Project Approval Form

Project Title: 2024 DB Inspections & Fault Ind Rplcmnt	**Project Number:** CD02200
Date Prepared: 08/12/2024	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** URD/DB Cable Improvements
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: 12/31/2024	
Total Capital Request: $3,891K	**Authorization Type:** Full Funding

1. Executive Summary

Full funding is being requested for this project at a cost of $3,891K which is 100% of the partial funding estimate. There is no scope change in the project.

The purpose of this project is to fund the 2024 Direct Buried (DB) inspection program and replace approximately 8,000 fault indicators throughout Connecticut and perform inspections of the Direct Buried (DB) equipment. Fault indicator replacement is necessary to ensure that when a fault occurs on the (DB) system it can be quickly identified and isolated to restore customers in a timely manner. This is part of Eversource's efforts to focus on improving the overall restoration time of outages involving a fault on the DB system.

2. Project Cost Summary

Capital Costs	2024	2025	2026	Total
Direct Capital Costs				
Internal Labor and Construction Equipment	$295	$0	$0	$295
Outside Services	$883	$0	$0	$883
Materials	$926	$0	$0	$926
Removals	$248	$0	$0	$248
Risk and Contingency	$30	$0	$0	$30
Other	$0	$0	$0	$0
Subtotal – Direct Costs	**$2,382**	**$0**	**$0**	**$2,382**
Indirect Capital Costs				
Indirect/Overheads (including benefits)	$1,429	$0	$0	$1,429
Capitalized interest or AFUDC, if any	$80	$0	$0	$80
Subtotal – Indirect Costs	**$1,509**	**$0**	**$0**	**$1,509**
Total Gross Capital Costs	**$3,891**	**$0**	**$0**	**$3,891**
Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Total Net Capital Project Costs	**$3,891**	**$0**	**$0**	**$3,891**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

This project is to replace an estimated 8,000 fault indicators during the direct buried maintenance program. Fault indicators are required to expedite fault locating and restore power more quickly.

b. Project Need

Identify any issues in the DB system and replace old fault indicators at approximately 8,000 locations throughout Connecticut. The inspections occur on a 15-year cycle. The fault indicators have a 15 to 20-year life. The ones being inspected and replaced as a part of this project are near the end of their life.

c. Project Scope

Inspect DB infrastructure and replace fault indicators at approximately 8,000 locations.

4. Alternatives Considered

The only alternative is to not replace the fault indicators on the underground system which is not recommended because a failure of a padmount transformer or a cable will cause a larger outage and old fault indicators beyond their shelf life will not help in fault locating and delay restoration.

5. Project Schedule

Add any additional milestones that are pertinent to the project

Milestone/Phase Name	Estimated Date
100% Engineering Completion	2/28/2024
Construction Start	3/1/2024
Testing/Commissioning	N/A

Milestone/Phase Name	Estimated Date
In Service Date	12/31/2024

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	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	2024	Medium	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.

available to perform the work.			
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

9.

References
1. N/A

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

Attachment	Included in Submittal?
A. Cost Estimate	*YES*
B. Partial PAF	*YES*

A.

CD02135_2023_project_needs_statement.

B.

Operations Project Authorization Form

Project Title: 2024 DB Inspections & Fault Ind Rplcmnt	**Project Number: CD02200**
Date Prepared: 03/13/2023	**Company:** Eversource CT
Organization: Electric Field Operations	**Class(es) of Plant:** D Line
Project Initiator: [redacted]	**Project Category:** URD/DB Cable Improvements
Project Manager: [redacted]	**Project Type:** Specific
Project Sponsor: [redacted]	**Capital Investment part of original Operating Plan:** Yes
Estimated in service date: 12/31/2024	**Emergency Related Request?** No
Eng./Constr. Resources Budgeted? Yes	**Facility Type** (check all that apply)**:** ☐ PTF ☐ non-PTF x Distribution
Total Gross Capital Request: $3,891K	**Authorization Type: Initial Funding**

Executive Summary

The purpose of this project is to fund the 2024 Direct Buried (DB) inspection program and replace approximately 8,000 fault indicators throughout Connecticut and perform inspections of the DB equipment.

Project Costs Summary

See APS3 and APS8 requirements and consult with Plant Accounting for capital/O&M determination. Use published loaders for benefits, materials, and invoices, maintained by the Director, Budget and Internal Reporting.

Note: Dollar values are in thousands

Capital Costs	2024	2025	2026	Total
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Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Total Net Capital Project Costs	**$3,891**	**$0**	**$0**	**$3,891**

Technical Justification:

Annual Inspections of DB infrastructure and replacement of fault indicators.

Project Objectives

Identify any issues in the DB system and replace old fault indicators at approximately 8,000 locations throughout Connecticut.

Project Scope

Inspect DB infrastructure and replace fault indicators at approximately 8,000 locations.

Background

This project is to replace an estimated 8,000 fault indicators during the direct buried maintenance program. Fault indicators are required to expedite fault locating and restore power more quickly.

Alternatives Considered:

The only alternative is to not replace the fault indicators on the underground system which is not recommended because a failure of a padmount transformer or a cable will cause a larger outage and old fault indicators beyond their shelf life will not help in fault locating and delay restoration.

Choose an item.

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	2/28/2024
Construction Start	3/1/2024
Testing/Commissioning	N/A
In Service Date	12/31/2024

Risks and Risk Mitigation Plans

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2024	Low	Included contingency costs in the funding request. Perform detailed Field Analysis and walk down in project development to avoid potential issues.

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References