

Office of Cybersecurity, Energy Security, and Emergency Response

Hurricane Dorian | Report #9

REPORT TIME & DATE:4:00 PM EDT | Wednesday, September 04, 2019INCIDENT START DATE:August 28, 2019PRIMARY LOCATION(S):Florida, Georgia, South Carolina, North Carolina, and VirginiaREPORT DISTRIBUTION:Public

EXECUTIVE SUMMARY

As of 2:00 PM EDT, Hurricane Dorian was 115 miles east of Jacksonville, FL, moving north-northwest at 9 MPH, with maximum sustained winds of 105 MPH (category 2). Hurricane-force winds extend outward up to 70 miles and tropical storm-force winds extend outward up to 175 miles from the center. A turn toward the north is expected tonight, followed by a turn toward the northeast on Thursday. On this track, the core of Hurricane Dorian will move parallel to the Florida east coast and the Georgia coast through tonight. The center of Dorian is forecast to move near or over the coast of South Carolina and North Carolina Thursday through Friday. The DOE Energy Response Organization is activated to coordinate Emergency Support Function (ESF) – 12 response efforts. DOE is holding regular calls with industry and interagency partners to assess preparations, potential post-storm requirements, and any unmet needs.

Electricity Sector Summary

- As of 3:00 PM, there are approximately 9,814 customers without power in Florida due to Hurricane Dorian. Utility crews are actively restoring outages as conditions permit.
- Utilities across the potentially affected region are preparing for potential impacts from Dorian.
- Utilities are holding daily mutual assistance coordination calls and mutual assistance crews are pre-positioning throughout the potentially impacted region from over 36 states, the District of Columbia, and Canada to support restoration efforts post-storm.

Oil & Natural Gas Sector Summary

- Per the Energy Information Administration, stocks of fuel in the Lower Atlantic Region (PADD 1C: WV, VA, NC, SC, GA, and FL) are within the 5-year range, with gasoline 2% above the 5-year average and distillate (diesel) stocks 1% above the 5-year average in the region.
- Jet fuel stocks are 11% above the 5-year average across the East Coast (PADD 1).
- While stocks throughout the region are robust, there are reports of scattered retail fuel station outages from increased demand. Retail fuel availability across Florida has stabilized.
- Widespread retail fuel station outages are not expected in Georgia or the Carolinas due to the smaller area forecast for potential impacts compared to the early forecast for Florida.
- Petroleum markets remain fully mobilized to resupply stations across the potential impacted states as needed and are working closely with the states to help expedite fuel resupply shipments.

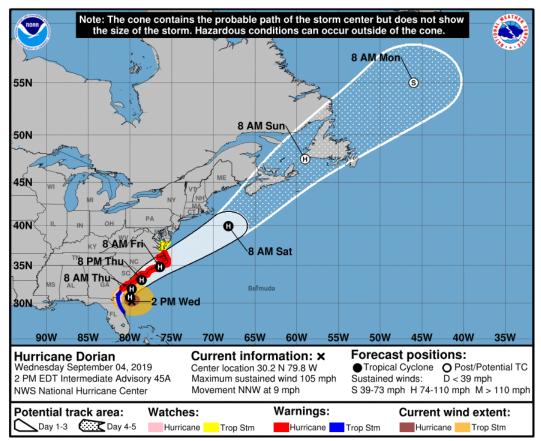


Hurricane Dorian

As of 2:00 PM EDT, Hurricane Dorian was 115 miles east of Jacksonville, Florida, moving north-northwest at 9 MPH, with maximum sustained winds of 105 MPH (category 2). Hurricane-force winds extend outward up to 70 miles and tropical storm-force winds extend outward up to 175 miles from the center. A turn toward the north is expected tonight, followed by a turn toward the northeast on Thursday. On this track, the core of Hurricane Dorian will move parallel to the Florida east coast and the Georgia coast through tonight. The center of Dorian is forecast to move near or over the coast of South Carolina and North Carolina Thursday through Friday.

Dorian is expected to produce 5 to 10 inches of rainfall, with isolated totals up to 15 inches, across coastal areas of the Carolinas and 3 to 6 inches, with isolated totals up to 9 inches, along the Atlantic Coast from Daytona Beach, FL to the Georgia-South Carolina border. Storm surge of 5 to 8 feet is possible from Isle of Palms to Myrtle Beach, SC; 4 to 7 feet from the Savannah River to Isle of Palms and from Myrtle Beach to Cape Lookout; with 4 to 6 feet from Cape Lookout, NC to Duck, NC, including Pamlico and Albemarle Sounds and the Neuse and Pamlico Rivers. Storm surge of 2 to 5 feet are possible, extending south to the Volusia/Brevard County line in Florida and north to Hampton Roads, VA.

