



56 Prospect Street  
Hartford, CT 06103

Steven J. Allen  
Eversource, ISO-NE Coordination  
phone: 860-728-4536  
email: steven.allen@eversource.com

September 22, 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-36      P106 115-kV Line Wood/Laminate Wood Structure Replacements  
and OPGW Installation (Rimmon substation – Eddy 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-36	Date:	Sep-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 #	TBD	
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: Aug-23

a. **High Level Project Details:**

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

**P106 115-kV Line Structure Replacements and OPGW Installation Project (Rimmon substation - Eddy substation)**

**Project Location** (State only):

**State:**

NH

**County:**

Hillsborough

b. Summary of PTF-related work for Project:

This project will replaced 16 wood and laminate wood structures with light-duty steel structures and install 3.4 miles (two 1.7 circuit miles) of Optical Ground Wire (OPGW) on the P106 115-kV Line (Rimmon substation - Eddy substation) to mitigate deficiencies such as rot, splits, cracks, and ability to accommodate OPGW.

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: n/a

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

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 these structures remediates the potential for structure failures due to asset condition vulnerabilities. To ensure the continued operability of this line segment, the identified structures in this line section need to be replaced. Installing OPGW improves communication bandwidth, security, and continuity in network reliability.

**Cost of Project:**

7. Total Project Cost (\$M) equals PTF + Non-PTF + all other Project Costs:	<u>\$5.634</u>
8. Total Proposed PTF Costs	
a. Total Proposed PTF Cost of this Project (\$M):	<u>\$5.634</u>
b. Requested Pool-Supported PTF Costs associated with this Project (\$M):	<u>\$5.634</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>\$0.719</u>
Labor	<u>\$2.843</u>
ROW	<u>\$0.000</u>
Engineering/Permitting/Indirects	<u>\$1.379</u>
Escalation	<u>\$0.000</u>
AFUDC (or equivalent)	<u>\$0.160</u>
Contingency	<u>\$0.533</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): \$0.000

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. \$0.000

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: \$0.000

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 the reasons stated in 6 above is not acceptable.

**Preferred:** Field inspections have indicated a significant amount of degradation and decreased load carrying capacity of laminate wood 115-kV structures (many of the poles show signs of rot, cracks, splits, and deterioration). Replacing the structures resolves multiple structural/hardware issues and supports safe and reliable operation of the transmission line. The installation of OPGW will provide high speed communication between substations, reduce dependency on leased services for protection and improve the reliability of the Transmission system.

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 or permitting was required for this project.

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

# PROJECT COST ESTIMATE & SCHEDULE SHEET

Transmission Owner: Public Service Company of New Hampshire

RSP Project #: TBD

Project Name: P106 115-kV Line Structure Replacements and OPGW Installation Project (Rimmon substation - Eddy substation)

Date: Sep-22

## 1. Project Scope Summary

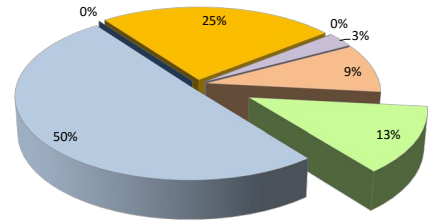
This project will replaced 16 wood and laminate wood structures with light-duty steel structures and install 3.4 miles (two 1.7 circuit miles) of Optical Ground Wire (OPGW) on the P106 115-kV Line (Rimmon substation - Eddy substation) to mitigate deficiencies such as rot, splits, cracks, and ability to accommodate OPGW.

## 2. Project Cost Summary

(\$M)

2.1. Project Cost Summary			
Cost Category	PTF	Non-PTF	Total
Material	\$ 0.719	\$ -	\$ 0.719
Labor & Equipment	\$ 2.843	\$ -	\$ 2.843
Right of Way	\$ -	\$ -	\$ -
Engineering/Permitting /Indirects	\$ 1.379	\$ -	\$ 1.379
Escalation	\$ -	\$ -	\$ -
AFUDC	\$ 0.160	\$ -	\$ 0.160
Contingency	\$ 0.533	\$ -	\$ 0.533
<b>Total Project Cost</b>	<b>\$ 5.634</b>	<b>\$ -</b>	<b>\$ 5.634</b>

- Material
- Labor & Equipment
- Right of Way
- Engineering/Permitting /Indirects
- Escalation
- AFUDC
- Contingency



2.2 Detailed Cost Summary By Project Element									
	Material	Labor & Equipment	Right of Way	Engineering/ Permitting/ Indirects	Escalation	AFUDC	Contingency	Total	PTF Amount
P106 115-kV Line Structure Replacements and OPGW Installation Project (Rimmon substation - Eddy substation)	\$ 0.719	\$ 2.843	\$ -	\$ 1.379	\$ -	\$ 0.160	\$ 0.533	\$ 5.634	\$ 5.634
<b>Total</b>	<b>\$ 0.719</b>	<b>\$ 2.843</b>	<b>\$ -</b>	<b>\$ 1.379</b>	<b>\$ -</b>	<b>\$ 0.160</b>	<b>\$ 0.533</b>	<b>\$ 5.634</b>	<b>\$ 5.634</b>

## 3. Project Milestone Schedule

Description	Start	End	2021				2022				2023				2024				2025			
			Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr2	Qtr3	Qtr4
			<b>Siting &amp; Permitting</b>																			
Approval and Permits	7/25/2022	10/21/2022	→																			
			<b>Engineering</b>																			
Engineering and Design	7/18/2022	1/23/2023	→→																			
			<b>Material</b>																			
Material	7/25/2022	5/31/2023	→→→																			
			<b>Construction</b>																			
Construction	10/17/2022	8/21/2023	→→→																			

P106 115-kV Line Structure Replacements and OPGW Installation Project  
 Correlation Table  
 (Rimmon substation - Eddy substation)

<u>TCA Item</u>	<u>RSP:</u> Project ID #	<u>Study:</u> Reliability Issues Requiring Action	<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-36	TBD	n/a	n/a	Replace 16 wood/laminate wood structures with light-duty steel structures to include insulators, guys and hardware and install 3.4 miles of Optical Ground Wire (OPGW).	Per PAC Presentation 9/21/2022	\$ 5.634	
				SUBTOTAL		\$ 5.634	\$ -