

Infrastructure Security & Energy Restoration

Hurricane Michael | Report #2

REPORT TIME & DATE:4:30 PM EDT | Wednesday, October 10, 2018INCIDENT START DATE:Wednesday, October 10, 2018PRIMARY LOCATION(S):Alabama, Florida, Georgia, North Carolina, South CarolinaREPORT DISTRIBUTION:Public

EXECUTIVE SUMMARY

Around 2:00 PM EDT, Hurricane Michael made landfall near Mexico Beach, Florida. Hurricane Michael was moving north-northeast at 14 MPH, with maximum sustained winds of 155 MPH (category 4); however, the system has begun to slowly weaken as it moves over land. On the forecast track, the core of Michael will move inland across the Florida Panhandle this afternoon, and across southeastern Alabama and southwestern Georgia tonight. Michael will move northeastward across the southeast through Thursday night, before moving off the Mid-Atlantic coast, away from the U.S., on Friday.

Electricity Sector Summary

- Customer Outages as of 4:00 PM EDT:
 - o Alabama: 13,090 customer outages (0.7%)
 - Florida: 263,317 customer outages (2.73%)
 - o Georgia: 21,738 customer outages (0.52%)
 - Note: Customer outages number will continue to increase and may fluctuate as the Hurricane Michael impacts the southeast.
- Potentially impacted utilities have pre-staged crews, equipment, and materials and mutual assistance networks have been activated to support restoration efforts.
- Restoration efforts will be limited until weather condition permit.

Oil & Natural Gas Sector Summary

- For the week ending on September 28, total gasoline stocks for the Lower Atlantic Region (WV, VA, NC, SC, GA, and FL), was 15% higher than the 5-year average for this time of year according to the Energy Information Administration.
- As of 12:00 PM October 10, 5.3% of Florida gas stations (including 33% of stations in the Florida Panhandle), 2% of Georgia gas stations, and 1% of Alabama gas stations were reported out-of-service due to lack of fuel and/or power.
- Ports across the potentially impacted area are closed or are open with restrictions.

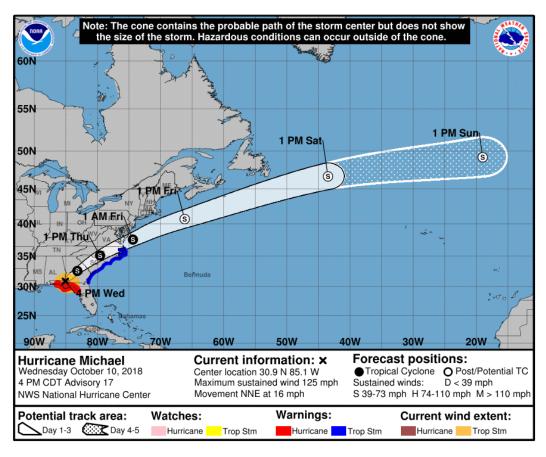
HURRICANE MICHAEL

Around 2:00 PM EDT, Hurricane Michael made landfall near Mexico Beach, Florida. Hurricane Michael was moving north-northeast at 14 MPH, with maximum sustained winds of 155 MPH (category 4); however, the system has begun to slowly weaken as it moves over land. Hurricane-force winds extend outward up to 45 miles from the center and tropical storm-force winds extend outward up to 175 miles. On the forecast track, the core of Michael will move inland across the Florida Panhandle this afternoon, and across southeastern Alabama and southwestern Georgia tonight. Michael will move northeastward across the southeast through Thursday night, before moving off the Mid-Atlantic coast, away from the U.S., on Friday.

Michael is forecast to produce 4 to 8 inches of rain, with isolated totals up to 12 inches, across the Florida Panhandle and Big Bend, southeast Alabama, and portions of southwest and central Georgia through Friday. Michael is forecast to produce 3 to 6 inches of rain, with isolated totals up to 8 inches, across the remainder of Georgia, the Carolinas, and southern Virginia, with 1 to 3 inches in the Mid-Atlantic and southern New England.

Michael is also forecast to continue to produce significant storm surge. If peak surge occurs during high-tide, Michael may produce a storm surge of 9 to 14 feet between Tyndall Air Force Base, Florida and Aucilla River, Florida; 6 to 9 feet from Tyndall Air Force Base to the Okaloosa/Walton County Line and from the Acuilla River to Cedar Key, Florida and 4 to 6 feet across other portions of the tropical storm warning area.

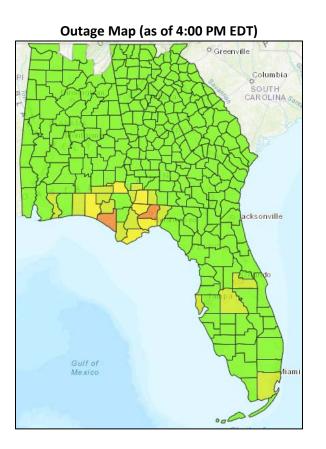
A hurricane warning remains in effect from the Alabama/Florida border to Suwanee River, Florida. A tropical storm warning is in effect from the Suwanee River, Florida to Chassahowitzka, Florida, as well as north of Fernandina Beach, Florida to Duck, North Carolina, including the Pamlico and Albemarle Sounds. Hurricane and tropical storm warnings extend inland across southeastern Alabama, southern and eastern Georgia, and southeastern South Carolina and North Carolina.





