



## Tropical Storm Michael | Report #4

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**REPORT TIME & DATE:** 5:00 PM EDT | Thursday, October 11, 2018  
**INCIDENT START DATE:** Wednesday, October 10, 2018  
**PRIMARY LOCATION(S):** Alabama, Florida, Georgia, North Carolina, South Carolina  
**REPORT DISTRIBUTION:** Public

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### EXECUTIVE SUMMARY

As of 5:00 PM EDT, Tropical Storm Michael was 20 miles north-northwest of Raleigh, North Carolina, moving northeast at 24 MPH, with maximum sustained winds of 50 MPH. Tropical storm-force winds extend outward from the center up to 230 miles. On the forecast track, the center of Michael will move across eastern North Carolina and southeastern Virginia this evening, and move into the western Atlantic Ocean tonight.

#### Electricity Sector Summary

- Customer Outages as of 4:00 PM EDT:
  - Alabama: 87,706 customer outages (3%)
  - Florida: 389,639 customer outages (3.7%)
  - Georgia: 268,461 customer outages (6.4%)
  - North Carolina: 361,879 customer outages (9%)
  - South Carolina: 117,221 customer outages (2.6%)
  - *Note: Customer outages number will continue to increase and may fluctuate as the Hurricane Michael impacts the southeast.*
- Crews in the impacted area have begun to perform damage assessments and restorations as the weather and flooding permit.
- Fluctuation in the outage numbers is expected and normal during large-scale restoration efforts.
- Utilities across the impacted area pre-staged crews, equipment, and materials and mutual assistance networks have been activated, with over 30,000 personnel positioned to support restoration efforts.

#### Oil & Natural Gas Sector Summary

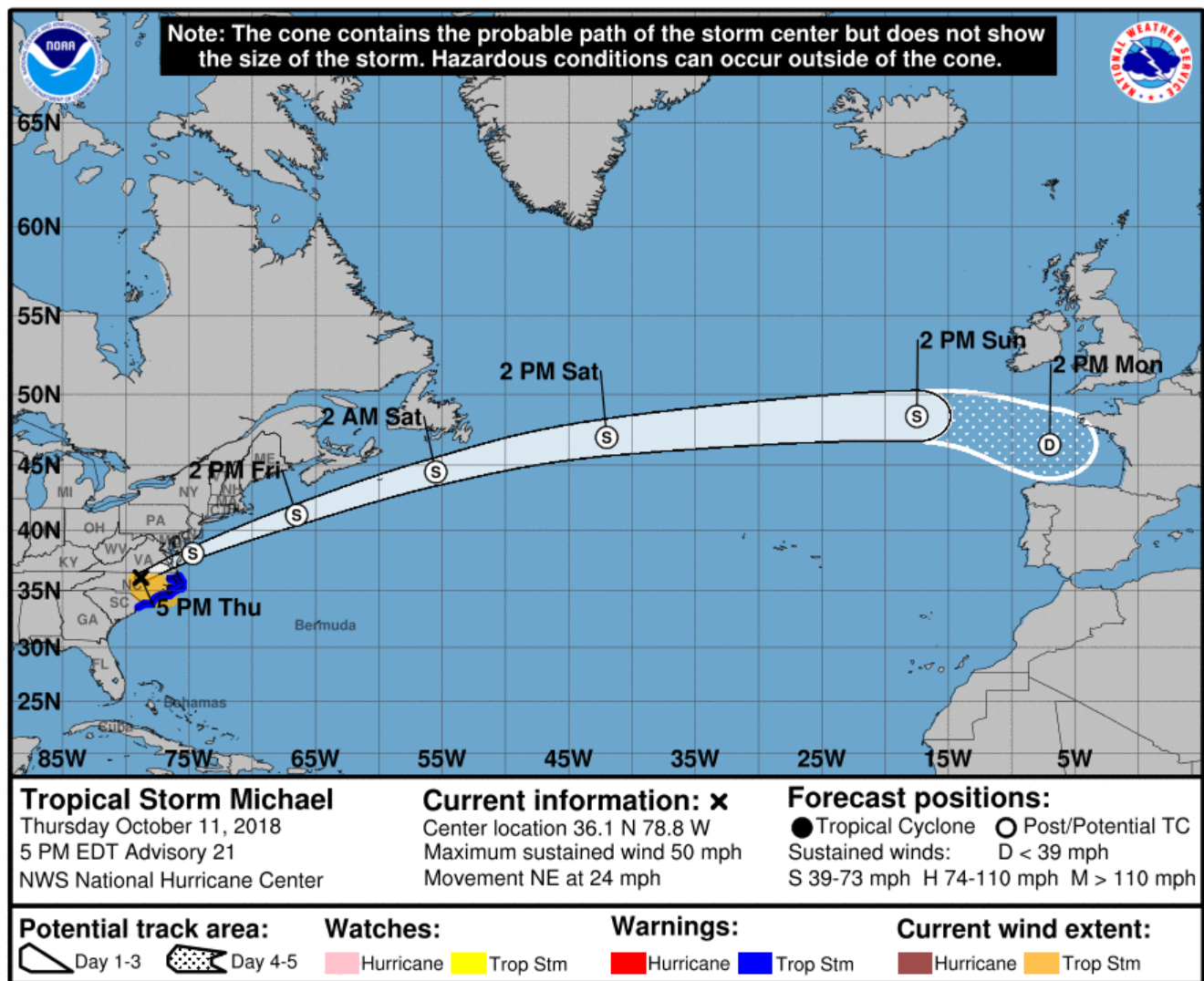
- For the week ending on October 5, the Lower Atlantic Region (WV, VA, NC, SC, GA, and FL) had 28.1 million barrels of total gasoline stocks, according to the Energy Information Administration. This is 9% higher than the 5-year average for this time of year.
- As of 12:00 PM October 11, 6.0% of Florida gas stations (including 38% of Florida Panhandle stations), 2.6% of Georgia gas stations, and 1.3% of Alabama gas stations were reported out-of-service due to lack of fuel and/or power.

