Operations Project Authorization Form

Project Title: [redacted] **RWO.2 Alternate source, Cust zone reduction**	**Project Number: CD01830**
Date Prepared: 09/01/2023	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** SMART SWITCHES PROGRAM
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: 12/30/2023	
Total Capital Request: $141K	**Authorization Type:** Full Funding

1. Executive Summary

[redacted] There have been 5 outages in the last 4 years. The circuit was last trimmed in 2021.

[redacted]

The initial engineering estimate for project CD01830 was approved for $167K on September 17th, 2021. However, the project was completed under budget due to in part by the reduction of indirect capital cost and the completion of the project by internal resources, instead of outside services as it was originally planned.

2. Project Cost Summary

Note: Dollar values are in thousands.

Financial Evaluation

Capital Costs	2023	2024	Total
Internal Labor and Construction Equipment	16.8	0.0	16.8
Outside Services	0.0	0.0	0.0
Materials	85.6	0.0	85.6
Removals	0.0	0.0	0.0
Risk and Contingency	0.0	0.0	0.0
Other	0.0	0.0	0.0
Subtotal	**102.4**	**0.0**	**102.4**

Indirect Capital Costs	2023	2024	Total
Indirects/Overheads (including benefits)	38.7	0.0	38.7
Capitalized interest or AFUDC, if any	0.0	0.0	0.0
Subtotal	**38.7**	**0.0**	**38.7**

Total Capital Costs (Gross)	**141.0**	**0.0**	**141.0**

Less Total Customer Contribution	**0.0**	**0.0**	**0.0**
Project Costs (Net of Reimbursement)	**141.0**	**0.0**	**141.0**

3.Technical Justification

a. Background

[redacted]

Business Process and / or Technical Improvements:

[redacted]

b. Project Need

[redacted]

Project Objectives

[redacted]

c. Project Scope

(Preferred option $141K): This option was selected because it addresses all reliability concerns at a lower cost)

[redacted]

Major Material:

- 2 Nova Reclosers and 2 Form 6 controls.
- 2 Eversource poles
- 900 amp disconnect switches.

4. Alternatives Considered

Alternatives were considered (please describe below)

(Option 2 $209K): This option was NOT selected because it is higher in cost)

[redacted]

5. Project Schedule

Milestone/Phase Name	Estimated Completion Date
Preliminary Approval	10/15/21
Detailed Design	05/31/22
Settings Requested	6/15/23
Construction Start Date	8/5/23
Construction End Date	12/30/23

6. Regulatory Decisions

No

7. Codes and Standards

8. Risk and Contingencies

9. Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2023	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	2023	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach
Internal construction resources not available to perform the work.	2023	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.	2023	Medium	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Storm delays	2023	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2023	Low	Schedule work to minimize system abnormal time. Most of this work will require system to be abnormal for any extended period.

10. References

References

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

Attachment	Included in Submittal?
A. Project Need Statement	*YES*
B. 21H12-71S Map	*YES*
C. 21H14 & 21H12 one line after	*YES*
D. 21H14 & 21H12 one line before	*YES*
E. Load Summary	*YES*
	YES

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



- *Attachment A*

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01830
[redacted]

Design Alternative CD01830-01

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	28.00%
SubTotal:	$130,553
Contingency Amount:	$36,555
Estimate:	$167,108
Reimbursement:	$0
Net Amount:	$167,108
Description:	

Item Description	CU	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	16-ALL17	$7,019.20
TRAFFIC OH/DB/UG - Traffic Control - Police Officer	16-ALL18	$5,000.00
SECTIONALIZE OH - Recloser Control - setting changes only 21H12-92T 21H12-71S	16-OH39A	$9,771.20
SECTIONALIZE OH-Vertical Disconnect Switches-600/900 amp 3-1ph for p-2559 (SR) instead of inline switches	16-OH43	$10,283.20
SECTIONALIZE OH - Recloser - 3ph P-2559 (SR) P-631(MR) High Street Portland	16-OH38	$95,979.20
OTHER OTHER Remove pole 2565 on High Street.	16-ALL14	$2,500.00

