

56 Prospect Street Hartford, CT 06103

David J. Burnham Eversource ISO Policy and Economic Analysis phone: 860-728-4506

email: david.burnham@eversource.com

January 31, 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-02 352 345-kV Line Structure Replacement Project (Frost Bridge substation to Long Mountain 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,

David J. Burnham

David J. Burnham

cc: M. Drzewianowski

		TCA	Attachmen A Applicatio				
Applicant:				Application #:	ES-22-TCA-02	Date:	Jan-22
Contact Name:	:	David J. Burnham		11		-	
Company Name	:	Eversource Energy Service Company					
Address 1	:	56 Prospect Street					
Address 2	:	·		RSP Project ID # or			
City, State, Zip)	Hartford, CT 06103	A	sset Condition ID #	TBD		
Contact Phone #	#	860-728-4506		Is Project related to	CIP-14	_	
Email Address	S	david.burnham@eversource.com		Yes	No X		
Project Description:	:					In Service Date:	Jun-22
3	a.	High Level Project Details:					<u> </u>
		·					
		Project Name (If no formal name, then Substation Upgra	ade, Line Upgra	de, etc. are acceptable):		tructure Replacement Project (Mountain substation)	(Frost Bridge
		Project Location (State only):	State:	CT	County:	Litchfield	
	b.	Summary of PTF-related work for Project:	<u>L</u>				
	Fi	nal project cost details will be known following closeon	ut of all projec	t work orders.			
	c.	Summary of Non-PTF-related work for Project:					
3. Was a transmission P	ropos	ed Plan Application required for this work?		Yes	No X	PPA Number: n/a	
	-	d Plan Application been approved? erence Proposed Plan Application # and approval date.		Yes [] [] [] (Please check only one)	No N/A X	Approval Date:	
Need For Project:							
5. Need Based On (Chec	ck all	Categories that apply)					
3. Need Based on (Che	a.	Reliability		X			
	b.	Economic					
		Service to new load					
	c.						
	d.	New generator interconnection					
		Generator Proposed Plan Application Number Generator Proposed Plan Application Date					

ISO-NE Public

	(Attach copy of cover letter & Generator Proposed Plan Application)
e.	. Public Policy Transmission Upgrade (PPTU)
f.	Market Efficiency Transmission Upgrade (METU)
g.	. Asset Condition X
h.	. Other (specify in line 6)
	ription of the need for this Project. nentation relative to the need for this Project.)
	ctures remediates the potential for structure failures due to asset condition vulnerabilities. To ensure the continued operability of this line segment, the in this line section need to be replaced.
identified structures i	in this line section need to be replaced.

Cost of Project:		
7. Total Project Cost (\$\(\frac{\mathbb{M}}{M}\)) equals PTF + Non-PTF + all other Project Costs:	\$5.782	
8. Total Proposed PTF Costs	<u> </u>	
a. Total Proposed PTF Cost of this Project (\$M):	\$5.782	
b. Requested Pool-Supported PTF Costs associated with this Project (\$M):	\$5.782	
c. Breakdown of Requested Pool-Supported PTF Cost associated with this Project (\$M): (Consistent with Table 1 and Appendix D of this Procedure)		
Material	\$0.826	
Labor	\$3.522	
ROW	\$0.000	
Engineering/Permitting/Indirects	\$1.159	
Escalation	\$0.000	
AFUDC (or equivalent)	\$0.095	
Contingency	\$0.180	
d. Generator Supported PTF Costs* (\$M):	\$0.000	
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* X 13. Valuation Year(s) of dollar amounts submitted above: 2022		
13. Valuation Year(s) of dollar amounts submitted above:		
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 X

considered. Provided an explanation why the preferred alternative was selected. (Include available documentation relative to the major transmission alternatives and selection.) Alternatives. 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 wood 345-kV structures (many of the poles show signs of decay, woodpecker damage, rot and deterioration). Replacing the structures resolves multiple structural/hardware issues and supports safe and reliable operation the transmission line. 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.	6. Describe the r	najor transmission alternatives, and their costs consis	stent with the breakdown provided in item	7 of this Application, that were	
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 wood 345-kV structures (many of the poles show signs of decay, woodpecker damage, rot and deterioration). Replacing the structures resolves multiple structural/hardware issues and supports safe and reliable operation the transmission line. 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.					
Preferred: Field Inspections have indicated a significant amount of degradation and decreased load carrying capacity of wood 345-kV structures (many of the poles show signs of decay, woodpecker damage, rot and deterioration). Replacing the structures resolves multiple structural/hardware issues and supports safe and reliable operation the transmission line. 7. 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.		-			
reference numbers. If no, then explain when siting is expected to be completed and any provisions that have been agreed to.	Preferred:	Field Inspections have indicated a significant ar ay, woodpecker damage, rot and deterioration	mount of degradation and decreased		
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.					
	No unusual si	ting 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: The Connecticut Light and Power Company

