



## Hurricanes Ida and Nicholas | Update #16

**REPORT TIME & DATE:** 11:00 AM EDT | Wednesday, September 15, 2021

**REPORT DISTRIBUTION:** Public

### EXECUTIVE SUMMARY

Hurricane Nicholas made landfall as a category 1 storm near the eastern part of the Matagorda Peninsula, about 50 miles south of Houston, Texas around 1:30 AM EDT on September 14. As of 5:00 AM EDT, Nicholas had weakened to tropical depression-strength and was 15 miles north-northeast of Port Arthur, Texas, moving east at 3 MPH, with maximum sustained winds of 30 MPH. Flash Flood Watches are in effect along the central Gulf Coast in portions of southern Louisiana, southern Mississippi, southern Alabama, and the Florida Panhandle. Rain will continue along the central Gulf Coast through the weekend and into early next week as tropical moisture lingers in the region. Hurricane Ida made landfall near Port Fourchon, Louisiana on August 29, as a category 4 storm. Ida caused substantial damage to the electric grid in Louisiana and disrupted the oil and natural gas supply chain.

#### Electricity Sector Summary

- As of 8:00 AM EDT on September 15, there are approximately 113,000 customer outages in Texas due to Hurricane Nicholas and 81,000 customer outages in Louisiana from both storms.
- While the New Orleans and Baton Rouge metro areas are mainly restored following Hurricane Ida, some harder hit rural locations are days to weeks away from restorations. Near complete restoration is expected for Livingston, St. James, St. John, and Entergy's service territory in Tangipahoa and St. Helena parishes by September 17.
- Near complete restoration for the hardest hit areas in the southeast Louisiana, including portions of Assumption, Lafourche, Plaquemines, St Charles, Terrebonne, and lower Jefferson parishes are expected to extend into the latter half of September. Utilities have encountered extensive damage that will require rebuilding the system, as opposed to just a restoration. Damage to customer owned equipment must be repaired by a qualified electrician before utilities are able restore power.

#### Oil & Natural Gas Sector Summary

- As of 12:30 PM EDT, September 14, 40% of the oil production and 48% 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. In the Gulf of Mexico, approximately 25 million barrels of crude oil and 30 billion cubic feet per day (Bcf) of natural gas production has been shut in as a result of Ida through September 12.
- Two refineries in Louisiana remain shut, accounting for about 0.5 million barrels per day (b/d) of refinery capacity, or approximately 3% of the total U.S. operable refining capacity. Four refineries have returned to operational status, while three other refineries are in the process of restarting but remain below normal operating rates. Fuel stocks in the area are being drawn down from storage while refineries and offshore production are restored. Refineries in Texas and western Louisiana continued normal operations through Nicholas.

**DOE ACTIONS****DOE ENERGY RESPONSE ORGANIZATION (ERO): ACTIVATED - LEVEL 1**

- DOE continues to coordinate with industry, interagency, and territorial partners to support response efforts related to Hurricane Ida. DOE ESF #12 subject matter experts are directly engaging with affected utilities to assess additional need to help support restoration efforts.
- DOE has worked with FEMA and industry partners to prepare for hurricane response operations during the COVID-19 pandemic.

**DOE EMERGENCY SUPPORT FUNCTION (ESF) #12 DEPLOYMENTS:**

- Louisiana Joint Field Office – Baton Rouge, LA
- Louisiana State Emergency Operation Center – Baton Rouge, LA
- *Note: Additional DOE ESF #12 Responders have deployed to Louisiana to support the State Emergency Operation Center and to coordinate with interagency, state, and industry partners.*



