



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

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### **CERTIFIED MAIL RETURN RECEIPT REQUESTED**

February 19, 2016

Bradford Makin  
Senior Quality Manager, Installations  
Bloom Energy  
1299 Orleans Drive  
Sunnyvale, CA 94089

RE: **PETITION NO. 1208** – Bloom Energy Corporation, as an agent for Walmart Stores, Inc., petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the construction, operation and maintenance of a Customer-Side 200-Kilowatt Fuel Cell Facility to be located at the Sam's Club store, 69 Pavillions Drive, Manchester, Connecticut.

Dear Mr. Makin:

At a public meeting held on February 18, 2016, the Connecticut Siting Council (Council) considered and ruled that the above-referenced proposal would not have a substantial adverse environmental effect, and pursuant to Connecticut General Statutes § 16-50k would not require a Certificate of Environmental Compatibility and Public Need, with the following conditions:

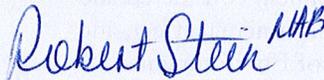
1. The Petition No. 1048 withdrawal letter shall be submitted to the Council prior to construction;
2. Unless otherwise approved by the Council, if the facility authorized herein is not fully constructed within three years from the date of the mailing of the Council's decision, this decision shall be void, and the facility owner/operator shall dismantle the facility and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between the filing and resolution of any appeals of the Council's decision shall not be counted in calculating this deadline. Authority to monitor and modify this schedule, as necessary, is delegated to the Executive Director. The facility owner/operator shall provide written notice to the Executive Director of any schedule changes as soon as is practicable;
3. Any request for extension of the time period to fully construct the facility shall be filed with the Council not later than 60 days prior to the expiration date of this decision and shall be served on all parties and intervenors, if applicable, and the Town of Manchester;
4. Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
5. The facility owner/operator shall remit timely payments associated with annual assessments and invoices submitted by the Council for expenses attributable to the facility under Conn. Gen. Stat. §16-50v;

6. This Declaratory Ruling may be transferred, provided the facility owner/operator/transferor is current with payments to the Council for annual assessments and invoices under Conn. Gen. Stat. §16-50v and the transferee provides written confirmation that the transferee agrees to comply with the terms, limitations and conditions contained in the Declaratory Ruling, including timely payments to the Council for annual assessments and invoices under Conn. Gen. Stat. §16-50v; and
7. If the facility owner/operator is a wholly owned subsidiary of a corporation or other entity and is sold/transferred to another corporation or other entity, the Council shall be notified of such sale and/or transfer and of any change in contact information for the individual or representative responsible for management and operations of the facility within 30 days of the sale and/or transfer.

This decision is under the exclusive jurisdiction of the Council and is not applicable to any other modification or construction. All work is to be implemented as specified in the petition, dated December 23, 2015, and additional information received on January 6, 2016, January 14, 2016, January 25, 2016, and February 9, 2016, and in compliance with Public Act 11-101, An Act Adopting Certain Safety Recommendations of the Thomas Commission.

Enclosed for your information is a copy of the staff report on this project.

Very truly yours,



Robert Stein  
Chairman

RS/MP/lm

Enclosure: Staff Report dated February 18, 2016

- c: The Honorable Jay Moran, Mayor, Town of Manchester  
Scott A. Shanley, General Manager, Town of Manchester  
James Davis, Zoning Enforcement Officer, Town of Manchester  
Honorable Tom Delnicki, Mayor, Town of South Windsor  
Michele Lipe, AICP, Town Planner, Town of South Windsor  
Matthew Galligan, Town Manager, Town of South Windsor  
Rory Eblen, Bloom Energy  
Edwin Pho, Bloom Energy  
Sam's Club, 69 Pavilions Drive, Manchester, CT



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**Petition No. 1208**  
**Walmart Stores, Inc.**  
**Manchester, Connecticut**  
**Staff Report**  
**February 18, 2016**

On December 3, 2012, the Connecticut Siting Council (Council) received Petition No. 1048 from BE 2012 W LLC (BE) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the installation of one 250 kilowatt (kW) Bloom Energy Corporation (Bloom) fuel cell facility as a customer-side distributed resources project at the northeast side of Sam's Club at 69 Pavilions Drive, Manchester. This project was approved by the Council on January 10, 2013. However, this fuel cell facility was never constructed.

