



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

November 1, 2016

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

RE: **PETITION NO. 1238** - Eversource Energy petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed re-conductoring of 0.6 miles of its existing No. 1779 115-kilovolt (kV) electric transmission line between South Meadow Substation in Hartford and the east side of structure 3001 in East Hartford and for the proposed rebuilding of 4.6 miles of its existing No. 1779 electric transmission line within existing Eversource right of way extending from structure 3001.5 in East Hartford to South Windsor Junction in South Windsor, traversing the municipalities of Hartford, East Hartford, and South Windsor, Connecticut, and related transmission line structure and substation improvements.

Dear Ms. Shanley:

At a public meeting held on October 27, 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. Use of off-road construction equipment that meets the latest EPA or California Air Resources Board standards, or in the alternative, equipment with the best available controls on diesel emissions, including, but not limited to, retrofitting with diesel oxidation catalysts, particulate filters and use of ultra-low sulfur fuel;
2. Compliance with the provisions of Section 22a-174-18(b)(3)(C) of the Regulations of Connecticut State Agencies that limit the idling of mobile sources to 3 minutes;
3. Approval of any minor project changes be delegated to Council staff;
4. Provide to the Council a copy of SHPO's response and/or recommended mitigation measures in regards to the professional archeological reconnaissance survey to be conducted;
5. 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;

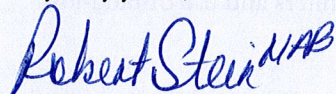
6. Any request for extension of the time period to fully construct the facility shall be filed with the Council not later than 60 days prior to the expiration date of this decision and shall be served on all parties and intervenors, if applicable, and the Cities of Hartford, East Hartford and South Windsor;
7. Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
8. 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;
9. 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;
10. 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.

The Council recommends removing gravel work pads unless the underlying landowner requests they remain in place.

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 June 20, 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 October 27, 2016

- c: The Honorable Marcia A. Leclerc, Mayor, Town of East Hartford
 Jeffrey Cormier, Town Planner, Town of East Hartford
 The Honorable Luke Bronin, Mayor, City of Hartford
 Jamie Bratt, Director of Planning & Economic Development, City of Hartford
 The Honorable Tom Delnicki, Mayor, Town of South Windsor
 Matthew B. Galligan, Town Manager, Town of South Windsor
 Michele R. Lipe, AICP, Director of Planning, Town of South Windsor
 Helen M. Taylor, Project Siting Specialist, Eversource Energy



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Petition No. 1238

Eversource Energy 1779 Line Upgrade Project

Staff Report

October 27, 2016

Introduction

On June 20, 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 a portion of transmission line no. 1779, a 115-kilovolt (kV) transmission line, in the City of Hartford and the Towns of East Hartford and South Windsor. Council member Robert Hannon and Council staff member Robert Mercier conducted a field review of the proposed project on August 8, 2016 with Eversource representatives Helen Taylor, Chris Runde, Chris Fritz, and Ervin Qyra. Daniel Repoli of Mickey's Oceanic Grill of East Hartford, Inc. attended the portion of the field review that occurred on his property to discuss potential structure locations that would minimize disruption to his business. Eversource filed an amendment to the Petition on October 6, 2016 for minor Project changes related to access roads and work pads.

Proposed Project

The purpose of the proposed project is to replace transmission structures and conductors on a segment of Line 1779 that have reached the end of their useful life. The existing transmission system in this area was constructed in the 1920's and is deteriorating.

Eversource proposes to reconstruct a 5.2 mile section of Line 1779 between the South Meadow Substation in Hartford and South Windsor Junction in South Windsor by replacing the conductors from the South Meadow Street Substation in Hartford to Structure 3001 in East Hartford (0.6 mile) and reconstruct all transmission components between Structure 3001 to South Windsor Junction (4.6 miles).

Specifically, the Project entails the following components:

- a. Replacement of existing 556 kcmil Aluminum conductor, steel-reinforced (ACSR) and 211.3 kcmil ACSR with new 636 T16 Aluminum conductor, carbon-reinforced from South Meadow Substation to Structure 3001 (0.6 mile).
- b. Reinforcement of three existing structures to support the new conductors (Structures 3001A, 3001, 3007A).
- c. Removal of 41 structures (38 double circuit lattice and 3 wood structures) along a 4.6 mile section of line from Structure 3003 in East Hartford to Structure 3046 at South Windsor Junction.
- d. Installation of 39 new single circuit monopole structures from Structure 3003 in East Hartford to Structure 3046 at South Windsor Junction.
- e. Replacement of existing conductor with 795 kcmil Aluminum conductor, steel-supported from Structure 3001 to Structure 3046.
- f. Modification to Structures 3001.5, 3009, 3010, 3011 by removing one set of conductors and replacing individual lattice support members, as necessary.
- g. Replacement of shield wire with optical ground wire.

