Executive Summary



Analysis of a Long-Term Agreement for the Operation and Management for Puerto Rico's Transmission and Distribution System

August 2020

INTRODUCTION

The service provided by Puerto Rico's state-owned utility is unreliable, highly polluting, and expensive. The Puerto Rico Electric and Power Authority ("PREPA") has been a source of private and public corruption in the island. For decades, diverse interests have organized in order to extract undeserved benefits from PREPA at the expense of the rest of the population of Puerto Rico. Thus, PREPA's transformation is imperative for the future development of the island's economy.

On June 22, 2020 PREPA and the Puerto Rico Public-Private Partnerships Authority (the "P3A" or "Administrator") entered into an agreement for the Operation and Maintenance ("O&M" Agreement) of PREPA's Transmission and Distribution System ("T&D System") with LUMA Energy, LLC, ("ManagementCo") and LUMA Energy Servco, LLC ("ServCo", and together with ManagementCo, the "Operator"). The Operator, in turn, is a consortium formed by (1) ATCO Ltd., a Canadian operator of electric systems and (2) Quanta Services, Inc., a Texas-based provider of "infrastructure solutions" for the electric power industry.

This policy brief analyzes important aspects of this agreement; highlights some risks associated with the performance of that agreement; identifies some serious concerns regarding the transaction; and offers some recommendations for its improvement.

The O&M Agreement grants the Operator the right to operate and manage PREPA's T&D System for **fifteen years**, while PREPA retains the ownership of the T&D System. In consideration for managing the T&D System in accordance with O&M Agreement, the Operator is entitled to receive a **Service Fee** consisting of:

- **An Annual Fixed Fee** that starts at \$70 million on year 1 and increases to \$105 million for each of years 4 through 15, and
- **An Incentive Fee** that is payable upon the Operator achieving certain performance benchmarks. This Incentive Fee starts at \$13 million on year 1 and increases up to \$20 million for each of years 4 through 15.

In both cases, the amounts payable on account of the Fixed Fee and the Incentive Fee, if any, will be adjusted for inflation. The agreement also includes a "Front-End Transition Period" and a "Back-End Transition Period" for which the fees are different than the Service Fee stated above.

The following table summarizes those aspects of the agreement that in our opinion raise important concerns and CNE's recommendations as to how to approach them.

ASPECT OF THE AGREEMENT	BACKGROUND	RISK/CONCERN	RECOMMENDATION
SUPPLEMENTAL AGREEMENT	The Supplemental Agreement becomes effective only if all conditions precedent to LUMA's takeover of the T&D System under the O&M Agreement are met, but PREPA has not yet received the Title III Approvals [these are the agreements with bondholders that must be approved by federal court under PROMESA.] The Supplemental Agreement entitles Operator to a much higher fixed fee than under the O&M Agreement.	The Supplemental Agreement could be used to force the government of Puerto Rico to accept both an unsustainable Restructuring Support Agreement (RSA) and a Plan of Adjustment that produces rent-like returns for some bondholders and induces a significant increase in electricity rates.	Have the Puerto Rico Energy Bureau ("PREB") rule that the Supplemental Agreement is contrary to Puerto Rico's stated public policy: that electric energy should be made available at the lowest cost possible.

ASPECT OF THE AGREEMENT	BACKGROUND	RISK/CONCERN	RECOMMENDATION
PREPA REORGANIZATION INTO GRIDCO AND GENCO	PREPA will be split into two operating companies: GridCo, which retains ownership of the T&D system and GenCo, which retains ownership of the generation assets. Both are required to enter into a power purchase and operating agreement (the "GridCo-GenCo PPOA") with the Operator acting as agent of GridCo, providing for expense reimbursement, power delivery and other services related to the generation, sale and purchase of power and electricity from PREPA's generation assets. Also, Operator is required to enter into an agreement to provide certain services to GenCo. GenCo shall pay a shared service fee (without markup for profit), which is to be determined by the parties.	The O&M Agreement requires the execution of several other agreements that, in essence, constitute related-party transactions and which could provide an opportunity for rent seeking or outright malfeasance by the Operator or PREPA. For example, "GridCo shall have no obligation to verify any invoice submitted by GenCo."	With respect to the GridCo-GenCo PPOA: (1) the agreement should be subject to close scrutiny, review, and prior approval by the PREB; and (2) GridCo should be required to exercise reasonable and prudent due diligence prior to paying any invoice submitted by GenCo. The GenCo Shared Services Agreement and any other related-party transactions or agreements not expressly covered by the terms and conditions of the O&M Agreement should be submitted to the PREB for its prior approval, taking into account the impact on rates, as well as any other appropriate benchmark.

