



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

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www.ct.gov/csc

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. 1207** – Bloom Energy Corporation, as an agent for Wal-mart 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 Walmart, 450 Providence Road, Brooklyn, 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. 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;
2. 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 Brooklyn;
3. Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
4. 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;
5. 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

6. 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, 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/CH/lm

Enclosure: Staff Report dated February 18, 2016

- c: The Honorable Richard Ives, First Selectman, Town of Brooklyn
Jana Butts Roberson, AICP, Land Use Administrator, Town of Brooklyn
Rory Eblen, Bloom Energy
Edwin Pho, Bloom Energy
David Ozment, Walmart





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Petition No. 1207 Staff Report

Walmart Stores Inc.

450 Providence Road, Brooklyn

February 18, 2016

On December 23, 2015, the Connecticut Siting Council (Council) received a petition from Bloom Energy Corporation (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 location and construction of a Customer-Side 200-kilowatt (kW) Fuel Cell to be located at the rear of an existing Walmart building at 450 Providence Road, Brooklyn. Council member Dan Lynch and Council staff Fred Cunliffe and Cymon Holzschuh visited the site on February 3, 2016 to review the proposal. Rory Eblen, a Bloom Energy representative, attended the field review on behalf of the petitioner. Jana Roberson, Land Use Administrator for the Town of Brooklyn, also attended the field review.

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 Walmart. 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 Energy Server will be fueled by natural gas supplied by Connecticut Natural Gas (CNG). Gas service will be delivered to the Energy Server via a new CNG gas meter assembly. The new service line will branch off of the existing CNG line located adjacent to the facility. The fuel cell would be protected by both fixed and removable bollards from potential impacts.

The facility would be installed on the 25.48-acre property that surrounds the Walmart building. The site is owned by Walmart and is zoned Planned Commercial under the zoning regulations of the Town of Brooklyn. The property is bordered by Providence Road to the south. The surrounding area is dense vegetation followed by commercial uses located within the Town of Brooklyn. The closest residential properties are located to the west and the northeast of the commercial lot and parking, over 500 feet away from the proposed facility.

Visual impact from the proposed project would be minimal due to its location at the rear of the building. The facility would be installed within a landscaped area on the rear side of the building. During the field review, Ms. Roberson stated that so long as the area of water-pervious surface and the amount of landscaping removed be replaced with plantings elsewhere on the property, the Town of Brooklyn would have no concerns about the petition. Mr. Eblen had no objections to these requests. The fuel cell facility would comply with all applicable Department of Energy and Environmental Protection (DEEP) air and water quality standards. The Energy Servers are designed to operate without water discharge under normal operating conditions. The facility would meet DEEP noise regulations without the need for sound remediation. The Department of Public Health, Drinking Water Section, provided comment for the Council indicating the project is not within a public water supply source.

Comparison of proposed Fuel Cell facility with RCSA Criteria¹

Pollutant	Bloom Energy Server (lbs/MWh)	Emissions standards (lbs/MWh)
NO _x	<0.01	0.15
CO	<0.1	1
CO ₂	773	1,650

¹ 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 (CH₄), sulfur hexafluoride (SF₆), hydrofluorocarbons (HFC) or perfluorocarbons (PFC), which are greenhouse gasses defined in Regulations of Connecticut State Agencies Section 22a-174-1(49).

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 injected in natural gas as an odorant. The sulfur dioxide is removed from the gas for use in the fuel cell, a process called desulfurization. The desulfurization materials of the proposed facility 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.

Prior to filing this petition, representatives from Bloom Energy discussed the proposed facility with the Town of Brooklyn Land Use Administrator, Jana Roberson, in August 2015. On December 17, 2015, Bloom provided notice of the project to abutting property owners, Brooklyn officials and required state agencies. No comments have been received.

Bloom Energy fulfilled its notice requirement on January 6, 2016 by providing notice to the Department of Agriculture. The Council was in receipt of this notice on January 6, 2016.

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.

Aerial view of site location at 450 Providence Road, Brooklyn (taken from Google Earth)

