EVERSOURCE

Project Approval Form

Project Title: [redacted] Normal overload	**Project Number:** CD02164
Date Prepared: 01/09/2024	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** OVERLOADS-SPECIFIC PROJECTS
Project Initiator: [redacted]	**Project Type:** Specific
Initiating Organization: Distribution	**Capital Investment part of original Op Plan:** Yes
Project Manager: [redacted]	**Emergency Related Request?** No
Project Sponsor: [redacted]	**Facility Type** (check all that apply)**:** ☐ PTF ☐ non-PTF ☒ Distribution ☐ N/A (General Plant)
Required in service date: 06/01/2024	
Total Capital Request: $2,634.6K	**Authorization Type:** Full Funding

1. Executive Summary

Full funding is being requested for this project at a cost of $2,634.6K, which is 102% of the approved partial funding estimate of $2,592K. There is no scope change in the project.

[redacted]

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2024	2025	2026+	Total
Internal Labor and Construction Equipment	246.2	0.0	0.0	246.2
Outside Services	725.5	0.0	0.0	725.5
Materials	257.4	0.0	0.0	257.4
Removals	92.1	0.0	0.0	92.1
Risk and Contingency	239.5	0.0	0.0	239.5
Other	0.0	0.0	0.0	0.0
Subtotal	**1,560.8**	**0.0**	**0.0**	**1,560.8**

Indirect Capital Costs	2024	2025	2026+	Total
Indirects/Overheads (including benefits)	1,073.9	0.0	0.0	1,073.9
Capitalized interest or AFUDC, if any	0.0	0.0	0.0	0.0
Subtotal	**1,073.9**	**0.0**	**0.0**	**1,073.9**
Total Capital Costs (Gross)	**2,634.6**	**0.0**	**0.0**	**2,634.6**
Less Total Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Project Costs (Net of Reimbursement)	**2,634.6**	**0.0**	**0.0**	**2,634.6**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

Distribution circuits are designed such that they remain within their load rating during normal operation and for any added load under a contingency situation to avoid equipment damage.

b. Project Need

[redacted]

c. Project Scope

- [redacted]
- [redacted]

4. Alternatives Considered

One alternative considered on this project was to create [redacted]

Project Option Comparison

	Option	
[redacted]		
Eliminate triple circuit pole line	N/A	N/A

Cost	$2.6M	$3.0M
Cost / MVA added	$500K/MVA	N/A
Cost / CM Saved	$/CM	$/CM
Cost / CI Saved	$/CI	$/CI
Preferred option	X	

5. Project Schedule

Add any additional milestones that are pertinent to the project

Milestone/Phase Name	Estimated Date
Partial Approval	August 2023
100% Detailed Engineering Completion	December 2023
Fully Funded	January 2024
Construction Start	January 2024
In Service Date	June 2024

6. Regulatory Decisions

N/A

7. Codes and Standards

N/A

8. Risk and Contingencies

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2024	Medium	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	2024	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Internal construction resources not available to perform the work.	2024	High	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2024	Medium	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2024	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2024	Medium	Schedule work to minimize system abnormal time. Install temporary bypasses/equipment if system will be abnormal for extended periods.

9. References

References
1. N/A

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

Attachment	Included in Submittal?
A. Cost Estimate	*YES*
B. Geographic Map	*YES*
C. System and Station One-Lines	*YES*
D. Load Sheet	*YES*
F. Partial Funding PAF	*YES*

Attachment A: Cost Estimate

Design Alternative CD02164-01

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$1,216,409
Contingency Amount:	$291,938
Estimate:	$1,508,347
Reimbursement:	$0
Net Amount:	$1,508,347
Description:	[redacted]

Item Description	CU	[redacted]	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Complex	16-ALL16		$21,072.00
POLE OH - POLE - 3ph (CL&P custodian)	16-OH14		$74,816.00
OH WIRE OH - Reconductor w/Spacer Cable - 556 kcmil	16-OH29		$471,040.00
OH WIRE OH - Remove circuit wire (3 phase)	16-OH37A		$14,720.00
SECTIONALIZE OH - Recloser - 3ph	16-OH38		$47,989.60
SECTIONALIZE OH - Recloser Control - setting changes only	16-OH39A		$9,771.20
TREE OH - Tree Trimming	16-OH61		$40,000.00
OTHER OTHER 30% adder to estimating units	16-ALL14		$216,000.00
OTHER OTHER 30% contractor costs	16-ALL14		$281,000.00
TRAFFIC OH/DB/UG - Traffic Control - Police Officer Police Protection	16-ALL18		$40,000.00

