



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

www.ct.gov/csc

CERTIFIED MAIL RETURN RECEIPT REQUESTED

May 27, 2016

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

RE: **PETITION NO. 1225** – Eversource Energy petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed rebuilding and reconductoring of approximately two miles of its existing No. 1682 115-kV transmission line within existing right of way from the Wilton Substation at 53 Old Danbury Road, Wilton to Norwalk Junction at 111 Danbury Road, Wilton, Connecticut.

Dear Ms. Shanley:

At a public meeting held on May 26, 2016, 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. Eversource provide to the Council a copy of SHPO's response and/or mitigation measures in regards to the professional archeological reconnaissance survey to be conducted;
2. Eversource notify the Council of changes to construction work hours and that approval of any changes in work hours be delegated to staff;
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 Wilton;
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 April 1, 2016 and additional information dated May 12, 2016 and May 13, 2016.

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

Very truly yours,



Robert Stein
Chairman

RS/RDM/lm

Enclosure: Staff Report dated May 26, 2016

- c: The Honorable Lynne Vanderslice, First Selectman, Town of Wilton
Robert Nerney, Director of Planning and Land Use Management, Town of Wilton



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

www.ct.gov/csc

Petition No. 1225

Eversource Energy

1682 Line Upgrade Project - Wilton

Staff Report

May 26, 2016

Introduction

On April 1, 2016, the Connecticut Siting Council (Council) received a petition (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 transmission line no. 1682 in the Town of Wilton. Council Chairman Robert Stein, Council Acting Executive Director Melanie Bachman, and Council staff member Robert Mercier conducted a field review of the proposed project on May 18, 2016. Eversource representatives in attendance included Kathleen Shanley, Fred Mattioli, Peter Novak, and Devleena Ghosh-Brower.

The purpose of the proposed project is to eliminate potential transmission system thermal and voltage criteria violations in the area that were identified in the June 2014 Southwest Connecticut Area (SWCT) Needs Assessment performed by ISO New England (ISO-NE) and in accordance with the February 2015 SWCT ISO-NE Solutions Study. In addition, the Project will meet Eversource's storm hardening requirements due to the proposed line design exceeding the structural loading criteria.

Proposed Project

Eversource proposes to modify a 1.85 mile section of Eversource's Line 1682, a 115-kilovolt (kV) transmission line extending through the south-central section of Wilton, adjacent to the Metro-North Railroad. Specifically, the Project entails the following components:

- a. Replacement of the eight existing double-circuit, steel lattice tower tangent structures (structures 3000, 3001, 3002, 3003, 3008, 3009, 3012 and 3013) with direct-embedded, double-circuit galvanized steel tangent monopole structures.
- b. Replacement of the seven existing double-circuit, steel lattice tower tangent structures (structures 2995, 2996, 2998, 3005, 3006, 3007 and 3010) with double-circuit, galvanized steel tangent monopole structures on foundations.
- c. Replacement of the four existing double-circuit steel lattice tower strain structures (structures 2994, 2997, 2999 and 3011) with double-circuit galvanized strain steel monopoles on foundations.
- d. Replacement of the existing transmission 556-kcmil aluminum conductor with steel reinforced conductor with new 1590-kcmil aluminum conductor with steel support conductor, which would be supported on the new double-circuit galvanized steel monopole structures within Eversource's right-of-way.
- e. Installation of OPGW and 19#10 Alumoweld shield wires.



CONNECTICUT SITING COUNCIL

Affirmative Action / Equal Opportunity Employer

The work would occur in existing Eversource right-of-way (ROW) between the Wilton Substation and the Norwalk Junction Substation. The 1682 Line and a 27.6-kV distribution circuit are the only electric lines within this section of ROW. The ROW was established in 1943 and varies in width from 40 to 110 feet.

The new structures would be direct-embedded or installed on concrete foundations depending on the structure location and underlying soil conditions. The new structures would be located as close to the existing structures as possible.

