



Hurricanes Maria & Irma

November 20 Event Summary (Report #78)

REPORT TIME & DATE:	12:00 PM EST November 20, 2017
INCIDENT START DATE:	Friday, August 25, 2017
PRIMARY LOCATION(S):	Puerto Rico & U.S. Virgin Islands
REPORT DISTRIBUTION:	Public

At this time, the U.S. Department of Energy (DOE) does not plan to issue a situation report on the response and recovery efforts in Puerto Rico and the U.S. Virgin Islands on November 23. If there are any significant issues or developments an update will be provided as appropriate.

EXECUTIVE SUMMARY

The U.S. Department of Energy (DOE) continues to support restoration efforts related to Hurricanes Maria and Irma. ESF #12 responders remain deployed to St. Thomas, St. Croix, and Puerto Rico in support of FEMA Incident Management Assistance Teams. A team of 25 personnel from the DOE Western Area Power Administration are on St. Thomas to provide mutual aid. DOE has also deployed seven subject matter experts to provide technical assistance to the U.S. Army Corps of Engineers for restoration planning on Puerto Rico and four personnel to assist FEMA with ESF #15 – External Affairs.

Electricity Sector Summary (as of 11:30 AM EST Monday)

- Puerto Rico: Approximately 46.6% of normal peak load has been restored and 57 of 78 municipalities are partially energized or have energized facilities. On November 15, approximate 50% of normal peak load had been restored; however, a fault on a 230kV transmission line caused a 28% decrease in load restored. The transmission line has been restored and load has begun to increase to pre-fault levels. DOE continues to coordinate closely with FEMA, Puerto Rico, and the U.S. Army Corps of Engineers to support restoration efforts and facilitate industry support, including additional mutual aid as requested by PREPA.
- USVI: VIWAPA reports that approximately 18,232 customers across the USVI have been restored (36.8% of total customers). Approximately 52.8% of customers on St. Thomas, 76.1% of customers on St. Croix, and 60% of customers on St. John remain without power. Restoration efforts continue across the Territory, mainly focusing on the backbone feeders for the grid.

Oil and Natural Gas Sector Summary (as of 11:30 AM EST Monday)

- As of November 20, a total of 927 out of 1,100 retail gas stations are operational on Puerto Rico.
- Fuel stocks are adequate across the region; however, DOE continues to monitor the situation in coordination with the Energy Information Administration.

ELECTRICITY SECTOR

Puerto Rico

ESTIMATED ELECTRICITY OUTAGES AS OF 10:00 AM AST 11/20/2017		
Impacted Territory	Total Average Peak Load (MW)	Total Average Peak Load Percentage of Pre-Storm Capacity
Puerto Rico	1251.2	46.60%

- As of 6:00 AM AST, November 20, Puerto Rico reported that restored load was 46.6% of normal peak load (approximately 1251 MW of 2,685 MW normal peak load).
 - On November 15, Puerto Rico had restored, 50% of normal peak load, meeting its restoration goal for mid-November; however, according to the Puerto Rico Electric Power Authority (PREPA), a 230 kV transmission line serving northern portions of the island experienced a technical failure. The transmission line failure caused a 28% drop in load restored; however, the line has been restored and percent of load restored is returning to pre-fault levels.
 - *NOTE: Due to technical limitations, PREPA is not able to provide the number or percentage of customers without power. As such, the current metric for restoration progress is the percent of normal peak load that has been restored. The percent of normal peak load restored is not a direct proxy for the number of customers restored. DOE will begin reporting customer level data as soon as the information is available.*
- As of November 20, a total of 57 out of 78 municipalities on Puerto Rico are at least partially energized. A map listing of these areas is available at: status.pr/Maps/Map/AEE.
- On November 19, the U.S. Army Corps of Engineers (USACE) reported 58.4% of Puerto Rico’s 1,146 transmission lines or line segments are functioning.
- On November 19, USACE reported 74.9% of Puerto Rico’s 344 substations are functioning.
- DOE is coordinating with PREPA, FEMA, the U.S. Army Corps of Engineers (USACE), and industry to support restoration efforts, including providing technical subject matter experts and to felicitating mutual assistance.
 - On Monday, October 16, USACE awarded a contract to support transmission and distribution systems restoration efforts on Puerto Rico.
 - On Wednesday, October 18, USACE awarded a contract for the repair of the distribution system in the western region of Puerto Rico.
 - On October 31, PREPA formally requested mutual assistance from industry for restoration efforts across the Territory.