Design Alternative CD02164-02

Estimate

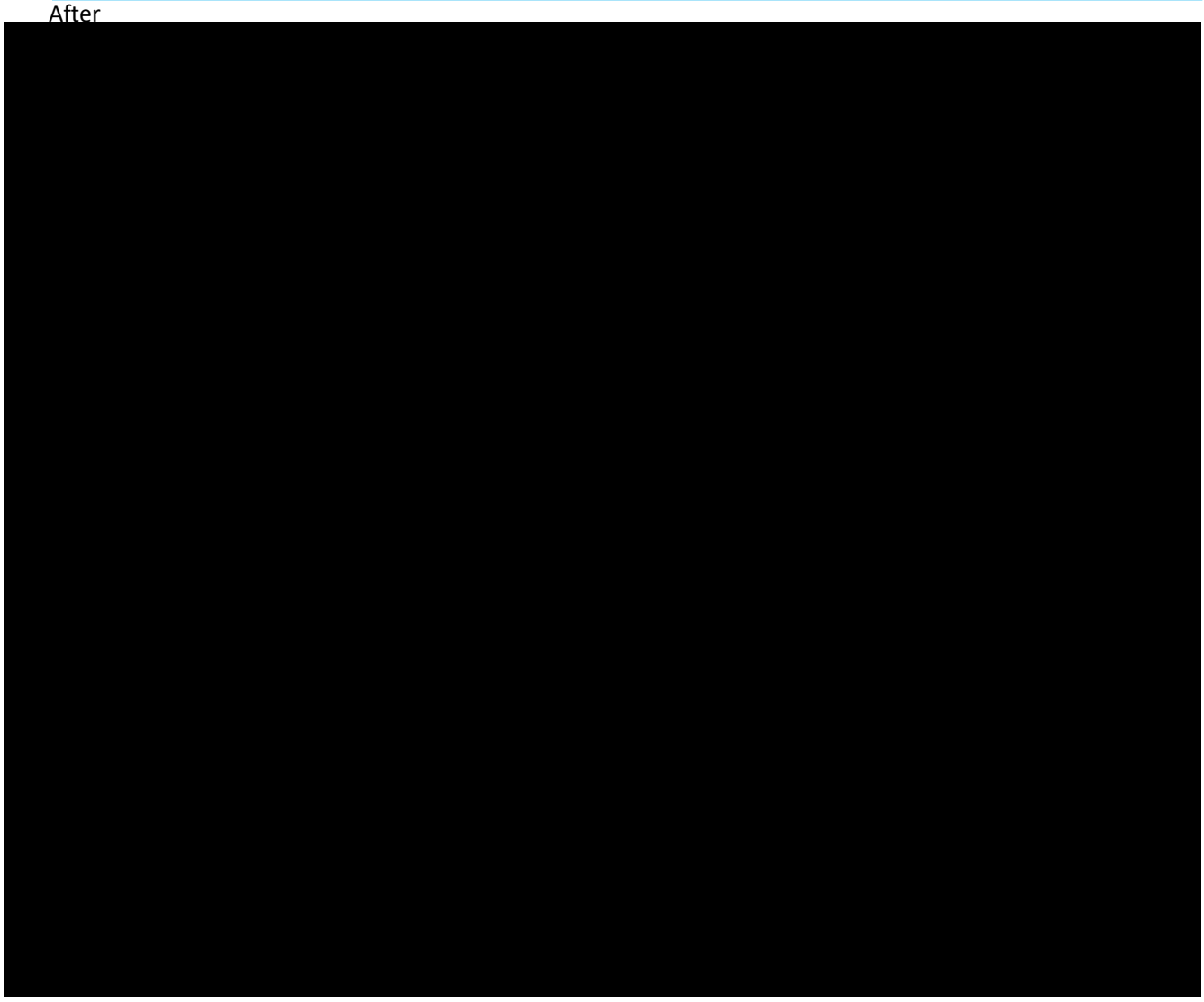
	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$939,048
Contingency Amount:	$225,372
Estimate:	$1,164,420
Reimbursement:	$0
Net Amount:	$1,164,420
Description:	[redacted]