## TROPICAL STORM MICHAEL

As of 5:00 PM EDT, Tropical Storm Michael was 20 miles north-northwest of Raleigh, North Carolina, moving northeast at 24 MPH, with maximum sustained winds of 50 MPH. Tropical storm-force winds extend outward from the center up to 230 miles. On the forecast track, the center of Michael will move across eastern North Carolina and southeastern Virginia this evening, and move into the western Atlantic Ocean tonight.

Michael is forecast to produce total rain accumulations of 4 to 7 inches from north-central North Carolina, into south-central Virginia, including the Delmarva Peninsula.

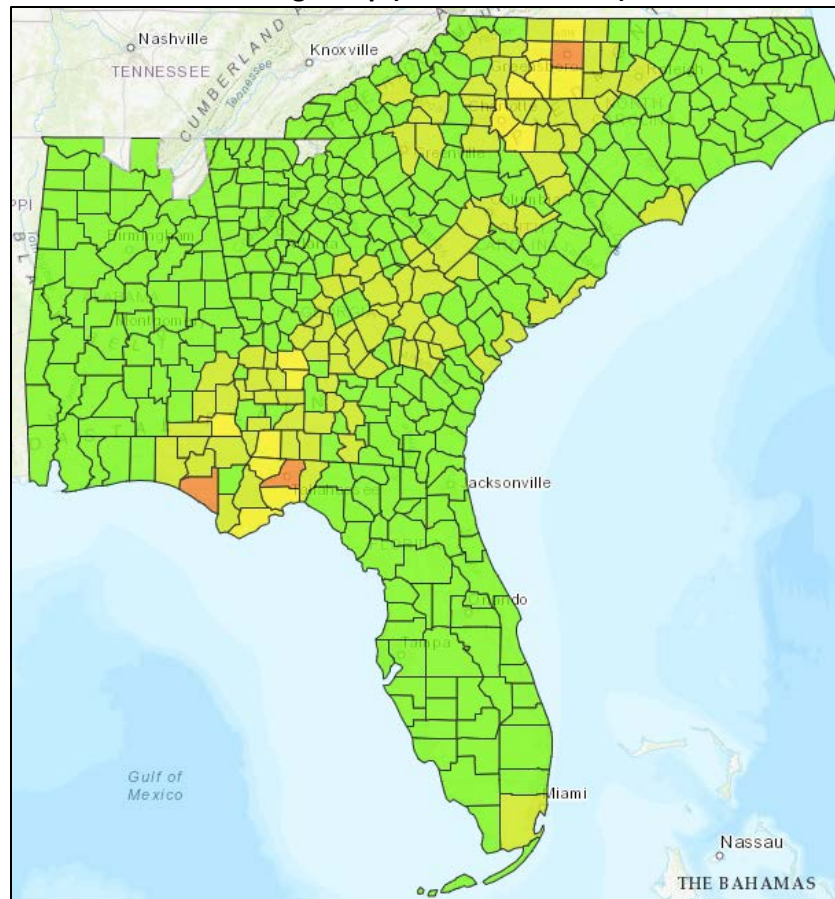
A tropical storm warning remains in effect from South Santee River, South Carolina to Duck, North Carolina, as well as the Pamlico and Albemarle Sounds.



