

James T. Gallagher Executive Director

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Via Electronic Mail

Lcda. María del Mar Cintrón Alvarado Secretary Comisión de Energía de Puerto Rico 268 Muñoz Rivera Avenue Seaborne Building Plaza (Old World Plaza Building) Plaza Level, Ste. 202 San Juan, PR 00918

Case No.: CEPR-MI-2018-0001

In RE: Regulation of Microgrid Development Subject: NYSSGC's General Comments on Proposed Regulation

Dear Secretary Cintrón Alvarado:

The New York State Smart Grid Consortium ("NYSSGC") hereby respectfully submits its comments in response to the Puerto Rico Energy Commission's ("Commission") proposed Regulation on Microgrid Development in the above-captioned proceeding on January 4, 2018 ("Proposed Rules").

1. Introduction

The NYSSGC is a unique public-private partnership established in 2008 as a not for profit entity to advance grid modernization in New York State. The mission of the NYSSGC is to promote the broad implementation of a safe, secure and reliable smart grid. Members include the world's leading power utilities, technology providers, research institutions and government policy makers. Recently we helped facilitate the stakeholder efforts for market design and technology as part of the New York Public Service Commission's Reforming the Regulatory Vision (REV) proceeding. Most recently, the NYSSGC has been working to facilitate the deployment of microgrids across New York State, and to develop advanced grid simulation tools to better understand the value that can be realized through the increased integration of distributed energy resources and smart grid technologies.

2. General Comments

New York State Smart Grid Consortium 1250 Broadway, 36th Floor, New York, NY 10001 358 Broadway, Saratoga Springs, NY 12866 • 518-369-0077 www.nyssmartgrid.com The NYSSGC's first suggestion refers to section 3.03.A that is in reference to the qualifications of "Combined heat-and-power" (CHP). In addition to the qualifications already suggested, the NYSSGC believes there should be minimum threshold requirements on the CHP's overall efficiency. More specifically, a threshold of at least 65% minimum overall efficiency should be included in Section 3.03.A. This is similar to efficiency thresholds adopted in New York and will help ensure that the equipment that is installed through this initiative is truly energy efficient.

Secondly, the NYSSGC suggests altering Section 1.08.B.1: "Alternative Renewable Energy" by removing fuel cells, as this technology is not considered a renewable energy resource. The Commission could, instead, amend the section titled "Combined Heat-and-Power Microgrids" (Section 3.03) to be "Clean, Efficient Generation Microgrids" as a way to include alternative generation forms (e.g. fuel cells).Declaring that CHP is the only generation type for microgrids is limiting and can stifle innovation because CHP technology is heavily reliant on exactly the right ratios of heat and power load, and there are also other efficient power source options, such as fuel cells, that can play an important role as a microgrid power source.

Consistent with the above suggestion, Section 3.04: "Hybrid Microgrids" should thus also be revised by including alternative generation sources (e.g. fuel cells).

Conclusion

Although the proposed "Regulation on Microgrid Development" is a significant start to advancing microgrid development in Puerto Rico, the NYSSGC believes that the inclusion of two suggestions will help to improve the impact of these efforts. These include the addition of at least a 65% minimum efficiency threshold for CHP generation within Section 3.03.A and the replacement of "Combined Heat-and-Power Microgrids" (Section 3.03) with "Clean, Efficient Generation Microgrids", and allowing other clean generation options in addition to CHP. Other sections that refer to "Combined Heat-and-Power Microgrids" should, therefore, be subject to the suggested replacement.

Respectively,

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