

ORIGINAL

COVER LETTER



December 23, 2015

Robert Stein, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

RE: Petition of Walmart Stores Inc., Brooklyn, CT for a Declaratory Ruling for the Location and Construction of a 200-Kilowatt Fuel Cell Customer-Side Distributed Resource at 450 Providence Road, Brooklyn, CT

Dear Chairman Stein:

On behalf of Walmart Stores Inc., and pursuant to Conn. Gen. Stat. §§ 4-176 and 16-50k(a) and Conn. Agencies Regs. § 16-50j-38 et seq., enclosed are an original and fifteen (15) copies of the above captioned Petition.

In the Petition, Walmart Corporation requests the Connecticut Siting Council's approval of the location and construction of an approximately 200-kilowatt Bloom Energy fuel cell Energy Server, including associated equipment (the "Facility"). The Facility will be located on the site of the Walmart, located at 450 Providence Road, Brooklyn, CT (the "Site"). The Facility will be located at the rear of the building on an area that is presently paved. The Energy Server will be approximately 26'-5" long, 8'-7" wide and 6'-9" high and fueled by natural gas. Electricity generated by the Facility will be consumed primarily at the Site, and any excess electricity will be exported to the electric grid.

Should you have any questions or concerns regarding the proposed Facility, please contact Edwin Pho at (408) 543-1675 or edwin.pho@bloomenergy.com.

Sincerely

Bloom Energy

Edwin Pho
Sr. Manager, Utilities Engineering & Permitting

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

PETITION OF WAL-MART STORES, INC. FOR : PETITION NO. ____
A DECLARATORY RULING FOR THE :
LOCATION AND CONSTRUCTION OF A 200- :
KILOWATT FUEL CELL CUSTOMER-SIDE :
DISTRIBUTED RESOURCE AT 450 :
PROVIDENCE ROAD, BROOKLYN, : November __, 2015
CONNECTICUT :

WAL-MART STORES, INC. FOR A DECLARATORY RULING

Pursuant to Conn. Gen. Stat. §§ 4-176 and 16-50k(a) and Conn. Agencies Regs. § 16-50j-38 *et seq.*, Wal-Mart Stores, Inc. (“Walmart”), requests that the Connecticut Siting Council (“Council”) approve by declaratory ruling the location and construction of a customer-side distributed resources project comprised of an approximately 200-kilowatt (“KW”) (net) Bloom solid oxide fuel cell Energy Server facility and associated equipment (the “Facility”), located at the rear of the Walmart building at 450 Providence Road, Brooklyn, Connecticut (the “Site”). *See* Exhibit 1. The facility will be installed by Bloom and operated by Walmart.

Conn. Gen. Stat. § 16-50k(a) provides that:

Notwithstanding the provisions of this chapter or title 16a, the council shall, in the exercise of its jurisdiction over the siting of generating facilities, approve by declaratory ruling . . . (B) the construction or location of any fuel cell, unless the council finds a substantial adverse environmental effect or of any customer-side distributed resources project or facility . . . with a capacity of not more than sixty-five megawatts, as long as such project meets air and water quality standards of the Department of Energy and Environmental Protection.”

As discussed fully in this petition, in addition to being a fuel cell facility, the Facility will be a customer-side distributed resources facility under 65 megawatts (“MW”) that complies with the air and water quality standards of the Connecticut Department of Energy and Environmental

Protection (“DEEP”). Additionally, the Facility will not have a substantial adverse environmental effect in the State of Connecticut.

I. COMMUNICATIONS

Correspondence and other communication regarding this petition should be directed to the following parties:

Amy Shanahan
Bloom Energy Corporation
1299 Orleans Drive
Sunnyvale, CA 94089
Telephone: (408) 543-1746
Fax: (408) 543-1501
Email: Amy.Shanahan@bloomenergy.com

Rory Eblen
Bloom Energy Corporation
1284 Pacific Street, Apt. 4B
Brooklyn, NY 11216
Telephone: (516) 974-6824
Email: Rory.Eblen@bloomenergy.com

II. DISCUSSION

A. Background

The Facility will be a 200 kilowatt customer-side distributed resources facility consisting of a state-of-the-art Bloom Energy Servers and associated equipment. The Facility will be interconnected to an existing switchgear section located inside the electrical room, near the southwest corner of the Walmart building (the “Building”). *See* Exhibit 2. Electricity generated by the Facility will be consumed primarily at the Site, and any excess electricity will be exported to the grid.

The Facility will be a “customer-side distributed resources” project because it will be “a unit with a rating of not more than sixty-five megawatts [and is located] on the premises of a retail end user within the transmission and distribution system including, but not limited to, fuel cells” Conn. Gen. Stat. § 16-1(a)(40)(A). Further, in its Final Decision in Docket No. 12-

02-09, dated September 12, 2012, the Connecticut Public Utilities Regulatory Authority (“PURA”) determined that Bloom’s Energy Server qualifies as a Class I renewable energy source fuel cell as defined in Conn. Gen. Stat. §16 1(a)(26)(A). See Exhibit 3.

Wal-Mart Stores, Inc. was selected by The Connecticut Light and Power Company (“CL&P”) as a winning bidder in CL&P’s and The United Illuminating Company’s joint request for proposals for their “Low and Zero Emissions Renewable Energy Credit Program” established under Sections 107, 108, and 110 of Public Act No. 11-80, *An Act Concerning the Establishment of the Department of Energy and Environmental Protection and Planning for Connecticut’s Energy Future* (codified at Conn. Gen. Stat. §§ 16-244r, -244s, and -244t, respectively). As a result of that selection, Wal-Mart Stores, Inc. has entered into a *Standard Contract for the Purchase and Sale of Connecticut Class I Renewable Energy Credits* (“Standard Contract”) with CL&P, under which it will sell, and CL&P will purchase, Connecticut Class I Renewable Energy Credits generated by the Facility. The PURA approved Wal-Mart Stores, Inc.’s selection by CL&P and its Standard Contract on July 15, 2015.

