# 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**

June 7, 2019

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

RE: **PETITION NO. 1371** – The Connecticut Light and Power Company d/b/a Eversource Energy petition for a declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed 667 Line Rebuild Project consisting of the replacement and reconductoring of approximately 6.1 miles of its existing No. 667 69-kilovolt (kV) electric transmission line structures within existing Eversource electric transmission line right-of-way between Falls Village Substation in Falls Village (Canaan) and Salisbury Substation in Salisbury, Connecticut, traversing Canaan, Sharon and Salisbury, and related substation and electric transmission line structure improvements.

Dear Ms. Shanley:

At a public meeting held on June 6, 2019, 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. Existing lattice structure concrete footings that are located in the wetlands be left in place;

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 Towns of Canaan, Salisbury and Sharon;

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 May 10, 2019, and additional information dated June 5, 2019.

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

Sincerely,

Melanie A. Bachman
Executive Director

MAB/RDM/emr

Enclosure: Staff Report dated June 6, 2019

c: Andrew Lord, Project Siting Specialist, Eversource Energy
The Honorable Henry Todd, First Selectman, Town of Canaan
Fred Laser, Planning and Zoning Chairman, Town of Canaan
Thomas Scott, Zoning Enforcement Officer, Town of Canaan
The Honorable Curtis G. Rand, First Selectman, Town of Salisbury
Nancy Brusie, Planning & Zoning Administrator, Town of Salisbury
The Honorable Brent M. Colley, First Selectman, Town of Sharon
Barclay W. Prindle, Chm, Planning and Zoning Comm., Town of Sharon

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. 1371**
**Eversource Energy**
**667 Line Rebuild Project- Canaan, Sharon, Salisbury**

**Staff Report**
**June 6, 2019**

## Introduction

On May 7, 2019, 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, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed modifications to a portion of its existing 667 69-kV Transmission Line (667 Line) in the Towns of Canaan, Sharon, and Salisbury (Towns).

The initial filing contained confidential information. Eversource submitted a corrected copy without the confidential information on May 10, 2019.

The purpose of the proposed project is to replace structures and re-conductor approximately 6.1 miles of the 667 Line entirely within Eversource's right-of-way (ROW) between Falls Village Substation at 35 Water Street, Salisbury, and the Salisbury Substation at 316 Indian Mountain Road, Salisbury. This section of transmission line is no longer reliable due to degradation of the conductors, shield wires and structures from age and weathering. There have been 2 conductor failures since 2017 and 2 shield wire failures since 2009. The structure and conductor replacements are necessary to maintain transmission line operation and electric system reliability.

## Proposed Project

The 667 Line is a supported by steel lattice structures, with the exception of one embedded wood pole (Structure 1052). The width of the existing ROW is 150 feet, except where the line traverses Eversource-owned property (from Structure 1016 to Structure 1014 in Salisbury).

The Project entails the following:

a. Replacement of 51 existing steel lattice structures (Structures 1001 to 1051) with 51 weathering steel monopole structures, with conductors arranged in a delta configuration. Some angle structures will be replaced with two-pole structures single circuit direct-embed, weathering steel H-frame structures;
b. Replace one single-circuit wood pole (Structure 1052) with a weathering steel monopole;
c. Install one new single-circuit weathering steel H-frame structure (Structure 1002A) just south of the Falls Village Substation to accommodate conductor clearance requirements. The structure will be direct embedded and guyed for support.
d. Replace the existing 4/0 aluminum conductor steel reinforced conductor (ACSR) with 556 kcmil 26/7 Aluminum Conductor Steel Supported (ACSS), capable of carrying a transmission voltage of 115-kV, but will be energized at 69-kV due to existing equipment restrictions at the Falls Village and Salisbury substations;
e. Replacement of existing Autoweld shield wire with two fiber optic ground wires (OPGW);
f. Installation of new hardware, insulators and lightning arresters on the replacement structures;

g. Widening the maintained vegetation management zone within the existing ROW to comply with conductor clearance requirements; and
h. Perform minor modifications at Falls Village and Salisbury substations including the installation of new communication cabinets, fiber and relay settings.

The heights of the replacement structures would be taller than the existing structures to meet current National Electric Safety Code (NESC) clearance requirements. The replacement structures will range in height from 70 feet to 115 feet above ground level. The replacement structures will generally be less than 10 feet taller than the corresponding existing structures; however, 20 structures will be more than 10 feet taller, 7 structures would be more than 20 feet taller and 2 structures would be more than 25 feet taller in order to span Beeslick Pond. The proposed replacement structures would be located in-line with the existing structures to the extent possible and would have either concrete or direct embed foundations.

