EVERSOURCE

Project Approval Form

Project Title: [redacted]	**Project Number:CD02236**
Date Prepared: 02/01/2024	**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: 12/31/24	
Total Capital Request: $294.5K	**Authorization Type:** Full Funding

1. Executive Summary

This project is being established to address a [redacted]

- [redacted]
- [redacted]
- [redacted]
- [redacted]
- Project Location
  - Division: Eastern
  - District: Madison AWC
  - City/Town: Madison

The partial estimate for this project was estimated at $242.2K and was approved on 8/31/2023. The full funding estimate is $294.5K. The difference in cost equates to $52.3K, an increase of 22%. After further review, the partial estimate had material cost as $33K less than what the actual material cost was estimated at. There is no change in scope and the work orders were written to reflect the engineering design.

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	Year 2024	Year 2025	Year 2026+	Total
Direct Capital Costs				
Internal Labor and Construction Equipment	17.1	0.0	0.0	17.1
Outside Services	1.4	0.0	0.0	1.4
Materials	158.7	0.0	0.0	158.7
Removals	6.8	0.0	0.0	6.8
Risk and Contingency	20.5	0.0	0.0	20.5
Other	0.0	0.0	0.0	0.0
Subtotal – Direct Costs	**204.6**	**0.0**	**0.0**	**204.6**
Indirect Capital Costs				
Indirect/Overheads (including benefits)	89.9	0.0	0.0	89.9
Capitalized interest or AFUDC, if any	0.0	0.0	0.0	0.0
Subtotal – Indirect Costs	**89.9**	**0.0**	**0.0**	**89.9**
Total Gross Capital Costs	**294.5**	**0.0**	**0.0**	**294.5**
Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Total Net Capital Project Costs	**294.5**	**0.0**	**0.0**	**294.5**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

Outage History



b. Project Need

This project is established to address the large customer zone on the [redacted].

This project installs sectionalizing devices to break-up this zone further. With these changes, it will greatly increase reliability and reduce the number of customers that will experience an outage in this area.

c. Project Scope

The scope of this project is as follows:

- [redacted]
- [redacted]
- [redacted]

Major Material:

- 3 Reclosers and controls
- 3 sets of Disconnect Switches

4. Alternatives Considered

There was an alternative to this project. In addition to resolving the [redacted], there were other zones on the circuit that had over 500 customers. This would require installing two additional reclosers (total of 5) to reduce the other customer zones under 500. This option was decided not to be done since the outage history didn't deem it to be a high priority.

Project Option Comparison

	Option	
[redacted]		
Estimate Type	Full	Partial
Capital Cost	$294.5	$401.4K
Expense Cost	$8.5K	$17.6K
Total Cost	$303K	$419K
Preferred option	X	

Option 1 was chosen to focus on the high priority zone. The other large zone was not identified a high priority and will be addressed in another project.

5. Project Schedule

Add any additional milestones that are pertinent to the project

Milestone/Phase Name	Estimated Date
Partial Approval	August 2023
100% Detailed Engineering Completion	January 2024
Fully Funded	February 2024
Construction Start	June 2024
In Service Date	July 2024

6. Regulatory Decisions

No

7. Codes and Standards

N/A

8. Risk and Contingencies

Contingencies:

Risk Mitigation:

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2024	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	2024	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Internal construction resources not available to perform the work.	2024	Medium	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.	2024	Medium	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2024	High	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2024	Medium	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2024	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	2024	Low	Before use of new technology ensure support of standards and manufacturer. Schedule project to accommodate for extra time or ensure new technology is not on the critical path.

Wetlands / Environmentally sensitive area	2024	Low	Use of mats and specialty equipment, only work during certain times of the year.