A hurricane warning is in effect from north of the Savannah River to the North Carolina/Virginia border, as well as the Albemarle and Pamlico Sounds. A tropical storm warning is in effect from the North Carolina/Virginia border to Chincoteague, VA, as well as the Chesapeake Bay, from Smith Point Southward.





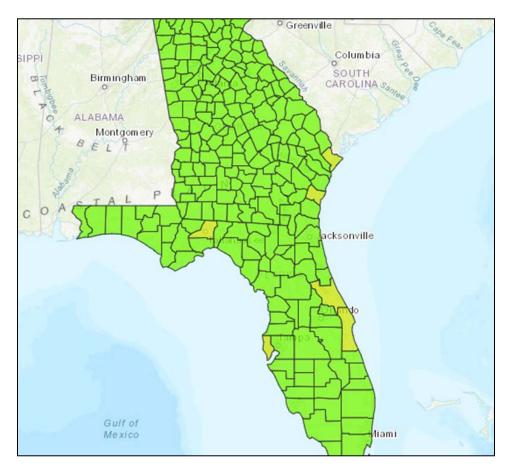
ELECTRICITY SECTOR

CURRENT POWER OUTAGES

• As of 3:00 PM EDT September 4, there are approximately 9,814 customers without power in Florida due to Hurricane Dorian.

ELECTRICITY OUTAGES as of 3:00 PM EDT Sept. 4, 2019					
Impacted State	ate Current Percent of Total Customers Outages in State without Percent				
Florida	9,814	0.01%			
Georgia	6,001	0.13%			
Total	15,815	-			

Source: EAGLE-I and ESF-12 Responders





STATE DETAILS

Florida

According to the Florida Division of Emergency Management, there are almost 28,000 linemen, tree crews, and support personnel staged around Florida to help quickly restore power. Mutual assistance crews from over 36 states are pre-positioned to support restoration efforts. As of 6:00 AM on September 4, power outages in the state were concentrated in Volusia County (6,862 outages) and St Johns County (3,570 outages) on the northeastern coast.

Florida Investor-Owned Utilities

Florida Power & Light (FPL)

- FPL crews are continuing to restore power to customers.
- On September 3, the company reported it had already restored numerous outages since the storm began impacting Florida. The outages have primarily been caused by trees and debris on power lines.
- As of September 2, FPL had assembled the largest pre-storm restoration workforce in its history, with approximately 17,000 personnel from FPL and other utilities positioned over more than a dozen staging sites.
- FPL has also pre-staged 60 drone teams and 75 fuel trucks to supply over 3.5 million gallons of fuel. It has also assembled thousands of transformers and poles as well as sleeper trailers with over 4,000 beds to support crew members.
- FPL has installed a water barrier around the St. Augustine substation to prevent flooding.

Duke Energy Florida

 On September 4, after minimal impact to Duke Energy Florida's service area, the utility released the 4,300 outside crews that had traveled to Florida to assist with storm response. Duke Energy's 2,200 Florida-based crew members and contractors will continue to respond to outages in the state.

Florida Municipal and Cooperative Utilities

• More than 1,000 line workers have traveled to Florida from out of state to supplement the 6,000 personnel in the Florida public power community assisting with future restoration efforts.

Jacksonville Electric Authority (JEA)

- JEA crews are actively restoring power to affected customers.
- As of August 30, JEA crews were trimming trees, prestaging materials, and working to stand up an emergency operations center. Austin Energy is providing mutual aid to JEA and has sent crews and equipment to the JEA service area.

Orlando Utilities

 As of August 30, Orlando Utilities reported that it is planning to triple its resources for storm response. Out-of-state crews from Nebraska, Missouri, and Michigan began arriving on August 31 to assist with response efforts.



Georgia

Georgia Investor-Owned Utilities

Georgia Power

• As of September 2, Georgia Power continues to encourage customers to monitor storm forecasts and prepare for potential impacts.

