

Hurricane Matthew Situation Report October 12, 2016 12:00pm

OVERVIEW

Following Hurricane Matthew, significant flooding continues across eastern North Carolina, with flood warnings in effect for most of the region. River flooding will continue in portions of North and South Carolina throughout the week. Flooding, downed trees, and debris has impeded restoration efforts in hard-hit and remote areas.

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. A large percentage of customers have already had power restored, especially in Florida, and restoration continues in Georgia, the Carolinas, and Virginia. Many utilities, including Duke, Jacksonville Electric Authority, Clay Electric, Dominion, and Georgia Power, have reported their service areas are largely restored. Many service areas will be completely restored by the end of the week, although restoration may take longer for customers in areas with significant damage, namely Eastern North Carolina. Mutual assistance agreements are working well and utility crews have arrived from other parts of the country, as well as Canada 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 11:00 AM EDT, October 12, the State of Florida has 47,939 customer outages. This represents <1% of customers in the state.
 - As of 11:00 AM EDT, October 12, Florida Power and Light Company (FPL) has 22,666 customer outages.
 - As of 11:00 AM EDT, October 12, Jacksonville Electric Authority has 23,651 customer outages.
 - As of 11:00 AM EDT, October 12, Duke Energy has 1,622 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 FPL has released restoration crews from service as restoration requests are decreasing and FPL crews are now assisting 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 are providing additional assistance to JEA with approximately 150 utility workers and vegetation support.



- o Crews from Tampa Electric are assisting in the restoration of JEA customers. Additional crews from as far away as Pryor, Oklahoma have arrived at Atlantic Beach to restore power.
- JEA is reporting that severe tree devastation is causing the restoration process to take longer than expected. JEA is receiving assistance from utilities in Florida and four other states. Restoration times are being reassessed.
- As of 9:30 AM EDT, October 12, New Smyrna Beach Utilities Commission is reporting that less than 1% of customers remain without power.
- Duke Energy Florida has restored ALL customers impacted by Hurricane Matthew as of the afternoon of Tuesday, October 12. Crews are ready to deploy to the Carolinas to assist in restoration efforts.
- O Clay Electric concluded its restoration efforts the night of Monday, October 10, having restored power to more than 73,000 members in a three-day period beginning at 6:00 AM EDT on Saturday, October 8. The cooperative has ended its Emergency Operation Plan status and is returning to normal operating activities.

Georgia

- o As of 11:00 AM EDT, October 12, the State of Georgia has 34,932 customer outages as a result of Hurricane Matthew. This represents <1% of customers in the state.
 - As of 11:00 AM EDT, October 12, Georgia Power has 34,794 customer outages.
- o FPL crews have been sent to assist Georgia Power especially with restoration efforts in 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.
- 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.
- o As of 10:00 PM EDT, October 11, Georgia Power reported power had been restored to approximately 298,000 customers. Over 340,000 customers were impacted by Hurricane Matthew. Georgia Power expects that power to 90% of these customers will be restored by end-of-day Wednesday, October 12.

South Carolina

- o As of 11:00 AM EDT, October 12, the State of South Carolina has 177,315 customer outages as a result of Hurricane Matthew. This represents 7% of customers in the state.
 - As of 11:00 AM EDT, October 12, Duke Energy has 56,372 customer outages.
 - As of 11:00 AM EDT, October 12, South Carolina Electric and Gas (SCE&G) has 31,012 customer outages.
 - As of 11:00 AM EDT, October 12, Santee Cooper has 14,439 customer outages.
- o The highest concentrations of power outages are in the Southeast corner of the state.
- O Duke Energy crews have restored power to more than 180,000 customers in South Carolina. Estimated time for full restoration may extend into the weekend in hard-hit and remote areas, due to flood conditions impeding access to damaged areas.
- o Duke Energy has identified more than 115 substations that were impacted by flooding. As of the morning of Wednesday, October 12, 98 have been restored.



- O Duke Energy has close to 9,000 crewmembers making repairs and has 1,500 additional crew members en route. Additional crews have come from as far away as Canada.
- O Duke Energy has identified more than 800 broken poles and miles of downed lines; however, repairs are being hampered by downed trees, flooded or damaged roads.
- O Duke Energy initiated six aerial patrols to assess damage and help develop restoration strategies.
- 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.
- o Orlando Utilities Commission crews have deployed to assist Santee Cooper's restoration efforts.
- O As of the morning of October 10, SCE&G crews have restored power to more than 256,000 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. SCE&G expects substantial restoration to be complete by end-of-day Sunday, October 16.

