



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

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www.ct.gov/csc

CERTIFIED MAIL RETURN RECEIPT REQUESTED

March 31, 2017

Kathleen M. Shanley
Manager-Transmission Siting
Eversource Energy
P.O. Box 270
Hartford, CT 06141-0270

RE: **PETITION NO. 1289** - Eversource Energy petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed modifications to the existing Green Hill Substation located at 775 Green Hill Road, Madison, Connecticut.

Dear Ms. Shanley:

At a public meeting held on March 30, 2017, the Connecticut Siting Council (Council) considered and ruled that the above-referenced proposal would not have a substantial adverse environmental effect, and pursuant to Connecticut General Statutes § 16-50k, would not require a Certificate of Environmental Compatibility and Public Need, with the following conditions:

1. Approval of any minor project changes be delegated to Council staff;
2. Installation of erosion and sedimentation controls on the south side of the unpaved access way and the addition of gravel on the slope of the unpaved access way to reduce runoff/erosion;
3. Unless otherwise approved by the Council, if the facility authorized herein is not fully constructed within three years from the date of the mailing of the Council's decision, this decision shall be void, and the facility owner/operator shall dismantle the facility and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between the filing and resolution of any appeals of the Council's decision shall not be counted in calculating this deadline. Authority to monitor and modify this schedule, as necessary, is delegated to the Executive Director. The facility owner/operator shall provide written notice to the Executive Director of any schedule changes as soon as is practicable;
4. Any request for extension of the time period to fully construct the facility shall be filed with the Council not later than 60 days prior to the expiration date of this decision and shall be served on all parties and intervenors, if applicable, and the Town of Madison;
5. Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
6. The facility owner/operator shall remit timely payments associated with annual assessments and invoices submitted by the Council for expenses attributable to the facility under Conn. Gen. Stat. §16-50v;

7. This Declaratory Ruling may be transferred, provided the facility owner/operator/transferor is current with payments to the Council for annual assessments and invoices under Conn. Gen. Stat. §16-50v and the transferee provides written confirmation that the transferee agrees to comply with the terms, limitations and conditions contained in the Declaratory Ruling, including timely payments to the Council for annual assessments and invoices under Conn. Gen. Stat. §16-50v; and
8. If the facility owner/operator is a wholly owned subsidiary of a corporation or other entity and is sold/transferred to another corporation or other entity, the Council shall be notified of such sale and/or transfer and of any change in contact information for the individual or representative responsible for management and operations of the facility within 30 days of the sale and/or transfer.

This decision is under the exclusive jurisdiction of the Council and is not applicable to any other modification or construction. All work is to be implemented as specified in the petition dated February 8, 2017 and additional information received on March 22, 2017.

Enclosed for your information is a copy of the staff report on this project.

Very truly yours,

A handwritten signature in blue ink that reads "Robert Stein" followed by the initials "MAB".

Robert Stein
Chairman

RS/RDM/lm

Enclosure: Staff Report dated March 30, 2017

- c: The Honorable Thomas Banisch, First Selectman, Town of Madison
David Anderson, Town Planner, Town of Madison
Helen M. Taylor, Eversource Energy, Project Siting Specialist
Roger Fortier, 761 Green Hill Road



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Petition No. 1289
Eversource Energy – Green Hill Substation
Madison, Connecticut
Staff Report
March 30, 2017

Introduction

On February 8, 2017, the Connecticut Siting Council (Council) received a petition from The Connecticut Light and Power Company d/b/a Eversource Energy (Eversource) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for proposed modifications to the existing Green Hill Substation located at 775 Green Hill Road in Madison, Connecticut. The substation was established in 1973 and all work would occur on Eversource's property.

A field review of the proposed project was conducted on March 9, 2017 that was attended by Council member Robert Silvestri, Council staff member Robert Mercier, and Eversource representatives Helen Taylor, Kris Aberg, Ken Roberts and Kasie Collins. Eversource submitted additional Project information to the Council on March 22, 2017.

Eversource consulted with Town officials in December 2016. Written notice of the petition was provided to the Town and property abutters on or about February 3, 2017. The property owner at 761 Green Hill Road contacted the Council on February 23, 2017, expressing concerns about the Project.

