EVERSOURCE
Project Authorization Form

Operations Project Authorization Form

Project Title [redacted] 2020 TDRP	**Project Number: CD01648**
Date Prepared: 08/08/2023	**Company:** Eversource CT
Organization: Electric Field Operations	**Class(es) of Plant:** D Line
Project Initiator: [redacted]	**Project Category:** TRMSN DISTR RELIABILTY PERFRM
Project Manager: [redacted]	**Project Type:** Specific
Project Sponsor: [redacted]	**Capital Investment part of original Operating Plan:** Yes
Estimated in service date: 12/31/2023	**Emergency Related Request?** No
Eng./Constr. Resources Budgeted? Yes	**Facility Type** (check all that apply): ☐ PTF ☐ non-PTF ☒ Distribution
Total Gross Capital Request: $325,748	**Authorization Type:** Full Funding

Financial Requirements:

Project Authorization

ERM: _____

FP&A: _____

Executive Summary

Transmission-Distribution Reliability Performance (TDRP) projects address reliability issues associated with the top Worst 100 circuits in Connecticut. In doing so, Eversource-CT maintains compliance with Docket 86-12-03. Eversource-CT is required to report the status of actions taken to improve performance for each circuit topping the "Worst 100" list. Updates are required each year for the four years following a circuit's appearance on the list.

[redacted]

The project will selectively address certain zones of backbone with poor reliability by reconductoring those sections with 556 tree wire. Single phase laterals will be reconductored with tree wire and sectionalizing fusing will be installed as appropriate including Tripsavers.

This project was moved to 2023 and it is expected to be within the percentage of acceptance between the initial engineering estimate and the full funding request.

Project Cost Summary

Capital Costs	2023	Year 2	Year 3+	Total
Internal Labor and Construction Equipment	$19,797	$0	$0	$19,797
Outside Services	$108,228	$0	$0	$108,228
Materials	$24,201	$0	$0	$24,201
Removals	$0	$0	$0	$0
Risk and Contingency	$22,727	$0	$0	$22,727
Other	$37,852	$0	$0	$37,852
Subtotal	**$212,805**	**$0**	**$0**	**$212,805**

Indirect Capital Costs	2023	Year 2	Year 3+	Total
Indirects/Overheads (including benefits)	$112,943	$0	$0	$112,943
Capitalized interest or AFUDC, if any	$0	$0	$0	$0
Subtotal	**$112,943**	**$0**	**$0**	**$112,943**
Total Capital Costs (Gross)	**$325,748**	**$0**	**$0**	**$325,748**
Less Total Customer Contribution	**$ -**	**$ -**	**$ -**	**$ -**
Total O&M Project Costs	**$0**	**$0**	**$0**	**$0**
Project Costs (Net of Reimbursement)	**$325,748**	**$0**	**$0**	**$325,748**

Technical Justification:

[redacted]

Project Need Statement

The work in this project will help Eversource Energy meet its reliability goals (SAFI, CADI and SADI). By improving the electrical system with cover wire, sectionalizing switches, and updating poles.

Project Objectives

The recommendations in this project will improve the reliability of the [redacted] by hardening electrical distribution system with covered wire and stronger poles. Cadi will be improved by the location of Fuse savers installed.

Project Scope

Selected/Preferred Option at a cost of $325,748

[redacted]

Major Material:

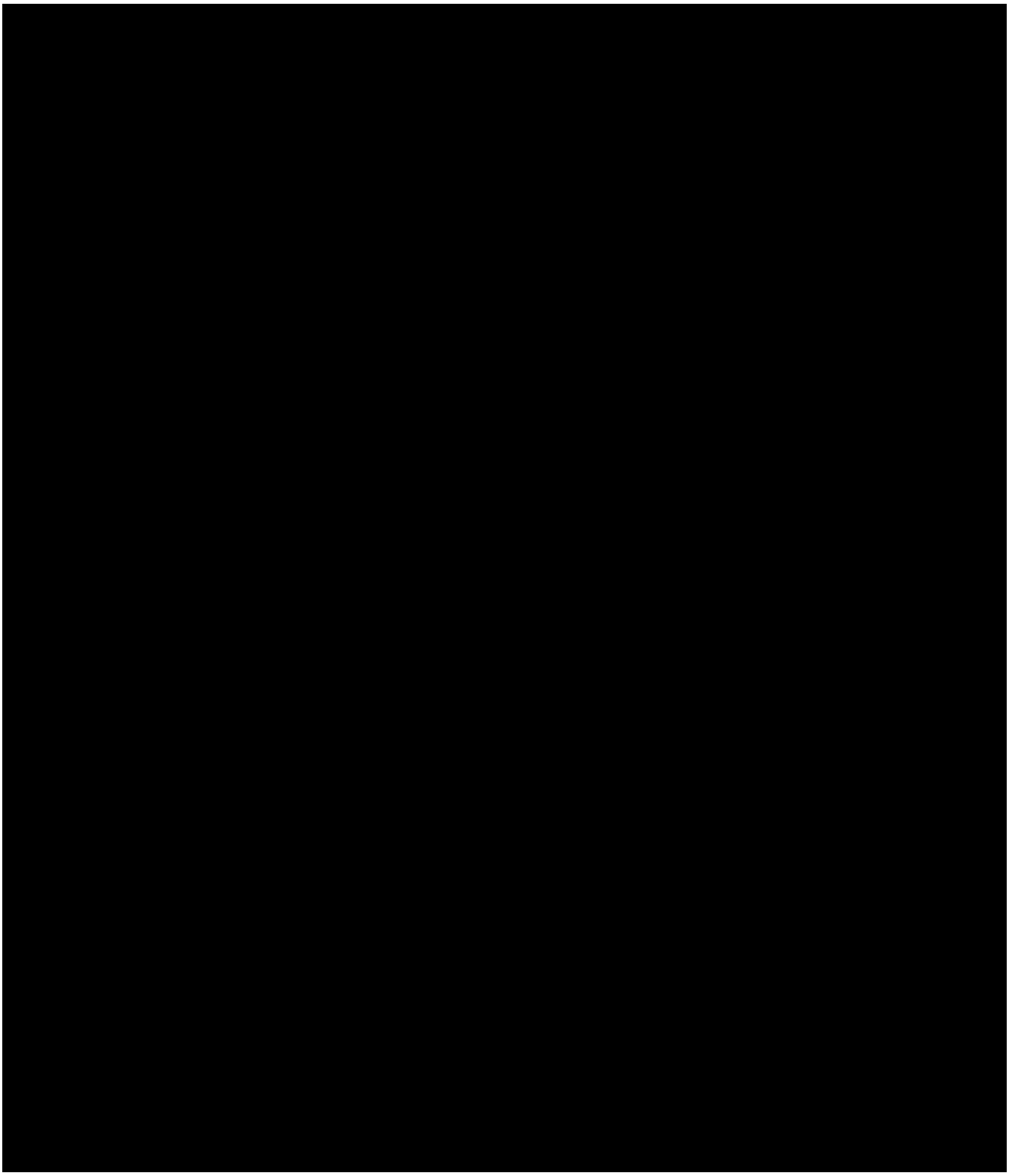
6,200 feet of 1/0 single phase tree wire.
18 poles.
1 Fuse Saver

The selected/preferred option will selectively address certain zones of backbone with poor reliability by reconductoring those sections with 556 tree wire. Single phase laterals will be reconductored with tree wire and sectionalizing fusing will be installed as appropriate including Tripsavers.

Background / Justification

Below is the table that was used to review the devices that were the major contributors to the reliability of the circuit.





Business Process and / or Technical Improvements:

The reliability improvements on the [redacted] will help bring the circuit off the TDRP list for future years. The areas that were determined to be problematic have been addressed with electrical and structural improvements.

Alternatives Considered with Cost Estimates

[redacted] **for $43M.**

- [redacted]
- [redacted]
- [redacted]

This option/alternative was not considered due to the high cost associated with the project' solution.

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Preliminary Approval	3/30/2021
Detailed Design	8/30/2021
Settings Requested	2/30/2022
Construction Start Date	1/1/2023
Construction End Date	12/30/2023

Risks and Risk Mitigation Plans

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation

Actual cost higher than estimated due to scope changes.	2023	Low	Included contingency costs in the funding request. Perform detailed Field Analysis and walk down in project development to avoid potential issues.
Customer Permission / Siting Council / Municipal approvals	2023	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Internal construction resources not available to perform the work.	2023	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Internal engineering resources not available to perform the work.	2023	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2023	Low	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2023	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2023	Low	Schedule work to minimize system abnormal time. Install temporary bypasses/equipment if system will be abnormal for extended periods.

References

Attachments (One-Line Diagrams, Images, etc.)

