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

Re: Docket No. Petition 1405 - Horton Cove Circuit Separation Project

Dear Ms. Bachman:

This letter provides the response to requests for the information listed below.

Response to CSC-01 Interrogatories dated 06/02/2020 CSC-001, 002, 003, 004, 005, 006, 007, 008, 009, 010

Very truly yours,

Kathleen Shanley Manager Transmission, Siting As Agent for CL&P dba EversourceEnergy

cc: Service List

Per the Council's instructions in response to COVID-19, Eversource is submitting this filing electronically and will be providing one hard copy for the Council's records.

Data Request CSC-01
Dated: 06/02/2020
Q-CSC-001
Page 1 of 1

Witness: NO WITNESS

Request from: Connecticut Siting Council

Question:

Referencing page 1 of the Petition, The Connecticut Light and Power Company d/b/a Eversource Energy (Eversource) notes that, "[T]his location is highly susceptible to outages associated with lightning strikes and interruptions resulting from other factors affecting the transmission system in the area." Please explain what is meant by "interruptions resulting from other factors."

Response:

The other factors include a long span over Horton Cove with tall structures and four circuits on the same structure. Interruptions have occurred from failed insulators and shield wires in addition to lightning strikes on the circuits in this vicinity.

Data Request CSC-01 Dated: 06/02/2020 Q-CSC-002 Page 1 of 1

Witness: NO WITNESS

Request from: Connecticut Siting Council

Question:

Please explain why galvanized steel is proposed for the replacement structures rather than weathering steel.

Response:

Galvanized steel poles are typically recommended to replace lattice structures for their similar color. The galvanized finish was also selected to match existing galvanized steel poles within the ROW and at the Thames River crossing.

Data Request CSC-01
Dated: 06/02/2020
Q-CSC-003
Page 1 of 1

Witness: NO WITNESS

Request from: Connecticut Siting Council

Question:

Please explain why existing quad-circuit Structure No. 7008 would be replaced with two double-circuit structures rather than four single-circuit structures (e.g. similar to the Structure No. 7009 replacement).

Response:

Replacing Structure 7008 with two double-circuit monopoles is proposed because there is not currently justification to separate these lines on four single-circuit structures, and two double-circuit structures is the best cost alternative. The existing quad-circuit lattice tower is located on top of a cliff with steep slopes around the structure. Placing four foundations in this work area would include a significant amount of additional site work, drilling, foundations, material, and installation costs. Moreover, beyond the scope of this project, these circuits presently exist in the same double-circuit pairs along these transmission lines. Therefore, the difference in system reliability by installing the lines on single-circuit structures at this location would be negligible.

The main reason the lines are proposed to be installed on single-circuit structures at the Structure No. 7009 location is to support the variety of line angle changes at the Montville Junction, which is just north of Horton Cove.

Data Request CSC-01 Dated: 06/02/2020 Q-CSC-004 Page 1 of 1

Witness: NO WITNESS

Request from: Connecticut Siting Council

Question:

Please explain why the double-circuit structures supporting the #1090 Line and the #1000 Line are not being replaced with double-circuit steel monopole structures.

Response:

There is no asset condition driver or line performance issue that would require or warrant rebuilding the 1090 Line and 1000 Line at this time.

Data Request CSC-01
Dated: 06/02/2020
Q-CSC-005
Page 1 of 1

Witness: NO WITNESS

Request from: Connecticut Siting Council

Question:

Referencing page 6 of the Petition, Eversource notes, "Height increases would be approximately 50 feet for the new replacement Structure 7008A and approximately 65 feet for the replacement Structure 7008B." Referencing Attachment C – List of Structure Replacements, existing Structure No. 7008 is 120 feet tall; proposed Structure No. 7008A is 185 feet tall (or 65 feet taller than existing); and proposed Structure No. 7008B is 170 feet tall (or 50 feet taller than existing). Please clarify the correct proposed heights for Structure Nos. 7008A and 7008B.

Response:

The height of Structure No. 7008A will be 185 feet tall and the structure height for Structure No. 7008B will be 170 feet tall.

Data Request CSC-01
Dated: 06/02/2020
Q-CSC-006
Page 1 of 1

Witness: NO WITNESS

Request from: Connecticut Siting Council

Question:

Referencing Attachment C – List of Structure Replacements, the proposed Structure Nos. 7009C and 7009D are identified as 160 feet tall. Drawing XS-3 depicts both structures as 165 feet tall. Which is correct?