B. Description of the Site and the Facility

1. The Site

The Facility will be installed on the Walmart development, a large planned commercial building located on 450 Providence Road in Brooklyn. Specifically, the Facility will be constructed on the 25.48-acre property that surrounds the Walmart. The Site is owned by Walmart and is zoned “Planned Commercial” (“PC”) under the zoning regulations of the Town of Brooklyn (the “Town”).

The property is bordered by Providence Rd. 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 Facility.

The Facility will be located in an existing paved area at the rear of building. The portion of the Site that will be used for the Facility is shown on Exhibit 2.

Prior to filing this petition, representative from Bloom Energy discussed the proposed Facility with the Town's Planner in August 2015. See Exhibit 4.

2. The Facility

The Facility will consist of a Bloom solid oxide fuel cell Energy Servers and associated equipment. The dimensions of the Energy Server are approximately 26'-5" long, 8'-7" wide and 6'-9" high. The Energy Server module is enclosed, factory-assembled and tested prior to installation on the Site. See Exhibit 5.

The Facility will be capable of producing 200 KW of continuous, reliable electric power. The Facility will interconnect to the Site's distribution system and operate in parallel with the grid to provide the Site's electrical requirements. Any electricity generated in excess of the Site's requirement will be exported to the grid under CL&P's net metering tariff. The interconnection to CL&P will be provided from the existing switchgear section located inside the electrical room near the western portion of the Building. At the time of this petition, the CL&P interconnection application is currently being prepared.

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 Bloom Energy Server will have extensive hardware, software and operator safety control systems, designed into the system in accordance with ANSI/CSA America FC 1-2004, the American National Standards Institute and Canadian Standards Association standard for Stationary Fuel Cell Power Systems. The Facility will be remotely monitored by Bloom Energy 24 hours a day, seven days a week. If software or hardware safety circuits detect an unsafe condition, variation in temperature or gas pressure outside of operational parameters, fuel supply is automatically stopped and the system is shut down. Two manual fuel shut-off valves are provided at each installation site, and two normally closed, safety shut-off rated isolation valves are installed within the system. The Facility will be installed in compliance with all applicable building, plumbing, electrical, fire and other codes.

The risk of fire related to the operation of the Energy Server is very low. In the Bloom fuel cell, natural gas is not burned; it is used in a chemical reaction to generate electricity. The natural gas is digested almost immediately upon entering the unit and is no longer combustible. As stated above, any variation in heat outside of the operational parameters will trigger an automatic shutdown of the energy server.

C. The Facility Complies with DEEP’s Air and Water Quality Standards and Will Not Have a Substantial Adverse Environmental Effect

The construction and operation of the Facility will comply with DEEP's air and water quality standards and will not have a substantial adverse environmental effect.

Construction-related impacts will be minimal. The Facility will be located on new concrete service pads at the rear of the building within an existing paved area. All utility trenches will be restored in-kind.

Conn. Agencies Regs. § 22a-174-42, which governs air emissions from new distributed generators, exempts fuel cells from air permitting requirements. Accordingly, no permits, registrations, or applications are required based on the actual emissions from the Facility. *See* Conn. Agencies Regs. §§ 22a-174-42(b) and (e). Notwithstanding this exemption, as shown below in Table 1, the Facility meets the Connecticut emissions standards for a new distributed generator. Further, Bloom's Energy Server has passed the stringent California Air Resources Board Distributed Generation Certification Regulation 2007 Fossil Fuel Emission Standards. *See* Exhibit 6.

Table 1: Connecticut Emissions Standards for a New Distributed Generator

Compound	Connecticut Emission Standard (lbs/MW-hr)¹	Bloom Energy Server (lbs/MW-hr)
Oxides of Nitrogen (NO _x)	0.15	<0.01
Carbon Monoxide (CO)	1	<0.10
Carbon Dioxide (CO ₂)	1,650	773

With respect to water discharges, the Energy Servers are designed to operate without water discharge under normal operating conditions. During construction, appropriate soil erosion prevention techniques will be incorporated around the disturbed areas to minimize soil erosion. The area for the proposed Facility will require some clearing and associated

¹ Conn. Agencies Regs. § 22a-174-42, Table 42-2.

maintenance to ensure that proper clearance is met from the Energy Server to the surrounding greenery. However, due to the limited disturbance required for the Facility's installation, no construction-related storm water permits will be required. Further, de minimis additional impervious area will be added to the Site and will not affect drainage patterns or stormwater discharge.

The proposed Facility will be located in a paved area on the lot that was previously developed and disturbed during construction of the Walmart building. Therefore, the construction and operation of the Facility will not have any adverse effects on endangered species, historical resources or surrounding areas.

The acoustical impact of the Facility will be minimal, and the Facility will meet the applicable requirements for off-site noise receptors. As discussed above, the proposed Facility will be located over 500 feet from the nearest residential properties separated by a large commercial building, and will meet DEEP noise regulations without the need for sound remediation devices.

III. NOTICE

Bloom has provided notice of this petition to all persons and appropriate municipal officials and governmental agencies to whom notice is required to be given pursuant to Conn. Agencies Regs. § 16-50j-40(a).² A copy of the notice letter and a service list is attached as Exhibit 7.

² Conn. Agencies Regs. § 16-50j-40(a) requires that “[p]rior to submitting a petition for a declaratory ruling to the Council, the petitioner shall, where applicable, provide notice to each person other than the petitioner appearing of record as an owner of property which abuts the proposed primary or alternative sites of the proposed facility, each person appearing of record as an owner of the property or properties on which the primary or alternative proposed facility is to be located, and the appropriate municipal officials and government agencies [listed in Section 16-50/ of the Connecticut General Statutes].”