## ELECTRICITY SECTOR

## POWER OUTAGES

Outage Map (as of 4:00 PM EDT)



ELECTRICITY OUTAGES AS OF 4:00 PM EDT 10/11/2018

Impacted State	Current Confirmed Customer Outages	Percent of Total Customers in State without Power	24-Hour Peak Customer Outages
Alabama	87,706	3.09%	***
Florida	389,639	3.68%	400,666
Georgia**	268,461	6.44%	424,744
North Carolina	361,879	8.98%	361,879
South Carolina	117,221	2.60%	128,493
<b>Total</b>	<b>1,224,906</b>	<b>-</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.

\*\*\*Additional customer outages reported by Alabama State EOC are included in the latest outage numbers for Alabama, which were not available for the prior report. As such, a 24-hour peak is not available.



**ELECTRICITY IMPACTS & RESTORATION EFFORTS**

- Crews in the impacted area, where the storm has passed, have begun to perform damage assessments and restorations as the weather conditions permit. Estimate restoration timelines will begin to be developed once damage assessments are complete.
- Duke Energy reports nearly 6,000 workers including power line technicians, damage assessors and tree specialists are ready to respond to the storm's impact in the Carolinas.
- Fluctuation in the outage numbers is expected and normal during large-scale restoration efforts.
- Impacted and potentially impacted utilities have mobilized over 30,000 personnel, including utility crews, contractors, and mutual assistance workers from at least 24 states to restore power.
- 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.
- Potentially affected 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 preparing to support restoration efforts.

**Alabama**

<b>87,706</b> Customer Outages	-	-
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- **Significantly Impacted Utilities**
  - Alabama Power: 34,288 Customer Outages
- *Note: Additional customer outages reported by Alabama State EOC are included in the latest outage numbers for Alabama, which were not available for the prior report. As such, a 24-hour peak is not available and percent change are not available.*

**Florida**

<b>389,369</b> Customer Outages	↓ <b>3%</b> since Oct 11, 8:00 AM EDT	<b>400,666</b> 24-hr Peak Outages
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- **Significantly Impacted Utilities**
  - Gulf Power (Southern Company): 112,089 Customer Outages
  - Tallahassee Electric: 104,628 Customer Outages
  - Talquin Electric Coop: 48,281 Customer Outages
  - Duke Energy Florida: 30,703 Customer Outages

**Georgia**

<b>268,639</b> Customer Outages	↓ <b>37%</b> since Oct 11, 8:00 AM EDT	<b>424,744</b> 24-hr Peak Outages
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- **Significantly Impacted Utilities**
  - Georgia Power: 116,815 Customer Outages
  - Municipal Utilities: ~80,000 Customer Outages
  - Mitchell EMC: 24,162 Customer Outages
  - Grady EMC: 18,621 Customer Outages
  - Sumter EMC: 15,792 Customer Outages



**North Carolina**

<b>361,879</b> Customer Outages	<b>↑ &gt;100%</b> since Oct 11, 8:00 AM EDT	<b>361,879</b> 24-hr Peak Outages
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- **Significantly Impacted Utilities**
  - Duke Energy: 307,503 Customer Outages
  - Energy United: 39,854 Customer Outages
- Outages in North Carolina continue to increase as the storm continues to impact the State.

**South Carolina**

<b>117,221</b> Customer Outages	<b>↓ 9%</b> since Oct 11, 8:00 AM EDT	<b>128,493</b> 24-hr Peak Outages
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- **Significantly Impacted Utilities**
  - Duke Energy: 25,853 Customer Outages
  - South Carolina Electric & Gas: 24,595 Customer Outages
  - South Carolina Cooperatives: 14,970 Customer Outages

