



## Hurricanes Ida and Nicholas | Update #17

**REPORT TIME & DATE:** 12:00 PM EDT | Thursday, September 16, 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, September 16, 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 16, there are approximately 53,000 customer outages in Texas due to Hurricane Nicholas and 57,000 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 to restore power.

#### Oil & Natural Gas Sector Summary

- As of 12:30 PM EDT, September 15, 30% of the oil production and 39% 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). In the Gulf of Mexico, cumulative production loss has totaled approximately 537,000 barrels of crude oil and 878 Mcf of natural gas production.
- Refineries in Texas and western Louisiana continued normal operations through Nicholas. Two refineries in eastern Louisiana remain shut from Ida, accounting for about 0.5 million 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 and crude oil stocks in the area are being drawn down from storage while refineries and offshore production are restored.

**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**

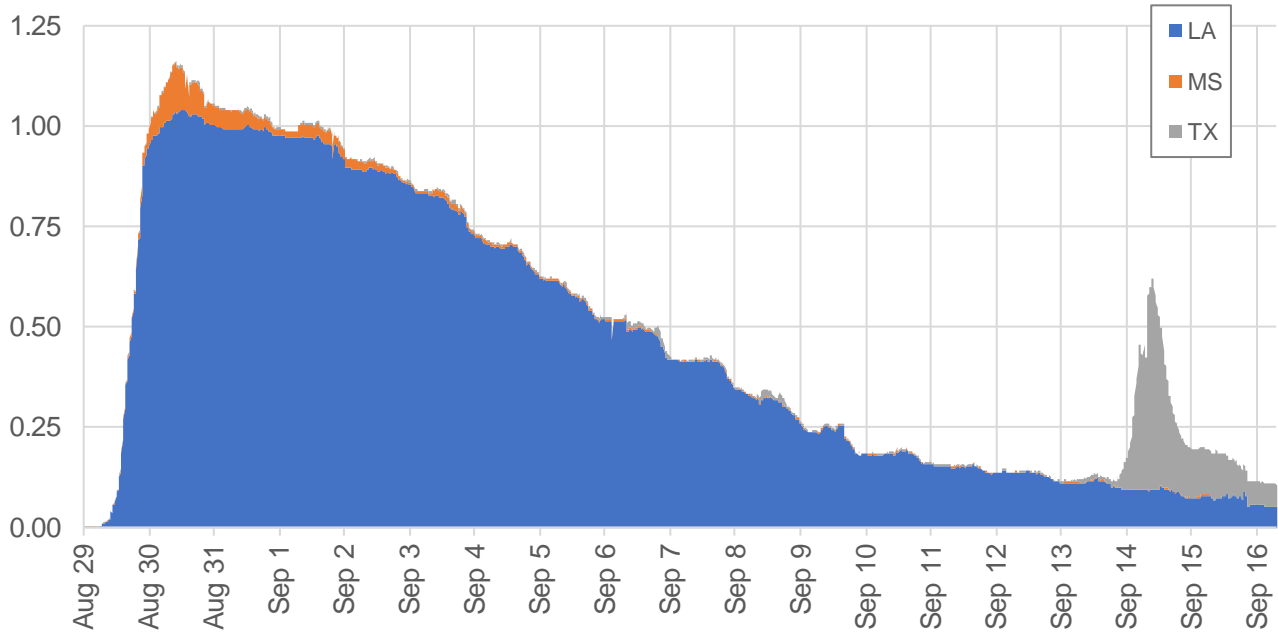
**POWER OUTAGES**

- As of 8:00 AM EDT on September 16, there are approximately 110,000 power outages in the Gulf Coast, including 53,000 outages in Texas due to Nicholas and 57,000 outages in Louisiana due to Ida and Nicholas.

