EVERSOURCE

Project Approval Form

Project Title: [redacted]	**Project Number: CD01959**
Date Prepared: 12/14/2023	**Company:** Eversource CT
Organization: Electric System Operations	**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: 12/31/2024	Towns: 22R2, Glastonbury and Hebron, CT
Total Capital Request: $274.8K	**Authorization Type: Full Funding**

1. Executive Summary

[redacted]

The initial engineering estimate for project CD01959 was approved for $238K on March 04th, 2022; however, the initial estimate did not include a revised per unit cost for labor and material. Therefore, the full funding request for this project is $274.8K

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2024	Year 2	Year 3+	Total
Internal Labor and Construction Equipment	32.0	0.0	0.0	32.0
Outside Services	2.8	0.0	0.0	2.8
Materials	120.5	0.0	0.0	120.5
Removals	4.1	0.0	0.0	4.1
Risk and Contingency	19.2	0.0	0.0	19.2
Other	0.0	0.0	0.0	0.0
Subtotal	**178.6**	**0.0**	**0.0**	**178.6**

Indirect Capital Costs	2024	Year 2	Year 3+	Total
Indirects/Overheads (including benefits)	96.2	0.0	0.0	96.2
Capitalized interest or AFUDC, if any	0.0	0.0	0.0	0.0
Subtotal	**96.2**	**0.0**	**0.0**	**96.2**
Total Capital Costs (Gross)	**274.8**	**0.0**	**0.0**	**274.8**
Less Total Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Project Costs (Net of Reimbursement)	**274.8**	**0.0**	**0.0**	**274.8**

3. Technical Justification

a. Background

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

b. Project Need

The goal of the Smart Switch program is to reduce the number of customers exposed to an outage event. This project reduces three large customer zones by adding sectionalizing reclosers to isolate outages.

[redacted]mers, and the [redacted]

a. Project Scope

The project will fund the following work:

[redacted]

2. Alternatives Considered

1 – Do Nothing ($0.00) –

This alternative was not selected because it does not increase the number of customers automatically restored through automation during extreme weather events, nor reduces customer's zones size taking into account areas where outages have occurred in zones of 500 customers or more. This project complies with regulatory requirements under the Smart Switch Program.

2-[redacted]

[redacted]

3. Project Schedule

Add any additional milestones that are pertinent to the project.

Milestone/Phase Name	Estimated Date
100% Engineering Completion	12/31/2023
Construction Start	5/1/2024
Testing/Commissioning	7/31/2024
In Service Date	10/31/2024

4. Regulatory Decisions

5. Codes and Standards

6. 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 available to perform the work.	2023	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Storm delays	2024	Low	If storm activity delays work, we may be forced to use external resources.

7. References

References
DSEM 02.501 – Storm Resiliency Guideline
DSEM 02.201 – Backbone Rehabilitation
DSEM 11.551 – Automatic Switchgear Selection Guide
DSEM 07.223 – UG/DB Design Selections, and DSEM 05.831 – Underground System Nomenclature

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

Attachment	Included in Submittal?
A. Cost Estimate	*YES*
B. Geographical View	*YES*
C. One Line	*YES*
D- Load Sheets	*YES*

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

Need Statement **GIS- Detail Map** **Outage Analysis** **One-Line Map**

[redacted] Load Summary.xlsx

[redacted] Smart Switch 2024 Before.pdf

[redacted] Smart Switch 2024 After.pdf

[redacted] mart Switch Map.pdf

CD01959_project_needs_statement.pdf

A. Cost Estimate

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01959 [redacted]

