

Tropical Depression Florence | Report #8

REPORT TIME & DATE: INCIDENT START DATE: PRIMARY LOCATION(S): REPORT DISTRIBUTION: 4:00 PM EDT | Sunday, September 16, 2018 Thursday, September 13, 2018 North Carolina & South Carolina Public

EXECUTIVE SUMMARY

As of Sunday afternoon Tropical Depression Florence was moving north-northwest across western portions of North Carolina and southern Virginia, with maximum sustained winds of 35 MPH. A turn toward the north and northeast is forecast on Monday. The center of Florence is moving across the western Carolinas today and then recurve over the Ohio Valley and Northeast on Monday and Tuesday.

Electricity Sector Summary

- The following outages have been reported at as of 3:00 PM:
 - North Carolina: 660,314 customer outages (13.3%) Decrease of 3.52% since last report
 - South Carolina: 44,598 customer outages (1.8%) Decrease of 18.4% since last report
 - Virginia: 2,956 customer outages (<1%) Increase of 321% since last report
- Crews in the impacted area have begun to perform damage assessments and restorations as the weather and flooding permit.
- Utilities have reported that significant progress has been made in restoring power to customers in North and South Carolina on Sunday, September 16; however, additional outages have been reported as the storm moves across the western portions of Carolinas and Virginia.
- Utilities are expected to begin to provide initial estimated restoration timelines early this week.
- DOE is working with utilities on access and routing to impacted areas.
- Crews are unable to operate in heavily flooded areas or when wind speeds are over 30 MPH.

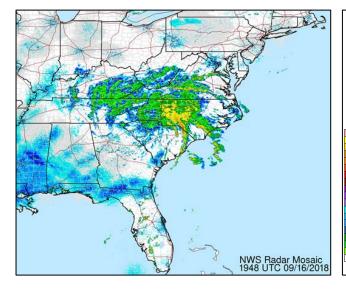
Oil & Natural Gas Sector Summary

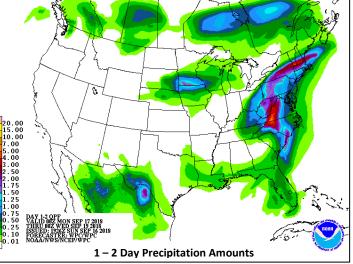
- No pipeline disruptions have been reported.
- All ports have reopened expect Wilmington, North Carolina.
- Gasoline inventories at terminals and pipelines in the Lower Atlantic region were 10% above the 5-year average as of September 7.
- Coastal areas impacted by Florence in North and South Carolina are experiencing widespread outages at retail fuel stations due to power outages and conditions preventing resupply from terminals.
 - States are working with industry to expedite resupply shipments to impacted areas.
 - o Resupply shipments to retail stations were suspended during the storm.
- A regional hour-of-service wavier is in effect for the impacted area and surrounding states.

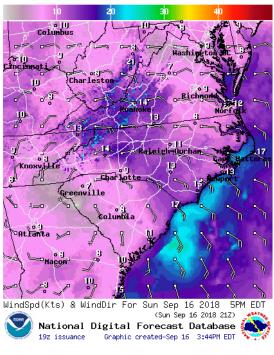
TROPICAL DEPRESSION FLORENCE

As of 11:00 AM EDT, Tropical Depression Florence was 40 miles west of Columbia, South Carolina, moving northnorthwest at 10 MPH, with maximum sustained winds of 35 MPH. A turn toward the north and northeast is forecast on Monday. On the forecast track, the center of Florence will move across the western Carolinas today and then recurve over the Ohio Valle and Northeast on Monday and Tuesday.

An additional 3 to 6 inches of rain is expected in southeastern North Carolina and far northeast South Carolina, with storm total accumulations of 30 to 40 inches. In central and western North Carolina, far northern South Carolina, and far southwest Virginia, an additional 5 to 10 inches of rain is expected, with storm totals of 15 to 20 inches. Flood and flash flood warnings are in effect throughout the impacted area. Flash flood emergencies have been issued for portions of North Carolina.







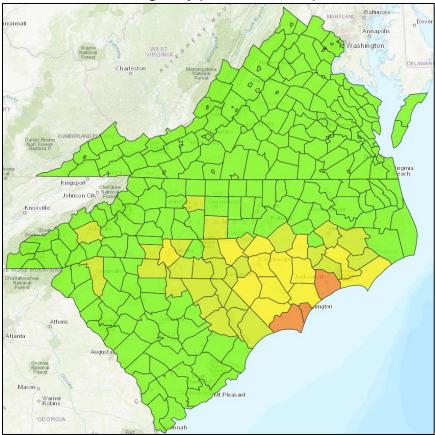


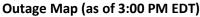
Infrastructure Security & Energy Restoration

POWER OUTAGES

ELECTRICITY OUTAGES AS OF 3:00 PM EDT 09/15/2018 Source: ESF-12 Responders & EAGLE-I				
Impacted State	Current Confirmed Customer Outages	Percent of Total Customers in State without Power	24-Hour Peak Customer Outages	
North Carolina	660,314	13.3%	746,229	
South Carolina	44,598	1.8%	95,183	
Virginia	2,956	<1%	5,882	
Total	843,336	-	*	