IV. BASIS FOR GRANTING OF THE PETITION

Under Conn. Gen. Stat. § 16-50k(a), the Council is required to approve by declaratory ruling the construction or location of a customer-side distributed resources project or facility with a capacity of not more than 65 MW, as long as the facility meets DEEP air and water quality standards. The proposed Facility meets each of these criteria. The Facility is a “customer-side distributed resources” project, as defined in Conn. Gen. Stat. § 16-1(a)(40)(A), because the Facility is “a unit with a rating of not more than sixty-five megawatts [and is located] on the premises of a retail end user within the transmission and distribution system including, but not limited to, fuel cells” and, as demonstrated herein, will meet DEEP air and water quality standards. In addition, as demonstrated above, the construction and operation of the Facility will not have a substantial adverse environmental effect in the State of Connecticut.

V. CONCLUSION

For the reasons stated above Wal-Mart Stores, Inc. respectfully requests that the Council approve the location and construction of the Facility by declaratory ruling.

Respectfully submitted,

Wal-Mart Stores, Inc.

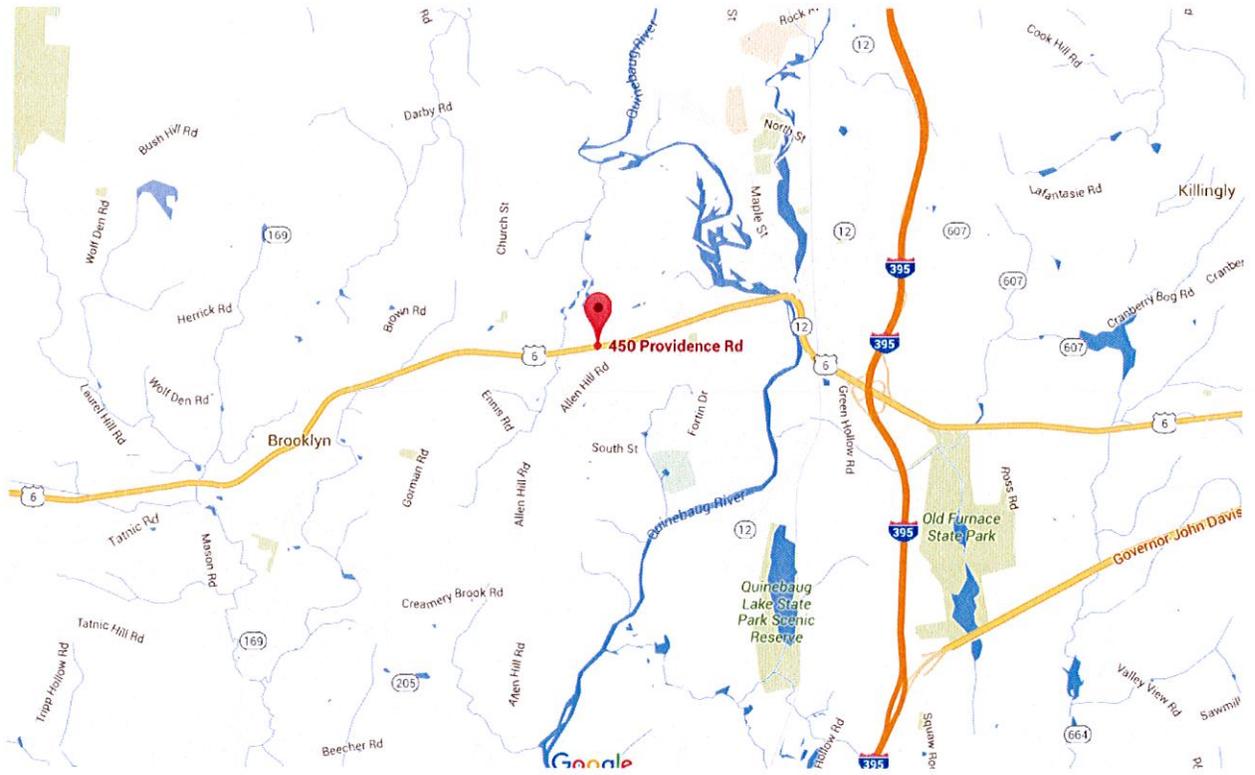
By: 

David Ozment
Senior Director of Energy
Wal-Mart Stores, Inc.
702 SW 8th Street
Bentonville, AR 72716
James.Ozment@Wal-Mart.com
(479) 204-0771

EXHIBITS

- Exhibit 1: Site Location Map
- Exhibit 2: Site Plan
- Exhibit 3: Final Decision, PURA Docket No. 12-02-09, *Petition of Bloom Energy Corporation for a Declaratory Ruling that Its Solid Oxide Fuel Cell Energy Server Will Qualify as a Class I Renewable Energy Source* (Sept. 12, 2012)
- Exhibit 4: Correspondence with the Town
- Exhibit 5: Bloom Energy Server Product Datasheet and General Installation Overview
- Exhibit 6: California Air Resources Board Distributed Generation Certification
- Exhibit 7: Notice Pursuant to Conn. Agencies Regs. § 16-50j-40(a)

EXHIBIT 1



Site Map

Walmart
450 Providence Road
Brooklyn, CT 06234

EXHIBIT 2

EXHIBIT 3



STATE OF CONNECTICUT

DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
PUBLIC UTILITIES REGULATORY AUTHORITY
TEN FRANKLIN SQUARE
NEW BRITAIN, CT 06051

DOCKET NO. 12-02-09 PETITION OF BLOOM ENERGY CORPORATION FOR A
DECLARATORY RULING THAT ITS SOLID OXIDE FUEL
CELL ENERGY SERVER WILL QUALIFY AS A CLASS I
RENEWABLE ENERGY SOURCE

September 12, 2012

By the following Directors:

Arthur H. House
John W. Betkoski, III

DECISION

I. INTRODUCTION

By Petition dated February 14, 2012, pursuant to Section 4-176 in the General Statutes of Connecticut (Conn. Gen. Stat.) and Section 16-1-113 in the Regulations of Connecticut State Agencies, Bloom Energy Corporation requests that the Public Utilities Regulatory Authority (Authority) issue a declaratory ruling that its solid oxide fuel cell energy server qualifies as a Class I renewable energy source.

