



## Hurricane Florence | Report #4

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**REPORT TIME & DATE:** 4:00 PM EDT | Friday, September 14, 2018  
**INCIDENT START DATE:** Thursday, September 13, 2018  
**PRIMARY LOCATION(S):** North Carolina & South Carolina  
**REPORT DISTRIBUTION:** Public

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### EXECUTIVE SUMMARY

As of 2:00 PM EDT, Hurricane Florence was 55 miles west-southwest of Wilmington, North Carolina, moving west at 5 MPH, with maximum sustained winds of 75 MPH. Florence made landfall at 7:15 AM EDT near Wrightsville Beach, North Carolina. On the forecast track, the center of Florence will move farther inland across extreme southeastern North Carolina today, and across extreme eastern South Carolina tonight and Saturday.

#### Electricity Sector Summary

- The following outages have been reported at as of 3:00 PM:
  - North Carolina: 604,375 customer outages (12.2%) – Increase of 62%
  - South Carolina: 80,281 customer outages (3.2%) – Increase of 616%
- Restoration efforts and estimated restoration times will not begin 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 & Natural Gas Sector Summary

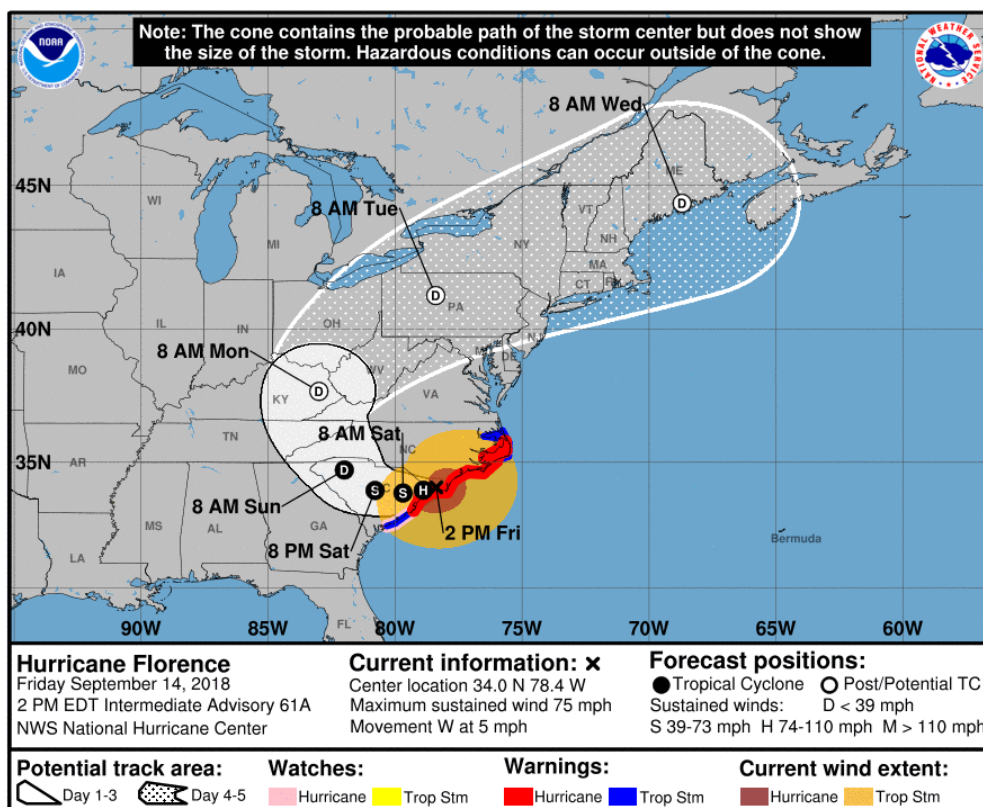
- There are localized retail fuel station outages due to increased demand from evacuees.
  - Overall gasoline inventories across the region are at or above the 5-year range.
  - States are working closely with industry to expedite resupply shipments to impacted areas.
  - Resupply shipments will be suspended as the storm passes and will recommence once conditions permit.
- Ports across the impacted area have closed or are open with restrictions.
- A regional hour-of-service waiver is in effect for the impacted area and surrounding states.
- Fuel blend waivers are in effect for North Carolina, South Carolina, Georgia, and southern Virginia.