**ELECTRICITY SECTOR**

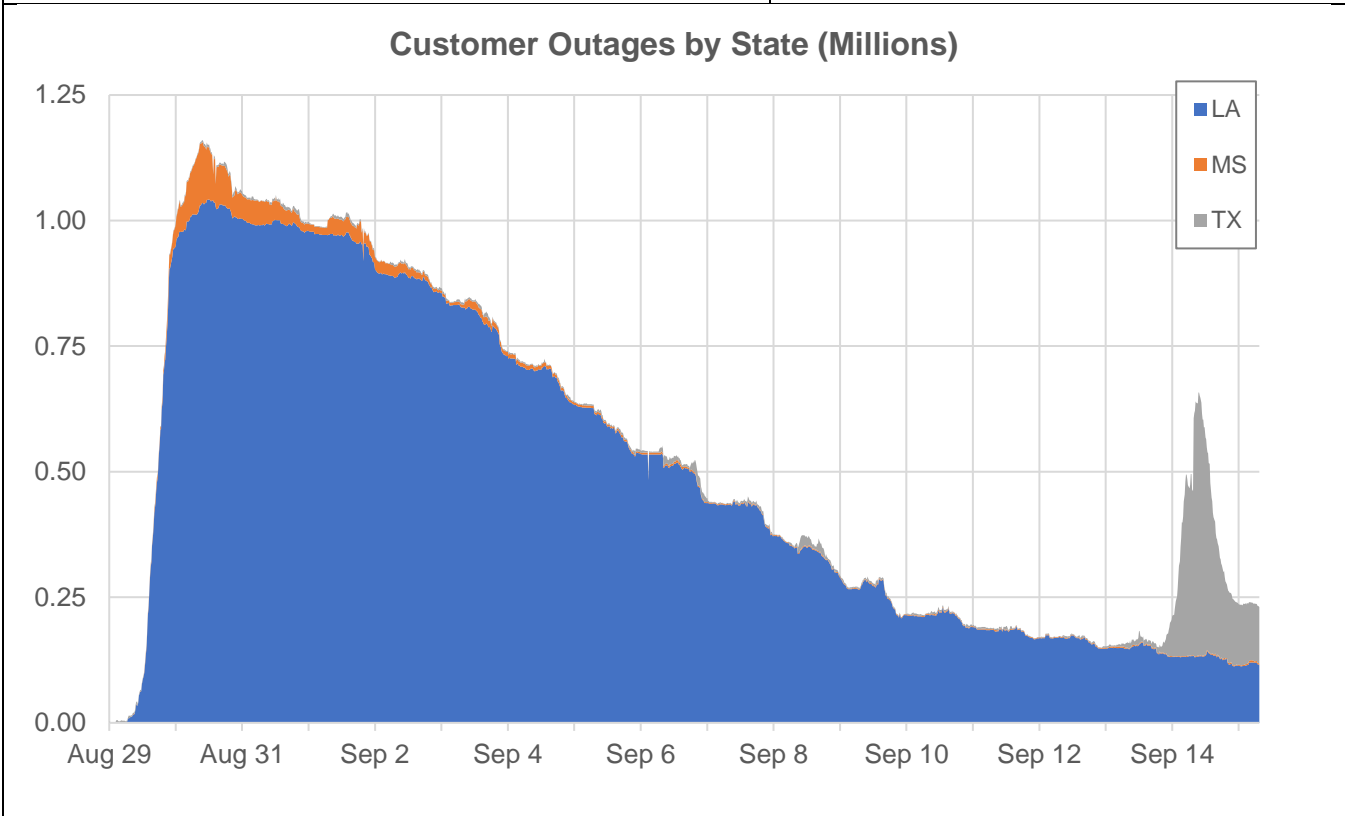
**POWER OUTAGES**

- As of 8:00 AM EDT on September 15, there are approximately 113,000 outages in Texas due to Nicholas and 81,000 outages remaining in Louisiana due to Ida and Nicholas. In total, there are approximately 194,000 power outages in the Gulf Coast as of 8 AM EDT.

| Customer Power Outages as of 8:00 AM EDT 09/15/2021 |                 |                          |                    |            |
|-----------------------------------------------------|-----------------|--------------------------|--------------------|------------|
| State                                               | Current Outages | % of State Without Power | Storm Peak Outages | % Restored |
| TX*                                                 | 113,122         | 1%                       | 523,986            | 78%        |
| LA**                                                | 81,311          | 4%                       | ~1,075,158         | 92%        |
| TOTAL                                               | 194,433         | -                        | -                  | -          |