9. References

References
1. N/A

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

Attachment	Included in Submittal?
A. Cost Estimate	*YES*
B. Geographic Map	*YES*
C. System and Station One-Lines	*YES*
D. Load Summary Sheet	*YES*

Attachment "A"

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD02236 [redacted]

Design Alternative CD02236-01

Estimate

Preliminary Estimate Summary

Revision Number:	0
Contingency:	24.00%
SubTotal:	$203,722
Contingency Amount:	$48,893
Estimate:	$252,615
Reimbursement:	$0
Net Amount:	**$252,615**
Description:	

Item Description	CU	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	23-ALL17	$4,562.48
TRAFFIC OH/DB/UG - Traffic Control - Police Officer	23-ALL18	$12,000.00
SECTIONALIZE OH - Recloser - 3ph	23-OH38	$187,159.44

[redacted]

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD02236 [redacted]

Design Alternative CD02236-02

Estimate

Preliminary Estimate Summary

Revision Number:	0
Contingency:	24.00%
SubTotal:	$337,846
Contingency Amount:	$81,083
Estimate:	$418,929
Reimbursement:	$0
Net Amount:	**$418,929**
Description:	

Item Description	CU	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	23-ALL17	$4,562.48
TRAFFIC OH/DB/UG - Traffic Control - Police Officer	23-ALL18	$15,000.00
SECTIONALIZE OH - Recloser Control - setting changes only	23-OH39A	$6,351.28
[redacted]		
SECTIONALIZE OH - Recloser - 3ph	23-OH38	$311,932.40

[redacted]

Attachment "B"



Option 1 Map



Option 2 Map



Attachment "C"

Existing One-line:



Option 1: One-line

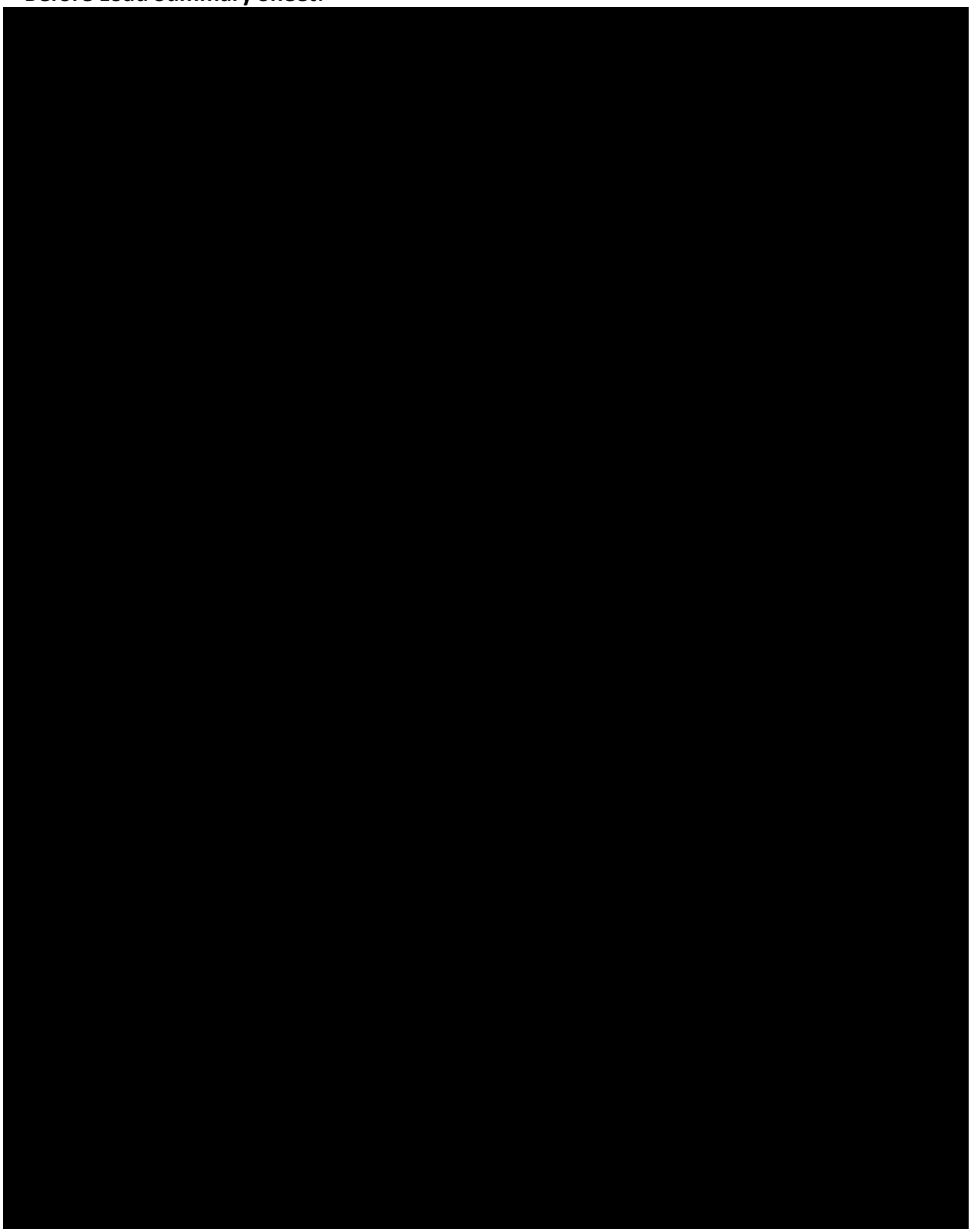


Option 2: One-line:

