

Privatization Bill Will Not Solve Puerto Rico's Electricity Crisis



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Executive Summary

In January 2018, Puerto Rico Governor Ricardo Rosselló announced his intention to privatize the Puerto Rico Electric Power Authority.

The Puerto Rico Electrical System Transformation Act was introduced in the Puerto Rico legislature in March to establish the legal framework for this privatization (P.S. 860 in the Senate and P.C. 1481 in the Assembly). The bill authorizes PREPA and the Public Private Partnership Authority (“P3 Authority”) to undertake a series of contracts to sell or lease PREPA’s generation, transmission and distribution assets to outside parties. The bill’s stated intent is to begin “a process through which our energy system will be transformed into a modern, sustainable, reliable, efficient, cost-effective and resilient one... through the creation of Public-Private Partnerships.”

We recommend the legislature reject this bill. While PREPA’s management requires reform, this can and should be done without privatizing PREPA’s assets.

The proposed law will not achieve its goal of modernizing Puerto Rico’s electrical system because it does not address the fundamental drivers of the high price of electricity on the Island – over-reliance on fossil fuels, high debt burden, decreasing demand, mismanagement and ongoing political interference in the operations of the electrical system. Instead, the bill establishes a mechanism to sell PREPA’s assets via politically driven contracts -- rich in fees for lawyers, accountants, consultants and advisors.

Specific flaws of the legislation include:

- It eliminates the requirement for any project to conform to Puerto Rico’s legally established energy policy priorities or regulation. The proposed bill effectively cancels the Island’s legislatively mandated Integrated Resource Plan and renewable energy mandate. It allows for natural gas, coal, incineration and renewable energy projects to be developed without establishing priorities, leaving these decisions up to PREPA and the P3 Authority. Because of the rapidly declining electrical demand in Puerto Rico, this process is likely to result in an overbuilding of the electrical system that the economy cannot afford.
- It does not address the need for greater investment in microgrids and distributed generation to improve electrical system reliability. And, by eliminating any independent oversight of the privatization contracts, it eviscerates any public policy to promote these technologies.
- It offers no direction regarding electricity affordability or competitiveness. Contract prices are not required to be regulated, which means that a major component of customer rates will be initially established and then governed by a vague contract, lacking in transparency and subject only to the political determinations of the government of Puerto Rico.
- It is silent on PREPA’s \$9 billion in debt and does not require the privatization transactions to align with the budget and debt goals of either PREPA or the Commonwealth. This failure means that the governor’s overall debt plan for the Commonwealth lacks internal discipline.

- It creates numerous red flags for abuse and political interference in the contracting process. PREPA and the P3 Authority, the two key agencies that select projects, negotiate contracts, approve deals and monitor the operations of future assets, are effectively controlled by the governor. The contracting system envisioned for these transactions does not require competitive bidding or an independent, rigorous review.
- The bill exposes PREPA's employees to an uncertain future. There are no affirmative commitments to honor collective bargaining agreements, right of first refusal for existing employees with new owners, job protections, or labor representation. The bill excludes PREPA's labor organizations from oversight and partnership committees. It allows the revenue derived from the asset sales to be used to defray current pension liabilities – but there is no mandate to fulfill pension obligations, no revenue benchmarks, and no time requirements.

In short, the bill fails to set priorities for renewable energy, provide sound energy planning, ensure affordable rates, establish sound debt management policies, restore integrity to the contracting process, protect existing employees and attract new professionals, or improve transparency and oversight.

In some respects, the privatization model being proposed for Puerto Rico resembles the privatization of the Long Island Power Authority. In comparing PREPA to the LIPA example, however, IEEFA finds that the LIPA model will not work in Puerto Rico without stronger regulatory oversight.

IEEFA recommends that any proposal for transforming PREPA adhere to the following principles:

- A commitment to sound energy planning that takes into account the cost-effectiveness of renewable energy, energy efficiency and demand response in Puerto Rico; the need to retire outdated oil-fired power plants; the potential for microgrids and rooftop solar; and the declining electricity demand.
- Elimination of PREPA's legacy debt.
- Strong, independent regulation.
- Transparent and accountable contracting processes.
- Inclusion of labor unions as an essential partner in the transformation of the electrical system.
- An end to political interference in the electrical system, and transparent and accountable governance.

Bad political deals masquerading as energy policy are what brought PREPA to ruin. This proposed law has all the signs of repeating the past and represents a major setback for Puerto Rico's effort to modernize its electrical system and boost its economy.

Proposed Legislation Would Establish the Legal Framework for Privatizing PREPA

The proposed Puerto Rico Electrical System Transformation Act would establish the legal authority and processes to implement Governor Rosselló's plan to privatize the Puerto Rico Electric Power Authority.¹ The bill sets the goal of, via privatization, beginning “a process through which our energy system will be transformed into a modern, sustainable, reliable, efficient, cost-effective and resilient one ... through the creation of Public-Private Partnerships.”² The bill expands the usual definition of “public-private partnership” to include the sale of PREPA's assets to a private third party.

The bill would give the existing Puerto Rico Public Private Partnership Authority (“P3 Authority”), together with PREPA³, the ability to carry out privatization transactions. The P3 Authority was established in 2009 as an affiliate of the Government Development Bank of Puerto Rico to combine public and private investment for Puerto Rico infrastructure projects.⁴ Because of the bank's insolvency, the Puerto Rico Fiscal Agency and Financial Advisory Authority (FAFAA) has since replaced the bank's role in governing the P3 Authority, with the president of FAFAA chairing the board of the P3 Authority. The P3 Authority selects government projects for possible partnerships; evaluates partnership proposals; negotiates contracts; and supervises the partnerships.⁵ The P3 Authority is required to use competitive bidding with certain exceptions (if an RFP does not result in multiple bids, if the P3 Authority receives unsolicited proposals, or if an RFP process is found to be “onerous, unreasonable or impractical”)⁶. There is no requirement for external audits of contracts.

Under the proposed law, the P3 Authority would use its existing processes to solicit and evaluate bids for PREPA's assets. PREPA employees in the privatized portions of the system who wish to continue working in the public sector would be reassigned by the government.⁷ The bill would also allow, but does not require, any proceeds raised from privatization to be used to recapitalize PREPA's underfunded retirement system⁸.

The privatization transactions would be carried out without the regulatory oversight of the Puerto Rico Energy Commission and without being subject to the commission-

¹ Governor Rosselló's January privatization announcement called for selling off PREPA's power plants and leasing the transmission and distribution system via a private concession. (“Ricardo Rosselló announced a privatization model for PREPA,” *El Nuevo Día*, January 22, 2018).

² Puerto Rico Electrical System Transformation Act, Statement of Motives.

³ The bill actually refers to “PREPA or the Government of Puerto Rico” entering into the privatization transactions, perhaps under the assumption that PREPA may cease to exist at some point. It is unclear which entity within the Government of Puerto Rico would be the counterparty to transactions under this scenario. (Puerto Rico Electrical System Transformation Act, Section 2(g)).

⁴ Its accomplishments include a private concession arrangement to operate two highways and the leasing of Puerto Rico's main airport to a private company.

⁵ For each potential partnership, the P3 Authority creates a Partnership Committee comprised of (a) the executive director of FAFAA or a designee; (b) a representative of the public agency involved in the project; (c) a member of the board of the relevant public agency; and (d) two members of any government entity with relevant expertise. The Partnership Committee evaluates proposals and negotiates the contracts. (See Act 29-2009)

⁶ Act 29-2009, Section 9(b)

⁷ Puerto Rico Electrical System Transformation Act, Section 13.

⁸ Puerto Rico Electrical System Transformation Act, Section 7.

approved Integrated Resource Plan (the long-term energy plan for PREPA).⁹ The Puerto Rico Energy Commission was established in 2014 as “an independent government entity in charge of regulating, overseeing, and ensuring compliance with the public policy on energy of the Commonwealth of Puerto Rico.”¹⁰ This includes regulating PREPA’s long-term energy plans, ensuring just and reasonable rates, and developing regulations to ensure reliable electric service. With this mandate, the commission has conducted the first-ever integrated resource planning and first-ever rate case for PREPA; ordered the renegotiation of imprudent contracts; rejected key elements of PREPA’s long-term capital plan and called for greater reliance on renewable energy and energy efficiency; launched an investigation into PREPA’s operational performance; and is developing the first microgrid regulation for Puerto Rico.