*\*Outages due to Nicholas.*

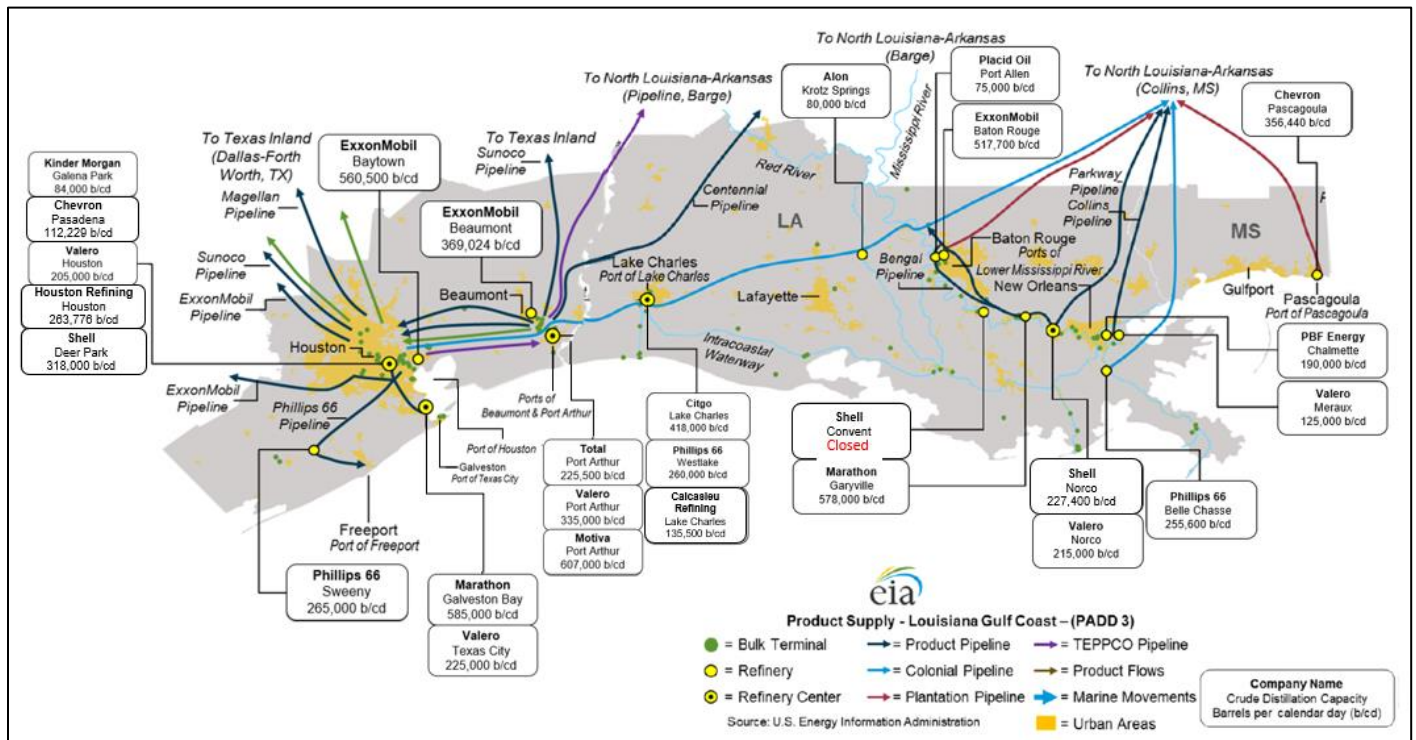
*\*\*Outages due to Ida and Nicholas.*



- Customer outages reflect how many electric meters are without power. Meters represent individual homes, businesses, and industrial sites.
- Industry has activated mutual assistance networks and at the peak over 27,000 personnel from at least 41 states and the District of Columbia were supporting restoration efforts. The number of personnel supporting restorations will be adjusted over time as certain types of work are complete (e.g., vegetation management).
- 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 and businesses, then to small groups of customers and individual homes.
- A multi-week restoration effort is expected for the hardest-hit areas in southeastern Louisiana, where portions of the distribution systems need to be rebuilt. While full restoration in the hardest-hit areas may take several weeks, customers will be restored as repairs are complete.
- Some 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. Entergy is reminding customers that they need to complete repairs and inspections of damaged customer owned electrical equipment before power can be restored.
- Entergy has announced expected restoration times for all Louisiana customers affected by Hurricane Ida, including for the hardest-hit parishes in Southeast Louisiana.
- The longest estimated restoration times are in the following parishes: Assumption (September 22), Lafourche (September 29), Lower Jefferson (September 29), Plaquemines (September 29), Terrebonne (September 29). The September 29 ETRs represent "no later than" dates, and Entergy will attempt to expedite restoration.
- Estimated times to restoration are for near-complete restoration of customers that can receive power, in the area. Many customers will be restored prior to the estimates.
- Utilities are ready to begin restoration efforts once Nicholas has passed and conditions permit. 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.

