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Operations Project Authorization Form

Project Title: W. Newbury Bloomfield DB Replacement	**Project Number: 80274459P**
Date Prepared: 01/05/2023	**Company:** Eversource CT
Organization: Electric Field Operations	**Class(es) of Plant:** D Line
Project Initiator: [redacted]	**Project Category:** DB CABLE REPLACE-SPECIFIC PROJ
Project Manager: [redacted]	**Project Type:** Annual
Project Sponsor: [redacted]	**Capital Investment part of original Operating Plan:** No
Estimated in service date:	**Emergency Related Request?** Yes
Eng./Constr. Resources Budgeted? No	**Facility Type** (check all that apply): ☐ PTF ☐ non-PTF ☒ Distribution
Total Gross Capital Request: $816,504	**Authorization Type:** Full Funding

Executive Summary

This program funds the rejuvenation or replacement of direct buried (DB) distribution cables in underground residential (URD) and commercial developments that are reaching the end of their useful lives. It has been determined on an industry-wide basis that much of the original XLP and HMP-insulated primary cable installed in the DB system has not achieved its engineered life expectancy. Premature cable failures have degraded the reliability for the Eversource customers served by these cables.

This project was to capture and document the charges to address emergent failures of the direct buried/underground (DB/UG) system. The aim was to replace DB/UG cable that had experienced faults and was deemed unreliable. Workorders were created for each of the locations to capture labor and material for the replacement of the cable.

The job calls to replace 9 sections of 3PH DB cable. The sections being replaced are between [redacted] Since this work exceeds $500K a unique Project Authorization Form and Project is required.

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Project Costs Summary

Note: Dollar values are in thousands

Capital Costs	Year 2022	Total
Direct Capital Costs		
Internal Labor and Construction Equipment	$5.2	$5.2
Outside Services	$360.8	$360.8
Materials	$104.9	$104.9
Removals	$1.2	$1.2
Risk and Contingency		
Other	$7.1	$7.1
Subtotal – Direct Costs	$479.2	
Indirect Capital Costs		
Indirect/Overheads (including benefits)	$326.8	$326.8
Capitalized interest or AFUDC, if any	$10.5	$10.8
Subtotal – Indirect Costs	$337.3	
Total Gross Capital Costs	**$816.5**	**$816.5**
Customer Contribution		
Total Net Capital Project Costs	**$816.5**	**$816.5**

Technical Justification:

Project Need, Objective and Justification:

Emergent failures in direct buried cable developments required cable replacement to address the reliability issues. [redacted]

Project Scope:

- Trench and Install 4000' of conduit
- Install 2500' of #1 3-1/C Primary
- Install 8 new coffin boxes
- Install/Remove temporary feed between pad 1670 and pad 1715

Major Material:

- 2500' of 3-1/C Primary
- 8 – 3x6 Coffin Boxes

Background:

[redacted]

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Regulatory Approvals:

Are Regulatory body approvals needed for the project?
No

If yes, provide detailed regulatory approvals

Project Schedule

Milestone/Phase Name	Estimated Date
100% Engineering Completion	Emergent Work
Construction Start	
Testing/Commissioning	
In Service Date	

Risks and Risk Mitigation Plans

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2022	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	High	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Internal construction 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.
Internal engineering resources not available to perform the work.	2022	High/Medium/Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.

Materials Shortage or long lead times	202X	High/Medium/Low	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	202X	High/Medium/Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	202X	High/Medium/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	202X	High/Medium/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	202X	Low	Use of mats and specialty equipment, only work during certain times of the year.

References

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

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