ORIGINAL

COVER LETTER

Bloomenergy™

December 23, 2015

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

RE: Petition of Walmart Stores Inc., Manchester CT for a Declaratory Ruling for the Location and Construction of a 200-Kilowatt Fuel Cell Customer-Side Distributed Resource at 69 Pavilions Dr., Manchester, Connecticut

Dear Chairman Stein:

On behalf of Walmart Stores Inc., Manchester, CT, 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 Sam's Club, Manchester, 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 A DECLARATORY RULING FOR THE LOCATION AND CONSTRUCTION OF A 200-KILOWATT FUEL CELL CUSTOMER-SIDE DISTRIBUTED RESOURCE AT 69 PAVILIONS DRIVE, MANCHESTER, CONNECTICUT	:	PETITION NO. ____
	:	November __, 2015

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 69 Pavilions Drive, Manchester, 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

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. <u>The Site</u>

The Facility will be installed on the Walmart development, a commercial urban development building located on 69 Pavilions Drive in Manchester. Specifically, the Facility will be constructed on the 13.07-acre property that surrounds the Walmart. The Site is owned by Walmart and is zoned "Commercial Urban Development" ("CUD") under the zoning regulations of the Town of Manchester (the "Town").

The property is bordered by Pavilions Drive to the south and Buckland Hills Drive to the north. The surrounding area is commercial urban development zones located within the Town of Manchester and Town of South Windsor. The closest residential properties are located to the southeast of the commercial lot and parking lot, 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*l* 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.

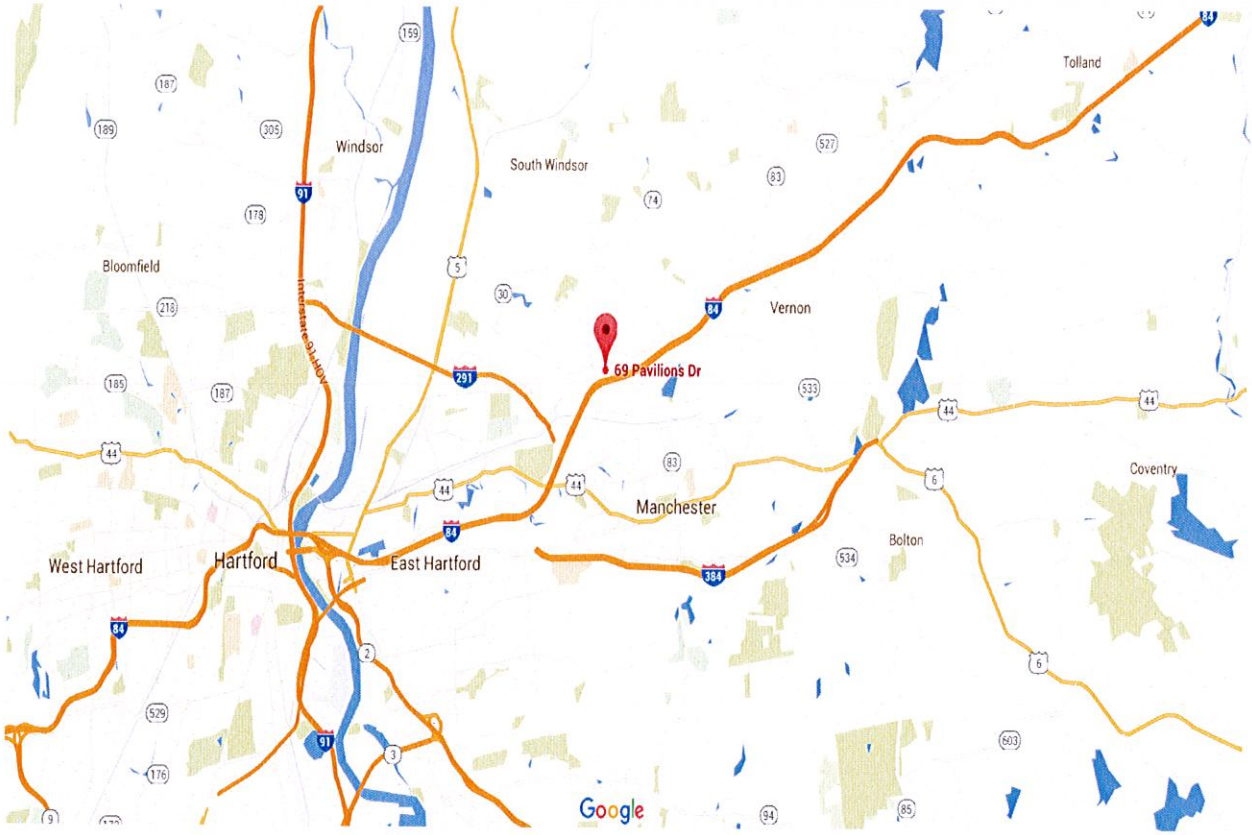
By: 

