



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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CERTIFIED MAIL RETURN RECEIPT REQUESTED

January 25, 2016

John R. Morissette
Project Manager-Transmission Siting
Eversource Energy
P.O. Box 270
Hartford, CT 06141-0270

RE: **PETITION NO. 1201** – Eversource Energy petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed reconductoring of approximately 1.75 miles of its existing No. 1810 115-kV transmission line from Forestville Junction in Southington to Lake Avenue Junction in Bristol, rebuilding and reconductoring of approximately 1.85 miles of its existing Nos. 1800 and 1810 115-kV transmission lines from Southington Substation in Southington to Structure No. 1815 in Southington, reinforcement of an existing transmission structure at Southington Substation in Southington, and related substation and transmission line structure improvements.

Dear Mr. Morissette:

At a public meeting held on January 21, 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. A landscaping plan shall be prepared in consultation with Spring Lake Village Condominium Complex and other abutters (as applicable) to mitigate the visual impacts of the 10-foot clearing in the ROW, and such plan shall be submitted to the Council;
2. The petitioner shall consider the use of weathering steel for the replacement transmission structures and allowing disturbed areas of the right of way to revegetate;
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 Southington and Bristol;
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 November 25, 2015 and additional information received on January 6, 2016.

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

Very truly yours,



Robert Stein
Chairman

RS/MP/lm

Enclosure: Staff Report dated January 21, 2016

- c: The Honorable Michael Riccio, Chairman, Town of Southington
Garry Brumback, Town Manager, Town of Southington
Robert Phillips, Director of Planning and Community Development, Town of Southington
The Honorable Ken Cockayne, Mayor, City of Bristol
William Veits, Planning Commission Chairman, City of Bristol



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Petition No. 1201

The Connecticut Light and Power Company d/b/a Eversource Energy Southington and Bristol, Connecticut

Staff Report

January 21, 2016

Introduction

On November 25, 2015, 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 the existing #1800 115-kV transmission line and the #1810 115-kV transmission line within existing rights of way (ROW) located in Bristol and Southington. Council members Phil Ashton and Robert Hannon and Council staff member Michael Perrone conducted a field review of the proposed project on January 5, 2016. John Morissette, Project Manager – Transmission Siting CT, Eversource; Jason Cabral, Project Manager, Eversource; and Justin Adams, Permitting, Eversource also attended the field review.

The proposed project is required to increase the transmission line rating for a portion of the #1810 line in order to eliminate the potential for transmission system thermal criteria violations based on the results of the May 2014 Greater Hartford and Central Connecticut Area (GHCC) Needs Assessment performed by ISO New England Inc. (ISO-NE) and in accordance with the February 2015 GHCC Solutions Study performed by ISO-NE. The proposed project, in combination with other necessary system improvements identified in the Solutions Study, eliminates thermal and voltage criteria violations identified in the Northwestern Connecticut geographic sub-area of the GHCC area.

Specifically, the project consists of three components as noted below:

- a) Reconductoring approximately 1.75 miles of the existing #1810 line from Forestville Junction in Southington to one structure past Lake Avenue Junction in Bristol and adding bracing to the existing wood H-frame structures;
- b) Rebuilding and reconductoring approximately 1.85 miles of the existing double-circuit lattice towers (DCLT) that support the existing #1800 and #1810 lines from Southington Substation to structure #1815 in Southington as the existing structures are not strong enough to support the larger conductor required for the new line rating on the #1810 line; and
- c) Reinforcement of an existing line terminal structure at Southington Substation within the existing fenced area.

In the reconductoring section (located in northern Southington and southern Bristol), the #1810 line shares the transmission ROW with the existing #1825 115-kV transmission line. In the rebuild section (located in Southington, roughly south of Interstate 84), the #1810 line shares the transmission ROW with the #1800 line, the existing #1820 line, and the #329 345-kV transmission line. The existing ROW was established in 1942. The existing #1800 and #1810 lines were put in service in 1962, and the #329 line was put into service in 1965.

Land in the project area includes rolling topography with some forest vegetation. Lands within the portions of the ROW occupied by transmission lines have been managed to promote shrub or similar low-growth vegetation. Land use adjacent to the reconductoring section is a mix of industrial and commercial uses with some undeveloped lands (e.g. open fields and forest lands). Land uses adjacent to the rebuild section are primarily residential.



