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September 14, 2022

Melanie Bachman, Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

Re: Petition 1531 – 1200/1300 Line Structure Replacement Project

Dear Ms. Bachman:

This letter provides an original and 15 copies of the response to the requests for information listed below:

Response to CSC-01 Interrogatories dated August 24, 2022
Set 01 – Questions 1-22

Sincerely,

Kathleen M. Shanley

Enclosure

Date Filed: September 14, 2022

Request from: Connecticut Siting Council

Question: 1

Referencing pages 19 and 20 of the Petition, were there any comments from the Town of East Windsor, Town Windsor Locks or abutting property owners? If so, what were their concerns, and how were these concerns addressed?

Response:

There have been no comments or issues raised from abutting property owners. The municipal officials of East Windsor and Windsor Locks have been notified of the Project and have not expressed any issues or concerns.

Date Filed: September 14, 2022

Request from: Connecticut Siting Council

Question: 2

Would notice to the Federal Aviation Administration be required for any of the proposed replacement structures? If yes, would marking and/or lighting be required for any of the proposed replacement structures?

Response:

Yes, notice to the Federal Aviation Administration (FAA) is required for the proposed structures and determinations have been received for all structures. The FAA determined that marking and/or lighting are not required for any of the proposed structures.

Date Filed: September 14, 2022

Request from: Connecticut Siting Council

Question: 3

What is the age of the structures and conductors on each line?

Response:

Structure 6207 (the only existing structure that will be replaced) is approximately 3.5 years old. Existing companion lattice structures 6208 and 6209 (filed as part of Sub-petition 1293-WLEW) are approximately 60 years old and will be replaced at the same time as this proposed Project.

The conductors on the 1200 line and 1300 line are approximately 60 years old.

Date Filed: September 14, 2022

Request from: Connecticut Siting Council

Question: 4

How does the proposed project relate to the asset condition maintenance activities addressed in Sub-petition 1293-WLEW and Sup-petition 1293-EEWSW?

Response:

Sub-petition 1293-WLEW proposed replacing existing lattice tower structures 6208 and 6209 due to an asset condition need. The proposed Project requires new structures 6208, 6208A, 6209 and 6209A to support the proposed 1590-kcmil ACSS reconductoring.

Pursuant to Sub-petition 1293-EEWSW (submitted in 2018), Eversource replaced Structure 6207, also due to asset condition needs. Structure 6207 needs to be replaced now as part of this Project due to the proposed configuration change and to support the proposed 1590-kcmil ACSS conductor. Proposed structures 6207 and 6207A are designed as deadend structures to support the full longitudinal tension loads from the proposed 1590-kcmil conductor on one side of the structure and the existing conductor on the other side of the structure. Except for structure 6207, the other 32 structures replaced in Sub-petition 1293-EEWSW will remain unaffected by this Project.

Date Filed: September 14, 2022

Request from: Connecticut Siting Council

Question: 5

If Structure No. 6207 was replaced in 2019 (Sub-petition 1293-EEWSW), why is it being replaced again? Could the existing steel H-frame Structure No. 6207 be reused or repurposed?

Response:

Structure 6207 needs to be replaced as part of this Project due to the proposed configuration change and to support the proposed 1590 kcmil ACSS conductor. The existing H-frame Structure 6207 is not able to support the proposed conductor in its current configuration. Since this structure is not a deadend structure it cannot be reused or repurposed in its current location, therefore needs to be replaced with a more rigid deadend structure.

"Deadend" structures are designed to support the full longitudinal tension loads from the wires. To not affect the sag and tension characteristics of the wires, the deadend structures need to be sufficiently rigid and not flexible. The load transfer is most effective when wires are supported by the rigid pole column itself, transferring the loads directly through the pole column, down to the foundation, and into the ground. Typically, deadend structures are located at right-of-way angle points and at reasonable distances to facilitate construction of the line. Structure 6207 & 6207A are required to be deadend structures to act as the anchor point for the proposed reconductor wire loads and the existing wires towards Structure 6206. The proposed 1590 kcmil ACSS conductor will terminate on Structure 6207 & 6207A and transition back to the existing ACSR conductor type.

Date Filed: September 14, 2022

Request from: Connecticut Siting Council

Question: 6

What is the extent and status of the expanded aerial rights from Amtrak to accommodate the alignment of the conductors over the railroad?

Response:

The license agreement with Amtrak is for a revised 150-foot license area over their tracks. An application for this revised license agreement was submitted to Amtrak on August 30, 2021 with additional information submitted on May 4, 2022 per request from Amtrak. Eversource has been informed that the license agreement is pending review and approval from one remaining department at Amtrak. Eversource continues to request weekly updates from Amtrak as to the status of the license agreement.