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)

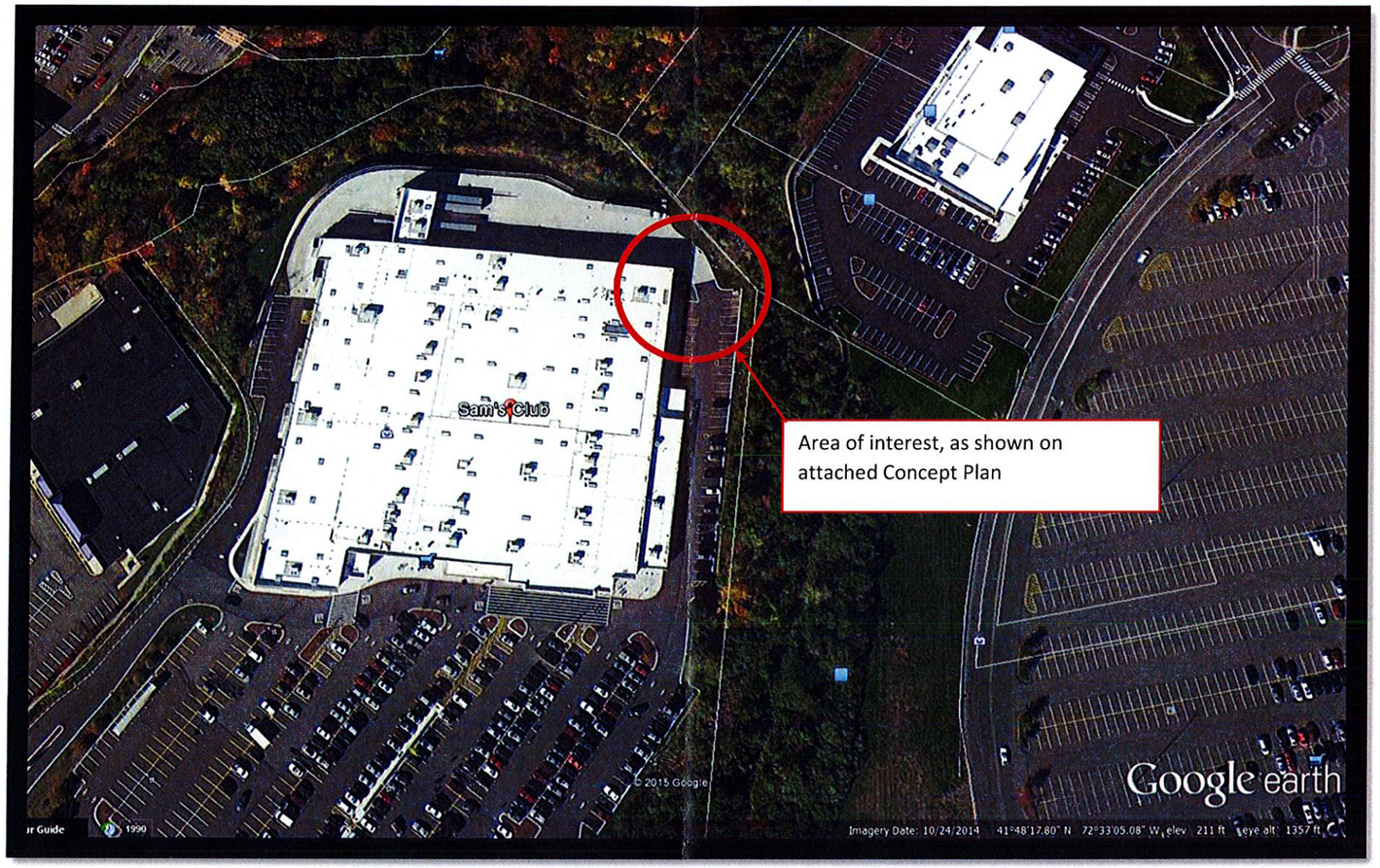
EXHIBIT 1



Site Map

Sam's Club
69 Pavilions Drive
Manchester, CT 06042

EXHIBIT 2



Aerial view of Sam's Club, Manchester, CT

Area of interest circled, as shown in more detail on attached Concept Plan

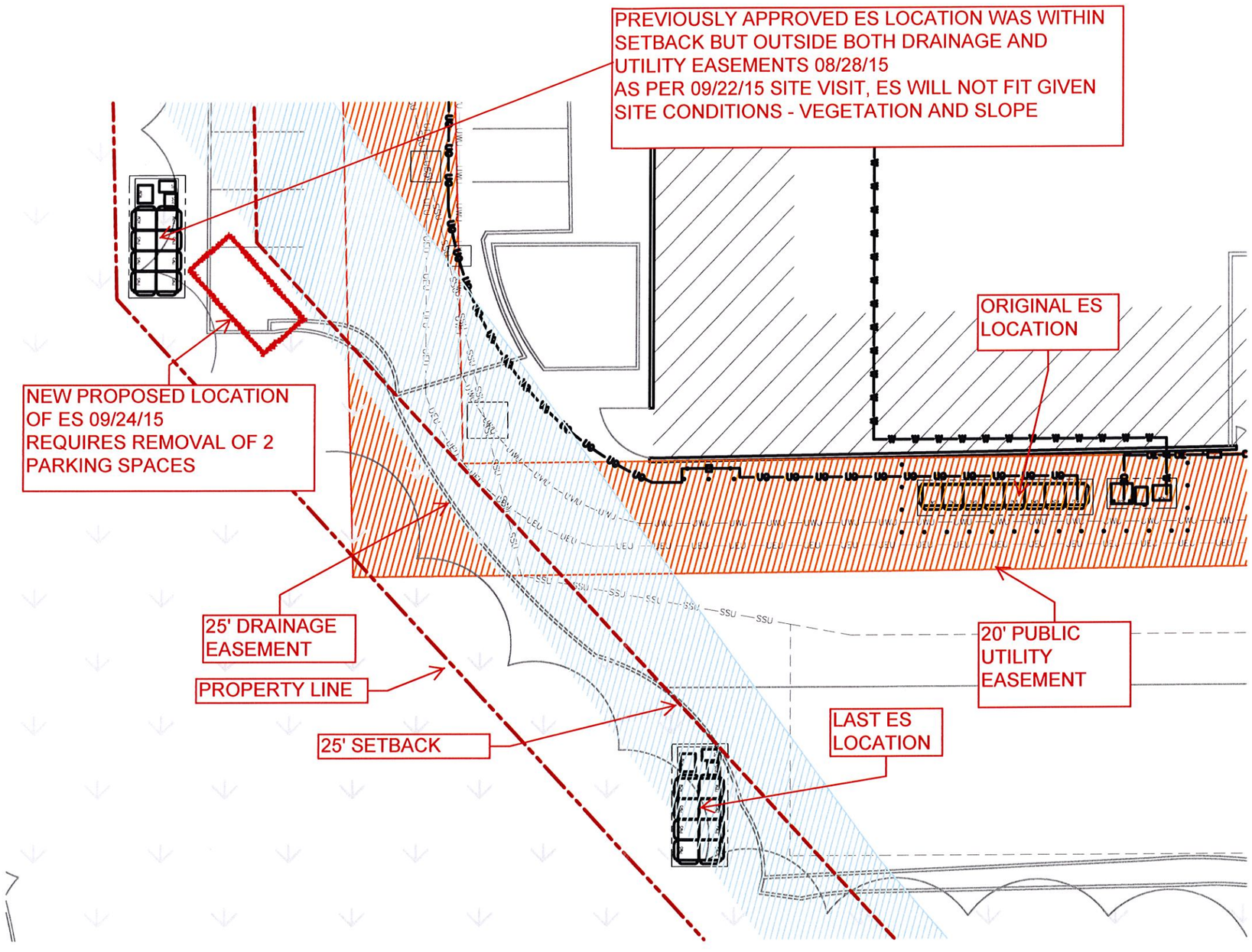

PREVIOUSLY APPROVED ES LOCATION WAS WITHIN SETBACK BUT OUTSIDE BOTH DRAINAGE AND UTILITY EASEMENTS 08/28/15
AS PER 09/22/15 SITE VISIT, ES WILL NOT FIT GIVEN SITE CONDITIONS - VEGETATION AND SLOPE
ORIGINAL ES LOCATION
NEW PROPOSED LOCATION OF ES 09/24/15 REQUIRES REMOVAL OF 2 PARKING SPACES
25' DRAINAGE EASEMENT
PROPERTY LINE
25' SETBACK
20' PUBLIC UTILITY EASEMENT
LAST ES LOCATION

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 reformate 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 CO_2 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.

