

Hurricane Matthew Situation Report October 10, 2016 4:00pm

OVERVIEW

The remnants of Post-Tropical Cyclone Matthew have dissipated over the Atlantic. Significant flooding continues over portions of South and North Carolina, which received record rainfall from Matthew and flood warnings are in effect for several areas across the region.

IMPACTS AND PREPARATIONS FOR HURRICANE MATTHEW

ELECTRICITY:

• Restoration efforts from Hurricane Matthew across the southeastern U.S. Atlantic coastline are underway and damage to electrical infrastructure continues to be assessed as crews are able to reach hard-hit and remote areas. Flooding resulting from levy and dam breeches have hindered restoration efforts in portions of North Carolina. Restoration crews are being rerouted from Florida and sent to Georgia, South Carolina, and North Carolina. Approximately 1.2 million customer outages remain along the coastline from Florida to Virginia. Many customers have already had power restored, especially in Florida, and restoration continues in Georgia, the Carolinas, and Virginia. Many areas will be restored today, although restoration will take longer for customers in areas with significant damage. Mutual assistance agreements are working well and utility crews have arrived from other parts of the country to assist in the restoration. On Thursday, October 07, President Obama declared States of Emergency for Florida, Georgia, South Carolina, and North Carolina.

Florida

- o As of 3:00 PM EDT, October 10, the State of Florida has 129,553 customer outages. This represents 1% of customers in the state.
 - As of 3:00 PM EDT, October 10, Florida Power and Light Company (FPL) has 45,780 customer outages.
 - As of 3:00 PM EDT, October 10, Jacksonville Electric Authority has 78,497 customer outages.
 - As of 3:00 PM EDT, October 10, Duke Energy has 5,256 customer outages.
- o FPL is the third-largest electric utility in the United States, serving more than 4.8 million customer accounts or more than 10 million people across nearly half of the state of Florida. FPL has a workforce of more than 15,000 responding, including 12,000 field personnel.
- O As of 7:00 AM EDT, October 10, FPL had restored over 1 million customer interruptions less than 48 hours after Hurricane Matthew passed FPL's service territory and FPL is working on restoring power to the approximate 10% of customers remaining without power. During the restoration process, crews identified additional damage to the neighborhood lines in hardest-hit areas, extending some customers' restoration until end of day Monday.
- o FPL has started to release restoration crews from service as restoration requests are decreasing and FPL crews are en route to assist in other impacted states.
- o Jacksonville Electric Authority (JEA) was in one of the hardest hit areas of Florida. The utility has 29 electric crews including contractors in the field working to restore power following Hurricane Matthew. An additional 43 Mutual Aid crews from Electric Cities of Georgia, TECO (Tampa), CPS Energy (San Antonio), and a number of Missouri municipal utilities are providing assistance. As FPL completes their restoration work south of Jacksonville, they will



- now be able to provide additional assistance to JEA with approximately 150 utility workers and vegetation support. This will allow JEA to substantially complete service restoration work for customers able to receive power by end-of-day on Monday, October 10th.
- Crews from Tampa Electric are headed to assist in the restoration of JEA customers. Additional
 crews from as far away as Pryor, Oklahoma have arrived at Atlantic Beach to restore power.
 Nearly all JEA customers are expected to be restored by Monday night into Tuesday morning.
- New Smyrna Beach Utilities Commission and Vero Beach municipal utilities were also in hard hit areas. APPA indicated that customers should be restored by end-of-day Monday, October 10.
- o As of 11:00 AM EDT, October 10, approximately 95% of Duke Energy customers in Florida have been restored.
- Clay Electric continues to make significant progress in restoring power to members impacted by Hurricane Matthew. The cooperative has restored power to more than 69,000 members as of 8:30 AM EDT, October 10.
- o Beginning at 6:00 AM EDT, October 8, more than 150 Clay Electric Cooperative personnel, along with help from nearly 500 construction and right-of-way personnel from other cooperatives and outside contractors, began a major effort to restore service to members that were impacted by Hurricane Matthew.
- o Orlando Utilities Commission has completed restoration to all customers.
- o Governor Scott directed the state to begin setting up housing for utility crews in strategic areas across the state. Camp Blanding in Northeast Florida is now able to house over 1,000 utility workers and their trucks.
- o In all service territories, some homes and businesses may not be able to receive power due to damage from flooding until they are repaired and inspected.