Response:

Structures 7009C and 7009D will be 160 feet tall.

Data Request CSC-01 Dated: 06/02/2020 Q-CSC-007 Page 1 of 1

Witness: NO WITNESS

Request from: Connecticut Siting Council

Question:

For the proposed replacement structures that would support the #100 Line at 69-kV, would the structures/arms/insulators be pre-designed for 115-kV?

Response:

Yes, the proposed 69-kV 100 Line will be designed to 115-kV standards.



Department of Economic and Community Development

State Historic Preservation Office

April 7, 2020

Mr. David R. George Heritage Consultants PO Box 310249 Newington, CT 06131

Subject: Phase IB Cultural Resources Reconnaissance Survey

Eversource Energy Horton Cove Circuit Separation Project

Montville, Connecticut

ENV-20-0631

Dear Mr. George:

The State Historic Preservation Office (SHPO) has reviewed the Cultural Resource Reconnaissance Survey prepared by Heritage Consultants, LLC (Heritage), dated February 2020. The proposed activities are under the jurisdiction of the Connecticut Siting Council and are subject to review by this office pursuant to the Connecticut Environmental Policy Act (CEPA).

The original proposed work plan included replacement of 19 structures, the removal of 10 structures, the examination of 6 existing structures, construction of 6 access roads, and construction of 4 pull pads within the Eversource Energy Horton Cove Circuit, located in Montville, Connecticut.

No previous archaeological sites were identified within 500 feet of project items, nor were any properties listed or formally determined to be eligible for listing on either the National Register of Historic Places or the State Register of Historic Places. Two cemeteries, Saint Patrick Cemetery and Gay Cemetery, are located within 500 feet of several project items: Structure Replacements 7007A, 7007B, 7007C, 7007D, 7008A, 7008B; Structures to be Removed 7007A, 7007B, 7008; Access Roads ALT-AR-7007, ALT-AR-7008; and Pull Pad PP-7007A; however, both cemeteries appear to be a sufficient distance from project items so as not to be impacted.

Following the Phase IA, the project was reduced in scope, and out of 19 project items originally determined to retain moderate to high potential for impacting archaeological deposits, only 13 remain within the revised project scope: Structures 7007A, 7007B, 6306B, 6306A, 7008A, 7008B, 7011A, 7011B, and 8345, Access Road 7007B, Alternative Access Roads ALT-AR-7008E and ALT-AR-7008W, and Pull Pad PP-6310. Phase IB of the reconnaissance survey consisted of subsurface testing of these area. A total of 83 of 103 planned shovel tests were excavated successfully throughout the proposed work area; 20 unexcavated shovel tests fell within areas containing steep slopes, push piles, or previous disturbance.

Three cultural resource loci were identified as a result of the Phase IB: Locus 7007A-01, located within the work area of proposed Structures 7007B, 7007A, 6306B, and 6306A, Locus 7008B-01, located within the work area of proposed Structures 7008A and 7008B, and Locus 7011B-01, located within the work area of proposed Structures 7011A, 7011B, and 8345.



Department of Economic and Community Development

State Historic Preservation Office

Locus 7007A-01 yielded two prehistoric lithic artifacts: one chert secondary thinning flake and one quartz secondary thinning flake, both recovered from the disturbed A-Horizon. Modern refuse was also observed. No other cultural materials or features were observed, and it was determined that Locus 7007A-01 does not possess research potential and/or the qualities of significance as defined by the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]), and no additional testing is warranted.0

Locus 7008B-01 yielded eight prehistoric lithic artifacts including 2 quartzite secondary thinning flakes, 4 argillite secondary thinning flakes, 1 chert secondary thinning flake, and a single quartz narrow-stemmed projectile point base, in addition to a potential cultural feature containing charcoal and shell fragments. As such, Locus 7008B-01 may retain research potential and is potentially eligible for listing on the National Register.

Locus 7011B-01 yielded two prehistoric lithic artifacts that consisted of 1 quartzite secondary thinning flake and a single chert projectile point midsection, which were recovered from the disturbed plowzone. As the artifacts are small in number and not temporally diagnostic, Locus 7011B-01 does not appear to retain research potential and is therefore not eligible for listing on the National Register. This office concurs that no additional testing of Locus 7011B-01 is recommended.