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.

K. Santopietro

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

September 12, 2012
Date

60906902 V1-WORKSITEUS-029819/0002

EXHIBIT 4

Bloomenergy™

December 17, 2015

Mark Pellegrini, AICP
Director Planning and Economic Development
Town of Manchester
Lincoln Center, 2nd Floor
494 Main Street, PO Box 191
Manchester, CT 06045-0191

RE: Sam's Club Bloom Energy Fuel Cell Project

Dear Mr. Pellegrini,

This letter is in regard to the proposed Bloom Energy Fuel Cell Project at the Sam's Club located at 69 Pavilions Drive, Manchester, CT 06040. 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

Bloomenergy®

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 CO_2 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

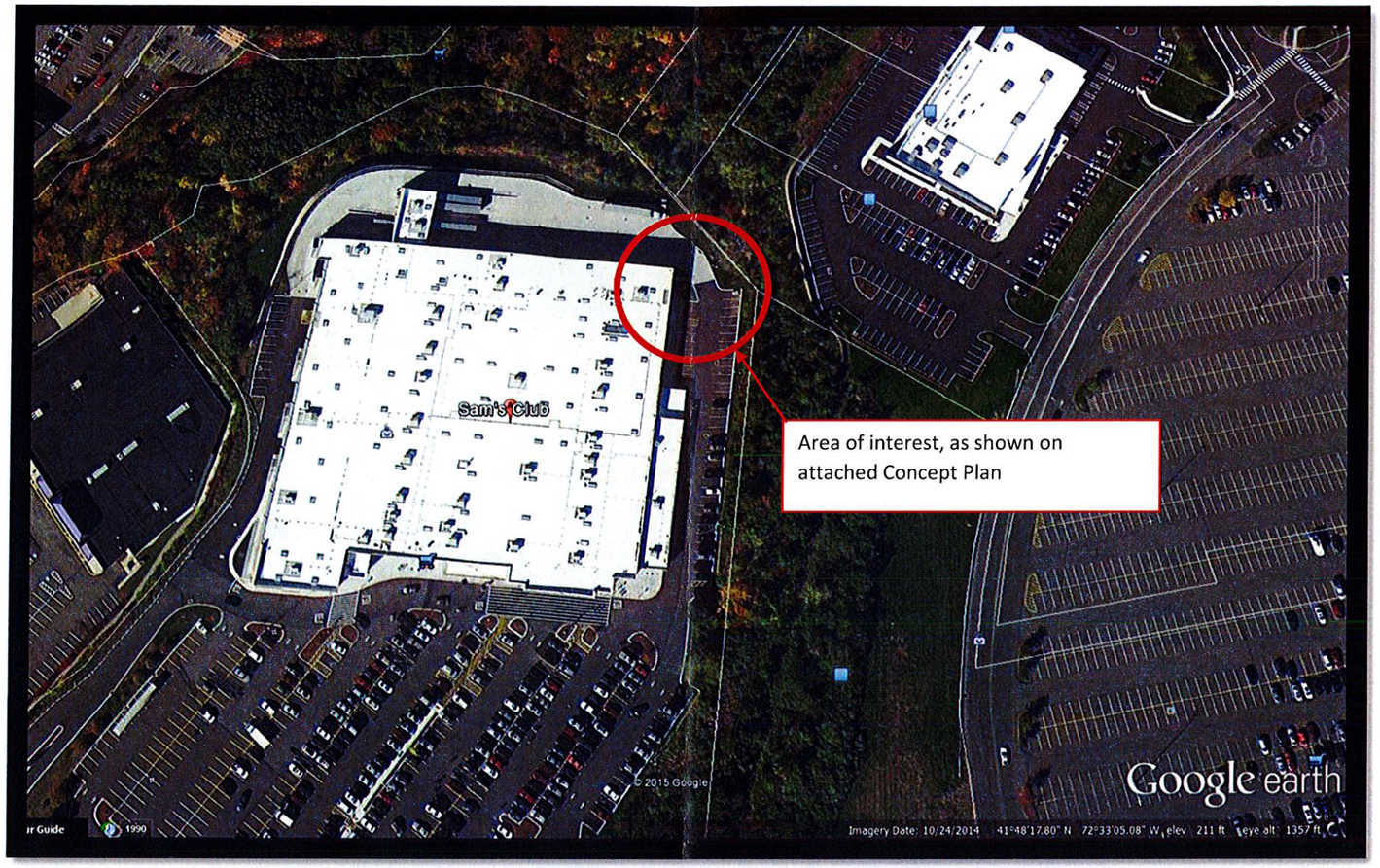
ES-5700

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	
NOx	< 0.01 lbs/MWh
SOx	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	