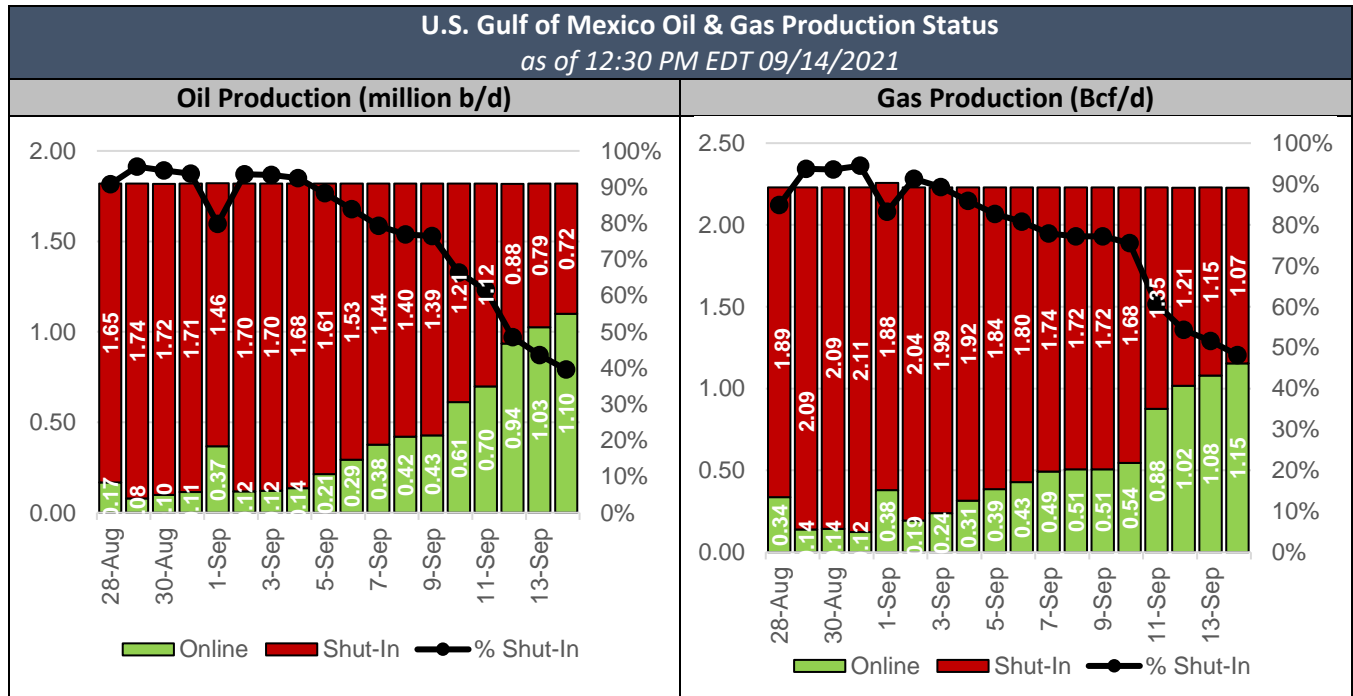
**OIL AND NATURAL GAS SECTOR**

Refineries in the Texas and Louisiana Gulf Coast Refining Districts have a combined capacity of 8.6 million b/d, or approximately 50% of total U.S. refining capacity, including 1.6 million b/d in the New Orleans area and 0.7 million b/d in the Baton Rouge area. Refinery production from the Louisiana Gulf Coast is trucked to local retail stations or shipped on the Colonial Pipeline and Products SE Pipe Line (PPL) systems to high-demand East Coast markets and via tanker and barge to Florida. Refineries in the Texas Gulf Coast move product to local markets and ship on Colonial Pipeline to the East Coast and multiple other pipelines to Dallas, Texas and Midwest markets. Refineries in the Gulf Coast (PADD 3) region export approximately 20% of their 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 region. Gulf of Mexico federal offshore oil production accounts for 15% of total U.S. crude oil production and federal offshore natural gas production in the Gulf accounts for 5% of total U.S. dry production.



