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May 24, 2023

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

RE: *The Connecticut Light and Power Company's Notice of Exempt Modification Pursuant to RCSA § 16-50j-57(b)(2) to an Existing Energy Facility in the City of New Britain, Hartford County, Connecticut ("Notice of Exempt Modification"): Replace Transformer to Support Generate NB Fuel Cells, LLC Project*

Dear Attorney Bachman:

The Connecticut Light and Power Company dba Eversource Energy ("Eversource") hereby gives notice to the Connecticut Siting Council (Council) of its intent to undertake an exempt modification, in accordance with Section 16-50j-57(b)(2) of the Regulations of Connecticut State Agencies ("RCSA"), to replace a transformer and related facilities at its existing 115-kilovolt ("kV") / 69-kV Black Rock Substation ("the Project").

The Project is required to accept delivery of power generated by the approximately 20-megawatt combined heat and power fuel cell facility being developed by Generate NB Fuel Cells, LLC to Eversource's transmission system. The fuel cell facility is located at Stanley Black and Decker's ("SBD's") New Britain campus and was the subject of Petition No.1350/1350A, which the Council approved on December 21, 2021.

Existing Facilities

The proposed Project would be located on Eversource's Black Rock Substation property, at 30 Oldfield Road in the City of New Britain. Black Rock Substation presently includes three 115-/13.8-kV transformers and one 115-/69 kV transformer. The substation's three 115-/13.8-kV load-serving transformers are designated as 1X (50 megavolt ampere: "MVA"), 2X (50 MVA), and 3X (47.5 MVA). The 115-/69-kV transformer (12.5 MVA) is designated as the 4X transformer.

Black Rock Substation also connects to four transmission circuits, consisting of three 115-kV lines (the 1820, 1830, and 1670 lines) and one 69-kV circuit (the 680 Line). The 4X transformer steps down 115 kV voltage to 69 kV to SBD's Burritt Substation to serve SBD's load via the 680 Line. Eight 13.8-kV distribution circuits also extend out from Black Rock Substation.

Energy generated by the fuel cells at SBD will be transmitted via underground cable to the SBD-owned Burritt Substation, where it will be transformed from 13.8 kV to 69 kV. The power will then be transmitted to Black Rock Substation via the 680 Line. No Eversource work is required at Burritt Substation.

Proposed Modifications

To support the transmission of power generated by the fuel cells, Eversource proposes to replace the Black Rock Substation's existing 12.5-MVA 4X transformer with a 115- /69-kV 67-MVA autotransformer.

Primary Project activities, all of which will be performed inside the existing substation fenced area, will include:

- The removal of the existing 4X transformer and associated facilities.
- Modifications to the existing transformer foundation and installation of an underground oil containment system to accommodate the replacement transformer's increased oil volume.
- Installation of the replacement 67 MVA transformer.
- Minor modifications to the routing of the 69-kV bus work from the replacement transformer to the 680 Line.
- Changes, all within the control enclosure, to the protection settings for the transformer and interconnections to the 680 Line and the 1820 Line.

All work will be performed on Eversource's Black Rock Substation property. No expansion of the Substation fenced area will be required.

During the transformer replacement process, Eversource will use a mobile transformer to maintain service to customers. The mobile transformer and related equipment will be positioned within the substation yard.

The replacement transformer will be larger than the existing transformer. The table, below, compares the dimensions of the existing and replacement transformer.¹

Dimensions (Approx. Feet)	Existing Transformer (12.5 MVA)	Replacement Transformer (67 MVA)
Height	8 feet	14 feet 8 inches
Length	20 feet	28 feet
Width	10 feet 6 inches	14 feet 8 inches

Attachment A illustrates the location of the substation, proposed replacement transformer, and the location within the fenced substation yard where the mobile transformer will be temporarily deployed during the construction period.

The Project will not have a substantial adverse environmental effect or cause a significant adverse change or alteration in the physical or environmental characteristics because:

- The transformer replacement work would be within the substation's existing fenced area and would not cause a significant adverse change to the physical or environmental characteristics of the substation.
- The construction equipment and vehicles required for the Project will use the existing substation access from Oldfield Road to reach the work sites inside the substation yard.
- Equipment and material staging to support the transformer replacement work will be located on Eversource's substation property.
- The work would not affect wetlands or waterways and will not require tree clearing.
- The substation is not in a flood zone designated by the Federal Emergency Management Agency.
- Eversource's review of the Connecticut Department of Energy and Environmental Protection's Natural Diversity Data Base maps (December 2022) determined that no state-listed endangered, threatened, or special concern species have been identified in the vicinity of the substation.
- The transformer replacement work, including the temporary use of the mobile transformer, would result in short-term noise typical of construction activities.

¹ The height of the replacement transformer will be much less than the existing line termination structures, which are the tallest infrastructure at Black Rock Substation.

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- The operation of the new transformer will not result in significant long-term changes to ambient noise and will conform to State noise regulations and the equivalent City of New Britain noise regulations at the property line, based on the results of sound modeling studies commissioned by Eversource.
- Electric and magnetic field levels will not be altered by the transformer replacement.
- The existing transformer and other equipment that will be removed as part of the Project will be appropriately recycled, reused, or otherwise managed in accordance with standard Eversource protocols.

Eversource proposes to commence Project construction in September 2023. The work is scheduled to be completed by February 2024.

Enclosed please find two copies of this Notice, along with the requisite filing fee of \$625.00. A notice of this exempt modification filing has been provided to the Mayor of the City of New Britain. Please direct any questions or communication to me at 860-728-4564.

Sincerely,



Deborah Denfeld
Team Lead – Transmission Siting

cc: Erin M. Steward, Mayor, City of New Britain

Attachment A: Aerial Map of Black Rock Substation

Attachment A: Aerial View of Black Rock Substation: Existing Equipment and Planned Replacement Equipment



Existing 4X transformer to be replaced ▭
Replacement transformer ▭
Temporary mobile transformer location ▭