Georgia Municipal and Cooperative Utilities

- As of September 4, Electric Cities of Georgia has coordinated and staged crews in South Carolina and Georgia to satisfy mutual aid requests. Previously, Electric Cities of Georgia had reported that additional crews have been assigned to the City of Albany, with crews prepositioning on September 2 and other crews on standby to support potential impacts from Hurricane Dorian.
- The Coastal Electric Members Cooperative reports that the utility has been preparing for potential outages and prestaging line crews and materials as well as contracting with vegetation management crews.

South Carolina

South Carolina Investor-Owned Utilities

Duke Energy Carolinas

- Workers from Duke Energy's Midwest contingent are traveling to the Carolinas to assist with future power restoration. As of 1:00 PM on September 4, about 1,500 workers from Duke Energy and partner utilities have arrived in Florence, SC to assist with storm response. Resources will be moved from Florence to impacted regions on Friday, September 6 as needed.
- As of September 3, Duke Energy Carolinas reports that nearly 9,000 field personnel are ready to respond to Hurricane Dorian in the Carolinas.

Dominion Energy South Carolina

- On September 4, Dominion Energy contract crews from Tennessee have staged in Colleton County, SC in preparation for future storm response.
- Dominion Energy South Carolina has secured three helicopters for future damage assessment and restoration. The company also has over 2,000 company and on-system contract resources and 140 contract line workers and tree contractors ready to assist with future restoration efforts.
- Dominion expects to secure several hundred additional line workers and tree contractors on September 4.

South Carolina Municipal and Cooperative Utilities

Berkeley Electric Cooperative

- Berkeley Electric is coordinating mutual aid plans with other cooperatives and has nearly 100 additional outside crew members on standby to assist with future restoration efforts.
- In addition to urging customers to prepare for Hurricane Dorian, Berkeley Electric Cooperative is reminding customers that the utility may shut down substations at Kiawah and Seabrook islands depending on tide surge and winds.



North Carolina

North Carolina Investor-Owned Utilities

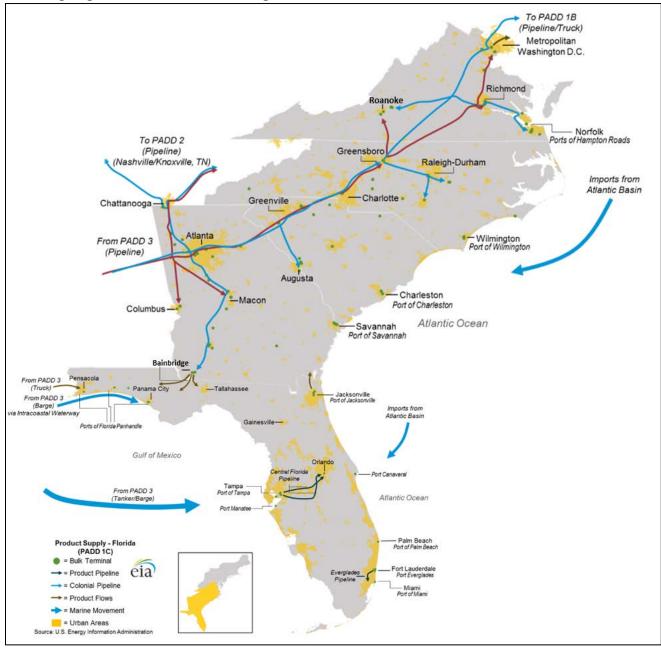
Duke Energy Carolinas

- Workers from Duke Energy's Midwest contingent are traveling to the Carolinas to assist with future power restoration. Crews are staging in the Raleigh area and will be mobilized to impacted areas on Friday, September 6 as needed.
- As of September 3, Duke Energy Carolinas reports that nearly 9,000 field personnel are ready to respond to Hurricane Dorian in the Carolinas.



PETROLEUM SECTOR

Florida's fuel supply relies overwhelmingly on domestic- and foreign-sourced marine deliveries to the state's ports along the Atlantic Ocean (Port Everglades, Port Canaveral, and Jacksonville) and Gulf of Mexico (Port Tampa, Port Manatee, Panama City, and Pensacola). Parts of northern Florida also receive fuel truck deliveries from Georgia and Alabama. Within Florida, the Central Florida Pipeline delivers fuel from the Port of Tampa to the Orlando market. In **Georgia, South Carolina, and North Carolina** virtually all fuels are supplied via the Colonial and Plantation pipeline systems from the Gulf Coast. Ports along the states' Atlantic coasts (Savannah, Charleston, and Wilmington) also receive smaller volumes of fuels via ocean-going marine vessels from foreign and domestic sources.





