

Office of Cybersecurity, Energy Security, and Emergency Response

# Hurricane Dorian | Report #13

REPORT TIME & DATE:4:00 PM EDT | Friday, September 06, 2019INCIDENT START DATE:August 28, 2019PRIMARY LOCATION(S):Florida, Georgia, South Carolina, North Carolina, and VirginiaREPORT DISTRIBUTION:Public

The next report will be issued at 10:30 AM EDT on Saturday, September 7, 2019.

# **EXECUTIVE SUMMARY**

As of 2:00 PM EDT, Hurricane Dorian was 125 miles northeast of Cape Hatteras, NC, moving northeast at 21 MPH, with maximum sustained winds of 90 MPH. On the forecast track, the center of Dorian will move away from the coast of North Carolina during the next several hours. The center should move to the southeast of extreme southeastern New England tonight and Saturday morning, and then across Nova Scotia late Saturday or Saturday night. 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 restoration efforts and any unmet needs.

## **Electricity Sector Summary**

- Current Outages (as of 3:15 PM EDT):
  - South Carolina: 91,822 customer outages (-43% since 9/6 @ 7:30M EDT)
  - North Carolina: 148,670 customer outages (-31% since 9/6 @ 7:30M EDT)
  - Virginia: 28,972 customer outages
- Utilities across the affected region have begun damage assessments and restoration efforts as conditions permit and have already restored power to numerous customers.
- Mutual assistance crews from 36 states and the District of Columbia have been supporting restoration efforts and no unmet needs for crews, equipment, or materials have been reported.

## 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 8% above the 5-year average and distillate (diesel) lower 12% above 5-year average in the region.
- Jet fuel stocks are 7% above the 5-year average across the East Coast (PADD 1).
- Overall the fuel supply chain throughout the impacted area remains stable.
- Ports in Florida, Georgia, and South Carolina have reopened.



## **Hurricane Dorian**

As of 2:00 PM EDT, Hurricane Dorian was 125 miles northeast of Cape Hatteras, NC, moving northeast at 21 MPH, with maximum sustained winds of 90 MPH (category 1). Hurricane-force winds extend outward up to 75 miles and tropical storm-force winds extend outward up to 220 miles from the center. A northeast motion with an increase in forward speed is expected through Saturday. On the forecast track, the center of Dorian will move away from the coast of North Carolina during the next several hours. The center should move to the southeast of extreme southeastern New England tonight and Saturday morning and then across Nova Scotia late Saturday or Saturday night.

Dorian is expected to produce an additional 1 to 4 inches of rain, with isolate storm totals up to 10 inches, across portions of northeastern North Carolina and into far southwest Virginia; 2 to 4 inches across extreme southeastern New England; and 3 to 5 inches across Nova Scotia and Prince Edward Island. Storm surge of 4 to 7 feet remains possible from Salter Path, NC to Duck, NC, including the Pamlico and Albemarle Sounds. Storm surge of 2 to 4 feet is possible from Duck, NC to Poquoson, VA, including Hampton Roads.

A hurricane warning is in effect from the Bogue Inlet to the North Carolina/Virginia border, including the Pamlico and Albemarle Sounds, as well as eastern Nova Scotia, from Hubbards to Avonport. A tropical storm warning is in effect from the North Carolina/Virginia Border to Fenwick Island, DE; the Chesapeake Bay from Drum Point southward; Tidal Potomac south of Cobb Island; Woods Hole to Sagamore Beach, MA; Nantucket, MA and Martha's Vineyard; east of Bar Harbor to Eastport, ME; Prince Edward Island; and Southwestern Nova Scotia, from Avonport to Hubbards.





#### **ELECTRICITY SECTOR**

#### CURRENT POWER OUTAGES

- As of 3:15 PM EDT Sept. 6, there are approximately 269,763 customers without power in the impacted states due to Hurricane Dorian. Outages are most heavily concentrated in Duke Carolinas' service territory in North Carolina and Dominion Energy's service territory in South Carolina.
- Fluctuation in the outage numbers is expected and normal during large-scale restoration efforts.
- 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.
- Utilities have prepositioned crews, materials, and equipment to begin restorations as conditions permit. Mutual aid networks have been activated and crews from utilities across the country are prepared to support the restoration efforts once the storm passes. Electric utilities are working with communication utilities, and providers to coordinate and prioritize.





