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VIA EMAIL AND HAND DELIVERY

Mr. Fernando Padilla
Executive Director of Projects and Physical Affairs
Puerto Rico Electric Power Authority
New Office Building Santurce
1110 Ponce De Leon Avenue, 7th Floor
San Juan, PR 00907

Ref.: AES Puerto Rico's Cashflow Situation

Dear Fernando,

As previously communicated, the cashflow situation at AES Puerto Rico ("AES-PR") has significantly deteriorated, and continues to worsen, due to new operational costs imposed on AES-PR as a result of unforeseen regulatory and logistical challenges. Although it has come at significant expense, we have met these challenges and strive to comply with all environmental regulations required by both the Environmental Protection Agency (EPA) and the Puerto Rico Department of Natural and Environmental Resources (DNER). In our last conversation, you asked AES-PR to elaborate on these new challenges and costs and to explain how they jeopardize AES-PR's future operations. I now take this opportunity to do so.

New Operational Costs and the Financial Impacts on AES-PR's Cashflows

AES-PR owns and operates a state-of-the-art 510 MW coal-fired power plant, a baseload resource critical to the electricity supply in Puerto Rico. For almost two decades, under our Power Purchase and Operating Agreement with PREPA ("PPOA"), AES-PR has supplied approximately 17% of the electricity used on the island—reaching as high as 27% in recent months. AES-PR has provided this service reliably, with a demonstrated track record of low forced outage rates, high availability, and substantial resiliency. For instance, AES-PR was the first large generating resource to be available after Hurricane Maria; it also was the only such resource that was 100% available in the wake of the earthquakes last year.[1] To enhance this reliability, we acquired a 23 MW black start generator unit in May 2020 (to be installed in July 2021) for the purpose of reestablishing power capacity in an expedited, efficient manner in the event of an emergency power outage in Puerto Rico. Also, we will be overhauling one of our Guayama plant's generator units in October 2021 (fifty days of offline maintenance) to ensure that the unit is functioning properly and can efficiently meet future load demand.

[1] The record developed in the Integrated Resource Planning ("IRP") proceedings before the Puerto Rico Energy Bureau ("PREB") confirmed AES-PR's essential role as a highly reliable provider of low-cost generation in Puerto Rico.

In addition to providing secure, reliable power to Puerto Rico, AES-PR continues exploring the development of renewable energy solutions and is actively looking to participate in upcoming tenders for new renewables projects in Puerto Rico. Notably, AES-PR is currently conducting feasibility studies for a 7 MW expansion of its solar park and the potential introduction of new technologies, like the battery energy storage in our AES Ilumina solar complex.[2] Our contributions to renewable energy in Puerto Rico also extend to the community: Later this year, AES-PR will donate a 100 kW solar panel (5B technology) to the Guayama Salvation Army.

AES-PR has generated reliable, secure electricity at the lowest cost of any baseload source on the island, saving PREPA and consumers billions of dollars. We are proud of this legacy, and we are striving to see that it continues (as detailed above). However, in recent years, AES-PR has been forced to incur significant new costs to address unforeseen challenges on the island that are beyond our control. For instance, AES-PR has incurred significant new environmental compliance costs to meet the requirements of EPA's 2015 Disposal of Coal Combustion Residuals from Electric Utilities final rule (that is, "the CCR Rule") and laws enacted by the Puerto Rico legislature. Last year, AES-PR required 26 vessels to ship approximately 529,949.97 short tons off-island for disposal. New operational costs like these—which are explained in more detail below—have negatively impacted AES-PR's cashflows and pose an existential threat to the company, should they remain unchecked.

