



February 4, 2018

## RE: PUERTO RICO ENERGY COMMISSION ON MICROGRID DEVELOPMENT (PROPOSED RULES) -- CEPR-MI-2018-0001

Long before hurricanes Irma and María, the financial and operational condition of PREPA evidenced the need for new energy paradigms for electric power generation and services in Puerto Rico. An energy paradigm focused on resiliency, clean and renewable energy, greater conservation, efficiency measures, choice, decentralization and an educated and participatory consumer base. The hurricanes mentioned above, merely made it a national emergency and priority.

Our three organizations, two nonprofit community-based (Movimiento por un Mundo Mejor Inc. and Voz Activa Inc.) and one for profit renewable energy company (Energy Solutions Puerto Rico), have formed an alliance to engage local communities affected by the hurricanes to facilitate their participation and transition to a resilient microgrid energy system. It is very opportune that the Puerto Rico Energy Commission has acted upon the need to develop a structured approach to micro grid development. Our mission, vis a vis CEPR-MI-2018-0001, is to ensure that communities and the consumer base of Puerto Rico and their concerns, are attended to in these proposed regulations.

Our organizations have come together to provide observations, comments and some recommended changes on the proposed rules.

1) **Observation**...This regulation does not openly exclude solid waste conversion technology as part of a Micro Grid energy generating source. **Recommended modification:** It should unequivocally exclude it. Solid waste conversion technology should not be considered as part of any microgrid community-based fuel source.

2) **Observation** ...There are thousands of PREPA customers that receive a humanitarian or economic need-based subsidy of some sort, including those that must run around the clock medical and life support systems. **Recommended modification:** There should be consistent rules and

regulations set in place so that all microgrids incorporate an equal subsidy structure in their energy and service pricing without jeopardizing its economic sustainability.

3) **Observation**...Transition to a microgrid based energy system from the traditional PREPA system is a significant change to a community or cluster of homes. **Recommended modification:** If a community is selected or opts for a Micro Grid energy system, there should be an encouragement that they attend a 1-day workshop to educate themselves about the new energy services, their rights and responsibilities.

4) **Observation**...These proposed rules openly exclude future PREPA Micro Grids from their rule making and requirements. Although we understand the reason why, the elephant in the room should not be overlooked. THERE CAN NOT BE TWO SYSTEMS, WITH DIFFERENT RULES. We feel that will create problems, price inequities, quality issues, potential discriminatory practices in coverage and interconnectability. **Recommended modification:** Clarify and establish deadlines by when the PREPA Micro Grid rules will be established and make it clear that if those PREPA's and Private Micro Grid rules will be consolidated and equalized.

5) **Observation**...This Commission fails to establish the time frame, technical requirements and costs for interconnecting the Micro Grid to PREPA. Using the experience gained in the past years in the interconnection process of distributed renewable energy generation, it is critical that these parameters be established early on in the process. It is no secret that there have been individual clients with proposed distributed generation systems who have had to wait upwards of 12 months to get the interconnection permit approved by PREPA. That practice, by action or omission, created economic hardship on clients and an uncertain permitting process intra different regions of PREPA. **Recommended modification:** PREPA has to be directed to establish interconnection technical and economic feasibility requirements within six months and make it clear that expert advice is to be sought out and incorporated from industry and regulatory experts such as the US Department of Energy and local and national academic institutions

6) **Observation** ...The proposed rules permit that a renewable energy based Micro Grid generate up to 25% of its electricity from traditional fossil fuels, such as natural gas, diesel, gasoline or biomass derivatives potentially exposing residents to locally generated air pollutants. **Recommended modification:** Micro Grids that use fossil fuel generators as part of the 75-25% mix should report criteria pollutant emissions to EQB and EPA to ensure that their area does not become a Non-Attainment Air quality areas and that vulnerable populations of elderly, those with chronic respiratory illness are not unduly exposed to continuous noxious air contaminants.

7) **Observation** ...Puerto Rico's electrical system has legacy infrastructure such hydroelectric generators established at numerous reservoirs. Special attention and priorities could be given to the establishment of community based Micro Grids on existing renewable base generating facilities that have not been maintained. For example, there are Lago Caonillas, Naguabo, Toro Negro, Comerio just to name a few. **Recommended modification:** These legacy facilities could be prioritized and APP type agreements sought out to modernize and incorporate this renewable based infrastructure into regional based micro grids providing more stability and energy justice to the remote and mountainous regions of Puerto Rico.

8) **Observation** ...PREPA's long term practices of financing operating expenses with bond emissions and credit lines, without making any long-term capital expenditures modernizing its equipment is one of the root causes of the problem we now face. **Recommended modification:** Therefore, in order to avoid similar practices within Micro Grids options, all future Bond emissions and

credit lines shall be notified and approval sought from the clients in a binding democratic process, before they are enacted.

9) **Observation**...Establishing 20 cents as the price ceiling is an invitation for all developers to charge 20 cents to their customers. **Recommended modification:** It should be very clear that a reasonable margin on the return should be established by the FERC type rulings with community participatory process as an important component.

10) **Observation** ...A \$250 per month charge on small sized Micro Grid that operates within PREPA's electrical infrastructures is EXCESSIVE. **Recommended modification:** The definition of Small systems should be expanded to up to clusters of 25 clients so that the monthly charge per client is about \$10 rather than \$25.

11) **Observation**... Section 1.08 (5) defines Cooperatives as, "any non-profit entity consisting of a group of customers who share ownership of a microgrid system". **Recommended modification:** Should be clarified that "non-profit entity" will be regulated by "Ley de Corporaciones" de 2009 and not by la "Ley de Cooperativas".

12) **Observation** ...Microgrids without energy Wheeling capability is an incomplete solution and is limiting in their capacity to generate community economic development. **Recommended modification:** Develop the energy wheeling implementation rules so that entities can generate energy at the most adequate location even if its geographically located away from their point of consumption.

13) **Observation** ... Under Section 9.01, Request for Consideration, a term of 20 days is given for requesting reconsideration, an amount of time that is inconsistent with the 30-day terms given for other reviews and reconsiderations such as Judicial review. **Recommended modification:** Make all the terms consistent to 30 days.

We encourage the Energy Commission of Puerto Rico to continue this very important work, it lays the foundation for energy evolution and energy democracy in Puerto Rico. We look forward to the opportunity to clarify or expand upon the recommendations we have made.