**OFFSHORE PRODUCTION**

- As of 12:30 PM EDT, September 14, 720,000 b/d (39.57%) of the oil production and 1.07 Bcf/d (48.20%) 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 39 out of 560 manned platforms remain evacuated; all 11 non-dynamically positioned rigs have returned personnel; and two of the 15 dynamically positioned rigs remain out of position.



Source: [BSEE](#)

## PORTS & WATERWAYS

- The U.S. Coast Guard has set the following conditions for ports and waterways as a result of Nicholas. Listed in the table are select ports that import crude oil or export petroleum products.

| Status of Gulf Coast Ports as of 09/15/2021 |                          |                                 |                                               |            |
|---------------------------------------------|--------------------------|---------------------------------|-----------------------------------------------|------------|
| Port                                        | Inbound Crude Oil* (b/d) | Outbound Refined Product* (b/d) | Status                                        | Date Stamp |
| Houston, TX                                 | 462,000                  | 1,373,000                       | Open. No Restrictions                         | 9/15       |
| Port Arthur, TX                             | 207,000                  | 214,000                         | Port Condition Yankee. Open with Restrictions | 9/13       |
| Beaumont, TX                                | 211,000                  | 457,000                         | Port Condition Yankee. Open with Restrictions | 9/13       |
| Lake Charles, LA                            | 144,000                  | 439,000                         | Port Condition X-Ray. Open                    | 9/13       |
| Corpus Christi, TX                          | 182,000                  | 477,000                         | Port Condition Seasonal Alert. Open.          | 9/14       |
| Texas City, TX                              | 87,000                   | 284,000                         | Open. No Restrictions                         | 9/15       |
| Freeport, TX                                | 85,000                   | 226,000                         | Open. No Restrictions                         | 9/15       |

Source: Receipt data from EIA Company Level Imports, U. S. Army Corps of Engineers Waterborne Commerce Statistics Center \*Foreign imports or exports and domestic movements in 2019

- The U.S. Coast Guard has set restrictions and port conditions on the following portions of the Gulf Coast Intracoastal Waterway (GIWW):
  - On September 10, the USCG reported that the Gulf Intracoastal Waterway from mile marker 18-20 west of the Harvey Locks remains closed due to shoaling.
  - Port Condition X-Ray remains in place between mile marker 190.5 to 251 of the GIWW
  - Rescinded the modified Port Condition Yankee from mile marker 319.5 to 442 on the GIWW and is now listed as open with no restrictions.
  - Port Condition seasonal alert for waterways between Baffin Bay (mile marker 481) and Rockport, TX (mile marker 520)
  - Port Condition Yankee for waterways between Rockport, TX (mile marker 520) and the Colorado Locks (mile marker 534)
- The U.S. Coast Guard has reopened all major ports in Louisiana, Mississippi and Alabama after Ida, although minor restrictions remain in effect at several ports.
- Louisiana Offshore Oil Port (LOOP)** reports that as of September 10, it has fully reopened its marine operations for imports and exports. LOOP is the U.S. port capable of receiving very large crude carriers (VLCCs).
- The Lower Mississippi River** is open to vessel traffic with some restrictions.
  - On September 10, the USCG advised there are underwater obstructions at various locations on the river. Lastly, USCG mentioned that Mile 203 Head of Passes to Baton Rouge will be limited to daylight transit only.
  - On September 9, the USCG announced that preventative maintenance will be resuming to remove a submerged pipeline, scheduled prior to Hurricane Ida. USCG has restricted all vessel transiting on the lower Mississippi River from mile markers 0 to 3.0 AHP for September 14, 19, and 21 between the hours of 6 AM and 6 PM.



