

Hurricanes Maria & Irma

October 16 Event Summary (Report #65)

REPORT TIME & DATE:	12:00 PM EDT October 16, 2017
INCIDENT START DATE:	Friday, August 25, 2017
PRIMARY LOCATION(S): Puerto Rico & U.S. Virgin Islands	
REPORT DISTRIBUTION:	Public

EXECUTIVE SUMMARY

Restoration efforts for power outages caused by Hurricanes Maria and Irma continue across Puerto Rico and the U.S. Virgin Islands, which caused significant damage across the region.

DOE continues to support response and restoration efforts for 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. ESF #12 responders are also deployed to the National Response Coordination Center and a team of 25 personnel from the DOE Western Area Power Administration are on St. Thomas to provide mutual aid.

Electricity Sector Summary (as of 10:30 AM EDT Monday)

- Puerto Rico: Approximately 14% of normal peak load has been restored. DOE is coordinating closely with FEMA, Puerto Rico, and the U.S. Army Corps of Engineers to support restoration efforts and facilitate mutual aid.
- USVI: Approximately 84.4% of customers on St. Thomas and 98.4% of customers on St. Croix remain without power. St. John remains without grid power, but service is expected to be restored within two to three week. Restoration efforts continue across the Territory, mainly focusing on critical facilities and backbone feeders for the grid. Please note that the U.S. Virgin Islands Water and Power Authority is now providing customer outage information and information on the number of customers without power may differ estimates in previous reports.

Oil and Natural Gas Sector Summary (as of 10:30 EDT Monday)

- Puerto Rico & USVI:
 - o As of October 16, 872 out of 1,110 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.

Hurricane Maria

ELECTRICITY SECTOR

Puerto Rico

ESTIMATED ELECTRICITY OUTAGES AS OF 11:00 AM EDT 10/16/2017					
Impacted Territory	Current Estimated Customer Outages	Percent of Estimated Customers without Power			
Puerto Rico	~1,354,734	~86.3%			
PR Total	~1,354,734	~86.3%			

Note: Estimate number of customers without power is based on percent of average peak load restored

- As of 6:00 PM EDT, Sunday October 15 peak load was approximately 382 MW, which represents about 14% of normal peak load restored.
- As of 11:00 AM EDT, Monday, October 16, DOE estimates approximately 1.35 million (86.3%) of customers on the island of Puerto Rico are without power.
 - Note: Outage numbers are an approximation based on the ratio of current load over the normal peak load. Due to technical constraints, PREPA is unable to provide a more accurate number of customers without power at this time.
- PREPA reported that as October 16, approximately 235 of 1,106 (21.2%) transmission lines or line segments of various voltages have been energized.
- PREPA reported that as October 16, approximately 115 of 342 (33.1%) substations of various voltages are energized.
- Jacksonville Electric Authority (JEA) has sent linemen and assets to assist the U.S. Army Corps of Engineers and Puerto Rico in restoration efforts.
- The New York Power Authority has sent crews to provide mutual aid, supporting damage assessments and restoration efforts.
- DOE is coordinating with PREPA, FEMA, the U.S. Army Corps of Engineers, and industry to provide technical subject matter experts and to facilitate mutual aid.

U.S. Virgin Islands

ELECTRICITY OUTAGES AS OF 10/15/2017						
Impacted Island	Current Customer Outages	Percent of Estimated Customers without Power				
St. Thomas	19,177	~84.4%				
St. John	2,887	100.0%				
St. Croix	22,409	~98.4%				
USVI Total	44,473	~91.9%				

Note: The U.S. Virgin Islands Water and Power Authority (VIWAPA) has begun to provide customer outage information. Estimates of customer without power in previous reports were based on load, and may differ from the outage information provided in this report.

- As of Sunday, October 15, approximately 44,473 customers (91.9%) on the U.S. Virgin Islands were without power.
 - o On St. Thomas, 19,117 customers (84.4%) are reported to be without power
 - On St. Croix, 22,409 customers (98.4%) are reported to be without power
 - St. John remains without grid power, but service is expected to be restored in two to three weeks.
- According to VIWAPA, approximately 260 off-island line workers arrived in the territory over the weekend. Another 150 are expected by Friday, October 27. The off-island crews will be equally divided between the St. Thomas-St. John and St. Croix districts.
- VIWAPA did not complete any restoration activities on Sunday, October 15 as part of a safety plan to ensure crews remain well rested to support the pace of restoration operations.
- Governor Kenneth Mapp announced VIWAPA is aiming for 90% of the USVI to be restored by late December.
- DOE is working closely with industry and FEMA to facilitate mutual assistance for the USVI

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). Draft restrictions and daylight-only restrictions remain in place at several ports.

Emergency Declarations & Waivers

This section only includes waivers that apply to Puerto Rico or the U.S. Virgin Islands. Waivers issued for the mainland U.S. in response to Hurricanes Harvey, Irma, and Nate have been removed.

EMERGENCY DECLARATIONS

The table below summarizes emergency declarations and motor carrier hours of service (HOS) waivers applying to Puerto Rico and USVI.

State Emergency Declarations and HOS Waivers as of 10:00 AM EDT 10/16/2017					
State	Details	Effecti	Status		
State	Details	Start	End	Status	
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.	Extended: 10/4	Extension to 11/6/17	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) for Hurricanes applying to Puerto Rico and USVI.

Fuel Waivers as of 10:00 AM EDT 10/16/2017					
State	Waiver	Issued By	Effective Dates		Status
	waivei		Start	End	Status
	Sulfur content requirement of 15 ppm				
Puerto \	waived. Permits the sale, distribution and use	U.S. EPA	09/36/17	10/30/17	Active
	of higher sulfur heating oil and ECA marine				
Rico	fuel. EPA extended the waiver as it applies to				
	mobile non-road generators or pumps used				
	for emergency purposes.				

Sources: U.S. Environmental Protection Agency

OTHER WAIVERS

Department of Homeland Security

On September 28, the Department of Homeland Security, at the request of the Department of Defense, <u>waived</u> the Jones Act requirements for Puerto Rico for a 10-day period. This waiver applies to all products shipped from U.S. coastwise points to Puerto Rico, through October 8, and applies to all covered merchandise loaded on board a vessel within the 10-day period of the waiver and delivered by October 18.

Department of Transportation (DOT)

- On September 28, DOT's Pipeline and Hazardous Materials Safety Administration (PHMSA) issued a waiver on Hazardous Materials Regulations to persons conducting operations under the direction of the Puerto Rico Public Service Commission within the Hurricane Maria emergency and disaster areas of Puerto Rico. The Waiver is granted to support the government of Puerto Rico in facilitating the transport of essential fuel. The waiver is effective until October 22.
- 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.