ELECTRICITY SECTOR

POWER OUTAGES



ELECTRICITY OUTAGES AS OF 4:00 PM EDT 10/10/2018						
Impacted State	Current Confirmed	Percent of Total Customers	24-Hour Peak			
-	Customer Outages	in State without Power	Customer Outages			
Alabama	13,909	0.7%	13,909			
Florida	263,317	2.73%	263,317			
Georgia	21,738	0.52%	21,738			
Total	298,964		*			

*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

- 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.
 - This workforce includes crews from and support personnel from 24 states, including personnel from the potentially impacted companies, contractor resources, and additional workers from mutual assistance partners. Additional electric companies outside of the storm zone continue to monitor and assess the situation and are ready to provide assistance.

Florida

262 217 Customor Outogos	↑ >100 % since Oct 10, 8:00 AM EDT	262 217 24 br Dook Outagos				
263,317 Customer Outages		263,317 24-hr Peak Outages				
Significantly Impacted	Utilities					
 Gulf Power (Southern Company): 122,936 Customer Outages 						
 Duke Energy Florence 	 Duke Energy Florida: 31,698 Customer Outages 					
 Tallahassee Electronic 	 Tallahassee Electric: 48,806 Customer Outages 					
o Talquin Electric	 Talquin Electric Coop: 35,337 Customer Outages 					
Georgia						
21,738 Customer Outages ↑ >100 % since Oct 10, 8:00 AM EDT 21,738 24-hr Peak Outages						
Significantly Impacted Utilities						
 Georgia Power: 	13,023 Customer Outages					
 Grady EMC: 7,357 Customer Outages 						
Alabama						
13,909 Customer Outages	↑ >100 % since Oct 10, 8:00 AM EDT	13,909 24-hr Peak Outages				
Significantly Impacted Utilities						
 Wiregrass Electric Coop: 7,204 Customer Outages 						

• Alabama Power Co: 6,263 Customer Outages

BACKGROUND AND PREPARATIONS

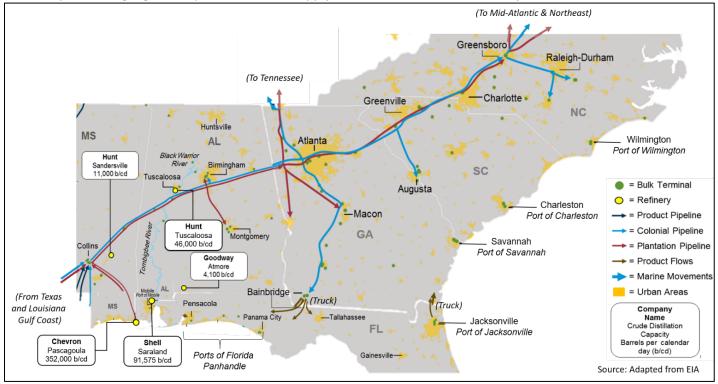
• The affected area is served by several utilities, including investor owned utilities, municipal utilities, and cooperative utilities. The three associations that represent these unities and manage the mutual assistance networks, Edition Electric Institute (EEI), American Public Power Association (APPA), 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 10, 718,877 b/d (42.3%) of the oil production and 812 MMcf/d (31.7%) 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 10/10/2018					
Production	Pre-Event	Shut-In (10/08)	Shut-In (10/09)	Shut-In (10/10)		
Crude Oil (b/d)	1,700,000	324,190	670,831	718,877		
Natural Gas (MMcf/d)	2,560	284	726	812		
Infrastructure	Pre-Event Count	Evacuated (10/08)	Evacuated (10/09)	Evacuated (10/10)		
Manned Platforms	687	10	75	89		
Rigs	37	5	11	7		

Source: BSEE



PORTS

- As of October 9, the Louisiana Offshore Oil Port (LOOP) has suspended operations at its Marine Terminal, which is the largest crude oil offloading facility in the United States. Currently, there are no interruptions in receipts or deliveries at LOOP's onshore Clovelly Hub storage facility. LOOP is executing its inclement weather plan and is closely monitoring the storm.
- 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 10/10/2018							
Port Sector	Port	Status	Date Stamp	2016 Volumes (b/d)			
				Products*		Crude Oil	
				In	Out	In	Out
	Mobile, AL	Open with restrictions. Port Status Yankee.	10/08	4,000	136,000	210,000	12,000
Mobile	Pascagoula, MS	Open with restrictions. Port Status Yankee.	10/08	13,000	114,000	156,000	2,000
wobie	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 with restrictions. Port Status Whiskey.	10/09	86,000	1,000	-	-
Savannah	Savannah, GA	Open with restrictions. Port Status Yankee.	10/10	15,000	1,000	-	-
Charleston	Charleston, SC	Open with restrictions. Port Status X-Ray.	10/10	22,000	-	-	-
North Carolina	Wilmington, NC	Open with restrictions. Port Status X-Ray.	10/09	6,000	-	-	-

*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 September 28, the Lower Atlantic Region (WV, VA, NC, SC, GA, and FL) had 28.7 million barrels of total gasoline stocks, according to the Energy Information Administration (EIA). This is 15% higher than the 5-year average for this time of year.
- For the week ending on September 28, the Lower Atlantic Region had 12.1 million barrels of total distillate stocks, according to EIA. This is equivalent to the 5-year average for this time of year.

RETAIL FUEL STATIONS

As of 12:00 PM October 10, 5.3% of Florida gas stations (including 33% of Florida Panhandle stations),
 2.0% of Georgia gas stations, and 1.0% 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 <u>49</u> <u>CFR 390.23</u> for the actual emergency regulation.

State Emergency Declarations and HOS Waivers as of 2:30 PM EDT 10/10/2018						
State*	Details	Effect	Status			
State		Start	End	Status		
AL, FL, GA, LA, MS, NC, SC, TN	FMCSA Regional Emergency Declaration	10/09	11/09	Active		
Florida*	State of Emergency Declaration	10/07	12/06	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	10/09	Until Rescinded	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.

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.

