



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

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October 14, 2016

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

RE: **PETITION NO. 1217** – Eversource Energy declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed separation of the existing 1779/1777 115 kilovolt (kV) electric transmission lines for 1.6 miles within existing right of way from Bloomfield Substation to Bloomfield Junction; proposed separation of the existing 1751/1777 115kV electric transmission lines for 5.3 miles within existing right of way from Bloomfield Junction to North Bloomfield Substation; modifications to the existing overhead 1779 115 kV electric transmission line to loop into the Rood Avenue Substation via underground cables; including related transmission line structure improvements; and modifications to the Bloomfield Substation, 40 Crestview Drive and North Bloomfield Substation, 2 Hoskins Road both in Bloomfield, Connecticut and modifications to the Rood Avenue Substation located at 275 Rood Avenue, Windsor, Connecticut.

Dear Ms. Shanley:

At a public meeting of the Connecticut Siting Council (Council) held on October 13, 2016, the Council considered and approved the partial Development and Management (D&M) Plan submitted for this project on August 29, 2016, for the transmission right-of-way portion of the project 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; and
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.

This approval applies only to the partial D&M Plan submitted on August 29, 2016. Requests for any changes to the D&M Plan shall be approved by Council staff in accordance with Regulations of Connecticut State Agencies (RCSA) §16-50j-62(b). Furthermore, the project developer is responsible for reporting requirements pursuant to RCSA §16-50j-62.

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 Council's decision on the petition dated May 3, 2016 and in the partial D&M Plan dated August 26, 2016.



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Thank you for your attention and cooperation.

Sincerely,

Handwritten signature of Robert Stein MAB in cursive.

Robert Stein  
Chairman

RS/MP/lm

Enclosure: Staff Report dated October 13, 2016

- c: The Honorable Joan A. Gamble, Mayor, Town of Bloomfield
- Philip K. Schenck, Jr., Town Manager, Town of Bloomfield
- Jose Giner, Director of Planning, Town of Bloomfield
- The Honorable Donald Trinks, Mayor, Town of Windsor
- Peter Souza, Town Manager, Town of Windsor
- Eric Barz, Town Planner, Town of Windsor



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### Petition No. 1217

#### Eversource

#### Bloomfield, Connecticut

#### Development and Management Plan

#### Staff Report

October 13, 2016

On April 28, 2016, the Connecticut Siting Council (Council) approved 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 the proposed modifications to transmission line nos. 1777, 1779 and 1751 and modifications to the Bloomfield Substation, North Bloomfield Substation and Rood Avenue Substation, in the Towns of Bloomfield and Windsor. In its decision, the Council required Eversource to submit a Development and Management Plan (D&M Plan) for this project.

Eversource submitted a partial D&M Plan (Substation D&M Plan) on July 29, 2016 that was limited to the modifications of the three substations and the modifications to the loop into Rood Avenue Substation. On September 15, 2016, the Council approved the Substation D&M Plan. On August 29, 2016, Eversource submitted the second (and final) partial D&M Plan (Transmission D&M Plan) related to the transmission portion of the project along the right-of-way. Copies of the Transmission D&M Plan were provided to Town of Bloomfield and the Town of Windsor on or about August 29, 2016. No comments have been received by the Council to date.

This Transmission D&M Plan is for the separation of the 1779/1777 115-kilovolt (kV) lines for 1.60 miles between Bloomfield Substation and Bloomfield Junction and the separation of the 1751/1777 115-kV lines for 5.30 miles between Bloomfield Junction and North Bloomfield Substation. The 1779 line will be relocated to new structures, which will be installed within the right-of-way, generally south of the existing lattice steel structures. Along this right-of-way segment, 16 new single-circuit monopoles and one three-pole structure will be installed to support the relocated 1779 line. Galvanized steel structures will be utilized because they are reasonably close in color to the existing lattice structures that have, over time, faded to a green-gray color. The existing lattice towers are 80 to 100 feet tall. The new structures will be approximately 5 to 10 feet taller, with a maximum height of 105 feet. To accommodate the new 1779 line structures, an additional 25 feet of vegetation along the southern portion of the right-of-way (but still within the limits of the right-of-way) will be cleared and subsequently managed for low-growth species.

