



56 Prospect Street  
Hartford, CT 06103

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June 14, 2022

Ms. Emily Laine  
Chair, NEPOOL Reliability Committee  
ISO New England, Inc.  
One Sullivan Road  
Holyoke, MA 01040-2841

Dear Ms. Laine,

In accordance with Schedule 12C of the ISO New England ("ISO-NE") Transmission, Markets & Services Tariff ("ISO-NE Tariff"), Eversource Energy Service Company ("Eversource") hereby submits the attached Transmission Cost Allocation ("TCA") application(s) reporting cost support information associated with the construction, retirement, or modification to facilities rated 69 kV and above that qualify as regional Pool Transmission Facilities ("PTF") for the following Eversource project:

**ES-22-TCA-18      P145 115-kV Line Rebuild (Merrimack substation – Farmwood substation)**

Eversource is requesting that ISO-NE submit this TCA to the NEPOOL Reliability Committee for review, in accordance with ISO-NE Planning Procedure No. 4 ("PP-4").

If you have any questions, I can be reached via the information listed above.

Sincerely,

*Steven J. Allen*

Steven J. Allen

cc: M. Drzewianowski

**Attachment B**  
**TCA Application Form**

1. Applicant:	Application #:	ES-22-TCA-18	Date:	Jun-22
Contact Name:	Steven J. Allen			
Company Name:	Eversource Energy Service Company			
Address 1:	56 Prospect Street			
Address 2:				
City, State, Zip:	Hartford, CT 06103	RSP Project ID # or		
Contact Phone #:	860-728-4536	Asset Condition ID #	324	
Email Address:	<a href="mailto:steven.allen@eversource.com">steven.allen@eversource.com</a>	Is Project related to CIP-14		
	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		

2. Project Description: In Service Date: Mar-24

a. **High Level Project Details:**

**Project Name** ( If no formal name, then Substation Upgrade, Line Upgrade, etc. are acceptable):

**P145 115-kV Line Rebuild (Merrimack substation - Farmwood substation)**

**Project Location** (State only):

**State:**

**NH**

**County:**

**Merrimack**

b. Summary of PTF-related work for Project:

This project will rebuild the P145 115-kV Line (Merrimack substation to Farmwood substation). This project will replace approximately 12.5 miles of existing 795 ACSR conductor with 1272 ACSS conductor due to age and deterioration and replace two existing obsolete 3#6 copperweld overhead shield wires with two new 48 fiber 0.646" Optical Ground Wire (OPGW) for increased reliability and communication within the Eversource system. This project will also replace a total of 154 structures with steel structures. The structures are being replaced due to age, deterioration or structural overloads.

Final project cost details will be known following closeout of all project work orders.

c. Summary of Non-PTF-related work for Project:

3. Was a transmission Proposed Plan Application required for this work?      Yes  No       PPA Number: TBD

4. Has a transmission Proposed Plan Application been approved?      Yes  No  N/A       Approval Date: TBD

If yes, attach a copy and reference Proposed Plan Application # and approval date. (Please check only one)

**Need For Project:**

5. Need Based On (Check all Categories that apply):

- a. Reliability
- b. Economic
- c. Service to new load
- d. New generator interconnection

Generator Proposed Plan Application Number \_\_\_\_\_  
Generator Proposed Plan Application Date \_\_\_\_\_  
(Attach copy of cover letter & Generator Proposed Plan Application)

- e. Public Policy Transmission Upgrade (PPTU)
- f. Market Efficiency Transmission Upgrade (METU)
- g. Asset Condition
- h. Other (specify in line 6)

6. Provide a narrative description of the need for this Project.  
(Include available documentation relative to the need for this Project. )

Replacing conductor, and structures remediates the potential for structure/equipment failure due to asset condition vulnerabilities. To ensure continued operability of this line, the structures and conductor need to be replaced. Replacing shield wires will increase reliability by providing better communication bandwidth and security.