Associated / Impacted Devices

Status	Type / SysID	Street / Cross St	Structure / Town	Circuit	Map	Cust	Notes
Existing	[redacted]	[redacted]					

EVERSOURCE

Project Approval Form

[redacted]

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

EVERSOURCE

Project Approval Form



EVERSOURCE

Project Approval Form

Operations Project Authorization Form

Date Prepared: 9/17/2021	**Project Title:** [redacted]
Company: Eversource CT	**Project ID Number: CD01830**
Organization: Distribution Electric	**Class(es) of Plant: Distribution**
Project Initiator: [redacted]	**Project Category: Line**
Project Manager: [redacted]	**Project Type: Specific**
Project Sponsor: [redacted]	**Project Purpose: Automatic Zone**
Estimated in service date: 12/31/2023	**If Transmission Project: PTF? N/A**
Eng. /Constr. Resources Budgeted? No	**Capital Investment Part of Original Operating Plan?**
Authorization Type: Preliminary Funding	**O&M Expenses Part of the Original Operating Plan?**
Total Request: $167,108	

Financial Requirements:
Project Authorization
ERM: _____

FP&A: _____

Executive Summary

[redacted] There have been 5 outages in the last 4 years. The circuit was last trimmed in 2021.

[redacted]

Project Approval Form

Project Costs Summary

Note: Dollar values are in thousands

	Prior Authorized	2023	2024	2025	Totals
Capital Additions - Direct	$0	$93.7	$0	$0	$93.7
Removals net of Salvage ____%	$0	$3.8	$0	$0	$3.8
Total - Direct Spending	$0	$97.5	$0	$0	$97.5
Capital Additions - Indirect	$0	$60.5	$0	$0	$60.5
Subtotal Request	$0	$158.0	$0	$0	$158.0
AFUDC	$0	$1.9	$0	$0	$1.9
Total Capital Request	$0	$159.9	$0	$0	$159.9
O&M	$0	$7.2	$0	$0	$7.2
Total Request	$0	$167.1	$0	$0	$167.1

Financial Evaluation

Note: Dollar values are in thousands

Direct Capital Costs	Year 1	Year 2	Year 3+	Total
Straight Time Labor	$12.6	$0	$0	$12.6
Overtime Labor	$2.8	$0	$0	$2.8
Outside Services	$23.0	$0	$0	$23.0
Materials	$58.4	$0	$0	$58.4
Other, including contingency amounts (describe)	$0.7	$0	$0	$0.7
Total Direct Costs	**$97.5**	**$0**	**$0**	**$97.5**
Indirect Capital Costs	**Year 1**	**Year 2**	**Year 3+**	**Total**
Indirects/Overheads (including benefits)	$60.5	**$0**	**$0**	$60.5
Capitalized interest or AFUDC, if any	$1.8	**$0**	**$0**	$1.8
Total Indirect Costs	**$62.3**	**$0**	**$0**	**$62.3**
Total Capital Costs	**$159.8**	**$0**	**$0**	**$159.8**
Total Capital Project Costs	**$159.8**	**$0**	**$0**	**$159.8**
Total O&M Project Costs	**$7.3**	**$0**	**$0**	**$7.3**
Total Project Cost	**$ 167.1**	**$ -**	**$ -**	**$ 167.1**

Technical Justification:

Project Need Statement

EVERSOURCE

Project Approval Form

[redacted]

Project Objectives

[redacted]

Project Scope

[redacted]

Major Material:

- 2 Nova Reclosers and 2 Form 6 controls
- 2 Eversource poles
- 900 amp disconnect switches

Background / Justification

[redacted]

Business Process and / or Technical Improvements:

[redacted]

Alternatives Considered with Cost Estimates

[redacted] at a cost of $209k. [redacted]

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Preliminary Approval	10/15/21
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Risks and Risk Mitigation Plans

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
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References

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

[redacted]Load s ary.xlsx [redacted]Map.pdf [redacted]one df [redacted]one pdf CD01830_project_n eeds_statement.pdf