

# Congress of the United States

Washington, DC 20515

July 10, 2018

Walter M. Higgins  
Chief Executive Officer  
Puerto Rico Electric Power Authority (PREPA)  
PO Box 364267  
San Juan, PR 00936-4267

Dear Mr. Higgins:

We write regarding the island's transition to renewable energies<sup>1</sup> and our grave concerns about the ongoing energy challenges in Puerto Rico. After the 3.3 million citizens in Puerto Rico endured the largest blackout in U.S. history, it is important that the island consider energy alternatives that make the best use of indigenous resources and technologies that are more resilient, cost-effective, reliable, clean, efficient, and affordable.

In a matter of hours, Hurricane Maria altered landscapes, daily lives, economies, infrastructure, and even the Commonwealth's debt restructuring process. In the aftermath of this historic storm, the island has the chance to transition from an energy system dependent on imported fossil fuels to one relying primarily on the use of locally generated renewable energy resources. A transition to renewable energy resources would optimize the way in which Puerto Rico produces and distributes energy across the entire island.

As plans are developed for strengthening and improving Puerto Rico's grid, all ideas should be considered. An improved grid and structure of utility operations must emphasize efficiency and be flexible enough to accommodate increasing use of both utility-scale renewable power generation and distributed renewable energy resources to allow consumers to generate their own electricity and sell surplus power back to the grid. In addition, the design must allow for development of microgrids to ensure that key facilities (e.g., hospitals, emergency response facilities, and power-sensitive businesses) and more remote communities will continue to have power in the event of a major grid outage.

A 21<sup>st</sup> century grid for Puerto Rico must accommodate full use of clean energy resources. An increased use of clean energy that is properly executed, coupled with a flexible policy that enables consumers to have more control over their energy costs, will position Puerto Rico as a leader in clean energy and grid modernization and provide the territory with vital infrastructure on which to rebuild and grow its economy.

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<sup>1</sup> Puerto Rico Legislative Assembly. Committee on the Environment and Natural Resources. Hearing on Senate Bill 773 May 4, 2018. Submitted testimony of Walter Higgins, CEO, Puerto Rico Electric Power Authority.

## **Economic Costs and Health Impacts of Fossil Fuel Use**

Puerto Rico's heavy reliance on electricity generated from fossil fuels comes at significant economic and health costs. Currently, 98 percent of the island's electricity is generated from imported fossil fuel (64 percent petroleum and coal, 34 percent natural gas),<sup>2</sup> and these fuels consume 46 percent of PREPA's budget. Such an arrangement is not sustainable from either a fiscal or environmental perspective.

Puerto Rico's reliance on fossil fuel affects more than just finances. For far too long, Puerto Rico's residents have borne the health consequences of their exposure to pollutants associated with fossil fuel use. Small mountains of highly toxic coal ash are scattered throughout the island, threatening water and air contamination during every storm, no matter how severe. Burning coal also produces dangerous airborne emissions like lead and mercury, which are known to cause health problems including learning disabilities and violent behavior. It is no wonder the American Lung Association reports that Puerto Ricans have higher rates of asthma than any other U.S. population group.<sup>3</sup> Taken together, the human health risks and economic costs of fossil fuels underscore the need for Puerto Rico to increase use of clean energy technologies.

## **Benefits of Renewable Technologies**

For now, the island will likely need to replace aging, dirty power plants with some natural gas. However, investing too much in new natural gas infrastructure will commit Puerto Rico to ongoing dependence on imported fuel. While natural gas prices may be relatively low now, PREPA's severe budget constraints will require all costs of this infrastructure and on-going fuel costs to be passed on to ratepayers. This is not a strategy that will help PREPA or Puerto Rico to improve their fiscal situations.

Over time, increased use of renewable fuel technologies can lower energy prices for businesses and residents, which can result in a stronger overall economy, growth in jobs to support the renewables industry, and more disposable income that residents can use to purchase other goods and services, thereby contributing to every sector of the economy. In fact, a recent study by the National Renewable Energy Laboratory showed that renewable energy can be effectively and efficiently integrated into PREPA's system to outperform traditional operation practices.<sup>4</sup> Fossil fuel interests are proposing to take over PREPA's generation, transmission, and distribution business.<sup>5</sup> Although previous PREPA plans include very low contributions from renewable generation,<sup>6</sup> it would be a giant step backward for the people of Puerto Rico to put a fossil fuel company in charge of PREPA, regardless of the utility's future as a private or public corporation.

