

56 Prospect Street Hartford, CT 06103

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

email: david.burnham@eversource.com

December 15, 2021

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-21-TCA-52 329 345-kV Line Asset Condition Project (Frost Bridge substation – Southington 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

				hment <u>B</u> ication Form			
1. Applicant:				Application #:	ES-21-TCA-52	Date:	Dec-21
Contact Name:		David J. Burnham		<u>-</u>			
Company Name:		Eversource Energy Service Company		<u>-</u>			
Address 1:		56 Prospect Street					
Address 2: City, State, Zip		Hartford CT 0C102		RSP Project ID # or	TDD		
City, State, Zip Contact Phone #		Hartford, CT 06103 860-728-4506		Asset Condition ID # Is Project related to CIP-14	TBD	-	
Email Address		david.burnham@eversource.com		Yes No	X		
		david.bdrimaing eversouree.com			A		
2. Project Description:						In Service Date:	Dec-22
	a.	High Level Project Details:					
		,					
					329 345-kV Line A	sset Condition Project (Fros	t
		Project Name (If no formal name, then Substation U	Jpgrade, Line Upgrad	le, etc. are acceptable):	Bridge substation -	Southington substation)	
		Project Location (State only):	State:	CT	County:	Hartford, New Haven, I	Litchfield
	b.	Summary of PTF-related work for Project:					
	Th	e project will replace 12 wood structures with ligh	t duty weathering	steel structures on the 329 345-k	V Line (Frost Bridge sub	station - Southington substa	ation). The
	st	ructures have deficiencies such as: woodpecker d	amage, rot, cracks	and deteriorated steel mechanica	al connections.		
	F:.	مرابع المعارج المعارج التربي المعارج ا	soout of all project	ank and an			
	FII	nal project cost details will be known following clo	seout of all project	work orders.			
		a					
	c.	Summary of Non-PTF-related work for Project:					
3. Was a transmission Pr	onos	ed Plan Application required for this work?		Yes No	X	PPA Number: n/a	
		d Plan Application been approved?		Yes No	N/A X	Approval Date:	
	-	erence Proposed Plan Application # and approval date.		(Please check only one)	N/A X	Approval Date:	
Need For Project:	id ici	erence Proposed Plan Application if and approval date.		(Libert chest chily che)			
5. Need Based On (Chec							
	a.	Reliability		X			
	b.	Economic					
	c.	Service to new load					
	d.	New generator interconnection		$\bar{\Box}$			
		Generator Proposed Plan Application Number					
		Generator Proposed Plan Application Date					
1		1 11	Pa	nge 1			

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.)
	ures remediates the potential for structure failures due to asset condition vulnerabilities. To ensure the continued operability of this line segment, the identified section need to be replaced.

Cost of Project:		
7. Total Project Cost (\$\(\frac{M}{D}\)) equals PTF + Non-PTF + all other Project Costs:	\$6.242	
8. Total Proposed PTF Costs		
a. Total Proposed PTF Cost of this Project (\$M):	\$6.242	
b. Requested Pool-Supported PTF Costs associated with this Project (\$M):	\$6.242	
c. Breakdown of Requested Pool-Supported PTF Cost associated with this Project (\$M): (Consistent with Table 1 and Appendix D of this Procedure)		
Material	\$0.544	
Labor	\$4.650	
ROW	\$0.000	
Engineering/Permitting/Indirects	\$0.858	
Escalation	\$0.000	
AFUDC (or equivalent)	\$0.094	
Contingency	\$0.096	
d. Generator Supported PTF Costs* (\$M):	\$0.000	<u></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	
 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	<u> </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.		
1. 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:		
14. If applicable, explain how the cost of common facilities were allocated between PTF and Non-PTF.		
5. Does this Project result in a change of existing Non-PTF facilities to PTF?	Yes	No X

xplanation why the prefer	ssion alternatives, and their costs consistent with the breakdown provided in item 7 of this Application, that were considered. Provided an end alternative was selected.
	tation relative to the major transmission alternatives analysis and selection.) g but for the reasons stated in 6 above is not acceptable.
	tions 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
	een completed? If yes, explain the siting process and any provisions that were made during siting, provide docket or siting reference in when siting is expected to be completed and any provisions that have been agreed to.
o unusual siting or pern	nitting 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: Connecticut Light and Power Company RSP Project #: TBD

Project Name: 329 345-kV Asset Condition Replacement (Frost Bridge substation - Southington substation)

Date: Dec-21

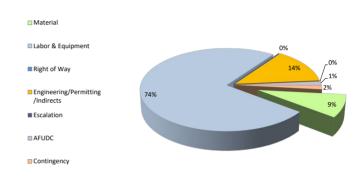
1. Project Scope Summary

This project has identified 12 wood structures in need of replacement with light duty weathering steel structures as the result of foot and aerial patrols. The structures have deficiencies such as: woodpecker damage, rot, cracks and deteriorated steel mechanical connections.

