



## Tropical Storm Florence | Report #6

**REPORT TIME & DATE:** 4:00 PM EDT | Saturday, September 15, 2018

**INCIDENT START DATE:** Thursday, September 13, 2018

**PRIMARY LOCATION(S):** North Carolina & South Carolina

**REPORT DISTRIBUTION:** Public

### EXECUTIVE SUMMARY

As of 2:00 PM EDT, Tropical Storm Florence was 40 miles south of Florence, South Carolina and 50 miles west of Myrtle Beach, South Carolina, moving west at 3 MPH, with maximum sustained winds of 45 MPH. Florence made landfall on Friday morning at 7:15 AM EDT near Wrightsville Beach, North Carolina. A slow westward motion is expected to continue through today, with a turn toward the west-northwest and northwest is expected on Sunday. Florence is then forecast to turn northward through the Ohio Valley by Monday. The number of power outages in North and South Carolina appear to have stabilized and restoration efforts are starting to begin as weather conditions and flooding permit.

#### Electricity Sector Summary

- The following outages have been reported at as of 4:00 PM:
  - North Carolina: 746,299 customer outages (15.1%) – Decrease of 12% since last report
  - South Carolina: 95,183 customer outages (3.7%) – Decrease of 43.2% since last report
- Crews in the impacted area have begun to perform limited damage assessments and restorations as the weather and flooding permit. DOE is working with utilities on access and routing to impacted areas.
- Restoration efforts will be limited until the storm moves out of the area. Crews are unable to operate in heavily flooded areas or when wind speeds are over 30 MPH.