There would be little role for either the commission or the congressionally established Financial Oversight and Management Board under the proposed privatization law. The commission would be authorized to oversee compliance with privatization contracts, but not to alter the contracts.¹¹ The FOMB would not have oversight over the contract issuance or operation. PREPA and the P3 Authority would be permitted to make selected and discretionary financial disclosures to the Board.¹²

The bill has sparked intense debate in Puerto Rico. The text of the legislation includes a list of supporters of transforming PREPA. But the privatization proposal has generated a large number of opponents too (see Appendix II).¹³

The Privatization Bill Would Not Resolve the Fundamental Challenges Facing Puerto Rico’s Electric System

Although the proposed privatization legislation promises to turn Puerto Rico’s electrical system “into a modern, sustainable, reliable, efficient, cost-effective and resilient one,” the bill would in fact do very little to address the fundamental barriers that have impeded this transformation to date. These barriers include: over-reliance on fossil fuels; PREPA’s high debt level; rapid fall in electrical demand; and political interference in the electric system. Some of these areas are simply unaddressed; others addressed in the proposed legislation would take Puerto Rico’s electric system in the wrong direction.

⁹ Specifically, PREPA is authorized to carry out the transactions “without having to comply with any process, requirement, approval, or review of the Puerto Rico Energy Commission or any other Puerto Rico regulatory commission having jurisdiction over PREPA or the Puerto Rico energy sector, and without having to comply with, or otherwise being subject to, the provisions of any Integrated Resource Plan.” (Puerto Rico Electrical System Transformation Act, Section 8)

¹⁰ Act 57-2014.

¹¹ Puerto Rico Electrical System Transformation Act, Section 8

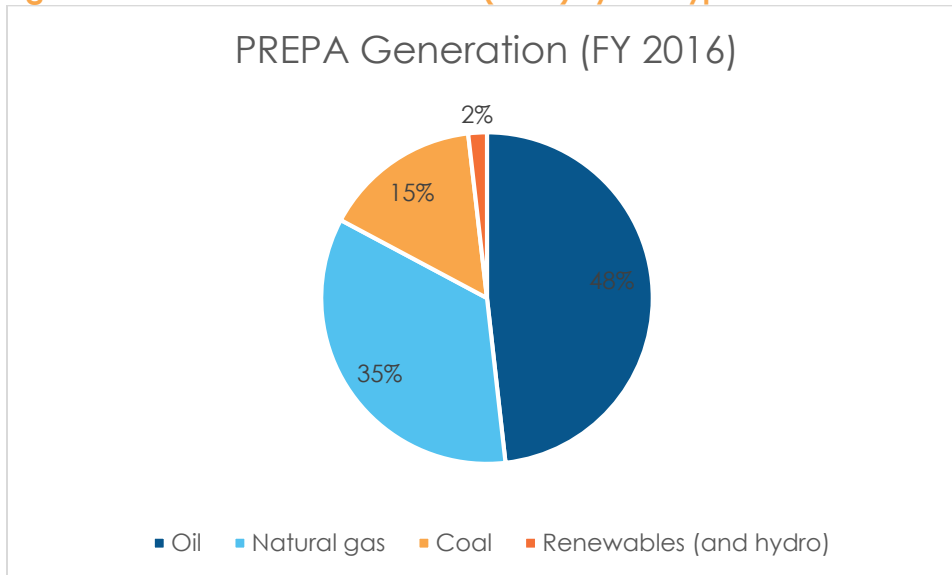
¹² Puerto Rico Electrical System Transformation Act, Section 6(b)

¹³ See Appendix II

The Privatization Bill Would Effectively Destroy Puerto Rico’s Energy Planning Process and Impede the Transition to Renewable Energy

Figure 1 shows PREPA's energy generation mix as of 2016. Sources include four major power generation facilities owned and operated by PREPA (at Palo Seco, San Juan, Aguirre and Costa Sur), several smaller PREPA-owned power plants, and power purchase agreements with coal, natural gas, and renewable energy facilities. In addition, and not included in Figure 1, Puerto Rico had approximately 136 MW of distributed rooftop solar in 2016, comprising 1% of total electricity generation.

Figure 1. PREPA's FY 2016 Generation (MWh) by Fuel Type.



In fiscal year 2017, PREPA's fuel budget (oil and a small amount of natural gas) totaled \$1.2 billion, or 46% of PREPA's total operating expenses. Its purchased power budget (predominantly to pay for the output of natural gas and coal plants) comprised another 28% of the total operating budget.¹⁴

The cost of fuel alone for PREPA's four oil-fired power plants was 8-9 cents/kWh in 2016 (and operation & maintenance costs add an additional 0.5 to 2 cents/kWh).¹⁵ These costs are significantly higher than the cost of utility-scale solar energy contracts signed by mainland US utilities.¹⁶ The utility-scale solar contracts signed by PREPA are also high-

¹⁴ PREPA Operations Report for June 2017, p. 21, online at

<https://www.aeepr.com/INVESTORS/DOCS/Financial%20Information/Monthly%20Reports/2017/June%202017.pdf>

¹⁵ FY 2016 fuel costs from Puerto Rico Energy Commission Case CEPR-AP-2015-0001, Request for Information CEPR-PC-01-13, FY 2014 costs for O&M from "Other information required in the regulation on Integrated Resource Plan for the Puerto Rico Electric Power Authority," 2015,

<https://www.aeepr.com/Docs/Ley57/Other%20Information%20Required%20for%20the%20Regulation%20of%20the%20IRP%20for%20PREPA%20July%202015.pdf>

¹⁶ Since 2015, utility-scale solar power purchase agreements in the mainland have commonly been priced at or below 5 cents/kWh. (See: M. Bolinger, J. Seel, and K. LaCommare, "Utility-Scale Solar 2016," Lawrence Berkeley National Laboratory, September 2017).

priced (18 to 20 cents/kWh¹⁷); the Puerto Rico Energy Commission has noted that these contracts include an unreasonable profit for renewable energy developers and ordered the renegotiation of existing (but not yet operational) contracts that are not cost-effective.¹⁸

PREPA's over-reliance on oil and natural gas is one of the drivers of Puerto Rico's high electric rates. Yet PREPA has consistently prioritized continued fossil fuel development over renewable energy development. In its first integrated resource plan submitted to the Puerto Rico Energy Commission in 2015, PREPA proposed a conversion of much of the island's centralized generation system from oil to natural gas. Under PREPA's proposal, PREPA would not achieve compliance with the legislatively mandated target of 20% renewable energy generation by 2035. The commission rejected PREPA's submission and approved a modified plan for PREPA that called for greater emphasis on energy efficiency, demand response and renewable energy. The commission did not approve PREPA's plan to build a second liquefied natural gas (LNG) import terminal, finding that PREPA's economic analysis did not provide sufficient justification for this approximately \$400 million capital investment.¹⁹

PREPA's most recent fiscal plan acknowledged the over-reliance on fossil fuels, and the opportunities available from cost-effective energy efficiency and new, competitively bid renewable energy contracts.²⁰ However, the fiscal plan still calls for the construction of a second LNG import terminal along the south coast of Puerto Rico and for the implementation of the capital planning priorities from PREPA's rejected 2015 IRP.²¹

Distributed renewable energy (microgrids and rooftop solar) have received increased attention in Puerto Rico after Hurricane Maria. The economic devastation wrought by the 2017 hurricanes has made clear the value of reliable power and the risks of relying on PREPA's south-to-north transmission system.

Shifting Puerto Rico's energy mix toward greater reliance on renewable energy and distributed generation requires coordinated policy and long-term energy planning. The current integrated resource planning process is required to coordinate the timing of generation retirements with necessary transmission upgrades and investment in renewable energy facilities. In addition, greater reliance on renewable energy will require complementary policies, including the promotion of demand response in order to shift demand from its current evening peak to the daytime as well as the development of energy storage (so that renewable energy can contribute towards meeting peak demand).

The privatization bill would not facilitate this transformation. The bill exempts the privatization transactions from compliance with Puerto Rico's integrated resource plan and from regulation by the Puerto Rico Energy Commission in general. This means that (a) the sale of PREPA's oil- and natural gas-fired power plants to various third parties

¹⁷ PREPA IRP Volume 1, Table 4-2, Case CEPR-AP-2015-0002, August 17, 2015.

¹⁸ Puerto Rico Energy Commission, Final Order, Case CEPR-AP-2015-0002, September 23, 2016, paragraph 299.

¹⁹ The Aguirre Offshore Gas Port also carries the additional cost of hiring a Floating Storage and Regasification Unit vessel. A decision to move forward with the Aguirre Offshore Gas Port would trigger a 15-year contract for this vessel with a net present value of \$422 million. (Source: Expert Report of Jeremy Fisher and Ariel Horowitz, Case CEPR-AP-2015-0001, November 23, 2016, p. 117)

²⁰ PREPA March 21, 2018 Fiscal Plan at p. 56.

²¹ PREPA March 21, 2018 Fiscal Plan at p. 46.

would leave it to those third parties to decide on plant retirements; (b) private developers could conceivably build additional fossil fuel projects or incinerators that are not included in the integrated resource plan and would crowd out more cost-effective renewable energy investments; and (c) any contracts for private operation or ownership of the transmission and distribution system may not require the concessionaire to offer the energy efficiency and demand response programs that would facilitate greater deployment of renewable energy.