## PETROLEUM REFINERIES

- As of September 15, two refineries in Louisiana remain fully shut down, accounting for about 0.5 million b/d of refinery capacity, or approximately 3% of total U.S. operable refining capacity. Four refineries have returned to operational status, while three other refineries are in the process of restarting, although they are likely not producing normal volumes yet. For most refineries, full restoration of normal refinery output will take two to three weeks after the passage of Ida, although restart timelines in New Orleans may take longer due to storm damage and ongoing power supply issues.
- On September 2, the Secretary of Energy authorized a release of 1.5 million barrels of crude oil from the U.S. Strategic Petroleum Reserve (SPR) to supply Exxon Mobil's Baton Rouge Refinery, and on September 3, another 0.3 million barrels were authorized for Placid Refining's Port Allen Refinery. On September 9, DOE authorized a second exchange with ExxonMobil's Baton Rouge Refinery for another 1.5 million barrels of crude oil.

## PETROLEUM TERMINALS

- Power outages in Baton Rouge and the New Orleans area are impeding the distribution of fuel from terminals to area gas stations, creating shortages. This is exacerbated by a shortage of hazmat qualified drivers and road conditions. Entergy is working to prioritize restoration of some terminals and options for generator support are being explored.
- As of September 5, there is a public announcement to communities south of Alexandria, LA to stay off the roads from 8PM to 6AM to clear way for fuel trucks. Traffic is heavy and fuel trucks are stuck in traffic on their way to/from the terminals

## RETAIL STATION OUTAGES

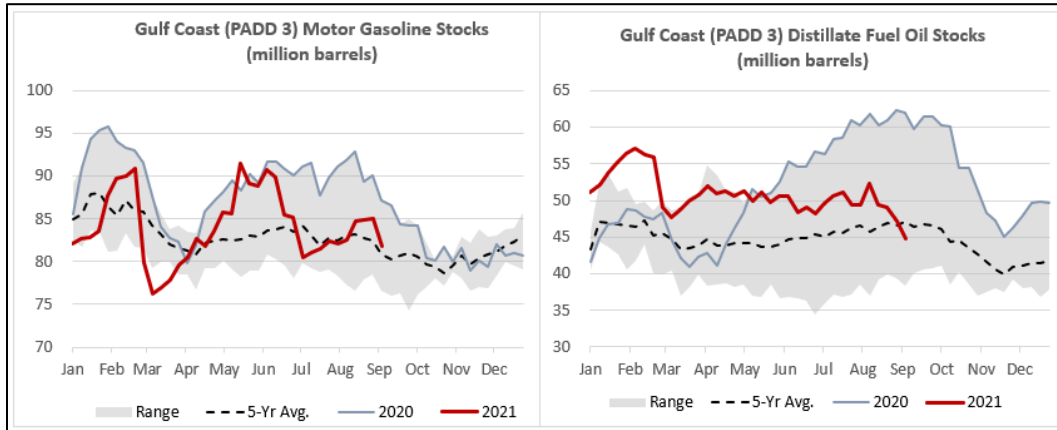
- Widespread power outages, high demand, and fuel constraints at some offline refinery-based loading-points/terminals are leading to retail gas station outages in impacted areas. Available stations are experiencing long-lines and high demand. As refineries continue to restart, refinery-based loading points/terminals will be restocked. Refineries with power, operational truck racks, and stored fuel inventory are being utilized for fuel distribution. Heavy traffic in some areas is also delaying resupply efforts.
- The City of New Orleans has developed a website for tracking [Gas Station Status in Orleans Parish](#).





FUEL STOCKS

- For the week ending on September 3, 2021, the Gulf Coast (PADD 3) had 81.8 million barrels of total gasoline stocks, according to the Energy Information Administration (EIA). This is 1% higher than the five-year average for this time of year. For the week ending on September 3, the Gulf Coast had 44.7 million barrels of total distillate stocks, according to EIA. This is 5% below the five-year average for this time of year.



