

Tropical Cyclone Michael | Report #5

REPORT TIME & DATE: 9:00 AM EDT | Friday, October 12, 2018

INCIDENT START DATE: Wednesday, October 10, 2018

PRIMARY LOCATION(S): Alabama, Florida, Georgia, North Carolina, South Carolina

REPORT DISTRIBUTION: Public

EXECUTIVE SUMMARY

As of 5:00 AM EDT, Post-Tropical Cyclone Michael was 185 miles east-northeast of Norfolk, Virginia, moving east-northeast at 29 MPH, with maximum sustained winds of 65 MPH. On the forecast track, the center of Michael will move away from the U.S. today, moving rapidly across the Atlantic. Michael made landfall near Mexico Beach, Florida on Wednesday afternoon, before moving across the southeast of the U.S., across Georgia, South Carolina, North Carolina, and southeastern Virginia.

Electricity Sector Summary

- Customer Outages as of 7:00 AM EDT:
 - Alabama: 25,652 customer outages (1%), decrease of 16%
 - o Florida: 351,433 customer outages (3.5%), decrease of 10%
 - Georgia: 304,862 customer outages (6.4%), decrease of 25%
 - North Carolina: 492,058 customer outages (10%), increase of 36%
 - o South Carolina: 7,422 customer outages (0.3%), decrease of 94%
 - Virginia: 523,304 customer outages (14%), increase >100%
 - Note: Customer outages in Alabama were adjusted to include additional cooperative utilities reported by the State EOC, 24-hour peak and calculations adjusted accordingly.
- Crews in the impacted area are performing damage assessments and restorations.
- 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.

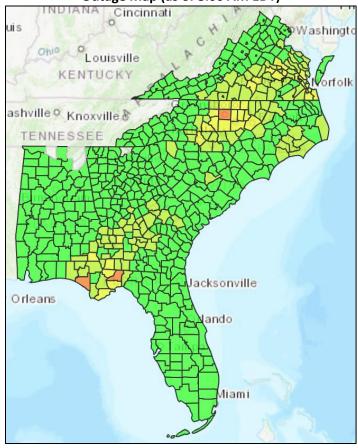
Oil & Natural Gas Sector Summary

- 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 6:00 AM October 12, 6.3% of Florida gas stations (including 41% of Florida Panhandle stations), 3.2% of Georgia gas stations, and 1.7% of Alabama gas stations were reported out-ofservice due to lack of fuel and/or power.

ELECTRICITY SECTOR

POWER OUTAGES





ELECTRICITY OUTAGES AS OF 7:00 AM EDT 10/12/2018						
Impacted State	Current	Percent of Total Customers	24-Hour Peak			
	Customers Outages	in State without Power	Customer Outages			
Alabama	25,652	1.01%	58,587			
Florida	351,433	3.46%	400,666			
Georgia**	304,862	6.44%	470,410			
North Carolina	492,058	9.94%	587,818			
South Carolina	7,422	0.29%	128,493			
Virginia	523,304	13.92%	572,666			
Total	1,704,731		*			

^{*}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.

^{**}Outage number reported by Georgia EOC includes additional outages from Cooperative Utilities not included in original reporting. The 24-hour peak has been adjusted accordingly.

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.

- 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.
- 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.
- 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 supporting the restoration efforts.

Alabama

Significantly Impacted Utilities

o Wiregrass Electric Coop: 13,206 Customer Outages

Alabama Power: 12,393 Customer Outages

Florida

- Significantly Impacted Utilities
 - Gulf Power (Southern Company): 113,640 Customer Outages
 - Tallahassee Electric: 89,537 Customer Outages
 - Talquin Electric Coop: 47,061 Customer Outages
 - Duke Energy Florida: 31,129 Customer Outages

Georgia

- Significantly Impacted Utilities
 - o Georgia Power: 81,645 Customer Outages
 - Mitchell EMC: 24,264 Customer Outages
 - o Grady EMC: 16,287 Customer Outages
 - Sumter EMC: 11,363 Customer Outages