• Georgia

- o As of 3:00 PM EDT, October 10, the State of Georgia has 121,368 customer outages as a result of Hurricane Matthew. This represents 3% of customers in the state.
 - As of 3:00 PM EDT, October 10, Georgia Power has 121,296 customer outages.
- o Georgia Power expects more than 90% of customers affected will have power restored by Wednesday night. In remote areas and on the coast, restoration could take several days.
- o FPL crews are being diverted to assist Georgia Power especially with restoration efforts within the Savanna, Georgia area.
- o Georgia Power's restoration crews continue to repair damage to electrical infrastructure including more than 500 distribution poles that have either been damaged or broken.
- As of 8:30 AM EDT, October 9, there were more than 1,919 cases of damage (the company is working to repair.
- Georgia Power has mobilized a workforce of nearly 5,000 personnel from Georgia Power and mutual assistance crews from other states, including Alabama, Mississippi, Louisiana and Texas.

South Carolina

- o As of 3:00 PM EDT, October 10, the State of South Carolina has 466,749 customer outages as a result of Hurricane Matthew. This represents 19% of customers in the state.
 - As of 3:00 PM EDT, October 10, South Carolina Electric and Gas (SCE&G) has 103,599 customer outages.
 - As of 3:00 PM EDT, October 10, Duke Energy has 107,040 customer outages.



- The highest concentrations of power outages are in the Southeast corner of the state.
- O Duke Energy crews have already made progress and restored power to more than 600,000 customers of the approximately 1.2 million customers impacted across North Carolina and South Carolina. Since 2:00 PM EDT, October 8, Duke Energy has restored about 825,000 customers. Estimated time for full restoration may extend into the weekend through Saturday, October 15 due to damage to conditions impeding access to crews to assess and restore power.
- O Duke Energy has identified more than 100 substations that were impacted by flooding. As of Monday afternoon, 64 have been restored.
- O Duke Energy has close to 7,000 personnel making repairs and has additional assistance en route. Additional crews have come from as far away as Canada.
- Duke Energy is continuing to monitor additional areas for flooding and potential impacts to substations.
- O Duke Energy contacted the Southeastern Electric Exchange and other utilities and related services to bring in roughly 6,000 personnel in addition to the 5,600 personnel already assembled. Duke has set up three "base camps" where crews will eat, sleep, obtain their assignments, and restock their vehicles. These additional personnel are starting to arrive Monday to assist in restoration efforts.
- O SCE&G crews have restored power to more than 100,000 customers impacted by Hurricane Matthew. Hardest hit were the coastal counties of Charleston, Beaufort, Dorchester and Colleton as well as Richland County in the Midlands. SCE&G secured more than 1,000 off-system crew members to supplement the more than 2,000 SCE&G employees assisting with storm restoration efforts.

North Carolina

- o As of 3:00 PM EDT, October 10, the State of North Carolina has 427,759 customer outages as a result of Hurricane Matthew. This represents 9% of customers in the state.
 - As of 3:00 PM EDT, October 10, Duke Energy has 268,929 customer outages.
 - As of 3:00 PM EDT, October 10, Dominion Power has 22,823 customer outages.
- o North Carolina's 26 electric cooperatives collectively serve approximately 2.5 million people in 93 of the state's 100 counties.
- O Duke Energy crews have already made progress and restored power to more than 600,000 customers of the approximately 1.2 million customers impacted across North Carolina and South Carolina. Since 2:00 PM EDT, October 8, Duke Energy has restored about 825,000 customers. Estimated time for full restoration may extend into the weekend through Saturday, October 15 due to damage to conditions impeding access to crews to assess and restore power.
- o Duke Energy has identified more than 100 substations that were impacted by flooding. As of Monday afternoon, 64 have been restored.
- O Duke Energy has close to 7,000 personnel making repairs and has additional assistance en route. Additional crews have come from as far away as Canada.
- o Duke Energy is continuing to monitor additional areas for flooding and potential impacts to substations.