[redacted] Map.pdf
[redacted] Segment 3.pdf
Burnt Hill Segment 1.pdf
CD01648_project_needs_statement.pdf
Fuse 1617 Lebanon Segment 2.pdf
P-1395 East St. no segments.pdf


Load Summary Sheet 32R2 TDRP.xls


Segment 4 and 6.pdf


P-1875 Lake Rd Hebron No Segment


[redacted] one line.pdf

------ ORIGINAL PAF ------

Operations Project Authorization Form

Date Prepared: 12/28/20	**Project Title: [redacted] 2020 TDRP**
Company: Eversource CT	**Project ID Number: CD01648**
Organization: Distribution Electric	**Class(es) of Plant: Distribution**
Project Initiator: [redacted]	**Project Category:** Line
Project Manager: [redacted]	**Project Type: TDRP**
Project Sponsor: [redacted]	**Project Purpose: Reliability**
Estimated in service date: 12/31/2022	**If Transmission Project: PTF? N/A**
Eng. /Constr. Resources Budgeted?	**Capital Investment Part of Original Operating Plan?**
Authorization Type: Full Funding	**O&M Expenses Part of the Original Operating Plan?**
Total Request: $ 308,694	

Financial Requirements:

Project Authorization
ERM: _____

FP&A: _____

Executive Summary
Transmission-Distribution Reliability Performance (TDRP) projects address reliability issues associated with the top Worst 100 circuits in Connecticut. In doing so, Eversource-CT maintains compliance with Docket 86-12-03. Eversource-CT is required to report the status of actions taken to improve performance for each circuit topping the "Worst 100" list. Updates are required each year for the four years following a circuit's appearance on the list.

[redacted] of the 2020 Transmission and Distribution Reliability Program (TDRP) list. [redacted]

The project will address certain zones of backbone with poor reliability by reconductoring those sections with 556 tree wire.
Single phase laterals will be reconductored with tree wire and sectionalizing fusing will be installed were appropriate.
[redacted] was trimmed in 2017, it is scheduled to be trimmed in 2021.

Project Cost Summary

	Prior Authorized	2022	20__	20__+	Totals
Capital Additions - Direct	$0	$172,756	$0	$0	$172,756
Less Customer Contribution	$0	$0	$0	$0	$0
Removals net of Salvage ____%	$0	$15,776	$0	$0	$15,776
Total - Direct Spending	$0	$188,533	$0	$0	$188,533
Capital Additions - Indirect	$0	$109,352	$0	$0	$109,352
Subtotal Request	$0	$297,885	$0	$0	$297,885
AFUDC	$0	$2,253	$0	$0	$2,253
Total Capital Request	$0	$300,138	$0	$0	$300,138
O&M	$0	$8,556	$0	$0	$8,556
Total Request	$0	$308,694	$0	$0	$308,694

Financial Evaluation

Direct Capital Costs	Year 1	Year 2	Year 3+	Total
Straight Time Labor	$22,370	$0	$0	$22,370
Overtime Labor	$2,089	$0	$0	$2,089
Outside Services	$97,110	$0	$0	$97,110
Materials	$64,513	$0	$0	$64,513
Other, including contingency amounts (describe)	$2,451	$0	$0	$2,451
Total Direct Costs	**$188,533**	**$0**	**$0**	**$188,533**

Indirect Capital Costs	Year 1	Year 2	Year 3+	Total
Indirects/Overheads (including benefits)	$109,352	$0	$0	$109,352
Capitalized interest or AFUDC, if any	$2,190	$0	$0	$2,190
Total Indirect Costs	**$111,542**	**$0**	**$0**	**$111,542**
Total Capital Costs	**$300,075**	**$0**	**$0**	**$300,075**
Total Capital Project Costs	**$300,075**	**$0**	**$0**	**$300,075**
Total O&M Project Costs	**$8,619**	**$0**	**$0**	**$8,619**
Total Project Cost	**$ 308,694**	**$ -**	**$ -**	**$ 308,694**

[redacted]

Project Need Statement

The work in this project will help Eversource Energy meet its reliability goals (SAFI, CADI and SADI). By improving the electrical system with cover wire, sectionalizing switches, and updating poles.

Project Objectives

The recommendations in this project will improve the reliability of the [redacted] by harden electrical distribution system with covered wire and stronger poles. Cadi will be improved by the location of Fuse savers installed.

Project Scope

[redacted]

[redacted]

Major Material:

6,200 feet of 1/0 single phase tree wire.
18 poles.
1 Fuse Saver

Background / Justification

Below is the table that was used to review the devices that were the major contributors to the reliability of the circuit.

[redacted]

[redacted]

Business Process and / or Technical Improvements:

The reliability improvements on the [redacted] will help bring the circuit off the TDRP list for future years. The areas that were determined to be problematic have been addressed with electrical and structural improvements.

Alternatives Considered with Cost Estimates

[redacted] for 43 million dollars.

[redacted]

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Preliminary Approval	3/30/2021
Detailed Design	8/30/2021
Settings Requested	2/30/2022
Construction Start Date	1/1/2022

Milestone/Phase Name	Estimated Completion Date
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