North Carolina

Significantly Impacted Utilities

Duke Energy: 425,682 Customer Outages
 Piedmont EMC: 22,509 Customer Outages
 Energy United: 19,939 Customer Outages
 Dominion Power: 7,970 Customer Outages

South Carolina

Significantly Impacted Utilities

Duke Energy: 5,459 Customer Outages

Virginia

523,304 Customer Outages ↑ >100% since Oct 11, 3:00 PM EDT **572,666** 24-hr Peak Outages

Significantly Impacted Utilities

Dominion Power: 445,171 Customer Outages

VA Electric Cooperatives: 55,824 Customer Outages
 Appalachian Power: 23,038 Customer Outages

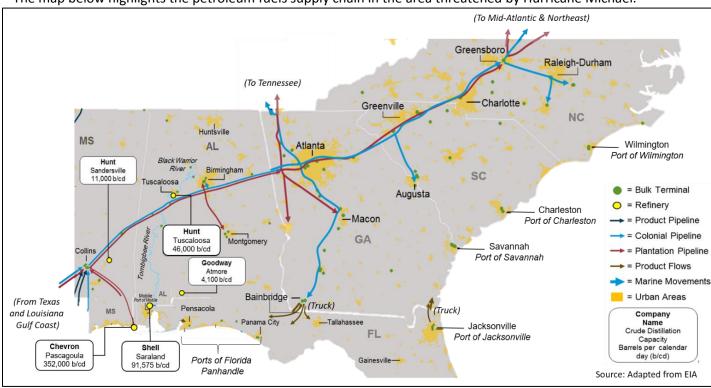
BACKGROUND AND PREPARATIONS

• The affected area is served by several utilities, including investor owned utilities, municipal utilities, and cooperative utilities. The three associations that represent these 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, 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 Louisiana Offshore Oil Port (LOOP), the largest privately-owned crude terminal in the United States, said it resumed normal operations at its Marine Terminal on Oct. 11 after operations were suspended ahead of Hurricane Michael.

• 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 7:30 AM EDT 10/12/2018							
Port Sector	Port	Status	Date Stamp	2016 Volumes (b/d)			
				Products*		Crude Oil	
				In	Out	In	Out
	Mobile, AL	Open.	10/10	4,000	136,000	210,000	12,000
Mobile	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	Open.	10/11	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.	10/11	22,000	-	-	-
North	Wilmington NC	Closed. Port Status Zulu.	10/10	C 000			
Carolina	Wilmington, NC	Closed. Port Status Zuid.		6,000	ı	-	-
Hampton	Norfolk, VA	Open with restrictions. Port Status modified Zulu.	10/11	7,000	9,000	-	-
Roads	Newport News, VA	Open with restrictions. Port Status modified Zulu.	10/11	3,000	ı	-	-

^{*}Transportation fuels (gasoline, distillate, jet fuel) volumes only.

Source: U.S. Coast Guard Homeport, U.S. Army Corp of Engineers, EIA Company Level Imports, American Maritime Partnership

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 6:00 AM October 12, 6.3% of Florida gas stations (including 41% of Florida Panhandle stations),
 3.2% of Georgia gas stations, and 1.7% 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 7:30 AM EDT 10/12/2018					
State*	Details	Effective Dates		Status	
		Start	End	Status	
AL, FL, GA, LA, MS,	FMCSA Regional Emergency Declaration	10/09	11/09	Active	
NC, SC, TN	- Intest Regional Entergency Becaration				
Florida*	State of Emergency Declaration	10/07	12/06	Active	
South Carolina**	State of Emergency Declaration	10/08	11/07	Active	
Alabama	State of Emergency Declaration	10/08	11/07	Active	
Georgia*	State of Emergency Declaration	10/09	10/16	Active	
North Carolina*	State of Emergency Declaration	10/10	Until Rescinded	Active	
Kentucky	State of Emergency Declaration	10/10	11/10	Active	
Virginia	State of Emergency Declaration	10/11	11/11	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. 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, PHSMA 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.

^{*}Includes 35 counties in northern Florida, 108 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