Eversource will remove the existing 1779 556-kcmil aluminum conductor steel reinforced (ACSR) conductors as well as the associated conductor and shield wire arms from the existing double-circuit lattice structures. Eversource will install new 1272-kcmil aluminum conductor with steel support (ACSS) conductors on the new monopoles for the 1779 line. Eversource will relocate the existing optical ground wire to the new monopoles.

The 1777 line will be relocated to new structures to be separate from the 1751 line. Along this right-of-way segment, 49 new single-circuit monopoles will be installed to support the relocated 1777 line. Weathering steel structures will be utilized to match the existing weathering steel 115-kV double-circuit monopoles and be reasonably close in color to the nearby 345-kV wood H-frame structures within the same right-of-way. The existing double-circuit towers are 75 to 105 feet tall. The new structures will be approximately 5 to 20 feet taller, with a maximum height of 105 feet. To accommodate the new 1777 line structures, an additional 5 feet of vegetation along the eastern portion of the right-of-way (but still within the limits of the right-of-way) will be cleared and subsequently managed for low-growth species.



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Eversource will also replace two 115-kV double-circuit horizontal weathering steel lattice towers with four three-pole structures on new drilled shaft foundations in Bloomfield Junction. The existing structures are 60 feet agl. The new structures will be approximately 20 feet taller in height with the tallest structure being about 80 feet agl.

Eversource will replace two existing 115-kV direct-embedded single-circuit guyed wood H-frame structures with two new direct-embedded single-circuit guyed weathering steel H-frame structures at Bloomfield Junction. The existing structure heights are 36 feet agl and 60 feet agl. The new structures will be approximately 15 feet taller than the existing structures with the tallest proposed structure being approximately 70 feet agl.

Eversource will also replace 0.15 miles of existing 1272-kcmil ACSR conductors with 1272-kcmil ACSS conductors on the 1751 and 1777 lines span at Bloomfield Junction.

Eversource will remove the unused conductor and shield wire arms from the existing double-circuit steel monopole structures. Eversource will also relocate the 5.30 miles of the existing 1777 line conductor and optical ground wire from the existing double-circuit steel poles to the proposed steel structures.

Wherever possible, Eversource will use existing access roads to reach existing and replacement structure locations. Existing access roads may need to be graded, widened, and/or improved in order to be used safely and effectively during construction. Where new access roads are required, Eversource will seek to avoid unnecessary work within wetlands and near vernal pools. When construction activity within wetlands is unavoidable, Eversource will use its best management practices (Eversource BMPs) to wetland disturbance such as the use of timber mats. Eversource will also use methods to minimize the infiltration of invasive species into wetland areas.

As an update regarding cultural resources, a Phase 1B cultural resources reconnaissance survey revealed that no historic or prehistoric sites that may be potentially eligible for listing on the National Register of Historic Places are situated within the project right-of-way. Moreover, many of the excavated shovel tests showed signs of the areas having been disturbed by previous construction and maintenance of the existing transmission line. As a result, Heritage concluded that "...no additional testing is needed and that the construction of the transmission line upgrades will not have any effect on cultural resources." In the Transmission D&M Plan, Eversource notes that the report was provided to the State Historic Preservation Office (SHPO) and the Tribal Historic Preservation Officers (THPOs). Both the SHPO and the THPOs have concurred with Heritage's findings.

Twenty of the new transmission structures will be located within the 100-year flood zone. In accordance with Condition 1a of the Council's Decision, all new structures located within the 100-year flood zone will be designed to withstand inundation.

Condition 1b of the Council's Decision requires a statement that Eversource shall implement protective measures for Natural Diversity Database wildlife in consultation with the Connecticut Department of Energy and Environmental Protection. In the Transmission D&M Plan, Eversource notes that it will implement all mitigation measures provided by DEEP.

