

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 Web Site: portal.ct.gov/csc

VIA ELECTRONIC MAIL & CERTIFIED MAIL RETURN RECEIPT REQUESTED

September 1, 2023

Deborah Denfeld Team Lead – Transmission Siting Eversource Energy P.O. Box 270 Hartford, CT 06141 Phone: (860) 728-4654

deborah.denfeld@eversource.com

RE: **PETITION NO. 1575** – 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 proposed modifications to its existing Salisbury Substation located at 316 Indian Mountain Road, Salisbury, Connecticut, and related electric transmission line structure improvements.

Dear Deborah Denfeld:

At a public meeting held on August 31, 2023, 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 project changes be delegated to Council staff;
- 2. Identification of staging areas and provisions for erosion and sedimentation (E&S) controls, if necessary, at the staging area locations prior to the commencement of construction;
- 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. The Council shall be notified in writing at least two weeks prior to the commencement of site construction activities:
- 5. 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 Salisbury;
- 6. Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed **along with a representative photograph of the project**;

- 7. 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; and
- 8. This Declaratory Ruling may be transferred or partially transferred, provided both the facility owner/operator/transferor and the transferee are current with payments to the Council for their respective annual assessments and invoices under Conn. Gen. Stat. §16-50v. 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. Both the facility owner/operator/transferor and the transferee shall provide the Council with a written agreement as to the entity responsible for any quarterly assessment charges under Conn. Gen. Stat. §16-50v(b)(2) that may be associated with this facility, including contact information for the individual acting on behalf of the transferee.

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 18, 2023, and additional information dated July 10, 2023.

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

Sincerely,

Melanie A. Bachman Executive Director

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MAB/IN/dll

Enclosure: Staff Report dated August 31, 2023

c: The Honorable Curtis G. Rand, First Selectman, Town of Salisbury <u>crand@salisbury.ct.us</u> Kathleen Shanley, Eversource Energy <u>Kathleen.shanley@eversource.com</u>

STATE OF CONNECTICUT)		
	: ss. Southington, Connecticut	September 1, 2023	
COUNTY OF HARTFORD)		

I hereby certify that the foregoing is a true and correct copy of the Decision and Staff Report in Petition No. 1575 issued by the Connecticut Siting Council, State of Connecticut.

ATTEST:

Milike Real

Melanie A. Bachman Executive Director Connecticut Siting Council

STATE OF CONNECTICUT)

: ss. New Britain, Connecticut September 1, 2023

COUNTY OF HARTFORD)

I certify that a copy of the Connecticut Siting Council Decision and Staff Report in Petition No. 1575 has been forwarded by Certified First Class Return Receipt Requested mail, on September 1, 2023, to each party and intervenor, or its authorized representative, as listed on the attached service list, dated May, 23, 2023.

ATTEST:

Dakota Lofoutain

Dakota LaFountain Clerk Typist

Connecticut Siting Council

Date: May 23, 2023 Petition No. 1575
Page 1 of 1

LIST OF PARTIES AND INTERVENORS $\underline{SERVICE\ LIST}$

Status Granted	Document Service	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Petitioner	E-mail	The Connecticut Light and Power Company d/b/a Eversource Energy	Deborah Denfeld Team Lead – Transmission Siting Eversource Energy P.O. Box 270 Hartford, CT 06141 Phone: (860) 728-4654 deborah.denfeld@eversource.com



STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

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Petition No. 1575 The Connecticut Light and Power Company d/b/a Eversource Energy Salisbury Substation Transformer Replacement Project

Salisbury, Connecticut

Staff Report August 31, 2023

Introduction

On May 22, 2023, the Connecticut Siting Council (Council) received a petition from The Connecticut Light and Power Company d/b/a Eversource Energy (Eversource) for a declaratory ruling pursuant to Connecticut General Statutes (CGS) §4-176 and §16-50k, for the Salisbury Substation Transformer Replacement Project (Petition or Project) at its existing Salisbury Substation facility site located at 316 Indian Mountain Road in Salisbury, Connecticut.

The Project consists of an expansion of the fenced substation area and the replacement of an existing 13 mega volt ampere (MVA) 69-kilovolt (kV) to 13.2-kV transformer with a 40 MVA 115-/69-/13.2-kV transformer.

On May 18, 2023, in compliance with Regulations of Connecticut State Agencies (RCSA) §16-50j-40, Eversource provided notice of the proposed Project to the Town of Salisbury (Town), and abutting property owners.

On May 23, 2023, the Council sent correspondence to the Town stating that the Council has received the Petition and invited the municipality to contact the Council with any questions or comments by June 21, 2023. No comments were received from the Town.

