



# Hurricanes Maria & Irma

## December 20 Event Summary (Report #83)

<b>REPORT TIME &amp; DATE:</b>	12:00 PM EST   December 20, 2017
<b>INCIDENT START DATE:</b>	Friday, August 25, 2017
<b>PRIMARY LOCATION(S):</b>	Puerto Rico & U.S. Virgin Islands
<b>REPORT DISTRIBUTION:</b>	Public

*As of the week of December 4, the U.S. Department of Energy (DOE) will issue a single situation report per week, with updates on the response and recovery efforts in Puerto Rico and the U.S. Virgin Islands, at 12:00 PM EST on Wednesdays.*

### EXECUTIVE SUMMARY

The U.S. Department of Energy (DOE) continues to support restoration and recovery efforts related to Hurricanes Maria and Irma. ESF #12 responders remain deployed to the U.S. Virgin Islands and Puerto Rico in support of FEMA. DOE has also deployed subject matter experts from the DOE Power Marketing Administration to provide technical assistance to the U.S. Army Corps of Engineers for restoration planning on Puerto Rico and a team from the National Renewable Energy Lab has been deployed to perform assessments in the U.S. Virgin Islands.

### Electricity Sector Summary (as of 11:00 AM EST Wednesday)

- Puerto Rico: Approximately 65.4% of normal peak load has been restored and 69 of 78 municipalities are partially energized or have energized facilities. 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 31,661 customers across the USVI have been restored (63.7% of total customers). Approximately 33.7% of customers on St. Thomas, 41% of customers on St. Croix, and 25.9% of customers on St. John remain without power.

### Oil and Natural Gas Sector Summary (as of 11:00 AM EST Wednesday)

- As of December 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 6:00 AM AST 12/20/2017		
Impacted Territory	Total Average Peak Load (MW)	Total Average Peak Load Percentage of Pre-Storm Capacity
Puerto Rico	1,687	65.40%

- As of 6:00 AM AST, December 20, Puerto Rico reported that restored load was 65.40% of normal peak load (normal peak load is generally between 2500 and 3000 MW).
  - *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 December 20, a total of 69 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](http://status.pr/Maps/Map/AEE).
- On December 19, the U.S. Army Corps of Engineers (USACE) reported 71.4% of Puerto Rico’s 56 transmission centers are functioning.
- On December 19, USACE reported 83.3% of Puerto Rico’s 342 substations are functioning.
- As of December 19, PREPA reported a total of 3,764 field workers are assisting in the restoration of transmission and distribution systems.
- Within the next 7 to 14 days, PREPA anticipates installing an additional 25 MW of generation in Yabucoa to supply the eastern part of the island.
- A significant number of weather-heads, the service drop entry point where power lines enter a building, are expected to need repair or replacement. PREPA will work to coordinate efforts to have weather-heads repaired in sync with distribution feeder repairs to ensure customers are able to receive power as the distribution system is restored.
- 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 Fluor to support transmission and distribution systems restoration efforts on Puerto Rico and USACE awarded a second contract to Fluor on December 1.
  - On Wednesday, October 18, USACE awarded a contract to PowerSecure 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. DOE, FEMA, USACE, and PREPA have been working closely with industry to facilitate the additional mutual assistance and ensure that additional resources are appropriately integrated into ongoing efforts.

**U.S. Virgin Islands**

ELECTRICITY OUTAGES AND SUPPORT PERSONNEL				
Source: VIWAPA				
Impacted Territory	Current Customer Outages	Percent of Customers without Power	Supplemental Utility Personnel	Change in Personnel Since Last Report
St. Thomas	8,549	33.69%	218	53 ↓
St. John	802	25.87%	105	0
St. Croix	8,698	40.96%	463	4 ↑
<b>USVI Total</b>	<b>18,049</b>	<b>36.31%</b>	<b>786</b>	<b>49 ↓</b>

*Note: Outage data is current as of 12/19/2017. St. Thomas customer outage numbers now include data from Water and Hassel islands (0.0% and 100.00% of customers without power, respectively). DOE will continue to validate customer outage data as it is collected. Supplemental Utility Personnel is current as of 12/20/2017.*

- As of December 19, the U.S. Virgin Islands Water and Power Authority (VIWAPA) reported approximately 18,049 customers (36.31%) remain without power within the territory.
  - On St. Thomas, 8,549 customers (33.69%) were reported to be without power.
  - On St. John, 802 customers (25.97%) were reported to be without power.
  - On St. Croix, 8,698 customers (40.96%) were reported to be without power.
- As of December 20, there were 786 supplemental personnel were assisting in restoration efforts across the U.S. Virgin Islands.
  - On St. Thomas, 218 personnel were reported to be assisting in restoration efforts.
  - On St. John, 105 personnel were reported to be assisting in restoration efforts.
  - On St. Croix, 463 personnel were reported to be assisting in 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**

*Puerto Rico’s oil and gas sector situation has stabilized. Absent major new developments, this will be the last Situation Report covering oil and gas sector impacts.*

**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. 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 12/20/2017</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**

- There are currently no active fuel specification waivers issued by the U.S. Environmental Protection Agency (U.S. EPA). Please see earlier Situation Reports for any needed details about waivers that have since expired.

**OTHER WAIVERS**

- **Department of Transportation (DOT)**
  - There are currently no active U.S. DOT or the Pipeline and Hazardous Materials Safety Administration (PHMSA) waivers. Please see earlier Situation Reports for any needed details about waivers that have since expired.
- **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.
  - On November 21, the EPA announced that it will extend enforcement discretion for PREPA facilities that have been impacted or damaged by Hurricane Maria through January 31, 2018. The action extends a “no action assurance” issued by EPA on October 6 and will continue to provide the utility relief from some Clean Air Act permit conditions and permitting requirements, including emission limits, hours of operation limits, fuel usage restrictions, and restrictions on the shutdown or bypass of pollution control equipment for most of their electric generating units operating in Puerto Rico.