Bloomenergy

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

DOC-1006120



Aerial view of Sam's Club, Manchester, CT

Area of interest circled, as shown in more detail on attached Concept Plan

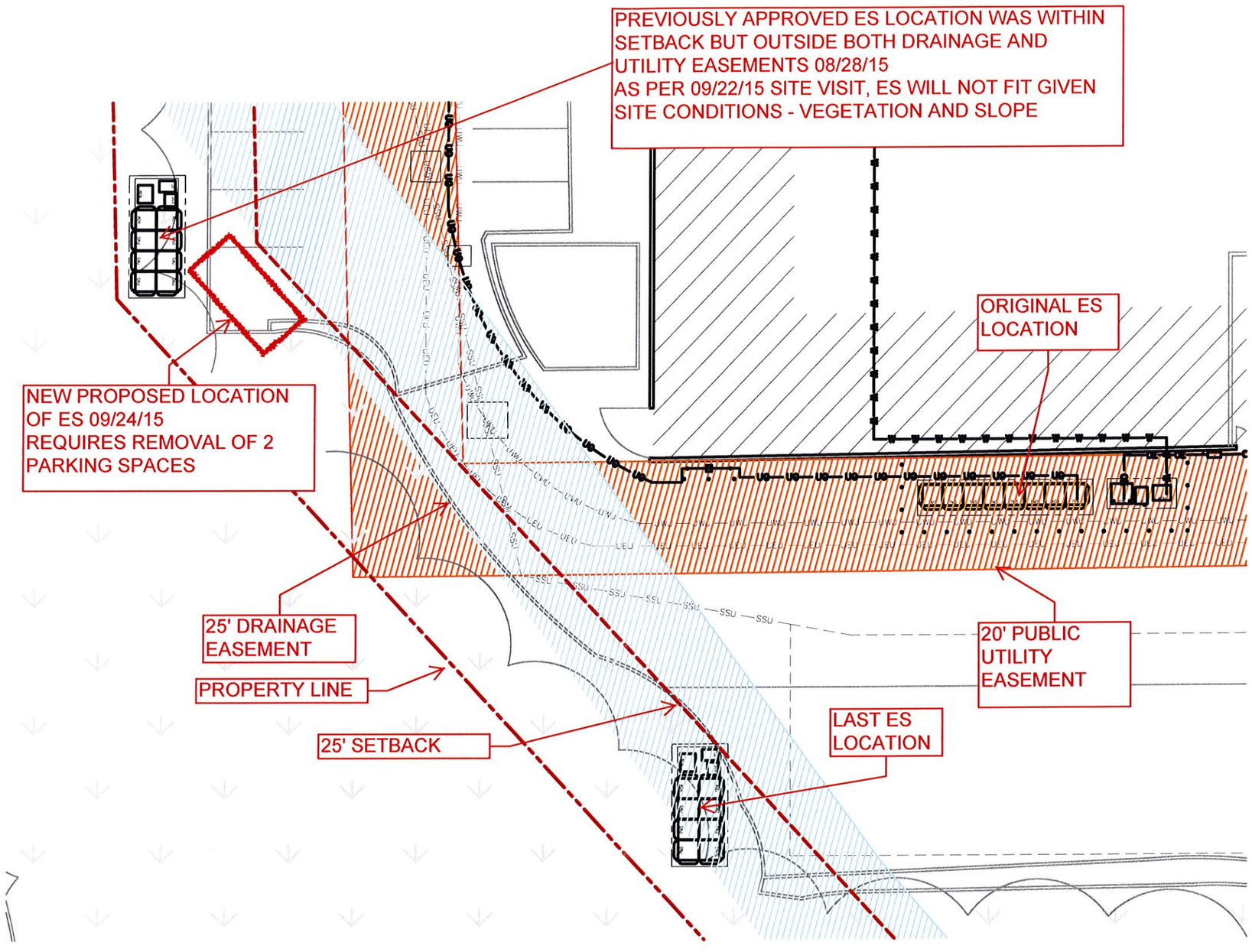
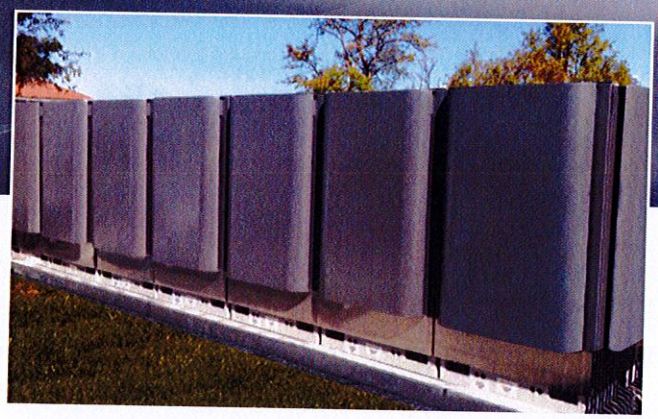

