Appendix 2
Operations Project Authorization Form

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Project Title: Black Rock Tpke - DB Replacement [redacted]	**Project Number:** CD01913 (Fund from 101395)
Date Prepared: 02/10/2022	**Company:** Eversource CT
Organization: Distribution Electric	**Class(es) of Plant:** D Line
Project Initiator: [redacted]	**Project Category:** Line
Project Manager: [redacted]	**Project Type:** Specific
Project Sponsor: [redacted]	**Capital Investment part of original Operating Plan:** Yes
Estimated in service date: 12/31/22	**Emergency Related Request?** Yes
Eng./Constr. Resources Budgeted? Yes	**Facility Type** (check all that apply)**:** ☐ PTF ☐ non-PTF ☒ Distribution
Total Gross Capital Request: $157K	**Authorization Type:** Full Funding

Executive Summary

This project has been created to address frequent DB faults at an area that feeds 7 customers on Black Rock Tpke, Redding, CT. These customers have experienced three outages in 4 years, with the most recent occurrences on Jul 3rd and Oct 5th, 2021. These outages were due to cable faults that occurred at different locations. This project proposes to install 1275' of #1 Al EPR cable in conduit, replace the submersible transformers with pad mount transformers and create a loop.

The total cost of the project will be $160,423. The capital portion of the cost is $157K.

Project Costs Summary

Note: Dollar values are in thousands

Capital Costs	Year 1	Year 2	Year 3+	Total
Internal Labor and Construction Equipment	$6	$0	$0	$6
Outside Services	$56	$0	$0	$56
Materials	$17	$0	$0	$17
Removals	$9	$0	$0	$9
Risk and Contingency	$8	$0	$0	$8
Other	$0	$0	$0	$0
Subtotal	**$96**	**$0**	**$0**	**$96**

Indirect Capital Costs	Year 1	Year 2	Year 3+	Total
Indirects/Overheads (including benefits)	$58	$0	$0	$58
Capitalized interest or AFUDC, if any	$3	$0	$0	$3
Subtotal	**$61**	**$0**	**$0**	**$61**

Total Capital Costs (Gross)	**$157**	**$0**	**$0**	**$157**
Less Total Customer Contribution	**$0**	**$0**	**$0**	**$0**
Project Costs (Net)	**$157**	**$0**	**$0**	**$157**

Technical Justification:

Project Need, Objective and Justification

This project has been created to address frequent DB faults at an area that feeds 7 customers on Black Rock Tpke, Redding, CT. These customers have experienced three outages in 4 years, with the most recent occurrences on Jul 3rd and Oct 5th, 2021. These outages were due to cable faults that occurred at different locations. This project proposes to install 1275' of #1 Al EPR cable in conduit, replace the submersible transformers with pad mount transformers and create a loop.

The objective of this project is to reduce the frequency of outages on Black Rock Tpke in Redding.

Project Scope

The project proposes the following:

[redacted]

Major Material

- 1275' #1 AL EPR (Single phase)
- 4 Pad mount Xfmr's
- 1 1 Ph Fiberglass Enclosure

Background

Outages:

[redacted]

[redacted]

Alternatives Considered:

Project is a compliance obligation - no alternatives considered - no financial benefit

Regulatory Approvals:

No

Project Schedule

Milestone/Phase Name	Estimated Date
100% Engineering Completion	06/2022
Construction Start	11/2022
Testing/Commissioning	N/A
In Service Date	12/2022

Risks and Risk Mitigation Plans

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2022	Low	Included contingency costs in the funding request. Perform detailed Field Analysis and walk down in project development to avoid potential issues.
Internal construction resources not available to perform the work.	2022	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost if necessary.
Internal engineering resources not available to perform the work.	2022	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost if necessary.
Materials shortage or long lead times	2022	Low	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2022	Medium	If storm activity delays work, we may be forced to use external resources.

System abnormal configuration	2022	Medium	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	2022	Low	Before use of new technology ensure support of standards and manufacture. Schedule project to accommodate for extra time or ensure new technology is not on the critical path.

References

NA

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


Geo Map - Black Rock Tpke _ DB Repl


CD01913_project_needs_statement.pdf