

April 1, 2016

Mr. Robert Stein  
Connecticut Siting Council  
10 Franklin Square  
New Britain, CT 06051

Re: Petition No. Petition 1217 - Bloomfield to Windsor Reliability Project

Dear Mr. Stein:

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

Response to CSC-01 Interrogatories dated 03/24/2016

CSC-003, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 017, 019

Very truly yours,

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

cc: Service List

**CL&P dba Eversource Energy**  
**Petition No. Petition 1217**

**Data Request CSC-01**  
**Dated: 03/24/2016**  
**Q-CSC-003**  
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**Witness:           Witness Panel**  
**Request from:   Connecticut Siting Council**

**Question:**

Would the proposed increase in replacement structure height and associated conductors comport with North American Electric Reliability Corporation reliability criteria?

**Response:**

Yes.

**Witness:           Witness Panel  
Request from:   Connecticut Siting Council**

**Question:**

Would the proposed mitigation and best management practices be consistent with Calhoun and Klemens (2002) Best Development Practices for the existing vernal pools in the vicinity of the proposed project? Could construction be performed outside of the active breeding season for vernal pool species?

**Response:**

The proposed mitigation and Eversource best management practices are consistent with Calhoun and Klemens (2002) Best Development Practices (BDPs) to the extent practicable. The proposed tree clearing will result in less than 1% conversion of currently forested areas of ROW within the Project's vernal pool envelopes and critical terrestrial habitat. No new permeant roadways or other permanent facilities, beyond new utility structures and the associated pads noted above, are proposed within vernal pool envelopes or critical terrestrial habitat.

Construction for the majority of civil work is planned to begin after the active vernal pool breeding season in late summer or early fall. Tree clearing and vegetation removal, access road improvements and construction pads will be completed outside of the active breeding season. Temporary roads and pads will be used in wetland areas, as depicted on the project plans. However, due to scheduling and available outages approved by ISO-NE final construction of the transmission structures, electrical engineering contracting construction and restoration will be completed in the summer of 2017. To prevent trapping and/or mortality to vernal pool dependent wildlife (indicator and facultative wildlife) during the active breeding season and terrestrial non-breeding seasons, Eversource will utilize exclusionary fencing around pads or work areas, install syncopated silt fencing and mat bridging and perform work area sweeps. The BDPs indicate minimizing conversion to developed habitat within the vernal pool envelope (0-100 feet from vernal pool) and within the critical terrestrial habitat (100-750 feet from the vernal pool) to the greatest extent practicable.

**CL&P dba Eversource Energy**  
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**Data Request CSC-01**  
**Dated: 03/24/2016**  
**Q-CSC-006**  
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**Witness:           Witness Panel**  
**Request from:   Connecticut Siting Council**

**Question:**

What color are the existing painted lattice structures that the proposed galvanized steel structures are intended to match?

**Response:**

The color of the existing double-circuit lattice tower is green-gray.

**CL&P dba Eversource Energy**  
**Petition No. Petition 1217**

**Data Request CSC-01**  
**Dated: 03/24/2016**  
**Q-CSC-007**  
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**Witness:           Witness Panel**  
**Request from:   Connecticut Siting Council**

**Question:**

How far (distance and direction) is the nearest residence from the tallest proposed structure – 3636-1?

**Response:**

There is no structure 3636-1. There is a structure 3136-1 and the closest residence is 868 feet away east of the structure.

**CL&P dba Eversource Energy**  
**Petition No. Petition 1217**

**Data Request CSC-01**  
**Dated: 03/24/2016**  
**Q-CSC-008**  
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**Witness:           Witness Panel**  
**Request from:   Connecticut Siting Council**

**Question:**  
Is structure 3-107\_1 or 3-109\_1 located in wetlands?

**Response:**  
Structures 3-107\_1 and 3-109\_1 are not located in wetlands.

**CL&P dba Eversource Energy**  
**Petition No. Petition 1217**

**Data Request CSC-01**  
**Dated: 03/24/2016**  
**Q-CSC-009**  
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**Witness:           Witness Panel**  
**Request from:   Connecticut Siting Council**

**Question:**

How far (distance and direction) is the nearest residence from the tallest proposed weathering steel single-circuit monopole structure of 105 feet above ground level? What is the structure number for this proposed structure?

**Response:**

The tallest proposed weathered structure is 3-110\_1 and the closest residence is 680 feet away west of the structure.