#### STATE DETAILS

South Carolina	Current Outages 2:00 PM 9/6	Change Since 7:30 AM 9/6	% Change Since 7:30 AM 9/6
South Carolina	91,822	-67,999	-43%
Dominion Energy South Carolina	59,244	-33,113	-36%
Berkeley Electric Coop Inc	25,530	-11,535	-31%
Other Utilities	7,048	-23,351	-77%

## South Carolina Investor-Owned Utilities

## Dominion Energy South Carolina (DESC) (formerly South Carolina Electric & Gas)

- As of 12:30 PM EDT Sept. 6, DESC reports that 64% of outages have been restored.
- DESC expects to reach 95% customer restoration in the following counties by:
  - 11 PM EDT Sept. 8 in Charleston County, the hardest-hit county within DESC's service area. Repairs in highly impacted coastal zones may extend beyond Sept. 8.
  - 9 AM EDT Sept. 7 in Beaufort County
  - o 11 PM EDT Sept. 6 in Berkeley County
- Across Dominion Energy's entire service area in SC, NC, and VA, 10,000 employees, contract crew members, and off-system crews are helping with restoration efforts.
- DESC received 700 additional all-system crews from the Southeastern Electric Exchange, complementing 2,000 field employees already in position.
- DESC had secured three helicopters for future damage assessment and restoration. The company also had over 2,000 company and on-system contract resources and 140 contract line workers and tree contractors ready to assist with future restoration efforts.

## **Duke Energy Carolinas**

- Thousands of Duke Energy crews are actively assessing damage, removing debris, and restoring service in the Carolinas.
- Many of the outages in the state are expected to be restored by early evening Sept. 6. Repairs and damage assessments are underway for the remaining outages.
- Workers from Duke Energy's Midwest contingent traveled to the Carolinas to assist with future power restoration. As of Sept. 4, about 1,500 workers from Duke Energy and partner utilities had arrived to assist with storm response.
- As of Sept. 3, Duke Energy Carolinas reported that nearly 9,000 field personnel are ready to respond to Hurricane Dorian in the Carolinas.



# South Carolina Municipal, State, and Cooperative Utilities

## Berkeley Electric Cooperative (BEC)

- As of 1:00 PM EDT Sept. 6, BEC crews are making steady progress addressing outages. There are over 30 broken utility poles in the BEC service area, as well as damage from trees to the lines, crossarms, and other equipment. BEC reports that crews in some locations have to cut their way through debris to access the affected lines.
- BEC is committing significant resources to the Johns Island district, which experienced at least 24 broken poles and the most overall damage of any district in the BEC service area. As of 9:00 AM EDT Sept. 6, BEC anticipates complete restoration of power to Johns Island and the Awendaw district sometime on Sept. 7. BEC anticipates restoring power to the majority of the Moncks Corner and Goose Creek districts by the end of the day on Sept. 6.
- As of 9:00 PM EDT Sept. 5, crews in all districts were working throughout the night to restore outages. BEC crews were supported by an additional 239 personnel from cooperative crews in Arkansas, Georgia, and South Carolina.

## Santee Cooper (South Carolina Public Service Authority)

• Santee Cooper has restored power to most customers. The company anticipates that most customers will have power restored by tonight, with almost all customers restored by 10:00 PM EDT Sept. 7.

## **Edisto Electric Cooperative**

• As of 3:30 PM EDT Sept. 5, Edisto had restored most customer outages and was working to restore power to the final customers affected.

## Palmetto Electric Cooperative

• As of 5:30 PM Sept. 5, Palmetto Electric Cooperative crews were working to restore power to the last outage of the storm.



North Carolina	Current Outages 2:00 PM 9/6	Change Since 7:30 AM 9/6	% Change Since 7:30 AM 9/6
North Carolina	148,670	-68,104	-31%
Dominion Energy North Carolina	45,806	35,443	342%
Duke Energy Carolinas	56,889	-56,162	-50%
Other Utilities	45,975	-47,385	-51%

#### **North Carolina Investor-Owned Utilities**

#### Duke Energy Carolinas

- As of 2:00 PM EDT Sept. 6, the hardest-hit counties include Brunswick, Carteret, Craven, Jones, New Hanover, Onslow and Pamlico.
- Thousands of Duke Energy crews are actively assessing damage, removing debris, and restoring service in the Carolinas. Duke Energy expects that progress will be aided by increasingly better weather as Hurricane Dorian leaves North Carolina.
- Complete power restoration could take several days, although many of the outages in the state are expected to be restored by early evening Sept. 6. Repairs and damage assessments are underway for the remaining outages.
- As of Sept. 3, Duke Energy Carolinas reported that nearly 9,000 field personnel were ready to respond to Hurricane Dorian in the Carolinas.

