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June 4, 2021

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

Re: Petition 1406A – Responses to CSC Interrogatories

Dear Ms. Bachman:

NuPower Bridgeport FC, LLC ("NuPower") hereby submits to the Connecticut Siting Council ("Council") its responses to the Council's May 14, 2021 interrogatories (Set 1).

Given that the Council has waived all hard copy filing requirements as part of its response to the COVID-19 pandemic, by this letter, NuPower submits to the Council an electronic copy of its responses. A hard copy of the responses will be mailed to the Council.

Should you have any questions regarding this filing, please do not hesitate to contact me.

Very truly yours,

Bruce L. McDermott

Enclosure

Interrogatory CSC-1

NuPower Bridgeport FC, LLC | Witness: Daniel Donovan

Petition No. 1406A |

Q-CSC-1: Referring to petition p. 13, how many residents attended the February 27, 2021 information meeting with the Seaside Village Homeowners Association? Who represented the leadership of the association? In general what were the concerns raised by the association and how were these concerns addressed?

A-CSC-1: Eight. The meeting was attended by Scott Guilmartin and Dan Donovan of NuPower, Walter Bonola and Dave Giordano of Doosan, and eight property owners from Seaside Village (Vincent Aurelia, Uli Fernandez, Mary Ann Provey, Daisa Cells, Susan Fazekas, Joe Provey, Yolanda Ramos and John Belinski). NuPower was told four individuals serve on the Seaside Village Homeowners Association but those individuals were not identified.

During this meeting, residents of Seaside Village received a tour of the NuPower's Cherry Street fuel cell project and had the opportunity to ask questions about the Bridgeport fuel cell project. Topics of discussion included project lighting, emissions, drainage, site selection, maintenance, decommissioning of the units, noise, economic benefits to the City of Bridgeport, thermal loop and visual impacts. Some concerns were raised regarding the level of noise, particularly when standing next to the fuel cell's cooling module inside the sound attenuation walls. However, it was explained that the level of noise at the cooling module is not representative of the facility's overall noise level, as heard from nearby sites. The Cherry Street unit is 20' from 174 high rise apartments and a 70,000 square foot charter school that overlook the fuel cell enclosure. There has never been a noise complaint. Furthermore, it was clarified that the noise level from 21 units will be the same as one unit and in compliance with the applicable noise standards. Lastly, it should be noted that the cooling modules at NuPower's Bridgeport facility will be surrounded by sound walls that will significantly decrease the level of noise.

Interrogatory CSC-2

NuPower Bridgeport FC, LLC | Witness: Daniel Donovan

Petition No. 1406A |

Q-CSC-2: Would the facility be visible from Seaside Village? If so, from what area(s)?

A-CSC- 2: The project site will not be visible from Seaside Village. The Interstate 95 overpass and a number of industrial buildings which include a gasoline station and an auto repair shop will block the project site from view. *See* Figure 3 of Petition 1406A for an aerial view of the project site and Attachment CSC-2-1 for a view of the project site from the closest point of Seaside Village to such.

Petition 1406A
Attachment CSC-2-1

THE
SEASIDE VILLAGE HOMES
INC.
A CO-OP
MANAGED BY
THE BRIDGEPORT MUTUAL MANAGEMENT
CORP.

South Ave.

NUNES
REG CASH 2.99
REG CREDIT 3.09
DIESEL CASH 3.29

AUTO REPAIRS
24 HOUR TOWING
203-0410 333-0016

CAR WASH
ENTRANCE

NUNES
CONVENIENCE

CLOTHING &
SHOE DROP

Interrogatory CSC-3

NuPower Bridgeport FC, LLC | Witness: Daniel Donovan

Petition No. 1406A |

Q-CSC- 3: Describe intervening structures and land use between the proposed site and Seaside Village.

A-CSC- 3: The project site is separated from Seaside Village by the Interstate 95 overpass and a number of industrial buildings, which include Makroteks Textiles LLC, Medelco Inc., J.J. Box Co., Nunes Auto Care and Car Wash and the Nunes gas station. Additionally, the excess space below the I-95 overpass and directly behind the project site is used by the Connecticut Department of Transportation for storage of cement slab blocks and other equipment. Across the street from the project site and also below the I-95 overpass, the space is used for parking. See Attachment C of Petition 1406A for photographs of the project site area and Attachment CSC-2-1 for a view of the project site from the corner of South Avenue and Iranistan Avenue, the closest portion of Seaside Village to the project site. Attachment CSC-2-1 illustrates how the intervening structures make it almost impossible to see the project site from the closest portion of Seaside Village to it. Lastly, it should be noted that the Seaside Village complex is primarily comprised of small homes that face inwards and are positioned on the westward side of the project site, and therefore, residents will have no view of the project site.