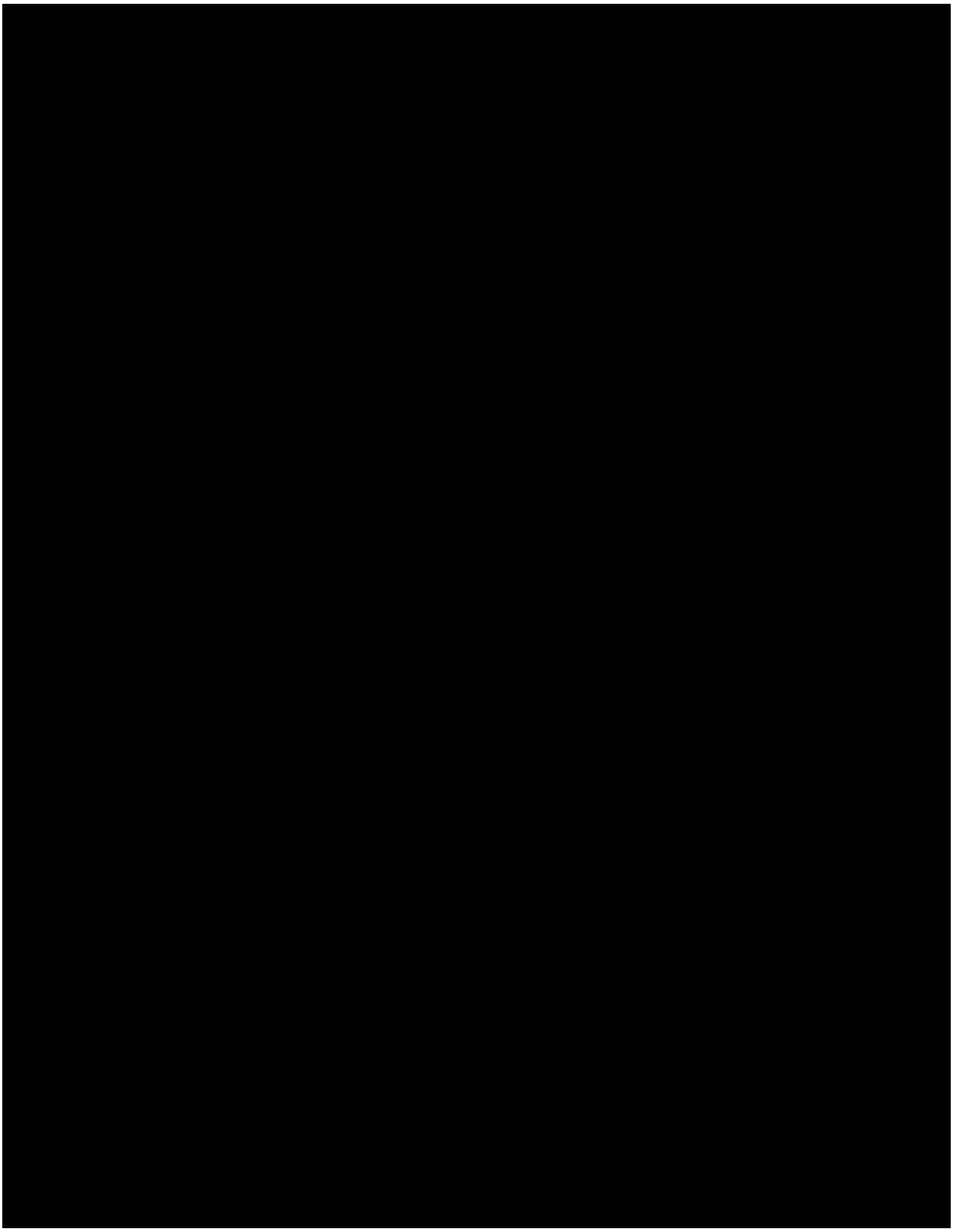


Attachment "D"

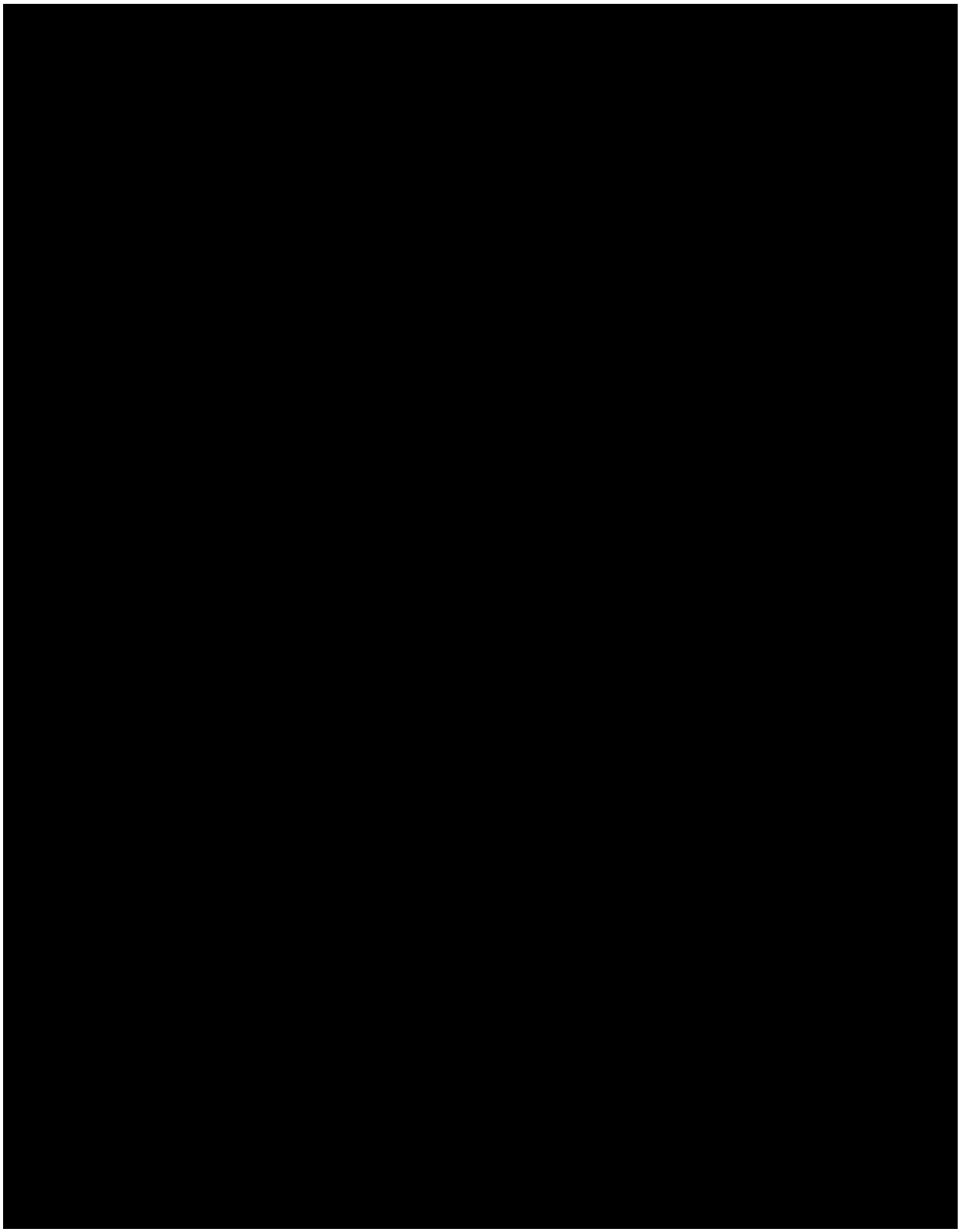
Before Load Summary Sheet:



