

56 Prospect Street Hartford, CT 06103

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

email: david.burnham@eversource.com

August 13, 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-42 310 345-kV Line Structure Replacements, PINCO Insulator Replacements and Installation of OPGW Project (Manchester substation – Millstone 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

			chment <u>B</u> lication Form		
Applicant: Contact Name:		David J. Burnham	Application #:	ES-21-TCA-42	Date: Aug-21
Company Name:		Eversource Energy Service Company	_		
Address 1:		56 Prospect Street	_		
Address 2:			RSP Project ID # or		
City, State, Zip		Hartford, CT 06103	Asset Condition ID #	262	<u>_</u>
Contact Phone #		860-728-4506	Is Project related to CIP-14	 -	
Email Address		david.burnham@eversource.com	Yes No	X	
2. Project Description:					In Service Date: <u>Dec-22</u>
	a.	High Level Project Details:			
		Project Name (If no formal name, then Substation Upgrade, Line Upgra	de etc are accentable):		Structure and PINCO Insulator Replacement ct (Manchester substation - Millstone
		Project Location (State only): State:	CT	County:	New London
			<u> </u>		New London
	b.	Summary of PTF-related work for Project:			
	suk rep	e project will replace 184 wood structures, PINCO Insulators and insostation). The structures have deficiencies such as: woodpecker da blacement due to age and deteriorating conditions. al project cost details will be known following closeout of all project	mage, rot, cracks and deteriorated		
	c.	Summary of Non-PTF-related work for Project:			
	_	d Plan Application required for this work?	Yes No	X	PPA Number: n/a
		Plan Application been approved?	Yes No	N/A X	Approval Date:
If yes, attach a copy and	d refe	rence Proposed Plan Application # and approval date.	(Please check only one)		
Need For Project:					
5. Need Based On (Check	call (a.	Categories that apply): Reliability	X		
	b.	Economic			
	c.	Service to new load			
	d.	New generator interconnection			
		Generator Proposed Plan Application Number Generator Proposed Plan Application Date			

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ISO-NE Public

ablic Policy Transmission Upgrade (PPTU) arket Efficiency Transmission Upgrade (METU) sset Condition ther (specify in line 6)	
sset Condition	
	X
ther (specify in line 6)	
of the need for this Project. on relative to the need for this Project.)	
and replacing the PINCO insulators remediates the potent ified structures in this line section need to be replaced.	al for structure failures due to asset condition vulnerabilities. To ensure the continued operability of
n a 1	f the need for this Project. n relative to the need for this Project.) nd replacing the PINCO insulators remediates the potenti

Cost of Project:		
7. Total Project Cost (\$\(\frac{M}{D}\)) equals PTF + Non-PTF + all other Project Costs:	\$61.333	
8. Total Proposed PTF Costs		
a. Total Proposed PTF Cost of this Project (\$M):	\$61.333	
b. Requested Pool-Supported PTF Costs associated with this Project (\$M):	\$61.333	
 c. Breakdown of Requested Pool-Supported PTF Cost associated with this Project (\$M): (Consistent with Table 1 and Appendix D of this Procedure) 		_
Material	\$8.302	
Labor	\$33.711	
ROW	\$0.000	
Engineering/Permitting/Indirects	\$9.160	<u> </u>
Escalation	\$0.785	
AFUDC (or equivalent)	\$2.451	
Contingency	\$6.924	
d. Generator Supported PTF Costs* (\$M):		
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.		
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:		
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 item 8 on why the preferred alternative was selected.
	available documentation relative to the major transmission alternatives analysis and selection.)
	Do nothing but for the reasons stated in 6 above is not acceptable.
woodp	red: 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, ecker damage, rot and deterioration). Replacing the structures and PINCO insulators resolves multiple structural/hardware issues and supports safe and reliable operation of the ission line.
	and local siting been completed? If yes, explain the siting process and any provisions that were made during siting, provide docket or siting reference. If no, then explain when siting is expected to be completed and any provisions that have been agreed to.
No unus	ual 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: Connecticut Light and Power Company

RSP Project #: 262

Line 310 Asset Condition Replacement (ACR), **Project Name:** Project (Manchester Substation - Millstone Substation)