Interrogatory CSC-4

NuPower Bridgeport FC, LLC | Witness: Daniel Donovan

Petition No. 1406A |

Q- CSC-4: Would the proposed facility require a DEEP air permit? If so, how would the project be classified (ex. combined heat and power system or distributed generation) and which regulation applies?

A- CSC-4: No, the proposed facility will not require a DEEP air permit. *See* pages 17-18 of Petition 1406A for additional information.

Interrogatory CSC-5

NuPower Bridgeport FC, LLC | Witness: Daniel Donovan

Petition No. 1406A |

Q- CSC-5: What is the status of the thermal loop? Does NuPower/Doosan expect it to be constructed and operational at the same time as the proposed fuel cell facility?

A- CSC-5: The thermal loop is currently under design and approximately 60% of the design drawings have been completed. The thermal loop is expected to be constructed, installed and operational concurrently with the fuel cell facility.

Interrogatory CSC-6

NuPower Bridgeport FC, LLC | Witness: Daniel Donovan

Petition No. 1406A |

Q- CSC-6: The air emission table in Petition Attachment F includes a “High Grade Heat Utilization” parameter. Does this represent the thermal loop? If so, provide an air emission summary table that does not include heat utilization by the thermal loop.

A- CSC-6: Yes, it represents the thermal loop. *See* Attachment CSC-6-1 for an air emissions reduction table that does not include heat utilization by the thermal loop.

The difference between the grid avoided emissions in Attachment CSC-6-1 and Petition Attachment F is due to Attachment CSC-6-1 reflecting the latest available emissions information for the grid.

The difference between the CO2 emissions levels in Attachment CSC-6-1 and Petition Attachment F reflects technological advances in the Doosan PureCell Model 400 systems.

Customer:	NuPower
Location:	Bridgeport Thermal Loop

Date: 6/2/2021

System:	PureCell® Model 400
QNTY:	21
Electrical Utilization:	100%
Total System Power:	9.66 MW
Fuel:	Natural Gas
eGrid Sub-region:	NEWE
Grid T&D Losses:	4.88%

	Emissions Balance		
	CO2	**NOx**	**SOx**
		(Metric Ton)	
Grid Avoided Emissions[1]	(36,432)	(12.9)	(4.8)
Fuel Cell Electric without thermal loop	38,307	0.8	0.0
BALANCE	***1,874.5***	***(12.1)***	***(4.8)***

Interrogatory CSC-7

NuPower Bridgeport FC, LLC | Witness: Daniel Donovan

Petition No. 1406A |

Q- CSC-7: Referring to Petition pp. 17 and 18- Air Emission Section - Table 1 and associated narrative, Clarify if the emissions are from each individual fuel cell unit or the cumulative fuel cell facility, and whether this includes the thermal loop. Please revise Table 1 accordingly or provide a new table.

A- CSC-7: The emissions in Table 1 of Petition 1406A represent the facility-wide emissions (all 21 fuel cells), excluding the use of the thermal loop.

Interrogatory CSC-8

NuPower Bridgeport FC, LLC | Witness: Daniel Donovan

Petition No. 1406A |

Q- CSC-8: What is the height of the proposed rooftop sound attenuation walls?

A- CSC-8: The proposed sound attenuation walls will be approximately eight (8) feet tall.

Interrogatory CSC-9

NuPower Bridgeport FC, LLC | Witness: Daniel Donovan

Petition No. 1406A |

Q- CSC-9: What is the anticipated reduction in noise levels from the facility by installing the sound attenuation walls? Exhibit M indicates the noise levels at the industrial property next door may exceed 70 dBA and noise mitigation is recommended.

A- CSC-9: The installation of sound attenuation walls is expected to reduce noise levels from the facility by approximately 12 to 14 dBA. NuPower has incorporated noise mitigation into the design of the project in order to provide sufficient sound attenuation so the noise generated by the fuel cells will not exceed the industrial and residential limits and be in compliance with the applicable City and State ordinances.

Interrogatory CSC-10

NuPower Bridgeport FC, LLC | Witness: Daniel Donovan

Petition No. 1406A |

Q- CSC-10: Are there any concerns about inadvertent highway snow removal contacting the top of the facility and the cooling fans?

A- CSC-10: Sound attenuation walls will be installed on the roof of the building. These walls will be eight feet tall and impervious to rain, snow and ice. For this reason, the sound walls will prevent the fuel cell units and associated cooling fans from coming into contact with any highway snow or other sort of highway debris. *See* Attachment N of Petition 1406A for a brochure and specifications of the sound walls.

