



Hurricane Laura | Update #4

REPORT TIME & DATE: 4:00 PM EDT | Thursday, August 27, 2020

REPORT DISTRIBUTION: Public

EXECUTIVE SUMMARY

As of 2:00 PM EDT, Tropical Storm Laura was 65 miles east-northeast of Shreveport, Louisiana, moving north at 15 MPH, with maximum sustained winds of 65 MPH, after hitting the Texas-Louisiana coast as a 150 MPH Category 4 hurricane early this morning. On the forecast track, the center of Laura is forecast to move northward over Arkansas tonight, the mid-Mississippi Valley on Friday, and the mid-Atlantic on Saturday. The DOE Energy Response Center is activated to coordinate with interagency, state, and industry partners.

Electricity Sector Summary

- As of 2:30 PM EDT, there are a total of 831,767 outages across the states of Louisiana, Texas, Arkansas, and Mississippi as a result of Laura.
- As Laura passes, utilities will begin damage assessments and restoration efforts as conditions permit.
- Utilities in the impacted area pre-staged crews, equipment, and materials, and mutual assistance networks have been activated to support restoration efforts as needed.

Oil & Natural Gas Sector Summary

- The ports of Lake Charles, Beaumont, and Port Arthur remain closed due to Laura.
- All refineries in the Beaumont/Port Arthur and Lake Charles regions shut-in operations in advance of the storm. This shut in approximately 2.4 million b/d of U.S. refinery capacity, or approximately 13% of the total U.S. operable refining capacity.
- As of 12:30 PM EDT, August 27, 84% of the oil production and 60% of the natural gas production in the federally administered areas of the U.S. Gulf of Mexico remain 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 any immediate supply issues. For the week ending on August 21, overall U.S. stocks of gasoline and distillate were 4.7% and 24.7% above the seasonal 5-year average. Jet fuel is slightly below the average, but within the 5-year range. Across the Gulf Coast, stocks of gasoline and distillate were 14% and 43% above the 5-year average respectively. Gulf Coast stocks of crude oil were 23.4% above the 5-year average in the Gulf Coast.

LAURA

As of 2:00 PM EDT, Tropical Storm Laura was 65 miles east-northeast of Shreveport, Louisiana, moving north at 15 MPH, with maximum sustained winds of 65 MPH. Tropical storm-force winds extend outward up to 105 miles, and tornadoes are possible through tonight over parts of Louisiana, Arkansas, and Western Mississippi. Continued weakening is forecast, and Laura is expected to weaken to a tropical depression this evening or overnight. On the forecast track, the center of Laura will move northward over Arkansas tonight, the mid-Mississippi Valley on Friday, and the Mid-Atlantic on Saturday.

Through Friday, Laura is expected to produce rainfall totals of 4 to 8 inches across portions of Louisiana, Mississippi, and Arkansas, with isolated maximums of 18 inches in Louisiana. Through Saturday, Laura is expected to produce rainfall totals of 1 to 3 inches, with isolated maximum amounts of 5 inches across the mid-Mississippi Valley and portions of the Lower Ohio and Tennessee Valleys, the central Appalachians, and the Mid-Atlantic.

The tropical storm warning along the Gulf Coast has been discontinued. A storm surge warning is in effect from Sabine Pass, Texas to Port Fourchon, Louisiana. Water levels remain elevated along the Gulf Coast and will continue to subside over the next few hours.

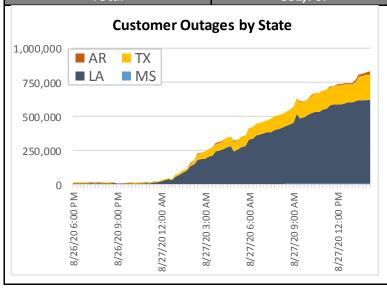


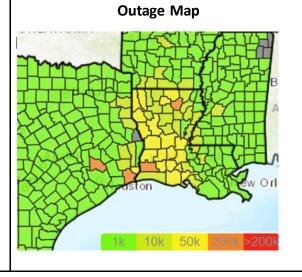
ELECTRICITY SECTOR

POWER OUTAGES

- As of 2:30 PM EDT, there are a total of 831,767 outages across the states of Louisiana, Texas, Arkansas, and Mississippi as a result of Laura.
- Utilities are ready to begin restoration efforts once Hurricane Laura has passed and conditions permit. Utilities pre-positioning crews, materials, and equipment in advance of the storm.
- Mutual assistance crews from at least 26 states, the District of Columbia, and Canada have been mobilized to support restoration efforts.
- Utilities typically 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.
- Restoration efforts and damage assessments will be limited until the storm has passed and weather conditions permit. Crews are unable to operate in heavily flooded areas and when wind speeds are greater than 30 MPH.

