Subcommittee on Energy and Mineral Resources

Doug Lamborn, Chairman
Hearing Memorandum

January 11, 2016

To: Subcommittee on Energy and Minerals Members

From: Subcommittee on Energy and Minerals Staff (x5-9297)

Subject: Oversight hearing on *"Exploring Energy Challenges and Opportunities Facing Puerto Rico"*

The Subcommittee will hold an oversight hearing on *"Exploring Energy Challenges and Opportunities Facing Puerto Rico"* on **Tuesday, January 12, 2016 at 10:00 a.m. in Room 1324 Longworth House Office Building.** This hearing will focus on the circumstances leading to the current financial crisis faced by the Puerto Rico Electric Power Authority (PREPA).

Policy Overview

- PREPA currently owes more than **$9 billion** in outstanding debt. This debt has arisen due to PREPA's reliance on outdated energy infrastructure, contributions in lieu of taxes that have provided free electricity to approximately 20% of PREPA's customers, and workplace deficiencies within PREPA.

- PREPA's current rate structure has disincentivized modernization and upgrades to both transmission and generation facilities. Because PREPA's profit increases are linked to fuel cost increases, becoming more efficient would result in decreased profitability.

- Contributions in lieu of taxes have been mishandled by PREPA, causing hundreds of millions of dollars to go uncollected over the past decades. Furthermore, PREPA has experienced an extremely high rate of energy theft, with **8% of electricity produced stolen** in 2010.

- The organizational structure of PREPA has promoted bureaucracy and politics over a meritocracy, while providing benefits that are untenable for PREPA to maintain as it seeks financial solvency.

Witnesses Invited

Ms. Lisa Donahue
Managing Director, AlixPartners
Serving as Chief Restructuring Officer, Puerto Rico Electric Power Authority
New York, New York

Mr. Josen Rossi
President, Puerto Rico Institute of Competitiveness and Sustainability
Chairman of the Board, AIREKO
Caguas, Puerto Rico

Mr. Jorge San Miguel
Chair, Environmental Law, Energy & Land Use
Ferraiuoli LLC
San Juan, Puerto Rico

Mr. Jaime L Sanabria Hernández
Co-President & General Manager for Finance & Administration
EcoEléctrica, L. P.
Peñuelas, Puerto Rico

Mr. Carlos Rivera Vélez, Ph.D., PE
Chairman of the Board
Puerto Rico Manufacturers Association
Añasco, Puerto Rico

<u>Background</u>

The Puerto Rico Electric Power Authority (PREPA) operates as the public utility for Puerto Rico. Statutorily established in 1941, PREPA's primary purpose to provide electricity to the entirety of Puerto Rico was "substantially completed in 1981."[1] Additionally, the Puerto Rican legislature granted PREPA broad authority to "determine, fix, alter, change and collect reasonable rates, fees, rentals, and other charges for the use of installations of the Authority, or for electric power services."[2] This grant of authority did not include an independent regulatory component, and therefore, PREPA has been permitted to act as a self-regulated monopoly, establishing its own rates without any oversight or transparency.[3] This lack of accountability has resulted in PREPA facing a financial crisis – now owing more than $9 billion in debt.[4]

This debt has accumulated despite Puerto Rico having one of the highest costs per kilowatt-hour (kWh) for electricity within the United States – residential customers pay approximately 50% more than the national average, while commercial and industrial users pay

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[1] Puerto Rico Act 57-2014, "Statement of Motives."
[2] Puerto Rico Act 83-1941, at § 6(l).
[3] Puerto Rico Act 57-2014, "Statement of Motives."
[4] National Public Radio, Power Problems: Puerto Rico's Electric Utility Faces Crippling Debt, May 7, 2015, *available at* http://www.npr.org/2015/05/07/403291009/power-problems-puerto-ricos-electric-utility-faces-crippling-debt.

twice as much.[5] These costs of energy have driven business from Puerto Rico, as manufacturers have identified the "cost and availability of energy" as "the most serious issue" they face.[6]

In response to the debt crisis, Puerto Rico passed Act 57 on June 18, 2014.[7] This act established an Energy Commission to oversee future development of PREPA's rate structure, and ordered the restructuring of the utility.[8] Act 57 represented Puerto Rico's response to PREPA's financial crisis. However, it remains unclear what effect, if any, the act will have on alleviating the existing crisis.