1. Environmental Costs

To generate electricity with coal necessarily requires AES-PR to produce CCRs.[3] Hence, as contemplated by our PPOA, for years our CCRs and the aggregate we manufactured from CCRs, Agremax, were used and then disposed of in Puerto Rico at certified (Title D) landfills. However, recent laws enacted by the Puerto Rico legislature restricted the beneficial use and disposal of CCR (Act 40-2017) and subsequently banned on-island CCRs disposal completely, including Agremax (Act 5-2020).[4]

These changes in law are unprecedented. No state in the continental United States imposes a similar ban, and under federal law, CCRs that are not used beneficially can be disposed of in landfills. There are three certified (Title D) landfills located within 50 miles from our plant that are permitted to accept Agremax for use or disposal. However, the changes in Puerto Rico law have required us to ship all CCRs over 1,000 miles by barge for disposal in the continental United States—dramatically increasing our cost to manage CCRs.[5] A further complication here is that the Jones Act—a federal law regulating maritime commerce between the States and Puerto Rico—requires us to ship these CCRs for disposal using exclusively U.S. vessels, which are scarce and thus expensive to reserve. Last year, AES-PR required 26 vessels to ship approximately 529,949.97 short tons off-island for disposal.

[2] We support PREPA's efforts to expand renewable energy sources on the grid and welcome future partnership opportunities to achieve that goal. Given Puerto Rico's ambitious renewable penetration targets for the years ahead, we expect AES-PR will continue to play a crucial role in Puerto Rico's transition to renewable energy by providing cost-effective, reliable capacity to Puerto Rico's grid as additional renewable assets come online.

[3] CCRs are non-hazardous wastes that can be beneficially used and landfilled in accordance with U.S. EPA regulations.

[4] Furthermore, Puerto Rico's Department of Natural and Environmental Resources (DNER) is in the process of finalizing its proposed regulations implementing Act 5-2020. Without reasonable accommodations for generators like AES-PR, the DNER's Act 5-2020 regulations will likely increase our costs and further threaten our ability to operate.

[5] On February 3, 2021, I wrote to you concerning this matter. That letter focused on how AES-PR's compliance with Puerto Rico's new ban on CCR disposal on the island (per Act 40-2017 and Act 5-2020) has come at considerable cost to AES-PR. (*See* J. Bolinaga Letter to F. Padilla (Feb. 3, 2021).) It also enclosed a financial forecast showing how these new environmental costs will negatively impact AES-PR's cashflows throughout the remaining life of the PPOA. (*See id.*)

Moreover, AES-PR strives to comply with all EPA environmental regulations, and our compliance measures have also had a significant impact on AES-PR's cashflows. Indeed, AES-PR has incurred new environmental compliance costs to meet the requirements of EPA's 2015 CCR Rule. For instance, since the CCR Rule became effective, AES-PR has made substantial investments in new compliance measures. These measures include installing and operating a groundwater monitoring system, conducting additional inspections, developing required plans, and the ongoing installation of a synthetic liner in its staging area to prevent CCR contact with the ground.

***Financial Impact*:** We estimate that the aforementioned changes in Puerto Rico and federal environmental laws are imposing **$167 million in costs related to AES-PR's management of CCRs**—which, among other things, includes shipping, trucking, and disposing of CCRs in a continental U.S. landfill—for the 2019-2027 period. This represents an incremental average annual cost to AES-PR of $18 million for the 2019-2027 period, and specifically, $20 million/year for 2021 and 2022.

2. The Port of Las Mareas Recurrent Dredging Costs

On February 27, 1997, AES PR, L.P. ("AES-PR") and the Puerto Rico Ports Authority (the "Authority") entered into a 25-year Marine Facilities Agreement (the "Agreement") for the use of the marine facilities to be built by AES-PR in the maritime terrestrial zone of the Port of Las Mareas in Guayama, Puerto Rico (the "Port"). The Agreement allowed AES-PR to build and develop a cogeneration power plant, as well as other marine facilities, to operate the power plant and receive/unload coal to be used in the electric generation process. The Agreement expressly specifies that the Authority is responsible for maintaining, repairing, and replacing—at its sole cost and expense—all dredging and cleaning of the Port. If the Authority fails to fulfill this obligation, then AES-PR, per the Agreement, has the right to perform the maintenance work at the Authority's sole cost and expense.

In October 2014, AES-PR notified the Authority, in writing, of the need to perform maintenance work under the Agreement. In the end, the Authority informed AES-PR that due to its current financial situation, it could not afford to perform the maintenance work itself. As a result, and as permitted under the Agreement, AES-PR in good faith performed the necessary dredging work for the Port of Las Mareas, at the Authority's sole cost and expense, from 2015 to 2017. The total cost of this dredging project was approximately $7.8 million. In June 2018, the Authority agreed to fully repay AES-PR for these dredging costs in installments; but, to date, the Authority has not made a single reimbursement payment to AES-PR.