PORTS

• The U.S. Coast Guard has set the following conditions for East Coast ports in preparation for Hurricane Dorian. Listed in the table are select ports that receive petroleum products.

Status of Florida Ports as of 3:00 PM EDT 09/04/2019					
Port Sector	Port 2017 Volumes (b/d)*		Status	Date Stamp	
Jacksonville	Jacksonville, FL	86,000	Port Condition Zulu. Closed.	9/3	
Jacksonvine	Port Canaveral, FL	54,000	Port Condition Zulu. Closed.	9/2	
Miami	Miami, FL	1,000	Open. No Restrictions.	9/3	
	Port Everglades, FL	298,000	Open. No Restrictions.	9/3	
St. Petersburg	Tampa, FL	297,000	Open. No Restrictions.	9/3	
	Port Manatee, FL	12,000	Open. No Restrictions.	9/3	
Savannah	Savannah, GA	19,000	Port Condition Zulu. Closed.	9/4	
Charleston	Charleston, SC	24,000	Port Condition Zulu. Closed.	9/4	
North Carolina	Wilmington, NC	3,000	Port Condition Zulu. Closed.	9/4	
Hampton Roads	Norfolk, VA	14,000	Port Condition X-Ray. Open.	9/3	

*Transportation fuels (gasoline, distillate, jet fuel) volumes only.

Source: U.S. Coast Guard Homeport, U.S. Army Corp of Engineers, EIA Company Level Imports

FUEL INVENTORIES

- According to the Energy Information Administration (EIA), for the week ending on August 23, the Lower Atlantic Region (PADD 1C: WV, VA, NC, SC, GA, and FL) had total stocks of:
 - 27.9 million barrels of gasoline (2% higher than the 5-year average for this time of year).
 - o 12.9 million barrels of distillate (1% higher than the 5-year average for this time of year).
- EIA reports the East Coast Region (all of PADD 1) had 10.7 million barrels of total jet fuel stocks for the week ending on August 23. This is 11% higher than the 5-year average for this time of year. Jet fuel stocks are not broken out by sub-PADD region.

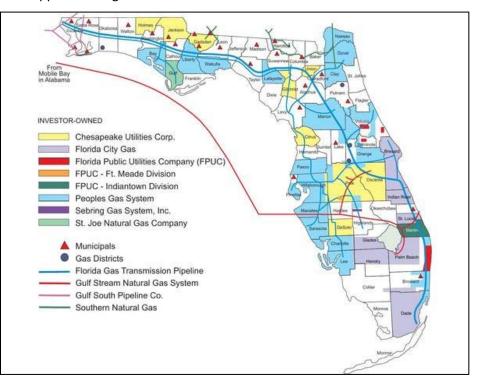
RETAIL FUEL STATIONS

- While stocks throughout the region are robust, there are reports of scattered retail fuel station outages from increased demand. Retail fuel availability across Florida has stabilized.
- Petroleum markets remain fully mobilized to resupply stations across the potentially impacted states as needed and are working closely with the states to help expedite fuel resupply shipments.



NATURAL GAS SECTOR

Natural gas to the Southeast region of the United States is supplied by a number of interstate pipelines from the Gulf Coast region and Appalachia regions.





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.

State Emergency Declarations and HOS Waivers as of 2:30 PM EDT 09/04/2019				
State/Territory	Details	Effective Dates		Chatura
		Start	End	Status
AL, FL, GA, KY, LA, MS, NC, SC, TN, VA, PR, USVI	FMCSA Regional Declaration of Emergency (Hour-of-Service Wavier)	8/29/2019	9/28/2019	Active
Florida	Federal State of Emergency	8/30/2019		Active
Seminole Tribe of Florida	Federal State of Emergency	9/1/2019		Active
Georgia	Federal State of Emergency	9/2/2019		Active
South Carolina	Federal State of Emergency	9/2/2019		Active
North Carolina	Federal State of Emergency	9/3/2019		Active
Florida	State of Emergency	8/28/2019	60 days unless extended	Active
Georgia (30 counties)	State of Emergency	8/29/2019		Active
South Carolina	State of Emergency	8/31/2019	30 days unless extended	Active
North Carolina	State of Emergency	8/30/2019	30 days unless extended	Active
Tennessee	State of Emergency	9/2/2019		Active
Virginia	State of Emergency	9/2/2019		Active
Kentucky	HOS Waiver	8/30/2019	9/29/2019	Active
Puerto Rico	State of Emergency	8/26/2019	Until rescinded	Active
Virgin Islands	State of Emergency	8/28/2019	Until rescinded	Active

