

March 29, 2024

Melanie Bachman, Esq. Executive Director Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

RE: Bloom Energy Corporation, **Notice of Exempt Modification** *Pursuant to RCSA 16-50j-57(a)* to Existing Fuel Cell Energy Facility Site at The Home Depot, 117 Main Street, Derby, CT 06002 ("Notice of Exempt Modification")

Dear Ms. Bachman:

This letter is to herby notify the Connecticut Siting Council of Bloom Energy Corp.'s intent to undertake an exempt modification, in accordance with Section 16-50f-57(a) of the Regulations of Connecticut State Agencies ("RCSA"), for the necessary upgrade to Bloom's fuel cell energy server system at **The Home Depot, located at 117 Main Street, Derby, CT 06002**

Proposed Modification

The existing facility consists of one (1) 200kw Bloom Energy ES-5700 Energy Server, now reaching the end of its service life. Specifications for the existing equipment and new equipment to be installed are provided in Attachment 1. As-builts showing the existing facility layout is shown in Attachment 2. There will be no changes to the site footprints, layouts, or utility routing as Bloom plans to replace all components in kind.

Bloom Energy proposes the following modifications to the facility:

- 1. Disconnect existing servers from the natural gas source, water source, supervisory control and data acquisition, and electricity systems.
- 2. Remove the existing fuel cell servers.
- 3. Install one (1) current generation fuel cell server (Model No. ES5-1650US0301S-NASY4N-0) on existing concrete pad or skid at the site (direct replacement in kind).
- 4. Install new server repower components.

The proposed modification would not have a substantial adverse environmental effect or cause a significant adverse change or alteration in the physical or environmental characteristics of the facility because:



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- a. The modification does not extend the boundaries of the site beyond the existing compound and will not impair the structural integrity of the facility.
- b. The modification does not increase the height of the existing associated equipment.
- c. The modification will not increase noise levels at the site boundary or to levels that exceed state and local criteria.
- d. Electric and magnetic field levels at the site will not be affected by the modifications due to low or no change in export of power from site.
- e. No endangered, threatened, or sensitive species are within the vicinity of the facility per NDDB.
- f. The modifications would not affect any waterways or wetlands and the facility is not located in a flood zone.

Construction start is expected to begin on August 12th, 2024 and will be completed within 4-6 weeks.

Bloom will provide the Council with an original and two copies of this notice, including the required \$625 filing fee. A copy of this notice will also be provided to the City of Derby Mayor and the property owners representative, Colin Holloway via electronic mail.

Please let us know if you have any questions or require additional information regarding this notification. Thank you.

Respectfully,

Kristen Grillo Senior Permitting Specialist | East Coast Field Office Customer Installations Group | North America (917) 803-4511 Kristen.Grillo@bloomenergy.com

CC: Joseph L. DiMartino, City of Derby Mayor Colin Holloway, The Home Depot



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Attachment 1: Bloom Energy Model Datasheets

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
СО	< 0.10 lbs/MWh
VOCs	< 0.02 lbs/MWh
$\rm CO_2^{}$ @ 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" × 8' 7" × 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 stand	
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	
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Bloomenergy°

PRODUCT DATASHEET

Energy Server 5.5

Always On, Clean Energy Using Patented Solid Oxide Fuel Cell Technology



The Energy Server 5 provides combustion-free electric power with these benefits



Clean

Our systems produce near zero criteria pollutants (NOx, SOx, and particulate matter) and far fewer carbon emissions than legacy technologies.



Reliable

Bloom Energy Servers are designed around a modular architecture of simple repeating elements. This enables us to generate power 24 x 7 x 365 and can be configured to eliminate the need for traditional backup power equipment.



Resilient

Our system operates at very high availability due to its fault-tolerant design and use of the robust natural gas pipeline system. Bloom Energy Servers have survived extreme weather events and other incidences and have continued providing power to our customers.



Simple Installation and Maintenance

Our Energy Servers are 'plug and play' and have been designed in compliance with a variety of safety standards. Bloom Energy manages all aspects of installation, operation and maintenance of the systems.

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Energy Server 5.5	Technical Highlights (ES5-1650US0301S-NASY14-0)	
Outputs		
Nameplate power output (net AC)	165kW	
Load output (net AC)	165kW	
Electrical connection	480V, 3-phase, 60Hz	
Inputs		
Fuels	Natural gas	
Input fuel pressure	12-18 psig (15 psig nominal)12-18 psig (15 psig nominal)Natural gas	
Water	None during normal operation	
Efficiency		
Cumulative electrical efficiency (LHV net AC) ¹	65-53%	
Heat rate (HHV)	5,811-7,127 Btu/kWh	
Emissions ²		
NOx	0.0017 lbs/MWh	
SOx	Negligible	
CO	0.034 lbs/MWh	
VOCs	0.0159 lbs/MWh	
CO ₂ @ stated efficiency	679-833 lbs/MWh on natural gas; carbon neutral on directed biogas	
Physical Attributes and Environment		
Weight	9.9 tons	
Dimensions (variable layouts)	10'9" x 8'8" x 7'0" or 21'6" x 4'4" 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 stand	dards	
Exempt from CA Air District permitting; meets stringent CA	ARB 2007 emissions standards	
An Energy Server is a Stationary Fuel Cell Power System. It 'Stationary Fuel Cell Power System' to ANSI/CSA FC1-2014		
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 ¹ 65% LHV efficiency verified by ASME PTC 50 Fuel Cell Power Systems Performance Test ² NOx and CO measured per CARB Method 100, VOCs measured as hexane by SCAQMD Method 25.3		

About Bloom Energy

Bloom Energy's mission is to make reliable, clean energy affordable for everyone in the world. The company's product, the Bloom Energy Server, delivers highly reliable and resilient, Always On electric power that is clean and sustainable. Bloom's customers include twenty-five of the Fortune 100 companies and leaders in cloud services and data centers, healthcare, retail, financial services, utilities and many other industries.

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T 408 543 1500 F 408 543 1501 info@bloomenergy.com www.bloomenergy.com Attachment 2: As-Built Site Plan