On December 23, 2015, the Council received a petition from Bloom on behalf of Walmart Stores Inc. (Walmart) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the installation of a 200-kW fuel cell to be located near the rear of the same existing Sam's Club building at 69 Pavilions Drive, Manchester. This is a different location on the subject property than the previous petition. Council member Robert Hannon and Michael Perrone of the Council staff visited the site on January 25, 2016 to review the proposal. Rory Eblen, a Bloom Energy representative, attended the field review on behalf of the petitioner.

Bloom's fuel cell facility would be a customer-side, distributed resources project that would consist of one 200-kW solid oxide fuel cell energy server to be owned and operated by Sam's Club. The dimensions of the facility would be approximately 26 feet 5 inches long by 8 feet 7 inches wide by 6 feet 9 inches tall. The fuel cell facility would be installed on a concrete pad in the far northern corner of the parking lot. The fuel cell facility would be fueled by natural gas and connected to existing natural gas service on the subject property via an underground connection near the rear of the building.

The facility would be installed on a 13.07-acre property. The property is owned by Walmart and zoned Commercial Urban Development under the zoning regulations of the Town of Manchester. The property is bordered by Pavilions Drive and Interstate 84 to the south. The subject property is generally surrounded by commercial properties on all other sides (with intervening tree cover on the western and eastern sides). Given the commercial nature of the area, there are no homes located within 1,000 feet of the proposed facility.

Visual impact from the proposed project would be minimal due to its location near the rear of the building, existing trees, an existing retaining wall to the north, and the commercial nature of the area. The fuel cell facility would comply with all applicable Department of Energy and Environmental Protection (DEEP) air and water quality standards. The facility would meet DEEP noise regulations without the need for sound remediation.

Comparison of proposed Fuel Cell facility with RCSA Criteria<sup>1</sup>

Pollutant	Bloom Energy Server (lbs/MWh)	Emissions standards (lbs/MWh)
NO <sub>x</sub>	<0.01	0.15
CO	<0.1	1
CO <sub>2</sub>	735 to 832	1,650



<sup>1</sup> Regulations of Connecticut State Agencies Section 22a-174-42(b)(3)(C); 22a-174-42(d)(2)(B)(ii) & Table 42-2

The proposed facility would emit no methane (CH<sub>4</sub>), sulfur hexafluoride (SF<sub>6</sub>), hydrofluorocarbons (HFC) or perfluorocarbons (PFC), which are greenhouse gasses defined in Regulations of Connecticut State Agencies Section 22a-174-1(49).

The Bloom fuel cell facilities are designed to operate without water discharge under normal operating conditions. Furthermore, by comments dated January 14, 2016, the Connecticut Department of Public Health noted that, "The project is not within a public water supply area; therefore, no environmental impacts to public drinking water sources of supply are anticipated."

The fuel cell facility is designed in accordance with American National Standards Institute and Canadian Standards Association (ANSI/CSA) America FC 1-2004 standard for stationary fuel cell power systems and includes extensive safety control systems - including both automatic and manual shutdown mechanisms - that comply with pertinent engineering standards. Sulfur dioxide is added to natural gas as an odorant. The sulfur dioxide is removed from the gas in a process called desulfurization so the gas can be used in the fuel cell. Desulfurization materials would be contained and disposed of in accordance with all applicable regulations.

The Connecticut Public Utilities Regulatory Authority (PURA), in its Final Decision in Docket No. 12-02-09, determined that Bloom's Energy Server qualifies as a Class I renewable energy source as defined in Conn. Gen. Stat. § 16-1(a)(26)(A). Furthermore, this project represents a resource within the "Low Emissions Renewable Energy Credit Program" established under Public Act No. 11-80.

On December 17, 2015, Bloom provided notice of the project to the Town of Manchester, Town of South Windsor (located within 2,500 feet of the proposed facility), abutting property owners, and the required state agencies. Proof of notice to the Connecticut Department of Agriculture was received on January 5, 2016. No comments have been received to date.

The proposed installation of the fuel cell is not expected to have any substantial adverse environmental impacts. It would reduce the emission of air pollutants that contribute to smog, acid rain, and global climate change. It would also contribute to the state's use of renewable energy.

By letter dated January 26, 2016, the Council requested that Bloom withdraw Petition No. 1048 and state in writing that the proposed project would supersede the previous petition. To date, a formal, written response has not been received. Staff recommends including a condition that the Petition No. 1048 withdrawal letter shall be submitted to the Council prior to construction.

**Aerial view of site location at 69 Pavilions Drive, Manchester (taken from Google Earth)**

