

56 Prospect Street Hartford, CT 06103

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

email: david.burnham@eversource.com

March 24, 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-11 533-508 115-kV Line Structure Replacements (Hartwell Substation –Lexington 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

		Attachment B TCA Application Form		
Applicant: Contact Name:	David J. Burnham	Application #:	ES-22-TCA-11	Date: Mar-22
Company Name:	Eversource Energy Service Company			
Address 1:				
Address 2:	56 Prospect Street	RSP Project ID # or		
City, State, Zip	Hartford, CT 06103	Asset Condition ID #	320	
Contact Phone #	860-728-4506	Is Project related to CIP-14		_
Email Address	david.burnham@eversource.com	Yes No	X	
Elliuli i idal ess	david.bdrimani@eversodirec.com	103	A	
2. Project Description:				In Service Date: Sep-22
7 1	a. High Level Project Details:			<u> </u>
	Project Name (If no formal name, then Substation Upgrade	e, Line Upgrade, etc. are acceptable):	533-508 115kV Line Substation - Lexing	e Structure Replacements (Hartwell ton Substation)
	Project Location (State only):	State: MA	County:	Middlesex
	b. Summary of PTF-related work for Project:	<u> </u>		
	mechanical connections. Final project cost details will be known following closeout c. Summary of Non-PTF-related work for Project: N/A	of all project work orders.		
	oposed Plan Application required for this work?	Yes No	X N/A X	PPA Number: N/A
	oposed Plan Application been approved? Id reference Proposed Plan Application # and approval date.	Yes No (Please check only one)	IN/A X	Approval Date: N/A
	k 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	Page 1		

July 7,2017 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)		
	ption of the need for this Project. entation relative to the need for this Project.)		
lacing these struct		ition vulnerabilities. To ensure the continued operability of this line segment, the identifie	d structures
	·		

Cost of Project:		
7. Total Project Cost ($\$\underline{M}$) equals PTF + Non-PTF + all other Project Costs:	\$5.000	
8. Total Proposed PTF Costs		_
a. Total Proposed PTF Cost of this Project (\$M):	\$5.000	
b. Requested Pool-Supported PTF Costs associated with this Project (\$M):	\$5.000	_
c. Breakdown of Requested Pool-Supported PTF Cost associated with this Project (\$M): (Consistent with Table 1 and Appendix D of this Procedure)		-
Material	\$0.406	
Labor	\$2.734	
ROW	\$0.000	
Engineering/Permitting/Indirects	\$0.964	
Escalation	\$0.000	
AFUDC (or equivalent)	\$0.103	
Contingency	\$0.793	
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		
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

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.
<u>Preferred:</u> Field inspections have indicated a significant amount of degradation and decreased carrying capacity of wood 115-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 of 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.
No unusual Siting is 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: NSTAR Electric Company RSP Project #: 320

Project Name: 533-508 115 kV Line Structure Replacements (Hartwell Substation - Lexington Substation)

Date: Mar-22

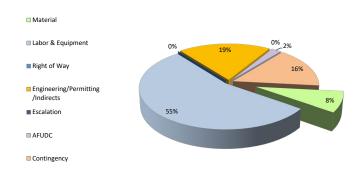
1. Project Scope Summary

Transmission Line Maintenanance has identified 16 structures on the 533-508 115-kV Line (between Hartwell Substation - Lexington Substation) that are in need of replacement as the result of foot and aerial patrols. The structures have deficiencies such as: woodpecker damage, insect damage, rot, cracks, age degradation and deteriorated steel mechanical connections.

2. Project Cost Summary

(\$M)

2.1. Project Cost Summary												
Cost Category	PTF		Non-PT	F	Total							
Material	\$	0.406	\$	-	\$	0.406						
Labor & Equipment	\$	2.734	\$	-	\$	2.734						
Right of Way	\$	-	\$	-	\$	-						
Engineering/Permitting /Indirects	\$	0.964	\$	-	\$	0.964						
Escalation	\$	-	\$	-	\$	-						
AFUDC	\$	0.103	\$	-	\$	0.103						
Contingency	\$	0.793	\$	-	\$	0.793						
Total Project Cost	\$	5.000	\$		\$	5.000						



	2.2 Detailed Cost Summary By Project Element														
	Material Labor & Right of Way Engineering/ Permitting/ Indirects		Escalation	AFUDC	Contingency	Total	PTF Amount								
533-508 115 kV Line Structure Replacements (Hartwell Substation - Lexington Substation)	\$ 0.406	\$ 2.734	\$ -	\$ 0.964	\$ -	\$ 0.103	\$ 0.793	\$ 5.000	\$ 5.000						
Total	\$ 0.406	\$ 2.734	\$ -	\$ 0.964	\$ -	\$ 0.103	\$ 0.793	\$ 5.000	\$ 5.000						

3. Project Milestone Schedule

				20	016			2	017			20	018			2	019			2	2020		1	2	021			2	022	
			Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr2	Qtr	3 Qtr4	Qtr1	Qtr:	2 Qtr	3 Qtr4	Qtr1	Qtr	2 Qtr3	Qtr4	Qtr1	Qtr2	! Qtr:	3 Qt
Description	Start	Complete	Si	ting	& Pe	rmitt	ting																							
				П			П		П				П					П		П	Ш			П				\Box	\Box	Ш
Approval and Permits	12/13/2021	8/3/2022																											+	Ш
																								T						Ш
			Er	ngine	erin	g																								
				П	т	П	ПП	тп	ПП	П		П	П			ПП	Т		тп	\Box	т	т	тп	ТΠ	т	тп	т	т	тп	П
Engineering and Design	11/29/2021	1/26/2022				T			T								T			T			I	T		T	-		TIII	П
																														Ш
			La	nd																										
																	\Box		\Box	\Box										П
Material	11/29/2021	4/21/2022																								-		-		П
					T	T	П		T				T				T			T			I	T					TIII	П
			Co	onst	ructio	on																								
				П	П	П	П	П		П		П					П	\Box	тп		П	П	П	ТП		ТП	П	П	тп	т
Construction	8/1/2022	9/4/2022																											-	-
				T		T	T	T	T				T						T		T		T	T		T		T	T	T
			Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr2	Qtr	3 Qtr4	Qtr1	Qtr:	2 Qtr	3 Qtr4	Qtr1	Qtr	2 Qtr3	Qtr4	Qtr1	Qtr2	Qtr:	3 Qti
				20	016		1	21	017			21	018			2	019	_	1		2020		1		021		1		022	

533-508 115-kV Line Structure Replacement Project Correlation Table (Hartwell Substation - Lexington Substation)

TCA <u>Item</u>	<u>RSP:</u> Project ID #	<u>Study:</u> Reliability Issues Requiring <u>Action</u>	PPA No.	PPA Application: Preferred Solution <u>Description</u>	PAC/RC Meeting: Presentation Reference	TCA Appli PTF <u>Estimate</u>	cation (\$Ms): Non-PTF <u>Estimate</u>
ES-22-TCA-11	<u>320</u>	n/a	n/a	This project will replace 16 wood structures with light-duty steel poles including insulators, hardware, insulators and guys.		\$ 5.000 \$ 5.000	