Date Filed: September 14, 2022

Request from: Connecticut Siting Council

Question: 7

Is the proposed project identified in any ISO-New England, Inc. (ISO-NE) needs and solutions analyses? Is the proposed project on the ISO-NE Regional System Plan (RSP), Project List and/or Asset Condition List?

Response:

No, the proposed Project is not identified in an ISO-NE needs and solution analysis and is not included in the ISO-NE Regional System Plan Project List or the Asset Condition List.

Date Filed: September 14, 2022

Request from: Connecticut Siting Council

Question: 8

Are any generation facilities listed on the ISO-NE interconnection queue associated with the proposed project? If so, please identify the generation facilities and the queue position.

Response:

No, there are no generation facilities listed on the ISO-NE interconnection queue associated with the proposed project.

Date Filed: September 14, 2022

Request from: Connecticut Siting Council

Question: 9

What is the total estimated cost of the project? Of this total, what costs would be regionalized, and what costs would be localized? Estimate the percentages of the total cost that would be borne by Eversource ratepayers, Connecticut ratepayers, and the remainder of New England (excluding Connecticut) ratepayers, as applicable.

Response:

The cost of this Project is integrated within a greater scope of work which encompasses other construction activities. The estimated cost of construction for the scope of work described in the Petition is approximately $1,117,000. This cost does not include any incremental charges for project management, engineering, permitting, etc., which is accounted for in the cost of the greater overall project.

The Project does not include Pool Transmission Facilities, and thus the entire cost will be allocated to customers of The Connecticut Light and Power Company d/b/a Eversource Energy.

Date Filed: September 14, 2022

Request from: Connecticut Siting Council

Question: 10

How would the project comply with any applicable NESC standards?

Response:

This Project is designed based on Eversource's transmission line standards, which meet or exceed National Electric Safety Code (NESC), and thus would be in compliance with the 2017 Edition of the NESC.

Date Filed: September 14, 2022

Request from: Connecticut Siting Council

Question: 11

Identify all other permits required to perform the proposed work.

Response:

Please see the list of permits below required for the proposed work:

Connecticut Department of Energy and Environmental Protection
Self-Verification Notification ("SV") under Connecticut General Permit 21
Natural Diversity Data Base Determination ("NDDB")

United States Army Corps of Engineers
SV under the Connecticut General Permit 21

The Public Utilities Regulatory Authority
Approval for Method and Manner of Construction

Connecticut Department of Transportation
Encroachment Permits for Routes 510, 159 and I-91

AMTRAK
Temporary Permit to Enter

Date Filed: September 14, 2022

Request from: Connecticut Siting Council

Question: 12

Referencing page 3 of the Petition, why are larger capacity conductors proposed for each line?

Response:

Larger capacity conductors are proposed for the 1200 and 1300 lines to proactively design for future capacity needs. Utilizing the largest typical Eversource 115-kV standard conductor size (1590-kcmil ACSS) for this Project reduces the risk of a costly reconductor project in the future.

Date Filed: September 14, 2022

Request from: Connecticut Siting Council

Question: 13

Referencing Attachment B of the Petition, Right-of-way Cross Section Drawing, why is Structure No. 6207 going from a horizontal to Delta configuration?

Response:

Due to the asset condition replacements of Structures 6208 and 6209 increased height to meet current clearance standards, Structure 6207 needs to be replaced with deadend structures rather than the existing tangent structure. Further, the proposed delta configuration for replacement structures 6207 and 6207A allows Eversource to roll the phases of the conductors from the existing vertical configuration at Structures 6208 and 6208A to the horizontal configuration at existing Structure 6206. The delta configuration at proposed structures 6207 and 6207A also provides a narrower structure footprint when compared to horizontal construction and is necessary to meet current clearance standards at the edge of the right of way, otherwise the right of way would need to be expanded to meet the required clearances.

Date Filed: September 14, 2022

Request from: Connecticut Siting Council

Question: 14

Referencing Attachment B of the Petition, Right-of-way Cross Section Drawing, with the Delta configuration, each circuit would require two poles: one pole for two of the phase conductors and one pole for one of the phase conductors. Would these poles be approximately 61 feet tall and 76 feet tall, respectively?

Response:

Yes.

Date Filed: September 14, 2022

Request from: Connecticut Siting Council

Question: 15

Referencing page 1 of the Petition, explain why the proposed replacement structures have height increases to accommodate the modified alignment with Structure Nos. 6208 and 6208A? Are the proposed replacement structure height increases the absolute minimum to meet clearance requirements?

