

RE: Regulation for Energy Efficiency and Demand Response

Case No.: NEPR-MI-2019-0015

Subject: Public Comment of Rocky Mountain Institute

Date: October 7th, 2019

Rocky Mountain Institute (RMI) respectfully submits the following public comment in response to the Puerto Rico Energy Bureau's Proposed Regulation for Energy Efficiency and Demand Response, dated September 4, 2019.

RMI commends the Energy Bureau in establishing a structure for implementation of energy efficiency (EE) and demand response (DR) programs. Consistent with the energy policy principles of Act 17-2019, energy efficiency and demand response are valuable resources that can provide similar benefit to the energy system as power plants (e.g., energy, capacity, ramping, ancillary services), usually at lower cost and without risk of environmental degradation. Given the relatively high costs of energy generation in Puerto Rico, efficiency and demand response are particularly promising resources to help meet Puerto Rico's goals of 30% EE savings by 2040 and 100% renewable power generation by 2050. In support of those goals, we offer the following comments regarding PREB's proposed regulation for energy efficiency and demand response.

- 1. The proposed regulation clearly specifies the third-party administrator's (TPA's) responsibility to design programs to meet the 30% EE goal by 2040, as established by Act 17. Many programs tested elsewhere in the U.S. have demonstrated the ability to exceed targets cost-effectively. In this regulation, PREB could set an aspirational target to exceed the 30% goal established in policy, subject to cost-effectiveness, could direct the TPA to pursue all cost-effective EE and DR opportunities, and could provide guidance for performance incentives that encourages the TPA to exceed the official targets.
- 2. At the same time, PREB can better define the goal of 30% energy efficiency by 2040. To this point, it does not appear that target has been clearly quantified for instance, what is the baseline year against which 30% is measured? Are there interim targets prior to 2040? What will be the total energy savings required (e.g., in MWh)?
- 3. While the 30% EE goal is established in policy, there is not a formalized goal for demand response. PREB could support the role of DR by establishing a target and incorporating it into a performance incentive structure for the TPA.
- 4. There is substantial opportunity to better incorporate EE and DR programs into planning processes both for the IRP and for transmission and distribution infrastructure planning. In the IRP proceeding currently underway, PREPA and Siemens incorporate a fixed amount of EE into their demand forecast (at PREB's direction) and project a target level of DR capacity. In future planning efforts, EE and DR can be better incorporated into resource planning by considering them as resources competing alongside generation and storage, with their own cost curves and performance characteristics. This can be approached analytically or by seeking market responses, for instance by running all-source requests for offers (RFOs) that allow independent market players to offer bundles of EE and DR alongside packaged



together with resources like solar PV and battery storage. Whatever approach PREB prefers, if it intends the TPA to interact with PREPA during the next phase of planning, specifying the roles and responsibilities among parties for joint planning would create greater clarity.

- 5. Distributed battery storage programs can be valuable to the grid and to customers, but are not highlighted in this proposed regulation. Distributed storage can provide multiple values simultaneously, for instance offering energy resilience to an individual customer while offering capacity and frequency regulation to the grid operator. Well-designed programs can compensate customers for the value their resources deliver to the grid, lowering the cost of batteries for customers and making them more accessible. Examples from the continental U.S. include Green Mountain Power's Resilient Home¹ and Massachusetts' ConnectedSolutions² programs.
- 6. As currently written, the proposed regulation does not clarify the respective roles of PREPA and the TPA in supporting distributed battery storage. This regulation does state "energy storage technologies, such as batteries or thermal storage, may provide DR services" indicating the TPA may run distributed battery programs. This is a valuable model, and the regulation could be clearer that distributed battery programs are within the scope of the TPA. Separately, within the IRP proceeding, PREPA and Siemens have referred to the possibility that companies may respond to large battery storage RFPs with battery aggregations. It appears there may be multiple potential paths for distributed battery storage to support Puerto Rico's electric grid, either through TPA programs or through responses to PREPA RFPs. A third potential path could emerge if customers are offered timevarying pricing in their electricity rates and use battery storage to manage these costs. PREB can clarify that these are all acceptable.
- 7. The proposed regulation may inadvertently exclude valuable DR services. It states the TPA's goal for DR is "to meet or exceed the amount of DR resource identified in the most recent approved Integrated Resource Plan." As currently proposed, PREPA's integrated resource plan establishes a DR goal of 82 MW capacity by 2038. This goal establishes capacity as the only value stream provided by demand response. In reality, DR (including battery energy storage) is capable of providing other services, including frequency response, regulation, and ramping. PREB could expand its proposed regulation by establishing opportunity for the TPA to provide such services to the grid operator through DR.
- 8. The proposed regulation asks bidders for the TPA role to propose their own performance-based compensation structures and amounts. This risks responses that are not well-aligned with PREB's priorities or those of Puerto Rico's energy policy, or, worse, creates a possibility for abuse. While PREB may finalize such performance-based compensation through negotiation with bidders, it could at least provide clear priorities and guidelines for such compensation, or even propose a desired compensation structure for bidders to respond to.

¹ https://greenmountainpower.com/product/powerwall/

² https://www.masssave.com/en/saving/residential-rebates/connectedsolutions-batteries/

³ Puerto Rico Integrated Resource Plan 2018-2019, Appendix 4: Demand Side Resources, Page 2-16



Such an approach would help ensure bidders understand PREB's priorities and create a basis for objectively evaluating proposals.

- 9. The proposed regulation does not clarify requirements or standards for anonymized data sharing (e.g., Green Button). PREB could specify that such platforms should be accessible to customers, and that customers own their data and have a right to share it with potential DR and EE providers.
- 10. The proposed regulation focuses energy efficiency on providing electricity savings. There can also be effective programs that reduce energy usage from propane, natural gas, or other fuels. PREB can consider expanding the TPA program objectives to reach these non-electric fuels.
- 11. The proposed regulation establishes a System Benefits Charge (SBC) but does not clarify the timing of the SBC establishment, and potential impacts of this timing on the establishment of the TPA contract, e.g., if the SBC Account must reach a target balance prior to implementation of EE or DR programs, and what schedule is therefore required for SBC implementation to ensure prompt program deployment.