Interrogatory CSC-11

NuPower Bridgeport FC, LLC | Witness: Daniel Donovan

Petition No. 1406A |

Q- CSC-11: Referring to the Site Plans (GA 1.0), define the equipment abbreviations. What area contains the thermal loop equipment?

A- CSC-11: "R.O. System in Hubbell Hot Box" refers to a reverse osmosis water filtration system.

"ATS" refers to an automatic transfer switch.

"LV-SWBD-1 through LV-SWBD-5" refer to the electrical switch gear.

"SHALL BETTER" refers to the United Illuminating meter cabinets.

"S&C PME" refers to the main electrical switches.

"XFRMR" refers to the electrical transformers.

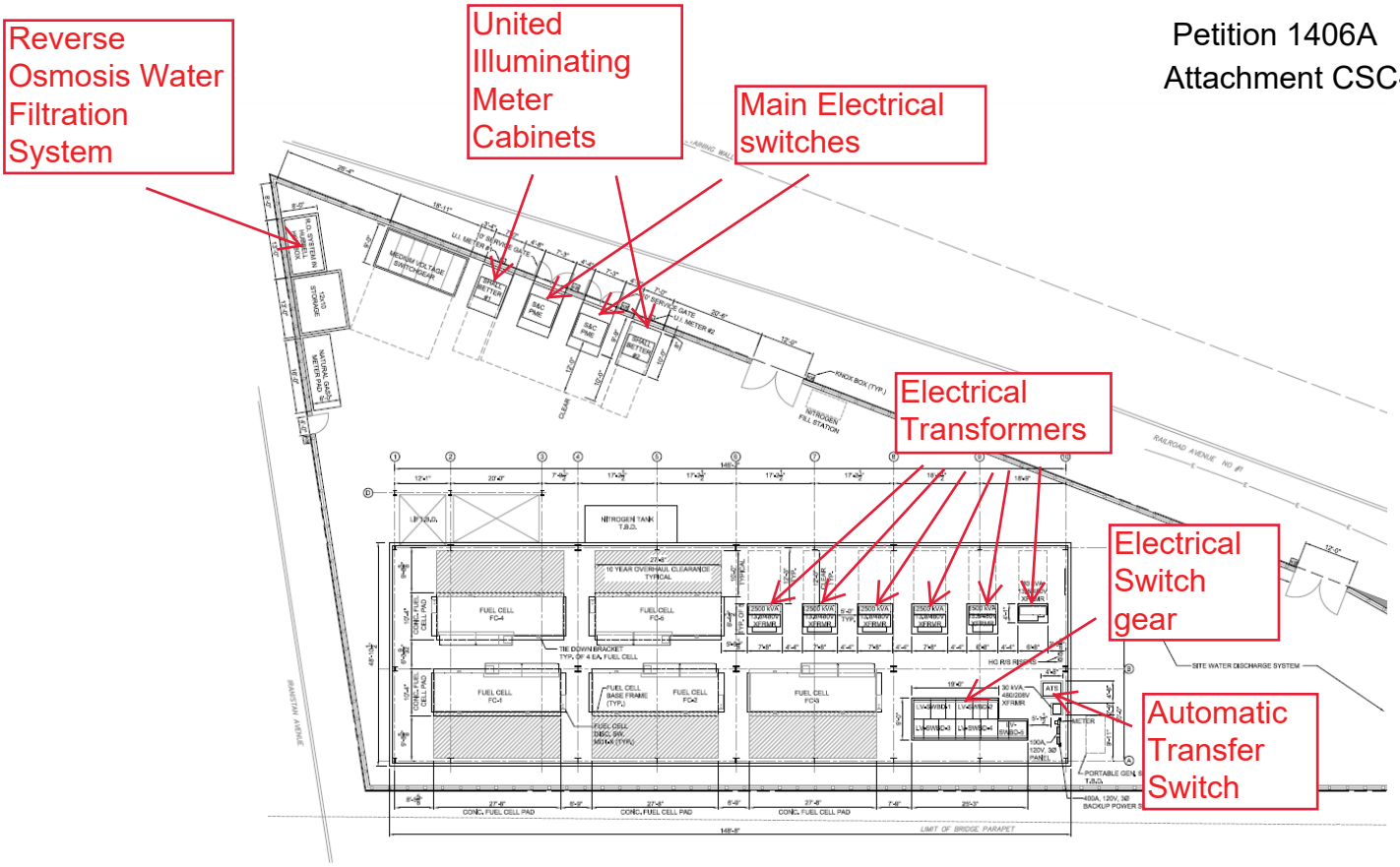
"T.O. Retaining Wall" refers to the top of the retaining wall.

"T.O. Slab" refers to the top of the slab.

See Attachment CSC-11-1 for a copy of Site Plan GA 1.0 and corresponding labeled equipment.