## EMERGENCY DECLARATIONS &amp; 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 11:00 AM EDT 09/14/2021 |                                                                                                            |                 |                 |         |
|----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-----------------|-----------------|---------|
| State/Territory                                                      | Details                                                                                                    | Effective Dates |                 | Status  |
|                                                                      |                                                                                                            | Start           | End             |         |
| AL, AR, LA, MS,<br>TN, TX                                            | Regional Federal Motor Carrier Safety Administration<br><a href="#">Emergency Declaration</a> (HOS Waiver) | 8/29            | 9/28            | Active  |
| Alabama                                                              | <a href="#">State of Emergency &amp; HOS Waiver</a>                                                        | 8/28            | Until rescinded | Active  |
| Mississippi                                                          | <a href="#">State of Emergency</a>                                                                         | 8/28            | Until rescinded | Active  |
|                                                                      | <a href="#">Presidential Emergency Declaration</a>                                                         | 8/28            | Until rescinded | Active  |
| Kentucky                                                             | <a href="#">State of Emergency &amp; HOS Waiver</a>                                                        | 8/30            | 9/9             | Expired |
| Louisiana                                                            | <a href="#">State of Emergency</a>                                                                         | 8/26            | 9/27            | Active  |
|                                                                      | <a href="#">Presidential Emergency Declaration</a>                                                         | 8/27            | Until rescinded | Active  |
|                                                                      | <a href="#">Presidential Major Disaster Declaration</a>                                                    | 8/29            | Until rescinded | Active  |
|                                                                      | <a href="#">State of Emergency (Tropical Storm Nicholas)</a>                                               | 9/12            | 10/11           | Active  |
|                                                                      | <a href="#">Presidential Emergency Declaration (TS Nicholas)</a>                                           | 9/13            | Until rescinded | Active  |
| Texas<br>(17 counties)                                               | <a href="#">State Disaster Declaration (Tropical Storm Nicholas)</a>                                       | 9/13            | Until rescinded | Active  |
| Virginia                                                             | <a href="#">State of Emergency</a>                                                                         | 8/30            | 9/28            | Active  |
| Pennsylvania                                                         | <a href="#">State of Emergency</a>                                                                         | 8/31            | Until rescinded | Active  |
|                                                                      | <a href="#">Presidential Major Disaster Declaration</a>                                                    | 9/10            | Until rescinded | Active  |
| West Virginia                                                        | <a href="#">State of Emergency</a>                                                                         | 8/31            | 9/30            | Active  |
| New Jersey                                                           | <a href="#">State of Emergency</a>                                                                         | 9/1             | Until rescinded | Active  |
|                                                                      | <a href="#">Presidential Emergency Declaration</a>                                                         | 9/2             | Until rescinded | Active  |
|                                                                      | <a href="#">Presidential Major Disaster Declaration</a>                                                    | 9/5             | Until rescinded | Active  |
| New York                                                             | <a href="#">State of Emergency</a>                                                                         | 9/1             | Until rescinded | Active  |
|                                                                      | <a href="#">Presidential Emergency Declaration</a>                                                         | 9/2             | Until rescinded | Active  |
|                                                                      | <a href="#">Presidential Major Disaster Declaration</a>                                                    | 9/5             | Until rescinded | Active  |
| Connecticut                                                          | <a href="#">Civil Preparedness Emergency</a>                                                               | 9/2             | Until rescinded | Active  |

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

- **Regional Curfews:** As of September 13, regional curfews were in effect for several Louisiana parishes (Plaquemines, St. Bernard, St. James, St. John, Tangipahoa, and Terrebonne). Curfew end dates vary by parish. These curfews help to limit travel to facilitate movement of fuel trucks and other essential commodities.