Customer Power Outages as of 8:00 AM EDT 09/16/2021				
State	Current Outages	% of State Without Power	Storm Peak Outages	% Restored
Texas*	53,199	<1%	523,986	90%
Louisiana**	57,024	3%	~1,075,158	95%
<b>TOTAL</b>	<b>110,223</b>		-	

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

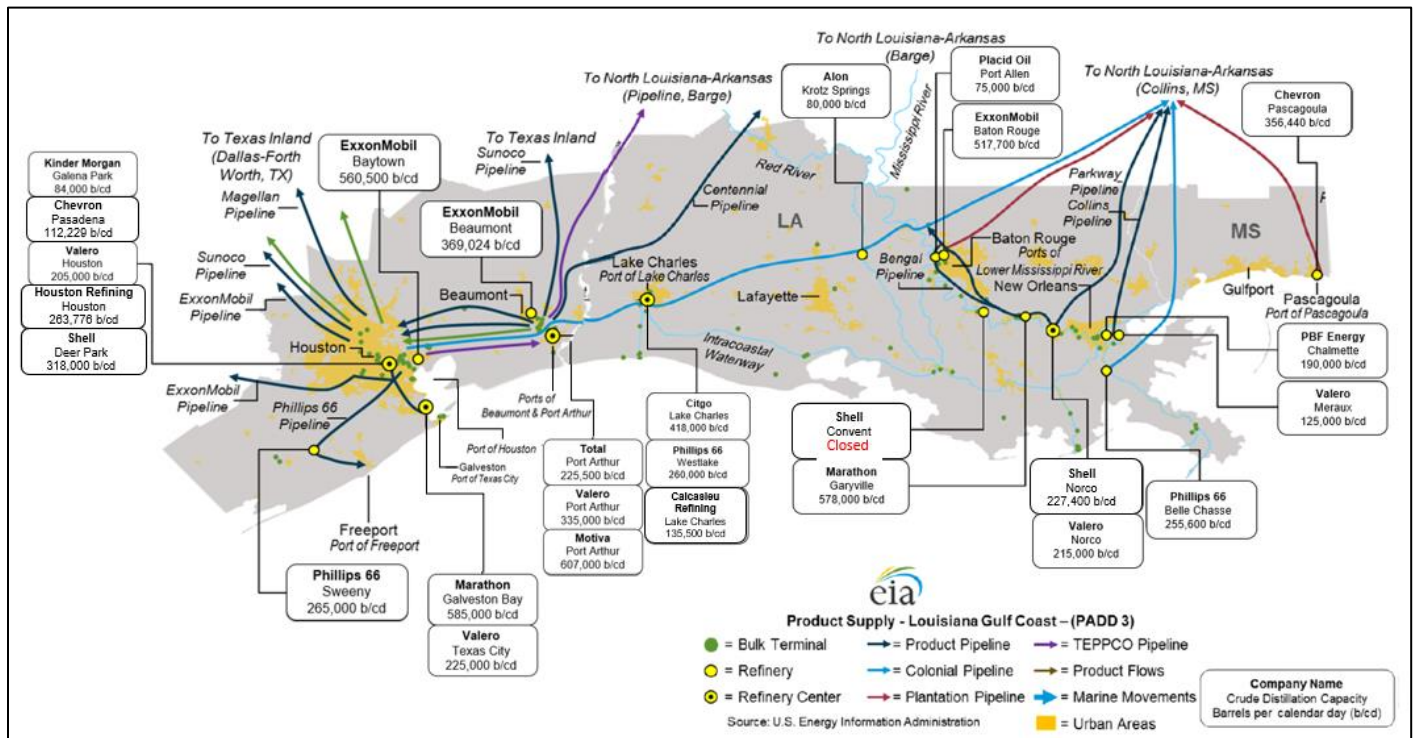
**Gulf Coast Customer Outages by State (Millions)**



- 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.