ASPECT OF THE AGREEMENT	BACKGROUND	RISK/CONCERN	RECOMMENDATION
POWER SUPPLY DISPATCH AND MANAGEMENT	The Operator's duties include: (i) dispatching, scheduling and coordinating Power and Electricity from available generation assets and providing related services; [and] (ii) coordinating the scheduling of load requirements and Power and Electricity with IPPs pursuant to their respective Generation Supply Contracts and with GenCo pursuant to the GridCo-GenCo PPOA.	The Operator is not a true Independent System Operator ("ISO"), as it has relationships with both GenCo and retail customers. This could lead to a market structure that allows the extraction of rents.	The PREB should remove any system operation functions from the Operator when negotiating the GridCo-GenCo PPOA, leaving it only in charge of the maintenance of the T&D System and providing services to PREPA and/or GenCo. Create an Independent System Operator exclusively in charge of dispatching energy and maintaining system reliability and stability. Make the PREB the sole overseer of the new ISO.
Power Supply Dispatch and Management	Most of the savings that have been produced in other market restructurings are due to factors exogenous to local electricity markets, but there is some evidence that moving from cost of service regulation, which is based on average cost plus a reasonable return on capital, to marginal cost pricing has had a positive effect in at least some jurisdictions in the United States.	The relationship between the average and marginal cost of generation is not fixed. It may change due to the introduction of new technologies or price changes in the cost of fuel, which is by and large the most significant cost driver for traditional power producers. Therefore, generators will seek to extract rents by trying to sell at the higher of average or marginal cost.	The PREB should approve any and all power purchase agreements between the operator and generators and use its rulemaking powers to require that GridCo purchase power from GenCo or any Independent Power Producer at the lower of average or marginal cost, consistent with system stability.

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POWER SUPPLY DISPATCH AND MANAGEMENT	Operator is required to use "economic dispatch" to run the T&D System, but that term is ambiguously defined in the O&M Agreement.	The combination of an ambiguous definition of "economic dispatch" and an oligopolistic market structure means that strategic interactions among and between market players, including price fixing via market signals, could take place and result in rent-seeking behavior and the extraction of rents.	The PREB should clarify, by regulation if necessary, the meaning of "economic dispatch" in the Puerto Rico power market. The PREB should also develop a process to investigate allegations of price fixing or market collusion. The PR Department of Justice should also train lawyers from its anti-trust division to investigate these cases and file charges against power producers, if necessary. PREPA and all large IPPs should be required by law to disclose all pricing-related information at the request of the PREB.
AUDITING AND TRACKING PROJECTED SAVINGS	The savings analyses provided by the government show, at first glance, that that the O&M Agreement, if executed in accordance with its terms, would pay for itself. But PREPA is notorious for overestimating savings from various reform efforts undertaken in the past.	The forecast of cost reductions to be generated by the Operator could be significantly overestimated.	The P3A should hire an independent auditing firm to perform yearly audits and keep track of cost reductions allegedly generated by the Operator. The PREB should also be allowed to review and analyze those findings. The O&M Agreement should be adjusted as necessary if the Operator fails to deliver the requisite cost reductions.

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METRICS/ BENCHMARKS	To collect the annual Incentive Fee, the Operator has to achieve certain performance benchmarks. A significant number of the benchmarks has not been determined yet and are subject to further negotiation among the parties. Almost all of the benchmarks are set against PREPA's prior performance, which sets a low bar.	The payment of the Incentive Fee depends on the Operator achieving certain performance benchmarks that have not been determined yet. Using PREPA's prior performance to measure progress could set a standard that is too low to justify the transaction.	Performance metrics should be developed in consultation with the PREB and the P3A using best practices and benchmarks from similarly situated utilities in the United States.
CAPITAL EXPENDITURES	The Grid Modernization Plan prepared by PREPA estimates that approximately \$21 billion in capital expenditures are necessary to bring the Puerto Rico power system to "industry standard levels." The Agreement does not r equire the Operator to make any capital expenditures using its own funding.	The financing for the entire modernization of Puerto Rico's T&D system is predicated on obtaining federal reconstruction funding for such purposes, which may be delayed or not materialize at all.	Operator, PREPA, and the PREB should prepare a "Plan B" setting forth capital spending priorities for Puerto Rico's T&D System in case federal funds to finance the Grid Modernization Plan are insufficient or unavailable.