Proposed Project

The purpose of the proposed project is to eliminate potential voltage criteria violations in the Haddam to Branford area that were identified in the May 2014 Greater Hartford and Central Connecticut Area Needs Assessment performed by ISO New England (ISO-NE). To resolve the potential low voltage conditions, Eversource proposes to install two capacitor banks at the substation to stabilize voltages in the event of a transmission system outage. The Project is currently identified in the October 2016 ISO-NE Regional System Plan Project List as a reliability upgrade project (#1603) with an expected in-service date of December 2017.

The Project includes the following equipment and modifications:

- a) Installation of six 115-kV manually-operated breaker disconnect switches;
- b) Installation of six 115-kV sulfur hexafluoride circuit breakers;
- c) Installation of two sets of 115-kV current limiting reactors;
- d) Installation of two 25.2-MVAR capacitor banks;
- e) Installation of three new lightning masts for protection of the new equipment;
- f) Relocation of one 115-kV capacitor coupled voltage transformer approximately four feet to the east of its current location to accommodate the new capacitor bank bus;
- g) Installation of foundations and bus support for the equipment and structures listed above; and
- h) Installation of underground conduits and cable, lightning arrestors, mounting and support structures, batteries, relay/controls to accommodate the new equipment.

To accommodate the new capacitor banks and related equipment, Eversource would expand the existing substation by approximately 50 feet to the west and 50 feet to the south, for a total area of approximately 24,000 square feet. Eversource would have to excavate a hillside in the expansion area to extend the existing substation yard. To support the remaining hillside, an approximate 450-foot long, 16-foot high (maximum) pre-cast retaining wall would be installed along the edge of the expansion area. A drainage system would be established in the southwest corner of the expansion area to direct post-construction flows to a rip rap splash pad/level spreader system. A new 7-foot high chain-link fence topped with barbed wire would be installed along the top of the retaining wall and at grade level to enclose the expansion area.

Environmental Effects and Mitigation Measures

The Project would require approximately 0.8 acre of tree clearing. Approximately 6,000 cubic yards of cut would be removed from the hillside to create the new, level substation expansion area. Blasting is not anticipated for this Project. Approximately 400 truck trips would be necessary to remove the excess soil. To accommodate the truck traffic, five-foot wide gravel shoulders would be installed on both sides of the existing, paved substation access drive. An unpaved access way located on Eversource property to the south of the expansion area may also be used for construction site access. Soil excavated within the existing substation for new foundations would be temporarily stockpiled within the substation yard for appropriate testing prior to disposal. A construction staging area would be established adjacent to the existing substation access drive, near the substation access gate.

During construction, Eversource would follow established Best Management Practices and the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control*. Construction erosion and sedimentation controls may include tracking pads, sediment traps, stone swales and check dams and perimeter erosion control measures.

The Project is not within an area known to contain any State-listed special concern, threatened, or endangered species. The Project is not located within an aquifer protection area and would not affect any known public or private water supply wells. No wetlands would be affected. The Project is not within a 100-year or 500-year flood zone.

Construction-related noise is exempt per DEEP noise regulations. Notwithstanding, any construction-related noise would be short-term and localized to the vicinity of the work area. There would be no permanent changes to the existing sound levels at the substation perimeter after completion of the project.

The Project is not in an archeologically or culturally sensitive area or near any designated recreational or scenic resources. Visibility of the Project would be minimal as it is located on Eversource's property and is set back from Green Hill Road. New substation structures would be shorter in height than existing structures and a wooded buffer would remain around the expanded substation. Eversource met with the property owner at 761 Green Hill Road and agreed to provide landscape plantings along the property line to enhance screening of the substation.

Changes to magnetic field (MF) levels associated with the Project would be negligible at the substation perimeter. Post-construction MF levels at the south property line would be approximately 5.6 milliGauss (mG), well below the guideline exposure levels established by the International Commission on Non-Ionizing Radiation Protection (2,000 mG) and the International Committee on Electromagnetic Safety (9,040 mG).

Construction Schedule

Eversource anticipates beginning construction in the Spring of 2017 with completion anticipated by the end of 2018. Normal work hours would be Monday through Saturday from 7:00 a.m. to 7:00 p.m. Sunday work hours or hours beyond normal work hours may be required for time sensitive work or during scheduled equipment outages.

Staff Recommendations

Staff recommends the following:

- 1) Approval of any minor project changes be delegated to Council staff; and
- 2) Installation of erosion and sedimentation controls on the south side of the unpaved access way and the addition of gravel on the slope of the unpaved access way to reduce runoff/erosion.

Green Hill Substation Site Plan

