



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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CERTIFIED MAIL RETURN RECEIPT REQUESTED

November 17, 2015

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

RE: **PETITION NO. 1154** – Eversource Energy declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed modifications to the existing Haddam Substation and associated 345-kV and 115-kV transmission lines located at 1384 Saybrook Road, Haddam, Connecticut. Revision Request.

Dear Mr. Morissette:

At a public meeting held on November 12, 2015, the Connecticut Siting Council (Council) considered and approved the proposed request for revision, dated November 4, 2015, with the condition that a consistent fence design be utilized. The proposed modifications include an increase to the spacing between the autotransformer blast walls and autotransformers to provide for adequate cooling; a change in the substation fence configuration; installation of an additional lightning mast; upgrades to existing 345-kV bus work and support structures; installation of an access gate on the south side of the substation; and a shift of the existing access drive to avoid encroachment on an adjacent property.

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 request, dated November 4, 2015.

Enclosed is a copy of the staff report on this petition revision request, dated November 12, 2015.

Very truly yours,

A handwritten signature in black ink that reads "Robert Stein" with the initials "MAB" written to the right.

Robert Stein
Chairman

RS/MP/lm

Enclosure: Staff Report, dated November 12, 2015

c: The Honorable Melissa Schlag, First Selectman, Town of Haddam
Elizabeth Glidden, Town Planner, Town of Haddam
Keith R. Ainsworth, Esq., Evans, Feldman & Ainsworth, LLC



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Petition No. 1154 - Amendment

Eversource

Haddam Substation

Staff Report

November 12, 2015

On April 20, 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 the proposed modifications to the existing Haddam Substation located at 1384 Saybrook Road and associated transmission lines in the Town of Haddam. The project is intended to eliminate identified potential transmission system thermal and voltage criteria violations caused by the loss of the existing Haddam Substation 345-kV to 115-kV autotransformer. Specifically, the modifications to Haddam Substation included but were not limited to the following:

- removal of one 345-kV disconnect switch;
- installation of three new single-phase autotransformers with vibration isolation pads as well as firewalls and an oil containment system;
- installation of three new 345-kV circuit breakers;
- installation of ten new 345-kV disconnect switches;
- installation of two new motor-operated disconnect switches;
- installation of nine new 345-kV coupling capacitor voltage transformers;
- installation of two new 115-kV strain-bus structures and strain bus;
- installation of three new 115-kV potential transformers;
- installation of four 110-foot tall lightning masts;
- installation of two 345-kV terminal structures;
- installation of one 345-kV galvanized three-pole single-circuit structure;
- installation of other miscellaneous equipment such as underground conduits, wave trap, lightning arrestors, mounting and support beams, relay/controls, and cables to accommodate the new equipment, and foundations for the new structures; and
- expand the southeastern section of the substation to the east (encompassing an area of roughly one acre).

On June 11, 2015, the Council approved the Petition No. 1154 project with the condition that Eversource provide a landscape plan to improve aesthetics directly outside of the retaining wall and include the aesthetic/architectural details of the retaining wall in order to further reduce its visual impact. In compliance with such condition, on August 27, 2015, Eversource filed its landscaping plan and retaining wall details.

On November 4, 2015, the Council received a request to amend the petition (Petition Amendment) from Eversource. Specifically, Eversource proposes to increase the spacing between the blast walls and the new autotransformers by 5.25 feet to provide for additional cooling. The increased spacing results in the following changes noted below (and also included in the Petition Amendment):

- The proposed fence line to the northeast of the new transformers has been modified to be on a diagonal in lieu of the right angle alignment originally proposed; and
- An additional lightning protection mast is required.



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Modifications to the existing 345-kV bus work and support structures are also proposed in the Petition Amendment to support the loading requirements for the updated substation configuration and bring them up to current codes and standards.

The Petition Amendment also includes a proposed access gate to be added to the South end of the substation to allow for access to the landscaping along the new retaining wall.

Finally, it was determined that an existing portion of the access road to the substation from Route 154 was found to be encroaching on an abutting property to the south along Route 154. Eversource attempted to negotiate an acquisition of access rights from the abutting property owner, but was unable to reach an agreement. This gravel access road is being relocated approximately 50 feet to the north so that it will be located entirely on Eversource property and Town of Haddam property. The relocation has been closely coordinated with the Town of Haddam and has received approval from the Connecticut Department of Transportation (because of its proximity to State Route 154).

Staff notes that much of the proposed work would be located within the footprint of the substation (as expanded in Petition No. 1154), except for the new diagonal fenced section and the shifted access drive. The incremental visual impact is expected to be minimal. Also, no wetlands or existing wetland buffers would be impacted by these changes.