PREVIOUSLY APPROVED ES LOCATION WAS WITHIN SETBACK BUT OUTSIDE BOTH DRAINAGE AND UTILITY EASEMENTS 08/28/15
AS PER 09/22/15 SITE VISIT, ES WILL NOT FIT GIVEN SITE CONDITIONS - VEGETATION AND SLOPE
ORIGINAL ES LOCATION
NEW PROPOSED LOCATION OF ES 09/24/15 REQUIRES REMOVAL OF 2 PARKING SPACES
25' DRAINAGE EASEMENT
PROPERTY LINE
25' SETBACK
20' PUBLIC UTILITY EASEMENT
LAST ES LOCATION

EXHIBIT 5

Bloomenergy®

ES-5700 Energy Server



Welcome to clean, quiet electricity that's always on.
Welcome to the ES-5700 Energy Server.

CLEAN POWER ON DEMAND

Bloom Energy's ES-5700 delivers clean power to meet your base load electricity needs. Seamlessly producing power in parallel with the utility grid, the ES-5700 will reduce your emissions and save you money.

RELIABLE RISK MITIGATION

The ES-5700 operates at unmatched electrical efficiencies. That means that it consumes less fuel and produces less CO_2 than competing technologies. By providing efficient power on-site, the economic and environmental benefits of your ES-5700 will continue to increase.

INNOVATIVE TECHNOLOGY

Utilizing solid oxide fuel cell (SOFC) technology first developed for NASA's Mars program, the ES-5700 produces clean power. Unlike other fuel cell technologies, Bloom's SOFCs are well-suited to high-volume, low-cost manufacturing which also makes them uniquely affordable. The ES-5700 also employs a modular architecture that enables the total installation size to be tailored to your base load electricity demand.

ALL-ELECTRIC POWER

The ES-5700's superior electrical efficiency eliminates the need for complicated CHP systems, and expands the deployment opportunities available to you. Your ES-5700 can be installed outdoors in hours rather than months or years.

FUEL FLEXIBILITY

The ES-5700 can run on natural gas, as well as, renewable fuels like biogas. You choose what works for you. Onsite fuels can provide added insurance for your critical loads, and the ES-5700 can easily accommodate those needs.

Future generations of Bloom's Energy Servers will offer the unique capacity to operate both as an energy generation and storage device, thus creating a bridge to a 100% renewable energy future.

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. By generating power where it is consumed, Bloom Energy offers increased electrical reliability and improved energy security, providing a clear path to energy independence.

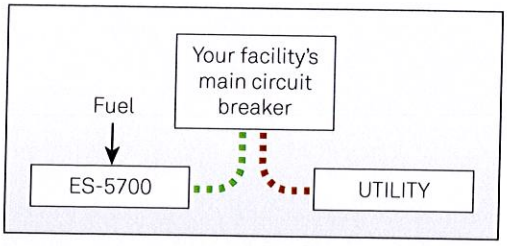
Headquarters:
Sunnyvale, California

For More Information:
info@bloomenergy.com

ES-5700 Energy Server

YOUR POWER IS SECURE

The ES-5700 has been designed in compliance with Underwriters Laboratories (UL) and a variety of safety standards, and is backed by a comprehensive warranty. The ES-5700 actively communicates with Bloom Energy's network operations center. Should the system require unscheduled maintenance, we'll be deploying a solution before you even know there's a problem.

