GREG WALDEN, OREGON
CHAIRMAN

FRANK PALLONE, JR., NEW JERSEY
RANKING MEMBER

ONE HUNDRED FIFTEENTH CONGRESS

Congress of the United States

House of Representatives

COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6115

Majority (202) 225-2927
Minority (202) 225-3641

MEMORANDUM

October 31, 2017

To: Subcommittee on Energy Democratic Members and Staff

Fr: Committee on Energy and Commerce Democratic Staff

Re: The 2017 Hurricane Season: A Review of Emergency Response and Energy Infrastructure Recovery Efforts

I. INTRODUCTION

On **Thursday, November 2, 2017, at 10:00 a.m. in room 2123 of the Rayburn House Office Building**, the Subcommittee on Energy will hold a hearing on "The 2017 Hurricane Season: A Review of Emergency Response and Energy Infrastructure Recovery Efforts."

II. BACKGROUND

On August 25, 2017, Hurricane Harvey made landfall off the Texas coast as a Category 4 hurricane, with winds of 80 miles per hour (mph). The hurricane was expected to produce a total of 15 to 30 inches of rain, with a possible maximum of 40 inches in isolated areas of the state.[1] The city of Houston, Texas received 51.88 inches of rain, the largest amount of rainwater recorded from a single storm in United States history. As a result, approximately 780,000 Texas residents evacuated their homes and more than 300,000 customers were without power.[2] In

[1] U.S. Department of Energy, Office of Electricity Delivery and Energy Reliability, Hurricane *Harvey Event Report (Update #1)* (Sept. 22, 2017) (energy.gov/sites/prod/files/2017/10/f37/Hurricane%20Harvey%20Event%20Summary%20%231.pdf).

[2] Federal Emergency Management Agency, *Historic Disaster Response to Hurricane Harvey in Texas* (Sept. 22, 2017) (www.fema.gov/news-release/2017/09/22/historic-disaster-response-hurricane-harvey-texas).

preparation for the storm, 21.5 percent of the oil production and 23.2 percent of the natural gas production in the Gulf of Mexico was shut down.[3]

The initial federal major disaster declaration, issued on August 25, 2017, included 30 Texas counties. To ensure retail gas stations were not constrained in terms of fuel supplies as a result of the storm, the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE) waived gasoline requirements for affected counties relating to reformulated gasoline, Reid vapor pressure, and Texas Low Emission Diesel. Additionally, the Secretary of Energy authorized two emergency exchange agreements for the Strategic Petroleum Reserve (SPR). The agreements allowed 400,000 barrels of sweet crude oil and 600,000 barrels of sour crude oil to be drawn and delivered for refining.

Less than two weeks after Hurricane Harvey flooded Texas, Hurricane Irma became the strongest Atlantic hurricane on record, with winds of 185 mph.[4] Hurricane Irma hit the U.S. Virgin Islands and Puerto Rico on September 6, 2017, after moving across the Caribbean as a Category 5 hurricane. On reaching the United States mainland on September 10, as a Category 4 hurricane, Hurricane Irma devastated large portions of the Florida Keys with high winds and 12 inches of rain before making landfall again at Marco Island and then moving north along the Florida Gulf Coast to Tampa.[5]

On September 7, 2017, DOE reported that over one million customers were without electricity in Puerto Rico, comprising approximately 66 percent of customers served by the Puerto Rico Electric Power Authority (PREPA). Additionally, DOE reported that all customers on the islands of St. Thomas and St. John were without power, totaling 19,581 customers and 2,893 customers, respectively. The Island of St. Croix had approximately 9,000 power outages as a result of Hurricane Irma.[6] Florida Power and Light reported to DOE that over two million customers were without power, which is approximately 20 percent of Florida's electricity

---

[3] *See* note 1.

[4] *Hurricane Irma is now the strongest hurricane ever recorded in the Atlantic*, Quartz (Sept. 6, 2017).

[5] National Hurricane Center, *Irma Makes Landfall at Cudjoe Key in Lower Florida Keys* (Sept. 10, 2017) (www.nhc.noaa.gov/archive/2017/al11/al112017.update.09101318.shtml?); *Destructive winds, rain hit Florida as Hurricane Irma makes landfall in the Keys*, Washington Post (Sept. 10, 2017); National Hurricane Center, *Center of Hurricane Irma Makes Landfall at Marco Island* (Sept. 10, 2017) (www.nhc.noaa.gov/archive/2017/al11/al112017.update.09101941.shtml?).

