



10 October 2019

Re: Regulation on Energy Efficiency & Demand Response

Case No.: NEPR-MI-2019-0015

Sr. Edison Avilés Deliz
Puerto Rico Energy Bureau

Introductory statement

CALL

As we embark on a new energy paradigm for Puerto Rico let me take this opportunity to recognize the fact that at no time in our policy history has there been more dynamism surrounding energy policy as there is now. I have participated in different aspects of the energy debate since 2007 and there is optimism that we have an opportunity to finally get it right. We recognize the hard and precise work of the Puerto Rico Energy Bureau on these issues.

EE/DR regulation, that we are exploring here, responds to Puerto Rico's Energy Transformation and Relief Act of 2014, but it also fits nicely within Articles 4 and 9 of Ley de Mitigación, Adaptación y Resiliencia al Cambio Climático de Puerto Rico of 2019, the 2016 Paris Accord Agreements and the broader responsibility to reduce our carbon footprint on the planet. Improving our energy efficiency by 30% over the next 21 years puts Puerto Rico in compliance with the objectives set out by the Intergovernmental Panel on Climate Change Report of 2018 if we are to respond constructively and keep global temperature from rising above 1.5°C. So, this is a very serious matter.

As a professional in the energy field, I could take the approach of focusing my remarks on only what benefits the renewable energy industry in Puerto Rico but I think it would short change the process. To balance that out, my remarks will be from a "prosumer" perspective that lives 365 days a year in Puerto

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Rico and is planning to do so for the next decades to come, but also happens to work in the energy field.

Specific Recommendations

One important focus that a TPA, PREB and PREPA should emphasize is energy efficiency and energy conservation education. The three-year plan submitted must include a robust campaign for educating the different customer classes that are served by PREPA's Generation and T&D assets. As you all know, we are currently experiencing the worst quality of electrical services from PREPA in the last 20 years. Everyday there are outages, some planned, some not and the overall explanation for them is that the maintenance budget is significantly compromised because of ongoing fiscal issues that we all know about. Therefore, PREPA's answer is to run a very THIN margin of spinning reserve and any unbalanced situation is going to cause outages. IF WE HAD AN EFFICIENCY AND DEMAND RESPONSE PROGRAM ONGOING RIGHT NOW, it could be important asset to see us through this current crisis. Instead, we have people screaming, "bring more generation as reserve capacity to keep the electricity on, no matter what". The more responsible answer could be, lets implement a x% or y% efficiency response and keep the lights on for everyone. That is an opportunity lost right there. But that could only occur with a population whose Energy IQ is higher that it is right now.

The public has to be educated about the value of energy efficiency. **We recommend that 10% of the EE/DR budget, during the first 3 years, be set aside for a robust energy conservation education campaign tailored to the specific needs of the different customer classes that are served by PREPA. After the first three years PREB can do a qualitative and quantitative analysis of the campaign's results and modify its amount if deemed necessary.**

The educational campaign is important for its own merit, but also because PREB has to explain the justification and value of the new Systems Benefits Charge, which is NonByPassable, to all of PREPA's customers.

Let's address the issue of Market Baseline Studies, Technical Reference Manual, PR Cost-Benefit Test, the First Selection of a Third-Party Administrator and goal setting. The way the



regulations are written it seems to give too much leeway to the first TPA to establish the objectives that can be met based on their own research of the market conditions and idiosyncrasies of Puerto Rico and then establish a three year working plan to meet those objectives which they identified. There are incredible valuable and knowledgeable energy stakeholders in Puerto Rico and the federal government that could delineate a road map of general goals and objectives that should be met by the TPAs that are hired to manage our EE and DR programs. **Our second recommendation is that the RFP incorporate a framework of actionable paths (ie. community participation, grants for efficiency innovation to different areas of the economy, cross sector measures that affect other public services such as garbage disposal, potable water infrastructure and schools, just to name a few, and other measures identified by stakeholders that participate in the redacting of the RFP. Penn State, Harvard and Yale and Georgia Institute of Technology, just to name a few have, very successful and documented case studies for the implementation of Energy Efficiency programs that are worth digging into IOT**

