



## Hurricane Laura | Update #16

**REPORT TIME & DATE:** 11:00 AM EDT | Thursday, September 10, 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. 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 (ESF) #12 activities and to coordinate with state and industry partners.

#### Electricity Sector Summary

- As of 8:30 AM EDT, there were approximately 122,000 customer outages reported across Louisiana.
- Restoration efforts are underway across the affected region, supported by mutual assistance, with more than 29,000 personnel from over 29 states, the District of Columbia, and Canada.
- Restorations for customers in the less hard-hit areas in northern Louisiana are effectively complete.
- 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.
- Some of the hardest hit areas continue to have limited access due to storm debris.
- 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.

#### Oil & Natural Gas Sector Summary

- Refineries in the Beaumont/Port Arthur area have begun restarting operations with the ExxonMobil Beaumont Refinery having completed their restart. Refineries in Lake Charles will likely remain shut down for several weeks pending repairs and restoration of commercial power.
- The refinery and offshore platform shut-ins are not anticipated to cause immediate supply issues. For the week ending on August 28, overall U.S. stocks of gasoline and distillate were 3.3% and 23.4% 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 10% and 42% above the 5-year average respectively. Gulf Coast stocks of crude oil were 19.7% above the 5-year average in the Gulf Coast (not including the SPR).
- Many retail fuel stations are unavailable in the impacted area due to power outages and/or damage. Louisiana and industry have deployed generators to some stations without power.

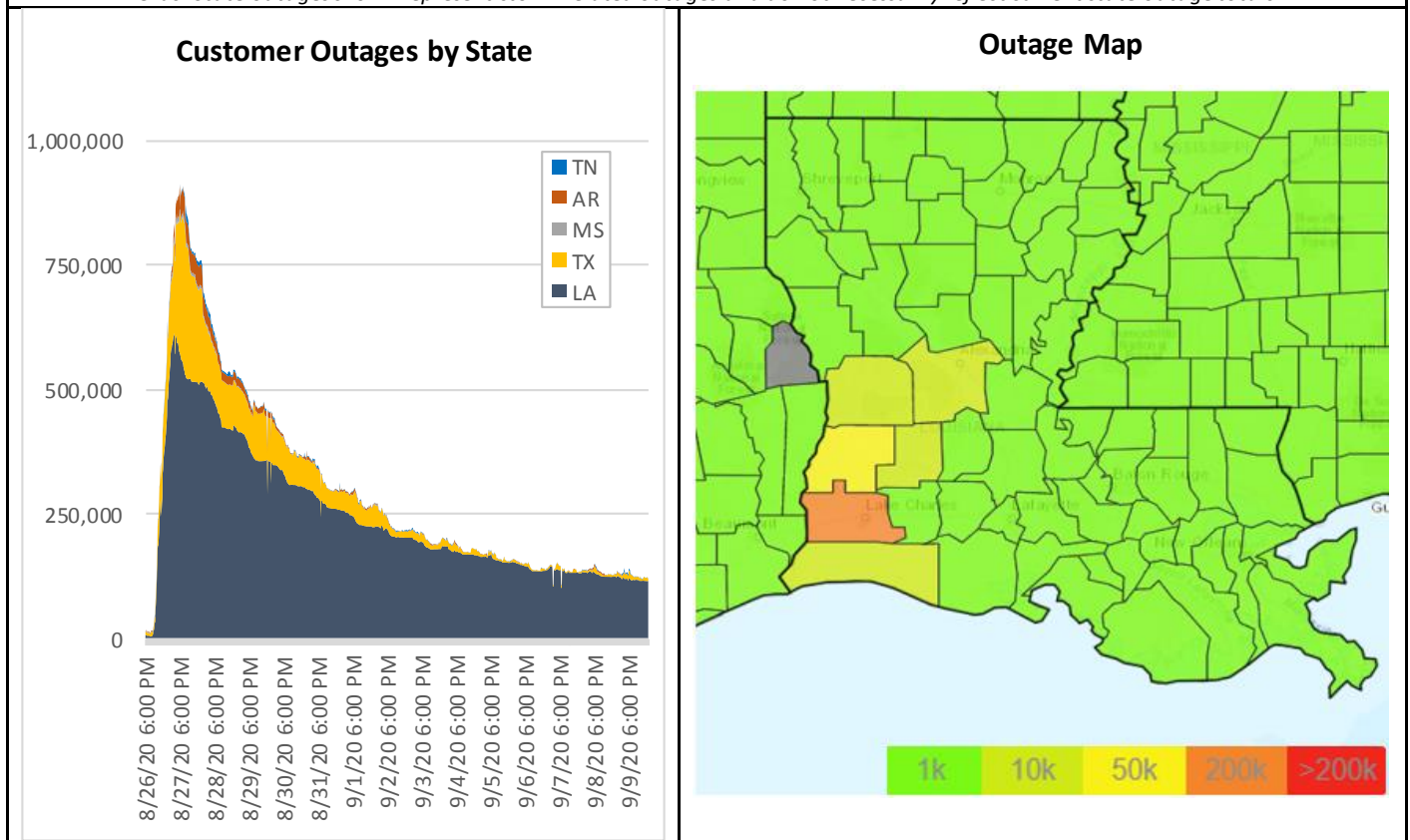
**ELECTRICITY SECTOR**

**POWER OUTAGES**

- As of 8:30 AM EDT, there are a total of 122,369 outages across the state of Louisiana as a result of Laura.

