

Pattern Santa Isabel LLC Pier 1, Bay 3 San Francisco, CA 94111

November 16, 2017

Mr. Ángel R. Rivera de la Cruz Puerto Rico Energy Commission 268 Avenida Muñoz Rivera, Suite 702 Hato Rey, Puerto Rico 02918

Re:

Case No. CEPR – IN - 2017 - 0002Request for Public Comments

Dear Mr. Rivera de la Cruz,

There is no doubt, Hurricane Maria was the most powerful storm to make a direct hit on Puerto Rico and words fall short to express how we feel about Puerto Rico's difficult and demanding time after so much loss. On behalf of Pattern Santa Isabel LLC ("Pattern"), I would like to express our solidarity with the humanitarian efforts and our full support of any and all kinds of rapid response power generation resources that can be mobilized to the island quickly to restore the power supply to all the citizens.

Once the immediate humanitarian needs of the citizen of Puerto Rico are met, as the Commission turns to the mid-to long-term energy supply resources, any installation of resources at scale should be part of a deliberate planning evaluation of all available resources and technology.

We do support the vision of utility-scale renewables and storage providing a medium term bridge between generation profiles of wind (with around the clock variable generation), solar (with primarily on-peak generation), and the shape of the load that must be served. We also believe that storage and other transmission devices or resources may be best designated and sited on a system level, as opposed to being necessarily co-located with individual generation resources.

Pattern is already the owner and operator of the largest renewable project on the island, so has gathered significant expertise on developing, building, and operating clean, cost effective renewable energy facilities such as Santa Isabel, which can continue to be a core part of Puerto Rico's generation modernization efforts.

In response to your later dated November 10, 2017, Case No. CEPR-IN-2017-002, Request for Public Comments related to the Implementation of regulatory actions to facilitate the tasks of restoring electric service and encourage the deployment of new technologies, Pattern welcomes this opportunity to comment on Exhibit A, Micro Grid Generation Technology, Section 4.

## Section 4.1

Information provided to the Commission by Pattern suggests that the Santa Isabel wind farm is operable, but lacks load and a source of energizing power. This condition could affect other renewable independent power producers, whose installations are operable but require power from PREPA to get back online.

#### Section 4.1.1

Is there a technical solution to add a small solar or diesel generator to restart the wind farm, and storage to firm up the supply?

# Response:

- Santa Isabel has on-site generators already that can meet the needs of the facility, but were not designed for continuous indefinite use, and receiving a permanent source of power is critical
- The 115 kV line we are connected to is energized and has been since October 6, and meeting our needs has only been awaiting PREPA's authorization for us to energize and connect. This remains the right immediate and long term solution for our power needs and we continue to work with PREPA for them to energize us and provide the feedback power we need.
- Santa Isabel completed a detailed assessment of its equipment and is ready to begin generating as soon as PREPA energizes us and authorizes our operation
- We do not believe that batteries or other devices are necessary to allow the Santa Isabel wind farm to reliably integrate into the PREPA generating system, and we eagerly await PREPA's authorization to do so
- As noted above, we do think storage provides very valuable opportunities in the medium term energy mix in Puerto Rico, and we are open to opportunities to work with PREPA and other private companies to participate in pilots or demonstrations of how we can expedite these benefits and help with the efforts to rebuild a more robust and reliable grid

## Section 4.1.2

Is there a load close to the wind farm that could be served from a microgrid based on the wind farm? Response: The municipality of Santa Isabel surrounds the wind farm. During the immediate recovery efforts we did offer power supply from our generators as an emergency option, but it was determined to not be the most effective method for supplying emergency power to the community. Once connected to the functioning 115 kV grid, our wind farm can provide power to the entire community of Santa Isabel (and other surrounding communities) through the existing transmission and distribution infrastructure.

### Section 4.1.3

What legal or contractual obstacles would prevent or limit the ability of Santa Isabel wind farm from

i. procuring a small-scale generation source to power up its turbines

Response: As mentioned in our response to 4.1.1, we already have emergency generators on-site to provide temporary power and do not see a need for any additional on-site power supply.

Pattern looks forward to be part of the first steps in the road towards achieving the objectives of modernizing and transforming the Puerto Rico electrical grid, to work side-by-side with the Commission, PREPA, and the citizens of Puerto Rico and facilitate the fast recovery and restoration of the electric service, to ensure that the right investments are made in restoring the electric service and have a long-term effect of strengthening the electric system.

Accordingly, Pattern submits its comments per the Commission Resolution and Order dated November 10, 2017.

Respectfully,

Sergio Gonsales

Pattern Energy Group Inc.