



56 Prospect Street
Hartford, CT 06103

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

December 1, 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-41 Eagle Substation 345/115kV Autotransformer Replacement Project

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-41	Date:	Dec-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:	steven.allen@eversource.com	Is Project related to CIP-14		
		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

2. Project Description: In Service Date: Dec-22

a. **High Level Project Details:**

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

Eagle Substation 345/115kV Autotransformer Replacement Project

Project Location (State only):

State:

New Hampshire

County:

Hillsborough

b. Summary of PTF-related work for Project:

This emergent project is replacing the failing Eagle TB154 345/115kV 450 MVA autotransformer with the TB150 345/115kV spare autotransformer from Scobie Pond substation and performing associated modifications to the existing Eagle TB154 foundation, oil containment system as well as cable/conduit and wiring to ensure reliable operation of the transmission system.

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: ES-22-T42

4. Has a transmission Proposed Plan Application been approved? Yes No N/A Approval Date: Sept. 22, 2022

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.)

The Eagle 345/115kV autotransformer TB154 was automatically tripped by the electrical protection system causing damage to the main winding and the load tap changer (LTC) to include leakage, bulging door and a compromised barrier board. It was determined that the unit cannot safely and reliably be placed back in service in a reasonable amount of time, and must be permanently replaced.

Cost of Project:

7. Total Project Cost (\$M) equals PTF + Non-PTF + all other Project Costs:	<u>\$6.375</u>
8. Total Proposed PTF Costs	
a. Total Proposed PTF Cost of this Project (\$M):	<u>\$6.375</u>
b. Requested Pool-Supported PTF Costs associated with this Project (\$M):	<u>\$6.375</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>\$0.202</u>
Labor	<u>\$3.354</u>
ROW	<u>\$0.000</u>
Engineering/Permitting/Indirects	<u>\$1.626</u>
Escalation	<u>\$0.810</u>
AFUDC (or equivalent)	<u>\$0.088</u>
Contingency	<u>\$0.295</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:

A system spare is required to replace the Eagle TB154 by December 31, 2022 based on System Operations studies. Alternatives less suitable for a system spare are as follows:
Southington spare, less suitable electrical match for rating and impedance.
Manchester spare, less suitable electrical match for rating and impedance

Preferred:

Scobie Pond TB150, this is the best electrical match to replace Eagle TB154 and would require the least System Planning review and analysis. This alternative outweighed the concerns to complete the foundation and oil containment modifications to accommodate TB150.

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.

Eagle Substation 345/115kV Autotransformer Replacement Project
Correlation Table

<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-41	<u>TBD</u>	n/a	ES-22-T42	Replace failing TB154 345/115kV MVA autotransformer with spare TB150 345/115kV autotransformer and associated foundation, oil containment system and cable/conduit and wiring modifications.	Per PAC Presentation 08/24/2022	\$ 6.375	
				SUBTOTAL		\$ 6.375	\$ -