II. PETITIONER'S EVIDENCE

Bloom Energy Corporation (Bloom) has commercialized a scalable, modular fuel cell using Bloom's patented solid oxide fuel cell (SOFC) technology. A fuel cell is a device that uses a fuel and oxygen to create electricity by an electrochemical process. A single fuel cell consists of an electrolyte and two catalyst-coated electrodes (an anode cathode). Fuel cells are generally categorized by the type of electrolyte used. Petition, pp. 2 and 3.

Each Bloom Energy Server consists of thousands of Bloom's patented SOFCs. Each fuel cell is a flat, solid ceramic square capable of producing at least 25 watts. In an energy server, Bloom "sandwiches" the SOFCs between metal interconnect plates into a fuel cell "stack." Bloom aggregates multiple fuel cell stacks together into a "power module," and then multiple power modules, along with a common fuel input and electrical output, are assembled as a complete energy server fuel cell. Id., p. 3.

The Bloom Energy Server converts the chemical energy contained in fuel, such as natural gas, into electricity at an efficiency of approximately 50% - 60% (lower heating value net AC) without any combustion or multi-stage conversion loss. Fuel entering the energy server is processed using a proprietary catalytic method to yield a reformat gas stream, and the gaseous product and preheated air are introduced into the fuel cell stacks. Within the stacks, ambient oxygen reacts with the fuel to produce direct current (DC) electricity. The DC power produced by the energy server system is converted into 480-volt AC power using an inverter, and delivered to the host facility's electrical distribution system. Id.

SOFCs operate at very high temperatures, obviating the need for expensive metal catalysts. With low cost ceramic materials, and extremely high electrical efficiencies, SOFCs can deliver attractive economies without relying on combined heat and power. Id.

Bloom Energy Servers are a fraction of the size of a traditional base load power source, with each server occupying a space similar to that of a parking space. This small, low-impact, modular form of base load power does not pose the environmental challenges associated with a traditional base load power plant, significantly reducing environmental impacts. Moreover, Bloom's innovative design requires only an initial input of 120 gallons of water per 100 kW, after which no additional water is consumed during normal operation. Id., pp. 3 and 4.

Bloom Energy Servers deliver significant environmental benefits over conventional base load technologies. In addition to significant CO₂ reductions due to its high efficiency, the energy server emits virtually no NO_x, SO_x, or other smog forming particulates since the conversion of gas to electricity in a Bloom Energy Server is done through an electrochemical reaction rather than combustion. Id., p. 4.

III. AUTHORITY ANALYSIS

Conn. Gen. Stat. §16-1(a)(26) defines a Class I renewable energy source as:

(A) energy derived from solar power; wind power; a fuel cell; methane gas from landfills; ocean thermal power; wave or tidal power; low emission advanced renewable energy conversion technologies; a run-of-the-river hydropower facility provided such facility has a generating capacity of not more than five megawatts, does not cause an appreciable change in the river flow, and began operation after the effective date of this section; or a biomass facility, including, but not limited to, a biomass gasification plant that utilizes land clearing debris, tree stumps or other biomass that regenerates or the use of which will not result in a depletion of resources, provided such biomass is cultivated and harvested in a sustainable manner and the average emission rate for such facility is equal to or less than .075 pounds of nitrogen oxides per million BTU of heat input for the previous calendar quarter, except that energy derived from a biomass facility with a capacity of less than five hundred kilowatts that began construction before July 1, 2003, may be considered a Class I renewable energy source, provided such biomass is cultivated and harvested in a sustainable manner; or (B) any electrical generation, including distributed generation, generated from a Class I renewable energy source.

Based on Bloom's assertions, the Authority finds that its Bloom Energy Server qualifies as a Class I renewable energy source "fuel cell" as defined in Conn. Gen. Stat. §16-1(a)(26)(A).

The Authority has created an electronic application process for generation owners to apply for a Connecticut Renewable Portfolio Standards registration. The application is available on the Authority's website at the web address <http://www.ct.gov/pura>. The application should be submitted electronically along with a single hard-copy filing. While the Authority concludes in this Decision that the Bloom Energy Server would qualify as a Class I renewable energy source pursuant to Conn. Gen. Stat. §16-1(a)(26), Bloom must still apply for registration of the aforementioned system once the facility becomes operational and is registered in the New England Generation Information System.

IV. CONCLUSION

Based upon the project as described herein, the Authority finds that, as proposed, the Bloom Energy Server would qualify as a Class I renewable energy source. However, since the energy server is not yet operational, it should apply for Class I registration once it begins operations.

The Connecticut Department of Energy and Environmental Protection is an Affirmative Action/Equal Opportunity Employer that is committed to requirements of the Americans with Disabilities Act. Any person with a disability who may need information in an alternative format may contact the agency's ADA Coordinator at 860-424-3194, or at deep.hrmed@ct.gov. Any person with limited proficiency in English, who may need information in another language, may contact the agency's Title VI Coordinator at 860-424-3035, or at deep.aaoffice@ct.gov. Any person with a hearing impairment may call the State of Connecticut relay number – 711. Discrimination complaints may be filed with DEEP's Title VI Coordinator. Requests for accommodations must be made at least two weeks prior to any agency hearing, program or event.

**DOCKET NO. 12-02-09 PETITION OF BLOOM ENERGY CORPORATION FOR A
DECLARATORY RULING THAT ITS SOLID OXIDE FUEL
CELL ENERGY SERVER WILL QUALIFY AS A CLASS I
RENEWABLE ENERGY SOURCE**

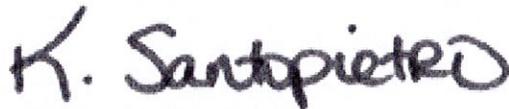
This Decision is adopted by the following Directors:

Arthur H. House

John W. Betkoski, III

CERTIFICATE OF SERVICE

The foregoing is a true and correct copy of the Decision issued by the Public Utilities Regulatory Authority, State of Connecticut, and was forwarded by Certified Mail to all parties of record in this proceeding on the date indicated.