Although there are a myriad of factors that led to PREPA's financial crisis, three key issues are: 1) the rate structure operated by PREPA disincentivizes transmission upgrades; 2) PREPA's outdated oil plants are inefficient, costly, and environmentally noncompliant with forthcoming regulations; and 3) operational issues have promoted dangerous working conditions, and a management system based on politics rather than merit.

<u>The Rate Structure PREPA has Operated under is Counter-Intuitive and has Disincentivized Transmission Upgrades</u>

For PREPA customers, two line items are represented on their bill. The first, the "base rate charge," is comprised of the energy charge, customer charge, and demand charge, and is intended to recover the following costs: operations and maintenance, general and administrative, depreciation, interest, and contributions in lieu of taxes (CILT). [9] To change the base rate, PREPA must initiate a public hearing – a politically difficult move.[10] The second component, the "adjustment charge" incorporates the cost of fuel, and purchased power from third parties.[11] To PREPA customers, the "adjustment charge" represents a volatile line item that rises and falls with the cost of energy.

The most dubious item captured by the "base rate charge" is the payment of CILT. The purpose of CILT is to compensate "municipalities for foregone property tax revenues," and has historically been extended to private entities housed within municipal structures.[12] Under the law, PREPA is required to collect revenues for power consumed by municipalities and then redistribute to the municipalities the greater of: 1) 20% of net revenues, 2) the actual cost of electric power consumed, or 3) the average of CILT paid over the past five years.[13] In practice, however, PREPA does not collect from the municipalities; instead opting to offset the amount

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[5] U.S. Energy Information Administration, Puerto Rico Territory Energy Profile, https://www.eia.gov/state/print.cfm?sid=RQ.
[6] *See e.g.* Steven Mufson, Is it Lights out for Puerto Rico, Wash. Post, July 25, 2015, *available at* https://www.washingtonpost.com/business/economy/is-it-lights-out-for-puerto-rico/2015/07/24/61c6e51c-29a7-11e5-a250-42bd812efc09_story.html.
[7] Puerto Rico Act 57-2014, "Statement of Motives."
[8] *See generally* Puerto Rico Act 57-2014.
[9] Alvarez & Marsal, Presentation to the Government Development Bank of Puerto Rico, at 41 (2012).
[10] Puerto Rico Act 83-1941, at § 6(l).
[11] Alvarez & Marsal, Presentation to the Government Development Bank of Puerto Rico, at 36 (2012).
[12] *Id.* at 38.
[13] Puerto Rico Act 83-1941 § 22(b)(2).

the municipalities owe from accounts receivable.[14] These uncollected revenues account for 17 to 20% of PREPA's total produced electricity.[15]

Generally, PREPA must adjust the "base rate charge" to ensure it covers both its debt service, projected capital needs, and basic operational costs, including CILT payments. However, PREPA has not adjusted the "base rate charge" since 1989.[16] Thus, for 27 years it has been unable to properly recover these basic costs.

Aside from base rate adjustments, PREPA is provided one additional opportunity to recover the cost of CILT payments via an **11% markup** on the "adjustment charge."[17] As discussed, the "adjustment charge" is highly volatile and dependent on the cost of fuel. Thus, PREPA "benefits financially when fuel costs increase and fares worse when those costs decline."[18] For instance, when oil prices are $100 per barrel, PREPA receives $11 per the 11% markup, but when oil is at $50, PREPA only receives $5.50. This business structure is counter-intuitive, as it disincentivizes PREPA from moving to more efficient and cheaper fuel sources.

An additional consequence of the rate structure operated by PREPA is that any fuel savings accomplished are subsequently passed onto the ratepayer, rather than debt repayment. Thus, the massive fuel savings achieved by PREPA in the past year due to the rapid decrease in oil prices have solely been to the benefit of the ratepayer, instead of the creditors who bear the burden of PREPA's debt.

PREPA's failure to update the base rate charge has exacerbated the financial crisis, as basic operational costs have gone uncollected for decades, while the rate structure itself has discouraged necessary efficiency upgrades for PREPA's infrastructure.

<u>PREPA's Outdated Oil Systems are Inefficient, Costly and Non-Compliant with Environmental Regulations</u>

In accomplishing its initial goal of ensuring electricity for Puerto Rico, PREPA built a number of oil-fired plants, which continue to have a major role in the production of energy for the island. As of 2012, over 80% of PREPA's capacity was "installed in 1977 or earlier."[19] This outdated infrastructure is inefficient and costly, as well as non-compliant with environmental regulations.