## HURRICANE FLORENCE

As of 2:00 PM EDT, Hurricane Florence was 55 miles west-southwest of Wilmington, North Carolina and 35 miles east-northeast of Myrtle Beach, South Carolina, moving west at 5 MPH, with maximum sustained winds of 75 MPH (category 1). Hurricane-force winds extend outward up to 35 miles from the center and tropical storm-force winds extend outward up to 170 miles. A slow westward to west-southwestward motion is expected through Sunday. On the forecast track, the center of Florence will move farther inland across extreme southeastern North Carolina today, and across extreme eastern South Carolina tonight and Saturday. Florence will then move generally northward across the western Carolinas and the central Appalachian Mountains early next week.

Florence is forecast to produce an additional 20 to 25 inches of rainfall across southeastern coastal North Carolina and far northeastern South Carolina, with isolated totals up to 40-inches. Other portions of South Carolina, North Carolina, and into southwest Virginia are forecast to receive 5 to 10 inches, with isolated totals up to 15-inches. Significant storm surge, with amounts of 7 to 11 feet between Cape Fear and Cape Lookout, 6 to 9 feet from Cape Lookout to the Ocracoke Inlet and 4 to 6 feet from Couth Santee River to Cape Fear is still possible.

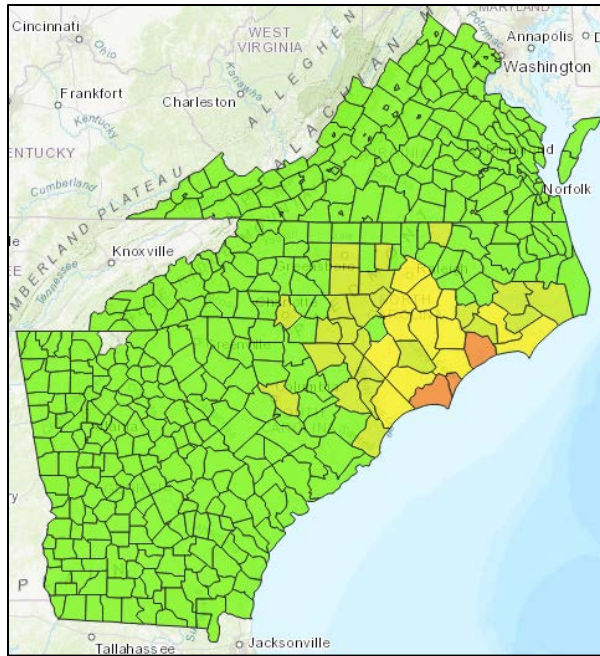
A hurricane warning remains in effect from South Santee River, South Carolina to Bogue Inlet, North Carolina and the Pamlico Sounds. A hurricane watch is in effect from Edisto Beach, South Carolina to South Santee River, South Carolina and a tropical storm warning is in effect north of the Bogue Inlet, North Carolina to Duck, North Carolina and Edisto Beach, South Carolina to South Santee River, South Carolina.



**ELECTRICITY SECTOR**

**POWER OUTAGES**

**Outage Map (as of 3:00 PM EDT)**



<b>ELECTRICITY OUTAGES AS OF 3:00 PM EDT 09/14/2018</b>			
<b>Impacted State</b>	<b>Current Confirmed Customer Outages</b>	<b>Percent of Total Customers in State without Power</b>	<b>24-Hour Peak Customer Outages</b>
Georgia	3,052	<1%	6,490
North Carolina	604,375	12.2%	604,375
South Carolina	80,281	3.2%	80,281
Virginia	2,300	<1%	5,411
<b>Total</b>	<b>690,008</b>		

\*There is no sum of the Peak Customer Outage column because peaks for individual utilities occur at different times; a total would not reflect peak outages.