Virginia

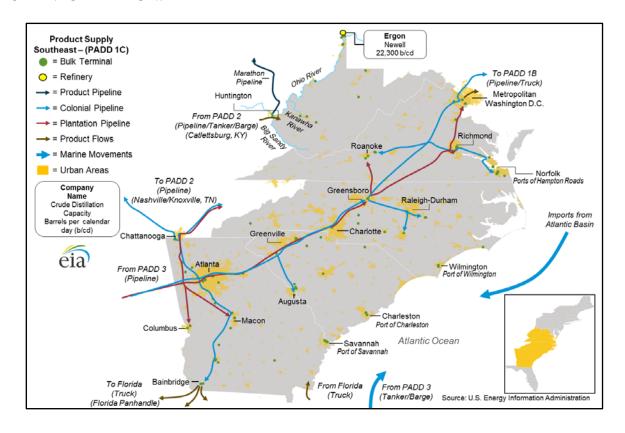
- o As of 3:00 PM EDT, October 10, the Commonwealth of Virginia has 79,459 customer outages. This represents 2% of customers in the Commonwealth.
 - As of 3:00 PM EDT, October 10, Dominion Power has 79,211 customer outages.
 - A number of other utilities make up the other 248 customer outages reported in Virginia.
- Ominion Power crews made steady progress over the weekend, restoring power to more than 70% of the 462,000 customers impacted by Hurricane Matthew since 4:00 PM EDT, October 8. As of 6:00AM EDT, October 10, approximately 136,600 customers remain without power at 3,600 work locations. The majority of those impacted are in southeastern Virginia and northeastern North Carolina, where historic rainfall, high winds and saturated ground combined to cause extensive damage to roads, bridges and electrical infrastructure. Flooding conditions and high winds over the weekend hampered the ability to initially make repairs at hard-hit locations.
- O Dominion Power has more than 2,300 personnel working to restore power and that number will increase as 500 additional line workers are returning from Florida. Dominion Power also continues to work through the mutual assistance process with neighboring utilities. The vast majority of customers impacted in Richmond, Midlothian and Northern Neck areas are expected to have power restored today, and a remaining few by mid-day Tuesday. Restoration efforts in the Eastern Region, may take several days due to more significant damage.

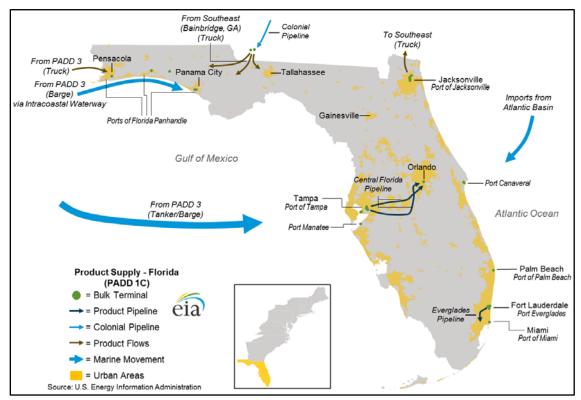
Table 1. Electricity Outages as of 7:30 AM EDT 10/10/2016						
Impacted State	Current Confirmed Customer Outages	Percent of Confirmed State Customers without Power	24-hr Peak Customer Outages			
Florida	129,533	1%	389,021			
Georgia	121,368	3%	189,887			
South Carolina	466,749	19%	522,628			
North Carolina	427,759	9%	596,638			
Virginia	79,459	2%	228,155			
Total	1,224,868		*			

^{*}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.



PETROLEUM INFORMATION:







PETROLEUM PORTS:

• On Monday, October 10, the Coast Guard resumed marine traffic at Hampton Roads and the port is now operating with restrictions. The table below lists the status of ports that receive petroleum products and their 2013 average receipts of transportation fuels (gasoline, distillates, and jet fuel).