Item Description	CU	[redacted]	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Complex	16-ALL16		$84,288.00
TRAFFIC OH/DB/UG - Traffic Control - Police Officer	16-ALL18		$30,000.00
POLE OH - POLE - 3ph (CL&P custodian)	16-OH14		$46,760.00
OH WIRE OH - Reconductor w/Spacer Cable - 556 kcmil	16-OH29		$256,000.00
OH WIRE OH - Remove circuit wire (3 phase)	16-OH37A		$8,000.00
TREE OH - Tree Trimming	16-OH61		$30,000.00
OTHER OTHER 30% adder for contractor	16-ALL14		$217,000.00
OTHER OTHER 30% adder to estimating units	16-ALL14		$167,000.00
OTHER OTHER	16-ALL14		$100,000.00

Attachment B: Geographic Map



After



Attachment C: One-Lines

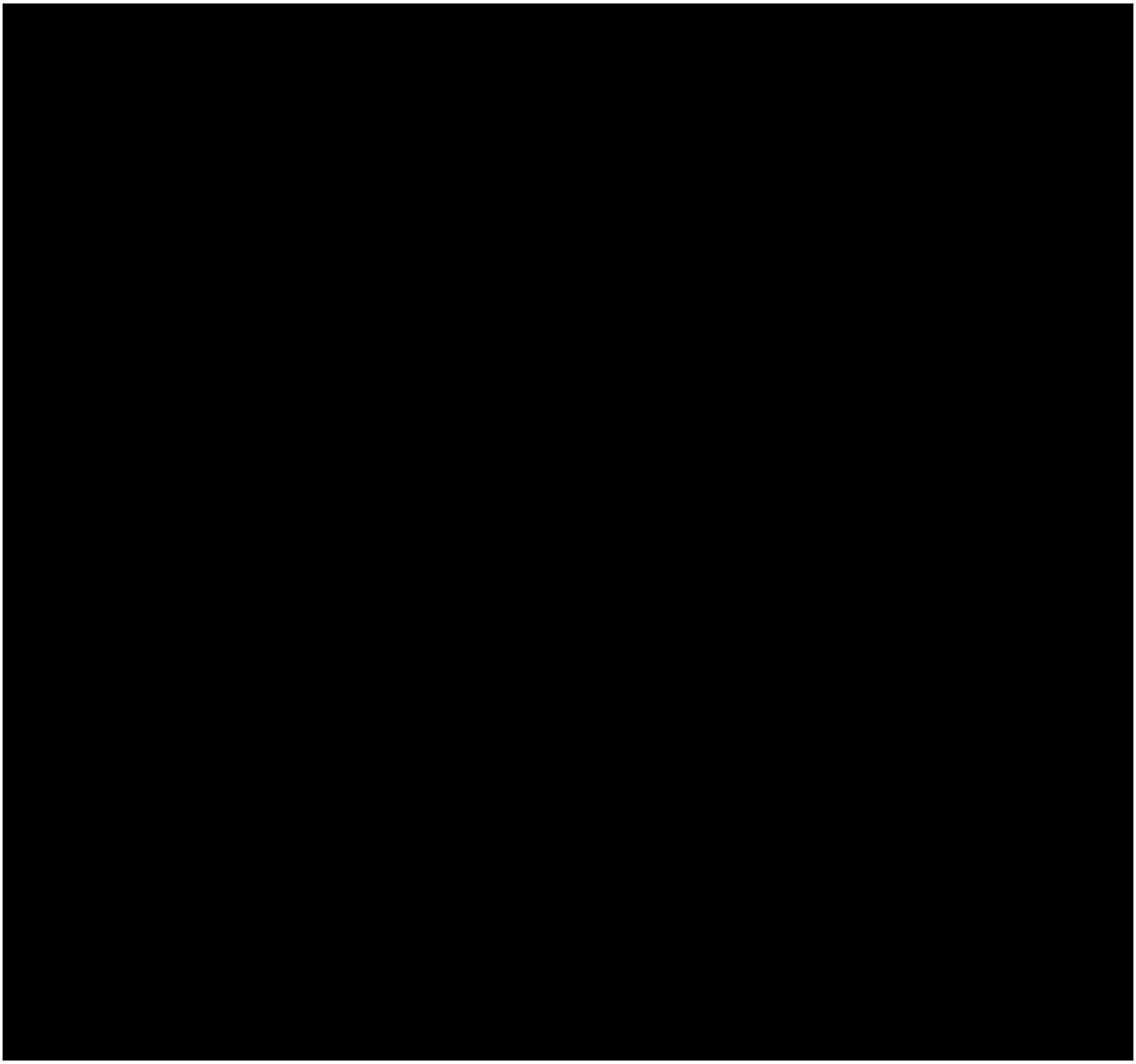
Before



After



Attachment D: Load Sheet



Attachment E: Partial Funding PAF

Operations Project Authorization Form

Project Title: [redacted] **Normal Overload**	**Project Number: CD02164**
Date Prepared: 03/22/2023	**Company:** Eversource CT
Organization: Electric Field Operations	**Class(es) of Plant:** D Line
Project Initiator: [redacted]	**Project Category:** OVERLOADS-SPECIFIC PROJECTS
Project Manager: [redacted]	**Project Type:** Specific
Project Sponsor: [redacted]	**Capital Investment part of original Operating Plan:** No
Estimated in service date: 06/1/2024	**Emergency Related Request?** No
Eng./Constr. Resources Budgeted? No	**Facility Type** (check all that apply)**:**
Total Gross Capital Request: $2,592K	**Authorization Type:** Initial Funding

Executive Summary

[redacted]

[redacted]

[redacted], while also includes $70K for tree trimming.

[redacted]

Project Costs Summary

Note: Dollar values are in thousands

Capital Costs	2024	2025	2026+	Total
Internal Labor and Construction Equipment	108.5	0.0	0.0	108.5
Outside Services	882.2	0.0	0.0	882.2
Materials	442.6	0.0	0.0	442.6
Removals	195.9	0.0	0.0	195.9
Other	17.2	0.0	0.0	17.2
Risk and Contingency	0.0	0.0	0.0	0.0