Work would occur within an existing 100-foot wide (typical) Eversource right-of-way (ROW) that is currently maintained to a width of 50 feet. The ROW was established in the 1920s and contains various types of transmission structures. Land use in the ROW area includes residential, industrial, agricultural, and commercial as well as vacant land, open space, and flood control lands. The Project crosses major transportation corridors and the Connecticut River.

The existing structures in the Project area range in height from 75 feet to 140 feet above ground level (agl). Most of the proposed monopole structures would be 5 feet to 35 feet taller than the existing structures to comply with the 2012 National Electrical Safety Code (NESC) conductor to ground clearance requirements, phase to phase clearance requirements and Eversource's Overhead Transmission Line Standards. The tallest proposed structure, no. 3021 in East Hartford, would be 140 feet agl to account for NESC requirements as well as OSHA clearance requirements for levee maintenance work. No wireless telecommunications facilities are located on any of the Project structures.

Direct-embedded structures with storm guys would be utilized for structures located within flood zone areas with good soil conditions. Self-supported structures on drilled shaft or micropile foundations would be utilized for structures located in poor soil areas and for all angle structures. The new structures would generally be located approximately 25 feet to the east and 20 feet north or south from the existing structures. Eversource proposes to de-energize the double circuit line on the east side of the existing structures to facilitate installation of the new structures. The double circuit line on the west side of the existing structures would remain energized until the new line is operational.

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 that may need to be graded, widened, and/or improved in order to be used safely and effectively during construction. Improvements would include clearing adjacent vegetation and establishing a 16 to 20 foot wide gravel travel surface. In areas where existing access roads traverse streams or wetlands, temporary construction mats would be utilized to reduce disturbance to underlying soils.

At each transmission line structure site, a 100-foot by 100-foot (typ.) work pad would be constructed to stage material for final structure assembly. Work pads located in upland locations would be composed of gravel and left in place unless removal is requested by the underlying landowner. Work pads located in wetland areas would be constructed of temporary matting. The October 6, 2016 Petition Amendment include additional work pads associated with the Connecticut River crossing and a relocation of several access roads.

The new structures would be delivered in sections by truck and stored at a nearby staging area along with other project materials and hardware. Eversource would consult with town officials when staging areas are identified. Structure sections would be assembled by crane at each work pad. Insulators and connecting hardware would be installed on most structures at this time.

The installation of the overhead conductors 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 pulling activities. For the rebuild segment, once the new lines are energized, the old structures and associated equipment would be removed and either recycled or disposed of in accordance with Eversource BMPs and applicable regulations. Structure foundations within wetlands/floodplains would be left in place to prevent soil disturbance. Lattice tower foundations in upland areas would be removed to a depth of six inches below grade. Wood pole structures would be cut 10 inches above grade, leaving the pole butts in place.

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. Highway crossings would be coordinated with the Department of Transportation.

Eversource proposes to begin work on the 0.6 mile re-conductoring portion of the project in late 2016. Work on the re-build section would commence in the spring of 2017. Project completion is anticipated by the summer 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 and during scheduled outages.

Environmental Considerations

The visual impact of the re-conductoring portion of the Project would be negligible as there is little change to the existing structures. The visual impact of the rebuild portion of the Project would be minimal given that the ROW mostly traverses commercial areas, highway corridors, flood plains and agricultural areas interspersed with woodland. In areas where there is structure visibility, the new monopole structures, although taller, would have a more streamlined appearance than the existing bulky lattice structures and would be in the same general location as the existing lattice structures.

The re-conductoring portion of the Project would cross the Connecticut River between Charter Oak Landing Park in Hartford and Great River Park in East Hartford. Both parks feature walkways along the Connecticut River in the areas where re-conductoring will occur. Eversource is coordinating with both municipalities to minimize construction-related recreational impacts, as well as appropriate construction site control.

Cultural resources surveys identified five known archeological sites within the Project area as well as areas of moderate to high archeological sensitivity in the rebuild portion of the Project. To prevent destruction of known and potential archeological sites, Eversource would use construction matting, as appropriate, and conduct archeological resource reviews prior to construction, as necessary. 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.

Removal of mature vegetation would occur mostly in the wooded areas on the East Hartford and South Windsor sections of the Project where the existing ROW would be widened by 25 feet to the east. Approximately 0.15-acres of woodland and forested wetlands would be cleared and converted to maintained shrub land.

Project construction would occur in 10 delineated wetland areas, consisting of a mix of state and federal jurisdictional wetlands. Most of the wetlands are located within the Connecticut River floodplain and tributary floodplains and are subject to early season, short duration flooding events. Some wetland areas contain permanent standing water that support fish. No vernal pools were identified.