In response to the results of the survey, an avoidance and construction management plan has been developed by the project sponsor to avoid disturbing Locus 7008B-01. Timber matting is proposed to be used in the work area containing proposed Structures 7008A and 7008B, and the soil will not be graded during construction to protect any intact prehistoric deposits that may be located there. SHPO further suggests the inclusion of the location within Eversource's permanent mapping database, so as to effectively manage future site work. If the use of protective timber matting is not feasible, or if any portion of Locus 7008B-01 is scheduled for construction related impacts, Phase II National Register of Historic Places testing is recommended prior to construction and this office should be contacted for additional consultation. With these precautionary measures taken into consideration, the proposed replacement structures will have no adverse effects to cultural resources.

This office appreciates the opportunity to review and comment upon this project. These comments are provided in accordance with the Connecticut Environmental Policy Act. For additional information, please contact Marena Wisniewski, Environmental Reviewer, at (860) 500-2357 or marena.wisniewski@ct.gov.

Sincerely,

Mary B Dunna

Deputy State Historic Preservation Officer

Data Request CSC-01 Dated: 06/02/2020 Q-CSC-008 Page 1 of 1

Witness: NO WITNESS

Request from: Connecticut Siting Council

Question:

Referencing page 10 of the Petition, Eversource notes, "The results of the Phase 1B survey, and Eversource's proposed protection strategy were provided to the State Historic Preservation Office (SHPO) and the Tribal Historic Preservation Offices (THPO)..." Did Eversource receive a response from SHPO and/or the THPOs? Explain.

Response:

On April 7, 2020, Eversource received a letter of concurrence from Mary B. Dunne, Deputy State Historic Preservation (see attachment). To date, Eversource has not received a response from the THPOs.

Data Request CSC-01 Dated: 06/02/2020 Q-CSC-009 Page 1 of 1

Witness: NO WITNESS

Request from: Connecticut Siting Council

Question:

Referencing page 8 of the Petition, Tree and Vegetation Removal, would all tree/vegetation removal be located within upland areas? If no, explain.

Response:

Yes, all tree/vegetation removal would be located within upland areas.



Horton Cove Photographic Documentation





Str. # 8342: Split pole tops, cracks.





Str. # 8343: Split pole tops, wood pecker damage, cracks, burnt at base.





Str. #8344: Wood pecker damage, burnt at base.



Str. #8345: Split pole tops.