Sources: U.S. Department of Transportation; White House; Governor Office Websites



FUEL WAIVERS

The Environmental Protection Agency (EPA), working with the Department of Energy (DOE), responds quickly to address fuel supply disruptions caused by hurricanes or other natural disasters by issuing emergency waivers of certain fuel standards in affected areas. The table below lists fuel-related waivers issued by the EPA:

Fuel Waivers as of 8:00 AM EST 09/04/2019				
State/Territory	Details	Effective Dates		Status
		Start	End	Status
Florida	RVP and RFG Waiver	8/30/2019	9/15/2019	Active
Florida	Restriction on red-dyed diesel fuel for	8/30/2019	9/15/2019	Active
	<u>highway use</u>			
Florida	NAA for Vapor Recovery Systems at	8/30/2019	9/15/2019	Active
	Fuel Distribution Terminals			
Florida	NAA for Loading of Tanker Trucks at	8/30/2019	9/15/2019	Active
	Fuel Distribution Terminals			
Georgia	NAA for Loading of Tanker Trucks at	9/2/2019	9/15/2019	Active
	Fuel Distribution Terminals	5/2/2015		
South Carolina	NAA for Loading of Tanker Trucks at	9/2/2019	9/15/2019	Active
	Fuel Distribution Terminals			
North Carolina	NAA for Loading of Tanker Trucks at	9/3/2019	9/15/2019	Active
	Fuel Distribution Terminals			

Sources: <u>U.S. Department of Transportation</u>; Governor Office Websites

In order to minimize or prevent the disruption of an adequate supply of gasoline for evacuees in the designated areas, the EPA has issued temporary waivers in Florida for:

- <u>Gasoline Reid Vapor Pressure (RVP) regulations</u> requiring the use of low volatility conventional gasoline (CG) during the high ozone season are found at 40 C.F.R. § 80.27. The waiver allows use of higher vapor pressure gasoline about two weeks earlier than normal.
- <u>Reformulated gasoline (RFG) regulations</u> at 40 C.F.R. § 80. 78(a)(7), which prohibit any person from combining any reformulated blendstock for oxygenate blending (RBOB) with any other gasoline, blendstock, or oxygenate, except for the oxygenate of the type and amount specified by the refiner that produced the RBOB.
- <u>Highway diesel fuel "no red dye" requirements</u>, thus allowing the sale, distribution and use of red dyed non-road locomotive and marine (NRLM) diesel fuel for use in highway diesel vehicles, but the diesel fuel must meet the 15ppm standard set forth at 40 C.F.R. § 80.520.

The EPA has also issued No Action Assurance (NAA) in some states for:

- <u>Loading of Tank Fuel Trucks at Petroleum Distribution Terminals</u>: no enforcement of tank tightness and documentation requirements of 40 C.F.R. Part 60, Subpart XX, 40 C.F.R. Part 63 Subpart R, and any counterpart in the Florida SIP.
- <u>Vapor Recovery Systems at Fuel Distribution Terminals</u>: no enforcement of vapor recovery requirements for fuel loading and unloading under 40 C.F.R. Part 60, Subpart XX, 40 C.F.R. Part 63 Subparts R, Y, CC, and BBBBBB, and any counterpart in the Florida SIP.



OTHER FEDERAL WAIVERS

- On August 30, the Pipeline and Hazardous Materials Safety Administration (PHMSA) issued an Emergency Stay of Enforcement for interstate pipeline operators in Florida dealing with the situation presented by Hurricane Dorian. PHMSA is considering providing similar notices for other states that may be affected. Specifically, PHMSA will not object to waiving the following requirements:
 - Pre-employment and random drug testing to facilitate mutual aid amongst operators (49 CFR 199.105).
 - All pipeline workers performing critical safety tasks, known as "covered tasks," are properly qualified and familiar with regulatory and company policies and procedures (49 CFR Part 192 Subpart N and 49 CFR Part 195 Subpart G).

