Hurricanes Maria & Irma
October 30 Event Summary (Report #72)

REPORT TIME & DATE: 12:00 PM EDT | October 30, 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 seven 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 30.5% of normal peak load has been restored and 39 of 78 municipalities are partially energized or have energized facilities. Installation of two generators installed by the U.S. Army Corps of Engineers (USACE) at the Palo Seco Power Plant site is complete on October 26. 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: As of Monday, October 23, VIWAPA reports that approximately 8250 customers across the USVI have been restored (17% of total customers). Approximately 68.6% of customers on St. Thomas, 96.7% of customers on St. Croix, and 87.9% of customers on St. John remain without power. The undersea transmission line from St. Thomas to St. John was energized on October 26 and VIWAPA began restorations to the Cruz Bay area of St. John on October 27. Restoration efforts continue across the Territory, mainly focusing on the backbone feeders for the grid.

Oil and Natural Gas Sector Summary (as of 10:30 EDT Monday)
- As of October 30, 927 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

<table>
<thead>
<tr>
<th>ESTIMATED ELECTRICITY OUTAGES AS OF 11:00 AM EDT 10/30/2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impacted Territory</td>
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<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Puerto Rico</td>
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<tr>
<td>PR Total</td>
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</tbody>
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Note: Estimate number of customers without power is based on percent of average peak load restored.

- As of 11:00 AM EDT, October 30, Puerto Rico reported that restored load was 30.5% of normal peak load (approximately 819 MW of 2,685 MW normal peak load).
- As of 11:00 AM EDT, October 30, DOE estimates at least 1.1 million customers (69.5%) remain without power on Puerto Rico.
  - A total of 39 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 October 25 the Financial Oversight and Management Board for Puerto Rico, under the authority of the Puerto Rico Oversight, Management, and Economic Stability Act (PROMESA), announced its intent to appoint Noel Zamot as Chief Transformation Officer for the Puerto Rico Electric Power Authority to “lead the transformation of PREPA and the rebuilding of the electricity sector following the devastation of Hurricane Maria. [Mr. Zamot’s] immediate priority will to fast-track reconstruction efforts on the Island in close coordination with the Government of Puerto Rico, the Board, and the federal government.”
- Two emergency distributed generation units, providing a total of 50 MW additional generation to help stabilize the electric system, have been installed by the U.S. Army Corps of Engineers (USACE) at the Palo Seco Power Plant.
- Jacksonville Electric Authority (JEA) and Kissimmee Utility Authority have sent linemen and assets to assist the U.S. Army Corps of Engineers and Puerto Rico in restoration efforts. Crews from the New York Power Authority have demobilized.
- 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 8:00 AM EDT 10/30/2017

<table>
<thead>
<tr>
<th>Impacted Territory</th>
<th>Current Customer Outages</th>
<th>Percent of Customers without Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Thomas</td>
<td>15,573</td>
<td>68.6%</td>
</tr>
<tr>
<td>St. John</td>
<td>~2,537</td>
<td>~87.9%</td>
</tr>
<tr>
<td>St. Croix</td>
<td>22,019</td>
<td>96.7%</td>
</tr>
<tr>
<td><strong>USVI Total</strong></td>
<td>~40,129</td>
<td>~82.9%</td>
</tr>
</tbody>
</table>

Note: VIWAPA only provided an initial estimate for the number of customers that have been restored on St. John.

- As of 8:00 AM EDT, October 30, The U.S. Virgin Islands Water and Power Authority (VIWAPA) reported approximately 40,129 (82.9%) customers remain without power within the territory.
  - On St. Thomas, 15,573 customers (68.6%) were reported to be without power.
  - On St. Croix, 22,019 customers (96.7%) were reported to be without power.
  - VIWAPA estimated 300 to 400 customers were restored on St. John over the weekend. Approximately 87.9% of customers remain without power on St. John.
- After energizing the undersea transmission line from St. Thomas on October 26, electrical service was restored to portions of Cruz Bay, St. John on Friday afternoon. Crews had been working for several weeks reconstructing the primary circuits in the downtown area.
- VIWAPA has a goal to have 90% electric service restored by late December.
- Additional manpower, equipment, and supplies arrived in the territory over the weekend to augment the restoration efforts. There are now more than 500 off-island linemen equally divided between both districts assisting the restoration efforts.
- 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.

<table>
<thead>
<tr>
<th>State</th>
<th>Details</th>
<th>Effective Dates</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional</td>
<td>Regional Emergency Declarations and FMCSR waivers issued by FMCSA.</td>
<td>Extended: 10/4</td>
<td>Active</td>
</tr>
<tr>
<td>(Multi-State)</td>
<td>On October 4, the FMCSA extended the Regional Emergency Declaration for Puerto Rico, and the U.S. Virgin Islands.</td>
<td>Extension to 11/6/17</td>
<td></td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>State of Emergency</td>
<td>Extended: 09/18/17</td>
<td>Active</td>
</tr>
<tr>
<td>U.S. Virgin Islands</td>
<td>State of Emergency</td>
<td>Extended: 09/18/17</td>
<td>Active</td>
</tr>
</tbody>
</table>

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 10/30/2017

<table>
<thead>
<tr>
<th>State</th>
<th>Waiver</th>
<th>Issued By</th>
<th>Effective Dates</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Puerto Rico</td>
<td><strong>Sulfur content requirement</strong> 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.</td>
<td>U.S. EPA</td>
<td>09/26/17 - 10/30/17</td>
<td>Active</td>
</tr>
</tbody>
</table>

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.