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March 29, 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-22 NH 115-kV Line Laminated Wood Structure Replacement Program Phase 1 – Line G128 (Madbury substation to Eastport 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> lication Form			
1. Applicant:			Application #:	ES-21-TCA-22	Date:	Mar-21
Contact Name:			_			
Company Name:			_			
Address 1: Address 2:			- DCD Draiget ID # or			
City, State, Zip			RSP Project ID # or Asset Condition ID #			
Contact Phone #			Is Project related to CIP-14		-	
Email Address			Yes No	X		
2. Project Description:					In Service Date:	<u>Dec-21</u>
	a. High Level Project Details:					
	Project Name ( If no formal name, then Subst	ation Upgrade, Line Upgrad	e, etc. are acceptable):		ated Wood Structure Replace G128 (Madbury substation to	
	Project Location (State only):	State:	NH	County:	Strafford	
	b. Summary of PTF-related work for Project:					
	Replace 75 laminated wood structures (LWS)	on the C139 115 Willing	with stool poles to mitigate deficie	nsias such ass woodnas	kor damage, cracks, ret and	colitting
	Symmetry of Non DTE valeted week for Decises					
	c. Summary of Non-PTF-related work for Project	: 				
3. Was a transmission Pro	oposed Plan Application required for this work?		Yes No	X	PPA Number: n/a	
4. Has a transmission Pro	oposed Plan Application been approved?		Yes No	N/A X	Approval Date:	
If yes, attach a copy an	nd reference Proposed Plan Application # and approva	l date.	(Please check only one)			_
Need For Project:						
5. Need Based On (Check	k all Categories that apply):					
	a. Reliability		X			
	b. Economic		$\bar{\Box}$			
	c. Service to new load					
	d. New generator interconnection					
	Generator Proposed Plan Application Number		<del></del>			
	Generator Proposed Plan Application Date					
	(Attach copy of cover letter & Generator Propo	osed Plan Application)				
			age 1			

July 7,2017 ISO-NE Public

e. Public Policy Transmission Upgrade (PPTU)	ŀ
f. Market Efficiency Transmission Upgrade (METU)	
g. Asset Condition X	
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.)	
Replacing these structures remediates the potential for structure failures due to asset condition vulnerabilities. To ensure the continued operability of this line segment, the identified structures in this line section need to be replaced.	

Cost of Project:		
7. Total Project Cost (\$M) equals PTF + Non-PTF + all other Project Costs:	\$12.632	
8. Total Proposed PTF Costs		
a. Total Proposed PTF Cost of this Project (\$M):	\$12.632	
b. Requested Pool-Supported PTF Costs associated with this Project (\$M):	\$12.632	
c. Breakdown of Requested Pool-Supported PTF Cost associated with this Project (\$M): (Consistent with Table 1 and Appendix D of this Procedure)		
Material	\$1.280	
Labor	\$8.878	
ROW	\$0.000	
Engineering/Permitting/Indirects	\$1.838	
Escalation	\$0.000	
AFUDC (or equivalent)	\$0.284	
Contingency	\$0.443	
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:		
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 nothingbut for the reasons stated in 6 above is not acceptableReplace/Repair only deteriorated components on structures: This alternative does not comprehensively mitigate aged structures/components, does not fall into Eversource's "best-practice" and is not an economical alternative.
<b>Preferred:</b> Field Inspections and evidence from previous asset condition projects have indicated a significant amount of degradation and decreased load carrying capacity of laminated 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.
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.

 $<sup>\</sup>hbox{* Pool-Supported PTF costs were determined pursuant to Schedule 11 of Section II of the Tariff.}$ 

## **PROJECT COST ESTIMATE & SCHEDULE SHEET**

Transmission Owner: Public Service Company of New Hampshire

RSP Project #:

Project Name: G128 115-kV Line Laminated Wood Structure Replacement Project

Date: Mar-21

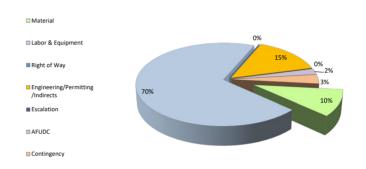
#### 1. Project Scope Summary

Replace 75 laminated wood structures (LWS) on the G128 115-kV Line (Madbury substation to Eastport substation) with steel poles and install lightning arrestors, insulator and counterpoise as required as the result of visual and aerial inspections as well as evidence from a series of previous asset condition projects in which a systemic probem with internal pole rot has been observed. The structures are being replaced to mitigate deficiencies such as woodpecker damage, cracks, rot and splitting.

#### 2. Project Cost Summary

(\$M)

2.1. Project Cost Summary										
Cost Category	PTF		Non-P	TF	Tota	I				
Material	\$	1.280	\$	-	\$	1.280				
Labor & Equipment	\$	8.787	\$	-	\$	8.787				
Right of Way	\$	-	\$	-	\$	-				
Engineering/Permitting /Indirects	\$	1.838	\$	-	\$	1.838				
Escalation	\$	-	\$	-	\$	-				
AFUDC	\$	0.284	\$	-	\$	0.284				
Contingency	\$	0.443	\$	-	\$	0.443				
Total Project Cost	\$	12.632	\$	-	\$	12.632				



2.2 Detailed Cost Summary By Project Element											
	Material	Labor & Equipment	Right of Way	Engineering/ Permitting/ Indirects	Escalation	AFUDC	Contingency	Total	PTF Amount		
G128 115-kV Laminated Wood Str Replacement	\$ 1.280	\$ 8.787	\$ -	\$ 1.838	\$ -	\$ 0.284	\$ 0.443	\$ 12.632	\$ 12.632		
Total	\$ 1.280	\$ 8.787	\$ -	\$ 1.838	\$ -	\$ 0.284	\$ 0.443	\$ 12.632	\$ 12.632		

### 3. Project Milestone Schedule

				2020			2021				2	022				
			Qtı	r1	Qtr2	) C	tr3	Qtr4	Qtr1	Qtr2	2 Qtr	3 Qtr4	Qtr	1 Qtr2	Qtr3	Qtr4
Description																
Approval and Permits	12/01/2020	04/01/2021														
				Ш	Ш	Ш							Ш			Ш
											_					
Engineering and Design	08/01/2020	02/01/2021					-									
Engineering and Design	00/01/2020	02/01/2021		-		-						-	-			
						_								_		
				П		П	П									
Material	02/01/2021	05/30/2021														
	105/04/0004	10/01/0001														
Construction	05/01/2021	12/31/2021		-		-										
			Qtı	r1	Qtr2	2 C	tr3	Qtr4	Qtr1	Qtr2	2 Qtr	3 Qtr4	Qtr	1 Qtr2	Qtr3	Qtr4
					2	020	)			, 2	021	8		2	022	

# G128 115-kV Line Laminated Wood Structure Replacement Project Correlation Table (Madbury substation - Eastport substation)

TCA <u>Item</u>	RSP: Project ID #	<u>Study:</u> Reliability Issues Requiring Action	PPA No.	PPA Application:     PAC/RC Meeting:     TCA Application       PPA No.     Preferred Solution     Presentation     PTF       Description     Reference     Estimate					
ES-21-TCA-22	###	n/a	n/a	Replace 75 laminated wood 115-kV structures with light-duty steel pole structures,including hardware, insulators, and guys and install lightning arrestors and counter poise.	Per PAC Presentation 03/17/2021	\$ 12.632 \$ 12.632	\$		