Under CGS §16-50x, the Council retains exclusive jurisdiction over the existing substation facility site. Under RCSA §16-50j-2a(29), "site" means a contiguous parcel of property with specified boundaries, including, but not limited to, the leased area, right-of-way, access and easements on which a facility and associated equipment is located, shall be located or is proposed to be located.

The Council submitted interrogatories to Eversource on June 20, 2023. Eversource submitted responses to the interrogatories on July 10, 2023.

Pursuant to CGS §4-176(e) of the Uniform Administrative Procedure Act, an administrative agency is required to take action on a petition within 60 days of receipt. On July 20, 2023, pursuant to CGS §4-176(e), the Council voted to set the date by which to render a decision on the Petition as no later than November 18, 2023, which is the 180-day statutory deadline for a final decision under CGS §4-176(i).

Notice and Community Outreach

Eversource initiated outreach to the Town in April 2023. The Town did not comment on the Project.

Eversource initiated outreach to property owners abutting the substation in April 2023. All abutting property owners were notified of the Project and provided information on how to obtain additional information, as well as how to submit comments to the Council. Eversource received comments from two abutting property owners

regarding visual mitigation. Eversource has met with the property owners and discussed visual mitigation options. During the construction phase of the Project, Eversource would maintain contact with the Town and abutting property owners to inform them of construction activities.

Existing Facility Site

Salisbury Substation is located on a 7.78-acre Eversource-owned parcel located at 316 Indian Mountain Road in Salisbury that is zoned residential. The substation was constructed in the early 1970's and is a 69-kV to 13.2-kV facility. The existing transformer was manufactured in 1953.

The surrounding area consists of developed residential parcels and undeveloped forested areas. The substation's western fence line is located about 600 feet east of Indian Mountain Road. An existing access gravel road also extends from the access drive and around the southern substation fence line onto a graveled laydown or staging area. Another existing gravel road extends from the laydown/staging area to a second substation access gate located in the northeastern corner of the fence. (See Figure 2)

Two 69-kV transmission lines connect to the substation - the 667 Line which extends northeast to Falls Village Substation and the 690 Line which extends west to the interconnection with Central Hudson Gas and Electric Company facilities located at the Connecticut-New York border.

The existing transformer is primarily connected to the 667 Line bus, but could also connect to the 690 Line.

Project Development

The purpose of the proposed Project is to improve Eversource's transmission and distribution system reliability at the substation by replacing a transformers and related equipment that are at or near the end of their service life and to meet National Electrical Safety Code (NESC) standards.

The Project is part of Eversource's planned upgrades to substation facilities within northwestern Connecticut. The upgrades would improve the reliability of Eversource's transmission and distribution system by replacement of aging equipment and infrastructure with modern equipment.

The Project is identified in the 2023 Eversource Forecast of Loads and Resources Report. It is not identified in an Independent System Operator -New England (ISO-NE) needs assessment or solutions study, and it is not included in the ISO-NE Regional System Plan Project List or Asset Condition List. No generation facilities listed on the ISO-NE interconnection queue are associated with the proposed Project.

Cost

The total estimated cost of the Project is approximately \$14.5M. The proposed Project is not associated with Pool Transmission Facilities¹ and therefore, it is not eligible for regional cost allocation. The entire Project cost would be borne by Eversource customers.

¹ ISO-NE defines Pool Transmission Facilities as facilities rated 69-kV or above owned by the participating transmission owners over which ISO-NE has operating authority in accordance with the terms set forth in the Transmission Operating Agreements.

Proposed Project

The Project is proposed to address identified asset condition deficiencies by replacement of equipment that is approaching the end of its useful life and cannot be upgraded or modernized to meet current standards. It includes the replacement of the 13 MVA 69-/13.2-kV transformer and associated equipment with a 40 MVA 115-/69-/13.2-kV transformer and associated equipment. A spare transformer stored near the eastern fence line of the substation would also be removed.

The Project would facilitate conversion of transmission connections to 115-kV to accommodate future electrical load demands and/or connections to New York State.

Eversource would extend the existing substation fence line approximately 15 feet to the north for a 3,000 square foot (0.07-acre) expanded area to provide permanent access inside the northern portion of the substation and facilitate future operation and maintenance activities. Vegetation would be cleared, and the existing fence section removed. The expanded area would be compacted, surfaced/layered with gravel and enclosed by a 7 foot tall, chain-link fence topped with 1 foot of three-strand barbed wire to match the existing substation fence.² The property line to the north is currently 24.6 feet from the existing fence line. It would be approximately 9.6 feet from the expanded fence line.