Str# 7011 - Steel Corrosion

1

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PHOTO LOCATION ORIENTATION

HORTON COVE RIGHT-OF-WAY CROSS-SECTION XS-1 MONTVILLE, CT



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PHOTO LOCATION ORIENTATION

HORTON COVE RIGHT-OF-WAY CROSS-SECTION XS-1 MONTVILLE, CT

1



NORTH

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PHOTO LOCATION ORIENTATION

HORTON COVE RIGHT-OF-WAY CROSS-SECTION XS-2 MONTVILLE, CT



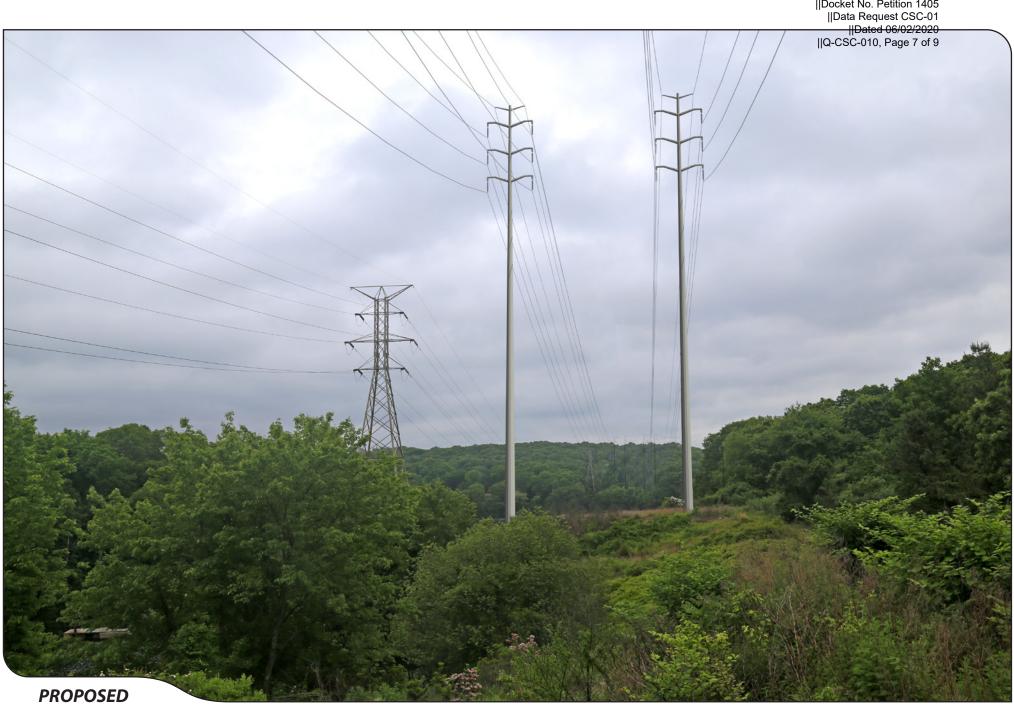


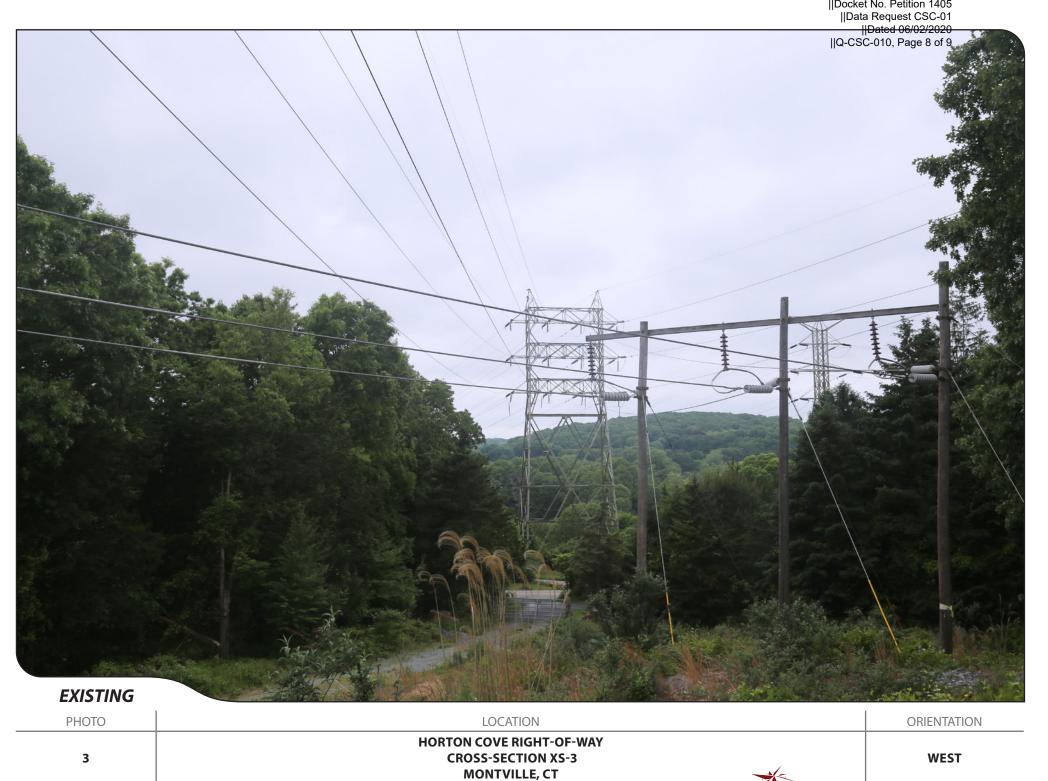
PHOTO LOCATION ORIENTATION

> **HORTON COVE RIGHT-OF-WAY CROSS-SECTION XS-2 MONTVILLE, CT**

2



NORTHEAST



TECHNOLOGY CORPORATION EVERS URCE



HORTON COVE RIGHT-OF-WAY
CROSS-SECTION XS-3
MONTVILLE, CT

WEST



Data Request CSC-01
Dated: 06/02/2020
Q-CSC-010
Page 1 of 1

Witness: NO WITNESS

Request from: Connecticut Siting Council

Question:

For Drawings XS-1, XS-2 and XS-3, please provide photographic documentation of the existing structures to be removed. Also provide photo-simulations to depict the proposed structures identified on Drawings XS-1, XS-2 and XS-3.

Response:

Attached are the photographic documentation of the existing structures and the photo simulations of the proposed structures identified on Drawing XS-1, XS-2, and XS-3.