This proposal contradicts PREPA's most recent fiscal plan, submitted to the FOMB on March 21, 2018. The fiscal plan recognizes the importance of integrated resource planning, even as PREPA contemplates privatization of the electrical system, and states that PREPA will complete its next integrated resource plan by the end of September 2018.²² If PREPA does complete such a plan, under the proposed privatization legislation, the P3 Authority would legally be allowed to disregard it in selecting privatization projects.

The legislation ignores the challenge posed by declining energy demand and the need for sound energy planning to avoid stranded capital investment in the generation system. Another fundamental challenge facing Puerto Rico's electrical system is declining electrical demand. This challenge is noted in the privatization bill, which explains that "over the past 10 years, the demand for energy on the Island has decreased by 18% and the reduction has reached 48% in the industrial sector."²³ Demand reduction is expected to continue for the next several years and has been exacerbated by the population loss due to Hurricane Maria. PREPA's fiscal plan analyzes scenarios contemplating between 15% and 32% loss of sales by FY 2023.²⁴

As demand declines, the fixed costs of electricity generation will be spread over fewer customers, putting upward pressure on rates.

In this situation of highly uncertain and declining electricity demand, investments in large-scale centralized generation facilities carry the additional risk of overbuilding, i.e. that the electricity demand may not materialize to support the new investment. This is why IEEFA has advocated strategically-timed retirements of existing generation facilities and the development of smaller generation facilities as needed to replace them.²⁵

The privatization bill would not facilitate the rational deployment of capital into the generation system. As explained above, by exempting the privatization transactions from the integrated resource planning process and commission oversight, the bill would not allow for the necessary coordination to minimize overbuilding in an environment of declining demand.

Additionally, in an environment of declining demand, PREPA has no incentive to encourage the development of distributed (rooftop) solar and microgrids, which lead to greater loss of sales from PREPA. Strategic citing or upgrading of transmission and distribution lines can be an important component of promoting renewable energy and

²² PREPA March 21, 2018 Fiscal Plan at p. 54. This should not be construed as support for the Puerto Rico Energy Commission, which PREPA attacks at p. 60 for allegedly over-stepping its regulatory authority.

²³ Puerto Rico Electrical System Transformation Act, Statement of Motives

²⁴ PREPA March 21, 2018 Fiscal Plan at p. 45.

²⁵ T. Torres and C. Kunkel, "Toward electrical system sustainability in Puerto Rico," Institute for Energy Economics and Financial Analysis and Instituto de Competitividad y Sostenibilidad Economica de Puerto Rico, March 2018.

reluctance to be the “first-mover” who bears the costs of those upgrades can be a significant barrier to build out of renewables. Strong public policy is necessary to facilitate actions that promote the development of solar and microgrids to enhance system resiliency. This would likely be absent if the contract for a private concession to operate the transmission and distribution system is exempt from regulation.

The Bill Fails to Incorporate the Proposed Privatization Transactions Into an Overall Strategy for Debt Management

PREPA is \$9.26 billion in debt.²⁶ The debt issues are currently being addressed as part of a bankruptcy proceeding. Prior to the bankruptcy PREPA, PREC and the governor and Legislature of Puerto Rico agreed to a refinancing plan that committed ratepayers to pay 85% of the debt.

This plan was rejected by the FOMB in June 2017 because it “did not support the structural and operational reforms required to attract additional capital to PREPA that will enable its much-needed transformation.”²⁷ In other words, the ratepayers and economy of Puerto Rico could not produce enough income to pay for PREPA’s operation, new investment and its legacy debt. The energy commission’s 2016 hearings on the finances of PREPA proved that the impact of this proposed bond deal on rates would have been unsustainable and counterproductive to establishing a competitively priced electricity system. The FOMB recognized that a heavy legacy debt burden would drive high rates and crowd out the financial capability for new investment.

PREPA’s most recent fiscal plan acknowledges that PREPA does not have the money to pay its legacy debt, stating “funding debt service at any level will require a rate increase over current levels or other dedicated revenue stream.”²⁸

The privatization bill provides essentially no role to the FOMB, nor does it incorporate the proposed privatization transactions into an overall debt management strategy for PREPA. The privatization bill appears to contemplate no substantive input from FOMB. The statute makes provision for PREPA or the P3 Authority to “share” information²⁹ with FOMB at its own discretion or pursuant to a vaguely worded criterion of appropriateness of “public disclosure.” FOMB should have the right to all information as both PREPA and the P3 Authority are covered organizations and FOMB has overall responsibility for establishing uniform debt policy needed for the commonwealth as a whole to achieve market access.

The bill does not require alignment of these transactions with the budget and debt goals of either PREPA or the commonwealth. The failure of this legislation to acknowledge PREPA’s debt levels and offer policy guidance means that the governor’s overall debt plan for the commonwealth lacks internal discipline. This sends a weak message to the FOMB and other financial stakeholders. The bill also does not contain requirements for projects to establish revenue targets, policies on the use of resources

²⁶ PREPA March 21, 2018 Fiscal Plan at p. 50.

²⁷ “Oversight Board does not approve PREPA’s RSA,” Financial Oversight and Management Board, June 27, 2017, <https://juntasupervision.pr.gov/wp-content/uploads/wpfd/49/5953131baf086.pdf>

²⁸ PREPA March 21, 2018 Fiscal Plan at p. 28.

²⁹ Puerto Rico Electrical System Transformation Act, Section 6(b).

created by the transaction, ownership models that assure accountability or long term operational principles consistent with PREPA's of the commonwealth's budget priorities.

³⁰ In short, despite articulating the goal of a "cost-effective" energy system, the bill provides no strategy on how this goal is to be achieved.

The Bill Creates Uncertainty for Investors, Consumers and Labor

As explained above, one of the fundamental challenges facing PREPA is its inability to attract capital, a result of its insolvency. PREPA has been unable to access the capital markets since 2014.

The privatization bill perpetuates uncertainty for investors through a preemption provision that attempts to resolve conflicts between statutes:

"All of the provisions of Act No. 29-2009 shall apply to the PREPA Transactions, except as other provided herein. To the extent that any provision of this Act is inconsistent with any provision of Act 29-2009 ... Act No. 57-2014 [the law establishing the Puerto Rico Energy Commission] ... **the provisions of this Act shall prevail.**"³¹

Act No. 29-2009 contains limited requirements for public information disclosure,³² bidding requirements and reporting,³³ labor requirements,³⁴ rate setting³⁵ and future contract monitoring.³⁶ These provisions confer some rights to contracting parties and labor and disclosure provisions to enhance transparency. If PREPA or its successor or a governor deems these or any other provision of Act 29-2009 or other applicable statutes inconsistent with the privatization law, then the provisions of the existing statutes are preempted. The interrelation of the statutes also effectively eliminates any third-party, independent review.

The preemption provision of the proposed privatization law creates uncertainty for investors. The preemption leaves the transaction and ongoing monitoring and application of contract provisions to the policy priorities of the executive. The proposed privatization law effectively politicizes the major contracts that will govern the electricity grid in much the same way as it has always been politicized. The agreements would be

³⁰ All of these issues have been raised more generally by FOMB in their February 5, 2018 letter to PREPA regarding defects in its January 2018 fiscal plan. "The Board applauds the announcement of the plan to privatize generation and enter into a long-term concession for transmission and distribution. To build on the announcement and materials published to-date, the Proposed Plan must contain much greater detail, including specificity regarding ownership models and a timeline towards supporting the proposed transformational transaction. In addition, the Proposed Plan must address steps to improve governance leading up to a transition and describe a strategy for effective governance in a concession or similar arrangement." 2/5/18 letter to PREPA
<https://juntasupervision.pr.gov/index.php/en/documents/>

³¹ Puerto Rico Electricity System Transformation Act, Section 4.

³² Act 29-2009, Section 9(j).

³³ Act 29-2009, Sections 7,8,9 and 10.

³⁴ Act 29-2009, Section 10(g).

³⁵ Act 29-2009, Section 10(a) vi.

³⁶ Act 29-2009, Section 10 (d).

based on the shifting priorities of incumbent executives and the political direction of future administrations, rather than consistently applied professional standards.

