EVERSOURCE ENERGY

56 Prospect Street
Hartford, CT 06103

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Transmission System Planning
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May 6, 2019

Ms. Mariah Winkler
Chair, NEPOOL Reliability Committee
ISO New England, Inc.
One Sullivan Road
Holyoke, MA 01040-2841

Dear Ms. Winkler,

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 Connecticut Light and Power Company project:

**ES-19-TCA-22 1635 115kV Line Structure Replacements (S. Windsor substation – Barbour Hill 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,

*Allen Scarfone*

Allen W. Scarfone

cc: M. Drzewianowski

# Attachment B
## TCA Application Form

1. Applicant:

Application #: ES-19-TCA-22 Date: May-19

| | |
|---|---|
| Contact Name: | Allen Scarfone |
| Company Name: | Eversource Energy |
| Address 1: | 56 Prospect Street |
| Address 2: | |
| City, State, Zip | Hartford, CT |
| Contact Phone # | 860-728-4618 |
| Email Address | allen.scarfone@eversource.com |

RSP Project ID # or Assect Condition ID # 127

Is Project related to CIP-14 Yes [ ] No [X]

2. Project Description: In Service Date: Oct-19

a. **High Level Project Details:**

| | | | |
|---|---|---|---|
| **Project Name** ( If no formal name, then Substation Upgrade, Line Upgrade, etc. are acceptable): | **1635 115kV Line Structure Replacements (S. Windsor substation - Barbour Hill substation)** | | |
| **Project Location** (State only): | **State:** **CT** | **County:** | **Hartford** |

b. Summary of PTF-related work for Project:

Replace 19 wood structures on the 1635 Line with steel pole structures to mitigate deficiencies such as: woodpecker damage, rot, cracks and deteriorated steel mechanical connections.

Final project cost details will be known following close out of all project work orders.

c. Summary of Non-PTF-related work for Project:

3. Was a transmission Proposed Plan Application required for this work? Yes [ ] No [X] PPA Number: n/a

4. Has a transmission Proposed Plan Application been approved? Yes [ ] No [ ] N/A [X] Approval Date:
If yes, attach a copy and reference Proposed Plan Application # and approval date. (Please check only one)

**Need For Project:**

5. Need Based On (Check all Categories that apply):

a. Reliability [X]

b. Economic [ ]

c. Service to new load [ ]

d. New generator interconnection [ ]

Generator Proposed Plan Application Number _____

Generator Proposed Plan Application Date _____

(Attach copy of cover letter & Generator Proposed Plan Application)

e. Public Policy Transmission Upgrade (PPTU) [ ]

| | | |
|---|---|---|
| f. | Market Efficiency Transmission Upgrade (METU) | ☐ |
| g. | Asset Condition | ☒ |
| 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**: | **$5.608** |
| 8. Total Proposed PTF Costs | |
| a. Total Proposed PTF Cost of this Project ($M): | $5.608 |
| b. Requested Pool-Supported PTF Costs associated with this Project ($M): | **$5.608** |
| c. Breakdown of Requested Pool-Supported PTF Cost associated with this Project ($M): (Consistent with Table 1 and Appendix D of this Procedure) | |
| Material | $0.890 |
| Labor | $3.090 |
| ROW | $0 |
| Engineering/Permitting/Indirects | $1.447 |
| Escalation | $0 |
| AFUDC (or equivalent) | $0.031 |
| Contingency | $0.150 |
| d. Generator Supported PTF Costs* ($M): | $0.00 |

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): | $0 |
| 10. Proposed PTF Costs ($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. | $0 |
| a. Description of Proposed PTF Cost introduced as a result of local, state or other regulatory/legislative requirements as defined in question 8 above. | |
| 11. All other Project Costs not captured in PTF Costs (8) or Non-PTF Costs (9) ($M) associated with this Project: | $0 |

12. Total PTF Cost based on: (check one)
Actual Costs ☐
**OR**
Estimated Costs* ☒

13. Valuation Year(s) of dollar amounts submitted above: 2019

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 ☒

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.

**Preferred:** Field Inspections have indicated a significant amount of degradation and decreased load 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.

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.

* Pool-Supported PTF costs were determined pursuant to Schedule 11 of Section II of the Tariff.