**Project Construction and Work Procedures**

All work would occur within the existing ROW or on Eversource property. Land use adjacent to the Project area consists of a mix of rural residential areas, agricultural lands, including horse pastures and paddocks, and undeveloped lands such as forests, meadows and rivers and conservation land.

The Project ROW is 150-feet wide, approximately 50 feet of which is currently maintained. The maintained area would be be expanded to 90 feet with approximately 15 feet of clearing on the north side of the ROW and approximately 25 feet of clearing on the south side of the ROW.

Access to the ROW would be from existing access roads extending to the ROW from off-ROW areas or where the ROW intersects with a public road. Eversource is attempting to obtain additional access rights from underlying property owners in order to use additional off-ROW access points to avoid wetland, agricultural or residential areas.

Eversource would consult with representatives of the Towns and/or the Connecticut Department of Transportation to develop and implement traffic management procedures, as necessary. Construction warning signs would be installed along public roads near work sites and flaggers or police personnel would be used to direct traffic, as necessary.

Three staging/laydown areas would be established on one property located at 69 Boardman Road in New Milford. These laydown areas were previously identified for use in connection with the rebuild of the 1555 Line (Petition 1314).

Specific work areas within the ROW would be accessed via existing roads that extend along the ROW corridor. Some of the existing access roads may need to be graded, widened, and/or reinforced with additional material in order to accommodate the safe passage of construction vehicles and equipment. A minimum travel surface of 12 to 16 feet is required although some road turning locations will be wider. In some areas, temporary or new gravel access roads would be constructed to access work areas. Where ROW access roads traverse streams and wetlands, temporary timber construction matting or rail car frame bridges would be used to avoid significant disturbance to waterways and underlying surfaces and soils.

Various types of construction equipment would be used for the work including but not limited to, drill rigs, dump trucks, flatbed trucks, bucket trucks, cranes, and conductor rigging and reel vehicles. Helicopters may also be used to install the initial pulling lines for the conductors and OPGW.

Upon completion of the Project, access roads and work pads located in uplands would be left in place to facilitate future transmission line maintenance, unless the underlying property owner requests their removal. Access roads and work pads located within improved areas would typically be removed and the areas restored unless the underlying property owner requests that they remain. Disturbed stone walls would be repaired, if requested. No new permanent access roads or work pads are proposed in wetlands or streams.

Gravel work pads ranging in size from 10,000 to 16,900 square feet would be constructed for at each structure location or for conductor pulling, creating a safe level workspace for Project activities. All work pads may vary in size due to environmental and topographical constraints. Once the new structures have been installed and the transmission line relocated and energized, the existing transmission structures would be removed and disposed of in accordance with Eversource's *Best Management Practices Manual for Massachusetts and Connecticut*, September 2016 (BMPs) and applicable regulations or recycled consistent with regulations and Eversource policies.

Eversource anticipates beginning work in the Summer of 2019, with an in-service date of December 2019. Multiple work crews would be deployed along the ROW. 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, delays caused by weather, and line outages.

## Environmental Considerations

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 BMPs. Typical E&S controls include, but are not limited to, the use of hay bales and silt fence, straw blankets, check dams, berms, swales, water bars, and sediment basins.

Foundation installation would require the use of equipment such as augers, drill rigs, and dump trucks. Excavated soils for foundation installation would not be stored within or adjacent to wetlands or watercourses. Materials that cannot be utilized as backfill would be disposed in accordance with Department of Energy and Environmental Protection's (DEEP) regulations. If groundwater is encountered, and when working within wetlands, vacuum trucks or other suitable equipment would be used to pump water from the excavated areas as the shaft is being drilled or as the structure is being set. The collected water would then be discharged in accordance with applicable requirements. A project specific Stormwater Pollution Control Plan would be developed for registration under the DEEP's *General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities.*

Following the completion of construction, topsoil would be replaced and disturbed areas seeded or mulched to provide stabilization until new vegetation can grow. Temporary E&S controls would remain in place until all disturbed areas are stabilized. Any remaining soil stockpiles would be spread evenly in the surrounding areas.

Water resources within the Project area include inland wetlands, watercourses (perennial and intermittent streams), one pond, one potential vernal pool, and Federal Emergency Management Agency (FEMA) Flood Zones. All work in or near these areas would be conducted in accordance with Eversource's BMPs and with the requirements of applicable regulatory permit conditions and approvals.