Design Alternative CD01959-01

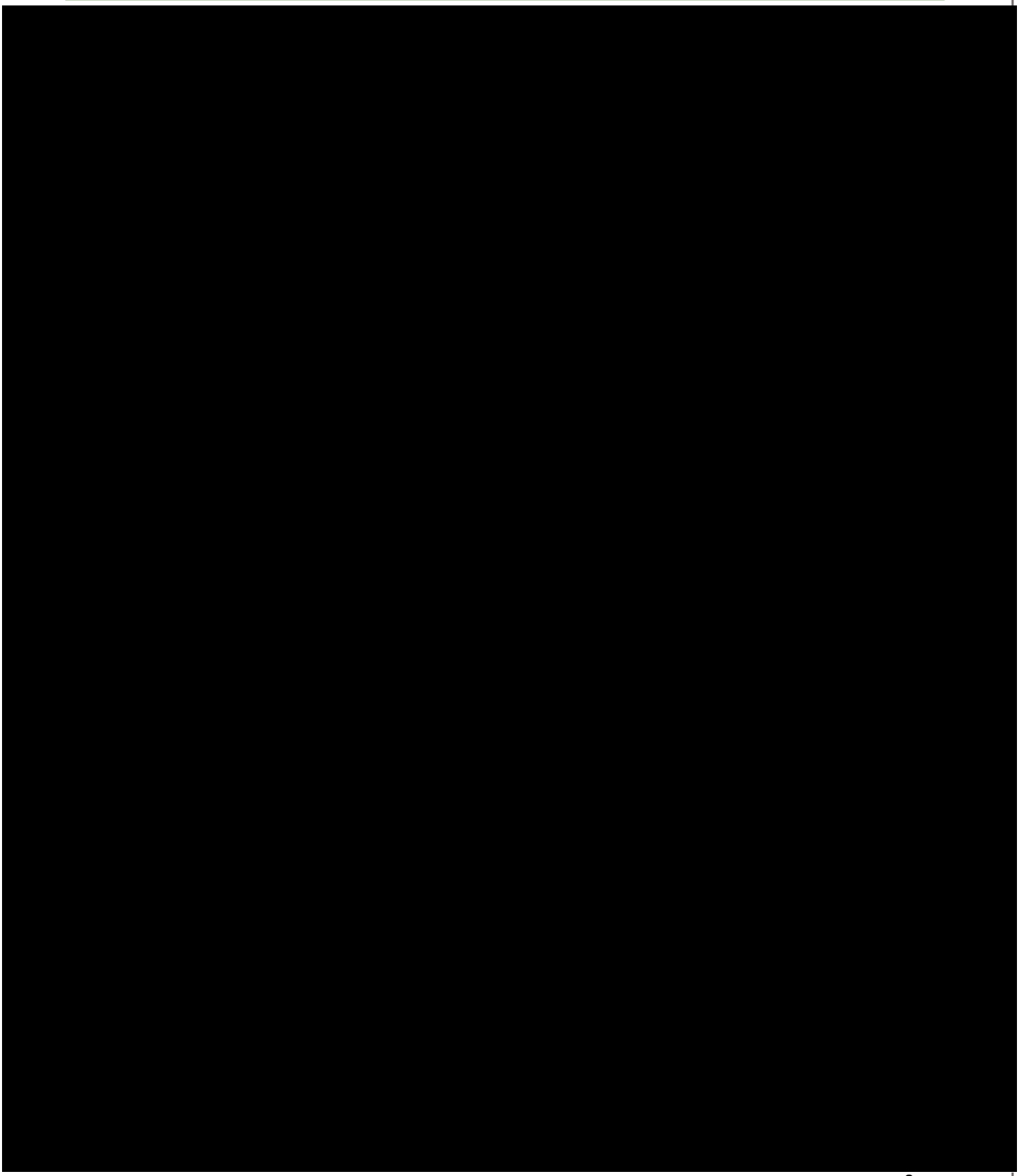
Estimate

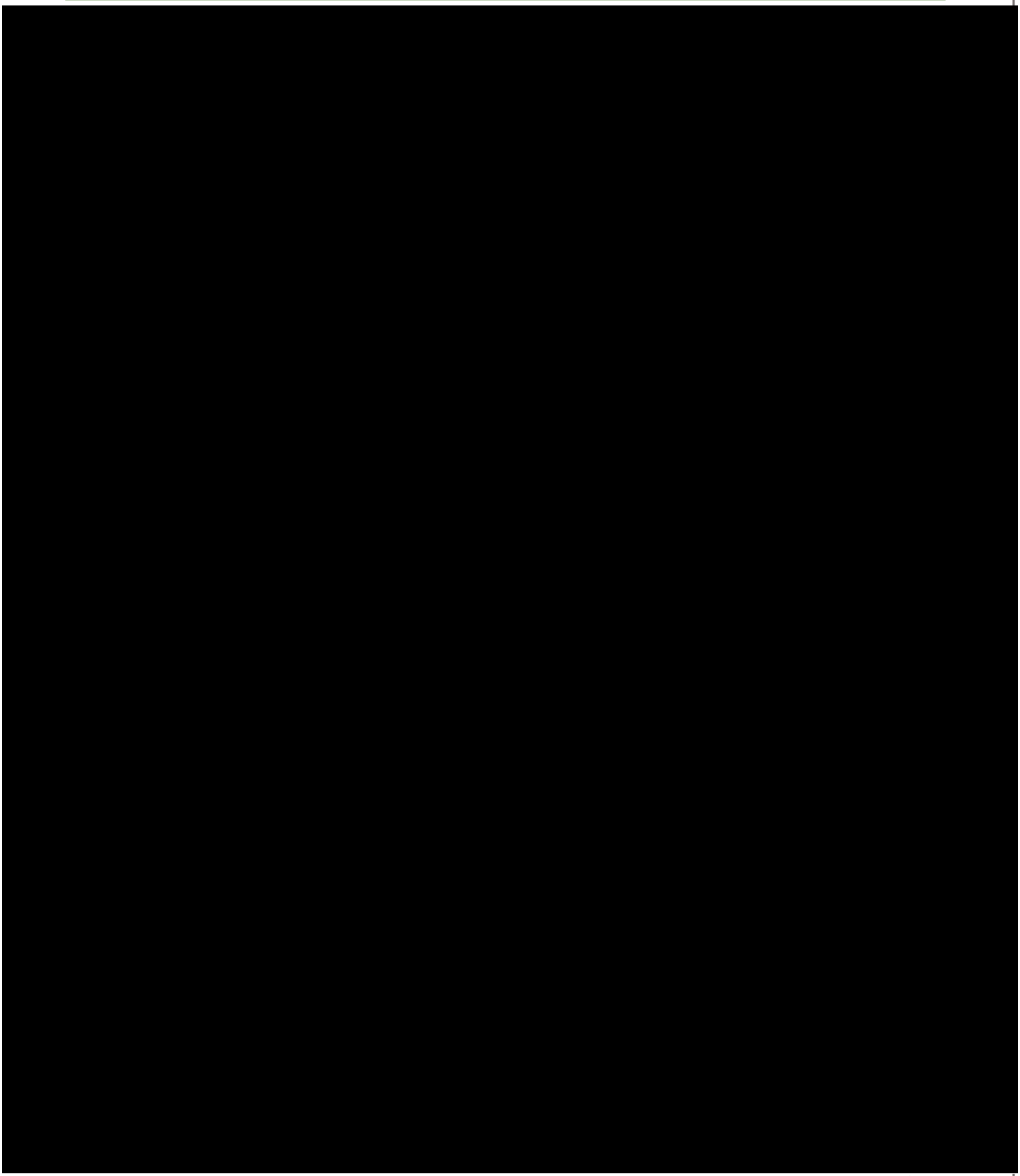
	Preliminary Estimate Summary
Revision Number:	0
Contingency:	28.00%
SubTotal:	$190,347
Contingency Amount:	$53,297
Estimate:	$243,644
Reimbursement:	$0
Net Amount:	**$243,644**
Description:	

