Hurricanes Maria & Irma
February 28 Event Summary (Report #93)

REPORT TIME & DATE: 12:00 PM EST | February 28, 2018
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) is issuing situation reports 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. On Puerto Rico, DOE continues to provide support to FEMA and subject matter experts from the DOE Power Marketing Administration remain deployed to provide technical assistance to the U.S. Army Corps of Engineers. DOE has also deployed a responder to Puerto Rico under the National Disaster Recovery Framework to support the FEMA recovery mission and development of a Federal Recovery Plan. ESF #12 responders deployed to the U.S. Virgin Islands (USVI) demobilized on January 12.

Electricity Sector Summary (as of 11:00 AM EST Wednesday)
- **Puerto Rico**: PREPA reports that 83.60% of normal peak load and 87.43% of customers (1,287,900) have been restored and all 78 municipalities are at least partially energized.
- **USVI**: As of January 31, regular updates on USVI restoration efforts have been discontinued. VIWAPA also began a *No Customer Left Behind* campaign aimed at reconnecting all customers who can be restored to the electric grid and who may have been bypassed during the initial phases of restoration.

Oil and Natural Gas Sector Summary (as of 11:00 AM EST Wednesday)
- As of February 28, a total of 970 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

<table>
<thead>
<tr>
<th>Impact Territory</th>
<th>Instant Maximum Production (MW)</th>
<th>Total Average Peak Load Percentage of Pre-Storm Capacity</th>
<th>Estimated Total Customer Outages</th>
<th>Percent of Total Customers without Power*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Puerto Rico</td>
<td>1,924</td>
<td>83.60%</td>
<td>185,200</td>
<td>12.57%</td>
</tr>
</tbody>
</table>

Note: The Puerto Rico Electric Power Authority (PREPA) has begun to report on the number of customers restored.

- On February 28, Puerto Rico reported that restored load was 83.60% of normal peak load (normal peak load is generally between 2500 and 3000 MW).
- On February 28, PREPA reported that 87.43% of customers (1,287,800) have power, which leaves 12.57% of customers (185,200) remaining without power.
- On February 26, PREPA reported 71.4% of their 56 transmission centers are functioning.
- On February 26, PREPA reported 92.7% of Puerto Rico’s 342 substations are functioning.
- On February 26, PREPA reported a total of 4,208 field workers are assisting in the restoration of transmission and distribution systems.
- Materials have been a critical factor to ensure continued progress with the restoration efforts. PREPA, USACE, and industry have worked to ensure that key materials are procured and delivered as quickly as possible prevent delays.
- 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 facilitating 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.
  - Mutual aid crews and equipment from several utilities across the country have or will deployed to Puerto Rico over the next few weeks. Several States have provided guidance to help expedite movement of equipment to shipping locations.

Power Grid Repair

% Customers with Power by Region

Source: USACE

U.S. DEPARTMENT OF ENERGY
Infrastructure Security & Energy Restoration
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. 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.

<p>| State Emergency Declarations and HOS Waivers as of 10:00 AM EST 02/28/2018 |
|---------------------------------------------------------------|-----------------------------|-----------------------------|-----------------------------|</p>
<table>
<thead>
<tr>
<th>State</th>
<th>Details</th>
<th>Effective Dates</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Start</td>
<td>End</td>
</tr>
<tr>
<td>Regional (Multi-State): Florida, Puerto Rico, U.S. Virgin Islands</td>
<td>This extension of the Regional Declaration of Emergency addresses ongoing emergency conditions creating a need for immediate transporting of supplies and equipment into the Affected States and jurisdictions or transporting persons into or from the Affected States and jurisdictions or providing other assistance in the form of emergency services during the emergency in the Affected States and jurisdictions resulting from Hurricanes Irma, Jose and/or Maria.</td>
<td>09/06/2017</td>
<td>Extension: 03/08/18</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>State of Emergency</td>
<td>Extended: 09/18/17</td>
<td>--</td>
</tr>
<tr>
<td>U.S. Virgin Islands</td>
<td>State of Emergency</td>
<td>Extended: 09/18/17</td>
<td>Extension: 02/02/18</td>
</tr>
</tbody>
</table>

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 discretion covered mobile power generators that were imported for use in Puerto Rico until January 31, 2018.
  - On November 21, the EPA extended enforcement discretion for PREPA facilities that had been impacted or damaged by Hurricane Maria through January 31, 2018. The action extended a “no action assurance” issued by EPA on October 6 that provided 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. This enforcement discretion has expired.