Laura Customer Power Outages as of 8:30 AM EDT 09/10/2020				
State	Current Storm-Related Outages	% of State Without Power	Peak Outages	% Restored from Peak
Louisiana*	122,369	7%	613,350	80%

\*Louisiana outage numbers include estimated customer outages for Jefferson Davis Electric Co-op and the Town of Vinton. The following states have fewer than 2,000 storm-related outages and have been removed from the table: Tennessee, Mississippi, Arkansas, Texas. State outages shown represent storm-related outages and do not necessarily reflect current state outage totals.

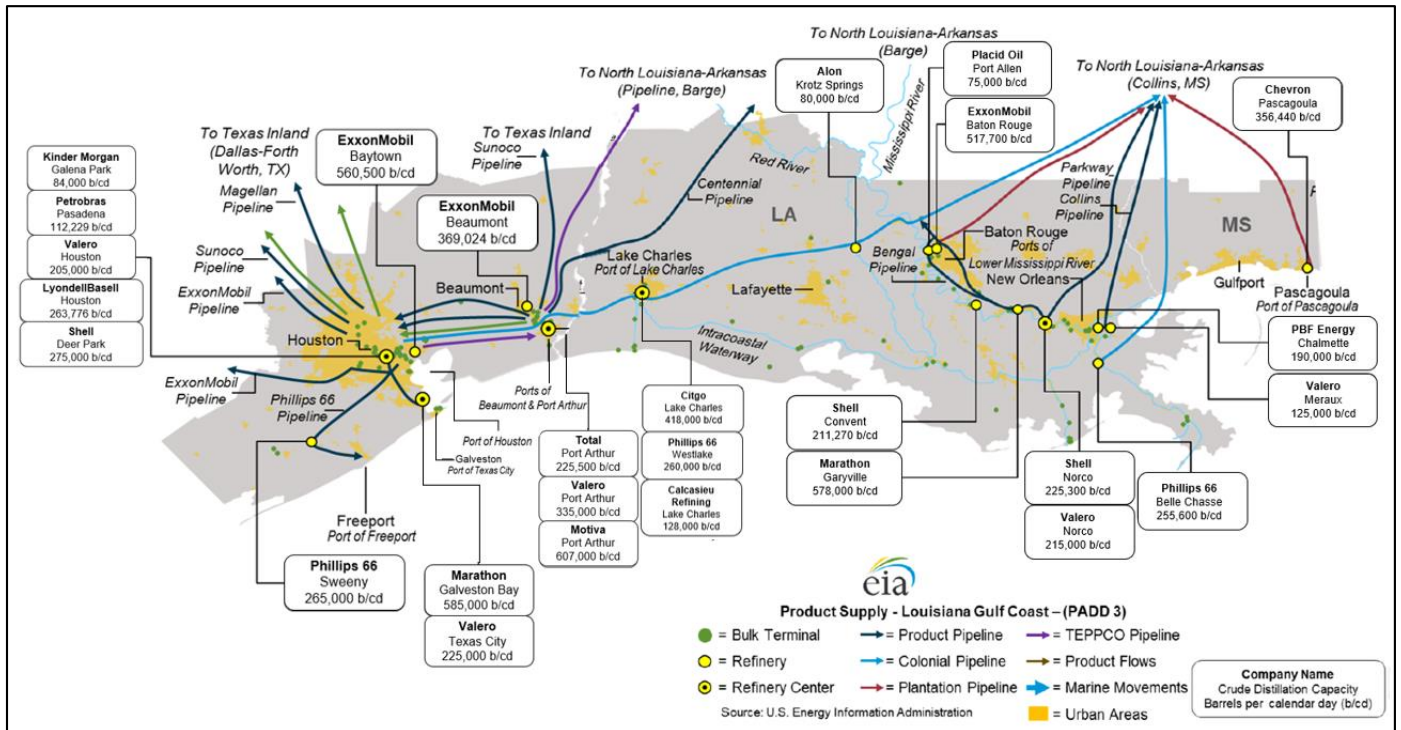


- A multi-week restoration effort is expected for the hardest-hit areas in western Louisiana, where distribution systems need to be rebuilt and/or due to significant transmission impacts, especially in southwest portions of the State. While full restoration in the hardest-hit areas may take several weeks, customers will be restored as repairs are complete and transmission is available.
- Restorations for customers in the less hard-hit areas in northern Louisiana are effectively complete.
- Debris and flooding continues to hinder access to some locations.
- 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.

