



February 5, 2018

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Comisión de Energía de Puerto Rico
Edificio Seaboarne
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Re: Case Num. CEPR- IN-2018-0001 Regulation on Microgrid Development

Comments of the Natural Resources Defense Council (NRDC)

Dear Commissioners:

The Natural Resources Defense Council (NRDC) hereby respectfully submits its comments in response to the Commission's proposed Regulation on Microgrid Development in the above captioned proceeding on January 3, 2018 ("Proposed Rules"). NRDC is an international nonprofit environmental organization headquartered in New York. NRDC has more than 1.4 million members and online activists. Since our founding in 1970, NRDC's lawyers, scientists, and other environmental specialists have worked to protect the world's natural resources, public health, and the environment. Thank you for the opportunity to comment on your proposed rule.

We commend the Puerto Rico Energy Commission for undertaking this rulemaking, which should establish clear guidelines under which investment in microgrids can accelerate greatly across the island. We believe microgrids have an important role to play as part of a modern decentralized electric system. Done correctly, microgrids can deliver increased electric resiliency and reliability, while also aiding in the integration of distributed renewable energy resources. As we are seeing more and more across the world, modern electric grids are transitioning away from dirty and large centralized power stations toward a more flexible grid with distributed generation and energy storage.

Additionally, we believe that sustainable energy microgrids are fully consistent with the new "Vision for the Future of Power in Puerto Rico" adopted by the Governing Board of the Puerto Rico Electric Power Authority on January 31, 2018. In particular, those microgrids would help Puerto Rico achieve the vision goals referring to a 'reliable and resilient' system and a system that is a 'model of sustainability'.

NATURAL RESOURCES DEFENSE COUNCIL

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Substantive Comments on the proposed regulation:

Energy Efficiency for microgrids:

The proposed microgrid regulations do not establish or even encourage the use of energy efficiency as these microgrid systems are developed. Energy efficiency is a critical tool to reduce energy consumption and, ultimately, the overall cost of the microgrid. It is the easiest, cheapest and fastest way to address our climate challenges, while also increasing energy cost savings, creating good local jobs, reducing harmful pollution, and enhancing grid reliability. Whole building energy efficiency retrofits should be encouraged as part of the application process with the Puerto Rico Energy Commission. We propose that an application for a microgrid permit include a completed energy audit, performed by a certified auditor, for each whole building that is an owner or customer for the microgrid. These energy audits are relatively inexpensive and provide valuable recommendations regarding cost-effective energy efficiency upgrades.

Additionally, in order to encourage energy efficiency retrofits, microgrids that service buildings which have performed energy efficiency audits and incorporated the identified retrofits should be allowed to sell energy or grid services to customers, other than PREPA, who have no ownership stake in the system.

Definitions of renewable energy:

We strongly support encouraging the use of ‘sustainable renewable energy’ (as defined in Section 1.08(B)(31)) as the energy source for microgrids. Renewable energy helps reduce greenhouse gases that cause climate change, reduces emissions associated with electric generation that significantly impact public health, create jobs and other economic benefits, and can also improve the reliability and resiliency of the electric grid. Though there may be circumstances in which using some forms of ‘alternative renewable energy’ (Section 1.08 B.1) is warranted, we believe that the use of sustainable renewable energy should be prioritized. To that end, we encourage the Commission to explore ways to incentivize “sustainable renewable energy” microgrids as strongly preferable to “alternative renewable energy” microgrids.

It is also worth noting that NRDC does not support the incineration of municipal solid waste to produce energy. This process releases significant amounts of greenhouse gases and other toxic pollutants that contribute to the degradation of air and water quality. In particular, communities in proximity to these trash incinerators will be harmed by these pollutants. Therefore, we suggest the PREC eliminate “conversion of municipal solid waste” (1.08(B)(1)(i)) from the definition of “Alternative Renewable Energy”.

Additionally, currently the regulation at Section 1.08(B) defines “sustainable renewable energy” and “alternative renewable energy” but does not distinguish between them later in the rule. In fact, subsequently, the rule mentions renewable microgrids in Section 3.02 (and makes reference to the

definitions) but ‘renewable microgrids’ or ‘renewable energy’ are not defined in Section 1.08. Therefore, it is not clear which definition of renewable energy should apply to Section 3.02.

Incentivizing microgrids for critical facilities:

As the “Purpose and Executive Summary” to the proposed rule makes clear, microgrids are needed to deliver energy services, particularly when storms or other hazards make the electric grid not as reliable and resilient as is needed. Microgrids can and should play a strategic role in improving the energy resiliency of the island.

In particular, microgrid development should be encouraged at critical facilities. These facilities provide the backbone for effective and efficient recovery from expected and unexpected hazards. The Puerto Rico Energy Commission should look for opportunities to incentivize the creation of microgrids at critical facilities such as hospitals, storm shelters, first responder facilities (police and fire stations), assisted living facilities, water pumping stations and others.

In particular, we believe the commission should explore discounted or no fees for these facilities, as well as additional privileges such as being able to sell energy and services to customers, other than PREPA, who have no ownership stake in the system.

Cost of electricity from microgrids:

Section 6.05(B) seeks to regulate the cost of electricity for Small Municipal, Large Municipal and Third party microgrid systems. The rule seeks to limit the rate for electricity to PREPA’s average electric rate. However, as the rule explains, microgrids provide additional degrees of resiliency and reliability in their service, and, if from sustainable renewable energy, they would also help improve sustainability in the island. We believe these additional qualities provide a value which may not be reflected in the price per kilowatt hour if it is limited to the PREPA rate. Therefore, we would suggest allowing the parties to enter into their own agreements on the cost of the electricity and other services provided.

Respectfully Submitted,

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