#### Dominion Energy North Carolina (DENC)

- As of 1:30 PM EDT, outages in the DENC service area were concentrated in Dare and Currituck counties. DENC is warning customers that the worst storm impacts are yet to come and that once winds subside, crews will begin repair and restoration activities.
- Across Dominion Energy's entire service area in SC, NC, and VA, 10,000 employees, contract crew members, and off-system crews are helping with restoration efforts.

Virginia	Current Outages 2:00 PM 9/6	Change Since 7:30 AM 9/6	% Change Since 7:30 AM 9/6	
Virginia	28,972	17,439	151%	
Dominion Energy Virginia	28,521	17,159	151%	
Other Utilities	451	280	164%	

#### **Dominion Energy Virginia (DEV)**

- As of 8:30 AM EDT Sept. 6, DEV is staging crews at the Richmond International Raceway in preparation for future outages.
- Across Dominion Energy's entire service area in SC, NC, and VA, 10,000 employees, contract crew members, and off-system crews are helping with restoration efforts.
- On Sept. 5, Dominion crews were positioned in Hampton and Chesapeake in advance of the storm. Dominion has warned customers to anticipate significant storm impacts and prepare for potential multi-day outages.



## **PETROLEUM SECTOR**

In **the Southeast** virtually all fuels are supplied via the Colonial and Plantation pipeline systems from the Gulf Coast. Ports along the states' Atlantic coasts (Savannah, Charleston, Wilmington, and Norfolk) 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 2:30 PM EDT 09/06/2019				
Port Sector	Port	2017 Volumes (b/d)*	Status	Date Stamp
lacksonvillo	Jacksonville, FL	86,000	Open. No Restrictions.	9/5
Jacksonville	Port Canaveral, FL	54,000	Open. No Restrictions.	9/5
Savannah	Savannah, GA	19,000	Open with restrictions. Drafts must be less than 36'.	9/5
Charleston	Charleston, SC	24,000	Open with restrictions. All deep draft commercial vessel movements must be authorized by the Captain of the Port.	9/6
North Carolina	Wilmington, NC	3,000	Port Condition Zulu. Closed.	9/4
Hampton Roads	Norfolk, VA	14,000	Port Condition Zulu. Closed.	9/5

\*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 30, the Lower Atlantic Region (PADD 1C: WV, VA, NC, SC, GA, and FL) had total stocks of:
  - 28.4 million barrels of gasoline (8% higher than the 5-year average for this time of year).
  - 11.3 million barrels of distillate (12% lower than the 5-year average for this time of year).
- EIA reports the East Coast Region (all of PADD 1) had 10.3 million barrels of total jet fuel stocks for the week ending on August 30. This is 7% higher than the 5-year average for this time of year. Jet fuel stocks are not broken out by sub-PADD region.

## 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				
Chata /Taunitam	Dataila	Effect	Chatura	
State/Territory	Details	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
North Carolina	HOS Waiver	8/31/2019	30 days or duration of emergency	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:

<b>Fuel Waivers</b> as of 8:00 AM EST 09/05/2019				
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 highway use	8/30/2019	9/15/2019	Active
Florida	NAA for Vapor Recovery Systems at Fuel Distribution Terminals	8/30/2019	9/15/2019	Active
Florida	NAA for Loading of Tanker Trucks at Fuel Distribution Terminals	8/30/2019	9/15/2019	Active
Georgia	NAA for Loading of Tanker Trucks at Fuel Distribution Terminals	9/2/2019	9/15/2019	Active
South Carolina	NAA for Loading of Tanker Trucks at Fuel Distribution Terminals	9/2/2019	9/15/2019	Active
North Carolina	NAA for Loading of Tanker Trucks at Fuel Distribution Terminals	9/3/2019	9/15/2019	Active

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).