[6] U.S. Department of Energy, Office of Electricity Delivery and Energy Reliability, Hurricane *Harvey Event Report (Update #22)* (Sept. 7, 2017) (energy.gov/sites/prod/files/2017/10/f37/Hurricane%20Harvey%20Event%20Summary%2022.pdf).

customers. As of September 22, electric power had been restored to approximately 99 percent of Florida's electricity customers.[7]

III. ELECTRICITY GRID CRISIS IN PUERTO RICO AND THE U.S. VIRGIN ISLANDS

Just ten days after Hurricane Irma, Hurricane Maria struck Puerto Rico and the U.S. Virgin Islands on September 20, as a Category 4 hurricane causing widespread flooding and catastrophic damage to the island's electrical grid, telecommunications system, and other infrastructure. More than a month after the storm, nearly 75 percent of Puerto Rico continues to lack power for lighting, drinking water treatment, food and medicine refrigeration, mobile service to call 911, and a host of other critical functions. Additionally, almost 84 percent of the U.S. Virgin Islands remains without power.[8] Immediately following the storm, Puerto Rico residents had minimal access to fuel, with only 15 percent of gas stations on the island having available fuel.[9] On October 30, DOE reported that 927 of the 1,110 retail gas stations were operational, and the fuel supplies throughout the island are adequate.[10]

As of October 26, PREPA reported to DOE that 35 of the 78 municipalities making up the territory of Puerto Rico were partially energized. As of October 24, the U.S. Virgin Islands Water and Power Authority (VIWAPA) reported that the island of St. Thomas has approximately 70 percent of customers without power; the island of St. Croix has approximately 97 percent of customers without power; and the island of St. John remains 100 percent without power.[11]

Since Hurricane Maria struck Puerto Rico and the U.S. Virgin Islands some 40 days ago, the lack of electricity has persisted and caused major societal problems for the territories. As of

---

[7] U.S. Department of Energy, Office of Electricity Delivery and Energy Reliability, *Hurricane Harvey Event Report (Update #43)* (Sept. 22, 2017) (energy.gov/sites/prod/files/2017/09/f36/Hurricanes%20Maria%20Irma%20and%20Harvey%20Event%20Summary%20afternoon%20September%2022%2C%202017.pdf).

[8] U.S. Department of Energy, Office of Electricity Delivery and Energy Reliability, *Hurricane Harvey Event Report (Update #71)* (Oct. 26, 2017) (energy.gov/sites/prod/files/2017/10/f38/Hurricanes%20Maria%20and%20Irma%20Event%20Summary%20October%2026%2C%202017.pdf).

[9] U.S. Department of Energy, Office of Electricity Delivery and Energy Reliability, *Hurricane Harvey Event Report (Update #39)* (Sept. 20, 2017) (energy.gov/sites/prod/files/2017/10/f37/Hurricanes%20Maria%20Irma%20and%20Harvey%20Event%20Summary%20September%2020%2C%202017.pdf).

[10] U.S. Department of Energy, Office of Electricity Delivery and Energy Reliability, *Hurricane Harvey Event Report (Update #72)* (Oct. 30, 2017) (energy.gov/sites/prod/files/2017/10/f39/Hurricanes%20Maria%20and%20Irma%20Event%20Summary%20October%2030%2C%202017.pdf).

[11] *Id.*

September 20, Hurricane Maria had disrupted 1.25 billion hours of electricity for residents of the islands. According to a Rhodium Group analysis of comparable data, this amounts to the largest blackout in American history.[12]

IV. PREPA: BACKGROUND AND RESTORATION CONTRACTS

PREPA is a government-owned corporation of Puerto Rico created by the Puerto Rico Electric Power Authority Enabling Act in 1941.[13] PREPA is responsible for nearly two-thirds of power generation and all of the distribution and transmission of electricity in the territory.[14] PREPA is managed by a board of directors appointed by the Governor with advice and consent of the Puerto Rico Senate. In 2014, Act 57-2014 created the Puerto Rico Energy Commission (PREC) to regulate PREPA and conduct oversight.

PREPA has a long history of financial struggles and its financial difficulties predate those experienced by the rest of Puerto Rico. The authority's aging plants burn imported oil to produce electricity, and those rates are subject to price shocks as oil prices rise and fall. In 2014, PREPA was unable to pay for fuel.[15] Creditors extended fuel-purchasing credit, and negotiated a deal to restructure over $5 billion of PREPA's $9 billion total debt. That deal was unpopular on the island because it led to increases in electricity customers' monthly bills.[16] The deal was also difficult for PREPA to uphold because it required the restructured debt to be secured to an investment-grade rating. On July 2, 2017, PREPA defaulted on the deal and sought bankruptcy protection under Title III of the federal Puerto Rico Oversight, and Economic Stability Act (PROMESA).