**BACKGROUND AND PREPARATIONS**

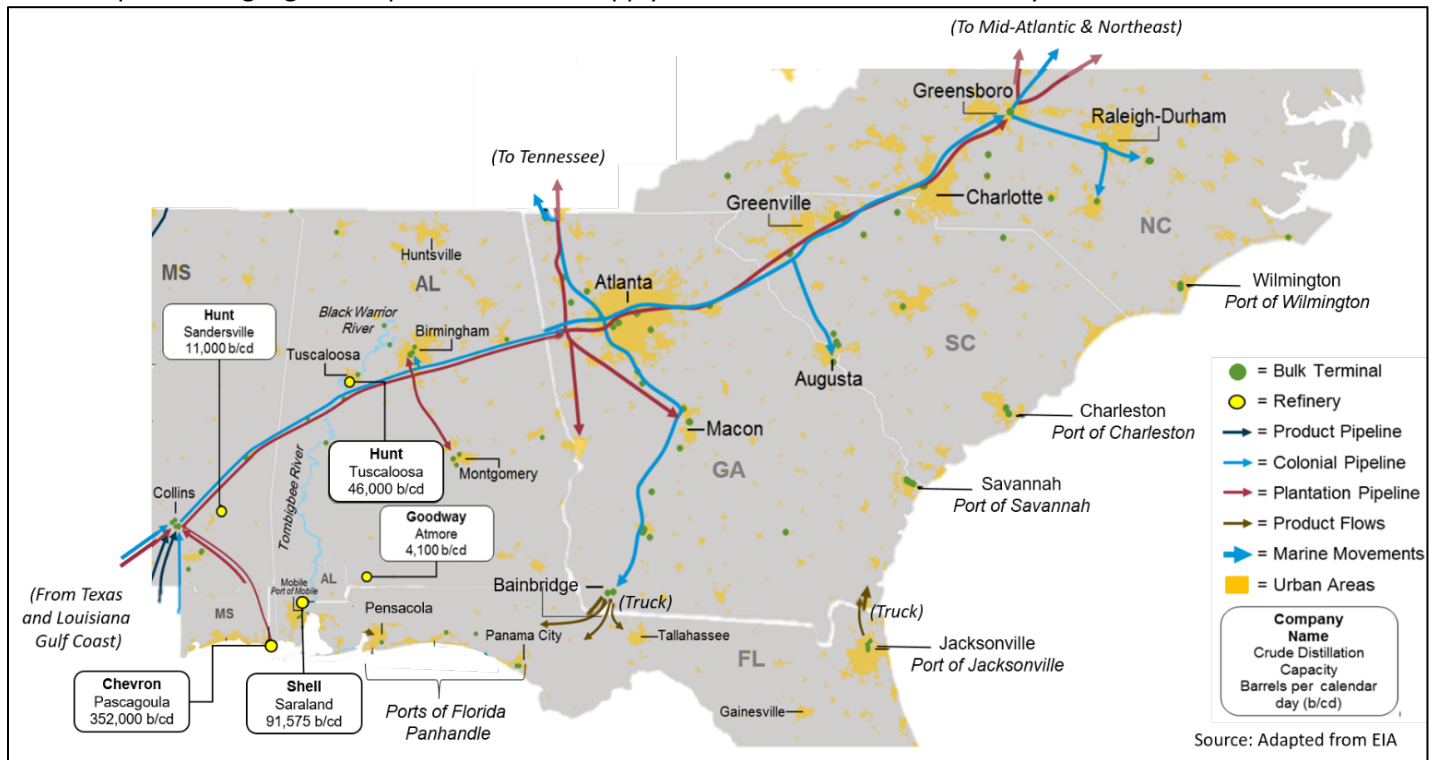
- The affected area is served by several utilities, including investor owned utilities, municipal utilities, and cooperative utilities. The three associations that represent these utilities and manage the mutual assistance networks, Edison Electric Institute (EEI), American Public Power Association (APPA), and the National Rural Electric Cooperative Association (NRECA), have been in regular contact with DOE, the potentially affected entities, and their mutual assistance networks.



## OIL & NATURAL GAS SECTOR

### OIL AND NATURAL GAS SECTOR OVERVIEW

The map below highlights the petroleum fuels supply chain in the area threatened by Hurricane Michael.



### OFFSHORE PRODUCTION AND OIL & GAS PLATFORMS

- As of 12:30 PM EDT, October 11, 680,107 b/d (40.0%) of the oil production and 744 MMcf/d (29.1%) of the natural gas production in the federally administered areas of the U.S. Gulf of Mexico are shut-in, according to estimates by the Bureau of Safety and Environmental Enforcement (BSEE).

U.S. Gulf of Mexico Oil & Gas Production Status as of 12:30 PM EDT 10/11/2018		
Production	Pre-Event	Shut-In (10/11)
Crude Oil (b/d)	1,700,000	680,107
Natural Gas (MMcf/d)	2,560	744
Infrastructure	Pre-Event Count	Evacuated (10/11)
Manned Platforms	687	59
Rigs	37	2

Source: BSEE





**PORTS**

- The U.S. Coast Guard has set the following conditions for Gulf Coast and Southeast ports as a result of Hurricane Michael.