After Option 1 Load Summary Sheet:



After Option 2 Load Summary Sheet:



EVERSOURCE

Project Approval Form

Partial PAF:

Project Title: SSRK22.21 [redacted] ->700RWO.3	**Project Number: CD02236**
Date Prepared: 08/31/2023	**Company:** Eversource CT
Organization: Electric System Operations	**Project Category:** Lines - Sectionalizing
Project Initiator: [redacted]	**Project Type:** Specific
Initiating Organization: Distribution	**Capital Investment part of original Op Plan:** Yes
Project Manager: [redacted]	**Emergency Related Request?** Yes
Project Sponsor: [redacted]	**Facility Type** (check all that apply): ☐ PTF ☐ non-PTF ☒ Distribution ☐ N/A (General Plant)
Required in service date: 12/31/24	
Total Capital Request: $242.2K	**Authorization Type:** Partial Funding

11. Executive Summary

This project is being established to address a [redacted]

- [redacted]
- [redacted]
- [redacted]
- [redacted]
- Project Location
  - Division: Eastern
  - District: Madison AWC
  - City/Town: Madison

12. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	Year 2023	Year 2024	Year 2025+	Total
Direct Capital Costs				
Internal Labor and Construction Equipment	0.0	13.2	0.0	13.2
Outside Services	0.0	27.1	0.0	27.1
Materials	0.0	125.8	0.0	125.8
Removals	0.0	14.5	0.0	14.5
Risk and Contingency	0.0	0.6	0.0	0.6
Other	0.0	0.0	0.0	0.0
Subtotal – Direct Costs	**0.0**	**181.3**	**0.0**	**181.3**
Indirect Capital Costs				
Indirect/Overheads (including benefits)	0.0	58.2	0.0	58.2
Capitalized interest or AFUDC, if any	0.0	2.9	0.0	2.9
Subtotal – Indirect Costs	**0.0**	**61.1**	**0.0**	**61.1**
Total Gross Capital Costs	**0.0**	**242.4**	**0.0**	**242.4**
Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Total Net Capital Project Costs	**0.0**	**242.4**	**0.0**	**242.4**

13. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

Outage History

[redacted]



b. Project Need

This project is established to address the [redacted]

This project installs sectionalizing devices to break-up this zone further. With these changes, it will greatly increase reliability and reduce the number of customers that will experience an outage in this area.

c. Project Scope

The scope of this project is as follows:

- [redacted]
- [redacted]
- [redacted]

Major Material:

- 3 Reclosers and controls
- 3 sets of Disconnect Switches

14. Alternatives Considered

No alternatives exist to reduce the large customer zone.

Project Option Comparison

	Option	
[redacted]		
Estimate Type	Partial	Partial
Capital Cost	$242.2K	$401.4K
Expense Cost	$10.8K	$17.6K
Total Cost	$253K	$419K
Total Cost / CM Saved	$0.73	$0.46
Total Cost / CI Saved	$613	$661
Preferred option	X	

Option 1 was chosen to focus on the high priority zone. The other large zone was not identified a high priority and will be addressed in another project.

5. Project Schedule

Milestone/Phase Name	Estimated Date
Partial Approval	August 2023
100% Detailed Engineering Completion	January 2024
Fully Funded	February 2024
Construction Start	June 2024
In Service Date	July 2024

6. Regulatory Decisions

No

7. Codes and Standards

N/A

8. Risk and Contingencies

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
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