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Office of Cybersecurity, Energy Security, and Emergency Response

Hurricanes Ida and Nicholas | Update #18

REPORT TIME & DATE: 12:00 PM EDT | Friday, September 17, 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. 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 17, there are approximately 65,000 power outages in the Gulf Coast, including 23,000 outages in Texas due to Nicholas and 42,000 outages in Louisiana due to 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 full 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 16, 28% 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. In the Gulf of Mexico, cumulative production loss has totaled approximately 28 million barrels of crude oil and 34 Bcf 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. Five refineries have returned to operational status, while two 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.
- For the week ending on September 10, the Gulf Coast (PADD 3) had 224 million barrels of total crude stocks, according to the Energy Information Administration (EIA). PADD 3 crude stocks remain within five-year range for this time of year.

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:

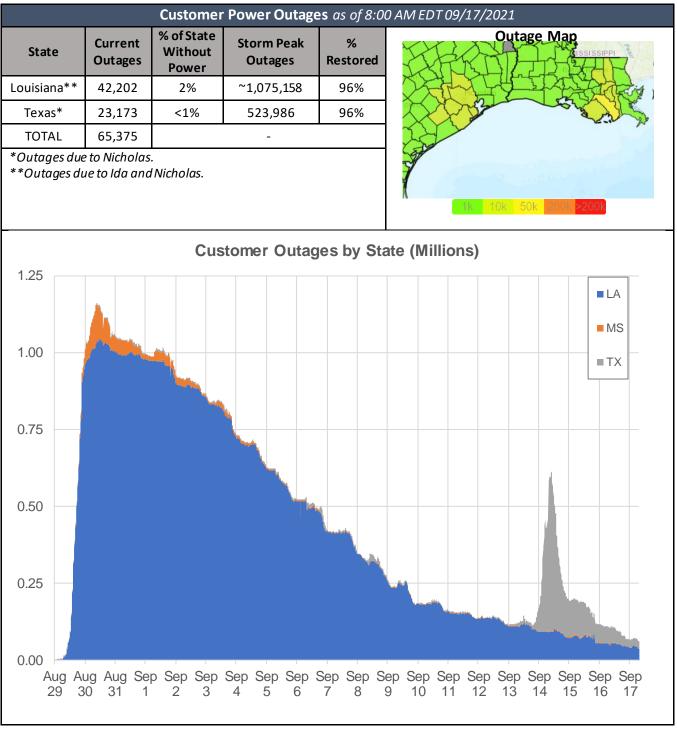
- Louisiana Joint Field Office Baton Rouge, LA
- Louisiana State Emergency Operation Center Baton Rouge, LA
- Note: Additional DOE ESF #12 Responders have deployed to Louisiana to support the State Emergency Operation center and to coordinate with interagency, state, and industry partners.



ELECTRICITY SECTOR

POWER OUTAGES

• As of 8:00 AM EDT on September 17, there are approximately 65,000 power outages in the Gulf Coast, including 23,000 outages in Texas due to Nicholas and 42,000 outages in Louisiana due to Ida and Nicholas.





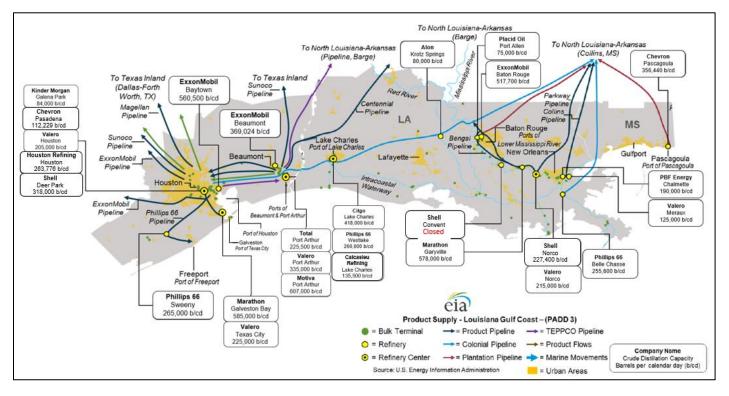
- Customer outages reflect how many electric meters are without power. Meters represent individual homes, businesses, and industrial sites.
- Industry has activated mutual assistance networks and at the peak, over 27,000 personnel from at least 41 states and the District of Columbia were supporting restoration 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 <u>reminding</u> 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.



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OIL AND NATURAL GAS SECTOR

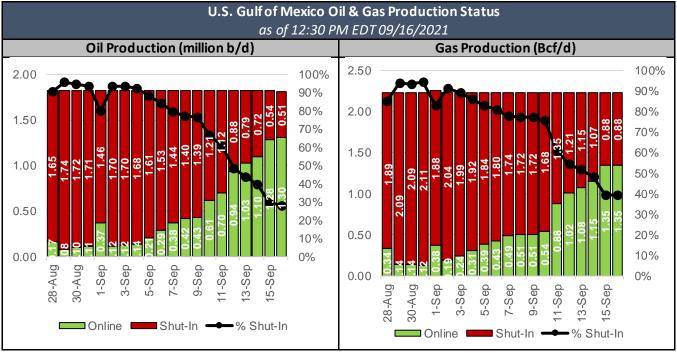
Refineries in the Texas and Louisiana Gulf Coast Refining Districts have a combined capacity of 8.6 million b/d, or approximately 50% of total U.S. refining capacity, including 1.6 million b/d in the New Orleans area and 0.7 million b/d in the Baton Rouge area. Refinery production from the Louisiana 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, TX 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 16, 514,000 barrels per day (b/d) (28.24%) 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 42 out of 560 manned platforms remain evacuated; all 11 nondynamically positioned rigs have returned personnel; and two of the 15 dynamically positioned rigs remain out of position.