Status of Southeast Ports as of 2:30 PM EDT 10/11/2018							
Port Sector	Port	Status	Date Stamp	2016 Volumes (b/d)			
				Products*		Crude Oil	
				In	Out	In	Out
Mobile	Mobile, AL	Open.	10/10	4,000	136,000	210,000	12,000
	Pascagoula, MS	Open.	10/10	13,000	114,000	156,000	2,000
	Panama City, FL	Closed. Port Status Zulu.	10/09	7,697	-	-	-
	Pensacola, FL	Closed. Port Status Zulu.	10/09	10,273	-	-	-
Jacksonville	Jacksonville, FL	Open.	10/11	86,000	1,000	-	-
Savannah	Savannah, GA	Open.	10/11	15,000	1,000	-	-
Charleston	Charleston, SC	Open with restrictions. Port Status modified Yankee.	10/11	22,000	-	-	-
North Carolina	Wilmington, NC	Closed. Port Status Zulu.	10/10	6,000	-	-	-
Hampton Roads	Norfolk, VA	Open with restrictions. Port Status X-ray.	10/10	7,000	9,000	-	-
	Newport News, VA	Open with restrictions. Port Status X-ray.	10/10	3,000	-	-	-

\*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 STOCKS**

- For the week ending on October 5, the Lower Atlantic Region (WV, VA, NC, SC, GA, and FL) had 28.1 million barrels of total gasoline stocks, according to the Energy Information Administration (EIA). This is 9% higher than the 5-year average for this time of year.
- For the week ending on October 5, the Lower Atlantic Region had 12.6 million barrels of total distillate stocks, according to EIA. This is equivalent to the 5-year average for this time of year.
- Florida Department of Emergency Management (FDEM) is monitoring statewide fuel stocks and retail fuel supplies; no reported supply shortages, distribution issues, or retail fuel shortage reported as of October 9.

**RETAIL FUEL STATIONS**

- As of 12:00 PM October 11, 6.0% of Florida gas stations (including 38% of Florida Panhandle stations), 2.6% of Georgia gas stations, and 1.3% of Alabama gas stations were reported out-of-service due to lack of fuel, lack of power, or both, according to GasBuddy.com.



## 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 EDT 10/11/2018				
State*	Details	Effective Dates		Status
		Start	End	
AL, FL, GA, LA, MS, NC, SC, TN	<a href="#">FMCSA Regional Emergency Declaration</a>	10/09	11/09	Active
Florida*	<a href="#">State of Emergency Declaration</a>	10/07	12/06	Active
South Carolina**	<a href="#">State of Emergency Declaration</a>	10/08	11/07	Active
Alabama	<a href="#">State of Emergency Declaration</a>	10/08	11/07	Active
Georgia*	<a href="#">State of Emergency Declaration</a>	10/09	10/16	Active
North Carolina*	<a href="#">State of Emergency Declaration</a>	10/10	Until Rescinded	Active
Kentucky	<a href="#">State of Emergency Declaration</a>	10/10	11/10	Active
Virginia	<a href="#">State of Emergency Declaration</a>	10/11	11/11	Active

Sources: [U.S. Department of Transportation](#); Governor Office Websites

\*Includes 35 counties in northern Florida, 92 counties in southern Georgia, and 66 counties in North Carolina. See Declarations for the full listing.

\*\*South Carolina issued a thirty day extension of its Hurricane Florence emergency declaration

### 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. There are no fuel waivers at this time.

### OTHER FEDERAL WAIVERS

- On October 10, **PHMSA** issued an **Emergency Stay of Enforcement for pipeline and LNG facility operators** affected by Hurricane Michael. Under the stay, PHMSA does not intend to take enforcement action relating to operators' temporary noncompliance with operator 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 which went into effect on October 10 will remain in effect for 45 days until November 24, unless PHMSA determines an extension is required. In addition, on October 10, **PHMSA** issued an **Emergency Assistance Personnel** waiver for Alabama, Florida, Georgia, North Carolina, and South Carolina affected by Hurricane Michael. For 30 days following October 10, PHMSA waived the notice required under 49 U.S.C. § 60118(d), which necessitates a 60-day review period for States to notify PHMSA that it intends to waive a pipeline safety regulation adopted by the State pursuant to State certification under 49 U.S.C. § 60105 for the above listed requirements.