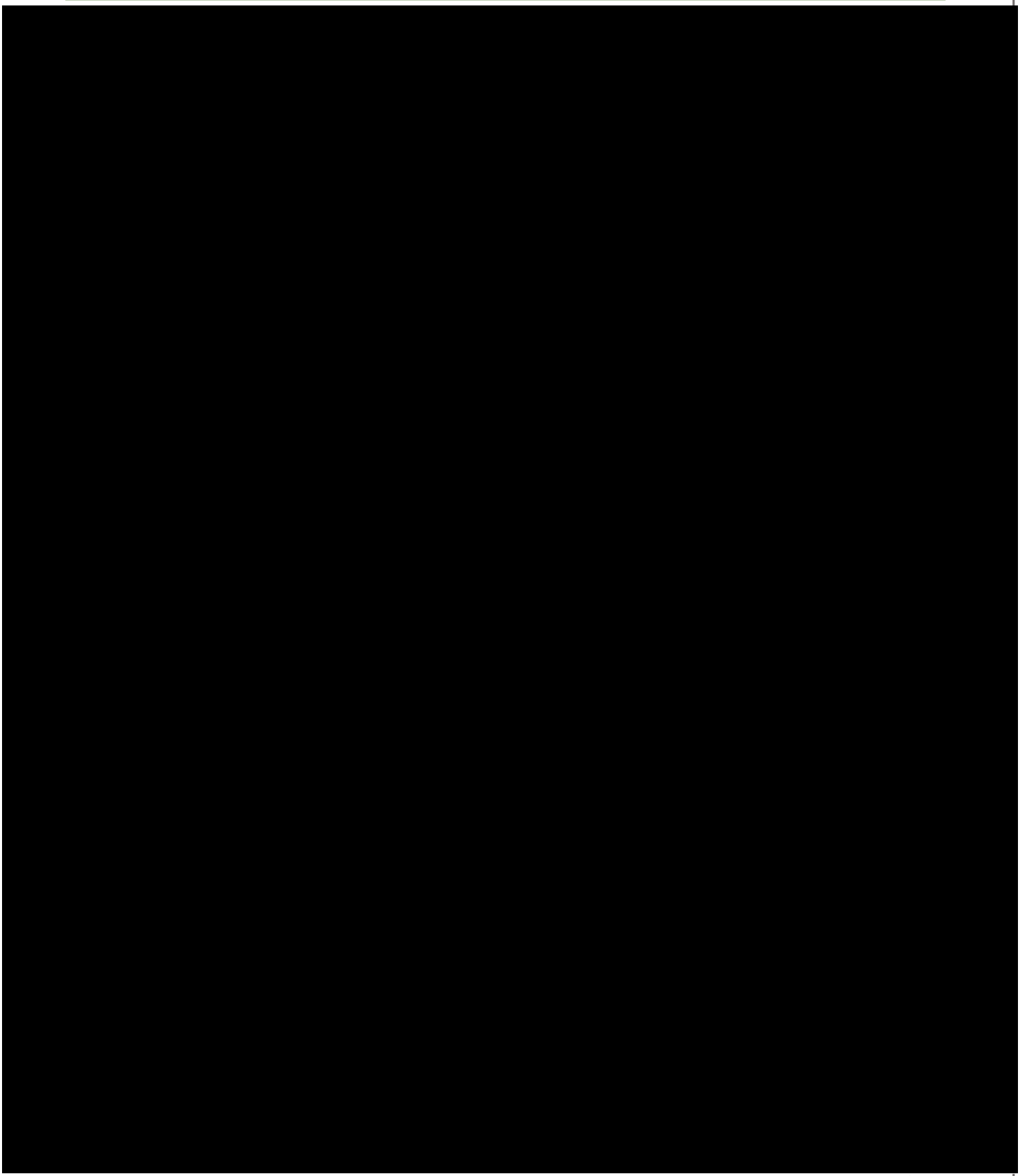
Item Description	CU	[redacted]	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	16-ALL17		$10,528.80
TRAFFIC OH/DB/UG - Traffic Control - Police Officer	16-ALL18		$5,000.00
SECTIONALIZE OH - Recloser - 3ph	16-OH38		$143,968.80
SECTIONALIZE OH-Vertical Disconnect Switches-600/900 amp 3-1ph	16-OH43		$30,849.60

Associated / Impacted Devices

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







Operations Project Authorization Form

Project Title: [redacted]	**Project Number: CD01959**
Date Prepared: 03/04/2022	**Company:** Eversource CT
Organization: EFO	**Class(es) of Plant:** D Line
Project Initiator: [redacted]	**Project Category: Smart Switch**
Project Manage [redacted]	**Project Type:** Specific
Project Sponsor: [redacted]	**Capital Investment part of original Operating Plan:** No
Estimated in service date: 12/31/2024	**Emergency Related Request?** No
Eng./Constr. Resources Budgeted? No	**Facility Type** (check all that apply)**:** ☐ PTF ☐ non-PTF ☒ Distribution
Total Gross Capital Request: $238K	**Authorization Type:** Initial Funding

Executive Summary

[redacted]

[redacted]

Project Costs Summary

Note: Dollar values are in thousands

Capital Costs	2024	2025	2026	Total
Internal Labor and Construction Equipment	$21	$0	$0	$21
Outside Services	$27	$0	$0	$27
Materials	$87	$0	$0	$87
Removals	$6	$0	$0	$6
Risk and Contingency	$1	$0	$0	$1
Other	$0	$0	$0	$0
Subtotal	**$141**	**$0**	**$0**	**$141**

Indirect Capital Costs	Year 1	Year 2	Year 3+	Total
Indirects/Overheads (including benefits)	$94	$0	$0	$94
Capitalized interest or AFUDC, if any	$3	$0	$0	$3
Subtotal	**$97**	**$0**	**$0**	**$97**
Total Capital Costs (Gross)	**$238**	**$0**	**$0**	**$238**
Less Total Customer Contribution	**$0**	**$0**	**$0**	**$0**
Project Costs (Net)	**$238**	**$0**	**$0**	**$238**

Technical Justification:

[redacted]

[redacted]

Project Scope:

[redacted]

[redacted]

[redacted]

