



Hurricanes Maria & Irma

October 23 Event Summary (Report #70)

REPORT TIME & DATE:	12:00 PM EDT October 23, 2017
INCIDENT START DATE:	Friday, August 25, 2017
PRIMARY LOCATION(S):	Puerto Rico & U.S. Virgin Islands
REPORT DISTRIBUTION:	Public

The U.S. Department of Energy (DOE) will issue situation reports with updates about the response and recovery efforts in Puerto Rico and the U.S. Virgin Islands on Mondays and Thursdays.

EXECUTIVE SUMMARY

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. DOE has also deployed subject matter experts to provide technical assistance to the U.S. Army Corps of Engineers for restoration planning on Puerto Rico.

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

- Puerto Rico: Approximately 18% of normal peak load has been restored and 35 of 78 municipalities are partially energized or have energized facilities. The Palo Seco and San Juan power plants have been restored after tripping offline on October 19 and 20. 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.
- USVI: On October 22, the U.S. Virgin Islands Water and Power Authority (VIWAPA), reported that 7,200 customers have been restored, which is 14.9% of total customers. Approximately 71% of customers on St. Thomas and 98.4% of customers on St. Croix remain without power. St. John remains without grid power; however, VIWAPA expects to begin to restore service this week, once the undersea cables are energized. Overall, restoration efforts continue across the Territory, mainly focusing on critical facilities and backbone feeders for the grid.

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

- As of October 23, 873 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 10/23/2017		
Impacted Territory	Current Estimated Customer Outages	Percent of Estimated Customers without Power
Puerto Rico	~1,287,233	~82.0%
PR Total	~1,287,233	~82.0%

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

- As of 6:00 AM EDT Monday, October 23 restored load was 18.0% of normal peak load (approximately 484 MW of 2,685 MW normal peak load).
 - Both the Palo Seco and San Juan power plants are operational as of the morning of Sunday, October 22.
 - On October 19, the San Juan and Palo Seco power plants tripped offline. Both power plants were restored October 20 morning; however, the San Juan power plant tripped back offline at approximately 12:00pm October 20. The San Juan power plant was restored on Saturday, October 21.
- As of 6:00 AM EDT, Monday, October 23, DOE estimates nearly 1.29 million customers (81.0%) remain without power on Puerto Rico.
 - A total of 35 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.
 - *Note: Outage numbers are an approximation based on the ratio of current load over the normal peak load. Due to technical constrains, PREPA is unable to provide the specific number of customers without power at this time.*
- PREPA reported that as of 7:06 PM EDT, Wednesday, October 18, approximately 281 of 1,107 (25.4%) transmission lines or line segments of various voltages have been energized.
- PREPA reported that as of 7:06 PM EDT, Wednesday, October 18, approximately 124 of 339 (36.5%) substations of various voltages are energized.
- Jacksonville Electric Authority (JEA) and the Kissimmee Utility Authority have 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 (USACE), and industry to provide technical subject matter experts and to facilitate mutual aid.
 - On Wednesday, October 18, USACE awarded a contract for the repair of the distribution system in the western region of Puerto Rico.
 - On Monday, October 16, USACE awarded a contract to support transmission and distribution systems restoration efforts on Puerto Rico.



U.S. Virgin Islands

ELECTRICITY OUTAGES AS OF 4:30 PM EDT 10/22/2017		
Source: VIWAPA Facebook and DOE estimates		
Impacted Territory	Current Customer Outages	Percent of Customers without Power
U.S. Virgin Islands	41,179	85.1%
USVI Total	41,179	85.1%

Note: Estimates of customer without power in earlier reports were based on load. The U.S. Virgin Islands Water and Power Authority (VIWAPA) is now providing customer outage information. The latest update from VIWAPA only provided customers restored across the USVI, not by island district. Latest information by island is below and updates will be provided as information is available.

- As of 4:30 PM EDT on October 22, VIWAPA reported 7,200 customers have been restored. Approximately 85.1% of customers within the U.S. Virgin Islands (USVI) remain without power.
 - As of October 17:
 - On St. Thomas, 16,112 customers (71.0%) were reported to be without power.
 - On St. Croix, 22,408 customers (98.4%) were reported to be without power.
 - St. John remains without grid power.
 - *Note: The latest update from VIWAPA only provided customers restored across the USVI, not by island district. The last reported numbers by island are provide for reference.*
- VIWAPA has a goal to have 90% electric service restored by late December.
- VIWAPA and off-island personnel continue to work to energize the East End Substation, which is necessary in order to energize the undersea transmission cables to St. John.
- 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. DOE is working with FEMA Public Affairs to help amplify the message to residents to ensure it does not delay 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). Draft restrictions and daylight-only restrictions remain in place at several ports.



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 HOS waivers issued by states in response to the impacts of Hurricanes Nate and Maria. Please see earlier Situation Reports for details about waivers that have expired or those related to Hurricanes Harvey and Irma.

State Emergency Declarations and HOS Waivers <i>as of 10:00 AM EDT 10/23/2017</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.	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 Maria and Nate. 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 EDT 10/20/2017					
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	10/30/17	Active

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

OTHER WAIVERS

- **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.