GOVERNMENT OF PUERTO RICO
PUBLIC SERVICE REGULATORY BOARD
PUERTO RICO ENERGY BUREAU

IN RE: REGULATION FOR ENERGY EFFICIENCY & DEMAND RESPONSE	CASE NO. NEPR-2019-0015 **SUBJECT**: REQUEST FOR FEEDBACK FROM STAKEHOLDERS.

FEEDBACK BY THE SOLAR & ENERGY STORAGE ASSOCIATION OF PR TO DR PRELIMINARY DRAFT

TO THE HONORABLE PUERTO RICO ENERGY BUREAU:

COMES NOW the Solar & Energy Storage Association of Puerto Rico (SESA-PR), represented by appearing counsel and respectfully alleges and prays:

I. Introduction

1. On September 4, 2019, the Energy Bureau of the Public Service Regulatory Board ("Energy Bureau or PREB") pursuant to the provisions of Act 17-2019, Act 57-2014, and Act 38 2017, issued a Resolution commencing a proceeding for the adoption of a Regulation for Energy Efficiency and Demand Response. As part of the process, the Energy Bureau held a public hearing on October 8, 2019 and received oral and written comments from several stakeholders. Subsequently, the Energy Bureau held a series of Stakeholder Workshops regarding Energy Efficiency under Docket No. NEPR-2019-0019, the final of which is still pending

2.. On July 2nd 2020, this Energy Bureau emitted a resolution separating Energy Efficiency (EE) from Demand Response (DR), and communicated the current DR "Preliminary Draft" text to stakeholders for feedback "before the formal rulemaking

process commences". In its resolution PREB stresses "the importance of demand response programs and their potential benefit to help manage unforeseen generation incidents".

3. Comments to the current Preliminary Draft are due on August 2nd, 2020, as per PREB Order, although since August 2nd was a Sunday, per Energy Bureau rules the effective deadline is the next regular work day, August 3rd.

II. General Comments

4. Firstly, SESA-PR commends the PREB for its inclusive and intelligent procedural decision to fully socialize a regulatory proposal before the formal initiation of a rulemaking proceeding. This form of stakeholder engagement, alongside periodic stakeholder meetings, can be a very effective way to move forward with this rule, and could serve as a good model for all PREB rulemakings and other proceedings going forward. This approach promotes transparency and helps socialize outcomes in ways that increase overall stakeholder understanding, cultivates meaningful stakeholder input, and promotes understanding and support from stakeholders and the public.

5. In general, SESA-PR strongly supports the object and spirit of this preliminary draft. It is imporatant that Puerto Rico advance policies that enable the transition to a decentralized, democratized and de-carbonized electricity system. Act 17-2019 requires a quick transition to 100% renewable energy, and encourages the adoption of energy efficiency, demand response and large-scale deployment of all scales of renewable energy resources as a central role in achieving this goal.

6. We support PREB's programmatic approach, not locked into a procurement-only mentality, ensuring that anyone with appropriate technology can participate in and benefit form said DR programs.

7. Solar "prosumers" (consumers which also produce electricity) must be helped to become more integrated with the grid, not be pushed out. One way to do this is by encouraging customers to adopt batteries and be prepared for a future hurricane or other critical event, while giving them the opportunity to earn value delivering clean energy and grid services from their batteries back to PREPA when it needs it. If this DR draft proposal enables these possibilities, it shall be a great win for all.

8. Successful DR programs compensate prosumers for the benefits their devices provide to the grid, and, in a virtuous cycle, can also make batteries progressively more affordable and accessible for those and new prosumers. The impact of a well-structured and well-administered DR program will then in turn lower costs for the utility, which lowers costs for all ratepayers.

9. New market opportunities can also result for DR aggregator companies or entities who can economically leverage, in coordinated fashion, multiple behind the meter storage facilities for DR energy services, benefiting prosumers and the grid as a whole. Distributed storage not only provides resilience to individual consumers and prosumers, but can also provide multiple services related to DR, including capacity, frequency regulation, peak load reduction and other benefits to the grid.