A total of 25 wetland areas were identified in or proximate to the Project area. Approximately 480 square feet of wetlands would be filled for the replacement of 3 structures. In order to minimize disturbance to the wetlands, existing concrete footings associated with the removed steel lattice structures would be left in place. Temporary wetland impacts through the use of temporary construction matting would total approximately 1.8 acres. In addition, tree removal in wetland areas to facilitate work pad installation would total approximately 0.7 acres, converting these forest areas to a shrub-scrub wetland type.

One work area is near a potential vernal pool but no activities would occur within the pool or within the 100-foot vernal pool envelope around the pool.

A total of 18 watercourses and water bodies were delineated within the Project area. Of these, 7 would be spanned to facilitate project work using temporary matting or temporary railroad car frame bridges. All watercourse crossings would be constructed and any disturbed areas subsequently restored in accordance with Eversource's BMPs.

Four replacement structures are located within a FEMA designated 100-year flood zone. No impact to flood stage capacity is expected since the concrete foundations for the removed lattice structures, consisting of four concrete piers/footings, would be removed to grade, creating flood storage capacity that can be utilized by the new structure foundations. One additional structure would be installed within a flood zone but there would be a de minimis effect on flood zone storage capacity.

Construction related work within flood zones would be performed in accordance with their BMPs and would utilize temporary construction matting to prevent permanent impacts to flood zone areas. Prior to significant storm events, vulnerable construction equipment would be removed and temporary matting secured to prevent movement during any subsequent flooding that could occur.

No designated aquifer protection areas or public water supply watersheds are within the Project area. Nevertheless, Eversource would require its contractors to employ best practices for the proper storage, secondary containment, and handling of diesel fuel, motor oil, grease and other lubricants, to protect area water resources.

The proposed expansion of the managed portion of the ROW related to NESC conductor clearance requirements would result in the conversion of approximately 13.5 acres of forest into a scrub-shrub or herbaceous areas, of which 2.6 acres occur in wetlands. Converting forest (including forested wetland) to shrubland, or emergent vegetation along the transmission line ROW would modify, but not adversely affect habitat values. During clearing and vegetation removal activities, temporary construction mats may be used to provide access for mechanized equipment within watercourse or wetland areas where hand clearing work is not feasible.

Eversource is consulting with the DEEP Wildlife Division regarding state-listed species within the Project area and would adhere to DEEP recommendations and species protection measures.

Eversource is consulting with the U.S. Fish and Wildlife Service (USFWS) regarding federally-listed species as a part of the Section 7 consultation process that is required for the Project's U.S. Army Corps of Engineers permit application filing. The only federally-listed species potentially occurring in the vicinity of the Project is the northern long-eared bat (NLEB) and the bog turtle (BT). Project-related tree clearing would not impact known NLEB hibernacula, but if requested by the USFWS, Eversource would adhere to any necessary NLEB protection measures. BT surveys were performed in 2018 but no turtles were observed in potential habitat areas. As a result, no additional BT surveys or work-related protection strategies are warranted.

The Project ROW traverses Route 41 (Sharon Road) a State-designated scenic road. Although a replacement structure is near the west side of the road, no adverse scenic impact is expected since the new monopole structure has a slimmer profile than the existing steel lattice structure that is being replaced.

The Falls Village Historic District, listed on the National Register of Historic Places (NHRP), is located approximately 190 feet northwest of Structure 1001 at its closest point (east side of Water Street). No adverse scenic impact is expected since the new monopole structure has a slimmer profile than the existing steel lattice structure that is being replaced and would be located in an area with existing electric facilities associated with the Falls Village hydroelectric plant.

Based on a review of historic documents and in-field assessments, 43 Project areas were investigated for cultural resources, two of which contained archaeological deposits that were classified as potentially significant under the NHRP. Eversource would utilize temporary matting at these two locations to avoid subsurface disturbance to these archaeological deposits.

The Appalachian Trail traverses open field areas near two replacement structures in Falls Village, and extends along Water Street near Structure 1001. Eversource would install construction safety fencing between the trail and the work areas to prevent trail users from entering work zones.

Construction-related noise would be short-term and localized in the to the work site areas. Construction-related noise is exempt per DEEP noise regulations. There would be no permanent change to the existing sound levels along the transmission ROW after completion of the Project.