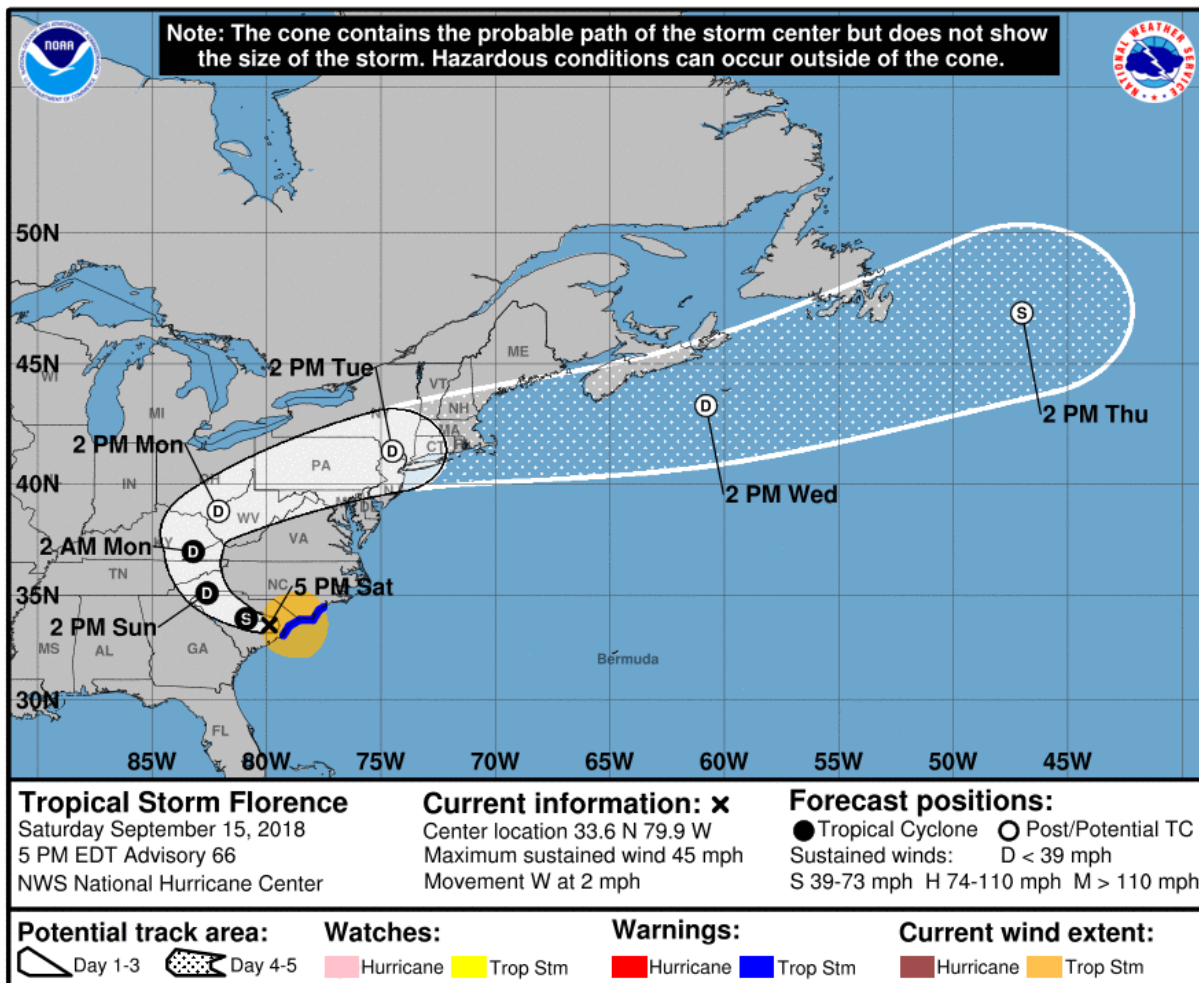
#### Oil & Natural Gas Sector Summary

- Ports in Virginia, Maryland, and Georgia are open. The Port of Wilmington, North Carolina remains closed, while the Port of Charleston, South Carolina is expected to resume operations on Sunday, September 16.
- There are localized retail fuel station outages due to increased demand from evacuees.
  - Gasoline inventories at terminals and pipelines in the Lower Atlantic region were 10% above the 5-year average as of September 7.
  - States are working with industry to expedite resupply shipments to impacted areas.
  - Resupply shipments were suspended during the storm.
- 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.

## TROPICAL STORM FLORENCE

As of 2:00 PM EDT, Tropical Storm Florence was 40 miles south of Florence, South Carolina and 50 miles west of Myrtle Beach, South Carolina, moving west at 3 MPH, with maximum sustained winds of 45 MPH. Tropical storm-force winds extend outward from the center up to 150 miles. A slow westward motion is expected to continue through today, followed by a turn toward the west-northwest and northwest on Sunday. Florence is then forecast to turn northward through the Ohio Valley by Monday.

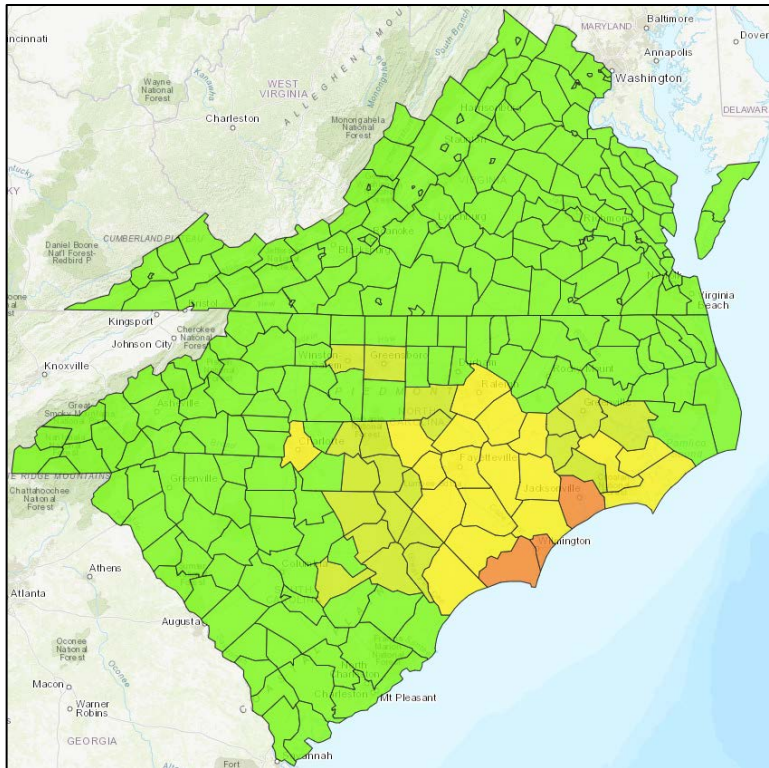
Florence is expected to produce an additional 15 to 20 inches of rain across southern and central portions of North Carolina, into far northeast South Carolina, with storm total of 30 to 40 inches along coastal areas of North Carolina, south of Cape Hatteras. Florence is expected to produce 5 to 10 inches across other portions of northern South Carolina, western North Carolina, and southwest Virginia. Storm surge of 2 to 5 feet is still possible within the tropical storm warning area. A tropical storm warning remains in effect from South Santee River, South Carolina to Cape Lookout, North Carolina and the Pamlico Sound. Flood and flash flood warnings are also in effect throughout the impacted area.