As established, PREPA has been disincentivized the past few decades from making capital improvements that would have lowered fuel costs, while promoting reliability and efficiency. The decades of neglect have led to a modernization cost estimated at $4.67 billion to

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[14] Alvarez & Marsal, Presentation to the Government Development Bank of Puerto Rico at 38 (2012).
[15] *See id.* at 39.
[16] NewOak, PREPA: "It's All About that Base," March 26, 2015, *available at* https://newoak.com/municipal-insights/prepa-base/.
[17] Alvarez & Marsal, Presentation to the Government Development Bank of Puerto Rico, at 36.
[18] *Id.* at 40.
[19] *Id.* at 20.

$5.72 billion over the next 20 years, of which nearly $2 billion is comprised of crucial and recommended transmission upgrades.[20]

Additionally, PREPA's outdated infrastructure faces two major environmental regulations: the Environmental Protection Agency's (EPA) Mercury and Air Toxic Standards (MATS), and Puerto Rico's Renewable Portfolio Standard (RPS).

MATS compliance represents one of the largest hurdles PREPA currently faces in modernizing its infrastructure. Of PREPA's 2,892 megawatts (MW) produced by steam units, only 820 MW are currently in compliance with MATS. Hence, PREPA will need to retrofit or retire nearly 2,100 MW of capacity. A key piece for PREPA's plan to comply with MATS depends on the development of the Aguirre Offshore Liquefied Natural Gas (LNG) facility.[21] The development of this facility would provide PREPA with 900 MW of additional MATS compliant generation, and would greatly offset the need to retrofit the remaining generation units. However, the Aguirre facility's future is contingent on financing being made available, and therefore, tenuous because of PREPA's financial crisis. Without approval and construction of the Aguirre facility, PREPA's ability to comply with MATS is doubtful.

Under Puerto Rico's RPS, PREPA is required by 2035 to have 20% renewable generation; however, PREPA has indicated that 20% integration by 2035 is unrealistic without the necessary modernization of PREPA's existing generation fleet due to the curtailment of renewable energy that would otherwise be produced.[22] Curtailment is "energy that the renewable projects could have produced but cannot be safely accepted in the system. . . This [produced] energy has to be paid . . . and hence has a cost."[23] Essentially, PREPA alleges that its outdated infrastructure cannot handle the rapid development of renewable resources over the next twenty years, and therefore compliance with RPS is improbable.

Although PREPA's outlook is grim, there are opportunities to help diversify PREPA's portfolio of electricity through the utilization of Power Purchase Operating Agreements (PPOA). These agreements between PREPA and a third party allow PREPA to purchase electricity from newer generation units. Currently, PREPA has two PPOAs, one with EcoEléctrica, for the purchase of electricity generated by LNG, and one with AES, for energy produced from coal. Combined, these PPOAs provide PREPA with 961 MW.[24] These private entities have much greater latitude to negotiate contracts with fuel suppliers, are not constrained by debilitating labor agreements, and promote efficient systems. Thus, PPOAs assist PREPA in providing reliable, and efficient energy to the island.

Due to the disincentive to invest in infrastructure upgrades, PREPA now finds itself needing billions of dollars in order to properly comply with immediate and pending

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[20] Siemens, Integrated Resources Plan *prepared for* Puerto Rico Electric Power Authority, Volume I, 6-10, 7-13 (2015).
[21] *See Id. at* Volume I, 6-11
[22] Siemens, Integrated Resources Plan *prepared for* Puerto Rico Electric Power Authority, Volume I, 5-3 (2015).
[23] *Id*.
[24] Siemens, Volume I, Executive Summary.

environmental requirements, as well as to develop an efficient and modern grid. However, increased use of PPOAs would encourage the development of private generation on the island, which would increase efficiency and decrease costs.

The Workplace Culture and Operations within PREPA Encourages Indifference

Act 57 recognized that "PREPA require[d] a thorough reform in its government, mission, and the manner in which it operates."[25] Indeed, in her role as Chief Restructuring Officer for PREPA, Lisa Donahue has identified operational and cultural segments that must be addressed for PREPA to become a functional organization. [26]

As discussed above, PREPA has failed to properly collect from municipal accounts for decades. This municipal backlog recently **exceeded $750 million**.[27] PREPA's failure to collect has also extended beyond just municipal accounts, as PREPA has not pursued collection mechanisms for accounts of any type that are "severely past due."[28] Furthermore, PREPA has experienced unacceptable theft of electricity produced, with reportedly **8% being stolen** in 2010.[29] Failure to collect past due accounts and to prevent theft has greatly hindered PREPA's finances, and has promoted a culture in which electric customers do not necessarily believe they must pay for electric service.