Project work consists of the following:

- a) Remove two 115-kV motor operated disconnects (MODs), associated ground switches and foundations;
- b) Replace one 16 feet high by 10 feet wide and 13 feet long 69-/13.2-kV, 13 MVA transformer with one 21.3 feet tall by 18.5 feet wide, and 29.5 feet long 115-/69-/13.2-kV, 40 MVA transformer;
- c) Remove the three 16-foot high sound walls located around the transformer and replace the transformer foundation;
- d) Remove three single-phase 13.2-kV voltage regulators, seven 13.2-kV ring bus-isolation switches, two 13.2-kV manual feeder switches, two feeder reclosers, the spare transformer, and equipment from the relay control enclosure;
- e) Install one 115-/69-kV combination unit circuit switcher and one 115-/69-kV MOD, both with associated foundation and steel;
- f) Install three 115-/69-kV three-phase bus support structures and one 13.2-kV three-phase bus support structure;
- g) Install three 115-/69-kV rigid bus connectors from the 690 Line bus to the MOD;
- h) Install one 22-foot high concrete firewall west of the new transformer;³
- i) Install eight 13.2-kV ring bus disconnect switches and two 13.2-kV manual feeder disconnect switches; and
- i) Install two feeder enclosures.

² 2023 NESC Section 11, Rule 110 (A)(1) states, "An installed barrier may be satisfied with any one of the following: (a) Fence fabric, not less than 7 feet in height; (b) a combination of 6 ft or more of fence fabric and...three or more strands of barbed wire to achieve an overall height of the fence of not less than 7 ft; or (c) other types of construction, not less than 7 ft..."

³ This is required to maintain a 42 feet clearance between the relay and control enclosure and the transformer and also ensure compliance with the Institute of Electrical and Electronics Engineers ("IEEE") Guide for Substation Fire Protection (IEEE 979)

Project Construction

Eversource would utilize three existing equipment staging areas on Eversource's parcel prior to construction. These staging/laydown areas were used during the 690 Line and 667 Line rebuild projects and would contain Project equipment, vehicles and office trailers. The primary staging/laydown area is located east of the substation eastern fence line and would be used for temporary office trailers, staging construction materials, fuel storage and equipment refueling, and supplies. The two other staging areas located to the west of the facility would be used for vehicle and equipment parking and temporary material storage.

Construction areas would be isolated by establishing erosion and sedimentation (E&S) controls in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Controls (2002 E&S Controls) and Eversource's April 2022 Best Management Practices Manual for Massachusetts and Connecticut (BMPs). 4

Typical E&S control measures include, but are not limited to, straw blankets, silt fencing, gravel anti-tracking pads, soil and slope protection, water bars, check dams, berms, swales, plunge pools, and sediment basins.

During construction, Eversource would utilize the existing substation access drive that extends east from Indian Mountain Road to the substation access road and then along the southern/eastern substation fence line to the primary staging area and continues to a second access gate on the northeastern corner of the substation compound. Eversource designated the portion of the existing access road extension along the southern/eastern substation fence line a "no parking zone" to preserve the existing vegetative clearance along the southern property boundary.

The proposed expansion area would be leveled and graded with crushed stone to match the existing substation yard. Eversource would remove the existing transformer and related equipment and install a mobile transformer and circuit switcher while the new transformer and related equipment are being installed.

The proposed Project will require about 630 cubic yards of cut and about the same amount of fill.

Decommissioned equipment would be recycled or disposed of in accordance with Eversource BMPs and applicable regulations.

Removal of the existing transformer and delivery of the new transformer would involve a large crane and an oversized vehicle. Eversource would consult with representatives of the Towns and/or the Connecticut Department of Transportation to develop and implement traffic management procedures, as necessary. Project-related traffic would be expected to be temporary and highly localized in the vicinity of the substation access along Indian Mountain Road and at the staging area. Project-related traffic is not expected to significantly affect transportation patterns or levels of service on public roads. Construction warning signs along public roads would be installed near work sites and flaggers or police personnel would be used to direct traffic, if necessary.

Environmental Effects and Mitigation Measures

Construction of the expansion area would require 0.07 acres of shrub vegetation clearing. Vegetation outside the substation compound consists of mostly shrub and open fields with some wooded areas along the north and south property boundaries. Vegetation removal/tree trimming would typically be accomplished using mechanical methods and standard equipment such as brush hogs or other types of mowing equipment, skidders, forwarders, bucket trucks for canopy trimming, log trucks and chippers.