• North Carolina

- o As of 11:00 AM EDT, October 12, the State of North Carolina has 111,886 customer outages as a result of Hurricane Matthew. This represents 2% of customers in the state.
 - As of 11:00 AM EDT, October 12, Duke Energy has 76,498 customer outages.
 - As of 11:00 AM EDT, October 12, Dominion Power has 4,712 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 As of 8:00 AM EDT on Tuesday, October 11, power was restored for close to 19,200 North Carolina co-op members overnight. In total, crews have restored power to more than 215,200 members since Hurricane Matthew struck the state. Close to 270 workers from western North Carolina and surrounding states are in the field assisting local co-op line-workers and tree trimmers. Counties experiencing the highest number of co-op outages at this time are Robeson, Cumberland, Sampson, Harnett and Wayne.
- Duke Energy crews have restored power to more than 924,000 customers in North Carolina. Estimated time for full restoration may extend into the weekend in hard-hit and remote areas, due to flood conditions impeding access to damaged areas.
- O Duke Energy has identified more than 115 substations that were impacted by flooding. As of the morning of Wednesday, October 12, 98 have been restored.
- o Duke Energy has close to 9,000 crewmembers making repairs and has 1,500 additional crew members en route. Additional crews have come from as far away as Canada.
- o Duke Energy has identified more than 800 broken poles and miles of downed lines; however, repairs are being hampered by downed trees, flooded or damaged roads.
- 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.



Virginia

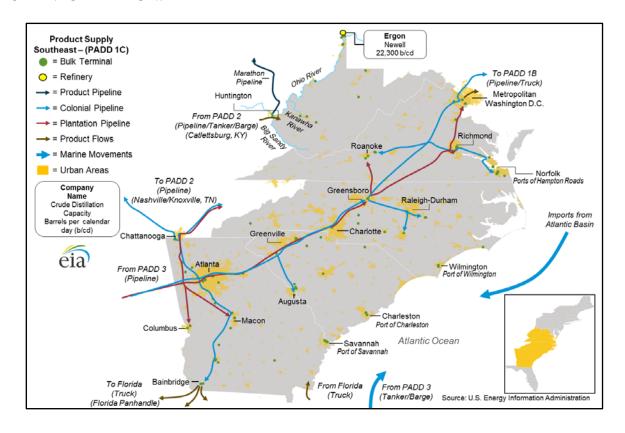
- o As of 11:00 AM EDT, October 12, the Commonwealth of Virginia has 6,305 customer outages. This represents <1% of customers in the Commonwealth.
 - As of 11:00 AM EDT, October 12, Dominion Power has 5,953 customer outages.
- O As of Wednesday morning, October 12, Dominion Power has restored power to 97% of the 462,000 customers impacted by Hurricane Matthew. The majority of those impacted are in southeastern Virginia and northeastern North Carolina. Flooding conditions and high winds over the weekend hampered the ability to initially make repairs at hard-hit locations.
- o Dominion Power expects ALL customers to be restored by end-of-day, Thursday, October 13.
- Dominion Power has more than 2,300 personnel working to restore power.
 Dominion Power also continues to work through the mutual assistance process with neighboring utilities.

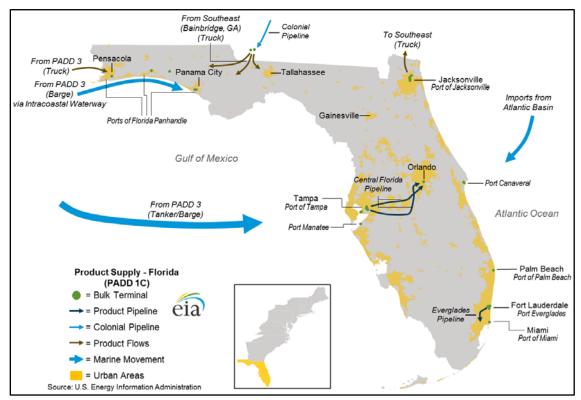
Table 1. Electricity Outages as of 11:30 AM EDT 10/12/2016							
Impacted State	Current Confirmed Customer Outages	Percent of Confirmed State Customers without Power	24-hr Peak Customer Outages				
Florida	47,939	<1%	111,011				
Georgia	34,932	<1%	71,755				
South Carolina	177,315	7%	288,319				
North Carolina	111,886	2%	254,182				
Virginia	6,305	<1%	32,716				
Total	378,377		*				

^{*}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 Tuesday, October 11, the Coast Guard reopened the Port of Savannah with restrictions. The ports Charleston and Wilmington are now open with no 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	Open with restrictions	10/11/2016			
Sector Charleston						
Charleston	16,500	Open with no restrictions	10/11/2016			
Sector North Carolina						
Wilmington	11,500	Open with no restrictions	10/11/2016			
Hampton Roads						
Hampton Roads	7,400	Open with no restrictions	10/11/2016			

^{*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.



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.	10/10/2016	10/14/2016	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.