Table 2. Status of U.S. Southeast Petroleum Ports as of 03:00 pm EDT 10/08/2016					
Port Sector	Fuel Receipts* (barrels/day)	Status	Date Stamp		
Sector Miami					
Port Everglades	236,000	Open with no restrictions	10/07/2016		
Miami	1,500	Open with no restrictions	10/07/2016		
Palm Beach	500	Open with no restrictions	10/07/2016		
Sector St. Petersburg					
Tampa	273,700	Open with no restrictions	10/07/2016		
Port Manatee	700	Open with no restrictions	10/07/2016		
Sector Jacksonville	e				
Jacksonville	69,800	Open with no restrictions	10/08/2016		
Canaveral	32,000	Open with no restrictions	10/08/2016		
Sector Savannah					
Savannah	12,600	Closed (Zulu)	10/07/2016		
Sector Charleston					
Charleston	16,500	Open with restrictions	10/09/2016		
Sector North Caro	Sector North Carolina				
Wilmington	11,500	Open with restrictions	10/09/2016		
Hampton Roads					
Hampton Roads	7,400	Open with restrictions	10/10/2016		

^{*2013} annual average of imports and domestic receipts. Includes gasoline, distillates, and jet fuel. Source: U.S. Coast Guard; U.S. Energy Information Administration,

PADDs 1 and 3 Transportation Fuels Markets (January 2016)

PETROLEUM REFINERIES:

• There are no refineries currently located within the storm's 3-day track.

RETAIL SERVICE STATIONS:

- Florida continues to monitor for supply, distribution, or retail fuel shortages or issues, specifically for isolated incidents of individual retailers experiencing temporary fuel shortages. Officials are also working with fuel partners and suppliers to increase the number trucks moving fuel from the ports to retail locations.
- Florida law requires all motor fuel terminals to be able to dispense fuel for a minimum of 72 hours using an alternative fuel supply to the electric grid. All gas stations built after 2006, gas stations within one-half mile of an interstate highway or designated evacuation route, or gas stations in certain sized counties with a certain number of fueling positions must be prewired for an alternative power source.



• The table below shows reported outages at retail service stations tracked by Gas Buddy in Florida, Georgia, and the Carolinas.

Reported Outages at Retail Service Stations as of 02:00 pm EDT 10/09/2016						
State	# of Outages (7 am, 10/9)	# of Outages (7 am, 10/9) (7 am, 10/10)	Total # of Stations in State	% of Outages (7 am, 10/10)		
Florida	461	775	7,107	11%		
Georgia	17	19	6,024	<1%		
South Carolina	19	25	2,957	<1%		
North Carolina	17	21	5,276	<1%		
Virginia	0	2	3,771	<1%		

Source: Gas Buddy, http://tracker.gasbuddy.com/.

STATE WAIVERS:

• Six states have active emergency declarations in order to waive Hours of Service (HOS) regulations for truck drivers delivering transportation fuels or other essential resources for emergency response. Table 4 lists the status of state emergency declarations.

Table 4. State Emergency Declarations and Hours of Service (HOS) Waivers as of 03:00 pm EDT 10/08/2016					
State	Resources Cited	<u>Effective Dates</u> Start End		Status	
Florida	Emergency services or supplies.	10/03/2016	10/10/2016	Active	
Georgia	Resources to assist in preparation, response, and recovery activities.	10/05/2016	10/12/2016	Active	
South Carolina	Essential services during or immediately following the event.	10/04/2016	TBD	Active	
North Carolina	Fuel oil, diesel oil, gasoline, kerosene, propane, liquid petroleum gas.	10/03/2016	11/02/2016	Active	
Virginia	Essential relief supplies, passengers, equipment, fuel, construction materials, and other critical supplies to or from any portion of the Commonwealth for purpose of providing direct relief or assistance as a result of this disaster.	10/06/2016	11/06/2016	Active	
Kentucky	Utility power restoration and debris removal vehicles as well as commercial vehicles transporting relief supplies.	10/07/2016	11/07/2016	Active	

Sources: U.S. Department of Transportation; Governor Office Websites.