The thermal loop equipment, consisting of a heat exchanger and an eight by twelve pump station skid, will be located on the far eastern point of the site (on the bottom right corner of Site Plan GA 1.0).

Petition 1406A
Attachment CSC-11-1



Interrogatory CSC-12

NuPower Bridgeport FC, LLC | Witness: Daniel Donovan

Petition No. 1406A |

Q- CSC-12: Referring to the Site Plans SP 1.0 and SD-1 are the site water discharge system and pump station part of the facility or is this existing City-owned infrastructure located on the parcel? If these are associated with the project, describe what is proposed.

A- CSC-12: Site Plans SP 1.0 and SD-1 illustrate the proposed site water discharge system. The system and all associated piping will be new to the facility and owned by NuPower. The pump station skid is part of the thermal loop system and it is not associated to the fuel cells. The pump station skid will also be installed and maintained by NuPower.

Interrogatory CSC-13

NuPower Bridgeport FC, LLC | Witness: Daniel Donovan

Petition No. 1406A |

Q- CSC-13: The footnote on Petition p. 22 states NuPower has met with the DOT. When were the meetings and with whom? What topics were discussed during the meetings and were any recommendations provided?

A- CSC-13: In April of 2019, Doosan Installation Manager Walter Bonola met with Paul Holmes of CTDOT, District 3 to discuss the project. Proximity to the elevated highway deck and any regulations regarding the same were discussed during this meeting, along with any CTDOT easements that may be in place.

Interrogatory CSC-14

NuPower Bridgeport FC, LLC | Witness: Daniel Donovan

Petition No. 1406A |

Q- CSC-14: Page 19 of the PURA decision for Docket 18-08-14 references a facility natural gas consumption rate of 84,000 cubic feet per hour. Is this consumption rate still applicable? Does the operation of the thermal loop later the consumption rate?

A- CSC-14: The consumption rate still applies. Operation of the thermal loop will not affect gas consumption.

Interrogatory CSC-15

NuPower Bridgeport FC, LLC | Witness: Daniel Donovan

Petition No. 1406A |

Q- CSC-15: Is the natural gas supply to the facility considered firm or would it be susceptible to interruption during extreme winter weather events?

A- CSC-15: The project will contract for a firm supply of natural gas for the fuel cells.

Interrogatory CSC-16

NuPower Bridgeport FC, LLC | Witness: Daniel Donovan

Petition No. 1406A |

Q- CSC-16: Would the proposed transformers be dry-type or oil-filled? If oil-filled, will there be secondary containment measures for the transformers and/or alarms to provide notification in the event of low oil levels?

A- CSC-16: Proposed transformers are oil-filled and will incorporate fire retardant ("FR3") oil as well as level and pressure sensors which will call out to Doosan's control room which is manned 24/7.

Interrogatory CSC-17

NuPower Bridgeport FC, LLC | Witness: Daniel Donovan

Petition No. 1406A |

Q- CSC-17: Are the proposed excess natural gas flow valves equipped with alarms to notify the operator of a problem? If so, will such alarm notification be transmitted to Southern Connecticut Gas and the local Fire Department?

A- CSC-17: Upon activation, the valves will stop all gas flow to the twenty-one fuel cells and will activate an emergency shut down alarm to the Doosan control room. The Doosan control room will notify any emergency services as required, as well as immediately dispatch technicians to the project site. A Doosan technician will also visit the site daily to monitor operations.

Interrogatory CSC-18

NuPower Bridgeport FC, LLC | Witness: Daniel Donovan

Petition No. 1406A |

Q- CSC-18: Has the Petitioner discussed the proposed project with the local Fire Department and Emergency Responders? Are there sufficient city fire hydrants in the vicinity for fire response. Where is the closet hydrant?

A- CSC-18: Doosan has reached out to the Fire Marshal's Office to discuss the project and is waiting for a response. In accordance with Doosan's standard procedures, Doosan will work with the Fire Marshal's Office and Emergency Responders to finalize the emergency response plan once construction is underway. There are sufficient city fire hydrants in the vicinity for fire response, with the closest hydrant located a few feet from the west end of the site along Iranistan Avenue.

Interrogatory CSC-19

NuPower Bridgeport FC, LLC | Witness: Daniel Donovan

Petition No. 1406A |

Q- CSC-19: Is the flood zone elevation data based on NAVD88?

A- CSC-19: Yes, all site elevations are based on NAVD88.

Interrogatory CSC-20

NuPower Bridgeport FC, LLC | Witness: Daniel Donovan

Petition No. 1406A |

Q- CSC-20: Did NuPower receive comments from the notification to the abutters (Attachment H)? If so, summarize the comments.

A- CSC-20: NuPower did not receive any comments from the abutters that were notified about the project.