Tropical Storm Laura Customer Power Outages as of 2:30 PM EDT 08/27/2020						
State	Current Outages	Current Outages % of State Without Power				
Louisiana	613,350	28.6%	613,350			
Texas	184,813	1.5%	184,813			
Arkansas	23,333	2%	23,333			
Mississippi	10,271	<1%	10,271			
Total	831,767	-	-			

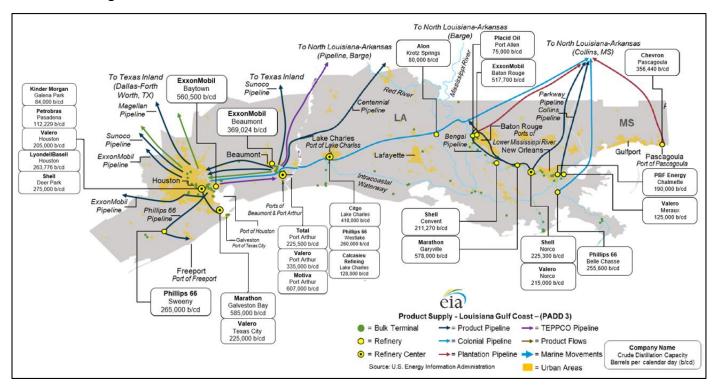






OIL AND NATURAL GAS SECTOR

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 and Texas Gulf Coast regions.





PORTS

- Louisiana Offshore Oil Port (LOOP) has suspended operations at its marine terminal as of August 23, per standard procedure. LOOP is the U.S. port capable of receiving very large crude carriers (VLCCs). LOOP's Clovelly Hub deliveries remain normal.
- The U.S. Coast Guard has set the following conditions for ports and waterways as a result of Laura. Listed in the table are select ports that receive petroleum products.

Status of Gulf Coast Ports as of 3:00 PM EDT 08/27/2020						
Port	Inbound Petroleum * (b/d)	Status	Date Stamp			
Louisiana						
Baton Rouge, LA	83,000	Open.	8/27			
Gramercy, LA	110,000	Open.	8/27			
New Orleans, LA	201,000	Open with restrictions. The RNA East remains closed.	8/27			
Morgan City, LA	208,000	Closed. Port Condition Zulu.	8/26			
Lake Charles, LA	394,000	Closed. Port Condition Zulu.	8/26			
Texas						
Port Arthur, TX	358,000	Closed. Port Condition Zulu.	8/26			
Beaumont, TX	365,000	Closed. Port Condition Zulu.	8/26			
Freeport, TX	94,000	Open with restrictions. Drafts limited to 26 feet.	8/27			
Galveston, TX	33,000	Open with restrictions. Open to tug/barge traffic only.	8/27			
Houston, TX	894,000	Open.	8/27			
Texas City, TX	113,000	Open with restrictions. Drafts limited to 26 feet.	8/27			
Brownsville, TX	53,000	Open.	8/27			
Corpus Christi, TX	266,000	Open.	8/27			

^{*}Crude oil and product foreign imports and domestic movements in 2018.

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

PETROLEUM REFINERIES AND TERMINALS

• Refineries and petroleum terminals in the affected region implemented hurricane preparedness plans in advance of the storm.