The Privatization Bill Fails to Resolve the Problems of Mismanagement and Political Interference That Have Impeded the Transformation of PREPA

PREPA has been crippled by a long history of mismanagement and political interference. In its January 2017 rate case order, the Puerto Rico Energy Commission explained, “the culture and practices arising from 75 years of monopoly status, subject to continuous and short-sighted political interference but with no oversight by an objective, professional and apolitical commission, cannot be changed quickly ... [T]he damage caused by this culture and these practices – damage in the form of deep debt, a deteriorated physical system, demoralized workers, hesitant lenders, skeptical renewable developers and suffering consumers – will require everyone to bear some cost, and make some effort, to solve the problems.”³⁷ A PREPA witness explained in the rate case that: “Historically, there has been political pressure to not increase PREPA's rates in response to cost and investment needs and therefore PREPA has had to sacrifice needed capital expenditures in order to remain solvent”³⁸

The commission has been the most forthright about the problem of political interference in the electrical system. By contrast, it is a prominent feature of official documents from the commonwealth to sanitize fundamental analysis of Puerto Rico's and PREPA's fiscal plight. The current proposed law and the P3 statute exemplify this tendency. The failure to clearly and forcefully define and address the underlying problems that have been in the control of Puerto Rico's leadership undermines the potential for recovery and the confidence that will be required to gain market access.

The P3 statute attributes Puerto Rico's fiscal dilemma to:

“Weak spending controls, excess of employees, and the ineffective use of their resources. The fiscal problems of the Central Government have also contributed to the cash flow problem of public corporations, since the General Fund is not in a position to pay for the services rendered by these public corporations....Among the most prominent factors that have led to this crisis is the practice of overestimating the revenues of the General Fund so as not to cut back on spending, which has caused a continuous deficit in recent years”³⁹

The current proposed privatization law explains the root of PREPA's crisis as follows:

“Over the past ten years, the demand for energy on the Island has decreased by 18% and the reduction has reached 48% in the industrial sector. On the other hand, the main generation units are located in the south, while the highest energy demand is in the north. Moreover, we have a generation system 28 years older than the average in the electric power industry in the United States, and a dependence on oil that makes the system increasingly expensive, more polluting, and less efficient. In addition to this

³⁷ Puerto Rico Energy Commission Case CEPR-AP-2015-0001, Final Resolution and Order, January 10, 2017, p. 1.

³⁸ Response to Commission information request CEPR-SGH-01-08 in Case No. CEPR-AP-2015-0001.

³⁹ Act 29-2009, Statement of Motives

dismal scenario, the public corporation has had a historically deficient administration that has maintained a virtual monopoly on power generation in Puerto Rico. The maintenance of its infrastructure was practically abandoned over the past decade.”⁴⁰

These statements gloss over core questions, including:

- Why is the generation system 28 years older than average if PREPA borrowed \$9 billion in capital for physical plant investment?
- Who decided to divert the proceeds from bond issuances to other uses?
- Who kept Puerto Rico dependent on oil for decades? Who allowed the administration to be deficient?
- Who allowed a dysfunctional administrative apparatus to evolve out of what was once a New Deal achievement?

Recent actions taken by Governor Rosselló's administration indicate that the governor is not serious about changing what the Puerto Rico Energy Commission identified as a core governance problem: “continuous and short-sighted political interference” without independent, professional oversight. The Rosselló administration has worked aggressively to thwart any independent oversight of PREPA.

At the outset of Governor Rosselló's administration, the government successfully moved to repeal the authority of the Commission to Audit the Debt of Puerto Rico.⁴¹ This commission was established to investigate the management action taken regarding the Commonwealth's debt led to its bankrupt status. In an investigation of PREPA's 2013 bond issuance, the commission found widespread breaches of due diligence responsibility.⁴²

PREPA and the governor's office have also mounted a direct campaign against the Puerto Rico Energy Commission. Twice so far in 2018, Governor Rosselló has proposed legislation that would consolidate the commission with several other regulatory commissions and subsume it under a new regulatory entity whose commissioners would all be appointed by Rosselló. And PREPA has consistently maintained a posture hostile to PREC, including in its most recent fiscal plan.⁴³

Governor Rosselló has also failed to take appropriate action on the Whitefish scandal. Faced with an Island-wide blackout from the hurricanes, PREPA awarded a large reconstruction contract to a small company with a limited track record and no apparent capacity via a contract that awarded extremely high rates to contractors. The ensuing scandal caused the resignation of PREPA's executive director for reasons not yet known to the public. On October 27, 2017 the governor promised an audit by

⁴⁰ Puerto Rico Electrical System Transformation Act, Statement of Motives.

⁴¹ Valentín Ortiz, “Puerto Rico government repeals commission to audit debt,” Caribbean Business News, April 19, 2017.

⁴² “Pre-audit Survey Report: PREPA Power Revenue Bonds, Series 2013A”, Puerto Rico Commission for the Comprehensive Audit of the Public Credit, 2016, <http://sptpr.net/wp-content/uploads/2016/10/Second-Interim-Pre-Audit-Report-on-2013-PREPA-debt-emission-con-anejos.pdf>

⁴³ At p. 60 of the March 2018 Fiscal Plan, PREPA accuses the Energy Commission of attempting to assert “excessive operating control” over PREPA and not respecting PREPA's operational or budget needs.

the Puerto Rico Office of the Comptroller.⁴⁴ One small way the government could help restore some credibility to its recovery effort would be to expedite this audit. Five months later there is still no formal, public record of why this ill-conceived, highly suspicious contract was either awarded or cancelled.

Taken in the context of a longstanding penchant for political interference in hiring, rate setting, generation choices, excessive fees, egregious contracting processes and reckless bond issuances the privatization law continues the pattern of hostility to professional standards and external review. Puerto Rico's governmental history tells us that the system this bill proposes to create would remain based on political control which means all agreements would be subject to reinterpretation by existing and future governors and legislatures.

Specifically, the proposed privatization bill establishes a contract process and overall governance that is subject to political interference. The contracting is based on the model described in Act 29-2009, the law which created the P3 Authority. Under that model, the P3 Authority determines whether a privatization project is needed.⁴⁵ Contractor selection does not require competitive bidding if an RFP does not result in multiple bids, if the P3 Authority receives unsolicited proposals, or if an RFP process is deemed "onerous, unreasonable or impractical."⁴⁶ While it may be reasonable to waive competitive bidding in certain scenarios, this should be accompanied by stringent public disclosure requirements and independent oversight, neither of which is included in either Act 29-2009 or the proposed bill.

Contractor selection and contract negotiation is the responsibility of a Partnership Committee established by the P3 Authority. The committee is comprised of a representative chosen by the president of the Government Development Bank, a representative chosen by the head of the public agency, a member of the board of the public agency and two officials from any government entity chosen by the P3 Authority's board. In other words, for the proposed PREPA privatization, the P3 Authority and PREPA would control the entire process. Both the P3 Authority and PREPA are governed by boards that are under the control of the governor, as shown by Table 1 below.

The bill would limit participation in the decision making regarding the selection of contractors to executive agencies that are dominated by gubernatorial appointments. The bill would eliminate the role of PREC with regard to any oversight of the asset sales and also allow for the elimination of PREC's rate making, management oversight and audits if the Partnership Contract determines that there should be no regulatory review of its activities. PREC would have no authority over the terms of the privatization contracts, even though such contracts – which would set the terms at which electricity is sold by private electricity providers – would have a material impact on overall electric rates.

⁴⁴ O. Dorell, "Puerto Rico's Gov. Rosselló orders audit of Whitefish contract to fix power grid," USA Today, October 26, 2017 and S. Ebbs and E. Dooley, "PR gov. threatens 'hell to pay' as probes of Whitefish contract begin," ABC News, October 27, 2017.

⁴⁵ Act 29-2009, Section 6(b)

⁴⁶ Act 29-2009, Section 9(b)

Under such conditions the key elements for investment that are provided by an independent rate making system and are currently the domain of the regulatory commission — clear rules applied consistently over a period of time according to professional standards and with predictable outcomes —would be eviscerated.

Table 1. The privatization contracts would be controlled by boards and committees governed by gubernatorial appointees.

I.	Board/Position	Appointment by:
PREPA Board		
	Three Members	Governor
	Three Members	Governor, with Senate consent
	One Elected	Public Vote
	FAFAA Appointee	Executive Director of FAFFA
P3 Partnership Authority Board		
	Executive Director of FAFAA	Governor
	Secretary of Treasury	Governor
	President of Planning Board	Governor
	Public Interest	Governor, based on Senate recommendations
	Public Interest	Governor, based on House recommendations
P3 Partnership Committee		
	Executive Director of FAFAA	Governor
	Officer of PREPA	PREPA Executive Director
	Board Member of PREPA	Governor
	Member chosen by P3 Authority Board	P3 Authority Board (Governor)
	Member Chosen by P3 Authority Board	P3 Authority Board (Governor)

The Proposed Privatization Bill Undermines Employment Protections and Union Representation for Existing PREPA Employees

Public-private partnerships seek to combine the assets of existing enterprises in a new financing and business model to provide new or improved goods and services. The formal partnership is typically formed between private sector companies and governmental entities. Employees who perform construction and operational functions within affected companies and government agencies are assets in the transaction. They are partners.