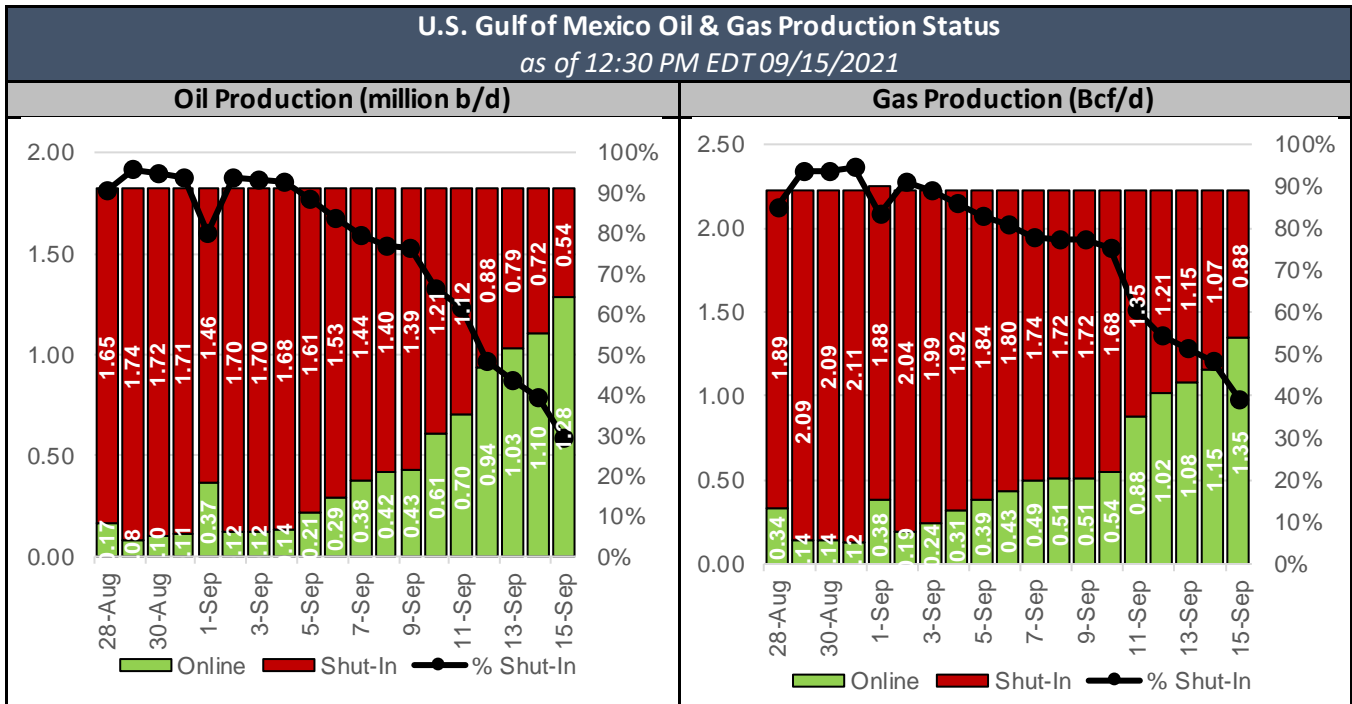
## OIL AND NATURAL GAS SECTOR

Refineries in the Texas and Louisiana Gulf Coast Refining Districts have a combined capacity of 8.6 million barrels per day (bd), 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 15, 537,000 barrels per day (b/d) (29.52%) of the oil production and 878 million cubic feet per day (Bcf/d) (39.40%) 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 36 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.
- 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.



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 09/16/2021				
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
Texas City, TX	87,000	284,000	Open. No Restrictions	9/15
Freeport, TX	85,000	226,000	Open. No Restrictions	9/15
Port Arthur, TX	207,000	214,000	Open. No Restrictions	9/15
Beaumont, TX	211,000	457,000	Open. No Restrictions	9/15
Lake Charles, LA	144,000	439,000	Open. No Restrictions	9/15
Corpus Christi, TX	182,000	477,000	Open. No Restrictions	9/14

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

- Eastern Louisiana Ports:** 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).
  - Port Fourchon is open for 24/7 operations. On September 7, the USEPA issued an emergency waiver of the ultra-low sulfur diesel fuel requirements at Port Fourchon, which allows higher-sulfur diesel to be used in any marine vessel, non-road vehicle, or not-road equipment. The waiver is in place to help improve supply constraints post Hurricane Ida.
  - Gulf Intracoastal Waterway (GIWW): On September 10, the USCG reported that the GIWW from mile marker 18-20 west of the Harvey Locks remains closed due to shoaling.
- 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.