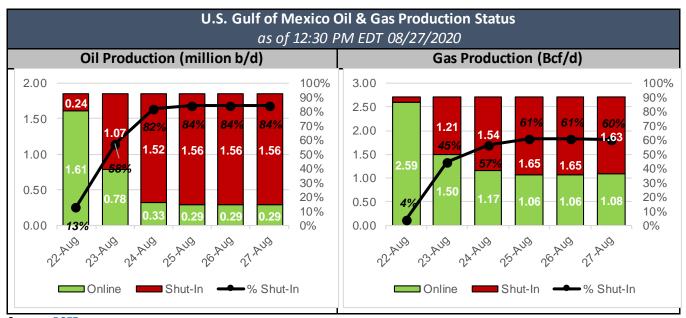
NATURAL GAS PIPELINES & TERMINALS

 Several Natural gas pipeline operators and terminals in the affected region implemented hurricane preparedness plans in advance of Hurricane Laura.



OFFSHORE PRODUCTION

- As of 12:30 PM EDT, August 27, 1.56 million barrels per day (b/d) (84.3%) of the oil production and 1.63 billion cubic feet per day (Bcf/d) (60.1%) of the natural gas production in the federally administered areas of the U.S. Gulf of Mexico are shut-in, according to estimates by the Bureau of Safety and Environmental Enforcement (BSEE).
- In addition, BSEE reports that 297 out of 643 manned platforms have been evacuated; 10 out of 12 non-dynamically positioned rigs have been evacuated; and 8 out of 16 dynamically positioned rigs have moved out of the storm's path as a precaution.

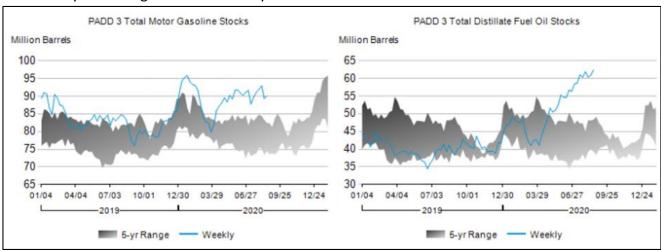


Source: **BSEE**



FUEL STOCKS

• For the week ending on August 21, 2020, the Gulf Coast (PADD 3) had 90.0 million barrels of total gasoline stocks, according to the Energy Information Administration (EIA). This is 14% higher than the 5-year average for this time of year. For the week ending on August 21, the Gulf Coast had 62.4 million barrels of total distillate stocks, according to EIA. This is 43% 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 458.3 million barrels for the week ending August 21, 2020, approximately 10.9% above the 5-year average for the time of year. Gasoline and distillate stocks are 4.7% and 24.7%, above their respective seasonal 5-year averages, while jet fuel stocks are 3% below its respective 5-year average, but within the 5-year range.

GAS STATIONS

- Due to increased demand from evacuees, there is potential for limited temporary localized retail fuel station disruptions. Suppliers are working to keep retail stations supplied.
- The state of Louisiana has some generators reserved for gas stations that they will place at strategic stations once debris is cleared.
- There are a few retail gas stations closed in Texas due to flooding near the Louisiana border. Otherwise, there are very few retail station closures in the state.
- The crowd-sourced Gas Buddy gas station outage data does not yet indicate substantial outages in the impacted area. Once the storm passes and it is safe to go out, there may be retail stations reported as out of service due to loss of power or lack of fuel.



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 3:00 PM EDT 08/27/2020						
State /Torritory	Details	Effective Dates		Status		
State/Territory	Details	Start	End	Status		
Arkansas -	State of Emergency	8/26	Until rescinded	Active		
	Presidential Emergency Declaration	8/27	Until rescinded	Active		
Alabama, Louisiana, Mississippi, and Texas	Hours of Service Waiver	8/24	9/23	Active		
Puerto Rico	Presidential Emergency Declaration	8/21	Until rescinded	Active		
	State of Emergency	8/21	Until rescinded	Active		
Mississippi –	State of Emergency	8/22	Until rescinded	Active		
	Presidential Emergency Declaration	8/22	Until rescinded	Active		
Louisiana	State of Emergency	8/21	9/20	Active		
	Presidential Emergency Declaration	8/22	Until rescinded	Active		
Texas -	State of Disaster Declaration	8/23	Until rescinded	Active		
	Presidential Emergency Declaration	8/23	Until rescinded	Active		

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

WAIVERS

- 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.