U.S. Virgin Islands

ELECTRICITY OUTAGES AS OF 9:13 AM AST 11/19/2017		
Impacted Territory	Current Customer Outages	Percent of Customers without Power
St. Thomas	13,341	52.84%
St. John	1,860	60.00%
St. Croix	16,152	76.06%
USVI Total	31,353	63.23%

- As of 9:13 AM AST, November 19, the U.S. Virgin Islands Water and Power Authority (VIWAPA) reported approximately 31,353 customers (63.23%) remain without power within the territory.
 - On St. Thomas, 13,341 customers (52.84%) were reported to be without power.
 - On St. John, 1,860 customers (60.00%) were reported to be without power.
 - On St. Croix, 16,152 customers (76.06%) were reported to be without power.
 - *NOTE: As the extent of damage is confirmed and additional data becomes available, the baseline number of VIWAPA customers reported will be updated based on data from VIWAPA. DOE will continue to validate customer outage data as it is collected. At this time, the number of customers who are unable to receive power is unknown but still included in the number of total customers per pre-storm levels.*
- On November 18, VIWAPA reported 557 personnel were assisting in restoration across the U.S. Virgin Islands. An additional 200 linemen are expected in the Territory.
 - On St. Thomas, 183 line personnel were reported to be assisting on restoration efforts.
 - On St. John, 105 line personnel were reported to be assisting on restoration efforts.
 - On St. Croix, 269 line personnel were reported to be assisting on restoration efforts.
- VIWAPA crews continue to work toward the goal of 90% restoration by the end of December.
- VIWAPA has removed electrical meters at locations where damage was apparent to either the meter base and/or weather head and reminding customer that the customer is responsible for ensuring repairs and inspection are complete, which is standard practice during a restoration.

OIL & GAS SECTOR

PORTS

- The U.S. Coast Guard has reopened all ports that receive marine delivery of petroleum products in Sector San Juan (Puerto Rico and the U.S. Virgin Islands).



Emergency Declarations & Waivers

EMERGENCY DECLARATIONS

- On September 18, Puerto Rico and USVI declared emergencies due to Hurricane Maria. These declarations automatically waived select Federal Motor Carrier Safety Regulations (FMCSRs), including hours-of-service (HOS) regulations, for motor carriers hauling resources to aid in restoration. Some HOS waivers applied specifically to the movement of petroleum products in or through the state. On September 20, President Trump approved a major disaster declaration.
- On September 26, President Trump amended the Puerto Rico and U.S. Virgin Islands disaster declarations to authorize increased cost sharing to 100 percent Federal funding for debris removal and emergency protective measures beginning September 17. The declaration includes direct Federal assistance for 180 days from the start of the incident period and a 90 percent Federal cost share thereafter.
- The table below summarizes emergency declarations and hours of service (HOS) waivers issued by states and FMCSA. Please see earlier Situation Reports for details about waivers that have expired.

State Emergency Declarations and HOS Waivers <i>as of 10:00 AM EST 11/20/2017</i>				
State	Details	Effective Dates		Status
		Start	End	
Regional (Multi-State)	Regional Emergency Declarations and FMCSR waivers issued by FMCSA. On October 4, the FMCSA extended the Regional Emergency Declaration for Puerto Rico, and the U.S. Virgin Islands. The FMCSA extended the Declaration again on November 6.	Extended: 10/04/17 11/06/17	Extension to 11/06/17 01/08/18	Active
Puerto Rico	State of Emergency	Extended: 09/18/17	--	Active
U.S. Virgin Islands	State of Emergency	Extended: 09/18/17	--	Active

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



FUEL WAIVERS

- The table below lists fuel-related waivers issued by the U.S. Environmental Protection Agency (U.S. EPA). Waivers that have expired have been removed from the table. Please see earlier Situation Reports for any needed details about waivers that have since expired.

Fuel Waivers as of 10:00 AM EST 11/20/2017					
State	Waiver	Issued By	Effective Dates		Status
			Start	End	
Puerto Rico	Sulfur content requirement of 15 ppm waived. Permits the sale, distribution and use of higher sulfur heating oil and ECA marine fuel. EPA extended the waiver as it applies to mobile non-road generators or pumps used for emergency purposes.	U.S. EPA	09/26/17 Extended: 10/11/17 10/27/17	10/15/17 Extended: 10/30/17 11/15/17	Expired

Sources: U.S. Environmental Protection Agency; State Governments

OTHER WAIVERS

- **Department of Transportation (DOT)**
 - On September 20, PHMSA issued an Emergency Stay of Enforcement for pipeline operators that may be affected by Maria. PHMSA will not take enforcement action relating to operator noncompliance with certain operator qualification requirements, or pre-employment and random drug testing requirements, arising from the use of personnel for pipeline activities related to response and recovery. The waiver took effect on September 20 and will expire on November 4.
- **Environmental Protection Agency (EPA)**
 - On September 22, the EPA announced that it will exercise enforcement discretion for mobile power generators being imported into the United States that will be used as emergency sources of power in Puerto Rico as a result of Hurricane Maria. EPA will not pursue enforcement actions for certain violations of the Clean Air Act for mobile power generators being imported for use in Puerto Rico that have not been certified to meet U.S. pollution control standards. This covers mobile power generators that are imported for use in Puerto Rico until January 31, 2018.