Work in wetland areas, including work pads, pull pads and temporary access roads, would utilize temporary matting. Temporary matting, totaling 14.3 acres, would be removed upon completion of construction and disturbed wetland areas would be restored in accordance with Eversource BMPs. Permanent wetland impacts associated with the new tower locations would total approximately 1,775 square feet.

Project construction would cross the Podunk River, four tributaries of the Podunk River, and an intermittent watercourse. Watercourse crossings would be conducted in accordance with Eversource's BMPs and would utilize temporary matting to reduce watercourse impacts. Disturbed areas would be restored in accordance with Eversource BMPs.

A majority of the Project is located within 100 year flood zone and floodways of the Connecticut, Hockanum and Podunk Rivers, and associated tributaries. Twenty-seven structures would be replaced within the flood zone areas. Drilled shaft foundations would be installed for these structures and would be eight feet in diameter. Due to the minimal fill required for the foundations there would be no adverse effect to the hydraulic characteristics of the flood zones and flood storage capacity. Eversource is coordinating with the Army Corps of Engineers and the municipalities of Hartford and East Hartford regarding work within the designated flood zones.

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

The Project area contains records of eight species listed on the Natural Diversity Database (NDDB). During field investigations, Eversource observed one additional listed species in the Project area. This species was reported to the Department of Energy and Environmental Protection (DEEP) for inclusion in the NDDB. For all listed species in the Project area, Eversource would follow DEEP protection measures during construction. Construction of the Project would occur within Forested Floodplain, a DEEP designated critical habitat. Eversource would adhere to DEEP recommendations to minimize the impact to this habitat.

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 ROW 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 that emits 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, when compared to existing levels, would increase slightly along the west edge of the ROW and decrease slightly along the east edge of the ROW under average loading conditions due to the general placement of the new towers and conductors toward the east. These values, 4.5 mG and 9.7 mG, respectively, are well below the guidelines established by ICNIRP and ICES.

Municipal and Abutter Notice

Eversource began Project consultation with the affected municipalities and provided notice to underlying and abutting landowners prior to submitting the Petition to the Council. Formal notice of the Petition was provided to the municipalities and abutting and underlying property owners on or about June 16, 2016.

The Town of East Hartford initially requested additional conductor clearance at Structures 3020 and 3021 for to accommodate future maintenance work on top of the levees. Eversource accommodated this request in the Petition filing. Additionally, the East Hartford Town Engineer submitted comments to the Council, dated October 18, 2016 that contained numerous construction related comments, including work coordination issues, requests for additional information regarding work in the flood control area, and construction detail to ensure existing underground infrastructure is not disturbed.

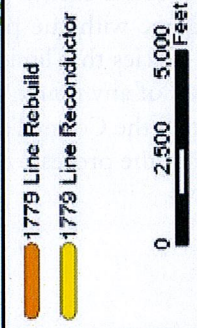
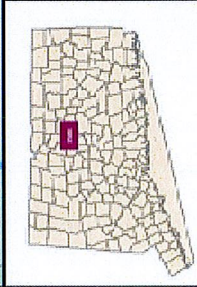
Although no formal comments were submitted by the City of Hartford or the Town of South Windsor, Eversource would continue to consult with all affected municipalities regarding impacts of the Project on local resources.

Prior to submission of the Petition to the Council, Eversource met with Daniel Repoli of Mickey's Oceanic Grill at 199 Pitkin Street, East Hartford to discuss locations on the property that could accommodate a new tower structure that would not affect his business. Mr. Repoli expressed these concerns to the Council in writing on June 6, 2016, as well as at the Petition field review on August 8, 2016. Eversource met with Mr. Repoli again in August 2016 to discuss ways to minimize disruption to his restaurant business. As shown in the Petition Amendment, Eversource agreed to relocate temporary access roads from his property to an abutting property to the north and to adjust work hours to avoid peak business times, when possible. Proposed replacement structure #3006 would remain in the rear portion of the restaurant parking lot.

Recommended Conditions

If approved, staff recommends including the following conditions:

- a) Use of off-road construction equipment that meets the latest EPA or California Air Resources Board standards, or in the alternative, equipment with the best available controls on diesel emissions, including, but not limited to, retrofitting with diesel oxidation catalysts, particulate filters and use of ultra-low sulfur fuel;
- b) Compliance with the provisions of Section 22a-174-18(b)(3)(C) of the Regulations of Connecticut State Agencies that limit the idling of mobile sources to 3 minutes;
- c) Approval of any minor project changes be delegated to Council staff; and
- d) Provide to the Council a copy of SHPO's response and/or recommended mitigation measures in regards to the professional archeological reconnaissance survey to be conducted.



EVERSOURCE
ENERGY

Project Overview Map
1779 Line