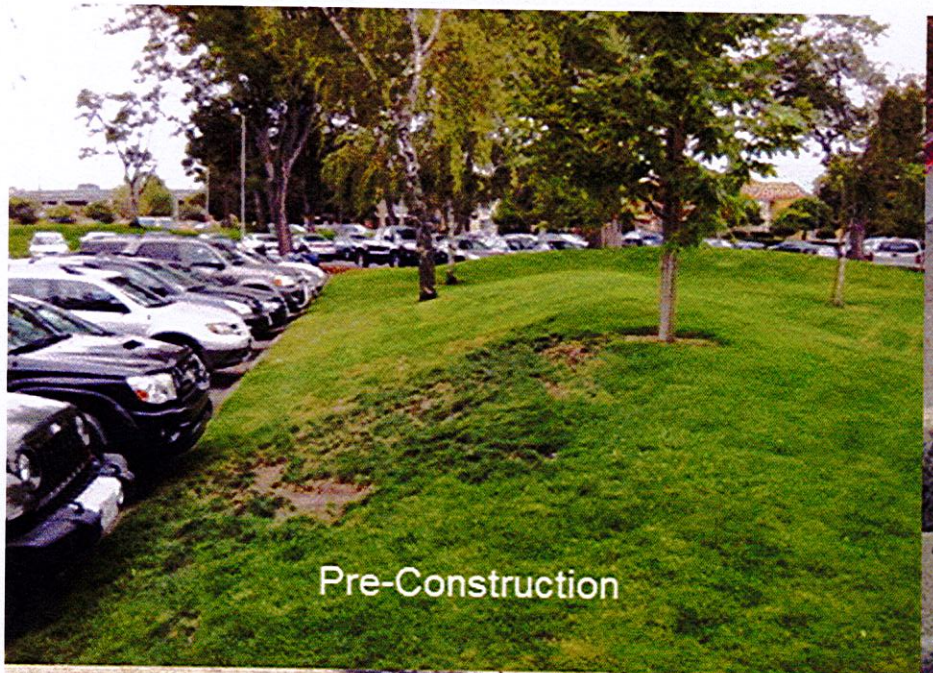


Technical Highlights	
Inputs	
Fuels	Natural Gas, Directed Biogas
Input fuel pressure	15 psig
Fuel required @ rated power	1.32 MMBtu/hr of natural gas
Outputs	
Nameplate power output (net AC)	210kW
Base load output (net AC)	200kW
Electrical efficiency (LHV net AC)	> 50%
Electrical connection	480V @ 60 Hz, 3 or 4-wire 3 phase
Physical	
Weight	19.4 tons
Size	26' 5" x 8' 7" x 6' 9"
Emissions	
NOx	< 0.01 lbs/MW-hr
SOx	negligible
CO	< 0.10 lbs/MW-hr
VOCs	< 0.02 lbs/MW-hr
CO_2 @ specified efficiency	773 lbs/MW-hr on natural gas; carbon neutral on Directed Biogas
Environment	
Standard temperature range	-20° to 45° C (extreme weather kit optional)
Humidity	0% - 100%
Seismic Vibration	IBC site class D
Location	Outdoor
Noise @ rated power	< 70 DB @ 6 feet
Codes and Standards	
Complies with Rule 21 interconnection 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	
Additional Notes	
Operates in a grid parallel configuration	
Includes a secure website for you to showcase performance & environmental benefits	
Remotely managed and monitored by Bloom Energy	
Capable of emergency stop based on input from your facility	