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<sup>2</sup> Campbell, Richard J, et al. "Repair or Rebuild: Options for Electric Power in Puerto Rico." Repair or Rebuild: Options for Electric Power in Puerto Rico, Congressional Research Service, 2017. <http://www.crs.gov/reports/pdf/R45023>

<sup>3</sup> Montalvo-Stanton, Evelyn. "Fighting for Air: The Burden of Asthma on Hispanics." American Lung Association, 2011. <http://www.lung.org/assets/documents/research/asthma-in-hispanics-english.pdf>

<sup>4</sup> U.S Department of Energy, *Energy Resilience Solutions for the Puerto Rico Grid*, Jun. 2018.

<sup>5</sup> Balmaceda, Javier, "PREPA Privatization in the Crosshairs of a Three-Company Consortium Offering USD 4bn Investment." Debtwire, 30 Apr. 2018. [www.debtwire.com/info/prepa-privatization-crosshairs-three-company-consortium-offering-usd-4bn-investment](http://www.debtwire.com/info/prepa-privatization-crosshairs-three-company-consortium-offering-usd-4bn-investment)

<sup>6</sup> Alicea, Juan F. "Puerto Rico Challenges & PREPA Transformation" Puerto Rico Electric Power Authority, 29 January 2015. [https://www.platts.com/IM.Platts.Content/ProductsServices/ConferenceandEvents/2015/pc502/presentations/Juan\\_Alicea\\_Flores.pdf](https://www.platts.com/IM.Platts.Content/ProductsServices/ConferenceandEvents/2015/pc502/presentations/Juan_Alicea_Flores.pdf)

## Success Stories

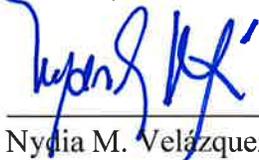
Due to Puerto Rico's geographic location and year-long tropical climate, the island has an incredible wealth of renewables that it should tap into, including wind and solar resources. PREPA should be leading the charge to set an ultimate goal of 100 percent renewable energy for the island, following in the footsteps of Hawaii.

The experience with renewable generation in several municipalities demonstrates the viability and benefits of having a more flexible, diversified grid structure and expanded renewable generation. In the municipality of Adjuntas, *Casa Pueblo*, a non-profit led by Dr. Arturo Massol-Deyá, has showcased just how powerful mutual aid and community engagement can be when residents control their own energy policies. In the immediate aftermath of Hurricane Maria, Casa Pueblo's lights were already shining bright without the help of PREPA. Similarly, *Coquí Solar* in Salinas displayed great resiliency in the wake of Maria thanks to its low dependence on fossil fuel generation.

The success stories of non-profits like *Casa Pueblo* and *Coquí Solar* are living proof that we can safely rely on renewables and improve the overall health of our communities. This is no longer a pipe dream. It is real, observable, and measurable. There is ample evidence that on-site renewable energy generation, paired with storage, offers resilient power solutions during times of fuel disruptions.<sup>7</sup>

It is our moral responsibility to protect families from the destruction of their natural resources and steer them into a strong economy and resilient, clean future. Instead of chaining the people of Puerto Rico to yesterday's energy sources, PREPA must actively implement improvements and enhancements for Puerto Rico's electric system in order to effectively strengthen and modernize Puerto Rico's electric grid to withstand storms of the future.

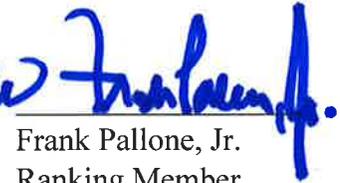
Sincerely,



Nydia M. Velázquez  
Member of Congress



Raúl M. Grijalva  
Ranking Member  
House Committee on  
Natural Resources



Frank Pallone, Jr.  
Ranking Member  
House Committee on  
Energy & Commerce

<sup>7</sup> National Renewable Energy Laboratory, "How is Solar PV Performing in Hurricane-struck Locations?", October 24, 2017. <https://www.nrel.gov/technical-assistance/blog/posts/how-is-solar-pv-performing-in-hurricane-struck-locations.html>; See also Foehringer Merchant, Emma. "Puerto Rico's Latest Challenge: Utility Curtailment of Wind and Solar Farms," Green Tech Media, 18 May 2018, <https://www.greentechmedia.com/articles/read/puerto-rico-prepa-curtailment-of-wind-and-solar#gs.sJcZNIg>