Response:

The proposed replacement Structures 6207 and 6207A will have increased heights due to the modified alignment and the phase configuration change from horizontal to delta. In the proposed delta configuration, two of the phases are located vertically above each other. The phases need to be spaced appropriately to accommodate phase to phase clearance, which drives the need for additional structure height.

No, the proposed structure heights are not at the absolute minimum to meet clearance requirements. As with any Eversource design, there is an additional safety buffer included. When determining design structure heights, the conductor clearances in both the ahead span and back span need to be considered. It is not uncommon to have clearances in one span drive the structure height in the ahead and/or back spans, especially in hilly terrain. Eversource evaluated the design to minimize structure height increases and meet clearance requirements and a safety buffer in accordance with Eversource standards.

Date Filed: September 14, 2022

Request from: Connecticut Siting Council

Question: 16

Provide the staging/laydown area location(s) and their respective areas in acres. Would appropriate erosion and sedimentation controls would be installed and maintained around the staging/laydown area(s) until completion of construction in accordance with Project permitting and Eversource Best Management Practices (BMPs)?

Response:

No staging/laydown areas will be needed for this Project. Materials needed for this Project will be delivered directly to the structure work site. All required erosion and sedimentation controls will be installed and maintained for the duration of the Project in accordance with Eversource BMP's.

Date Filed: September 14, 2022

Request from: Connecticut Siting Council

Question: 17

Has Eversource evaluated the project area for existing invasive species consistent with Section 3.10.4.1 of the Eversource April 2022 BMPs that are posted on its website? If invasive species exist, how would Eversource control the spread of invasive species for this Project?

Response:

Yes, Eversource has evaluated the Project area for existing invasive species consistent with Section 3.10.4.1 of the Eversource April 2022 BMPs and has identified invasive species within both upland and wetland work areas. Eversource will follow the Decontamination Procedures and Methods of Cleaning described in Section 3.10 of the Eversource April 2022 BMP Manual, including the following, to control the potential spread of invasive species:

- Clean vehicles, equipment, materials (including matting), gear, footwear or clothing of all visible soil and plant material on site in the infested area, or as near as practical to the infested area, prior to leaving the project site.
- Cleaning may be accomplished using a brush, broom or hand tools, by shaking or dropping mats in a controlled manner to dislodge attached soil and debris, and compressed air.

Date Filed: September 14, 2022

Request from: Connecticut Siting Council

Question: 18

What is the total disturbance area for the proposed project?

Response:

The Project work would result in approximately 4,460 square feet of disturbed area associated with the construction of the new gravel access road and the new replacement structures. Temporary construction matting will be used for the portion of the access road in the wetlands and for the work pad.

Date Filed: September 14, 2022

Request from: Connecticut Siting Council

Question: 19

Is a DEEP General Permit required for this project? If so, describe site construction inspections that are required for this project under the DEEP General Permit.

Response:

No, a DEEP General Permit is not required for the Project as ground disturbance is less than 1 acre.

Date Filed: September 14, 2022

Request from: Connecticut Siting Council

Question: 20

Are CT DEEP and/or the US Army Corps of Engineers permits required for the temporary wetland impacts associated with the access through Wetland 3? If yes, what is the status of such permits?

Response:

Yes, CT DEEP and US Army Corp of Engineers (USACE) permits are required for the temporary wetland impacts associated with the access through Wetland 3. Eversource will submit a Self-Verification to CT DEEP and USACE prior to construction start in accordance with the Department of the Army Regional General Permits for the State of Connecticut.

Date Filed: September 14, 2022

Request from: Connecticut Siting Council

Question: 21

In addition to Eversource's BMPs, what other specific environmental mitigation measures and/or monitoring would be conducted for construction within environmentally sensitive areas?

Response:

Besides Eversource's BMPs, we will conduct weekly environmental inspections to ensure compliance with BMPs and any permit conditions.

Date Filed: September 14, 2022

Request from: Connecticut Siting Council

Question: 22

Could restoration of disturbed areas incorporate habitat for the benefit of pollinator species, such as bees, moths and butterflies?

Response:

Restoration is limited to removal of the temporary matting for the work pads, as the gravel access roads are intended to be permanent.

Prompt removal of the temporary matting will allow the existing underlying vegetation to quickly revegetate. Our ongoing maintenance of this low-growing vegetation naturally creates a diverse early successional habitat that is significantly important to a variety of wildlife and plant species, including pollinators.