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March 24, 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-20 NH 115-kV Line Laminated Wood Structure
Replacement Program Phase 1 – L175 Line (Deerfield substation to Madbury 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

|                                |  | <u>Attachment B</u><br>Application Form |   |  |        |
|--------------------------------|--|---|---|--|--------|
| 1. Applicant:                  |  | Application #:                          | ES-21-TCA-20                              | Date:                                  | Mar-21 |
| Contact Name:<br>Company Name: |  |   |   |  |        |
| Address 1:                     |  | <del></del>                             |   |  |        |
| Address 2:                     |  | RSP Project ID # or                     |   |  |        |
| City, State, Zip               |  | Asset Condition ID #                    |   |  |        |
| Contact Phone #                |  | Is Project related to CIP-14            | -   |  |        |
| Email Address                  | david.burnham@eversource.com                                       | Yes No                                  | X   |  |        |
| Project Description:           |  |   |   | In Service Date:                       | Dec-21 |
|                                | a. High Level Project Details:                                     |   |   |  |        |
|                                | Project Name ( If no formal name, then Substation Upgrade, Line    | e Upgrade, etc. are acceptable):        | 115-kV Line Lamina<br>Program Phase 1 - L | ted Wood Structure Replace<br>175 Line | ement  |
|                                | Project Location (State only): State                               | te: NH                                  | County:                                   | Stratford, Rockingha                   | ım     |
|                                | b. Summary of PTF-related work for Project:                        | L                                       |   |  |        |
|                                | c. Summary of Non-PTF-related work for Project:                    |   |   |  |        |
|                                |  |   |   |  |        |
| 3. Was a transmission Pr       | roposed Plan Application required for this work?                   | Yes No                                  | X   | PPA Number: n/a                        |        |
| 4. Has a transmission Pr       | oposed Plan Application been approved?                             | Yes No                                  | N/A X                                     | Approval Date:                         |        |
| If yes, attach a copy as       | nd reference Proposed Plan Application # and approval date.        | (Please check only one)                 |   |  |        |
| Need For Project:              |  |   |   |  |        |
| 5. Need Based On (Chec         | ck all Categories that apply):                                     |   |   |  |        |
|                                | a. Reliability   | X                                       |   |  |        |
|                                | b. Economic  |   |   |  |        |
|                                | c. Service to new load   |   |   |  |        |
|                                | d. New generator interconnection                                   | $\Box$                                  |   |  |        |
|                                | Generator Proposed Plan Application Number                         | <u>—</u>                                |   |  |        |
|                                | Generator Proposed Plan Application Date                           |   |   |  |        |
|                                | (Attach copy of cover letter & Generator Proposed Plan Application |   |   |  |        |
|                                |  | Page 1                                  |   |  |        |

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| e. Public Policy Transmission Upgrade (PPTU)   |  |
|--|--|
| 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 con structures in this line section need to be replaced. | dition vulnerabilities. To ensure the continued operability of this line segment, the identified |
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| Cost of Project:   |          |         |
|--|----------|---------|
| 7. Total Project Cost (\$\(\frac{\mathbf{M}}{M}\) equals PTF + Non-PTF + all other Project Costs:  | \$19.300 |         |
| 8. Total Proposed PTF Costs  | ·        |         |
| a. Total Proposed PTF Cost of this Project (\$M):  | \$19.300 |         |
| b. Requested Pool-Supported PTF Costs associated with this Project (\$M):  | \$19.300 |         |
| c. Breakdown of Requested Pool-Supported PTF Cost associated with this Project (\$M): (Consistent with Table 1 and Appendix D of this Procedure)                                     |          |         |
| Material   | \$2.006  |         |
| Labor  | \$14.100 |         |
| ROW  | \$0.000  |         |
| Engineering/Permitting/Indirects   | \$2.306  |         |
| Escalation   | \$0.000  |         |
| AFUDC (or equivalent)  | \$0.446  |         |
| Contingency  | \$0.442  |         |
| 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 IC  |          |         |
| 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<br>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.   |
|     | - Replace/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.   |
|     | <u>Preferred:</u> 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> 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: L175 115-kV Laminated Wood Structure Replacement Project

Date: Mar-21

#### 1. Project Scope Summary

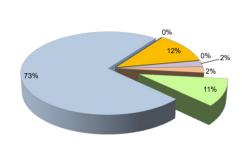
Replace 115 laminated wood structures (LWS) on the L175 115-kV Line (Deerfield substation to Madbury substation) with steel poles and install lightning arrestors and counter poise as required as the result of visual and aerial inspections as well as evidence from a series of previous asset condition projects in which a systemic problem with internal pole rot. 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-F | PTF | Total |        |  |  |  |  |  |  |
| Material                             | \$  | 2.006  | \$    | -   | \$    | 2.006  |  |  |  |  |  |  |
| Labor & Equipment                    | \$  | 14.100 | \$    | -   | \$    | 14.100 |  |  |  |  |  |  |
| Right of Way                         | \$  | -      | \$    | -   | \$    | -      |  |  |  |  |  |  |
| Engineering/Permitting<br>/Indirects | \$  | 2.306  | \$    | -   | \$    | 2.306  |  |  |  |  |  |  |
| Escalation                           | \$  | -      | \$    | -   | \$    | -      |  |  |  |  |  |  |
| AFUDC                                | \$  | 0.446  | \$    | -   | \$    | 0.446  |  |  |  |  |  |  |
| Contingency                          | \$  | 0.442  | \$    | -   | \$    | 0.442  |  |  |  |  |  |  |
| Total Project Cost                   | \$  | 19.300 | \$    |     | \$    | 19.300 |  |  |  |  |  |  |