Date: Aug-21

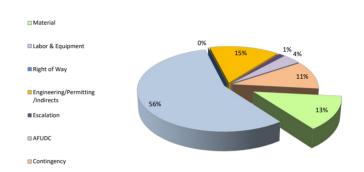
1. Project Scope Summary

Transmission Engineering has identified the need to replace 184 wood structures, replace PINCO insulators and install approximately 47 miles of Optical Ground Wire (OPGW) on the 310 345-KV Line (Manchester substation - Millstone substation). The wood structures will be replaced with steel poles due to deficiencies such as: woodpecker damage, rot, cracks and deteriorated steel mechanics. The PINCO insulators require replacement due to age and deteriorting conditions.

2. Project Cost Summary

(\$M)

2.1. Project Cost Summary											
Cost Category	PTF		Non-PT	F	Total						
Material	\$	8.302	\$	-	\$	8.302					
Labor & Equipment	\$	33.711	\$	-	\$	33.711					
Right of Way	\$	-	\$	-	\$	-					
Engineering/Permitting /Indirects	\$	9.160	\$	-	\$	9.160					
Escalation	\$	0.785	\$	-	\$	0.785					
AFUDC	\$	2.451	\$	-	\$	2.451					
Contingency	\$	6.924	\$	-	\$	6.924					
Total Project Cost	\$	61.333	\$	-	\$	61.333					



2.2 Detailed Cost Summary By Project Element													
	Material	Labor & Equipment	Right of Way	Engineering/ Permitting/ Indirects	Escalation	AFUDC	Contingency	Total	PTF Amount				
310 345-kV Line Structure, PINCO Insulator Replacements and OPGW installation project (Millstone substation - Manchester substation)	\$ 8.302	\$ 33.711	\$ -	\$ 9.160	\$ 0.785	\$ 2.451	\$ 6.924	\$ 61.333	\$ 61.333				
Total	\$ 8.302	\$ 33.711	\$ -	\$ 9.160	\$ 0.785	\$ 2.451	\$ 6.924	\$ 61.333	\$ 61.333				

3. Project Milestone Schedule

			20			2017		2018		2019			2020			2021			2022		
			Qtr1 Qtr2	Qtr3 Qtr4	Qtr1 Qt	2 Qtr3 Qt	4 Qtr1	Qtr2 Qtr3	Qtr4	Qtr1	Qtr2	Qtr3 Qtr	4 Qtr1	Qtr2	Qtr3 Qtr	4 Qtr1	Qtr2 C	tr3 Qtr	4 Qtr1	Qtr2 Qt	r3 Qtr4
Description			Siting	& Perm	itting		,														
										Ш		ПП			ПП						TT
Approval and Permits	03/03/2021	01/31/2022							1				1						-		
			Engine	ering																	
											Ш										
Engineering and Design	01/25/2021	05/17/2021														•	>				
															mm						
			Land																		
											Ш										
Material	07/01/2021	03/30/2022																	\rightarrow		
			Const	ruction																	
Construction (All Phases)	10/04/2021	12/31/2022																			
			Qtr1 Qtr2	Qtr3 Qtr4	Qtr1 Qt	2 Qtr3 Qt	4 Qtr1	Qtr2 Qtr3	Qtr4	Qtr1	Qtr2	Qtr3 Qtr	4 Qtr1	Qtr2	Qtr3 Qtr	4 Qtr1	Qtr2 C	tr3 Otr	4 Qtr1	Qtr2 Qt	r3 Qtr4
			20	16		2017		2018			201	9		202	20		202	1		2022	

310 345-kV Line Structure and PINCO Insulator Replacements OPGW Project Correlation Table (Manchester substation - Millstone 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 Applica PTF Estimate	tion (\$1,000s): Non-PTF <u>Estimate</u>
ES-21-TCA-42	<u>262</u>	n/a	n/a	Replace 184 wood 345-kV structures with light-duty steel pole structures, including hardware, insulators, and guys, replace PINCO insulators and install approximately 47 miles of OPGW.	Per PAC Presentation 01/21/2021	\$ 61.333 \$ 61.333	\$