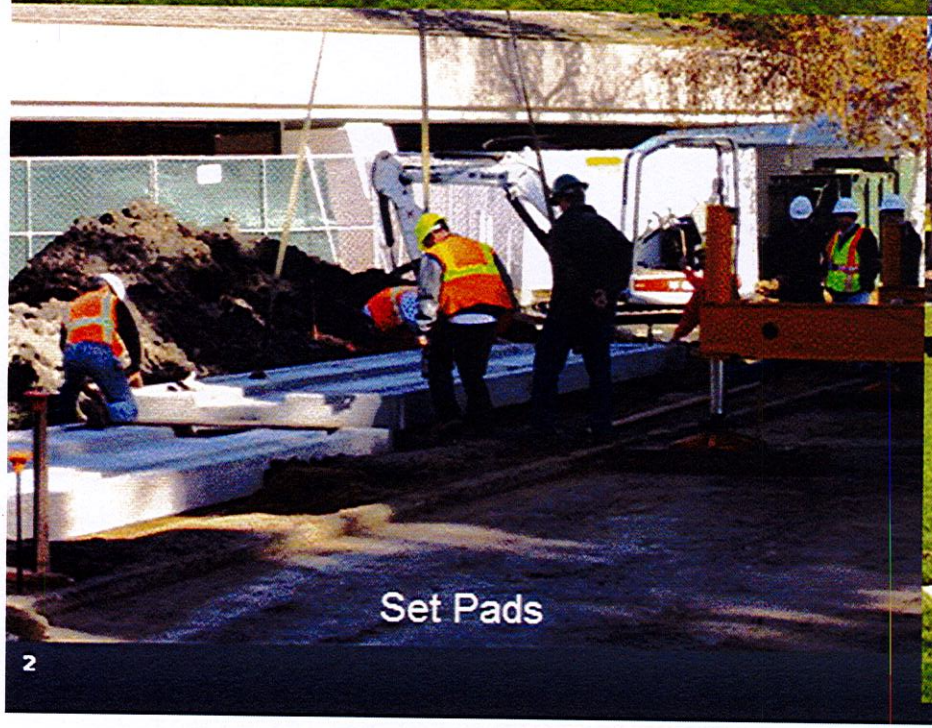
Bloomenergy®

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

Bloomenergy

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

Bloomenergy™

December 17, 2015

VIA FIRST CLASS MAIL

To the Persons on the Attached List

RE: Petition of Walmart Stores, Inc. for a Declaratory Ruling for the Location and Construction of a 200-Kilowatt Fuel Cell Customer-Side Distributed Resource at 69 Pavilions Drive, Manchester, Connecticut

Dear Property Owner,

Pursuant to Section 16-50j-40 of the Connecticut Siting Council's (the "Council") regulations, we are notifying you Walmart Stores, Inc. intends to file on or shortly after December 17, 2015, a petition for a declaratory ruling with the Council. The petition will request the Council's approval of the location and construction of an approximately 200-kilowatt Bloom Energy fuel cell and associated equipment (the "Facility"), located at the site of the Sam's Club, located at 69 Pavilions Drive, Manchester, 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 Mayor Town of Manchester	Louis A. Spedaccini Manchester Mayor Town Hall 41 Center Street Manchester, CT 06040
Planning & Zoning Department Town of Manchester	Mark Pellegrini, AICP Director of Planning and Economic Development Planning Department Lincoln Center, 2nd Floor 494 Main Street, PO Box 191 Manchester, CT 06040
Inland Wetland Agency Town of Manchester	Matthew R. Bordeaux Environmental Planner/Inland Wetlands Agent Planning and Zoning Commission/Inland Wetlands Agency PO Box 191 Manchester, CT 06045
State Senator	Senator Steve Cassano Legislative Office Building Room 2200 Hartford, CT 06106
US Senator	Senator Richard Blumenthal 90 State House Square, 10th Floor Hartford, CT 06103
US Senator	Senator Christopher Murphy One Constitution Plaza, 7th Floor Hartford, CT 06103
State Representative	Representative John B. Larson 221 Main Street, 2nd Floor 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
Office of the Mayor Town of South Windsor	Mayor Saud Anwar Town of South Windsor 93 Rockledge Drive South Windsor, CT 06074
Planning & Zoning Department Town of South Windsor	Michele R. Lipe, AICP Director of Planning Town of South Windsor 1540 Sullivan Ave South Windsor, CT 06074
Inland Wetland Agency Town of South Windsor	Jeffrey H. Folger Environmental Planner/Conservation Officer Inland Wetlands Agency/Conservation Commission 1540 Sullivan Avenue South Windsor, CT 06074
State Senator	Senator Tim Larson Legislative Office Building Room 3600 Hartford, CT 06106-1591
State Representative	Representative William Aman Legislative Office Building Room 4200 Hartford, CT 06106-1591
AUBTTING PROPERTY OWNERS	

BRIXMOR MANCHESTER I LLC
420 LEXINGTON AVENUE, 7TH FLOOR
NEW YORK, NY 10170

SHOPPES AT BUCKLAND HILLS LLC
C/O GENERAL GROWTH
PROPERTIES INC.
P.O. BOX 9118
FARGO, ND 58106

SHOPPES AT BUCKLAND HILLS LLC
C/O GENERAL GROWTH
PROPERTIES INC.
110 NORTH WACKER DRIVE
CHICAGO, IL 60606

MANCHESTER LAND
CONSERVATION
TRUST INC.
20 HARTFORD RD.
MANCHESTER, CT 06042

SHOPPES AT BUCKLAND HILLS LLC
C/O GENERAL GROWTH
PROPERTIES INC.
110 NORTH WACKER DRIVE
CHICAGO, IL 60606

SHOPPES AT BUCKLAND HILLS LLC
C/O GENERAL GROWTH PROPERTIES INC.
C/O DAVE & BUSTERS OF CONNECTICUT
INC.
2481 MANANA DR.
DALLAS, TX 75220

Dated December 17, 2015

Edwin Pho
edwin.pho@bloomenergy.com
Bloom Energy Corporation
1299 Orleans Dr.
Sunnyvale, CA 94089
Ph. (408) 543-1746