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OPERATOR-OWNED CAPITAL IMPROVEMENTS	The Operator has the option to propose to the PREB Operator-owned capital improvements to the T&D System. The PREB shall evaluate any such proposal on its merits and allow for the Operator "to earn a reasonable rate of return thereon consistent with the returns permitted to be earned by companies operating in the United States electric transmission and distribution business on similar investments."	Bidding on capital improvements by the Operator, or any of its affiliates, would be a related-party transaction and such transactions are prone to generate rent-seeking opportunities.	First, the PREB should develop a special administrative process to conduct a strict scrutiny of any such proposed transactions. Second, those transactions should also be subject to review and approval by the P3A, as Administrator of the O&M Agreement.
LIABILITY LIMITATIONS	The liability waiver provisions in the Agreement include ordinary negligence, gross negligence or willful misconduct of Owner, ManagementCo or ServCo, or their respective employees, agents or contractors.	The liability waiver provisions proposed in the O&M Agreement are too broad and favorable to the Operator, creating a perverse incentive for the Operator to execute its duties and obligations without following the requisite standard of care.	The PREB should not grant the broad liability waiver set forth in the O&M Agreement. Instead, it should provide for a limited waiver consistent with the dangerousness intrinsic to the operation and management of a large power system.

ASPECT OF THE AGREEMENT	BACKGROUND	RISK/CONCERN	RECOMMENDATION
THE O&M AGREEMENT IS ONLY ONE PART OF A LARGER PROCESS	In addition to completing the transition to the Operator as per the Agreement, the following key initiatives must be implemented: improving operations, modernizing the transmission and distribution system, upgrading the generation fleet, improving workforce and public safety, restructuring legacy debt obligations, and pension reform.	Failure to coordinate the multiple actions required to modernize Puerto Rico power system could lead a catastrophic failure of the entire transformation process.	The processes to transform PREPA should be coordinated by the PREB pursuant to a duly adopted Integrated Resource Plan that sets forth a logical sequence for PREPA's modernization and transformation. The PREB should exercise its legal authority to compel PREPA to comply with this requirement. With respect to the PREB, we recommend that the next administration restore its legal standing and powers as a truly independent regulator. In addition, the FOMB should ensure that the PREB has adequate budgetary resources to effectively execute its mission.

In addition to these critical flaws in the O&M Agreement, we are concerned that Puerto Rico's government may not have the required capacity to successfully manage this complex multilayered process, with several dimensions that intersect and reinforce each other. Thus, there are no guarantees that the process to modernize and transform PREPA will be successful. A lot depends on the effective execution and implementation of other initiatives, exogenous to the O&M Agreement.

In the end, we cannot advocate in favor of keeping this utterly utterly corrupt, environmentally harmful, and economically unsustainable government-owned enterprise in charge of our power system. Yet, while we strongly favor the thorough transformation of the PREPA, the proposed O&M Agreement is critically deficient in several key areas. If that agreement cannot be corrected in a timely manner, then we can only recommend the parties return to the negotiating table. And try again.



The Center for a New Economy (CNE) is Puerto Rico's first and foremost policy think tank, an independent, nonpartisan group that advocates for the development of a new economy for Puerto Rico. Over the last 20 years, CNE has championed the cause of a more productive and stable Puerto Rico through its offices in San Juan, Puerto Rico and Washington, D.C. We seek to inform current policy debates and find solutions to today's most pressing and complex economic development problems by rigorously analyzing hard data and producing robust empirical research. CNE is organized as a 501(c)(3) nonprofit that does not solicit or accept government funding. It relies solely on funding by individuals, private institutions and philanthropic organizations.