**ELECTRICITY IMPACTS**

**Georgia**

**3,052** Customer Outages | **↑ 1605%** since Sep 14, 8:00 AM EDT | **6,490** 24-hr Peak Outages

**North Carolina**

**604,375** Customer Outages | **↑ 62%** since Sep 14, 8:00 AM EDT | **604,375** 24-hr Peak Outages

**South Carolina**

**80,281** Customer Outages | **↑ 616%** since Sep 14, 8:00 AM EDT | **80,281** 24-hr Peak Outages

**Virginia**

**2,300** Customer Outages | **↑ 29%** since Sep 14, 8:00 AM EDT | **5,411** 24-hr Peak Outages



**NUCLEAR GENERATION**

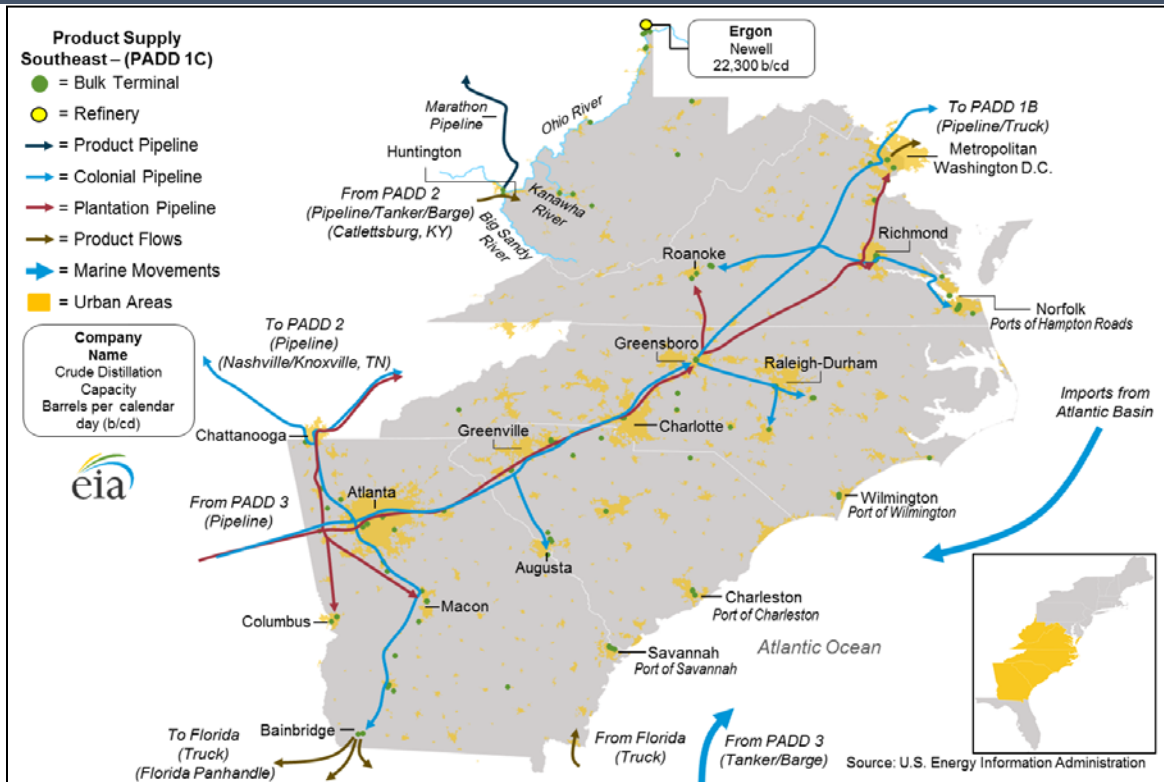
- Per Nuclear Regulatory Commission procedures, nuclear power plants will shut down two hours prior to forecast arrival of hurricane-force winds.