CONNECTICUT SITING COUNCIL

Affirmative Action / Equal Opportunity Employer

Reconductoring Portion of the Project

Specifically, Eversource seeks to replace the existing 795-kcmil aluminum conductor steel reinforced (ACSR) conductors with new 795-kcmil aluminum conductor steel supported (ACSS) conductors on the #1810 line which is located on the west side of the double circuit structures from Forestville Junction to one structure past Lake Avenue Junction (structure nos. 1844 to 1860). Eversource would also reinforce seven existing double-circuit wood H-frame structures that support the #1810 line and the #1825 line. Reinforcement would consist of installing new cross bracing on four structures that currently do not have such bracing, installing additional cross bracing on one structure with existing bracing and replacing existing cross bracing on two structures. Eversource would also reinforce two horizontally configured DCLT structures that support the #1810 and the #1825 lines. Reinforcement would consist of installation of additional bracing angles in the truss area and reinforcing the two foundation footings of each of the two structures by excavating the soil around the base of the structure and filling with concrete. Finally, Eversource would install new optical ground wire from Forestville Junction to Lake Avenue Junction on the #1810 line side.

Rebuild Portion of the Project

Specifically, Eversource seeks to replace nine DCLT tangent structures with new direct-embedded double-circuit galvanized steel pole structures. Eversource would also replace each of six DCLT angle structures with two drilled shaft single-circuit galvanized steel poles on new foundations. The heights of the existing structures range between 95 feet to 105 feet above ground level. The proposed structures would be approximately 5 to 20 feet taller than existing structures and no taller than 120 feet. Eversource would also replace the existing 556-kcmil ACSR conductor with new 1272-kcmil ACSS conductor on the #1810 line. The existing 1272-kcmil ACSR on the #1800 line would be transferred from the existing DCLT onto the new steel pole structures. Eversource would also install new optical ground wire from structure #1805 to structure #1815 on the #1800 line side and install a new shield wire from Southington Substation to structure #1815 on the #1800 line side. Finally, Eversource would perform approximately 10 feet wide of tree/vegetation clearing along the western portion of the ROW to safely operate the proposed upgraded transmission facility.

Southington Substation Portion of the Project

Eversource would install braces on the truss area of the #1810 line terminal structure to provide additional reinforcement.

Construction Methods

The project would be constructed, operated, and maintained in accordance with established industry practices and in accordance with Eversource's December 2011 Best Management Practices Manual for Connecticut (Eversource BMPs). Construction vehicles and equipment would enter and exit the ROW at various points from public roads. To safely move construction vehicles and equipment on to and off the ROW, while minimizing disruptions to vehicular traffic along public routes, Eversource or its contractor would work with municipalities and/or Connecticut Department of Transportation as necessary.

Preparation of the ROW would include vegetative removal or mowing of the managed portion of the ROW. Woody vegetation within the ROW that could interfere with the operation of the transmission would be removed. No tree clearing is anticipated in the reconductoring section. However, some limited vegetation removal would be required within construction areas, access roads and work/pull pad areas. The removal would be performed by manual and/or mechanical methods. In the rebuild section, 10 feet of clearing would occur to the western limits of the ROW, and all vegetation would be removed using mechanical methods that could include chainsaws, brush mowing units, tree harvesters, feller-bunchers, forwarders, log skidders, and log trucks.

Temporary erosion and sedimentation control measures would be installed where needed and maintained and inspected throughout the project as necessary.

There are two proposed staging areas for the project, which would be located in Southington on parcels owned by Eversource. One staging area would be approximately 2.75 acres in size and would be located adjacent to Southington Substation with access from Peter's Circle or Lepage Drive. The second proposed staging area would be an existing parking lot approximately 0.1 acres in size and located off of Belleview Avenue at the entrance to Southington Substation.

The locations of new access, work pads, and pulling pads have been identified in the Petition drawings. Many of the access roads are already established, and existing access would be used wherever possible. Access installation and improvements would be to a width of 16 to 20 feet to accommodate construction vehicles and equipment. Once the access roads are prepared, mobilization activities would commence including material delivery from the staging areas to the work sites.

Work pads in the rebuild section would be approximately 100 feet by 100 feet for tangent structures and 150 feet by 100 feet for angle structures. In the reconductoring section, the work pads would range from 35 feet by 70 feet to 150 feet by 100 feet on angle structures. The pulling pads for conductor and optical ground wire installation would typically be about 50 feet by 100 feet in size.

For the rebuild section, structure foundation work would be performed using mechanical excavators, drill rigs and pneumatic hammers. During non-working hours, fencing or other barricades would be placed around or over open foundation excavations for safety purposes.

Structure sections and associated materials would be delivered by truck and then assembled and installed by crane. Installation of overhead line conductors and shield wires would require the use of special pulling tensioning equipment, which would be placed at the specified pull locations.

After removal of the old structures, the existing DCLT foundations would be cut at ground level. The removal of existing steel lattice towers (that would be replaced), conductor, associated hardware, concrete, etc. would be disposed of and/or recycled as applicable in accordance with applicable regulations and Eversource BMPs.

After construction, structure work pads and new access roads would be left in place to facilitate future transmission line maintenance, unless directed to be removed by the landowner. Access roads, work pads, and pull pads that may be located within a manicured or otherwise improved residential area would typically be removed unless the landowner requests that they remain in place. Construction mats would be removed after the project is complete.