In the aftermath of Hurricane Maria, PREPA signed a $300 million contract for electricity grid reconstruction with Whitefish Energy Holdings, LLC, a two-year-old company based in Whitefish, Montana. At the time of the contract award, Whitefish had only two full-time employees and had never landed a reconstruction contract of such magnitude.[17]

On October 26, 2017, Ranking Members Pallone, Rush and DeGette, along with Chairmen Walden and Upton, sent a letter to Whitefish requesting documents and a briefing from the contractor in light of concerns raised related to the development of the contract between

---

[12] Rhodium Group, *America's Biggest Blackout* (Oct. 26, 2017).

[13] The Puerto Rico Electric Power Authority Enabling Act, Act No. 83 of May 2, 1941.

[14] U.S. Energy Information Administration, *Puerto Rico Temporary Profile and Energy Estimates* (Sept. 21, 2017) (www.eia.gov/state/analysis.php?sid=RQ).

[15] *Puerto Rico's Power Authority Effectively Files for Bankruptcy*, The New York Times (Jul. 2, 2017).

[16] *Puerto Rico Utility Deal on Verge of Collapse*, The Wall Street Journal (Mar. 22, 2017).

[17] *Lawmakers to probe Puerto Rico grid repair contract*, Energy Wire (Oct. 25, 2017).

PREPA and Whitefish.[18] On October 27, a leaked copy of the contract between Whitefish and PREPA surfaced. The contract included clauses barring the government from auditing or reviewing certain terms of the contract, and waiving any claim against Whitefish for delayed completion of the grid repair work.[19] Due to mounting criticism of the terms of the contract, Puerto Rico Governor Ricardo Rosselló announced on October 29, that he was asking the PREPA Board of Directors to cancel the contract with Whitefish.[20]

Whitefish had subcontractors on the ground in Puerto Rico, including teams from the Jacksonville Electric Authority and the Kissimmee Utility Authority. It is unclear what happens with these teams now that the Whitefish contract has been cancelled. Additionally, on October 31, PREPA wrote to the American Public Power Association and the Edison Electric Institute requesting mutual assistance from mainland utilities in restoring the grid.

PREPA has also signed a contract for grid restoration services, similar to its Whitefish agreement, with COBRA Acquisitions, a subsidiary of Mammoth Energy Services.

In addition to the contracts issued by PREPA, FEMA signed a mission agreement with the U.S. Army Corps of Engineers (USACE) on September 28, 2017 tasking them with overseeing grid restoration. USACE signed contracts with Fluor Corporation and PowerSecure (a subsidiary of the Southern Company) to help restore Puerto Rico's grid. The first contract with Fluor was signed on October 19, 2017 for $240 million. After the announcement that the Whitefish contract would be terminated, USACE announced it would modifying the contract with Fluor to increase it by $600 million.

V. WITNESSES

Panel I

Charles Alexander
Director of Contingency Operations
U.S. Army Corps of Engineers

Robert Corbin
Deputy Asst. Secretary
Office of Petroleum Reserves, U.S. Department of Energy

[18] Letter from Rep. Frank Pallone, Jr., Ranking Member, House Committee on Energy and Commerce, et al., to Mr. Andrew Techmanski, CEO, Whitefish Energy Holdings, LLC (Oct. 26, 2017).

[19] *Whitefish Energy contract bars government from auditing deal*, The Hill (Oct. 27, 2017).

[20] *Puerto Rico Cancels Whitefish Energy Contract to Rebuild Power Lines*, New York Times (Oct. 29, 2017).

Patricia Hoffman
Principal Deputy Assistant Secretary
Office of Electricity Delivery and Energy Reliability
U.S. Department of Energy

Frank Rusco
Director, Natural Resources and Environment
Government Accountability Office

DeAnn Walker
Chairman
Public Utility Commission of Texas

Panel II

Thomas A. Fanning
Chairman, President and CEO
Southern Company

Cathy Kennedy, RN
On behalf of National Nurses United

The Honorable Ramón Luis Nieves
Attorney at Law and Notary Public
RL Legal and Consulting Services
Former Chairman, Senate Energy Committee, Senate of Puerto Rico

Max McBrayer, Jr.
Chief Supply Officer
RaceTrac Petroleum, Inc.

Chet Thompson
President and CEO
American Fuel and Petrochemical Manufacturers

Julio Rhymer
Executive Director and CEO
Virgin Islands Water and Power Authority