- Restoration of damaged transmission segments is a key priority, especially transmission segments located around southern portions of the Texas-Louisiana border. Restoration of transmission infrastructure will further enable subsequent phases of restoration as distribution infrastructure is restored.
- Fluctuation in the outage numbers is expected and normal during large-scale restoration efforts.
- Mutual assistance networks have been activated, with more than 29,000 personnel from 29 states, the District of Columbia, and Canada supporting 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 in less-impacted areas complete restorations, they are coordinating 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 and Texas Gulf Coast regions.



**PORTS**

- The U.S. Coast Guard (USCG) 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.

<b>Status of Gulf Coast Ports as of 8:30 AM EDT 09/10/2020</b>			
<b>Port</b>	<b>Inbound Petroleum* (b/d)</b>	<b>Status</b>	<b>Date Stamp</b>
<b>Louisiana</b>			
Lake Charles, LA	394,000	Open with restrictions.	9/7
<b>Texas</b>			
Port Arthur, TX	358,000	Open.	9/5
Beaumont, TX	365,000	Open.	9/5

\*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

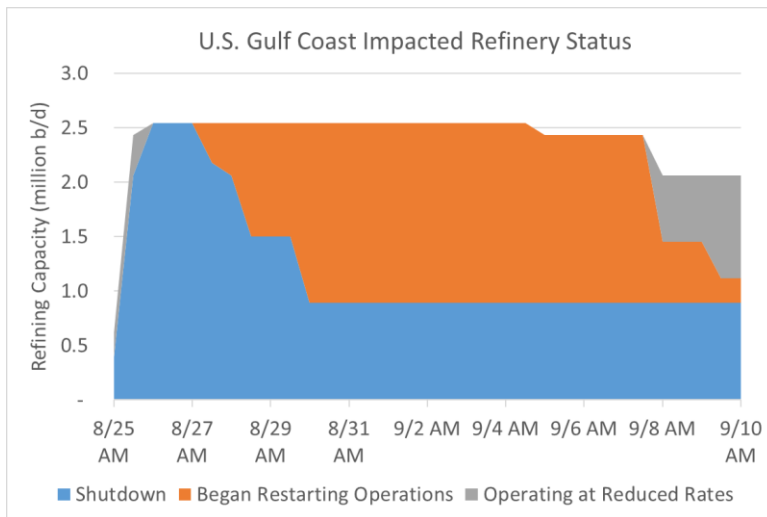
- As of September 7, Port Condition Recovery remains in effect for the Calcasieu Waterway. Shoaling in the Calcasieu Channel and Calcasieu River is restricting the draft of transiting vessels. Two swing bridges east of the Calcasieu Lock are open from 6 PM to 7 AM daily until normal operations are restored.

**OFFSHORE PRODUCTION**

- As of September 5, 0.17 million barrels per day (b/d) (9.07%) of the oil production and 0.21 billion cubic feet per day (Bcf/d) (7.86%) of the natural gas production in the federally administered areas of the U.S. Gulf of Mexico remained shut-in, according to estimates by the Bureau of Safety and Environmental Enforcement (BSEE). This is down from a peak shut-in of 84% of oil production and 61% of natural gas production when Laura made landfall. In addition, BSEE reported that 40 out of 643 platforms remained unmanned and 1 out of 12 non-dynamically positioned rigs were still evacuated.

**PETROLEUM REFINERIES**

- As of 9:00 AM EDT September 10, four refineries in the Gulf Coast region were shut down, according to public reports. These refineries have a combined refining capacity of 0.9 million b/d, equal to 9% of total Gulf Coast (PADD 3) refining capacity and 5% of total U.S. refining capacity.
- Another three refineries are in the process of restarting after being shut down. Restart may take several days. Motiva and Valero’s Port Arthur refineries are likely operating at reduced rates, while they continue the restart process. The restarting refineries have a combined capacity of 1.17 million b/d, equal to 12% of total Gulf Coast (PADD 3) refining capacity and 6% of total U.S. refining capacity.



The above chart summarizes impacts to Gulf Coast refining capacity as a result of Hurricane Laura 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) SITES**

- As of September 9, assessment, cleanup, and recovery efforts are underway at West Hackberry.