Construction hours would typically occur Monday through Saturday from 7:00 a.m. to 7:00 p.m. In the vicinity of the Spring Lake Village Condominium Complex (SLVCC), Eversource would use an 8:00 a.m. start time. Sunday hours may be necessary in the case of transmission line outages. Construction is expected to begin in the summer of 2016 and be completed by the spring of 2017.

Environmental Effects and Mitigation Measures

According to the Connecticut Department of Energy and Environmental Protection's Natural Diversity Database, there are no state-listed endangered, threatened, or special concern species or critical habitat located within the Project area. No impacts to archeological or historic resources are expected.

There would be no permanent fill within wetlands as a result of the project. Any temporary impacts to wetlands would be limited to construction matting (a/k/a "swamp mats") that would be removed and the area restored to pre-construction conditions. Another section of the project would utilize a temporary bridge to cross wetlands and minimize impacts. No structures to be replaced or modified would be located within wetlands.

Two vernal pools identified in the vicinity of the proposed project are located approximately 352 feet and 492 feet from structure number 1860 (to be modified) in the reconductoring section of the project. The structure is located well outside of the 100-foot Vernal Pool Envelope, and clearing within the 750-foot Critical Terrestrial Habitat would be negligible because clearing is not anticipated in the reconductoring portion of the project.

The proposed project is not located within a 100-year or 500-year flood zone.

There are no public supply reservoirs, public/private water supply wells or aquifer protection areas located in the vicinity of the proposed project.

Any new access required would be minimized and has been identified in the Petition. Existing access routes may be improved as needed with additional gravel in select areas.

Erosion and sedimentation (E&S) control measures would be installed in accordance with the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control* and Eversource's best management practices. Temporary E&S controls would remain in place until construction is complete and all disturbed areas are stabilized.

For the rebuild portion of the project, magnetic fields would decrease along the western edge of the ROW. Magnetic fields along the eastern edge of the ROW would be essentially unchanged. For the reconductoring portion of the project, magnetic fields would decrease very slightly along both the northern and southern edges of the ROW. The worst-case existing and proposed magnetic fields are located along the eastern edge of the ROW in the rebuild section from Southington Substation to Structure #1805 at approximately 140 milliGauss (mG). This is far below the International Commission on Non-ionizing Radiation Protection acceptable exposure level of 2,000 mG for general public as recognized in the Council's "Electric and Magnetic Field Best Management Practices for the Construction of Electric Transmission Lines in Connecticut."

There would be no changes to the existing sound levels along the transmission ROWs after completion of the project. No new equipment would be installed at Southington Substation; thus, noise levels at Southington Substation would remain unchanged.

The visual impacts associated with the reconductoring portion of the project are not expected to be significant. Specifically, many of the H-frame structures already have X-braces. Additional braces would actually improve the visual profile by making the transmission structures in the ROW appear more uniform. Reconductoring does not increase the number of phase conductors as it is a one for one "swap" so it would appear similar afterwards. Optical ground wires are much less visible than existing phase conductors and would not materially affect visibility. Additional steel diagonals to reinforce DCLT structures would blend in visually and have no visual impact. Foundation modifications would have zero visual impact.

For the rebuild portion of the project, replacing DCLT structures with steel pole structures would result in a more narrow visual profile because steel pole structures generally have a smaller footprint than lattice towers. However, the steel structures would have a worst-case increase in height in range of five to 20 feet. The reconductoring and installation of optical ground wire portions of the project would not have a significant effect on visibility.

Clearing 10 feet of tree/vegetation along the western portion of the ROW may have significant visual impacts in select portions of the line, including but not limited to the vicinity of the SLVCC. To address this issue, Eversource has consulted with the SLVCC and other abutters (and will continue to do so) and would develop a landscaping plan that helps replace some of the visual buffer and improve aesthetics while only allowing shorter landscape plantings that would not affect transmission line reliability. Council staff recommends that the landscape plan be submitted to the Council.

The visual impact associated with the modifications to the terminal structure inside Southington Substation would be negligible because the existing structure would be maintained with the same height, and the work would remain within the existing fenced substation.

Municipal and abutter notice

In June 2015, Eversource consulted with the Town of Southington (Town) and City of Bristol (City). Eversource also performed outreach with property owners, particularly for the rebuild section in Southington (which includes clearing). Formal notice of the Petition was provided to the Town, the City, and abutting property owners on or about November 19, 2015. The Council has not received any comments from abutters or the municipalities to date.

Staff recommends including the following condition:

1. A landscaping plan shall be prepared in consultation with Spring Lake Village Condominium Complex and other abutters (as applicable) to mitigate the visual impacts of the 10-foot clearing in the ROW, and such plan shall be submitted to the Council.