In the case of PREPA, its employees are a major asset. According to the Statement of Motives in the privatization bill, “PREPA’s employees have worked tirelessly to serve Puerto Rico. They are not the problem.”⁴⁷ The problem for PREPA is historically on the management side. PREPA’s management has largely been drawn from the ranks of marginally competent political appointees with little or no long-term outlook regarding energy planning and utility management.

But the support for PREPA workers in the Statement of Motives is not backed up in either the proposed bill or the P3 existing statute with provisions that treat labor as a partner. Instead there are provisions in both statutes that waive existing collective bargaining agreements and labor representation. In places where the P3 existing statute and the new proposed privatization statute conflict, the new privatization statute prevails. The P3 existing statute provides a modicum of labor protections with regard to hiring preferences, but even these are at risk given the proposed privatization law’s ability to preempt other existing statutes. Furthermore, the Partnership Committee that governs individual privatization transactions excludes labor, business and consumers.

PREPA’s workforce is underfunded and short-staffed. PREPA has 6,200 employees,⁴⁸ over half are members of the Union de Trabajadores de la Industria Electrica y Riego (UTIER). PREPA’s workers are represented by four unions⁴⁹ with UTIER the largest. PREPA has lost over 30% of its workforce since 2012.⁵⁰

Wages are at the lower level of the lowest quartile of all U.S. utility workers.⁵¹ Linemen are the highest paid workers in PREPA at \$21 per hour and the average wage is \$19.00 per hour. Employee annual salary ranges from \$39,000 to \$44,000. According to PREPA’s analysis wages for its employees (an average of \$58,000) are 20% below the average salary of utility workers in the United States (\$72,800).⁵²

Health benefits are considered generous but employees pay premiums and copays.⁵³ UTIER has expressed its willingness to work on options to improve health care benefits and streamline and reform the delivery of health care.

The pension system is underfunded with estimates of the deficit ranging from \$2 billion to \$3.6 billion; no audit of the pension system is available since 2014.⁵⁴ The underfunding is a result of long-term budget actions by PREPA management that diverted pension contributions to other non-pension expenditures. The proposed privatization law identifies only one use of proceeds from the sale – settling the pension deficit.⁵⁵ The proposed law states this preference but allows by reference for funds from any

⁴⁷ Puerto Rico Electrical System Transformation Act, Statement of Motives

⁴⁸ PREPA March 21, 2018 Fiscal Plan at p. 26.

⁴⁹ (UEPI) Union Empleados Profesionales Independiente, (UITICE) Union Insular de Trabajadores Industriales de Construcciones Electricas and (UPAEE) Union de Piloto de la AEE

⁵⁰ PREPA March 21, 2018 Fiscal Plan at p. 114.

⁵¹ <https://www.bls.gov/oes/current/oes499051.htm>, Annual men wage of electrical power-line installers and repairers, by state, May 2016. See also: PREPA March 21, 2018 Fiscal Plan, p. 115.

⁵² Benchmarking analysis, prepared by Navigant Consulting in behalf of PREPA, Case CEPR-AP-2015-0001, <https://www2.aeepr.com/Documentos/Ley57/Tarifa/Attachment%20LK-1%20Benchmarking%20Chapter%20-%202012-21-2015.pdf>. Data are for 2013, the most recent year for which data are available.

⁵³ PREPA March 21, 2018 Fiscal Plan, p. 38.

⁵⁴ Personal communication with Angel Jaramillo, President, UTIER, April 12, 2018, and PREPA March 21, 2018 Fiscal Plan, p. 29.

⁵⁵ Puerto Rico Electrical System Transformation Act, Section 7.

transaction to be used to retire debt or establish a fund that could be used by PREPA for its ongoing capital plan.⁵⁶ The Government Development Bank is required to provide its recommendations for the use of the proceeds to the governor for final approval.⁵⁷

According to PREPA's pre-hurricane assessment the utility's asset value for its generation system was \$2.2 billion.⁵⁸ Post hurricane assessments are likely to be lower. Any revenue received from asset sales that are used to improve the pension fund would create annual savings and partially reduce pressure on PREPA's expense budget.

Although the wage and benefit package for PREPA employees is considerably lower than industry standards it is an important source of middle class employment in Puerto Rico. PREPA's current fiscal plan⁵⁹ states that the utility's skill level and employment base suffers from chronic underfunding. Going forward management will need to identify necessary skill levels and conduct hiring and build out of staff sufficient to meet the service and technical needs of the system.⁶⁰ The current financial plan instead proposes headcount and overtime reductions.⁶¹

An overview of PREPA's pre-hurricane budget indicates that labor costs are a relatively low expense item. PREPA's budget is principally designed to pay outside fossil fuel companies for deliveries and bondholders. Beyond the short-term benefit of paying PREPA's obligations to these creditors only a relatively small proportion of PREPA's budget is recirculated back into Puerto Rico's economy in the form of either consumer spending or investment in Puerto Rico.

⁵⁶ Act 29-2009, Section 17

⁵⁷ Ibid.

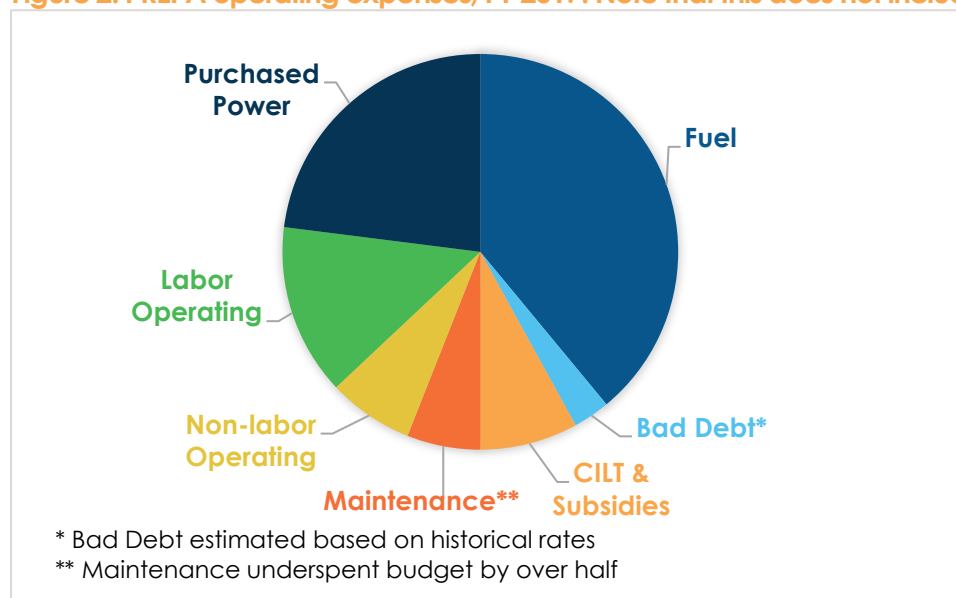
⁵⁸ Schedule E-5, Net Plant In Service, Puerto Rico Energy Commission Case CEPR-AP-2015-0001, May 27, 2016.

⁵⁹ PREPA March 21, 2018 Fiscal Plan, p. 115.

⁶⁰ PREPA March 21, 2018 Fiscal Plan, p. 115

⁶¹ PREPA March 21, 2018 Fiscal Plan, p. 38 and 40.

Figure 2. PREPA operating expenses, FY 2017. Note that this does not include debt payments.



Labor costs are a component of other operating expenses (see Figure 2) and constitute approximately or 14% of total costs. Fossil fuel costs, including purchased power, are 62% of the budget.⁶² Under current budget assumptions fossil fuel costs are unsustainable and there is no provision of any payment for debt service.

The proposed privatization law and existing P3 statute eliminates existing collective bargaining agreements. The proposed privatization and P3 existing law fails to affirm a commitment to existing collective bargaining agreements, current employee's right of first refusal to new employment opportunities, protection against new owners forcing existing employees out of a job and out of representation by existing unions.⁶³ Further there is no explicit policy statement that gives preference for hiring residents of Puerto Rico in any new employment opportunities created by the proposed law. This leaves employees and existing labor organizations exposed to a poorly designed set of labor policies that are embedded in the statutes.

For example, in lieu of statutorily guaranteed labor protections the proposed privatization law contemplates transfers of PREPA workers from their current employment into other public sector jobs in Puerto Rico.⁶⁴ Provisions in the existing P3 statute confer some right to existing employment,⁶⁵ but it is done after existing labor contracts are waived and individual employee rights than reestablished under a Partnership Contract. And, as noted above the provisions of the P3 existing law are inapplicable if it is deemed they conflict with provisions in the new, proposed privatization statute.

The P3 existing statute uses a Partnership Committee model of deliberation and decision making to manage each deal under the law. The Partnership Committee, by

⁶² PREPA March 21, 2018 Fiscal Plan at p. 30.