As an update with regard to federally-listed species, Eversource notes in the Transmission D&M Plan that it has consulted with the U.S. Fish and Wildlife Service (USFWS) regarding the northern long-eared bat, a federally-listed Threatened Species (and also State-listed Endangered species). There are no known records of the NLEB within one mile of the project. In accordance with the USFWS Final 4d Rule for NLEB, no seasonal restriction will be required for compliance.

Condition 1c of the Council's Decision requires that Eversource include any additional staging areas not identified in the Petition. Accordingly, Eversource has identified its Blue Hills Avenue laydown and staging area in the Town of Bloomfield. To accommodate the deliveries of project-related materials and supplies in advance of the Transmission D&M Plan approval, Eversource submitted a request for approval of the Blue Hills Avenue Laydown Area at 885 Blue Hills Avenue, Bloomfield, dated September 14, 2016. On September 15, 2016, the Council approved the laydown and staging area request.

Condition 1d of the Council's Decision requires that Eversource include the timing of the work in the vicinity of the Wintonbury Hills Golf Course. Accordingly, Eversource has noted in its Transmission D&M Plan that work at the vicinity of the golf course will be performed between Thanksgiving and April 1<sup>st</sup>, which is during the "off season" of the golf course when it is closed to the public. This is also the time period requested by the Town of Bloomfield, the owner of the golf course.

Condition 1e of the Council's Decision requires that Eversource consider limited landscaping along the north side of the expanded area of the Rood Avenue Substation to improve aesthetics as viewed from Sunnyfield Drive. Eversource has already complied with this condition in the approved Substation D&M Plan. This condition is not applicable to the Transmission D&M Plan.

Condition 1f of the Council's Decision requires a vernal pool study consistent with Calhoun and Klemens 2002 Best Development Practices (2002 BDPs). AECOM, as consultant for Eversource, provided a Vernal Pool Habitat Report (VPHR) in the Transmission D&M Plan using 2002 BDPs. Specifically, AECOM performed vernal pool surveys during Spring 2015. Supplemental surveys were performed in May and June 2016 to compile additional habitat information at certain vernal pools that could potentially provide habitat for State-listed species, as well as any vernal pools that may be impacted by project tree clearing or trimming. A total of 15 vernal pools were identified. See table below.

Vernal Pool No.	K&C Tier Rating	Located in the ROW	Size in square feet
VP-1779-1	I	Yes	2,350
VP-1779-2	I	Yes, partially	1,387
VP-1751-1	I	No	1,938
VP-1751-14	I	No	223
VP-1751-3	III	No	78
VP-1751-4	III	No	393
VP-1751-5	III	Yes, partially	1,400
VP-1751-6	III	Yes	507
VP-1751-7	III	No	204
VP-1751-9	III	No	1,095
VP-1751-10	III	Yes, partially	7,322
VP-1751-11	III	No	702
VP-1751-12	III	Yes, partially	1,036
VP-1751-13	I	Yes, partially	10,944
VP-1751-15	I	No	1,904

All of the vernal pools have less than 25 percent of the existing 100-foot vernal pool envelopes (VPEs) undeveloped and no more than 50 percent of the existing 100-foot to 750-foot critical terrestrial habitats (CTHs) undeveloped. In order to maintain required clearances between vegetation and the relocated 115-kV line conductors, secondary impacts associated with tree clearing activities will only occur within VP-1779-1, VP-1751-5, and VP-1751-13. A total of approximately 1,936 square feet (or 0.04 acres) of currently forested habitat within these vernal pools will involve tree clearing and will be converted to scrub-shrub habitat. The remaining and converted habitat would still provide habitat value to breeding amphibian species within the vernal pools.

Additional secondary impacts to vernal pools are expected to result from a total of approximately 0.58 acres of tree clearing to convert to scrub-shrub habitat within the 100-foot vernal pool envelopes which, in total, include about 9.4 acres of existing forested land.

The grand total of proposed tree clearing area in all CTH areas combined is approximately 1.86 acres. This is far less than 25 percent, because geometrically, even a single vernal pool of negligible size would have a minimum CTH area of about 39.8 acres. In addition, the tree clearing is not "clear cutting" because of the conversion to scrub-shrub habitat.