Let us move now to Article 12, Geographically Targeted Programs. After Hurricane Maria, there is clear evidence that some geographic communities are more vulnerable than others, from an electrical standpoint. Prof Castro-Stiriche, from UPR-M Electrical Dept has done really good work identifying these communities down to the street level and they account for about 200,000 homes. The interesting thing is that these homes are repeat offenders, under non-optimal climate conditions, they are the first ones to suffer the outages and the last ones to have power restored. I have included a reference for your review. <https://inesi.upr.edu/wp-content/uploads/2019/06/EnergyPolicyBriefHousehold2019mar.pdf> This opens up an important opportunity for energy justice in Puerto Rico and almost necessitates that the TPA pay special attention to these homes and communities in developing Non_Wire alternatives. Therefore our **Third recommendation is that geographically isolated communities, as identified by the the CHOLEs report, are actively sought out and recruited to participate in Energy Efficiency efforts that will improve their energy reliability and resiliency.**



One key aspect of the regulation is that it must clearly state that the relationship between the TPA and PREPA's clients must be transparent and its communication strategy effective. On this important mandate we make the following recommendation. Our **Fourth recommendation is that TPA set up an easy to follow web site IN SPANISH that details what the Energy Efficiency opportunities, rebates, programs, appliance exchange, community grants etc. that are available.**

Now, it also important that the TPA have time to implement, study, reach out, educate, communicate, evaluate and modify their three-year plans. Three years is not a lot of time and should not be spent writing plans and reports. So let's look at alternative such as automatization for reporting and evaluating the efficacy of measures. In order for that to work, PREPA and its successors have to understand a clear mandate that they have to be forthcoming with relevant information and data so that the TPA can measure quickly the efficacy of their EE and DR measures. Our **Sixth recommendation is that the regulation lay out specifically the information and the time for compliance that PREPA or its successors will have to comply with a request for information and real-time data sharing with the TPA so that programs and the intended responses are well integrated.**

We are not convinced that having an Annual plan presentation by the TPA is the manner to achieve our 30% efficiency goal. Having three-year plans with metrics, benchmarks and automatic triggers is probably a better way to go. It gets the TPA and the public thinking in a longer time framework, rather than a year to year plans. The bar is set too low for allowing a TPA to request a budget change, program change, goal modifications from year to year. We should be very clear that deviating from the approved Three-Year program is only permitted by big ticket items, such as long term electrical disruptions caused by extreme weather events, labor issues, force majeure, etc. That was our **Seventh Recommendation.**

In wrapping up our remarks, we want to close out by emphasizing that the people of Puerto Rico have felt underserved by the electrical company, probably for the last ten years, maybe more. And as such the PREB has to be



mindful that they do not have the luxury of rolling out such an important program without a clear communication strategy and support from PREPA. The forces of Status Quo are to entrenched and we have to make sure that internal sabotage does not endanger the important goal of achieving 30% efficiency by 2040. I close out by saying that the customer must hear in a clear message that this program will save them money on their consumption, that it will improve the reliability of PREPA in the mid to long term and will put in line with meeting our planetary responsibilities of reducing greenhouse gas emissions. Whether this program will succeed or not is largely dependent on how the customers accept it. Therefore the communication approach should be multidisciplinary in nature. It cannot be presented just as an electrical or engineering issue. Environmental Sociologist, businesspeople, community leaders, civic and religious leaders must all participate in communicating the importance of this new energy paradigm for Puerto Rico. The TPA must present itself open to input from the people it will serve and respond in a timely manner to issues that are brought to their attention.

We look forward to answering any questions you may have and to participate in a substantive manner in the development of an excellent EE/DR program for Puerto Rico.

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Managing Partner