⁶³ <http://ppp.worldbank.org/public-private-partnership/legislation-regulation/laws/labor-employment> and <http://www.ilo.org/pardev/partnerships/public-private-partnerships/lang--es/index.htm>

⁶⁴ Puerto Rico Electrical System Transformation Act, Section 13

⁶⁵ Act 29-2009, Section 10(g).

statute consists of only government employees from the partner agency (PREPA), the P3 authority and the Puerto Rico Fiscal Agency and Financial Advisory Authority.⁶⁶ This model excludes labor, business and consumer interests – stakeholders that would have access to a regulatory process under the Puerto Rico Energy Commission. This exclusion also appears to be inconsistent with PREPA's recent fiscal plan⁶⁷ that calls for labor-management efficiency optimization plans.

The example of the Long Island Power Authority (LIPA) shows how labor costs and union representation can be integrated into privatization transactions in a manner that is consistent with a balanced budget and in alignment with new management objectives. A new partnership formed between LIPA (see Appendix I) and PSEG utility, honored existing collective bargaining agreements, and required new operators to protect employee's wages and benefits and to complete the transition under the existing International Brotherhood of Electrical Workers umbrella.⁶⁸

Past Privatizations Raise Questions About the Privatization Model to Be Employed for the PREPA Transactions

The P3 Authority's privatization model has been applied to recent transactions in Puerto Rico, including the privatization of the Luis Muñoz Marín (LMM) International Airport and the privatization of two highways. The outcomes of both privatizations raise questions about whether the contracts were negotiated in the public interest and should suggest concerns about the same model being applied to the privatization of PREPA.

Both privatization processes were initiated under the governorship of Luis Fortuño. The LMM airport privatization occurred in 2012, when a forty-year lease for operation of the airport was awarded to Aerostar Airport Holdings, a consortium of Mexican airport operator Aeroportuario del Sureste and AIG's Highstar Capital. Highstar sold its 50% management stake in 2014 to the hedge fund Oaktree Capital, which then resold in 2017 to Canada's Public Sector Pension Investment Board.⁶⁹

At the time, the privatization was criticized for undervaluing the airport. According to Alejandro Silva Huyke, then-president of the Puerto Rico Economics Association, Aerostar Airport Holdings made an offer valued at \$731 million for an airport worth \$1.6 billion. Additionally, because the LMM airport was the most profitable venture of the Puerto Rico Port Authority, the loss of income from LMM, which had previously subsidized smaller airports and ports, worsened the financial situation of the port authority.⁷⁰ And, because of a provision in the contract that prohibited any other airport in Puerto Rico from expanding to become an international airport for the next 15 years without compensating the LMM leaseholder, the Port Authority was further hindered in

⁶⁶ Act 29-2009, Section 8(a)

⁶⁷ PREPA March 21, 2018 Fiscal Plan at p. 76.

⁶⁸ <http://www.lipower.org/papers/OSA.pdf>, Section 4.5, p. 27-31.

⁶⁹ J. Koshman, "Canada just bought half of Puerto Rico's main airport," New York Post, March 22, 2017.

⁷⁰ A. Silva Huyke, "Lost costso económicos de la aprobación de la APP del aeropuerto," October 30, 2012, <http://sincomillas.com/costos-economicos-de-la-aprobacion-de-la-app-del-aeropuerto-lmm/>

its economic development efforts.⁷¹ (This situation occurred despite the fact that the Port Authority, under Act 29-2009, was involved in every part of the privatization transaction).

Additionally, in 2011, Puerto Rico privatized highway 22 (San Juan to Hatillo) and highway 5 (San Juan to Bayamón) by leasing their operation under forty-year contract to Metropistas de Puerto Rico, a consortium of Abertis Infraestructuras and Goldman Sachs Infrastructure Partners. Similar to the airport concession, the privatization of these highways removed a profitable asset from the Highway and Transportation Authority, leaving it with fewer revenues to subsidize the cost of a struggling urban train system.⁷² The contract allows for annual increases in tolls, subject to statutory maximums, but with no external regulation to determine whether tolls reflect the cost of service.⁷³

Ex-governor Fortuño was appointed to the Board of Directors of Abertis in 2016.⁷⁴

The P3 Authority's website does not provide any independent audit of the implementation of these contracts.

Recommendations

The Puerto Rico Electrical System Transformation Act should be rejected. The bill does not productively address any of the fundamental barriers to the necessary transformation of the Puerto Rico Electric Power Authority. The bill is designed only to effectuate the sale of PREPA's assets to private third parties, without any clear vision of how this would result in a more sustainable and affordable energy mix, lower debt burden, or reduced political interference in the electric system.

The bill offers no plan for Puerto Rico's energy direction and, by exempting the privatization transactions from the existing integrated resource plan and energy commission oversight, effectively repeals that which currently exists. The privatization contracts would be negotiated by Public-Private Partnership Authority and PREPA officials who are largely appointed by the governor, without any oversight by the Puerto Rico Energy Regulatory Commission or its successors, or by the Financial Oversight and Management Board.

The short-sighted approach to external oversight removes an important element of fiscal integrity and sound, professional utility management that investors will be looking to as PREPA and the government of Puerto Rico emerges from bankruptcy. The bill would not help, and would likely frustrate, Puerto Rico's ability to attract private capital into its electrical system.

⁷¹ Luis Muñoz Marín International Airport Lease Agreement, July 5, 2012, Section 3.22, <http://www.p3.pr.gov/assets/2012-7-5-lmmia-lease-agreement.pdf>

⁷² O. Serrano, "Autopistas: Gobierno suelta lo bueno y se queda con lo malo," Noticel, June 21, 2011.

⁷³ Toll Road Concession Agreement, June 27, 2011, Schedule 10. <http://www.p3.pr.gov/assets/2011-6-27-autopistas-metropolitanas-de-pr-schedules.pdf>

⁷⁴ Abertis, "Board of directors and committees", <https://www.abertis.com/en/investors-relations/corporate-governance/board-of-directors-and-committees>

The following basic energy principles and operational guideposts must be part of any new legislative design that intends to solve problems and transform Puerto Rico's electrical system:

Energy Principals

- A commitment to sound energy planning that takes into account the cost-effectiveness of renewable energy, energy efficiency and demand response in Puerto Rico; the need to retire outdated oil-fired power plants; the potential for microgrids and rooftop solar; and the declining electricity demand.⁷⁵ Puerto Rico needs an updated Integrated Resource Plan (IRP)⁷⁶ that has been subjected to a professional third party review like that currently available under Puerto Rico law through the Puerto Rico Energy Commission.
- Elimination of PREPA's legacy debt. Repayment of the current debt would crowd out the necessary capital investments to rebuild and modernize the electrical system. Bondholders should pursue partial recovery of losses from insurance companies and from legal cases against bond consultants and underwriters who approved possibly fraudulent bond issuances. No funds from the sale of PREPA's assets should be used to defease or otherwise reduce PREPA's indebtedness.
- Well-regulated and responsible debt issuances. Future bond issuances shall be accompanied by a certification from the FOMB and the Puerto Rico Fiscal Agency and Financial Advisory Authority that underwriters, accountants, lawyers, consultants, and financial advisors are responsible vendors. The certification shall also attest to the reasonableness of the fees and that fees are consistent with standards established by PREC.
- Strong, independent regulation. Given the long-term political interference in the management, hiring and contracting for the electrical system, a strong, independent regulator is needed to restore Puerto Rico's credibility as a viable place to do business. This independent regulation should be coupled with strong fiscal controls and a rebuilding plan that meets the social and economic needs of Puerto Rico and its population.

The above principles can only be achieved through significant operational reform of PREPA. PREPA needs to be restructured, reformed and rebranded to reflect a new commitment to energy professionalism and a modern economy ("the reformed public utility"). Puerto Rico should obtain its generation through a broad mix of energy sources, including microgrids and distributed generation consistent with an Integrated Resource Plan. This can be achieved if a reformed public utility working with strong regulators implements Puerto Rico's integrated resource plan, attracts private capital and operates with public input, transparency and professional administration. The reformed public utility should honor existing collective bargaining agreements, and those agreements should be extended to any transactions undertaken with the private sector. Labor unions need to be included in the retooling of the electricity system as an

⁷⁵ T. Torres and C. Kunkel, "Toward electrical system sustainability in Puerto Rico," Institute for Energy Economics and Financial Analysis and Instituto de Competitividad y Sostenibilidad Economica de Puerto Rico, March 2018.

⁷⁶ Puerto Rico Energy Commission, Order Initiating Investigation, Case CEPR-IN-2017-0002, October 27, 2017.

essential partner. PREPA's plans for better management, improved staffing, and staff recruitment need to move forward.