Subtotal	**1,646.3**	**0.0**	**0.0**	**1,646.3**

Indirect Capital Costs	2024	2025	2026+	Total
Indirects/Overheads (including benefits)	886.8	0.0	0.0	886.8
Capitalized interest or AFUDC, if any	58.8	0.0	0.0	58.8
Subtotal	**945.6**	**0.0**	**0.0**	**945.6**
Total Capital Costs (Gross)	**2,591.9**	**0.0**	**0.0**	**2,591.9**
Less Total Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Project Costs (Net)	**2,591.9**	**0.0**	**0.0**	**2,591.9**

Technical Justification:

Project Need, Objective and Justification:

[redacted]

Project Scope:

- [redacted]
- [redacted]

Major Material:

- 7,600’ of three phase 556 Spacer Cable.

Background:

[redacted]

Alternatives Considered:

Alternatives were considered (please describe below)

One alternative considered on this project was to create [redacted]

Project Option Comparison

[redacted]	

[redacted]

Cost	$2.6M	$3.0M
Cost / MVA added	$500K/MVA	N/A
Cost / CM Saved	$/CM	$/CM
Cost / CI Saved	$/CI	$/CI
Preferred option	X	

Regulatory Approvals:

Are Regulatory body approvals needed for the project?

No

Project Schedule

Milestone/Phase Name	Estimated Date
100% Engineering Completion	August 2023
Construction Start	January 2024
Testing/Commissioning	April 2024
In Service Date	June 2024

Risks and Risk Mitigation Plans

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2024	Medium	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	2024	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Internal construction resources not available to perform the work.	2024	High	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	2024	Medium	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2024	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2024	Medium	Schedule work to minimize system abnormal time. Install temporary bypasses/equipment if system will be abnormal for extended periods.

References



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