10. The step PREB takes with this Preliminary Proposal not only clearly aligns with Puerto Rico legislated public policy, but indirectly reflects, at the local and retail level,

norms that the Federal Energy Regulatory Commission (FERC), in its Order 745, has established for markets under its jurisdiction: that given its capability to balance supply and demand as an alternative to a generation resource, and given that dispatch of a demand response resource is cost-effective, DR resources must be fully compensated.[1]

11. In terms of potential examples for PREB to emulate, the 2020 Hawai'i Electric Frequency Response Trigger program in Oahu is on point. There, a SESA member company (Sunrun) has deployed about 1,000 home battery systems to inject 4.3 MW of capacity and fast frequency service into Hawaii Electric Company's (HECO) grid.[2] These solar-plus-storage behind-the-meter systems can be tapped to respond to grid needs faster than conventional generators, and it can be done in a more cost competitive way than adding utility-scale generation.

12. The Hawai'i PUCs have approved more of these programs within HECO's service territory, creating space and opportunity for more distributed solar-plus-storage partnerships.[3] **Hawaii has found that increasing the amount of distributed demand response costs less than building new power plants, and in fact costs less than operating & maintaining its already-operating power plants.**

13. Another potential program structure is so called "*Bring your own device*" (BYOD) programs. BYOD refers to utility and non-utility programs that encourage customers to

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[1]<https://www.ferc.gov/industries-data/electric/power-sales-and-markets/demand-response>; <https://www.ferc.gov/sites/default/files/2020-04/OrderNo.745-A.pdf>. FERC's Order 745 was upheld by the Supreme Court in FERC v. EPSA, 136 S. Ct. 760 (2016). <https://www.supremecourt.gov/opinions/15pdf/14-840-%20new_o75q.pdf>.

[2]<https://www.utilitydive.com/news/sunrun-partnership-enhances-hecos-ability-to-tap-into-der-systems-when-pow/562733/>.

[3]<https://www.utilitydive.com/news/hawaii-regulators-question-lack-of-non-wires-alternatives-in-hecos-integra/560470/>.

acquire pre-approved devices from a vendor of their choosing. Customers can enroll the devices into demand response and energy efficiency programs, managed directly or indirectly by the utility. Via deployment of stored solar energy, these programs present great opportunities to manage energy usage, energy efficiency and load shifting applications.

14. Another interesting and pertinent BYOD program is National Grid's "*ConnectedSolutions*" initiative in several states.[4] Batteries can be utilized year-round, enabling these programs to "peak shave" throughout the year and reduce the cost of generation and transmission capacity for all customers. Basically, by allowing utilities to draw power stored in batteries (such as the locally quite popular and widely deployed Tesla Powerwall 2) during times of peak demand, the utility is able to balance out the electric grid and avoid the use of energy from the most expensive, dirty, non-renewable peaker plants. Customers with solar PV plus batteries get compensated as the utility gains the ability to tap the battery up to 60 times per summer and five times per winter, with each event lasting a maximum of three hours. This safeguard allows customers sufficient emergency energy source during power outages. This program could be an effective model for Puerto Rico, perhaps limiting Battery draws during peak hurricane season or even as storms are forecasted to hit the island, as a boosted resiliency measure.

III. Specific Comments

The following is a list of specific comments that we ask the PREB and all stakeholders to consider as this important rule continues being created.

[4] <https://www.nationalgridus.com/MA-Home/Connected-Solutions/BatteryProgram>.

15. 1.04: In defining Applicability, consider being clear about what entity will be primarily responsible for this rule turning into real-life successful DR programs, and what entity will be held accountable if real-life DR programs don't occur at all, or don't occur in a large-enough scale. For example, who does PREB envision is primarily responsible for DR programs in Puerto Rico? And what is meant by 1.04 A. "PREPA, its successor and the operator of the Transmission and Distribution System"? This implies that there is a "successor", some entity other than PREPA or LUMA, which has recently been contracted as the operator of the Transmission and Distribution System. And specifically, between PREPA and LUMA, who is this rule primarily applicable to?