RSP Project #: TBD

Project Name: 352 345-kV Line Structure Replacement Project

(Frost Bridge substation to Long Mountain substation)

Date: Jan-22

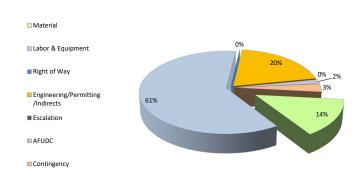
1. Project Scope Summary

Transmission Engineering has identified 16 wood structures on 352 345-kV Line (Frost Bridge substation - Long Mountain substation) that are in need of replacement with steel poles. The structures have deficiencies such as: woodpecker damage, rot, cracks and deteriorated steel mechanics.

2. Project Cost Summary

(\$M)

Cost Category	PTF		Non-P	ΓF	Total	
Material	\$	0.826	\$	-	\$	0.82
Labor & Equipment	\$	3.522	\$	-	\$	3.52
Right of Way	\$	-	\$	-	\$	-
Engineering/Permitting /Indirects	\$	1.159	\$	-	\$	1.15
Escalation	\$	-	\$	-	\$	-
AFUDC	\$	0.095	\$	-	\$	0.09
Contingency	\$	0.180	\$	-	\$	0.18
Total Project Cost	\$	5.782	\$		\$	5.7



	Material	Labor & Equipment	Right of Way	Engineering/ Permitting/ Indirects	Escalation	AFUDC	Contingency	Total	PTF Amount						
352 345-kV Line Structure Replacement Project (Frost Bridge substation to Long Mountain substation)	\$ 0.826	\$ 3.522	\$ -	\$ 1.159	\$ -	\$ 0.095	\$ 0.180	\$ 5.782	\$ 5.782						
Total	\$ 0.826	\$ 3.522	\$ -	\$ 1.159	\$ -	\$ 0.095	\$ 0.180	\$ 5.782	\$ 5.782						

3. Project Milestone Schedule

			2	016			20	017			20)18			20	119			20	20			20	21			20	22
		Qtr1	Qtr.	2 Qtr3	3 Qtr4	Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr2	Qtr3 Qtr
Start	Complete	Si	ting	& P	ermi	tting	j									•												
9/24/2021	2/17/2022																								>	>		
		Eı	ngir	eeri	ng																							
			ļ																		ļ							
12/4/2020	11/5/2021		ļ			ļ				ļ																		
			Щ	ш	Ш	Ш	Ш	Ш	Ш	Ш	Ш	Ш		Ш			Ш	Ш		Ш		Ш			Ш	Ш		
		La	and																									
											<u> </u>																	
11/10/2021	2/7/2022																			-					•			
			Ш	ш	ш	Ш	Ш	Ш	Ш	Ш	Ш			Ш			Ш			Ш		Ш			Ш	Ш		
		C	ons	truct	ion																							
4/04/0000	0/40/0000																											
1/31/2022	6/19/2022				+					ļ			l						ļ		 							
		Otr1	Otr	2 0#3	3 Qtr4	Otr1	Otra	Otro	Otr4	Otr1	Otra	Otra	Otr4	Otr1	Otra	Qtr3	Otr4	Otr1	Otra	Otts	Otr4	Otr1	Otro	Otra	Otr4	Otr1	Otra	Qtr3 Qtr
		Qiri			QII4	QUI	<u>, </u>		QII4	QITI)18	Ql/4	QUI			QII4	QITI		20	QII4	QITI			QII4	QlFI		22
				016				017				/10		Ь		19		L	20	120			20	121			20	

352 345-kV Line Structure Replacement Project Correlation Table (Frost Bridge substation to Long Mountain substation)

TCA <u>Item</u>	RSP: Project ID #	<u>Study:</u> Reliability Issues Requiring <u>Action</u>	PPA No.	PPA Application: Preferred Solution Description	PAC/RC Meeting: Presentation Reference	TCA Applica PTF Estimate	tion (\$1,000s): Non-PTF Estimate
ES-22-TCA-02	<u>TBD</u>	n/a	n/a	Replace 16 wood 345-kV structures with light-duty steel pole structures, including hardware, insulators, and guys.	Per PAC Presentation 12/15/2021	\$ 5.782 \$ 5.782	\$ -