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Project Approval Form

Project Title: Enterprise Dr DB Cable Replacement, Bristol	Project Number: CD02498
Date Prepared: 06/07/2024	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** DB CABLE REPLACE-SPECIFIC PROJ
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: 6/15/2024	
Total Capital Request: $602.6K	**Authorization Type:** Full Funding

1. Executive Summary

[redacted]

While fault locating the failed section, six industrial customers were de-energized for fault locating. The reason for de-energizing customers was the two direct buried loop cables share the same trench and there is no way of knowing if the cables touch.

Two of the faults were repaired on June 5, Wednesday, and the cable still has two faulted locations. Also, the concentric neutral was practically gone.

This project installed the UG structures required to replace the failed direct buried cable and the underground structures within the excavating area for replacing the other loop cable.

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	Year 2024	Total
Capital Costs		
Internal Labor and Construction Equipment	44.4	44.4
Outside Services	183.0	183.0
Materials	9.2	9.2
Removals	15.7	15.7
Risk and Contingency	11.8	11.8
Other	1.0	1.0
Subtotal – Direct Costs	**265.1**	**265.1**
Indirect Capital Costs		
Indirect/Overheads (including benefits)	334.9	334.9
Capitalized interest or AFUDC, if any	2.6	2.6
Subtotal – Indirect Costs	**337.5**	**337.5**
Total Gross Capital Costs	**602.6**	**602.6**
Customer Contribution		
Total Net Capital Project Costs	**602.6**	**602.6**

Explain unique payment provisions, if applicable:

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

The Bristol Enterprise Drive development was installed between 1985 and 1988. The Southern phase was installed in 1988. The direct buried cable has reached its end of life and needs replacing.

b. Project Need

[redacted]

c. Project Scope

[redacted]

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

4. Alternatives Considered

Project Option Comparison

[redacted]	Option			
Authorization Type	Full			
Capital Cost	$602.6K			
Expense Cost	$49.6K			
Total Cost	$652.2K			
Total Cost / MVA added	$/MVA			
Total Cost / CM Saved	$/CM			
Total Cost / CI Saved	$/CI			
Preferred option	X			

5. Project Schedule

Add any additional milestones that are pertinent to the project.

Milestone/Phase Name	Estimated Date
Partial Approval	June 7, 2024

Milestone/Phase Name	Estimated Date
100% Detailed Engineering Completion	November 30, 2024
Fully Funded	December 15, 2024
Construction Start	June 7, 2024
In Service Date	June 15, 2024

6. Regulatory Decisions

7. Codes and Standards

8. Risk and Contingencies

Contingencies:

Risk Mitigation:

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk

			Mitigation
Actual cost higher than estimated due to scope changes.	2024	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	2024	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Internal construction resources not available to perform the work.	2024	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.	2024	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2024	Low	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	Low	Schedule work to minimize system abnormal time. Install temporary bypasses/equipment if system will be abnormal for extended periods.
Technological risks involving integration of new technology	2024	Low	Before use of new technology ensure support of standards and manufacturer. Schedule project to accommodate for extra time or ensure new technology is not on the critical path.

Wetlands / Environmentally sensitive area	2024	Low	Use of mats and specialty equipment, only work during certain times of the year.

9. References

References
1.
2.
3.
4.
5.

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

Attachment	Included in Submittal?
A. Cost Estimate	*YES*
B. Initial PAF	*YES*
C. Geographic Map	*YES*
D. System and Station One-Lines	*YES*
E. Construction Sketch	*YES*
F.	

A. Cost Estimate.

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Budget Summary - Preferred Option

Replace Failed DB Cable

2024

ID	Title	Status	Rev	Contingency	Expenditure Amount	Net Estimate
1	Replace DB Cable Between [redacted]	Draft	0	20%	$517,906	$517,906
				2024 Total:	$517,906	$517,906
				Total Project:	$517,906	$517,906

Project Option Summary

ID	Description	Segments	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)	Prfrd
O1	Replace Failed DB Cable	1	$517,906	$0	100%	$0.00	$0.00	☑

Segments

ID	Title	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)
1	Replace DB Cable Between Pads [redacted]	$517,906			$0.00	$0.00

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Design Alternative

CD02498-01

General Information

Segment: 1 - [redacted] Status: Draft

Segment Type: DB CABLE - REPLACEMENT Town: BRISTOL Budget Year: 2024

Work Type: LT-Reconductoring Trimming Required: ☐ In Service Date: 12/31/2025

Description: [redacted]

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	20.00%
SubTotal:	$431,588
Contingency Amount:	$86,318
Estimate:	$517,906
Reimbursement:	$0
Net Amount:	**$517,906**

Description:

Item Description	CU	[redacted]	Amount
DB CABLE DB/UG - 4/0 - 3-1/C (3ph) Al	23-UG113		$47,087.04
CONDUIT UG-Ductline-up to 12 duct-Non- Traveled/Non-Paved	23-UG138		$306,800.00
UG CABLE DB - Splice Box	23-UG154		$36,541.44
ACT ACT Estimate for Division Crews Over time. Need to work all week end.	23-ALL13		$41,160.00