Kimberley J. Santopietro
Executive Secretary
Department of Energy and Environmental Protection
Public Utilities Regulatory Authority

September 12, 2012

Date

EXHIBIT 4



December 17, 2015

Jana Butts Robertson, AICP
Land Use Administrator
Town of Brooklyn, CT
Clifford B. Green Memorial Center
69 South Main Street
PO Box 356
Brooklyn, CT 06234

RE: Walmart, Brooklyn CT Bloom Energy Fuel Cell Project

Dear Ms. Robertson,

This letter is in regard to the proposed Bloom Energy Fuel Cell Project at the Walmart located at 450 Providence Road, Brooklyn, Connecticut 06234. The proposed project involves installation of one 200-kilowatt fuel cells and associated equipment (the "Facility") which will provide approximately 200 kilowatts of clean energy to the hotel. The fuel cell is approximately 26'-5" long, 8'7" wide, and 6'-0" high and utilizes natural gas. I've attached a copy of the product datasheet and the Preliminary Site Plan.

The proposed Facility will be located within the existing paved area at the rear of the building. Bloom will submit required applications to the Zoning and Building Departments, as required by these Departments. In addition, we intend on filing a Petition for a Declaratory Ruling with the Connecticut Siting Council shortly, and are providing this notice in order for you to see the plan in advance. We would be happy to discuss any comments you may have either by phone or in person.

Should you have any questions or concerns regarding the proposed Facility, please contact Edwin Pho at (408) 543-1675 or edwin.pho@bloomenergy.com.

Sincerely,

Bloom Energy

Edwin Pho
Sr. Manager, Utilities Engineering & Permitting



ES-5700

Clean, Reliable, Affordable Energy



CLEAN, RELIABLE POWER ON DEMAND

Bloom Energy's ES-5700 delivers clean power that reduces emissions and energy costs. The modular architecture enables the installation to be tailored to the actual electricity demand, with a flexibility to add servers as the load increases. The ES-5700 actively communicates with Bloom Energy's network operations centers so system performance can be monitored and maintained 24 hours per day, 365 days per year.

INNOVATIVE TECHNOLOGY

Utilizing patented solid oxide fuel cell (SOFC) technology, the ES-5700 produces combustion-free power at unprecedented efficiencies, meaning it consumes less fuel and produces less CO₂ than competing technologies. Additionally, no water is needed under normal operating conditions.

ALL-ELECTRIC POWER

The ES-5700, which operates at a very high electrical efficiency, eliminates the need for complicated and costly CHP systems. Combining the standard electrical and fuel connections along with compact footprint and sleek design, the ES-5700 is the most deployable fuel cell on the market.

CONTROLLED AND PREDICTABLE COST

By providing efficient on-site power generation, the economic and environmental benefits are central to the ES-5700 value proposition. Bloom Energy customers can lock in their long term energy costs and mitigate the risk of electricity rate increases. The ES-5700 has been designed in compliance with a variety of safety standards and is backed by a comprehensive warranty.

About Bloom Energy

Bloom Energy is making clean, reliable energy affordable. Our unique on-site power generation systems utilize an innovative fuel cell technology with roots in NASA's Mars program. By leveraging breakthrough advances in materials science, Bloom Energy systems are among the most efficient energy generators, providing for significantly reduced operating costs and dramatically lower greenhouse gas emissions. Bloom Energy Servers are currently producing power for many Fortune 500 companies including Apple, Google, Walmart, AT&T, eBay, Staples, as well as notable non-profit organizations such as Caltech and Kaiser Permanente.

Headquarters:

Sunnyvale, California

For More Information:

www.bloomenergy.com

ES-5700

Technical Highlights

Outputs

Nameplate power output (net AC)	210 kW
Base load output (net AC)	200 kW
Electrical connection	480 V, 3-phase, 60 Hz

Inputs

Fuels	Natural gas, directed biogas
Input fuel pressure	15 psig
Water	None during normal operation

Efficiency

Cumulative electrical efficiency (LHV net AC)	52-60%
Heat rate (HHV)	6,295-7,264 Btu/kWh

Emissions

NO _x	< 0.01 lbs/MWh
SO _x	Negligible
CO	< 0.10 lbs/MWh
VOCs	< 0.02 lbs/MWh
CO ₂ @ stated efficiency	735-849 lbs/MWh on natural gas; carbon neutral on directed biogas

Physical Attributes and Environment

Weight	19.4 tons
Dimensions	26' 5" x 8' 7" x 6' 9"
Temperature range	-20° to 45° C
Humidity	0% - 100%
Seismic vibration	IBC site class D
Location	Outdoor
Noise	< 70 dBA @ 6 feet

Codes and Standards

Complies with Rule 21 interconnection and IEEE1547 standards
Exempt from CA Air District permitting; meets stringent CARB 2007 emissions standards
Product listed by Underwriters Laboratories Inc. (UL) to ANSI/CSA America FC 1-2004

Additional Notes

Access to a secure website to monitor system performance & environmental benefits
Remotely managed and monitored by Bloom Energy
Capable of emergency stop based on input from the site



Bloom Energy Corporation
1299 Orleans Drive
Sunnyvale CA 94089
T 408 543 1500
www.bloomenergy.com

EXHIBIT 5



ES-5700

Clean, Reliable, Affordable Energy



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Headquarters:

Sunnyvale, California

For More Information:

www.bloomenergy.com

ES-5700

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Emissions

NO _x	< 0.01 lbs/MWh
SO _x	Negligible
CO	< 0.10 lbs/MWh
VOCs	< 0.02 lbs/MWh
CO ₂ @ stated efficiency	735-849 lbs/MWh on natural gas; carbon neutral on directed biogas

Physical Attributes and Environment

Weight	19.4 tons
Dimensions	26' 5" x 8' 7" x 6' 9"
Temperature range	-20° to 45° C
Humidity	0% - 100%
Seismic vibration	IBC site class D
Location	Outdoor
Noise	< 70 dBA @ 6 feet