The existing lattice structures range in height from 64 feet to 101 feet above ground level (agl). The proposed monopole structures would be 7 feet to 26 feet taller than the existing structures, with a maximum height of 119 feet agl. The increase in structure height is required to comply with the 2012 National Electrical Safety Code conductor to ground clearance requirements, phase to phase clearance requirements and Eversource's Overhead Transmission Line Standards.

T-Mobile and AT&T have installed telecommunications antenna arrays at the top of existing lattice structures no. 2997 and no. 2998, respectively. Eversource would design the new monopole structures at these locations so that they can accommodate replacement antennas for both telecommunication carriers. Additionally, both of the new structures would be constructed to support a 10-foot extension for future co-location. Eversource is coordinating with the telecommunications carriers regarding construction sequencing.

Project Construction and Work Procedures

Construction areas would be isolated by establishing erosion and sedimentation controls (E&S controls) in accordance with the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control* and Eversource's Best Management Practices (Eversource BMPs). Typical E&S controls include, but are not limited to, the use of hay bales and silt fence, check dams, berms, swales, and sediment basins. Following the completion of construction, seeding and mulching would occur to permanently stabilize previously disturbed areas. Temporary E&S controls would remain in place until construction is complete and all disturbed areas are stabilized.

Construction along the ROW would utilize existing access roads, new access roads and spurs. Existing access roads may need to be graded, widened, and/or improved in order to be used safely and effectively during construction. Existing access road improvements as well as new access roads would include clearing adjacent vegetation and establishing a gravel travel surface approximately 16 to 20 feet wide. However, where access roads traverse streams or wetlands, temporary construction mats would be utilized.

At each transmission line structure site, a 100-foot by 100-foot work pad would be constructed to stage material for final on-site assembly. Construction of a work pad may require the removal of vegetation, grading and the installation of gravel to provide a safe, level work base for the construction equipment.

The new structure sections and associated materials and hardware would be delivered by truck and would be stored at a nearby staging area. The new structure would be delivered to the installation location in sections, and then it would be assembled and installed with a crane. Insulators and connecting hardware would be installed on most structures at this time.

The installation of the overhead line conductors and shield wires would require the use of special pulling and tensioning equipment, which would be positioned at the work pad locations. Helicopters may be used for conductor and shield wire pulling activities. Additionally, a 27.6-kV distribution line that is attached to the lattice structures would be relocated to the new monopole structures. Once the new lines are installed on the new monopoles, the old lattice towers and associated equipment would be removed and either recycled or disposed in accordance with Eversource BMPs and applicable regulations.

Access roads and/or structure work pads that are constructed in upland areas would be left in place to facilitate future maintenance, unless requested to be removed by the underlying property owner.

Eversource anticipates beginning construction during summer of 2016 with completion by December 2017. 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 during or for scheduled Metro-North Railroad outages. Eversource would coordinate work hours with the Town of Wilton and abutting property owners when work beyond normal work hours is necessary.

The Project would traverse some maintained lawn areas, driveways and parking lots that exist in the ROW. Eversource would coordinate with affected property owners to maintain necessary access as well as restore disturbed areas upon completion of construction.

Environmental Considerations

Land-use in the Project area consists of a mix of commercial, residential and undeveloped lands. Although the Project includes slightly taller towers than what presently exists, the Project is located along busy transportation corridors (Route 7 and the Metro-North Railroad) and already contains a transmission line, and, as such, would have a negligible visual impact. Additionally, the new monopole structures would have a more streamlined appearance than the existing lattice structures and would be essentially in the same location as the existing lattice structures.

Several open space parcels, a Town park, and a recreation trail are located near the Project area. Given their location west of the Metro-North Railroad, the construction of the Project would have no direct impacts on these recreational resources.