**FEDERAL WAIVERS**

- **EPA Gasoline RVP Requirements:** On September 2, EPA issued a second [waiver](#) of Reid Vapor Pressure (RVP) requirements in Louisiana and Mississippi to help reduce fuel supply shortages as part of EPA's response to Hurricane Ida. Under this temporary waiver, regulated entities may produce, sell, and distribute higher-volatility winter gasoline in Louisiana and Mississippi with an RVP of no more than 11.5 pounds per square inch (psi) before the addition of ethanol. The waiver is effective immediately and will continue through September 15.
  - EPA's September 2 waiver supersedes its first [waiver](#) issued August 30 which allowed for the sale of winter gasoline with an RVP of no more than 11.5 psi after the addition of ethanol.
- **EPA Ultra Low Sulfur Diesel Fuel Requirements:** On September 7, the Environmental Protection Agency (EPA) issued a [waiver](#) for ultra-low sulfur diesel requirements at Port Fourchon, Louisiana, in order to address fuel supply constraints caused by Hurricane Ida. The waiver allows for the sale at Port Fourchon of higher-sulfur diesel that exceeds the 15 parts per million standard (normally reserved for ocean-going vessels) for use in any marine vessel, non-road engine, or non-road equipment. The waiver begins September 7 and expires September 16.
- **IRS Dyed Diesel:** On September 1, the Internal Revenue Service (IRS) [announced](#) that, in response to shortages of undyed diesel fuel caused by Hurricane Ida, it will not impose a penalty when dyed diesel fuel is sold for use or used on the highway for a number of parishes in the state of Louisiana. This penalty relief is available to any person that sells or uses dyed fuel for highway use and goes into effect as of August 29 and will remain in effect through September 15. The affected parishes are:
  - Ascension, Assumption, East Baton Rouge, East Feliciana, Iberia, Iberville, Jefferson, Lafourche, Livingston, Orleans, Plaquemines, Pointe Coupee, St. Bernard, St. Charles, St. Helena, St. James, St. John the Baptist, St. Martin, St. Mary, St. Tammany, Tangipahoa, Terrebonne, Washington, West Baton Rouge, and West Feliciana.
- **PHMSA Operator Qualifications Requirements:** On August 28, the Pipeline and Hazardous Materials Safety Administration (PHMSA) issued a [Stay of Enforcement](#) to all liquefied natural gas facilities and interstate gas and hazardous liquid pipeline operators affected by Hurricane Ida. The Stay of Enforcement alerts operators that PHMSA will temporarily relax enforcement of certain regulations related to operator qualifications and employment drug testing requirements to remove obstacles that would prevent safe and rapid recovery efforts. The Stay of Enforcement remains in effect for 45 days or until rescinded or extended by PHMSA.

**STATE WAIVERS**

- **Mississippi State Gasoline RVP Requirements:** On September 1, the Mississippi Department of Agriculture & Commerce issued a waiver for RVP specifications related to gasoline and gasoline blends. From September 1 – September 15, the waiver allows the sale of fuel with a Reid Vapor Pressure of no more than 11.5 psi after the addition of ethanol. The exemption to normal RVP requirements will expire on September 16. The waiver, in addition to the one issued by the EPA on August 30, is intended to allow for a greater supply of gasoline for sale in the state.

- **Louisiana Department of Environmental Quality Emergency Declaration:** On September 8, the Louisiana Department of Environmental Quality issued an amended [emergency declaration](#) in response to Hurricane Ida. The declaration waives certain air pollution regulations and emissions limitations related to the use, transfer, and storage of fuels, including at tank truck and railcar loading racks and marine tank vessel loading operations. The declaration remains in effect until September 30 and applies to the following parishes:
  - Ascension, Assumption, East Baton Rouge, East Feliciana, Iberia, Iberville, Jefferson, Lafourche, Livingston, Orleans, Plaquemines, Pointe Coupee, St. Bernard, St. Charles, St. Helena, St. James, St. John the Baptist, St. Martin, St. Mary, St. Tammany, Tangipahoa, Terrebonne, Washington, West Baton Rouge, and West Feliciana.
- **Louisiana Expedited Fuel Imports:** On September 4, the Louisiana Department of Revenue issued a [waiver](#) for fuel importers that expedited certain application processes and waived certain bond requirements in order to address fuel supply constraints caused by Hurricane Ida. The waiver remains in effect until rescinded.
- **Louisiana Dyed Diesel Waiver:** On September 1, following the announcement by the U.S. Internal Revenue Service (IRS) that it will waive penalties for the sale or use of dyed diesel on the highway in certain Louisiana parishes, the Louisiana Department of Revenue issued a [waiver](#) for state-level penalties on selling or using tax-exempt dyed diesel fuel on the highway. The Louisiana waiver uses the IRS timeline and goes into effect as of August 29 and will remain in effect through September 15.
- **Louisiana State Bridge Tolls:** On August 27, the Louisiana State Department of Transportation and Development issued a [Secretary's Emergency Order](#) suspending all tolls under the operation and control of the state of Louisiana, specifically LA 1 Toll Bridge from Leesville to Grand Isle and Port Fourchon. The order remains in effect until rescinded.
- **Louisiana State Weight Restrictions:** On August 27, the Louisiana State Department of Transportation and Development issued a [Weight Restriction Waiver](#) suspending certain vehicle size and weight restrictions in order to assist in hurricane response and recovery efforts. The waiver remains in effect through September 24 unless terminated sooner.