As a coal-based plant, AES-PR's Guayama facility must have a regularly maintained, fully accessible port to receive the coal shipments it needs to generate power, as well as to ship the end-process CCRs for disposal in the continental United States (*see* #1 above). Hence, additional maintenance dredging and cleaning will need to be performed to keep the Port intact and functional—which is also the Authority's sole responsibility while the Agreement is in effect.

***Financial Impact*:** **The $7.8 million in historical dredging costs from 2015 to 2017**—which the Authority acknowledges it is completely responsible for and has promised to repay—have already negatively impacted AES-PR's cashflows for those fiscal years, and AES-PR reserves its right to full repayment under the Agreement. But we are also concerned about the cost of future maintenance works at the Port while the Guayama plant remains in operation. **If the Authority fails to honor its contractual obligations to perform or, in the alternative, reimburse AES-PR for future maintenance**

works at the Port, then we estimate that this recurrent dredging and cleaning work will cost AES-PR approximately $8 million over the next six years of plant operation.[6]

3. EAF Penalties Under PPOA Article 11, Section 11.2(b)

PPOA Article 11, Section 11.2(b) affords PREPA the right to discount its capacity payments to AES-PR in the event AES-PR's Equivalent Availability Factor ("EAF") "for the period comprising the last twelve Billing Periods . . . falls below 90%." Under the PPOA's calculation scheme, these "EAF penalties" can be quite substantial.

In January 2020, PREPA requested that AES-PR delay necessary maintenance of certain generation units, because PREPA needed AES-PR's generation in the wake of the damages caused by the earthquakes on other PREPA assets. AES-PR complied with PREPA's request and delayed necessary maintenance of these units from January 2020 to June 2020. As PREPA explained to the PREB at the IRP proceeding, if AES-PR had not deferred maintenance and remained in operation, it would have been unable to serve load, leaving many citizens without power. The inability to timely service these units for that period compromised AES-PR's ability to maintain a 90% EAF. Also, due to the last twelve months rolling average availability methodology to quantify penalties, 2021 figures are expected to be impacted by these maintenance postponements as well. As a result, AES-PR faces substantial EAF penalties, which have only compounded its negative cashflow situation.

***Financial Impact*: We estimate that the costs posed by these EAF penalties (per the PPOA formulas) are $4.5 million for 2020 and $6.9 million for 2021, totaling $11.4 million in EAF penalties.**

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<u>**The cashflow problem at AES-PR is dire. Due to the new operational costs itemized above—which in the aggregate total approximately $186.3 million[7] for the 2019-2027 period, and specifically, for 2021 and 2022, total approximately $25 million/year**</u>—AES-PR expects to operate at a net negative cashflow for the foreseeable future. And, as tax exemptions wear off, these cash deficits are expected to continue to worsen.

To sustain our operations, it is essential that AES-PR receives PREPA's cooperation with addressing these uncontrollable new costs, so that AES-PR at least maintains enough cash to cover its bare minimum costs to operate, with reasonable cushion to deal with possible contingencies. Without this cooperation, PREPA would be jeopardizing AES-PR's ability to provide reliable, uninterrupted power, or, in the worst case, will prevent AES-PR from operating at all—outcomes that could have devastating consequences for PREPA and the people of Puerto Rico.

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[6] We note that if the Authority fails to perform the recurrent maintenance dredging, this could lead to an increase in the coal transportation price for PREPA.

[7] This figure excludes the approximately $7.8 million the Authority owes to AES-PR in historical dredging costs for 2015-2017.

AES-PR's cashflow problem can be rectified with PREPA's partnership, however. Once you have had an opportunity to review this letter with your colleagues, I would appreciate a meeting with PREPA to further discuss this matter and strategize on mutually beneficial solutions.

Respectfully submitted,

Jesús Bolinaga
President
AES Puerto Rico

Cc: Efrán Paredes-Maisonet, Executive Director, PREPA