Removal of mature vegetation would be minimal as all work would occur within a maintained ROW. The existing cleared area of the ROW varies in width from 40-60 feet. All clearing would be conducted in accordance with Eversource's BMPs. Eversource would coordinate with affected property owners to provide replacement plantings in areas where existing landscaping or visual buffers are removed during construction.

Cultural resources surveys identified two areas within the ROW that have a moderate/high potential to produce intact cultural deposits. Eversource is coordinating with the State Historic Preservation Office (SHPO) regarding additional survey work in these areas and would comply with any subsequent SHPO mitigation requirements. In addition to these potential archeological deposits, one historic building on the National Register of Historic Places is approximately 600 feet from the ROW. No adverse impacts to this historic building are anticipated.

No records of State-listed endangered, threatened, or special-concern species occur in the vicinity of the project area. Although the Petition initially identified one listed species, Eversource reviewed this information and determined this finding was related to work in a different portion of the existing ROW that was to be included as part of this Petition, but now will be submitted as a separate petition in the future. This listed species is not known to occur near the Project area.

Construction of the Project would require the installation of temporary construction mats in three separate wetland areas to access work pad locations, affecting a total of 0.85-acre of wetlands. The temporary mats would be removed upon completion of construction and disturbed wetland areas would be restored in accordance with Eversource BMPs. Additionally, 50 square feet of wetlands would be permanently filled for the installation structure no. 3006. Due to the amount of the wetlands in this area, it is not possible to relocate the structure to avoid permanent wetland impact. No vernal pools were identified within the Project area.

Eversource may need to cross the Norwalk River or an associated tributary to access several structures. Watercourse crossings would be conducted in accordance with Eversource's BMPs and would utilize temporary matting to reduce impact to riverbanks. Disturbed areas would be restored in accordance with Eversource BMPs.

Three of the new structures would be located in a FEMA 100-year flood zone and would not impact the base flood elevation as a result of construction. Based on a hydraulic analysis, structures nos. 3005, 3006, and 3007 would be constructed on new drilled shaft foundations that are eight feet in diameter, extending five feet above the base flood elevation, and would conform to compensatory flood storage requirements.

No public water supply reservoirs are located in the vicinity of the proposed project. The Project is not located within an aquifer protection area.

Construction-related noise is exempt per DEEP noise regulations. Notwithstanding, any construction-related noise would be short-term and localized in the vicinity of work sites. There would be no permanent changes to the existing sound levels along the transmission right-of-way after completion of the project.

Magnetic Fields

Eversource reviewed magnetic field (MF) levels associated with the Project. The Project route already contains an existing transmission line and a distribution line that both emit MF. In the United States, no state or federal exposure standards for 60-hertz MF based on demonstrated health effects have been established, nor are there any such standards established world-wide. However, the International Commission on Non-Ionizing Radiation Protection (ICNIRP) has established a level of 2,000 milliGauss (mG), based on extrapolation from scientific experimentation, and the International Committee on Electromagnetic Safety (ICES) has calculated a guideline of 9,040 mG for exposure to workers and the general public, and recognized in the Council's *Electric and Magnetic Field Best Management Practices for the Construction of Electric Transmission Lines in Connecticut*.

Calculations performed by Eversource indicate MF would increase slightly along the west edge of the ROW (facing the railroad) and decrease slightly along the east edge of the ROW under average loading conditions. These values, 5.0 mG and 12.1 mG, respectively, are well below the guidelines established by ICNIRP and ICES.

Municipal and Abutter Notice

Eversource began Project consultation with the Town of Wilton in February 2016. Formal notice of the Petition was provided to the Town and abutting property owners on or about April 1, 2016. The Council has not received any comments from property abutters or the Town to date.

Recommended Conditions

Staff recommends the following conditions:

- Eversource provide to the Council a copy of SHPO's response and/or mitigation measures in regards to the professional archeological reconnaissance survey to be conducted; and
- Eversource notify the Council of changes to construction work hours and that approval of any changes in work hours be delegated to staff.