**Cost of Project:**

7. Total Project Cost (\$M) equals PTF + Non-PTF + all other Project Costs:	<u>\$52.142</u>
8. Total Proposed PTF Costs	
a. Total Proposed PTF Cost of this Project (\$M):	<u>\$52.142</u>
b. Requested Pool-Supported PTF Costs associated with this Project (\$M):	<u>\$52.142</u>
c. Breakdown of Requested Pool-Supported PTF Cost associated with this Project (\$M): (Consistent with Table 1 and Appendix D of this Procedure)	
Material	<u>\$5.387</u>
Labor	<u>\$34.286</u>
ROW	<u>\$0.000</u>
Engineering/Permitting/Indirects	<u>\$3.520</u>
Escalation	<u>\$2.472</u>
AFUDC (or equivalent)	<u>\$1.753</u>
Contingency	<u>\$4.724</u>
d. Generator Supported PTF Costs* (\$M):	<u>\$0.000</u>
If the costs in 8.b. plus 8.d. do not equal the total proposed PTF cost (8.a) explain and indicate who is responsible for the remaining costs.	
9. Total Proposed Non-PTF Cost of this Project (\$M):	<u>\$0.000</u>
10. Proposed PTF Costs (\$M) introduced as a result of local, state or other regulatory/legislative requirements, including costs identified pursuant to Section 1.6.3 of this PP-4.	<u>\$0.000</u>
a. Description of Proposed PTF Cost introduced as a result of local, state or other regulatory/legislative requirements as defined in question 8 above.	
11. All other Project Costs not captured in PTF Costs (8) or Non-PTF Costs (9) (\$M) associated with this Project:	<u>\$0.000</u>

12. Total PTF Cost based on: (check one)

Actual Costs

**OR**

Estimated Costs\*

13. Valuation Year(s) of dollar amounts submitted above: 2022

14. If applicable, explain how the cost of common facilities were allocated between PTF and Non-PTF.

15. Does this Project result in a change of existing Non-PTF facilities to PTF?

Yes

No

16. Describe the major transmission alternatives, and their costs consistent with the breakdown provided in item 7 of this Application, that were considered. Provided an explanation why the preferred alternative was selected.  
(Include available documentation relative to the major transmission alternatives analysis and selection.)

**Alternative:**

- Do nothing but for reasons stated in 6 above is not acceptable.
- Replace only priority C asset condition structures, laminated wood structures and obsolete copperweld shield wire. This alternative was not selected as it does not fully address asset condition and operational concerns of the aging P145 Line.

**Preferred:**

- Rebuild the P145 115-kV Line. This is the preferred alternative to address the obsolete shield wires, laminated wood structures and asset condition concerns in the most efficient and cost-effective manner.

17. Has state and local siting been completed? If yes, explain the siting process and any provisions that were made during siting, provide docket or siting reference numbers.  
If no, then explain when siting is expected to be completed and any provisions that have been agreed to.

No unusual Siting is required for this project.

\* Pool-Supported PTF costs were determined pursuant to Schedule 11 of Section II of the Tariff.



P145 115-kV Line Rebuild Project Correlation Table  
(Merrimack substation - Farmwood substation)

<u>TCA Item</u>	<u>RSP:</u> Project ID #	<u>Study:</u> Reliability Issues Requiring <u>Action</u>	<u>PPA Application:</u>		<u>PAC/RC Meeting:</u> Presentation Reference	<u>TCA Application (\$Ms):</u>	
			<u>PPA No.</u>	<u>Preferred Solution Description</u>		<u>PTF Estimate</u>	<u>Non-PTF Estimate</u>
ES-22-TCA-18	324	n/a	TBD	Replace 12.5 miles of existing 795 ACSR conductor with 1272 ACSS conductor, two existing 3#6 copperweld shield wires wire with OPGW and replace 154 structures with steel structures including hardware, insulators and guys.	Per PAC Presentation 01/20/2022	\$ 52.142	
				SUBTOTAL		\$ 52.142	\$ -