Bloomenergy

VIA ELECTRONIC MAIL

April 27, 2020

Melanie Bachman
10 Franklin Square
New Britain, CT 06051

PETITION NO. 1400 – Bloom Energy Corporation petition for a declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed construction, maintenance and operation of a 1150-kilowatt customer-side fuel cell facility and associated equipment to be located at Eastern Connecticut State University, 165 Windham Street, Windham, Connecticut.

Dear Ms. Bachman:

Please see the attached responses to the interrogatories provided to Bloom Energy on April 22, 2020.

Sincerely,

Justin Adams
Permitting Manager

Bloomenergy
Connecticut
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c: Nedal Sumrein, Bloom Energy Corporation

Petition No. 1400
Bloom Energy Corporation
165 Windham Street
Windham, CT
Interrogatories

Project Development

1. Was the project selected for the LREC/ZREC Program? If yes, which electric distribution company would purchase the RECs?

   Yes the project was selected for the LREC program. Eversource Energy would purchase the RECs.

Proposed Site

2. Drawing G1.1 indicates that Bloom Energy Corporation (Bloom or Petitioner) would utilize a fence with privacy slats. Would it be a chain link fence? How tall would it be? Referencing Drawing No. C1.1, do the small circles along the fence line represent the areas with privacy slats?

   Yes, the small circles represent an 8' chain link fence with privacy slats.

Energy Output

3. Has Bloom utilized its fuel cells in any combined heat and power (CHP) applications? If so, please provide examples describing the projects and the CHP application. Please further explain why there is no useful waste heat generated by the fuel cell.

   Yes, Bloom has utilized CHP applications in very specific situations nationally. There CHP applications located in Connecticut. In this proposal and the vast majority of other applications, Bloom utilizes the heat generated via the internal electrochemical reaction to increase the overall electrical efficiency of the system output and thus does not require an external heat sync to increase efficiency.

4. Do the proposed fuel cell units have taps/hookups for CHP i.e. connections for building heating/hot water lines? Are there any other Bloom units commercially available at this time and suitable for this project that offer CHP capability?

   As explained in the previous question, Bloom does have a technology with commercially available CHP capabilities. However in this application, greater electrical efficiency is achieved through utilizing the excess heat internally. It therefore would not have taps and/or hookup connections to a building.

5. Page 10 of the Petition states that "The minimal amount of thermal load present at the Site would preclude the efficient deployment of a CHP application." Given that universities typically have a need for heat and hot water, please further describe the existing thermal loads of Eastern Connecticut State University (ECSU), and explain why no significant thermal load is present at the site. Is it because the proposed fuel cell site is not in close proximity to the thermal loads?

   Bloom Energy Servers are designed to be more efficient or equal to the efficiency of a CHP application without the need for heat recovery external to the system. This allows the systems to be located near the points of electrical interconnection without consideration of the thermal load demands within buildings. The thermal loads of the nearby buildings were therefor not considered when locating the system.

6. Have there been discussions with ESCU relating to a potential CHP application? If so, what was the response?

   Yes, a CHP application was discussed with ECSU. As noted in previous answers, this would not result in an increased efficiency of the electrical output and would also have a negative effect on the costs associated with installing the system. Therefore, ECSU saw little reason to pursue this option.

Site Components/ Interconnection

7. Is the project interconnection required to be reviewed by ISO-NE?

   Yes, ISO-NE will review the proposed project. Per the ISO-NE planning procedure PP5-1, Bloom must submit a completed generator notification form to IS-NE's reliability committee.

Public Safety

8. Would any bollards be necessary to protect the fuel cell facility?

   Yes, bollards will be used to protect the facility.

9. Does the Petitioner intend to provide on-site training to local emergency responders, if requested?

   Yes, as part of the building permit application review process the Windham Fire Marshal/Emergency Management Department will review the project. During this review, Bloom will provide any on-site training requested by local officials.

10. Please identify media to be used for pipe cleaning procedures at the proposed facility in accordance with Public Act 11-101, An Act Adopting Certain Safety Recommendations of the Thomas Commission.

    Nitrogen.

Environmental

11. Would any trees six inches in diameter or greater be removed for installation of the proposed facility? If yes, how many?

    Tress six inches in diameter or greater will not be removed.

12. Referencing Drawing No. G1.1, Bloom notes that "New Green Screening" is proposed. What type of vegetative screening is proposed, and how tall would it be?

    Arborviate/Leyland cypress bushes that match the existing screen trees will be used.

Construction

13. What are the expected typical work hours and days of the week that construction would occur?

    During construction Bloom expects to be onsite between 7:00AM and 5:00PM Monday thru Friday. There are currently no plans to perform any work on the weekends.