⁴ 2022 Eversource Best Management Practices MA CT

Construction would conform to the 2002 E&S Controls and Eversource's BMPs. Following completion of construction, seeding and mulching or finished surface treatments would be completed to permanently stabilize the areas disturbed by the work outside of the substation fence. Temporary E&S control measures would remain in place until project work is complete and all disturbed areas have been stabilized. Vegetation removal activities would be performed in accordance with Eversource BMPs.

The Project is not located within a Federal Emergency Management Agency-designated 100-year or 500-year flood zone.

The Project is not located within a Department of Energy and Environmental Protection (DEEP)-designated Aquifer Protection Area. The Project would not affect groundwater or surface water resources. The property is not located within a public water supply watershed.

One wetland (Wetland 1) and one intermittent stream occur on the parcel. No vernal pools are located on the substation parcel.

The southern part of Wetland 1 is approximately 5-feet south of the existing access road, 11-feet from the staging area to the west and 40-feet from the staging area to the east. The northern part of Wetland 1 is approximately 10-feet north of the existing access road, 38-feet from the staging area to the southwest and 44-feet from the staging area to the southeast. The intermittent stream connects the northern and southern parts of Wetland 1 and passes under the substation access road via an existing culvert.

The proposed Project would have no direct impact on Wetland 1. Eversource would install temporary E&S controls adjacent to the access road near the wetland to protect these water resources. Eversource would also conduct work in accordance with its BMPs which include provisions for the proper storage, secondary containment, and handling of diesel fuel, motor oil, grease, and other lubricants, to protect subsurface water quality.

The Project would not require a DEEP-issued Stormwater Permit.

The mobile transformer and proposed replacement transformer would be equipped with secondary oil containment systems. The replacement transformer's oil containment pit is designed to accommodate 110% of the total transformer oil volume. The existing transformer, mobile transformer and proposed replacement transformer utilize CrossTrans 206 oil and HyVolt II oil. Neither oil type contains hazardous substances.

The facility site is not located within a DEEP Natural Diversity Database (NDDB) buffer area.

The site is previously disturbed and not expected to impact cultural resources. A Cultural Resources Assessment conducted in January of 2023 determined that there are no previously identified archaeological sites or National Register of Historic Places or State Register of Historic Places, listed historic properties or districts on or within 0.5 miles of the facility site.

There are no recreational or scenic resources, state designated scenic roadways, or "blue-blazed" hiking trails maintained by the Connecticut Forest and Park Association near the facility site.

The Project would not result in a substantial change to the visual character of the substation. The new equipment is similar in appearance to existing substation equipment. The height of the tallest existing equipment within the substation is a 60-foot 4.5-inch terminal structure. The tallest proposed equipment within the substation is a circuit switcher that would be 27 feet 1 inch.

Public Safety

The Project would comply with the current National Electrical Safety Code.

The proposed modifications will be in accordance with the Institute of Electrical and Electronics Engineers ("IEEE") Standard 1264 - IEEE Guide for Animal Deterrents for Electric Power Supply Substations.

There would be no permanent changes to existing substation sounds levels after completion of the Project. The design of the proposed transformer will minimize sound emissions compared to the existing transformer. Transformer noise will comply with DEEP Noise Control Regulations at all property boundaries. Noise levels associated with construction activities is exempt from DEEP Noise Control Regulations. Notwithstanding, any construction-related noise would be short-term and localized in the vicinity of the facility site.

Federal Aviation Administration obstruction evaluation is not required for the replacement transformers or associated equipment, and no marking or lighting would be required.

Electric and magnetic field levels at the boundaries of the substation parcel would not change as a result of the Project.

The proposed modifications would not change the security of the existing substation. The access gates would be locked except during construction and existing substation lighting will remain.

Construction Schedule

Construction is expected to begin in October of 2023, with an in-service date of May 2024. 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. Eversource would seek approval from the Council prior to any required extended or Sunday work hours.

Conclusion

If approved, staff recommends the following condition:

- 1) Approval of any project changes be delegated to Council staff; and
- 2) Identification of staging areas and provisions for erosion and sedimentation (E&S) controls, if necessary, at the staging area locations prior to the commencement of construction.

Ore Hill Pond Ore Hill Pit Pond Salisbury, CT 112 New York Connecticut Northeast, NY Salisbury Substation 41) Indian Lake 361 Sharon, CT Amenia, NY 343 EVERS URCE
ENERGY
Figure 1 - Overview Map
Salisbury Substation Transformer
Replacement Project
Salisbury, CT
Date: April, 2023 INDEX MAP Open Water
Project Area Town
Adjacent Town Substation Major Route CX7 Local Road Municipal Boundary = State Boundary ALL-POINTS

Figure 1: Project Location

Figure 2: Project Overview

