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Project Approval For

Project Title: [redacted], [redacted] UCT	**Project Number:** CD01810
Date Prepared: 09/12/2023	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** UG CABLE & EQUIPMNT REPLACEMNT
Project Initiator: [redacted]	**Project Type:** Specific
Initiating Organization: Distribution	**Capital Investment part of original Op Plan:** No
Project Manager: [redacted]	**Emergency Related Request?** Yes
Project Sponsor: [redacted]	**Facility Type** (check all that apply): ☐ PTF ☐ non-PTF ☒ Distribution ☐ N/A (General Plant)
Required in service date: 12/31/2023	
Total Capital Request: $1,054.2K	**Authorization Type:** Full Funding

1. Executive Summary

Partial funding was approved for this project in August 2021 at a cost of $354K. The project has been completed in the field and full funding is now being requested at a cost of 1,054.2K -- an increase of $700.2K or 299% of the partial funding. The overage was due in part to the following out of scope work:

- [redacted]
- The Town of Ridgefield only allowed for work to be done between 8:30AM – 2:30PM due to congestion.
- Environmental cleanup due to the [redacted]
- Two additional manholes needed cleaning.
- Replacing the [redacted]
- [redacted]
- [redacted]
- [redacted]
- Traffic Control included three-four cops per day for the week.

Other contributors included higher material, labor and overhead costs.

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2022 Actuals	2023 Actuals	Total
Internal Labor and Construction Equipment	51.0	32.4	83.4
Outside Services	238.9	151.7	390.6
Materials	77.4	49.1	126.5
Removals	41.6	28.7	70.3
Risk and Contingency	0.0	20.8	20.8
Other	3.4	2.2	5.6
Subtotal	**412.3**	**284.8**	**697.1**

Indirect Capital Costs	2022 Actuals	2023 Actuals	Total
Indirects/Overheads (including benefits)	194.8	145.3	340.1
Capitalized interest or AFUDC, if any	2.1	15.0	17.1
Subtotal	**196.8**	**160.3**	**357.1**
Total Capital Costs (Gross)	**609.1**	**445.1**	**1,054.2**
Less Total Customer Contribution	**0.0**	**0.0**	**0.0**
Project Costs (Net of Reimbursement)	**609.1**	**445.1**	**1,054.2**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

In July 2021 while crews were working to replace cables near [redacted] under project CD01558 they found that [redacted]

[redacted]

b. Project Need

This project will replace the [redacted]

Improvements due to this project include:

[redacted]

c. Project Scope

In order to meet the objectives, the project proposes the following:

- [redacted].

Major Material:

[redacted]

4. Alternatives Considered

No alternatives were considered as this project was emergent work. The existing aging infrastructure condition posed an immediate safety hazard and needed to be rectified.

5. Project Schedule

Milestone/Phase Name	Estimated Completion Date
Initial Funding Authorization	August 2021
Order UCT transformer	September 2021
Construction Begin	September 2022
Construction End	December 2022

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.	2021	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	2022	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach
Internal construction resources not available to perform the work.	2021	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.	2022	Medium	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.

9. References

References
1. DSEM 07.853 "Prioritization of UG System Structural Work" http://rbgit-prod.nu.com/standards/Dsem/em07-851.pdf
2. DSEM 07.881 "Prioritization of UG System Environmental Hazard Remediation" http://rbgit-prod.nu.com/standards/Dsem/em07-881.pdf
3.

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

Attachment	Included in Submittal?
A. Cost Estimate (Partial Funding)	*YES*
B. [redacted]	*YES*
C. Pics	*YES*
D. Partial Funding PAF	*YES*

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Attachment A: Partial Funding Estimate

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$285,537
Contingency Amount:	$68,529
Estimate:	$354,066
Reimbursement:	$0
Net Amount:	**$354,066**
Description:	

Item Description	CU	$ / Per	Qty	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Complex	16-ALL16	[redacted]		$28,096.00
TRAFFIC OH/DB/UG - Traffic Control - Police Officer	16-ALL18			$50,000.00
UG CABLE DB/UG - 750/1000 - 3-1/C (3ph) Cu	16-UG114B			$9,600.00
CONDUIT UG-Ductline-up to 12 duct - Traveled Way / Paved	16-UG137			$31,280.00
ENCLOSURE UG - HEXHOLE	16-UG142			$30,594.40
ENCLOSURE UG - MANHOLE - Precast Rebuilding existing vault	16-UG139			$62,986.40
OTHER OTHER Xfmr Sub 750kVA UCT	16-ALL14			$72,980.00