Codes and Standards

Complies with Rule 21 interconnection and IEEE1547 standards
Exempt from CA Air District permitting; meets stringent CARB 2007 emissions standards
Product listed by Underwriters Laboratories Inc. (UL) to ANSI/CSA America FC 1-2004

Additional Notes

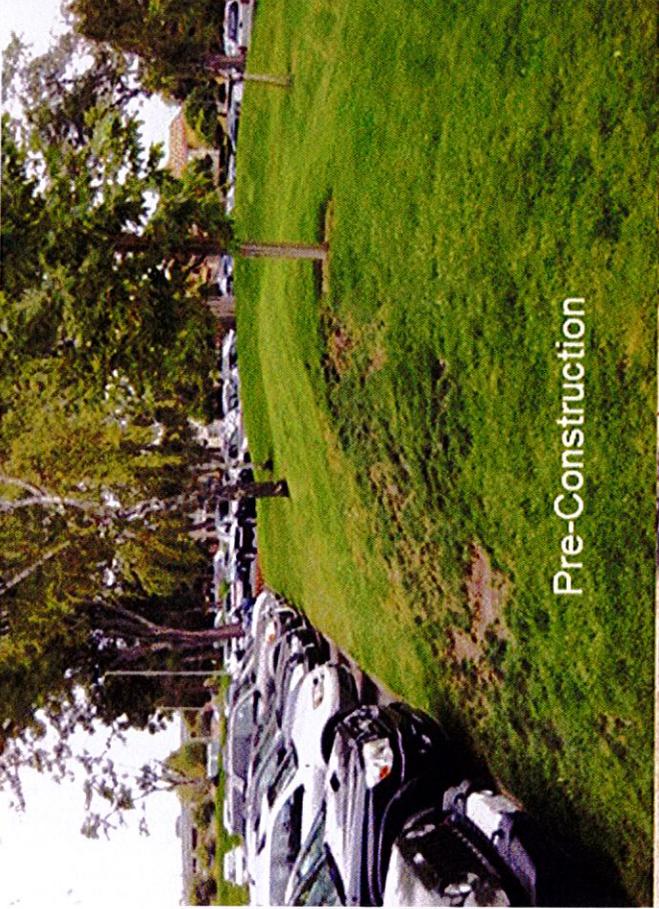
Access to a secure website to monitor system performance & environmental benefits
Remotely managed and monitored by Bloom Energy
Capable of emergency stop based on input from the site



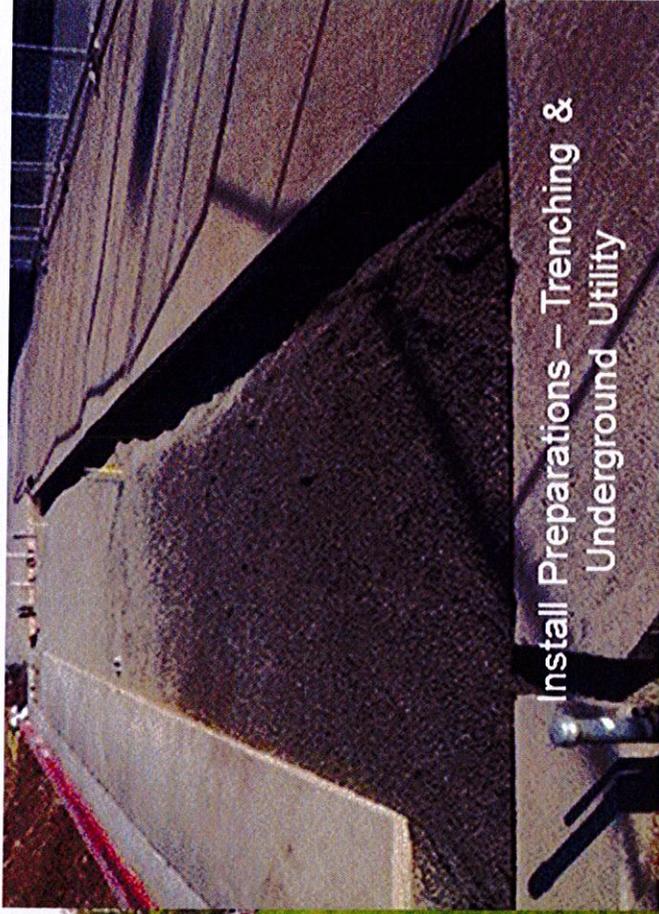
Bloom Energy Corporation
1299 Orleans Drive
Sunnyvale CA 94089
T 408 543 1500
www.bloomenergy.com

