Bloomenergy

VIA FEDEX & ELECTRONIC MAIL

January 7, 2019

Melanie Bachman
10 Franklin Square
New Britain, CT 06051

RE: PETITION NO. 1391 - 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 customer-side 550-kilowatt fuel cell facility and associated equipment to be located at the Altice USA (formerly Cablevision) building, 28 Cross Street, Norwalk, Connecticut.

Dear Ms. Bachman:

Please see the attached responses to the interrogatories provided to Bloom Energy December 24, 2019.

Sincerely,

Justin Adams
Permitting Manager

Bloomenergy
Connecticut
860.839.8373
justin.adams@bloomenergy.com

Petition No. 1391
Bloom Energy Corporation
28 Cross Street, Norwalk
Interrogatories

1. Was the project selected for the LREC/ZREC Program?

   Yes the project was selected for the LREC Program.

2. Are local emergency responders included as part of the Training provision included in Petition Exhibit 4, Section 10? If not, would training be provided to local emergency responders?

   Yes, local emergency responders are included as part of the training during the commissioning of the fuel cell. The Norwalk Fire Marshal will review and approve the plans submitted for the building permit. During this review cycle, Bloom Energy will provide training to the identified emergency responders.

3. Petition Site Plan G1.1 shows Energy Server Unit 1 (ES-1) in close proximity to an existing emergency generator. Does the proposed placement of ES-1 comply with Fire Code requirements concerning set back distances from stored combustible liquids that may be used to power the emergency generator?

   Per NFPA 30, Table 4.3.2.1.1(b) (below), the placement of ES-1 five feet (5') from the existing generator and fuel tank complies with the fire code for setback distance from stored combustible liquids.

Table 4.3.2.1.1(a) Stable Liquids [Operating Pressure: Not over gauge pressure of 17 kl psig)]

Type of Tank	Protection	Minimum Distance (ft)	
		From Property Line that Is or Can Be Built Upon, Including the Opposite Side of a Public Way[1]	From Nearest Side of A Way or from Nearest Ir Building on the Same P
Horizontal and vertical tanks with emergency relief venting to limit pressures to 2.5 psig (gauge pressure of 17 kPa)	Approved inerting system[2] on the tank or approved foam system on vertical tanks	½ × Table 4.3.2.1.1(b) value	½ × Table 4.3.2.1.1(b) va
	Protection for exposures[2]	Table 4.3.2.1.1(b) value	Table 4.3.2.1.1(b) value
	None	2 × Table 4.3.2.1.1(b) value	Table 4.3.2.1.1(b) value
Protected aboveground tank	None	½ × Table 4.3.2.1.1(b) value	½ × Table 4.3.2.1.1(b) va

Note: For SI units, 1 ft = 0.3 m.

[1]The minimum distance shall not be less than 5 ft.

[2]See definition 3.3.35, Protection for Exposures.

[3]See NFPA 69, *Standard on Explosion Prevention Systems*.

[4]For tanks over 45 m (150 ft) in diameter, use "Protection for Exposures" or "None," as applicable.

Table 4.3.2.1.1(b) Reference Table for Use in Tables 4.3.2.1.1(a), 4.3.2.1.2, and 4.3.2.1.4

Tank Capacity (gal)	Minimum Distance (ft)	
	From Property Line that Is or Can Be Built Upon, Including the Opposite Side of a Public Way	From Nearest Side of Any Public Way or from Nearest Important Building on the Same Property
275 or less	5	5
276 to 750	10	5
751 to 12,000	15	5
12,001 to 30,000	20	5
30,001 to 50,000	30	10
50,001 to 100,000	50	15
100,001 to 500,000	80	25
500,001 to 1,000,000	100	35
1,000,001 to 2,000,000	135	45
2,000,001 to 3,000,000	165	55
3,000,001 or more	175	60

Note: For SI units, 1 ft = 0.3 m; 1 gal = 3.8 L.

Exception: Vertical tanks with weak roof-to-shell seams (see 4.2.5.2.2) that store Class IIIA

4. In regards to Petition Exhibit 9, Facility Sound Analysis, please provide the following:

Please see the attached reply from the acoustic consultant, Cavanaugh Tocci, who prepared the sound analysis for this petition for responses to a, b & c below.

a) Page 4 states the maximum sound level is 57 dBA at the nearest commercial property, however Figure 3 shows a projected sound level of 56 dBA at the nearest commercial property. Please clarify.

b) Although Figure 3 shows a projected sound level of 47 dBA at 10 Wilton Avenue, and below the adjusted residential noise level threshold of 53 dBA, are there any sound mitigation measures that can be used at the site to reduce potential noise from facility operation?

c) Do the Figure 3 projected sound levels represent noise only from facility operation or do the projected sound levels include facility operation and background noise? What sound projection methodology is required under Connecticut Nosie Control regulations?

January 2, 2020

Mr. Justin Adams
Bloomenergy - Connecticut

Justin.Adams@bloomenergy.com

SUBJECT: Response to Siting Council Questions – 4 a-c
Pertaining to the Acoustic Review of a Proposed Fuel Cell Installation
28 Cross Street, Norwalk, CT

Dear Mr. Adams,

The following letter is my response to the Connecticut Siting Counsel's questions regarding the Sound Analysis for the proposed fuel cell installation in Norwalk, Connecticut. The questions and responses follow:

Question 4 (a)

Page 4 states the maximum sound level is 57 dBA at the nearest commercial property, however Figure 3 shows a projected sound level of 56 dBA at the nearest commercial property. Please clarify.

Response

The 56-dBA level indicated in Figure 3 is correct. The text on page 4 of the report is a typographical error.

Question 4 (b)

Although Figure 3 shows a projected sound level of 47 dBA at 10 Wilton Avenue, and below the adjusted residential noise level threshold of 53 dBA, are there any sound mitigation measures that can be used at the site to reduce potential noise from facility operation?

Response

We are not aware of any sound mitigation options that can be directly applied to the fuel cells to reduce emitted sound. As such, the only available option for mitigation would be to construct a sound barrier wall between the fuel cells and the receptor. The effectiveness of the barrier depends on the site geometry. At a minimum, the height of the barrier must extend through the "line of sight" between the source and the receptor. In this case the receptor height is a second-floor window at 10 Wilton Avenue, and the source height is the top of the fuel cell. To reduce sound impacts by approximately 5 dBA, a sound barrier would need to be approximately 12 feet tall and 60 feet long.

Question 4 (c)

Do the Figure 3 projected sound levels represent noise only from facility operation or do the projected sound levels include facility operation and background noise? What sound projection methodology is required under Connecticut Nosie Control regulations?

Response

Estimated sound levels in Figure 3 are for the sound produced by the fuel cell installation, and do not include background noise. The Connecticut DEEP Noise Control Regulation noise standards (Section 22a-69-3,5) require that emitter sound levels should not exceed various limits. Thus, the regulations do not require that existing background sound levels should be included when evaluating compliance.

Sincerely,
CAVANAUGH TOCCI

Douglas Bell

Douglas H. Bell
19270/Response to Siting Council Interrogatory - Noise.docx