The organizational structure of PREPA has promoted bureaucracy and politics over a meritocracy. Indeed, many "management and other strategic decisions . . . have been based on political considerations rather than best practices or sound business judgment."[30] For instance, each new Puerto Rican administration has "replaced about 200 of [PREPA's] top managers upon taking office" since 2001.[31] This has left the administrators of PREPA with weak management skills, and an inability to make quick decisions.[32] Due to this politicization, there has existed no path to leadership within PREPA, and has encouraged an environment without individual accountability or goals.

Further demonstrating the poor working culture found within PREPA is the abysmal safety record. In the past 10 years, PREPA "has had 15 fatalities and approximately 14,000

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[25] Puerto Rico Act 57-2014, "Statement of Motives."
[26] AlixPartners, Update on Transformation of PREPA, Presentation to the Governing Board, Dec. 15 2015.
[27] FTI Capital Advisors, Accounts Receivable and CILT Report, at 9, *available at* http://www.aeepr.com/Docs/restructuracion/PREPA%20AR%20and%20CILT%20Report%20Final.pdf.
[28] AlixPartners, Update on Transformation of PREPA, Presentation to the Governing Board, Dec. 15 2015. *See e.g.* National Public Radio, Power Problems: Puerto Rico's Electric Utility Faces Crippling Debt, May 7, 2015 ("The fearless 60-year-old now owes the power company nearly $10,000 and has no intention of paying" . . . "Many in Puerto Rico share Vazquez's dissatisfaction with the island's state-owned power company").
[29] Standard & Poor's, Global Credit Portal: Puerto Rico Electric Power Authority; Retail Electric, March 26, 2012, *available at* http://www.aeepr.com/INVESTORS/DOCS/Financial%20Information/Rating%20Report/getPDFdo%20articlePDF%20(2).pdf.
[30] Lisa Donahue, Statement before the Puerto Rican Senate, April 14, 2015.
[31] Alex Nussbaum, Oil, Politics Pave Path Toward Default in Puerto Rico, Bloomberg, May 12, 2015 (citing Lisa Donahue before the Puerto Rican Senate).
[32] AlixPartners, Update on Transformation of PREPA, Presentation to the Governing Board, Dec. 15 2015.

safety incidents."[33] For a company of 6,800 employees, those statistics reflect an incident rate greater than two times per person employed.

Finally, PREPA provides financially untenable benefits to its employees. For instance, PREPA employees have approximately 50 days of paid leave, and are the beneficiaries of the highest health benefit costs of all government entities in Puerto Rico. Furthermore, rigid pro-labor laws promote absenteeism of employees and low productivity.[34]

Although Act 57 sought to address many of these concerns through PREPA's restructuring, the extent to which PREPA will be able to transform is questionable, as many of these issues have become entrenched within PREPA's workplace.

PREPA's Recent Financial Restructuring Agreement Provides Breathing Room but is Contingent on a Number of Third Party Actors

After months of negotiations, PREPA reached a restructuring agreement with 70% of its bondholders on December 23, 2015.[35] This agreement provides PREPA with five-year debt service relief of over $700 million, a principal debt reduction of more than $600 million, and a refund to PREPA of $115 million of the January 1, 2016 interest payment.[36]

However, this plan is contingent upon a number of outside actors meeting specific deadlines. First, the legislature must pass a securitization agreement that would add an extra line item to PREPA's customers' bills. This legislation must be adopted by January 22, 2016. After that, PREPA must initiate a rate approval process before the Energy Commission by March 22, 2016 with said rate required to be approved by June 10, 2016. If one of these events fails to occur, the restructuring agreement is "terminated."[37] Furthermore, it remains unclear what will occur with the remaining 30% of bondholders who did not sign onto the financial restructuring agreement.

[33] Lisa Donahue, Testimony in Support of PREPA Revitalization Act before the Puerto Rico House of Representatives, Nov. 11, 2015.
[34] AlixPartners, Update on Transformation of PREPA, Presentation to the Governing Board, Dec. 15 2015.
[35] Reuters, BRIEF-PREPA and creditors agree to financial restructuring plan, Dec. 23, 2015, *available at* http://www.reuters.com/article/idUSB8N14700Y20151224.
[36] PREPA, PREPA Agrees to Financial Restructuring Plan with Major Financial Creditors, Dec. 24. 2015, *available at* http://www.aeepr.com/Docs/PREPA_RSA.pdf.
[37] Amended and Restated Restructuring Support Agreement, at 32, Dec. 23, 2015.