Operations Project Authorization Form

Date Prepared: August 10, 2021	**Project Title:** [redacted]
Company/ies: Eversource CT	**Project ID Number:** CD01804
Organization: Distribution Electric	**Class(es) of Plant:** Distribution
Project Initiator: [redacted]	**Project Category:** Line
Project Manager: [redacted]	**Project Type:** Reliability Specific
Project Sponsor: [redacted]	**Project Purpose:** Reduce large zones
Estimated in service date: December 31, 2022	**If Transmission Project: PTF?** N/A
Eng. /Constr. Resources Budgeted? Y	**Capital Investment Part of Original Operating Plan?** Y
Authorization Type: Preliminary	**O&M Expenses Part of the Original Operating Plan?** Y
Total Request: $155,700	

Financial Requirements:

Project Authorization

ERM: _____

FP&A: _____

Executive Summary

[redacted]. With the addition of a midpoint recloser within each zone, the customer zones would be reduced as follows:

[redacted]

There have been [redacted] over the past 4 years. The addition of the midpoint recloser would reduce customer exposure in the event of a future outage.

Project Costs Summary *(cost in thousands of dollars)*

	Prior Authorized	2022	2023	2024+	Totals
Capital Additions - Direct	$0	$89	$0	$0	$89
Less Customer Contribution	$0	$0	$0	$0	$0
Removals net of Salvage ____%	$0	$8	$0	$0	$8
Total - Direct Spending	$0	$97	$0	$0	$97
Capital Additions - Indirect	$0	$53	$0	$0	$53
Subtotal Request	$0	$150	$0	$0	$150
AFUDC	$0	$1	$0	$0	$1
Total Capital Request	$0	$151	$0	$0	$151
O&M	$0	$5	$0	$0	$5
Total Request	$0	$156	$0	$0	$156

Financial Evaluation *(cost in thousands of dollars)*

Direct Capital Costs	Year 1	Year 2	Year 3+	Total
Straight Time Labor	$7	$0	$0	$7
Overtime Labor	$1	$0	$0	$1
Outside Services	$66	$0	$0	$66
Materials	$23	$0	$0	$23
Other, including contingency amounts (describe)	$0	$0	$0	$0
Total Direct Costs	**$97**	**$0**	**$0**	**$97**

Indirect Capital Costs	Year 1	Year 2	Year 3+	Total
Indirects/Overheads (including benefits)	$53	$0	$0	$53
Capitalized interest or AFUDC, if any	$1	$0	$0	$1
Total Indirect Costs	**$54**	**$0**	**$0**	**$54**
Total Capital Costs	**$151**	**$0**	**$0**	**$151**
Less Total Customer Contribution	**$0**	**$0**	**$0**	**$0**
Total Capital Project Costs	**$151**	**$0**	**$0**	**$151**
Total O&M Project Costs	**$5**	**$0**	**$0**	**$5**

Total Project Cost	**$ 156**	**$ -**	**$ -**	**$ 156**

Technical Justification:
Project Need Statement

[redacted]

Project Objectives

The main objectives of this project are as follows:

- Reduce the number of customers affected by an outage in [redacted]

Project Scope

In order to meet the above objectives, the scope of the project proposes the following:

[redacted]

Major Material:

1. (2) Reclosers
2. (2) Sets of vertical disconnects

Background / Justification

In the past four years, there have been 4 events on the [redacted] in the two zones addressed by this project.

Start Time	Restoration Time	Device	Affected Circuit	Cause Type	Customer Count	Customer Affected Count	Customer Minutes	Duration
12/1/2020 12:37	12/1/2020 1:15	[redacted]		Tree Related	478	[redacted]	18164	38
11/30/2020 3:16	11/30/2020 5:27			Tree Related	581		62618	131
11/30/2020 3:16	11/30/2020 4:09			Tree Related	581		5459	53
7/11/2020 2:00	7/11/2020 2:48			Miscellaneous	736		35328	48
11/1/2019 5:12	11/1/2019 10:06			Tree Related	404		118776	294

Business Process and / or Technical Improvements:

This project conforms to the Smart Switch Program objectives, to reduce customer zone counts to 500 or less.

Alternatives Considered with Cost Estimates

No alternatives were considered as part of this project.

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01804
Reliability MR project [redacted]

Project Option Summary

ID	Description	Segments	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)	Prfrd
O1	Reduce large Customer Zone with Mid-Point Reclosers	1,2	$155,700	$0	100%	$126.04	$31.40	☑

Segments

ID	Title	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)
1	Reduce [redacted] zone	$77,850			$72.75	$16.19
2	Reduce the [redacted] zone	$77,850			$580.81	$580.81

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Project Option Comparison

Design Criteria	Option
	1 – Break up [redacted] large Zones
[redacted]	
Cost per Customer Min Saved	$0.58

Schedule

Milestone/Phase Name	Estimated Completion Date
Preliminary Approval	August 2021
Detailed Design	October 2021
Construction Approval	November 2021
Settings Requested	December 2021
Construction Start Date	June 2022
Construction End Date	December 2022

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.
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.	2022	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

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

Outage Report

CD01804_Outage_History.xlsx

Load Summary

CD01804_Load_Sheet_BPG-20210810.xls

2021 Need Statement

CD01804_project_needs_statement.pdf

One Line & Detailed Map

[redacted]_Online_20210810.pdf

PAF Calculator

PAF Calculator - CD01804 20210810.›