This requires a structure that incentivizes sound, professional executive leadership and penalizes political interference. IEEFA suggests the following model:

- A new board should have seven members: three appointed by the governor with advice and consent of Senate, one by each house of the legislature, one by the chair of the Federal Oversight and Management Board and one appointed by the union with the largest membership base in PREPA. The Board should have fixed and staggered terms. Members should be dismissed only with cause and if the resolution authorizing the dismissal receives more than five votes.
- All board members should meet professional standards and have demonstrated competencies to perform as prudent, reliable and responsible fiduciaries of the reformed utility.
- The Board should appoint the executive director based upon an independently conducted job search. The governor and any member of the Legislature can submit candidates for the position. Final decision should be made by the board.
- An advisory committee should be appointed. The advisory committee should consist of three members from business, labor (not including unions covered under agreements with the reformed utility) and consumer interests. Each member should serve for as long as the interest groups allow, but all members must receive updated representation endorsements every three years. The Board should prescribe the rules related to selection and seating of Advisory Committee members.
- The committee should: 1) have the right to all information available to Board Members subject to all confidentiality provisions that bind members; 2) have the right to be informed in a timely manner of all board meetings and be seated at those board meetings in a manner that denotes their advisory role; 3) not vote on any matter before the board or attend executive committee sessions; 4) have the right to a response from the executive director to all written questions and statements submitted by committee members within 30 days.
- Governor Rossello appointed a Transformation Advisory Council (TAC) for PREPA made up of industry experts with proper professional credentials to assist the reform utility with the task of reform. The TAC should be part of the reform utility's statutory mandate. It should be seen as a sounding board for technical aspects of utility reform proposals on Puerto Rico. The TAC should be empowered to publish its analyses and recommendation to the public regarding all major reform initiatives prior to their enactment.
- For five years from the passage of this legislation the Puerto Rico Energy Commission shall appoint, finance and oversee an Independent Private Sector Inspector General (IPSIG) to ensure that energy, fiscal and operational reforms initiated now are thoroughgoing and that political interference is minimized. The IPSIG shall be part of the commission's operational responsibilities and be funded

annually through a separate appropriation for its work. The IPSIG shall report its day to day findings to relevant Board members and management of the reformed utility and report all progress and impairments in writing and oral briefings at least on a quarterly basis to the chair of the commission and such staff as designated. The chair of the commission shall be in attendance at all oral briefings. The IPSIG quarterly reports and any formal submissions to the commission shall be available to the governor, heads of the Legislative Assembly, Federal Oversight and Management Board, United States Attorney's Office for the District of Puerto Rico and the chairman of the United States Securities and Exchange Commission.

- Competitive bidding should be the primary mode of contracting. If standard competitive bidding procedures prove impractical the Puerto Rico Energy Commission shall certify any alternative procedures. The Puerto Rico Energy Commission certification shall be presented to the authorized representative of the IPSIG. Emergency contracting procedures need to be established utilizing pre-screened vendor lists, ongoing updates of vendors and a robust post-audit review of contract awards, cost and performance.

The proposed Puerto Rico Electrical System Act provides for a series of unregulated and politicized asset sales. It does not provide a vision for transforming the electrical system in a way that would actually address its fundamental problems. Sweeping organizational and governance reforms, such as the ones proposed here, combined with a long-term energy planning process and strong regulatory oversight are needed to achieve a functional electrical system in Puerto Rico.

Appendix I: The Long Island Power Authority: Is It a Useful Business Model for Puerto Rico?

A recent study of the future for PREPA was supported by several major utility operations, many from New York State.⁷⁷ The plans that are emerging now in Puerto Rico look a lot like the plans used by one of these New York agencies to restructure its own activities, the Long Island Power Authority (LIPA). LIPA serves 1.1 million customers principally covering Nassau and Suffolk counties in southeastern New York with peak usage of 5600 MW and median income⁷⁸ of \$95,000. There are several aspects to the LIPA model that could prove useful to Puerto Rico. However, there are vast differences between each utility's operating landscape that would require significant amendment to the LIPA model if some of its component parts are to be of use.

⁷⁷ NYPA et al, "Build Back Better: Reimagining and strengthening the power grid of Puerto Rico," December 2017.

⁷⁸ <https://datausa.io/profile/geo/nassau-county-ny/> and <https://datausa.io/profile/geo/suffolk-county-ny/>

Long Island's Electrical System is Largely Operated Via Private Contracts

LIPA is a corporate municipal instrumentality and political subdivision of the State of New York. It owns and operates the electric transmission system in Nassau, Suffolk and parts of Queens. LIPA also has an ownership interest in Nine Mile Point 2, a nuclear power in Oswego, New York. LIPA has a small staff of professionals augmented by a portfolio of outside experts who assist executive leadership with the management of its principal agreements. The day-to-day operations of the electric system are carried out by various contracts with several service providers. Since 1998 the service providers were generally subsidiaries of National Grid.⁷⁹ In January 2014, PSEG⁸⁰ assumed responsibility for power supply management, fuel procurement, transmission and distribution, existing labor agreements and related other services. The relationship is governed by an Official Services Agreement between LIPA and PSEG Long Island.⁸¹

LIPA is governed by a nine-member board. Five are appointed by the governor, two by the senate majority leader and two by the speaker of the assembly. The chair is appointed by the governor.

Under New York law, LIPA is empowered to set rates for electric service without approval of the New York State Public Service Commission or any other state regulatory body. The New York State Public Service Commission is authorized to review and make recommendations on rate increases that exceed certain thresholds. In 2016 LIPA received 55% of its revenue from residential customers, 43% from businesses and 1.9% from public sector customers. LIPA's current rates are in excess of 17 cents per kWh.⁸²

LIPA's rates cover not only operational charges associated with its service agreements but also debt service for LIPA and the Utility Debt Securitization Authority (UDSA).⁸³ UDSA is a separate municipal corporation and subdivision of the State of New York. It has no commercial operations. It was established to restructure a portion of LIPA's debt. The bifurcation of LIPA's debt derives from the 1998 purchase by LIPA of LILCO, a bankrupt corporation. LILCO built the Shoreham Nuclear power plant but the company filed for bankruptcy. LIPA's purchase of LILCO required the assumption of \$7.3 billion in debt from a non-performing asset. In 2013 LIPA, its advisors and the New York State legislature restructured LIPA's debt to provide a more stable management structure.

LIPA owns the transmission and distribution system. It derives power supply resources through a series of power purchase contracts. The principal contract is with National Grid for 3700 MW and extends through 2028. LIPA purchases the electricity generated by all of the fossil fueled capacity of the Island's generating facilities owned by National

⁷⁹ For a comprehensive audit of the ten year LIPA and National Grid experience see: documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7BCB049972

⁸⁰ For brief overview of PSEG/LIPA relationship and current financial presentation see: [http://www.lipower.org/pdfs/company/investor/Wells%20Fargo%20Public%20Power%20Symposium%2012-6-2017%20\(002\).pdf](http://www.lipower.org/pdfs/company/investor/Wells%20Fargo%20Public%20Power%20Symposium%2012-6-2017%20(002).pdf)

⁸¹ Operations Services Agreement between LIPA and PSEG Long Island, December 28, 2011, <http://www.lipower.org/pdfs/company/papers/LIPAPSEG/OSA12.pdf>

⁸² PSEG Long Island "Power Supply Charge": <https://www.psegliny.com/page.cfm/Account/ServiceAndRates/PowerSupplyCharge>, PSEG Long Island "Common Residential Electric Rates 2018," https://www.psegliny.com/files.cfm/rates_resi.pdf

⁸³ <http://www.lipower.org/UDSA/docs/2017A/UDSA%20Series%202017,%20October%2025,%202017.pdf>

Grid. LIPA purchases approximately 1900 MW of capacity from other providers and owns an 18% interest in a 1300 MW nuclear plant.

LIPA has an A- credit rating with Fitch and Standard and Poor's. UDSA is rated AAA.

LIPA offers energy efficiency and renewable energy programs.⁸⁴ These energy efficiency and renewable energy initiatives were established almost a decade ago and continue to grow. LIPA has recently concluded that a dramatic reduction in peak forecasts has been achieved largely due to its rooftop solar initiatives.^{85 86} Although LIPA is independent of some aspects of the state's regulatory system it nevertheless is an integral part of the state's Public Service Commission's energy planning, goal setting and implementation program.⁸⁷ Long Island is also home to several major microgrid investments that are at the early stages across Long Island, which have received funding from the state of New York and are being developed in partnership with the New York Power Authority.⁸⁸

PREPA and LIPA Share Some Similarities but Also Important Differences

There are important similarities between the two entities that should prove constructive as PREPA moves forward.