## PETROLEUM REFINERIES

- As of September 16, 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

- Power outages, high demand, and fuel constraints at some offline refinery-based loading-points/terminals lead to retail gas station outages in impacted areas. Available stations were 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.
- The City of New Orleans has developed a website for tracking [Gas Station Status in Orleans Parish](#).

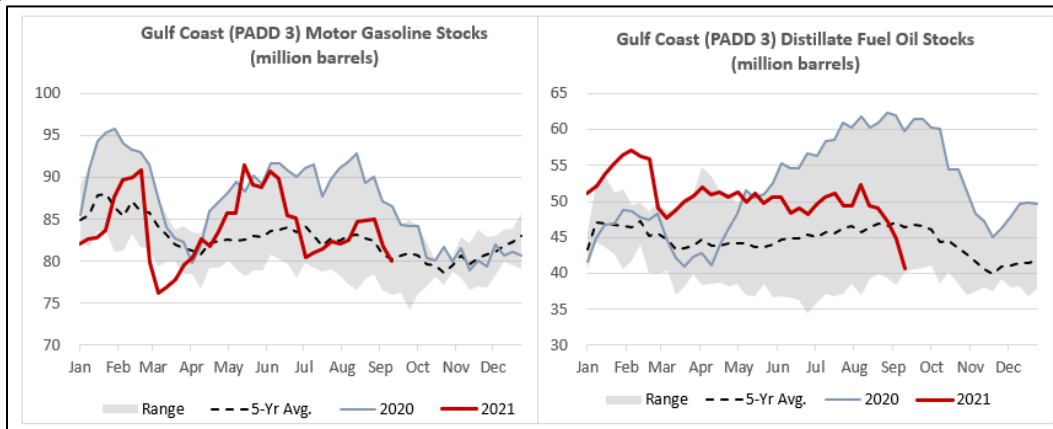


**CRUDE OIL STOCKS**

For the week ending on September 10, 2021, the Gulf Coast (PADD 3) had 224.2 million barrels of total crude stocks, according to the Energy Information Administration (EIA), down 3.9 million barrels from the prior week. PADD 3 crude stocks are within five-year range for this time of year.

**FUEL STOCKS**

- For the week ending on September 10, 2021, the Gulf Coast (PADD 3) had 80.0 million barrels of total gasoline stocks, according to the Energy Information Administration (EIA). This is in line with the five-year average for this time of year. For the week ending on September 10, the Gulf Coast had 40.6 million barrels of total distillate stocks, according to EIA. This is 13% below the five-year average for this time of year.



## 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 9:00 AM EDT 09/16/2021				
State/Territory	Details	Effective Dates		Status
		Start	End	
AL, AR, LA, MS, TN, TX	Regional Federal Motor Carrier Safety Administration <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 (Nicholas)</a>	9/12	10/11	Active
	<a href="#">Presidential Emergency Declaration (Nicholas)</a>	9/13	Until rescinded	Active
Texas (17 counties)	<a href="#">State Disaster Declaration (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.

**FEDERAL WAIVERS**

- **EPA Gasoline RVP Requirements (*Expired*):** On September 2, the Environmental Protection Agency (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, 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 15, the Internal Revenue Service (IRS) announced that, in response to shortages of undyed diesel fuel caused by Hurricane Ida and Nicholas, it will extend its penalty relief for dyed diesel fuel sold 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 went into effect as of August 29. The penalty relief was extended from September 15 to September 30 and additional parishes were added:
  - Acadia, Allen, Ascension, Assumption, Avoyelles, Beauregard, Calcasieu, Cameron, East Baton Rouge, East Feliciana, Evangeline, Iberia, Iberville, Jefferson, Jefferson Davis, Lafayette, Lafourche, Livingston, Orleans, Plaquemines, Pointe Coupee, Rapides, St. Bernard, St. Charles, St. Helena, St. James, St. John the Baptist, St. Landry, St. Martin, St. Mary, St. Tammany, Tangipahoa, Terrebonne, Vermillion, Vernon, 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 (*Expired*):** 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 (Expired):** 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.