Source: BSEE



PORTS & WATERWAYS

- **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). Despite reports saying they are open for shipments, as of September 17 Reuters reports that LOOP has yet to receive any shipments since Hurricane Ida made landfall.
 - <u>Port Fourchon</u> is open for 24/7 operations. The emergency waiver of the ultra-low sulfur diesel fuel requirements at Port Fourchon issued by USEPA has expired, which allows higher-sulfur diesel to be used in any marine vessel, non-road vehicle, or not-road equipment.
 - <u>Gulf Intracoastal Waterway (GIWW)</u>: 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 <u>various locations</u> 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 17, 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. Five refineries have returned to operational status, while two 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 ExxonMobil'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.

RETAIL STATION OUTAGES

 Power outages, high demand, and fuel constraints at some offline refinery-based loadingpoints/terminals lead to retail gas station outages in impacted areas following Hurricane Ida. The retail station supply chain is continuing to stabilize. Some stations may still be unavailable due to power outages and/or damage.



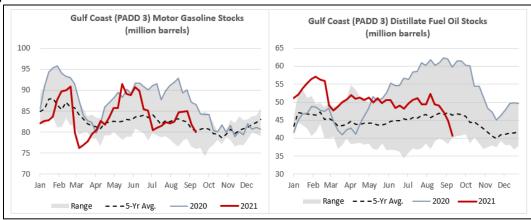


CRUDE OIL STOCKS

• 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 <u>49</u> <u>CFR 390.23</u> for the actual emergency regulation.

Emergency Declarations and HOS Waivers as of 9:00 AM EDT 09/17/2021				
State/Territory	Details	Effective Dates		Status
		Start	End	Status
AL, AR, LA, MS,	Regional Federal Motor Carrier Safety Administration	8/29	9/28	Active
ΤΝ <i>,</i> ΤΧ	Emergency Declaration (HOS Waiver)			
Alabama	State of Emergency & HOS Waiver	8/28	Until rescinded	Active
Mississippi	State of Emergency	8/28	Until rescinded	Active
	Presidential Emergency Declaration	8/28	Until rescinded	Active
Kentucky	State of Emergency & HOS Waiver	8/30	9/9	Expired
Louisiana	State of Emergency	8/26	9/27	Active
	Presidential Emergency Declaration	8/27	Until rescinded	Active
	Presidential Major Disaster Declaration	8/29	Until rescinded	Active
	State of Emergency (Nicholas)	9/12	10/11	Active
	Presidential Emergency Declaration (Nicholas)	9/13	Until rescinded	Active
Texas (17 counties)	State Disaster Declaration (Nicholas)	9/13	Until rescinded	Active
Virginia	State of Emergency	8/30	9/28	Active
Pennsylvania	State of Emergency	8/31	Until rescinded	Active
	Presidential Major Disaster Declaration	9/10	Until rescinded	Active
West Virginia	State of Emergency	8/31	9/30	Active
New Jersey	State of Emergency	9/1	Until rescinded	Active
	Presidential Emergency Declaration	9/2	Until rescinded	Active
	Presidential Major Disaster Declaration	9/5	Until rescinded	Active
New York	State of Emergency	9/1	Until rescinded	Active
	Presidential Emergency Declaration	9/2	Until rescinded	Active
	Presidential Major Disaster Declaration	9/5	Until rescinded	Active
Connecticut	Civil Preparedness Emergency	9/2	Until rescinded	Active

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



FEDERAL WAIVERS

- **FMCSA Hours of Service Waiver:** Effective September 1, the Federal Motor Carrier Safety Administration issued an extension and amendment of its emergency declaration related to COVID-19 response. The amended waiver includes an hours-of-service exemption for commercial motor vehicle operations providing direct assistance in support of emergency relief efforts related to COVID-19. The waiver specifically allows for the transportation of gasoline, diesel, jet fuel, and ethyl alcohol. The waiver will remain in effect until November 30.
- **IRS Dyed Diesel:** On September 15, the Internal Revenue Service (IRS) <u>announced</u> 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 <u>Stay of Enforcement</u> 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.
- EPA Ultra Low Sulfur Diesel Fuel Requirements (*Expired*): On September 7, the Environmental Protection Agency (EPA) issued a <u>waiver</u> 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.
- EPA Gasoline RVP Requirements (*Expired*): On September 2, EPA issued a second <u>waiver</u> 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) <u>before</u> the addition of ethanol. The waiver is effective immediately and will continue through September 15.
 - EPA's September 2 waiver supersedes its first <u>waiver</u> issued August 30 which allowed for the sale of winter gasoline with an RVP of no more than 11.5 psi <u>after</u> the addition of ethanol.



STATE WAIVERS

- Louisiana Department of Environmental Quality Emergency Declaration: On September 8, the Louisiana Department of Environmental Quality issued an amended <u>emergency declaration</u> 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 <u>waiver</u> 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 State Bridge Tolls: On August 27, the Louisiana State Department of Transportation and Development issued a <u>Secretary's Emergency Order</u> suspending all tolls under the operation and control of the state of Louisiana, specifically LA 1 Toll Bridge from Leeville 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 <u>Weight Restriction Waiver</u> 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.
- 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 <u>waiver</u> 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.
- 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.