**CL&P dba Eversource Energy**  
**Petition No. Petition 1217**

**Data Request CSC-01**  
**Dated: 03/24/2016**  
**Q-CSC-010**  
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**Witness:           Witness Panel**  
**Request from:   Connecticut Siting Council**

**Question:**

With respect to the conductors, are “45/7” and “54/19” the ratios of aluminum strands to steel strands in a given conductor?

**Response:**

Yes. On 45/7 stranding, there is 45 strands of aluminum and 7 strands of steel. On 54/19 stranding there is 54 strands of aluminum and 19 of steel.

**CL&P dba Eversource Energy**  
**Petition No. Petition 1217**

**Data Request CSC-01**  
**Dated: 03/24/2016**  
**Q-CSC-011**  
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**Witness:           Witness Panel**  
**Request from: Connecticut Siting Council**

**Question:**

Would the four proposed three-pole structures also be weathering steel?

**Response:**

The four proposed three-pole structures at Bloomfield Junction will be weathering steel.

**CL&P dba Eversource Energy**  
**Petition No. Petition 1217**

**Data Request CSC-01**  
**Dated: 03/24/2016**  
**Q-CSC-012**  
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**Witness:           Witness Panel**  
**Request from:   Connecticut Siting Council**

**Question:**

Is proposed structure 3133-1 located within either the 100-year or 500-year flood zones?

**Response:**

Structure 3133\_1 is located in the 100-year and 500-year flood zones.

**CL&P dba Eversource Energy**  
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**Data Request CSC-01**  
**Dated: 03/24/2016**  
**Q-CSC-013**  
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**Witness:           Witness Panel**  
**Request from:   Connecticut Siting Council**

**Question:**

Which is the tallest proposed piece of equipment for Rood Avenue Substation and its height relative to existing similar equipment?

**Response:**

A breaker disconnect switch, section of buswork and associated bus supports will be installed at 28'-6". This is 38' below the lightning masts on the existing terminal structures within the substation.

**CL&P dba Eversource Energy**  
**Petition No. Petition 1217**

**Data Request CSC-01**  
**Dated: 03/24/2016**  
**Q-CSC-014**  
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**Witness:           Witness Panel**  
**Request from:   Connecticut Siting Council**

**Question:**

What is the existing mesh size for the [Rood Avenue] substation chain link fence (e.g. two inch)? What is the proposed mesh size for the substation expansion area?

**Response:**

The existing chain link fence is 1¼" mesh size. The proposed chain link fence for the yard expansion will be 1¼" mesh size.

**CL&P dba Eversource Energy**  
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**Data Request CSC-01**  
**Dated: 03/24/2016**  
**Q-CSC-015**  
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**Witness:           Witness Panel**  
**Request from:   Connecticut Siting Council**

**Question:**

How would the proposed [Rood Avenue] substation modification/expansion affect existing magnetic field levels at the nearest residence?

**Response:**

The substation expansion at the Rood Substation to the west of the existing yard will still be more than 200 feet from the nearest residence. The nearest homes are on the opposite side of the transmission corridor, and the magnetic fields at those homes would be governed by the existing transmission lines in the corridor. The modifications of the transmission line will happen between the existing transmission corridor and the substation. Therefore changes to the magnetic fields will be negligible at these homes.

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**Data Request CSC-01**  
**Dated: 03/24/2016**  
**Q-CSC-017**  
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**Witness:           Witness Panel**  
**Request from:   Connecticut Siting Council**

**Question:**

How would the proposed [Bloomfield] substation modifications affect magnetic field levels at the nearest residence to the existing substation?

**Response:**

Changes to the magnetic fields in the vicinity of the Bloomfield Substation will be the result of the circuit separation of the 1777 and 1779 circuits. Calculations for the changes to the magnetic fields for this separation are included on page 1 of Attachment F to the Petition. Changes to the equipment within the substation would have a negligible effect on the magnetic fields beyond the substation property.

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**Data Request CSC-01**  
**Dated: 03/24/2016**  
**Q-CSC-019**  
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**Witness:           Witness Panel**  
**Request from:   Connecticut Siting Council**

**Question:**

How would the proposed [North Bloomfield] substation modifications affect magnetic field levels at the nearest residence to the existing substation?

**Response:**

Changes to the magnetic fields in the vicinity of the North Bloomfield Substation will be the result of the circuit separation of the 1777 and 1751 circuits. Calculations for the changes to the magnetic fields for this separation are included on page 2 of Attachment F to the Petition. Changes to the equipment within the substation would have a negligible effect on the magnetic fields beyond the substation property.