Furthermore, Eversource has included its Vernal Pool Avoidance and Minimization Measures (VPAMM) in the Transmission D&M Plan. The VPAMM includes but is not limited to the requirement that tree trimming and clearing activities in the three vernal pools be completed by hand and removal of low growing (scrub-shrub) vegetation surrounding vernal pools shall be minimized by using construction matting where access is needed.

Condition 1g of the Council's Decision requires a wildlife analysis for the blue spotted salamander and marbled salamander with protective measures as applicable. The blue-spotted salamander is a State-designated Species of Special Concern. AECOM conducted habitat assessments and biological surveys for the blue-spotted salamander and the marbled salamander along the rights-of-way of the project. During the survey of the project right-of-way, no blue-spotted or marbled salamander egg masses, larvae, or adults were observed. With regard to habitat assessment, AECOM biologists concluded that potentially suitable breeding habitat for salamander species was present outside of the right-of-way within the forested portion of Wetland 22A. While no suitable salamander breeding habitat was identified along the project right-of-way, seasonal pools offering potentially suitable breeding habitat may be present in the forested wooded swamp habitat located within Wetlands 22 and 22A, located west of the 1751/1777 line right-of-way in the Adams Road vicinity.

As a protective measure for the seasonal pools, installation of soil erosion and sedimentation controls (E&S controls) is proposed to avoid or minimize sediment deposits into seasonal pools located outside of the construction area. Such E&S controls will be compliant with the *2002 Connecticut Guidelines for Erosion and Sediment Control*, and Eversource BMPs. In addition, for construction activities near vernal pools along the project right-of-way, Eversource will require its contractors to include the use of Eversource BMPs designed to isolate migrating vernal pool species from active work zones. Syncopated silt fencing and other protection measures will also be installed as specified in the Transmission D&M Plan. Eversource plans to conduct tree clearing/trimming and to install access roads and construction pads outside of the March to April breeding season for most vernal pool species, including blue-spotted salamanders. Tree clearing, access road, and work pad construction near vernal pools will be performed during the fall 2016 and winter 2016/2017 time period. Specifically, tree clearing and construction activities between Bloomfield Substation and Bloomfield Junction are proposed in the fall 2016. Tree clearing and construction activities between North Bloomfield Substation and Duncaster Road, which includes the project right-of-way near vernal pool 1751-13 and the nearby NDDDB blue-spotted salamander polygon area, are proposed in the Winter 2016/2017.

The project will span nine perennial streams and 25 wetlands. No new transmission line structures will be located in any watercourses or water bodies. Approximately 0.02 acres of wetlands will be permanently filled as a result of the unavoidable installation of twelve structures in five wetlands. All construction activities in wetlands and watercourses will be performed in accordance with conditions of the U.S. Army Corps of Engineers and DEEP regulatory approvals and Eversource BMPs.

Eversource's Transmission D&M Plan includes a number of different plan components intended to help ensure that Eversource abides by the most current best management practices for its construction project. Among the components included are a soil erosion and sedimentation control, wetland avoidance and minimization measures, a wetlands invasive species control plan, water bodies avoidance and minimization measures, roadway and work pad construction practices, spill prevention and countermeasures plan, a vegetation clearing plan, and procedures for snow removal and deicing.

Eversource will monitor the conformance of its construction contractors with its environmental requirements by including environmental inspectors on its team of personnel who will be performing oversight of the project. Notices and reports will comply with the Regulation of Connecticut State Agencies Section 16-50j-62.

Eversource expects that construction will commence in the fourth quarter of 2016 and will be completed by the second quarter of 2018. Typical construction hours and days of the week would be Monday through Saturday, 7:00 a.m. to 7:00 p.m. However, non-standard work hours might be necessary due to outage-related time constraints. Any noise related to construction will be exempt per DEEP noise regulations. Operation of the (completed) project is expected to meet the DEEP noise standards at the property boundaries.

Staff finds that Eversource's Transmission D&M Plan for this project conforms to the Council's declaratory ruling and that it addresses the environmental issues likely to be encountered during this project.

Council staff recommends approval of the Transmission D&M Plan 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; and
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.