Bloom Energy Server

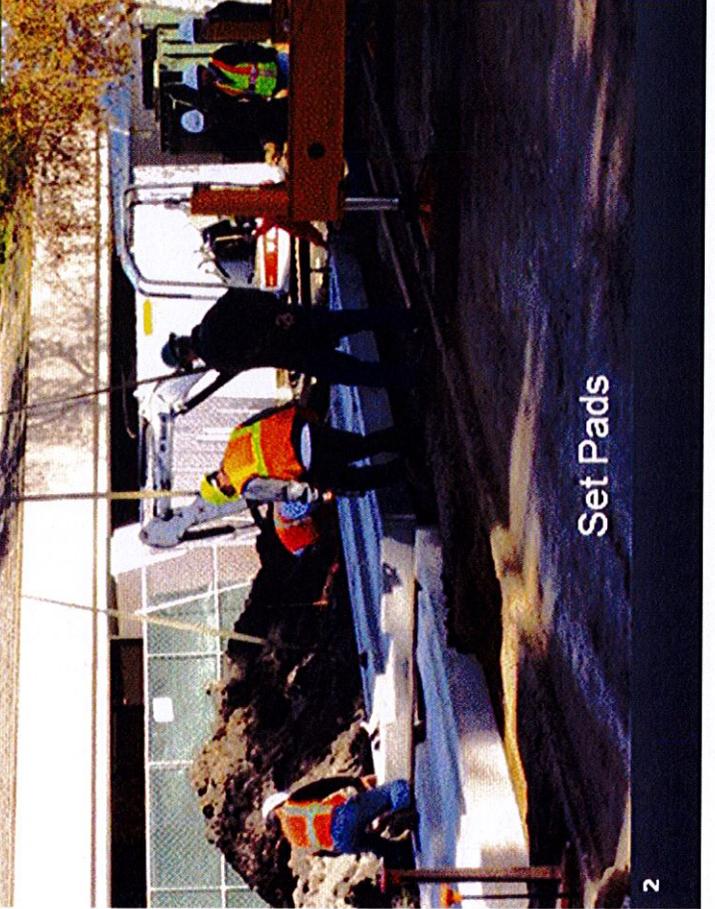




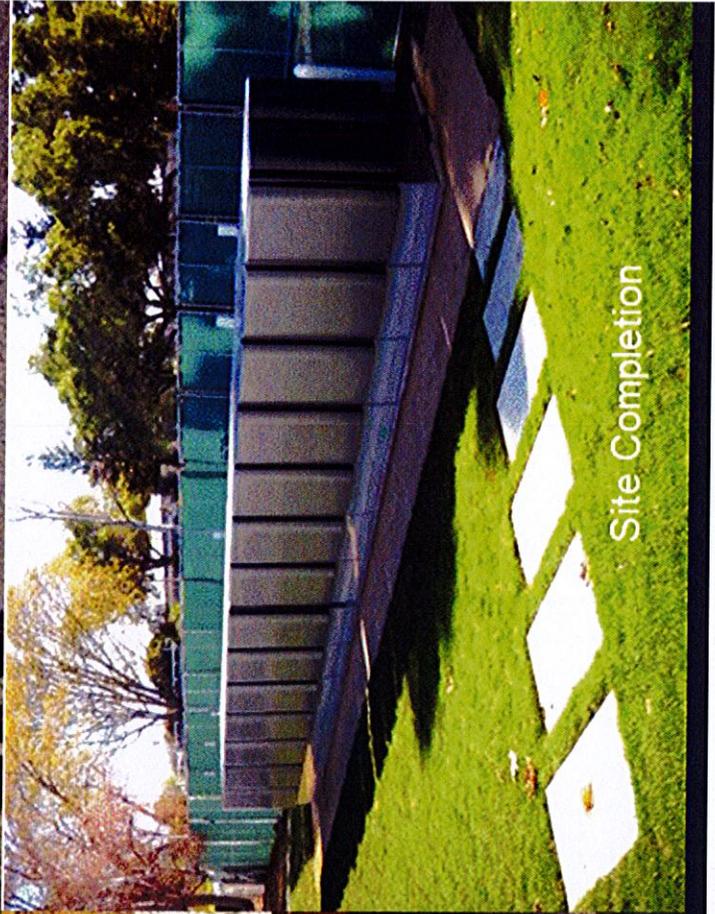
Pre-Construction



Install Preparations – Trenching & Underground Utility



Set Pads



Site Completion

Bloom Energy Server Installation



Representative Installations



EXHIBIT 6

State of California
AIR RESOURCES BOARD
Executive Order DG-036
Distributed Generation Certification of
Bloom Energy Corporation
ES-5700

WHEREAS, the Air Resources Board (ARB) was given the authority under California Health and Safety Code section 41514.9 to establish a statewide Distributed Generation (DG) Certification Program to certify electrical generation technologies that are exempt from the permit requirements of air pollution control or air quality management districts;

WHEREAS, this DG Certification does not constitute an air pollution permit or eliminate the responsibility of the end user to comply with all federal, state, and local laws, rules and regulations;

WHEREAS, on July 11, 2011, Bloom Energy Corporation applied for a DG Certification of its 200 kW ES-5700 fuel cell and whose application was deemed complete on August 30, 2011;

WHEREAS, Bloom Energy Corporation has demonstrated, according to test methods specified in title 17, California Code of Regulations (CCR), section 94207, that its natural-gas-fueled ES-5700 fuel cell has complied with the following emission standards:

1. Emissions of oxides of nitrogen no greater than 0.07 pounds per megawatt-hour;
2. Emissions of carbon monoxide no greater than 0.10 pounds per megawatt-hour; and
3. Emissions of volatile organic compounds no greater than 0.02 pounds per megawatt-hour.

WHEREAS, Bloom Energy Corporation has demonstrated that its ES-5700 fuel cell complies with the emission durability requirements in title 17, CCR, section 94203(d);

WHEREAS, I find that the Applicant, Bloom Energy Corporation, has met the requirements specified in article 3, title 17, CCR, and has satisfactorily demonstrated that the ES-5700 fuel cell meets the DG Certification Regulation 2007 Fossil Fuel Emission Standards;

NOW THEREFORE, IT IS HEREBY ORDERED, that a DG Certification, Executive Order DG-036 is granted.

This DG Certification:

- 1) is subject to all conditions and requirements of the ARB's DG Certification Program, article 3, title 17, CCR, including the provisions relating to inspection, denial, suspension, and revocation;
- 2) shall be void if any manufacturer's modification results in an increase in emissions or changes the efficiency or operating conditions of a model, such that the model no longer meets the DG Certification Regulation 2007 Fossil Fuel Emission Standards; and
- 3) shall expire on the 21st day of September, 2016.

Executed at Sacramento, California, this 21st day of September 2011.