| 2.2 Detailed Cost Summary By Project Element                |        |       |                      |              |                                       |    |            |       |       |             |       |       |        |            |        |
|---|--------|-------|----------------------|--------------|---------------------------------------|----|------------|-------|-------|-------------|-------|-------|--------|------------|--------|
|   | Materi | al    | Labor &<br>Equipment | Right of Way | Engineering/<br>Permitting/ Indirects | 8  | Escalation | AFUDC |       | Contingency |       | Total |        | PTF Amount |        |
| L175 115-kV Laminated Wood Structure<br>Replacement Project | \$     | 2.006 | \$ 14.100            | \$ -         | \$ 2.306                              | \$ | -          | \$    | 0.446 | \$          | 0.442 | \$    | 19.300 | \$         | 19.300 |
| Total   | \$     | 2.006 | \$ 14.100            | \$ -         | \$ 2.306                              | \$ | -          | \$    | 0.446 | \$          | 0.442 | \$    | 19.300 | \$         | 19.300 |

# 3. Project Milestone Schedule

|                        |            |            | 2020     |      |       | 2021    |       |          |      |      | 20   | )22     |      |      |      |
|------------------------|------------|------------|----------|------|-------|---------|-------|----------|------|------|------|---------|------|------|------|
|                        |            |            | <br>Qtr1 | Qtr: | 2 Qtr | 3 C     | Qtr4  | Qtr1     | Qtr2 | Qtr3 | Qtr4 | Qtr1    | Qtr2 | Qtr3 | Qtr4 |
| Description            |            |            |          |      |       |         |       |          |      |      |      |         |      |      |      |
|                        |            |            | <br>     |      |       |         |       |          |      |      |      |         |      |      |      |
| Approval and Permits   | 12/01/2020 | 04/01/2021 |          |      |       |         |       |          |      |      |      |         |      |      |      |
|                        |            |            |          |      |       |         |       |          |      |      |      |         |      |      |      |
|                        |            |            |          |      |       |         |       |          |      |      |      |         |      |      |      |
|                        |            |            |          |      |       |         |       |          |      |      |      |         |      |      |      |
| Engineering and Design | 08/01/2020 | 02/01/2021 | <br>     |      |       |         |       | <b>-</b> |      |      |      |         |      | •    |      |
|                        |            |            |          |      |       | Ш       |       |          |      |      |      | Ш       |      |      | Ш    |
|                        |            |            |          |      |       |         |       |          |      |      |      |         |      |      |      |
|                        |            |            | <br>     |      |       | _       | _     |          |      |      |      |         |      |      |      |
| Material               | 02/01/2021 | 05/30/2021 | <br>     |      |       |         |       |          |      |      |      |         |      |      |      |
|                        |            |            |          |      |       | $\perp$ | Ш     | ш        |      |      | Ш    | $\perp$ |      |      | ш    |
|                        |            |            |          |      |       |         |       |          |      |      |      |         |      |      |      |
| O                      | 05/04/0004 | 40/20/2024 |          |      |       |         |       |          |      |      |      |         |      |      | +    |
| Construction           | 05/01/2021 | 12/30/2021 |          |      |       |         |       |          |      |      |      |         |      |      |      |
| i                      | I          | I          | 1.1      |      |       | 1 1     | - 1 1 | 1.1      |      |      |      | 1.1     |      |      |      |

# L175 115-kV Line Laminated Wood Structure Replacement Project Correlation Table (Deerfield substation - Madbury substation)

| TCA<br><u>Item</u> | <u>RSP:</u><br>Project ID # | Study:<br>Reliability Issues Requiring<br><u>Action</u> | PPA No. | PPA Application:<br>Preferred Solution<br><u>Description</u>   | PAC/RC Meeting:<br>Presentation<br>Reference | TCA Applica<br>PTF<br>Estimate | tion (\$1,000s):<br>Non-PTF<br><u>Estimate</u> |
|--------------------|-----------------------------|---|---------|--|--|--------------------------------|--|
| ES-21-TCA-20       | ###                         | n/a   | n/a     | Replace 115 laminated wood 115-kV structures with lightduty steel pole structures, including hardware, insulators, and guys and install lightning arrestors and counter poise. | Per PAC<br>Presentation<br>03/17/2021        | \$ 19.300<br>\$ 19.300         | \$ -   |