

Office of Cybersecurity, Energy Security, and Emergency Response

# Hurricane Dorian | Report #3

REPORT TIME & DATE:5:00 PM EDT | Thursday, August 29, 2019INCIDENT START DATE:August 28, 2019PRIMARY LOCATION(S):Puerto Rico & U.S. Virgin IslandsREPORT DISTRIBUTION:Public

DOE will pause reporting for Hurricane Dorian on Friday and Saturday barring any significant issues or developments. The next Situation Report will be issued on Sunday, September 1, 2019.

# **EXECUTIVE SUMMARY**

As of 5:00 PM EDT, Hurricane Dorian was 330 miles east of the southeastern Bahamas, moving northwest at 13 MPH, with maximum sustained winds of 85 MPH (category 1). Dorian is expected to approach the east coast of Florida and/or southern Georgia Monday. Hurricane Dorian passed over the U.S. Virgin Islands and far eastern portions of Puerto Rico on Wednesday afternoon.

### **Electricity Sector Summary**

- Puerto Rico: Restoration efforts for remaining outages are ongoing. Vieques and Culebra reported no significant power outages following Hurricane Dorian.
- U.S. Virgin Islands: As of 4:30 PM EDT August 29, Virgin Islands Water & Power Authority (VIWAPA) is reporting 4,013 customer outages. Remaining outages are primarily in St. Thomas.

#### Oil & Natural Gas Sector Summary

- All ports have reopened across Puerto Rico and the U.S. Virgin Islands except for Roosevelt Roads. Restriction remain for select ports pending further assessment/restoration.
- The fuel supply chain across Puerto Rico and the U.S. Virgin Islands are stable and inventories are adequate.



# **Hurricane Dorian**

As of 5:00 PM EDT, Hurricane Dorian was 330 miles east of the southeastern Bahamas, moving northwest at 13 MPH, with maximum sustained winds of 85 MPH (category 1). Hurricane-force winds extend outward up to 15 miles and tropical storm-force winds extend outward up to 90 miles from the center. A west-northwestward to westward motion is forecast to begin by Friday night and continue into the weekend. On this track, Dorian should move over the Atlantic well east of the southeastern and central Bahamas tonight and on Friday, approach the northwestern Bahamas Saturday, and move near or over portions of the northwest Bahamas on Sunday. Dorian is expected to near the east coast of Florida and/or the southern coast of Georgia on Monday.

Dorian is expected to produce 5 to 10 inches of rainfall, with isolated totals up to 15 inches, across coastal sections of the Southeast United States.







# **ELECTRICITY SECTOR**

#### **POWER OUTAGES**

Hurricane Dorian Customer Outages as of 4:30 PM EDT August 29, 2019						
Impacted State	Current Customer Outages	Percent of Estimated Customers without Power	24-hr Peak Customer Outages			
U.S. Virgin Islands	4,013	7%	39,264			
St. Thomas	4,011	15%	21,799			
St. John	0	0	2,491			
St. Croix	2	<0.1%	15,655			
Total	4,013					



#### **DETAILS BY TERRITORY**

#### **Puerto Rico**

#### **Puerto Rico Electric Power Authority (PREPA)**

- As of 8:00 AM EDT August 29, PREPA reported 7,430 customer outages in Puerto Rico.
- Vieques and Culebra reporting no significant power outages (100% with power).
- Technical personnel are working to repair issues in Aibonito, Barranquitas, Fajardo, Luquillo, Humacao, and Naguabo.
- The electrical issues in Barranquitas affecting Orocovis customers were resolved as of 12:00 PM EDT August 29.
- The Mayor of Culebra reported early August 29 that there was minimal damage, and only one community on the island lost power during the storm.
- On August 28, Gov. Andrew Cuomo dispatched two crews of New York Power Authority (NYPA) personnel to Puerto Rico and the U.S. Virgin Islands to help with power restoration if needed.
- The Puerto Rico Electric Power Authority (PREPA) reported a significant inventory of materials, including generators, compared to inventory available prior to Hurricane Maria.
- PREPA is a member of the American Public Power Association (APPA), which coordinates mutual assistance efforts across municipal utilities. PREPA is holding regular calls to discuss any resource and mutual assistance requirements with APPA.

# **U.S.** Virgin Islands

#### Virgin Islands Power and Water Authority (VIWAPA)

- As of 4:30 PM EDT August 29, Virgin Islands Water & Power Authority (VIWAPA)—the U.S. Virgin Islands' sole electric utility—is reporting 4,013 customer outages. Outages are primarily concentrated in St. Thomas.
- Power was fully restored to St. Croix as of 7:20 PM EDT August 28.
- At the peak on August 28, VIWAPA had more than 40,000 customers without power.
- St. Thomas & St. John
  - As of 4:30 PM EDT, VIWAPA reported 4,011 customer outages in St. Thomas and 0 customer outages in St. John.
  - As of 7:00 AM EDT August 29, only three full feeders (5A, 6A, and 8A) and portions of an additional three feeders (6B, 7C, and 7E) are without power.