James Goldstene
Executive Officer
by

/S/

Richard Corey, Chief
Stationary Source Division

EXHIBIT 7



December 17, 2015

VIA FIRST CLASS MAIL

To the Persons on the Attached List

RE: Petition of Walmart, Brooklyn, CT for a Declaratory Ruling for the Location and Construction of a 200-Kilowatt Fuel Cell Customer-Side Distributed Resource at 450 Providence Road, Brooklyn, CT

Dear Property Owner,

Pursuant to Section 16-50j-40 of the Connecticut Siting Council's (the "Council") regulations, we are notifying you Walmart, Brooklyn, CT intends to file on or shortly after December 16, 2015, a petition for declaratory ruling with the Council. The petition will request the Council's approval of the location and construction of an approximately 20 kilowatt Bloom Energy fuel cell and associated equipment (the "Facility"), located at the site of the Walmart, located at 450 Providence Road, Brooklyn, Connecticut (the "Site"). Electricity generated by the Facility will be consumed primarily at the Site, and any excess electricity will be exported to the electric grid. The Facility will be fueled by natural gas.

The Facility will be located at the rear of the building on an area that is presently paved. The fuel cell is approximately 26'-5" long, 8'-7" wide and 6'-9" high.

Should you have any questions or concerns regarding the proposed Facility, please contact Edwin Pho at (408) 543-1675 or edwin.pho@bloomenergy.com.

Sincerely

Bloom Energy

Edwin Pho
Sr. Manager, Utilities Engineering & Permitting

PROOF OF NOTICE

This is to certify that on December 17, 2015, the foregoing notice was sent via first class mail to the following:

AGENCY	NAME & ADDRESS
Office of the First Selectman Town of Brooklyn	Richard Ives First Selectman Town of Brooklyn 4 Wolf Den Road PO Box 356 Brooklyn, CT 06234
Land Use Department Town of Brooklyn	Jana Butts Robertson, AICP Land Use Administrator Clifford B. Green Memorial Center 69 South Main Street PO Box 356 Brooklyn, CT 06234
Inland Wetland Agency Town of Brooklyn	Jana Butts Robertson, AICP Land Use Administrator Clifford B. Green Memorial Center 69 South Main Street PO Box 356 Brooklyn, CT 06234
State Senator	Senator Mae Flexer Legislative Office Building Room 1800 Hartford, CT 06106
US Senator	Senator Richard Blumenthal 90 State House Square, 10 th Floor Hartford, CT 06103
US Senator	Senator Christopher Murphy One Constitution Plaza, 7 th Floor Hartford, CT 06103
State Representative	Representative Mike Alberts Legislative Office Building Room 4200 Hartford, CT 06106
Connecticut Attorney General	Honorable George Jespen Attorney General 55 Elm Street Hartford, CT 06106
State Department of Energy and Environmental Protection	Rob Klee Commissioner CT DEEP 79 Elm Street Hartford, CT 06106-5127

State Department of Public Health	Dr. Jewel Mullen Commissioner Department of Public Health PO Box 340308 Hartford, CT 06134
State Council on Environmental Quality	Karl J. Wagener Executive Director Council on Environmental Quality 79 Elm Street Hartford, CT 06106
State Department of Public Utility Control	Chairman Arthur House CT Public Utilities Regulatory Authority 10 Franklin Square New Britain, CT 06051
State Office of Policy and Management	Benjamin Barnes Secretary Office of Policy and Management 450 Capitol Avenue Hartford, CT 06106
State Department of Economic and Community Development	Catherine Smith Commissioner CT Department of Economic and Community Development 505 Hudson Street Hartford, CT 06106
State Department of Transportation	James P. Redeker Commissioner Department of Transportation 2800 Berlin Turnpike Newington, CT 06111
AUBTTING PROPERTY OWNERS	

Robin L Glessner
42 Brickyard Rd.
Brooklyn, CT 06234-1504

Richard & Naomi Regis
240 South St.
Brooklyn, CT 06234-2534

CP Brooklyn LLC
231 Farmington Ave.
Farmington, CT 06032-1818

Timothy & Beckie Pappas
PO BOX 512
Canterbury, CT 06331-1908

Michael & Kathleen Howard
66 Westview Dr.
Brooklyn, CT. 06234-2506

St. John Lutheran Church
445 Providence Rd.
Brooklyn, CT 06234-2544

John Martins
455 Providence Rd.
Brooklyn, CT 06234

Peter & Elaine Garosshen
65 Allen Hill Rd.
Brooklyn, CT 06234-1801

F C R Realty LLC
PO Box 873
Danielson, CT 06239-0873

Conn Light & Power CO
PO Box 270
Hartford, CT 06141-2335

Sandston Investments LLC
95 Hockanum Blvd.
Vernon, CT 06066

Mark & Leesa Thorstenson
45 Allen Hill Rd.
Brooklyn, CT 06234-1801

HFO and Associates LLC
28 Quail Run
Randolph, NJ 07869

Irene Planeta
45 Woodland Dr.
Brooklyn, CT 06234

Kenyon Oil Co. Inc.
221 Quinebaug Rd.
NO Grosvenordal, CT 06255

Joseph & Alice Comtois
PO Box 344
Brooklyn, CT 06234-0344

Anthony & Michelle Santos
68 Westview Dr.
Brooklyn, CT 06234

Demetrios & Maria Pasiakos
67 Westview Dr.
Brooklyn, CT 06234-0192

Sam Hung & Sau Ching Cheng
P.O. Box 1080
Danielson, CT 06239-0192

Federal National Mortgage Association
PO Box 650043
Dallas, TX 75265

Phillip Roger & Shelly Noll
61 Westview Dr.
Brooklyn, CT 06234-0192

F C R Realty LLC
P.O. Box 873
Danielson, CT 06239-0873

Lucille Byrne
35 Brickyard Rd.
Brooklyn, CT 06234-1503

LAC Properties LLC
P.O. Box 753
Brooklyn, CT 06234

Wal-Mart Real Estate Business Trust
P.O. Box 8050
Bentonville, AR 72712-8050

Kerry & Elaine Lambert
50 Brickyard Rd.
Brooklyn, CT 06234-2435

Roland & Lyn Lacharite
P.O. Box 344
Brooklyn, CT 06234-0344

Dated December 17, 2015



Edwin Pho

Edwin.Pho@bloomenergy.com

Bloom Energy Corporation

1299 Orleans Dr.

Sunnyvale, CA 94089

Ph. (408) 543-1746