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Attachment B: Vault# 9



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Attachment C: Pictures



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Attachment D: Partial Funding PAF

Operations Project Authorization Form

Date Prepared: 08/13/2021	**Project Title: [redacted], Ridgefield UCT**
Company/ies: Eversource CT	**Project ID Number: CD01810**
Organization: Distribution Electric	**Class(es) of Plant: Distribution**
Project Initiator: [redacted]	**Project Category: Line**
Project Manager: [redacted]	**Project Type: Spec Proj – UG Structural Issue**
Project Sponsor: [redacted]	**Project Purpose: Replace 3-167kVA submersible transformer**
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: Initial Funding	**O&M Expenses Part of the Original Operating Plan?**
Total Request: $354,066	

Financial Requirements:

Project Authorization
ERM: _____

FP&A: _____

Executive Summary

[redacted]

In July 2021 while the crew were working on replacing the cable near [redacted] purposed under CD01558 crew found that [redacted]

This project has been established to [redacted] WO# has been

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established to [redacted]

Project Costs Summary

	Prior Authorized	2021	2022	2023+	Totals
Capital Additions - Direct	$0	$0	$171,730	$0	$171,730
Less Customer Contribution	$0	$0	$0	$0	$0
Removals net of Salvage ____%	$0	$0	$47,837	$0	$47,837
Total - Direct Spending	$0	$0	$219,567	$0	$219,567
Capital Additions - Indirect	$0	$0	$116,117	$0	$116,117
Subtotal Request	$0	$0	$335,684	$0	$335,684
AFUDC	$0	$0	$2,024	$0	$2,024
Total Capital Request	$0	$0	$337,709	$0	$337,709
O&M	$0	$0	$16,357	$0	$16,357
Total Request	$0	$0	$354,066	$0	$354,066

Financial Evaluation

Direct Capital Costs	2021	2022	2023+	Total
Straight Time Labor	$0	$10,836	$0	$10,836
Overtime Labor	$0	$3,671	$0	$3,671
Outside Services	$0	$187,206	$0	$187,206
Materials	$0	$17,465	$0	$17,465
Other, including contingency amounts (describe)	$0	$389	$0	$389
Total Direct Costs	**$0**	**$219,567**	**$0**	**$219,567**

Indirect Capital Costs	2021	2022	2023+	Total
Indirects/Overheads (including benefits)	$0	$116,117	$0	$116,117
Capitalized interest or AFUDC, if any	$0	$1,930	$0	$1,930
Total Indirect Costs	**$0**	**$118,048**	**$0**	**$118,048**
Total Capital Costs	**$0**	**$337,614**	**$0**	**$337,614**
Less Total Customer Contribution	**$0**	**$0**	**$0**	**$0**
Total Capital Project Costs	**$0**	**$337,614**	**$0**	**$337,614**
Total O&M Project Costs	**$0**	**$16,452**	**$0**	**$16,452**
Total Project Cost	**$ -**	**$ 354,066**	**$ -**	**$ 354,066**

Technical Justification:

Project Need Statement

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In July 2021 while the crew were working on replacing the cable near [redacted] purposed under CD01558 crew found that [redacted]

[redacted]

[redacted]

Project Objectives

[redacted]

Project Scope

[redacted]

Major Material:

- 1 – 750kVA UCT submersible transformer, 13.8 120/208 Stock# 602968
- Installing a new 7X16X9 precast submersible vault with hatch Stock#600643
- Vault Cover Stock#600645
- 60" X 56" Hex hole: Stock# 521912

Background / Justification

In July 2021 while the crew were working on replacing the cable near [redacted] purposed under CD01558 crew found that [redacted]

[redacted]

[redacted]

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Business Process and / or Technical Improvements:

[redacted]

Alternatives Considered with Cost Estimates

No Alternatives

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Initial Funding Authorization	August 2021
Order UCT transformer	September 2021
Construction Begin	September 2022
Construction End	December 2022

Regulatory Approvals

N/A

Risks and Risk Mitigation Plans

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2021	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	2022	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach
Internal construction resources not available to perform the work.	2021	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.	2022	Medium	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Storm delays	2022	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2022	Low	Schedule work to minimize system abnormal time. Most of this work will require system to be abnormal for any extended period of time.

References

- DSEM 07.853 “Prioritization of UG System Structural Work” **http://rbgit-prod.nu.com/standards/Dsem/em07-851.pdf**
- DSEM 07.881 “Prioritization of UG System Environmental Hazard Remediation” **http://rbgit-prod.nu.com/standards/Dsem/em07-881.pdf**

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

CD01810_project_needs_statement.pdf

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