## Magnetic Fields

In the United States, no state or federal exposure standards for 60-hertz magnetic field (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.*

Eversource reviewed the MF levels associated with the Project, using a transmission voltage of 69 kV. A table demonstrating changes in MF levels is presented in the table below.

| Summary of Fields | | 667 Line EMF Calculations | | |
|---|---|---|---|---|
| | | South Edge | Max | North Edge |
| MF (mG) | Existing | 0.4 | 4.7 | 2.0 |
| | Proposed | 0.7 | 6.6 | 2.2 |

## Municipal and Abutter Notice

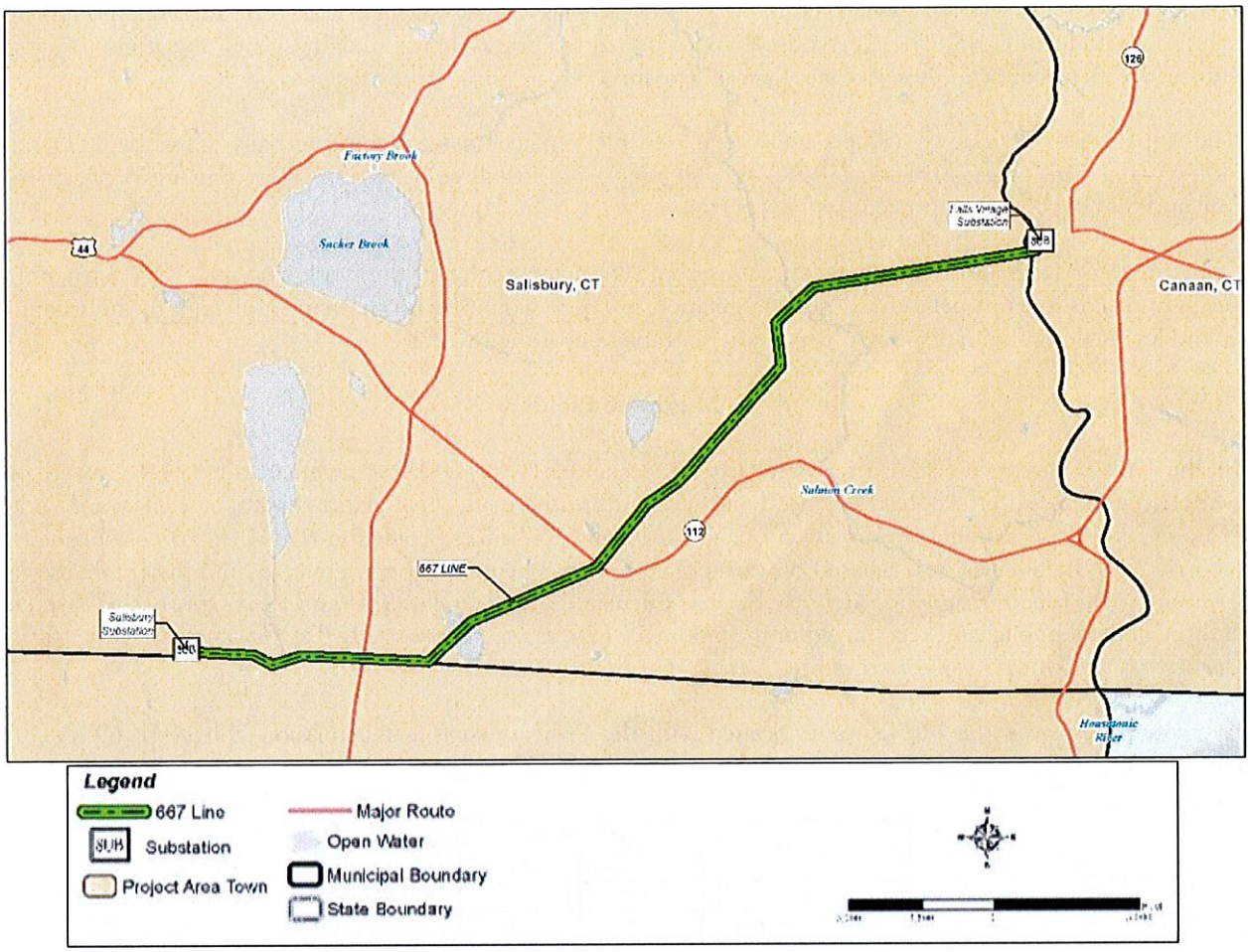
In the Summer of 2018, Eversource consulted with the municipal officials in the respective Towns. Eversource also initiated outreach to property owners located along the ROW as well as to nearby property owners in proximity to the work areas through the Summer of 2018 to April 2019. Additionally, in April 2019, and on May 7, 2019, Eversource provided representatives of the Towns with written notice of the Petition filing. On May 7, 2019, Eversource provided abutting and underlying property owners with written notice of the Petition filing.

## Recommended Condition

If approved, Staff recommends including the following condition:

1. Approval of any minor project changes be delegated to Council staff.

## Project Route Overview




## Examples of Temporary Wetland/Watercourse Crossings - Eversource BMPs


Rail car frame bridge crossing.


Construction mat access road.