**ELECTRICITY SECTOR**

**POWER OUTAGES**

**Outage Map (as of 8:00 AM EDT)**



<b>ELECTRICITY OUTAGES AS OF 4:00 PM EDT 09/15/2018</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>
North Carolina	746,299	15.1%	845,952
South Carolina	95,183	3.7%	167,476
Virginia	1,854	<1%	7,420
<b>Total</b>	<b>843,336</b>		<b>*</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 & RESTORATION EFFORTS**

- Georgia officials have crews staged for assistance in North and South Carolina once the storm passes.
- Crews in the impacted area have begun to perform limited/intermittent damage assessments and restorations as the weather in the peripheral areas has allowed.
- 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.

**NORTH CAROLINA**

<b>746,299</b> Customer Outages	↓ <b>12%</b> since Sep 15, 8:30 AM EDT	<b>845,952</b> 24-hr Peak Outages
---------------------------------	--	-----------------------------------

- **Significantly Impacted Utilities**
  - Duke Energy (Carolinas): 404,837
  - Cooperative Utilities: 301,209

**SOUTH CAROLINA**

<b>95,183</b> Customer Outages	↓ <b>43.2%</b> since Sep 15, 8:30 AM EDT	<b>167,476</b> 24-hr Peak Outages
--------------------------------	--	-----------------------------------

- **Significantly Impacted Utilities**
  - Duke Energy (Carolinas): 34,286
  - South Carolina Cooperatives: 34,150
  - Santee Cooper: 17,414