B. Initial PAF

Project Title: Enterprise Drive DB Cable Replacement, Bristol	Project Number: CD02498
Date Prepared: 06/06/2024	**Company:** Eversource CT
Organization: Distribution Engineering	**Class(es) of Plant:** D Line
Project Initiator: [redacted]	**Project Category:** DB CABLE REPLACE-SPECIFIC PROJ
Project Manager: [redacted]	**Project Type:** Specific
Project Sponsor: [redacted]	**Capital Investment part of 5-year plan?** No
	Emergency Related Request? Yes
Total Request ($): $30K	**Authorization Type:** Initial Funding

1. Project Need Statement

[redacted]

2. Project Objectives

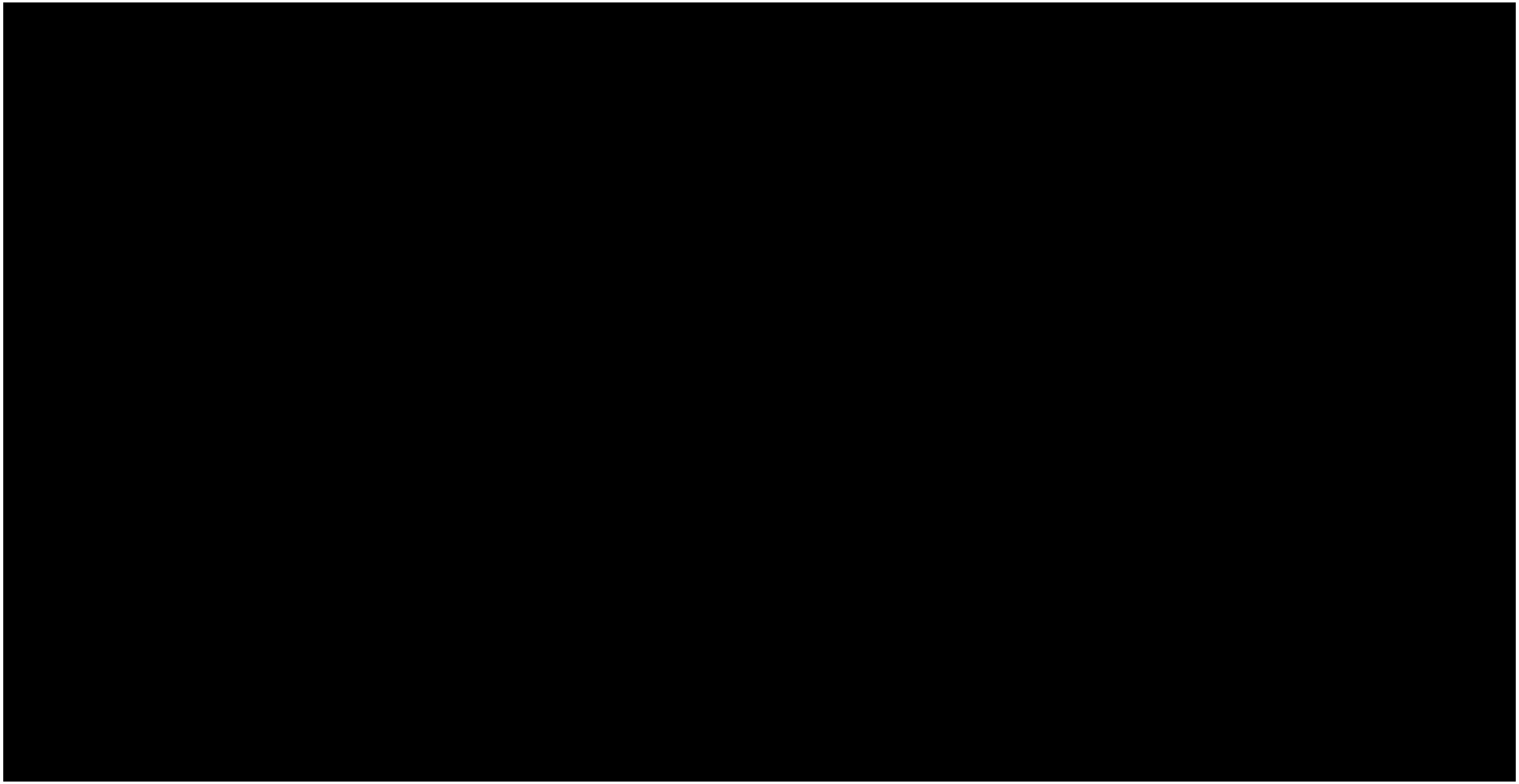
[redacted]



Project Initiator: [redacted]_____

Engineering Approval:_____

C. Geographic Map.



D. System and Station One-Lines.



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Refer to Distribution Capital Project Approval Process
JA-AM-2001-B, Rev.1