2. Project Cost Summary

(\$M)

2.1. Project Cost Summary													
Cost Category	PTF		Non-F	TF	Total	l							
Material	\$	0.544	\$	-	\$	0.544							
Labor & Equipment	\$	4.650	\$	-	\$	4.650							
Right of Way	\$	-	\$	-	\$	-							
Engineering/Permitting /Indirects	\$	0.858	\$	-	\$	0.858							
Escalation	\$	-	\$	-	\$	-							
AFUDC	\$	0.094	\$	-	\$	0.094							
Contingency	\$	0.096	\$	-	\$	0.096							
Total Project Cost	\$	6.242	\$	-	\$	6.242							



	2.2 Detailed Cost Summary By Project Element														
	Mater	rial	Labor & Equipment	Right of Way	Engineering/ Permitting/ Indirects	Escalation	AFUD	С	Contingency	Total	PTF Amount				
329 345-kV Line Asset Condition Project (Frost Bridge substation - Southington substation)	\$	0.544	\$ 4.650	\$ -	\$ 0.858	\$ -	\$	0.094	\$ 0.096	\$ 6.242	\$ 6.242				
Total	\$	0.544	\$ 4.650	\$ -	\$ 0.858	\$ -	\$	0.094	\$ 0.096	\$ 6.242	\$ 6.242				

3. Project Milestone Schedule

				2	2016			- 2	2017			20)18			2	2019				20	20			2	021			2	022	
			Qtr1	Qtr	2 Qtr	3 Qtr	4 Qtr	1 Qti	2 Qtr	3 Qtr4	Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr.	2 Qt	3 Qt	r4 C	Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr.	2 Qtr3	Qtr4	Qtr1	Qtr2	2 Qtr	Qtr
Description			Si	ting) & F	erm	ittin	g																							
				П	Т	\Box	Т		П					П	П	П			П	П		П				Ш	ПП	П	П	TT	П
Approval and Permits	04/13/2021	09/01/2021		П	T		T			T		m		T					Т							-	T	T		T	
				П			T		T		П	m		T					П						T		T	T		T	
			Er	ngir	neeri	ng																									
							\Box			Ш	$\Pi\Pi$			П				Ш								$\Pi\Pi$	$\Pi\Pi$				Π
Engineering and Design	12/20/2020	09/01/2021		П	T		T			T		m		T					Т							-	T	T			
				П			T			TIII	П	m		m					П			П	П				T	T			
			La	nd																											
				П	Т	\Box	Т	П	\Box					П	П	П			Т	П		П				Ш	ПП	П	П	TT	П
Material	03/15/2021	06/28/2021		П			T				П	m		m					П			П	П				T	T		T	
				П			T				П	m		m					П			П	П				T	T		T	
			Co	ons	truc	tion																									
				П	T	ТП	T	П	ТП	ПП	ПП	ПП	П	П	П	Т	Т	П		П		П		П	Т	ТП	ТП	TΠ	ТП	\Box	П
Construction	09/20/2021	12/01/2022					T					П	П	T		T	T								T		-				\Rightarrow
							T					m	П	T		T	T		Т						T		T			T	
			Qtr1	Qtr	2 Qtr	3 Qtr	4 Qtr	1 Qti	2 Qtr	3 Qtr4	Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr.	2 Qt	3 Qt	r4 C	Qtr1	Qtr2	Qtr3	Qtr4	Qtr1	Qtr.	2 Qtr3	Qtr4	Qtr1	Qtr2	2 Otr	3 Qtr
					2016				2017				18				2019		T		20					021				022	

329 345-kV Line Structure Asset Condition Project Correlation Table (Frost Bridge substation - Southington substation)

TCA	RSP: Project ID #	Study:	PPA No.	PPA Application: Preferred Solution	PAC/RC Meeting: Presentation	TCA Applic PTF	ation (\$Ms): Non-PTF
<u>ltem</u>	Project ID #	Reliability Issues Requiring <u>Action</u>	PPA NO.	<u>Description</u>	Reference	Estimate	Estimate
ES-21-TCA-52	<u>TBD</u>	n/a	n/a	Replace 12 wood 345-kV structures and PINCO insulators with light-duty steel pole structures, including hardware, insulators, and guys.	Per PAC Presentation 12/15/2021	\$ 6.242	
				SUBTOTAL		\$ 6.242	\$ -