# PROJECT COST ESTIMATE & SCHEDULE SHEET

**Transmission Owner:** Eversource **RSP Project #:** 127

**Project Name:** 1635 Line - Structure Replacement Project **Date:** May-19

## 1. Project Scope Summary

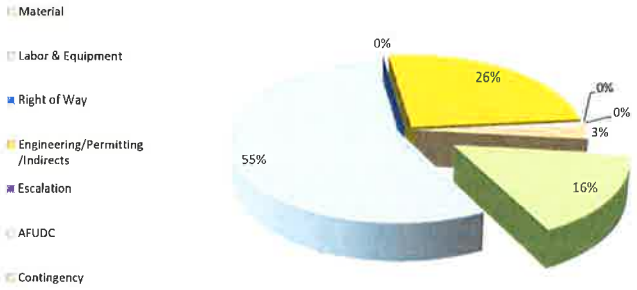
Transmission Line Maintenance has identified 19 structures on the 1635 115kV Line (South Windsor substation - Barbour Hill substation) that are in need of replacement as the result of foot and aerial patrols. The structures have deficiencies such as: woodpecker damage, rot, cracks and deteriorated steel mechanical connections.

## 2. Project Cost Summary

($1000s)

### 2.1. Project Cost Summary

| Cost Category | PTF | Non-PTF | Total |
|---|---|---|---|
| Material | $ 890 | $ - | $ 890 |
| Labor & Equipment | $ 3,090 | $ - | $ 3,090 |
| Right of Way | $ - | $ - | $ - |
| Engineering/Permitting /Indirects | $ 1,447 | $ - | $ 1,447 |
| Escalation | $ - | $ - | $ - |
| AFUDC | $ 31 | $ - | $ 31 |
| Contingency | $ 150 | $ - | $ 150 |
| **Total Project Cost** | **$ 5,608** | **$ -** | **$ 5,608** |




### 2.2 Detailed Cost Summary By Project Element

| | Material | Labor & Equipment | Right of Way | Engineering/ Permitting/ Indirects | Escalation | AFUDC | Contingency | Total | PTF Amount |
|---|---|---|---|---|---|---|---|---|---|
| 1635 115kV Line Structure Replacements | 890 | 3,090 | 0 | 1,447 | 0 | 31 | 150 | $ 5,608 | $ 5,608 |
| **Total** | **$ 890** | **$ 3,090** | **$ -** | **$ 1,447** | **$ -** | **$ 31** | **$ 150** | **$ 5,608** | **$ 5,608** |

## 3. Project Milestone Schedule

| Description | | | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|---|
| | | | Qtr1 Qtr2 Qtr3 Qtr4 | Qtr1 Qtr2 Qtr3 Qtr4 | Qtr1 Qtr2 Qtr3 Qtr4 | Qtr1 Qtr2 Qtr3 Qtr4 | Qtr1 Qtr2 Qtr3 Qtr4 | Qtr1 Qtr2 Qtr3 Qtr4 | Qtr1 Qtr2 Qtr3 Qtr4 |
| **Siting & Permitting** | | | | | | | | | |
| Approval and Permits | 07/30/2018 | 01/01/2019 | | | → | | | | |
| **Engineering** | | | | | | | | | |
| Engineering and Design | 07/30/2018 | 12/31/2018 | | | → | | | | ◆ |
| **Land** | | | | | | | | | |
| Material | 07/30/2018 | 02/28/2019 | | | → | | | | ◆ |
| **Construction** | | | | | | | | | |
| Construction | 01/01/2019 | 10/31/2019 | | | | → | | | ◆ |
| | | | Qtr1 Qtr2 Qtr3 Qtr4 | Qtr1 Qtr2 Qtr3 Qtr4 | Qtr1 Qtr2 Qtr3 Qtr4 | Qtr1 Qtr2 Qtr3 Qtr4 | Qtr1 Qtr2 Qtr3 Qtr4 | Qtr1 Qtr2 Qtr3 Qtr4 | Qtr1 Qtr2 Qtr3 Qtr4 |
| | | | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |

1635 Line 115-kV Structure Replacement Project (S. Windsor substation - Barbour Hill substation)
Correlation Table

| TCA Item | RSP: Project ID # | Study: Reliability Issues Requiring Action | PPA Application: PPA No. | PPA Application: Preferred Solution Description | PAC/RC Meeting: Presentation Reference | TCA Application ($1,000s): PTF Estimate | TCA Application ($1,000s): Non-PTF Estimate |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| **ES-19-TCA-22** | 127 | n/a | n/a | Replace 19 wood 115-kV structures with light-duty steel pole structures, including hardware, insulators, and guys. | Per PAC Presentation 10/17/2018 | $ 5,608 | |
| | | | | SUBTOTAL | | $ 5,608 | $ - |