Status of SPR Sites as of 4:00 PM EDT 09/09/2020			
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	Re-Entry & Reconstitution	Pending Reconstitution
Big Hill	Winnie, TX	Normal Operations	Drawdown Ready
Bryan Mound	Freeport, TX	Normal Operations	Drawdown Ready

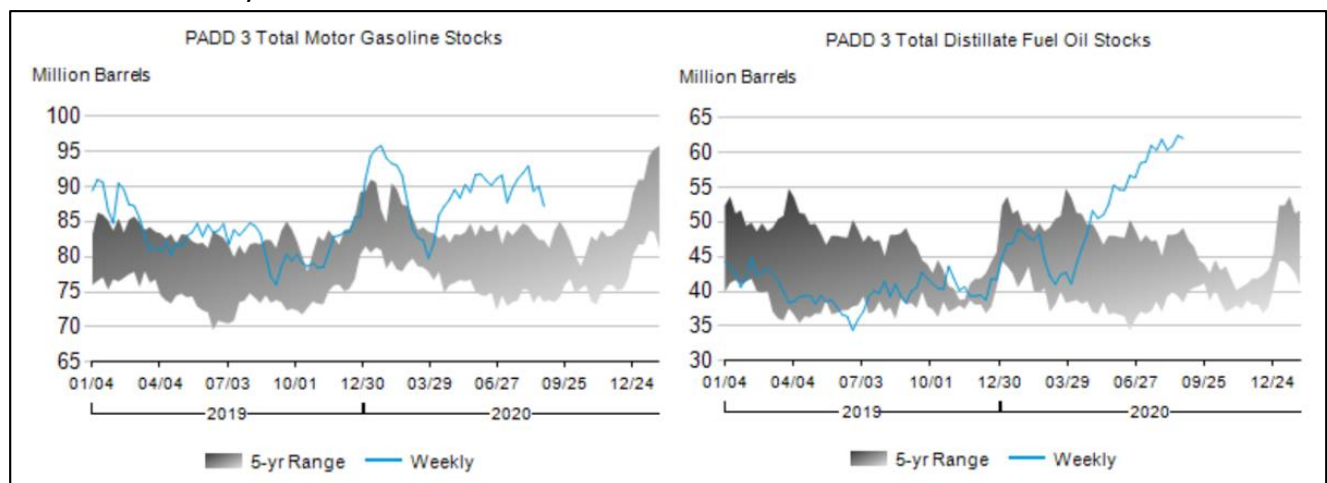
Source: DOE Office of Petroleum Reserves

## GAS STATIONS

- Many retail fuel stations are unavailable in the impacted area due to power outages and/or damage. As of September 2, the Louisiana Oil Marketers and Convenience Store Association reports that there are no supply issues (gasoline or diesel) at this time.
- Due to limited number of retail stations with power and fuel, lines have been reported at available stations in the Lake Charles area.
- The state of Louisiana has deployed some generators to gas stations that are operational. ExxonMobil has reported providing generators to distributors in Louisiana without power.

## FUEL STOCKS

- For the week ending on August 28, 2020, the Gulf Coast (PADD 3) had 87.2 million barrels of total gasoline stocks (down 2.8 million barrels from last week), according to the Energy Information Administration (EIA). This is 10% higher than the 5-year average for this time of year. For the week ending on August 28, the Gulf Coast had 62.0 million barrels of total distillate stocks (down 0.4 million barrels from last week), according to EIA. This is 42% 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 452.0 million barrels for the week ending August 28, 2020, approximately 9.5% above the 5-year average for the time of year. Gasoline and distillate stocks are 3.3% and 23.4%, above their respective seasonal 5-year averages, while jet fuel stocks are 4.5% 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 8:00 AM EDT 08/31/2020				
State/Territory	Details	Effective Dates		Status
		Start	End	
Arkansas	<a href="#">State of Emergency</a>	8/26	Until rescinded	Active
	<a href="#">Presidential Emergency Declaration</a>	8/27	Until rescinded	Active
AL, AR, LA, MS, MO, OK, TN, TX	<a href="#">Hours of Service Waiver</a>	8/27	9/23	Active
Kentucky	<a href="#">State Emergency Declaration</a>	8/27	9/10	Active
Puerto Rico	<a href="#">Presidential Emergency Declaration</a>	8/21	Until rescinded	Active
	<a href="#">State of Emergency</a>	8/21	Until rescinded	Active
Mississippi	<a href="#">State of Emergency</a>	8/22	Until rescinded	Active
	<a href="#">Presidential Emergency Declaration</a>	8/22	Until rescinded	Active
Louisiana	<a href="#">State of Emergency</a>	8/21	9/20	Active
	<a href="#">Presidential Emergency Declaration</a>	8/23	Until rescinded	Active
	<a href="#">Presidential Disaster Declaration</a>	8/28	Until rescinded	Active
Texas	<a href="#">State of Disaster Declaration</a>	8/23	Until rescinded	Active
	<a href="#">Presidential Emergency Declaration</a>	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 [suspension](#) 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 [order](#) 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.
- On August 27, the Secretary of Energy used his authorities under section 202(c) of the Federal Power Act to issue an emergency [order](#) 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.