**BACKGROUND AND PREPARATIONS**

- Restoration efforts and estimated restoration times will not begin 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.
- Utility restoration crews in South Carolina are coordinating and preparing with debris removal crews in ahead of the response window.
- The potentially affected area is served by several utilities, including investor owned utilities, municipal utilities, and cooperative utilities. The three associations that represent these utilities and manage the mutual assistance networks, Edison Electric Institute (EEI), American Public Power Association (APPA), and the National Rural Electric Cooperative Association (NRECA), have been in regular contact with DOE and the potentially affected entities.
- Over 40,000 workers from 17 states have been mobilized to support restoration efforts. Crews, mutual assistance crews, and equipment have been pre-positioned outside the potentially impacted areas.
  - This workforce includes crews and support personnel from the potentially impacted companies, contractor resources, and additional workers from mutual assistance partners outside the expected impact area. Additional electric companies outside of the storm zone continue to monitor and assess the situation and are ready to provide assistance.



**PETROLEUM SECTOR**



**PRODUCT PIPELINES**

- Pipeline operators are following storm procedures.
- No issues have been reported at this time.

**PORTS**

- On September 13, the U.S. Coast Guard (USCG) reported that dredges and survey boats are ready to support port restoration.
- The USCG has set the following conditions for Southeast ports.

Status of Southeast Ports as of 7:30 AM EST 09/14/2018				
Port Sector	Port	Status	Date Stamp	2016 Inbound Products (b/d)*
Maryland NCR	Baltimore, MD	Port Condition Whiskey. Open with restrictions.	09/10	29,000**
	Washington, DC	Port Condition Whiskey. Open with restrictions.	09/10	2,000
Hampton Roads	Norfolk, VA	Port Condition Modified Zulu. Select waterways closed. Ports open with restrictions.	09/12	7,000
	Newport News, VA	Port Condition Modified Zulu. Select waterways closed. Ports open with restrictions.	09/12	3,000
North Carolina	Wilmington, NC	Port Condition Zulu. Closed.	09/12	6,000
Charleston	Charleston, SC	Port Condition Zulu. Closed.	09/12	22,000
Savannah	Savannah, GA	Port Condition Yankee. Open with restrictions.	09/13	15,000

\*Transportation fuels only (gasoline, distillate, and jet fuel)

\*\*The Port of Baltimore also had 11,000 b/d of petroleum products shipped outbound in 2016.

Source: U.S. Coast Guard [Homeport](#), U.S. Army Corp of Engineers, EIA Company Level Imports

**PETROLEUM REFINERIES**

- There are no refineries in the immediate impact zone of Hurricane Florence (NC, SC, GA, VA).

**FUEL STOCKS**

- For the week ending on September 7, the Lower Atlantic Region (WV, VA, NC, SC, GA, & FL) had 27.9 million barrels of total gasoline stocks, or 10% higher than the 5-year average for this time of year, according to the U.S. Energy Information Administration (EIA). Also, the Lower Atlantic Region had 12.5 million barrels of total distillate stocks, or 5% lower than the 5-year average for this time of year. For these fuels, inventory levels include volumes at refineries, bulk terminals and blenders, and in pipelines. EIA does not survey inventories held at retail stations.

**RETAIL FUEL STATIONS**

- There are localized retail fuel station outages due to increased demand from evacuees. States are working closely with industry to expedite resupply shipments to impacted areas.