16. 1.09 B) 6): Redraft to include new underlined language, so that it reads: "Demand Response" or "DR" means changes in <u>utility-supplied</u> electric usage by end-use customers from their normal consumption patterns in response to changes in the price of electricity over time, or to incentive payments designed to induce lower <u>utility-supplied</u> electricity use during periods when <u>utility</u> system costs increase or when <u>utility</u> system reliability is jeopardized." Addition of the underlined text makes clear that DR programs are targeted to reduce customer's consumption of utility-supplied electricity, which enables load-shifting to utility's own battery storage systems to be included, as well as programs which don't target reduction of a consumer's overall electric usage but rather incentivize payments for triggering customers' controlled draining of a certain percentage of their customer-sited battery storage, lowering their amount of utility-supplied electricity consumed at times advantageous for the utility.

17. 1.09 B) 9): Revisit the phrase "…for self-supply or sale" at the end of the sentence defining "Distributed Generation". Note that Net Metered systems are not generally considered to "sell power", but rather have the effect of reducing a customer's net power consumption from the utility over a given billing cycle. Also revisit the phrase "electric power generation facility" to ensure that residential & commercial rooftop solar, which is clearly Distributed Generation, meets the intended definition.

18. 1.09) B) 23): Revisit this definition of "Provider of Last Resort" or "POLR". As listed in this draft, PREPA is currently "the entity" with the primary responsibility for providing all generation, transmission, distribution, commercialization and operating functions of the electrical system. The paradigm created by the LUMA contract means that there won't be one single entity responsible for all of these things.

19. 2.01 B): Revisit the wording regarding what customers "may participate directly". First, what is meant by "PREPA's DR programs", as opposed to other DR programs? Second, what is the logic behind prohibiting customers with capacity less than 50 kW from participating in such programs, and why is the appropriate threshold 50kW? **If the intent is to disallow customers with systems that are too small from participating, consider setting a much lower threshold, such as 5KW, to match the common output of residential battery storage systems.**

20. 2.01 E): Revisit the intention of what entity is responsible for "pursuing all available cost-effective Demand Response resources". As it's currently drafted, it says that one of three different entities "shall", which leave it unclear both which entity is expected to do this, and which entity would suffer repercussions if they didn't. Also, revisit the use of the word "available". Since there are no DR programs in existence in Puerto Rico today,

there are therefore none "available". It seems the intention of this rule is to make all cost-effective DR resources become available for customers to have the choice to participate in.

21. 2.01 G): It's unclear why all IPPs that engage in Wheeling should be required to also "develop and offer cost-effective, feasible Demand Response programs". Independent Power Producers generally simply sell electricity at a set price to customers, and there doesn't appear to be anything that would preclude customers which acquire some or all of their electric generation from an IPP to participate in whatever DR programs are offered by PREPA or other DR providers. Consider erasing all references to Wheeling in this rule.

22. 2.03 A): Reconsider the phrase "served by PREPA" is too restrictive, and reconsider the intention of the 50kW threshold and whether it needs to be repeated here in addition to existing in section 2.01 B).

23. 2.04 E): Consider expanding upon the phrase "Compensation mechanisms are subject to Energy Bureau review and approval." The degree to which this rule enables DR programs to exist could be dependent on the degree to which this rule spells out the specifics of how pricing for compensation mechanisms are to be created, and the specific process by which they are to be reviewed and approved by the Energy Bureau. Alternatively, or in addition, this rule itself could clearly define what these compensation mechanisms are to entail, and even set initial pricing for these compensation mechanisms. With sufficient stakeholder engagement and buy-in, this could result in a rule that is "shovel-ready" upon final publication, resulting in DR programs existing as soon as possible.

24. 3.01 C) 1): Consider adding to the phrase …"which might dispatch daily" to account for programs which might dispatch multiple times per day, such as air conditioner compressor cycling that could be dispatched multiple times within the peak usage of a given day.

25. 3.03 F) 2) b): Include a subsection of "trade groups and associations" (such as SESA).

26. 4.01 D): Include a subsection in test mentioning "Avoided Renewable Portfolio Standard compliance costs". This is clearly aligned with Act 17-2019 and would induce the utility to leverage programs to aid its RPS compliance (and avoid PREB fines). Also include "Avoided lost customer hours of service costs", which are of primary concern in Puerto Rico, and consider adding additional benefits per ongoing stakeholder recommendations.