- Both entities are public power authorities controlled by and accountable to elected officials.
- Both entities own some power generation but conduct business in an operating environment with private sector competition.
- Both entities rely upon purchase power agreements, but to different degrees.
- Both entities have fossil fuels as the dominant energy source for power generation.
- Both entities are governed by Integrated Resource Plans.
- Both entities recognize collective bargaining agreements and labor organizations.
- Both entities are managing high electricity rates driven in large part by extraordinary debt levels.

⁸⁴ PSEG Long Island, "2017 Integrated Resource Plan: PSEG Long Island Analysis Summary", http://www.lipower.org/pdfs/company/trans/2017-04-10_PSEG_IRP_Summary_Report.pdf

⁸⁵ Press release: "10,000th Solar PV System Installed on Long Island Highlights Partnership of New York State and Long Island Utility," December 12, 2014. <https://www.psegliny.com/page.cfm/AboutUs/PressReleases/121214-solar>

⁸⁶ LIPA, "Energy Guide: 2017 Long Island Integrated Resource Plan and Repowering Studies", http://www.lipower.org/pdfs/company/trans/LIPA_EnergyGuide%206x9%204_22_17%20FINAL.pdf

⁸⁷ J. Weaver, "New York state signs law – 20% of USA has energy storage targets and mandates", Electrek, December 1, 2017, <https://electrek.co/2017/12/01/new-york-energy-storage-targets/>

⁸⁸ P. Ciampoli, "NYPA partners on several newly-funded microgrid projects," American Public Power Association, March 24, 2017. <https://www.publicpower.org/periodical/article/nypa-partners-several-newly-funded-microgrid-projects>

There are important dissimilarities.

- The median income on Long Island is \$95,000. The median income in Puerto Rico is \$18,696.⁸⁹
- Long Island's population is growing,⁹⁰ Puerto Rico's is declining.
- Long Island's economic growth is positive,⁹¹ Puerto Rico's is negative.
- The Integrated Resource Plan for LIPA is developed by LIPA and PSEG and approved by them. Private sector consultants verify the content and the State Public Service Commission comments.⁹² LIPA's transmission and distribution system and the generation resources it relies upon are in a state of good repair. Since 2014 PREPA submits its Integrated Resource Plan for review and the Puerto Rico Energy Commission approves it. PREPA's pre-hurricane transmission and distribution system and the generation resources it relies upon could not meet the state of good repair test.
- Since 2014 Puerto Rico's electricity rates are approved by the commission. Prior to then rates were approved by the PREPA board. The authority to set rates was removed from its Board in 2014 because political interference had rendered the rate design and rate levels dysfunctional. For LIPA the rates are approved by LIPA. Since 2013 the New York State Public Service Commission reviews, but does not approve rate increases. LIPA's rates have been increased (and decreased) sufficient to cover operations and debt payments since 1998.
- LIPA has a combined debt obligation of \$7.3 billion, an A- and AAA bond rating and is current on its payments.⁹³ PREPA has a combined indebtedness of \$9.0 billion, is bankrupt and according to its most recent financial plan under current conditions can afford no debt service for the foreseeable future.
- LIPA's large debt load is the result of a public policy decision to decommission the Shoreham Nuclear Power plant. PREPA's significant debt load stems from a response to a decade long recession and debt mismanagement that went unnoticed due to stakeholder indifference.
- PREPA has a history of political interference into its workings to the point of chronic and unaddressed operational dysfunction, a system in disrepair and bankruptcy. Large contracting and management scandals related to debt issuances, oil procurements, renewable energy contracts and emergency responses are pervasive. Political interference into LIPA's workings have been controversial but with less negative fiscal implications and serious problems when

⁸⁹ <https://datausa.io/profile/geo/puerto-rico/>

⁹⁰ Long Island Association Research Institute, "Long Island's Changing Demographics," September 2017. <https://chambermaster.blob.core.windows.net/userfiles/UserFiles/chambers/2181/CMS/Demographics-Study.Final.pdf>

⁹¹ http://www.longislandindex.org/data_posts/gross-metropolitan-product-2/

⁹² LIPA, "Integrated Resource Plan and Repowering Studies – Frequently Asked Questions", 2017. <http://www.lipower.org/pdfs/company/trans/Frequently%20Asked%20Questions%20LIPA%202017%20IRP%20and%20Repowering%20Reports.pdf>

⁹³ For most recent debt service analysis of LIPA and UDSA see: http://www.lipower.org/pdfs/company/papers/LIPA_2018Budget%201-18%20web%20approved.pdf, p. 38-41.

they occur have been met by public disclosure⁹⁴ and policy responses.⁹⁵ Debt management has been difficult, complicated and controversial but free of scandal. The electrical system is in a state of good repair.

The LIPA Model Would Not Work in Puerto Rico Without Stronger Regulatory Oversight

These dissimilarities point toward the need for a stronger regulator than the LIPA model for two reasons. First, Puerto Rico's economy will need a maximum amount of third-party support to turn around the historical perception of mismanagement and recent contracting scandals. LIPA's financial problems stem from a rejection of a nuclear plant in 1998. This was publicly disclosed and much debated matter.⁹⁶ The Long Island economy has been powerful enough to absorb a \$7.3 billion liability for a non-performing asset. PREPA's failure, while rooted in economic decline has been closely associated with the reckless use of debt, mismanagement and scandal. There has been very little transparency. Puerto Rico's economy cannot absorb a \$9 billion liability for non-performing assets.

Second, New York does have a professional energy regulator that is responsible for carrying out the state's energy policy and facilitating the transformation to a more resilient grid, including the integration of renewable energy and microgrid development.⁹⁷ LIPA's commitment to its own Integrated Resource Plan is not regulated but it is carefully integrated with the State's plan that is controlled by the New York State Public Service Commission. Under the proposed privatization bill, Puerto Rico would lose all such regulatory functions.

Appendix II: List of Organizations Opposed to Proposed Privatization Legislation

1. ACONER
2. Ambientalistas
3. AMPR
4. APPU
5. Asociación de Empleados Gerenciales AEE
6. Asociación de Empleados Jubilados AEE
7. Asociación de Maestros de Puerto Rico

⁹⁴ D. Hakim, P. McGeehan, and M. Moss, "Suffering on Long Island as power agency shows its flaws," November 13, 2012. <https://www.nytimes.com/2012/11/14/nyregion/long-island-power-authoritys-flaws-hindered-recovery-efforts.html>

⁹⁵ New York State, "LIPA Reform Act," <http://www3.dps.ny.gov/W/PSCWeb.nsf/All/F2EA85DF4AB658B285257F57006AFCD8?OpenDocument>

⁹⁶ B. Lambert, "Warm reception turns cold for Pataki's plan to take over Lilco and cut rates," New York Times, July 3, 1997. <https://www.nytimes.com/1997/07/03/nyregion/warm-reception-turns-cold-for-pataki-s-plan-to-take-over-lilco-and-cut-rates.html>

⁹⁷ New York State, "About REV", <https://rev.ny.gov/about/>

8. CAMBIO
9. Campamento en contra de la Cenizas Peñuelas
10. CEDEI-FASE
11. Central Puertorriqueña de Trabajadores, UIEAEP
12. CGT/JSALP
13. CLAC
14. Coalición 8 de marzo
15. Coalición Organizaciones Anti Incineración
16. Colectiva Feminista
17. Colectivo Naborías Naranjito, Movimiento NIN Negrón
18. Colectivo Nacional Todos Somos Pueblo
19. Colegio de Actores
20. Comisión Organizaciones Anti Incineración
21. Comuna Caribe
22. Convergencia Nacional Boricua
23. CUTE
24. Diaporriqueños
25. Economistas
26. EDUCAMOS
27. El Puente
28. FADEP
29. FCT/UFCW
30. Federación Central de Trabajadores
31. Federación de Maestros de Puerto Rico
32. Federación de Pensionados y Jubilados de Puerto Rico
33. Federación Puertorriqueña de Trabajadores
34. Frente Auditoría de la Deuda
35. HEEND UPR
36. Jornada Se Acabaron las Promesas
37. MINH
38. Movimiento 26 de abril
39. Movimiento Estudiantil UPR
40. Movimiento Nacionalista Revolucionario
41. Partido Independentista Puertorriqueño
42. Partido Puertorriqueño de Trabajadores
43. PROSOL-UTIER
44. Sierra Club
45. Sindicato Puertorriqueño de Trabajadores
46. Sindicato UPU
47. UAASL-Coordinadora Sindical
48. UIA-AAA
49. UITICE
50. UJS-MST
51. Unión de Empleados de la Corporación del Fondo del Seguro del Estado
52. Unión de Empleados Profesionales Independientes (AEE)
53. Unión General de Trabajadores
54. Unión Independiente de Trabajadores de Aeropuerto
55. Unión Independiente de Trabajadores de Sindicatos

56. UAW
57. UPAEE
58. UTBV
59. VAMOS

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