#### St. Croix

- VIWAPA reported all feeders in St. Croix were re-energized as of 7:20 PM EDT August 28.
- Throughout the storm's passage, the Estate Richmond Power Plant remained in service, allowing three feeders (3A, 4A, and 5A) to stay online during the storm.



# OIL AND NATURAL GAS SECTOR

**Puerto Rico** imports petroleum products—primarily residual fuel, motor gasoline, and distillate fuel at four principal ports (San Juan, Yabucoa, Guayanilla, and Ponce). From terminals at these ports, fuels are distributed by truck to retail stations or by barge to coastal power plants, including plants near Arecibo, Mayaguez, Salinas/Aguirre, and Guayama. Puerto Rico's power sector is highly reliant on petroleum fuels; 40% of the territory's power plants burn residual fuel oil and 30% burn diesel fuel. Much of the remaining electricity generation capacity is fueled by natural gas, which is imported through the Peñuelas liquefied natural gas (LNG) import terminal in Guayanilla, where it is regasified and delivered by pipeline to the nearby EcoEléctrica and the Costa Sur generating stations.

**The U.S. Virgin Islands** imports petroleum products primarily through the ports of Limetree Bay and Christiansted on St. Croix. The petroleum terminal at Limetree Bay is a logistics hub for the Caribbean region, importing, storing, and then exporting petroleum products. St. Thomas mostly receives petroleum products by barge from Puerto Rico, as well by tanker trucks, which are delivered on "roll-on, roll-off" marine vessels. USVI power plants run primarily on fuel oil but propane is a growing source for electricity.

#### PORTS

 The U.S. Coast Guard has set the following conditions for ports and waterways in Sector San Juan as a result of Hurricane Dorian. Listed in the table are select ports that receive petroleum products.

Status of Caribbean Ports as of 9:00 AM EDT 08/28/2019							
	2019-to-date						
Port	Product	Date Stamp	Status				
	Imports (b/d) <sup>A</sup>						
Puerto Rico							
San Juan	75,400	Open.	8/29/19				
Ponce	38,400	Open.	8/29/19				
Guayanilla	58,400	Open.	8/29/19				
Yabucoa	34,600	Open. Daylight transit only.	8/29/19				
Mayaguez	B,C	Open. Draft less than 28'.	8/29/19				
Arecibo	B,C	<sup>B,C</sup> Open. Daylight transit only.					
Guayama	<sup>B,C</sup> Open. Draft less than		8/29/19				
Roosevelt Roads	В	Port Condition Zulu. Closed.	8/28/19				
Salinas/Aguirre	B,C	Open.	8/29/19				
U.S. Virgin Islands							
Christiansted, St. Croix	47.000	Open. Daylight transit only.	8/29/19				
Limetree Bay, St. Croix	47,000	Open.	8/29/19				
St. John <sup>B</sup>		Open. Daylight transit only.	8/29/19				
St. Thomas	B,C	Open. Daylight transit only.	8/29/19				

<sup>A</sup>All petroleum products, excluding asphalt.

<sup>B</sup>No direct foreign imports but receives petroleum products from larger ports by barge.

<sup>c</sup> Receives fuel for oil-fired power plant.

Source: Receipt data from U.S. Customs via Reuters EIKON (Jan-Aug. 2019 average), USITC DataWeb (Jan.-June 2019)



#### FUEL INVENTORIES

Puerto Rico

• Puerto Rico Transport and Public Services Bureau reports that propane shipments were made to Vieques and Culebra (islands just off the east coast of Puerto Rico) ahead of the storm to serve as reserves in the event access to the main island is limited.

## **EMERGENCY DECLARATIONS & WAIVERS**

#### **EMERGENCY DECLARATIONS**

To provide vital supplies and transportation services to a disaster area in the United States, emergency declarations may be issued by the President, Governors of States, or Federal Motor Carrier Safety Administration (FMCSA). These declarations trigger the temporary suspension of certain Federal safety regulations, including Hours of Service, for motor carriers and drivers engaged in specific aspects of the emergency relief effort. See <u>49</u> <u>CFR 390.23</u> for the actual emergency regulation.

State Emergency Declarations and HOS Waivers as of 9:00 AM EDT 08/28/2019							
State/Territory	Details	Effective Dates		Status			
	Details	Start	End	Status			
Puerto Rico	State of Emergency	8/26/2019	Until rescinded	Active			
Virgin Islands	State of Emergency	8/28/2019	Until rescinded	Active			
Florida	State of Emergency	8/28/2019	60 days unless extended	Active			

Sources: U.S. Department of Transportation; Governor Office Websites

