

July 31, 2020

VIA E-MAIL AT: COMENTARIOS@ENERGIA.PR.GOV

Mr. Edison Avilés Deliz, P.E., Esq.
Chairman
Puerto Rico Energy Bureau
268 Muñoz Rivera Ave, Suite 202
San Juan, PR 00918

Dear Chairman Avilés Deliz:

**Re: Request for feedback from stakeholders
Draft Proposed Regulation for Demand Response
Case No. NEPR-MI-2019-0015**

The Environmental Defense Fund (“EDF”), a global non-profit corporation engaged in linking science, economics and law to create innovative, equitable and cost-effective solutions to society's most urgent environmental problems, is filing these comments on the Puerto Rico Energy Bureau’s (“Energy Bureau”) initial proposal regarding demand response rulemaking. EDF thanks the Energy Bureau for the opportunity to offer these comments.

I. Introduction

The Puerto Rico Energy Public Policy Act (“Act 17-2019”) seeks to promote the necessary changes in order to transform the Electric Power System into one that satisfies the energy needs of the 21st century,¹ as well as maximizing the use of the energy resources available and that empowers the consumer to be part of the energy resources portfolio through the adoption of energy

¹ Puerto Rico Energy Public Policy Act, Act 17-2019, sec. 1.5 (2)(a).

efficiency strategies, demand response, the installation of distributed generators, among others.² On demand response, Act 17-2019 requires the establishment of programs and strategies that take into account short-, medium-, and long-term goals and incentivize customers to become more energy efficient, with a focus that results in a reduction in costs and energy consumption, as well as greater stability and reliability.³

Regarding the guidelines for developing demand response programs, Act 17-2019 requires that:

Within one hundred and eighty (180) days, the Energy Bureau shall develop guidelines for electric power service companies to develop Demand Response or Demand-Side Management Programs. Once [the Energy Bureau] establishes the guidelines, electric power service companies shall submit to the Energy Bureau within six (6) months, a proposal for the plan on demand response in accordance with the established guidelines. These shall include a defined schedule and incentives to make short-, medium-, and long-term programs feasible, focusing on the benefits that residential and commercial customers may receive from the reduction of energy consumption during peak hours.⁴

Act 17-2019 also requires the Energy Public Policy Program to develop and implement educational campaigns on a regular basis directed to advising consumers on the benefits of, among other things, demand response.⁵

On July 2, 2020, the Energy Bureau issued a Resolution requesting comments from stakeholders on a draft Regulation for Demand Response (“Preliminary Draft”).⁶ The Energy Bureau’s intention is to improve the Preliminary Draft before a rulemaking process commences.

II. Discussion and Comments

An effective demand response program can incentivize customers of electric service to become more energy efficient with greater benefits to the energy provider in terms of energy consumption, and reliability and stability of the grid. Moreover, customers participating in such voluntary programs can benefit from a cost reduction in their utility bills. The requirement that a

² *Id.* at sec. 1.5 (2)(e).

³ *Id.* at sec. 1.5 (5)(f).

⁴ *Id.* at sec. 5.24.

⁵ *Id.* at sec. 3.7.

⁶ *See* Resolution, Request for feedback from stakeholders, NEPR-MI-2019-0015 (July 2, 2020).

utility must design its electricity system to meet peak demand is a major factor in the cost of electricity. For example, in the New York Reforming Energy Vision case, the New York Public Service Commission Public staff found that peak demand was 75% higher than the average load, and that the system utilization rate (average demand divided by peak demand) was under 60%. This means that a huge portion of the bulk electricity system was not being used for a large portion of the time.⁷ The situation is exacerbated in Puerto Rico because it is an island and has more limited options to meet peak demand. The Energy Bureau can mitigate higher electricity prices by providing a regulation that requires a robust portfolio of demand response programs.

In order to achieve the demand response goals established in Act 17-2019, the Energy Bureau should promulgate a demand response regulation that follows best practices in the electric utility industry for the design and implementation of effective demand response programs.⁸ Following such best practices, we recommend that the Energy Bureau require the Puerto Rico Electric Power Authority (“PREPA”), its successor, the operator of the Transmission and Distribution System and DR Aggregators (“DR Program Providers”) to conduct a periodic demand response potential study, which identifies the technical potential for all achievable demand response programs, and also identifies how much demand response would be cost-effective. Such Potential Studies need to consider all customer classes and technologies. The array of controllable load has advanced considerably since Act 57-2014, including building automation, electric vehicle charging and customer-sited energy load shifting to incentivize customers to charge/discharge when the electric system is stressed.

In the event that PREPA or its successor deploys Advanced Metering Infrastructure, such as smart meters, the Preliminary Draft should require that these entities must implement procedures for customer and third party access to granular customer energy usage data, and protection of customer privacy, that follow industry best practices.

