

Office of Cybersecurity, Energy Security, and Emergency Response

Hurricane Dorian | Report #10

REPORT TIME & DATE:9:00 AM EDT | Thursday, September 05, 2019INCIDENT START DATE:August 28, 2019PRIMARY LOCATION(S):Florida, Georgia, South Carolina, North Carolina, and VirginiaREPORT DISTRIBUTION:Public

EXECUTIVE SUMMARY

As of 8:00 AM EDT, Hurricane Dorian was 70 miles south-southeast of Charleston, SC, moving northnortheast at 8 MPH, with maximum sustained winds of 115 MPH (category 3). On the forecast track, the center of Dorian will continue to move close to the coast of South Carolina today, and then move near or over the coast of North Carolina tonight and Friday. The center should move to the southeast of extreme southeastern New England Friday night and Saturday morning, and approach Nova Scotia later on Saturday. 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

- Current outages (as of 8:00 AM EDT):
 - Georgia: 16,563 customer outages
 - South Carolina: 198,579 customer outages
 - North Carolina: 4,425 customer outages
- Utilities across the potentially affected region are prepared 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 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 8:00 AM EDT, Hurricane Dorian was 70 miles south-southeast of Charleston, SC, moving northnortheast at 8 MPH, with maximum sustained winds of 115 MPH (category 3). Hurricane-force winds extend outward up to 60 miles and tropical storm-force winds extend outward up to 195 miles from the center. A turn toward the northeast is anticipated by tonight, and a northeastward motion at a faster forward speed is forecast on Friday. On the forecast track, the center of Dorian will continue to move close to the coast of South Carolina today, and then move near or over the coast of North Carolina tonight and Friday. The center should move to the southeast of extreme southeastern New England Friday night and Saturday morning and approach Nova Scotia later on Saturday.

Dorian is expected to produce 6 to 12 inches of rainfall, with isolated totals up to 15 inches, across coastal areas of the Carolinas, 3 to 8 inches across far southeastern Virginia, 1 to 2 inches along costal Georgia and 2 to 4 inches in extreme southeastern New England. Storm surge of 5 to 8 feet is possible from Isle of Palms to Myrtle Beach, SC and 4 to 7 feet from Myrtle Beach, SC to Duck, NC (including the Pamlico and Albemarle Sounds). Storm surge of 2 to 4 feet extending south to the Savannah River, GA and north to Hampton Roads, VA is possible.

A hurricane warning is in effect from north of 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 8:00 AM EDT September 5, there are approximately 221,180 customers without power in the impacted states due to Hurricane Dorian. Outages are most heavily concentrated in Dominion Energy South Carolina's service territory.

ELECTRICITY OUTAGES as of 8:00 AM EDT 09/05/2019					
Impacted State	Current	Percent of Total Customers			
	Customers Outages	in State without Power			
Florida	1,613	0.02%			
Georgia	16,563	0.35%			
South Carolina	198,579	7.83%			
North Carolina	4,425	0.09%			
Total	221,180	-			

Source: EAGLE-I and ESF-12 Responders





STATE DETAILS

South Carolina

South Carolina Investor-Owned Utilities

Duke Energy Carolinas

- Duke Energy projects some customers in the coastal Carolinas, including the Pee Dee and Triangle regions, could experience extended outages, depending on the track.
- 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 had 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 (formerly South Carolina Electric & Gas)

- Dominion Energy crews are actively responding to power outages.
- As of September 4, Dominion Energy South Carolina had received over 600 off-system crew members from eight states to help with future restoration efforts.
- 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.

South Carolina Municipal, State, and Cooperative Utilities

Santee Cooper (South Carolina Public Service Authority)

• As of September 4, mutual aid crews from Tennessee, Georgia, and Florida have arrived in Santee Cooper's service area to assist with restoration efforts.

Berkeley Electric Cooperative

- Berkeley Electric Cooperative began seeing the first storm-related outages late in the evening of September 4. As of 1:00 AM on September 5, sustained high winds are preventing crews from restoring most outages.
- 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

- Duke Energy projects some customers in the coastal Carolinas, including the Pee Dee and Triangle regions, could experience extended outages, depending on the track.
- 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.

Georgia

Georgia Investor-Owned Utilities

Georgia Power

• Hurricane Dorian continues to impact the coastal areas of Georgia Power's service territory. The company assembled crews from around the state, and its sister companies stand ready to respond as quickly and as safely as possible.

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 has been prestaging line crews and materials as well as contracting with vegetation management crews.

Florida

Florida Investor-Owned Utilities

Florida Power & Light (FPL)

• 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.

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 crews 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.



Page 5 of 11

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. Listed in the table are select ports that receive petroleum products.

Status of Southeast Ports as of 8:00 AM EDT 09/05/2019					
Port Sector	Port Sector Port		Status	Date Stamp	
	Jacksonville, FL	86,000	Port Condition Zulu. Closed.	9/3	
Jacksonville	Port Canaveral, FL	54,000	Open with restrictions. Drafts must be less than 36'.		
Miami	Miami, FL	1,000	00 Open. No Restrictions.		
	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.		
North Carolina	Wilmington, NC	3,000	Port Condition Zulu. Closed.		
Hampton Roads	Norfolk, VA	14,000	Port Condition Yankee. Open with restrictions.		

*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).
 - 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 8:00 AM EDT 09/05/2019				
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 <i>as of 8:00 AM EST 09/05/2019</i>				
State/Territory	Details -	Effective Dates		Statuc
		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.S. Department of Transportation; 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).