27. 4.02 C): Redraft to "The Energy Bureau shall include in the Puerto Rico Test all relevant generation, transmission, and distribution impacts, reliability and resilience, furtherance of Renewable Portfolio Standard goals, other generation resource ~~fuel~~ impacts, and environmental impacts, and may include other non-energy impacts, economic development impacts, and social equity impacts. The accrual of specific non-energy impacts to certain programs or technologies, such as income-eligible programs or combined heat and power, may be considered." Addition of underlined text and stricken text (underlined and stricken here for emphasis, not to be underlined in final proposal) clearly aligns this article with Act 17-2019 and Puerto Rico's fast movement away from fossil fuels.

28. 4.02 D): Consider shortening the 12 month period to 3 months to get the process started sooner; or initiate the Puerto Rico Test proceeding upon final publication of this Rule. Also consider that that Technical Resource Manual may be necessary before or during development of the Puerto Rico Test, thus starting this process earlier could accelerate the time with additional savings opportunities are defined and developed.

29. 6.02 A): Consider giving a deadline for development and publishing this standard form, such as "within 90 days of final rule publication".

30. 6.02 C): Add a subsection clearly stating that "No Meter or telemetry technology shall be used by any party in connection, directly or indirectly, to measure customers' generation of solar energy." This is aligned with the prohibition in Act 17-2019 of direct or indirect charges on prosumers.

31. 6.03: Add a subsection stating that "A complaint procedure of an Electric Services Company certified by the Energy Bureau which is in force before the approval of this Regulation, will be deemed the pertinent procedure under this section, until another procedure is adopted." Also give a clear timeline for when DR Program Providers must develop and publish such procedure. Or, simply determine as part of this rule the text of what this procedure should be and require DR Program Providers to implement it in their offerings.

32. 7.01) A): Redraft to "PREPA, its successor or the operator of the Transmission and Distribution System shall develop for the Energy Bureau's approval, rate designs that are consistent with customer implementation of cost-effective DR resources.

> 1) PREPA, its successor or the operator of the Transmission and Distribution System may develop and implement time-varying <u>rates and/or</u>

> demand charges that are informed by the costs of distribution or transmission infrastructure. Any such rate structure must be cost-based, and must not discourage beneficial electrification, pro-renewables integration mandates and policies, and ~~or~~ the more efficient use of the grid.
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> 2) PREPA, its successor or the operator of the Transmission and Distribution System may develop and implement time-varying rates ~~and/or demand charges~~ that are informed by the costs of energy supply. Any such rate structure must be cost-based, ~~and~~ must not discourage beneficial electrification and .pro-renewables integration mandates and policies."

Addition of underlined text and stricken text (underlined and stricken here for emphasis, not to be underlined in final proposal) clearly aligns this article with Act 17-2019, specifically the legal ban on all direct or indirect charges on prosumers, as well as Puerto Rico's fast movement away from fossil fuels and toward a 100% renewables RPS. Also add language clarifying that such proceedings are open to stakeholder intervention and participation.

33. 7.01) A): Add language clarifying that parties other than "PREPA, its successor or the operator of the Transmission and Distribution System" may also develop and propose rate designs for the Energy Bureau's consideration.

IV. Conclusion

38. SESA again thanks PREB for this opportunity to comment and improve this regulatory Preliminary Draft. A future DR Regulation can be a critical initiative to walk the path laid out by Act 17-2019 and reach its goals.

34. We also note that this Preliminary Draft does not reference any specific funding source for proposed DR Programs. Funding could potentially include PREPA funds, PREB's own funds, DR Provider's own financing, federal or local government funds, private foundations, banks, or other sources.

35. As this rule develops, we recommend scheduling a professionally-facilitated day-long workshop or workshops to happen in conjunction with publication of the subsequent draft of this rule, whether it be the formal draft rule or a subsequent development draft rule. During this workshop or series of workshops, the Energy Bureau could explain its reasoning behind what changes were made to the next draft and why, and highlight areas of value for stakeholder input, and take a "collaborative rulemaking" approach that could generate valuable input for the Energy Bureau to consider on its path to publication of the final rule.

WHEREFORE It is respectfully requested from this Honorable Energy Bureau thoroughly consider our comments and accept our suggestions and additions to this regulatory Preliminary Draft.

In San Juan, Puerto Rico, this 3rd day of August 2020.

Respectfully submitted,
[*signed/ Javier Rúa-Jovet*]

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