The Preliminary Draft should require the DR Program Providers to issue a request for proposal (“RFP”) to hire an independent consultant to develop a Technical Resource Manual (“TRM”) that provides standardized assumptions for how energy savings and demand savings should be calculated. The proposed regulation should require PREPA to periodically update the TRM.⁹ In addition to the TRM, an RFP should also be required to procure all cost-effective demand response. Moreover, the Energy Bureau should have discretion to approve demand

⁷ See

[http://www3.dps.ny.gov/W/PSCWeb.nsf/96f0fec0b45a3c6485257688006a701a/26be8a93967e604785257cc40066b91a/\\$FILE/ATTK0J3L.pdf/Reforming%20The%20Energy%20Vision%20\(REV\)%20REPORT%204.25.2014.pdf](http://www3.dps.ny.gov/W/PSCWeb.nsf/96f0fec0b45a3c6485257688006a701a/26be8a93967e604785257cc40066b91a/$FILE/ATTK0J3L.pdf/Reforming%20The%20Energy%20Vision%20(REV)%20REPORT%204.25.2014.pdf)

⁸ See Best Practices in Utility Demand Response Programs, Synapse Energy, <https://www.synapse-energy.com/sites/default/files/Utility-DR-17-010.pdf> (2017).

⁹ See Technical Resource Manual, NY Dep’t. of Public Service. For background on the TRM, <http://www3.dps.ny.gov/W/PSCWeb.nsf/All/72C23DECFF52920A85257F1100671BDD?OpenDocument>

response programs proposed by DR Program Providers for disadvantaged customers, even if the program does not pass a cost-effectiveness test.

As required by Act 17-2019, the proposed demand response plans prepared by DR Program providers shall include a defined schedule and incentives to make short-, medium-, and long-term programs feasible, focusing on the benefits that residential and commercial customers may receive from the reduction of energy consumption during peak hours. The Preliminary Draft does not mention this legal requirement.

Also, the Preliminary Draft should be more clear as to which customers can participate in the demand response programs, rather than cross referencing customer classes as to PREPA's tariff provisions. To that effect, the customers should be defined, for example, as large industrial, light industrial and commercial, and residential (as defined by its load capacity). The regulations should be easier to understand by a reasonable customer who is not familiar with the tariff provisions and to whom this regulation will be applicable. We also recommend that all residential customers be allowed to participate in the demand response programs with no restriction on the customer's DR resource capacity, independently if they decide to participate with PREPA or its successor, or the operator of the Transmission and Distribution system. This is consistent with best practices by other jurisdictions in the mainland United States.

Regarding resource planning, the Preliminary Draft should require PREPA, its successor, and the operator of the Transmission and Distribution System, to evaluate demand response on equal footing as a supply side resource when preparing its integrated resource plans ("IRPs"). This is a requirement under Act 17-2019.¹⁰ Also, there should be a requirement to incorporate all cost-effective demand response into the referred IRP. Such an evaluation should also consider how cost-effective demand response could realize bill savings by replacing inefficient existing generation. These are the most cost-effective and environmentally responsible resource options, and the Energy Bureau should demand this as a best practice in IRP planning.

The Preliminary Draft should also require PREPA, its successor, and the operator of the Transmission and Distribution System, to evaluate demand response as an alternative to planning distribution system improvements. For reference, New York's Distribution Load Relief Program ("DLRP") and Commercial System Relief Program (CSRP) – both are independent of the wholesale capacity programs - offer robust examples of how to leverage both demand response and distributed energy resources to defer or avoid transmission and distribution upgrades.

For any distribution system improvement project with a cost in excess of \$1 million, they should be required to document how it considered demand response programs as an alternative to a capital improvement project. The Preliminary Draft should require them to make this showing in the next rate case where it seeks cost recovery for the capital improvement project. The Preliminary Draft should also require the above mentioned entities to implement time-varying rate

¹⁰ See note 1, sec. 2.1.

design options to facilitate cost-effective demand response that decreases peak demand. Also, the Preliminary Draft should require the DR Program Providers to adopt a Benefit Cost Analysis using the Resource Value Framework and include a societal cost of carbon.¹¹

In addition to the legal obligation in Act 17-2019 requiring that the Energy Public Policy Program develop and implement educational campaigns on a regular basis directed to advising consumers on the benefits of, among other things, demand response, the Preliminary Draft should require DR Program Providers to offer programs to educate customers on the benefits of demand response. These educational programs should also be available at their websites. Such Preliminary Draft should reinstate the Energy Public Policy Program educational requirements set in Act 17-2019.

Regarding demand response events where the demand of energy increases and electricity peak levels must be reduced, the Preliminary Draft should require that DR Program Providers include a notification service to its customers participating in their demand response approved programs through mobile apps alerts, text messages, e-mail or phone calls.

We thank again the Energy Bureau for considering the stakeholders input before a proposed regulation goes through a formal rulemaking process. EDF does not waive its right to provide additional comments to the proposed Regulation for Demand Response once the rulemaking process commences pursuant to the Puerto Rico Uniform Administrative Procedures Act and the regulations of the Energy Bureau. If you have any questions regarding these comments, please do not hesitate to contact me at your convenience.

Respectfully,

/s/ Agustín F. Carbó Lugo
Attorney for EDF
TSPR RUA No. 13,801

¹¹ See Resource Framework, The National Efficiency Project, <https://nationalefficiencyscreening.org/wp-content/uploads/2017/03/The-Resource-Value-Framework-Reforming-EE-Cost-Effectiveness-14-027.pdf>, and NESP, Resource Value Framework, <https://nationalefficiencyscreening.org/about-resource-value-framework/>.

