoline and distillate stocks are 0.9% and 21.1%, above their respective seasonal 5-year averages, while jet fuel stocks are 10.3% below its respective 5-year average.



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 Saf ety 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 09/24/2020							
State/Territory	Dataila	Effective Dates		Status			
State/Territory	Details		End				
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	Inactive			
Arkansas	State of Emergency (Laura)	8/26	Until rescinded	Active			
AIKdIISdS	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			
T derto Meo	<u>Presidential Emergency Declaration (Laura)</u>	8/21	Until rescinded	Active			
Alabama	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)	9/15	Sixty days unless extended	Active			
	State of Emergency (Sally)	9/13	Until rescinded	Active			
Mississippi	Presidential Emergency Declaration (Sally)	9/14	Until rescinded	Active			
Mississippi	State of Emergency (Laura)	8/22	Until rescinded	Active			
	Presidential Emergency Declaration (Laura)	8/22	Until rescinded	Active			
	State of Emergency (Beta)	9/20	10/19	Active			
	State of Emergency (Sally)	9/12	10/11	Active			
Louisiana	Presidential Emergency Declaration (Sally)	9/14	Until rescinded	Active			
Louisidiid	State of Emergency (Laura)	8/21	10/19	Active			
	Presidential Emergency Declaration (Laura)	8/23	Until rescinded	Active			
	Presidential Disaster Declaration (Laura)	8/28	Until rescinded	Active			
Texas	State Disaster Declaration (Beta)	8/21	Until rescinded	Active			
	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. This is in effect through October 12.
- 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 and is in effect for 30 days.