*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

- Crews across the impacted area have begun to perform damage assessments and restorations as weather conditions permit.
- Utilities have reported that significant progress has been made in restoring power to customers in North and South Carolina on Sunday, September 16
 - Duke Energy reports that while there has been significant restoration progress there were approximately 100,000 new customer outages on September 16 due to continuing impacts from Florence in the western portions of North and South Carolina.
 - Flooding may delay efforts to access the hardest hit areas.
 - Electric utilities are working with communication utilities and providers to coordinate restoration efforts.
- Crews in Georgia were staged to provide assistance in North and South Carolina once the storm passes.
- 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

660,314 Customer Outages	↓ 3.5 % since Sep 16, 8:30 AM EDT	746,299 24-hr Peak Outages
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Significantly Impacted Utilities

- Duke Energy (Carolinas): 391,013 customer outages
- North Carolina Cooperative Utilities: 247,420 customer outages
- ElectriCities: 21,873 customer outages

SOUTH CAROLINA

Significantly Impacted Utilities

- Duke Energy (Carolinas): 24,812
- South Carolina Cooperatives: 8,612
- Santee Cooper: 1,458

VIRGINIA

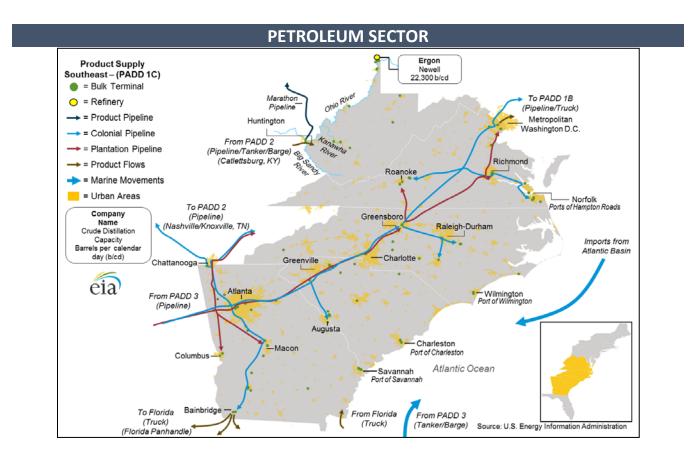
2,956 Customer Outages	1321 % since Sep 15, 8:30 AM EDT	5,882 24-hr Peak Outages
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Utilities in portions of Virginia are beginning to see some outages as Florence moves across southern portions of the State.

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 unities and manage the mutual assistance networks, Edition 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.
- Per Nuclear Regulatory Commission procedures, nuclear power plants will shut down two hours prior to forecast arrival of hurricane-force winds.





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 7:30 AM EST 09/16/2018					
Port	Port	Status	Date	2016 Inbound	
Sector	POR	Status	Stamp	Products (b/d)*	
Maryland	Baltimore, MD	Port Condition Normal. Open without restrictions.	09/15	29,000**	
NCR	Washington, DC	Port Condition Normal. Open without restrictions.	09/15	2,000	
Hampton	Norfolk, VA	Port Condition Normal. Open without restrictions.	09/15	7,000	
Roads	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 Readiness Condition IV. Open without restrictions.	09/16	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

- As of 12:30 PM, September 16, 24% of North Carolina gas stations and 12% of South Carolina gas stations were out-of-service due to lack of fuel, lack of power, or both, according to GasBuddy.com. The majority of these outages are located in the coastal areas of Wilmington, Greenville-New Bern, Raleigh-Durham, and Myrtle Beach-Florence
- States are working closely with industry to expedite resupply shipments to impacted areas.



EMERGENCY DECLARATIONS & WAVIERS

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 7:30 AM EST 09/16/2018						
State	Details	Effective Dates		Status		
		Start	End	Status		
DE, DC, FL, GA, MD, NJ,	FMCSA Regional Declaration of	09/10	00/10	00/10 10/10	10/10	Active
NY, NC, PA, SC, VA, WV	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 09/16/2018						
Stata(c)	Waiver	Effective Dates		Status		
State(s)		Start	End	Status		
North Carolina, South Carolina	<u>RVP requirements</u>	09/11	09/15	Expired		
North Carolina, South Carolina	RFG comingling regulations	09/11	10/01	Active		
Georgia, parts of Virginia	RVP requirements	09/12	09/15	Expired		
Georgia, parts of Virginia	RVP requirements; amended	09/13	09/15	Expired		
Georgia, parts of Virginia	RFG comingling regulations	09/12	09/30	Active		
Southern Virginia	<u>RFG requirements</u>	09/12	09/30	Active		

Sources: U.S. Environmental Protection Agency; State Governments

Note: RVP waivers were effective through September 15, 2018, which was the end of the high ozone season. The wavier is no longer required.



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 were effective through September 15, 2018, which was 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, PHSMA does not intend to take enforcement action relating to operators' temporary noncompliance with gualification 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, nonradioactive 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.