**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.

State Emergency Declarations and HOS Waivers as of 7:30 AM EST 09/14/2018				
State	Details	Effective Dates		Status
		Start	End	
DE, DC, FL, GA, MD, NJ, NY, NC, PA, SC, VA, WV	FMCSA Regional Declaration of Emergency	09/10	10/10	Active
North Carolina	State of Emergency Declaration	09/07	Until Rescinded	Active
South Carolina	State of Emergency Declaration	09/08	Until Rescinded	Active
Virginia	State of Emergency Declaration	09/08	10/10	Active
Maryland	State of Emergency Declaration	09/10	Until Rescinded	Active
District of Columbia	State of Emergency Declaration	09/11	09/13	Rescinded
Kentucky	State of Emergency Declaration	09/11	10/11	Active
Tennessee	State of Emergency Declaration	09/11	10/11	Active
Georgia	State of Emergency Declaration	09/12	09/19	Active

Sources: [U.S. Department of Transportation](#); 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 7:30 AM EST 09/14/2018				
State(s)	Waiver	Effective Dates		Status
		Start	End	
North Carolina, South Carolina	<a href="#">RVP requirements</a>	09/11	09/15	Active
North Carolina, South Carolina	<a href="#">RFG comingling regulations</a>	09/11	10/01	Active
Georgia, parts of Virginia	<a href="#">RVP requirements</a>	09/12	09/15	Active
Georgia, parts of Virginia	<a href="#">RVP requirements; amended</a>	09/13	09/15	Active
Georgia, parts of Virginia	<a href="#">RFG comingling regulations</a>	09/12	09/30	Active
Southern Virginia	<a href="#">RFG requirements</a>	09/12	09/30	Active

Sources: [U.S. Environmental Protection Agency](#); State Governments



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 of:

- Reid vapor pressure (RVP) requirements at 40 C.F.R. § 80.27, thus allowing regulated parties to produce, sell or distribute winter gasoline (including gasoline blendstocks for oxygenate blending (BOBs)) with higher RVP than normally allowed during the high ozone season. On September 13, EPA issued an emergency waiver that amended the September 12 waiver to further increase the allowable RVP for conventional gasoline in Georgia. These waivers are effective through September 15, 2018, which is the end of the high ozone season.
- Reformulated gasoline (RFG) regulations at 40 C.F.R. § 80.78(a)(7), thus allowing the commingling of any RBOB with any other gasoline, blendstock, or oxygenate in the designated areas.
- Reformulated gasoline requirements in Southern Virginia RFG areas, thus allowing regulated parties to produce, sell or distribute conventional winter gasoline instead of RFG in those areas.

#### OTHER FEDERAL WAIVERS

- On September 13, **PHMSA** issued an Emergency **Stay of Enforcement for pipeline and LNG facility operators** affected by Hurricane Florence. Under the stay, PHMSA does not intend to take enforcement action relating to operators' temporary noncompliance with qualification requirements found in 49 C.F.R. §§ 192.801–192.809 and 195.501–195.509, or pre-employment and random drug testing requirements found in 49 C.F.R. § 199.105(a), (c) arising from the use of personnel for pipeline activities related to response and recovery. The stay will remain in effect until October 28, unless PHMSA determines an extension is required.
- On September 12, **PHMSA** issued a **Waiver of the Hazardous Materials Regulations** (HMR, 49 C.F.R. Parts 171-180) to allow the EPA and USCG to conduct their ESF #10 response activities to safely remove, transport, and dispose of hazardous materials. Persons conducting operations under the direction of EPA Regions 3 or 4 or USCG Fifth or Seventh Districts within the Hurricane Florence emergency areas of South Carolina, North Carolina, and Virginia are authorized to offer and transport non-radioactive hazardous materials under alternative safety requirements imposed by EPA Regions 3 or 4 or USCG Fifth or Seventh Districts when compliance with the HMR is not practicable. Under this Waiver Order, non-radioactive hazardous materials may be transported to staging areas within 50 miles of the point of origin. Further transportation of the hazardous materials from staging areas must be in full compliance with the HMR. This Waiver Order will remain in effect for 30 days from the date of issuance.