**VIRGINIA**

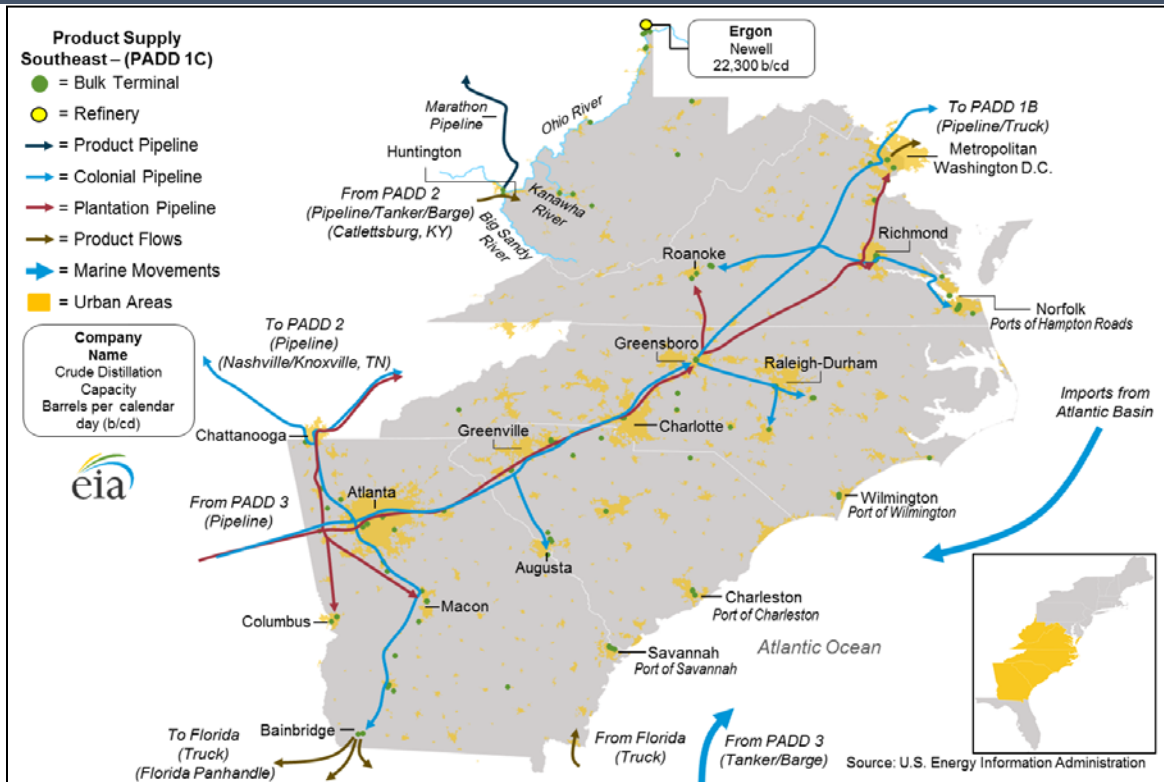
<b>1,854</b> Customer Outages	↓ <b>37%</b> since Sep 15, 8:30 AM EDT	<b>7,420</b> 24-hr Peak Outages
-------------------------------	--	---------------------------------

**BACKGROUND AND PREPARATIONS**

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



**PETROLEUM SECTOR**



**PRODUCT PIPELINES**

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

**PORTS**

- The USCG has set the following conditions for Southeast ports.

Status of Southeast Ports as of 2:30 PM EST 09/15/2018				
Port Sector	Port	Status	Date Stamp	2016 Inbound Products (b/d)*
Maryland NCR	Baltimore, MD	Port Condition Normal. Open without restrictions.	09/15	29,000**
	Washington, DC	Port Condition Normal. Open without restrictions.	09/15	2,000
Hampton Roads	Norfolk, VA	Port Condition Normal. Open without restrictions.	09/15	7,000
	Newport News, VA	Port Condition Normal. Open without restrictions.	09/15	3,000
North Carolina	Wilmington, NC	Port Condition Zulu. Remains closed due to power loss & toppled containers breaching perimeter fence.	09/14	6,000
Charleston	Charleston, SC	Port Condition Zulu. Closed. Vessel activity to resume 09/16.	09/15	22,000
Savannah	Savannah, GA	Port Readiness Condition IV. Open without restrictions.	09/15	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 2:30 PM EST 09/15/2018				
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 2:30 PM EST 09/15/2018				
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.
- On September 14, **EPA** issued No Action Assurances (NAAs) as requested by North Carolina, South Carolina, Virginia, and Georgia to help avoid delays in fuel distribution. EPA policy allows the Agency to issue NAAs in cases where it is necessary to avoid extreme risks to public health and safety and where no other mechanism can adequately address the matter. Under these NAAs, EPA will **not pursue enforcement actions against tanker trucks under air quality regulations governing the testing for tank tightness and associated documentation.**
- On September 14, **EPA** issued two No Action Assurances (NAAs) as requested by Virginia and North Carolina regarding the loading and unloading of fuel at bulk gasoline terminals, pipeline breakout stations, marine tank vessel loading operations, and gasoline loading racks. Pursuant to these NAAs and the conditions contained in them, EPA will **not pursue enforcement actions for violations of the Clean Air Act vapor recovery requirements for these fuel loading and unloading operations** in those states.