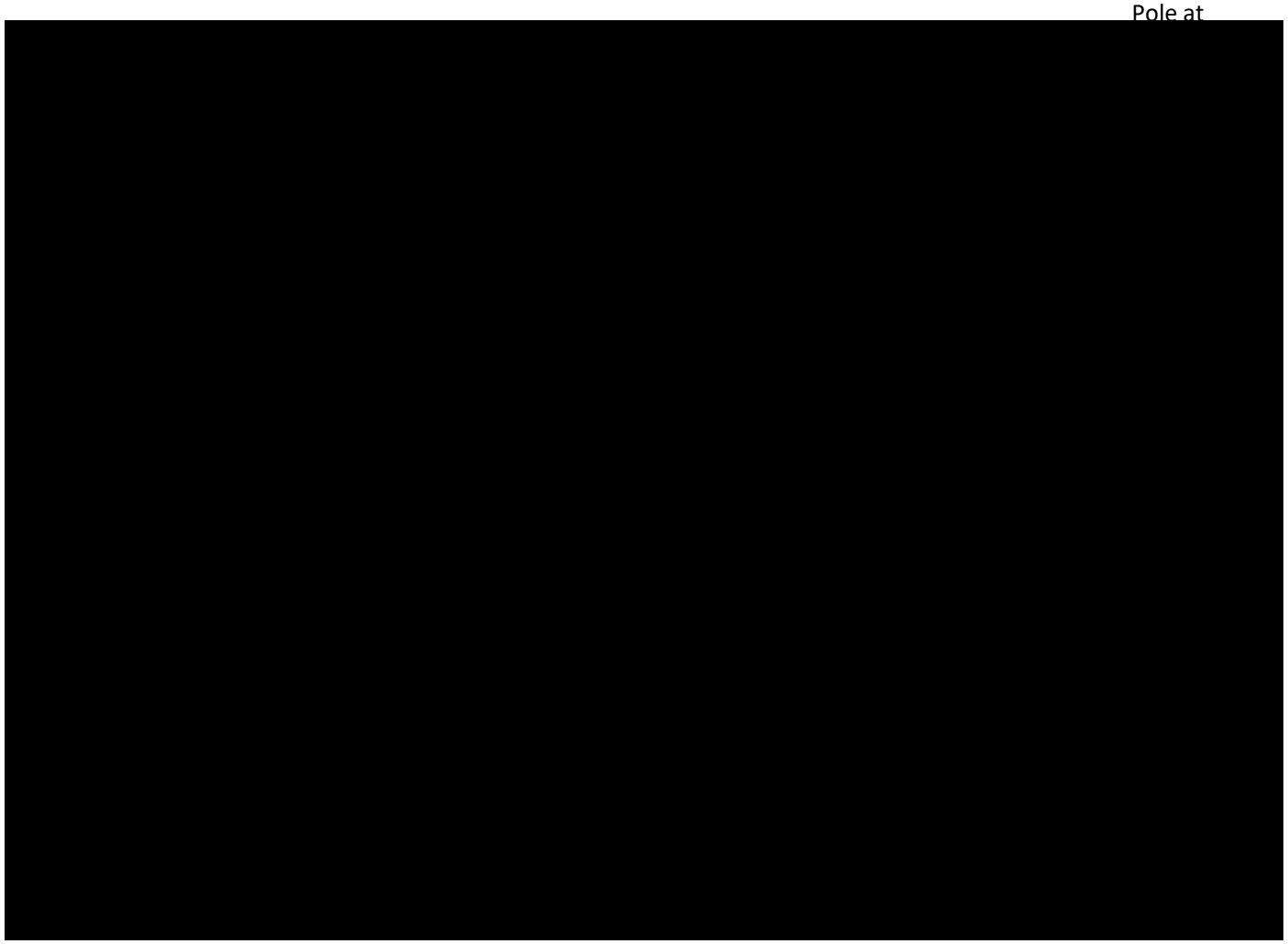
Background / Justification

[redacted]

[redacted]

[redacted]

Pole at



Alternatives Considered:

[redacted] for $60,000.

[redacted] switch for $30,000.

These options were not selected as the customers at risk will be easily reduced with automatic devices at the cost of one recloser per zone.

Regulatory Approvals:

No

Project Schedule

Milestone/Phase Name	Estimated Date
100% Engineering Completion	12/31/2023
Construction Start	5/1/2024
Testing/Commissioning	7/31/2024
In Service Date	10/31/2024

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

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

