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Project Approval Form

Project Title [redacted] **Overload Project**	**Project Number: CD02101**
Date Prepared: 01/04/2024	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** OVERLOADS-SPECIFIC PROJECTS
Project Initiator: [redacted]	**Project Type:** Specific
Initiating Organization: Distribution	**Capital Investment part of original Op Plan:** No
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: 6/1/2024	
Total Capital Request: $264.1K	**Authorization Type:** Full Funding

1. Executive Summary

[redacted]

The total capital cost of the project will be $264.1k.

- Project Location:
  - Division: Western
  - District: Newtown AWC
  - Town: Beacon Falls

After the full funding estimate was requested, it was found that the initial engineering estimate was lower than the full funding amount. The initial capital estimate was $166K while the full funding amount came in at $264.1K, a 59% increase from the initial. This increase can be attributed to the use of legacy units for estimating which are 30% less, the absence of switching costs, the need for 100' more of UG cabling, and the additional funding required for manhole cleaning and inspection before cable installation. No scope change was incurred.

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	37.6	0.0	0.0	37.6
Outside Services	9.0	0.0	0.0	9.0
Materials	84.5	0.0	0.0	84.5
Removals	9.7	0.0	0.0	9.7
Risk and Contingency	24.0	0.0	0.0	24.0
Other	0.0	0.0	0.0	0.0
Subtotal – Direct Costs	**164.8**	**0.0**	**0.0**	**164.8**
Indirect Capital Costs				
Indirects/Overheads (including benefits)	99.3	0.0	0.0	99.3
Capitalized interest or AFUDC, if any	0.0	0.0	0.0	0.0
Subtotal – Indirect Costs	**99.3**	**0.0**	**0.0**	**99.3**
Total Gross Capital Costs	**264.1**	**0.0**	**0.0**	**264.1**
Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Total Net Capital Project Costs	**264.1**	**0.0**	**0.0**	**264.1**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

[redacted]

b. Project Need

[redacted]

c. Project Scope

To resolves the above issues, this project proposes the following under preferred option 1:

- [redacted]

Major Material:

Option 1:

- [redacted]

4. Alternatives Considered

[redacted]

Project Option Comparison		
	Option	
[redacted]		
Authorization Type	Full	Full
Capital Cost	$264.1K	$419.9K
Expense Cost	$8.0K	$13.1K
Total Cost	$272.1K	$433K
Total MVA Added	1.41 MVA	1.41 MVA
Cost / MVA added	$193K / MVA	$307.1K / MVA
Preferred option	X	

[redacted]

5. Project Schedule

Milestone/Phase Name	Estimated Date
Partial Approval	3/2023
100% Detailed Engineering Completion	7/2023
Fully Funded	1/2024
Construction Start	1/2024
In Service Date	6/2024

6. Regulatory Decisions

N/A

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	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	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	High	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	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2024	Low	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. Partial PAF w/ attachments	*YES*
B.	
C.	
D.	
F.	

*Partial PAF includes the following attachments: Cost Estimate, Geographic Map, One-lines, and Load Sheet.

A. Partial PAF

Project Title: [redacted] **Overload Project**	**Project Number: CD02101**
Date Prepared: 03/21/2023	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** OVERLOADS-SPECIFIC PROJECTS
Project Initiator: [redacted]	**Project Type:** Specific
Initiating Organization: Distribution	**Capital Investment part of original Op Plan:** No
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: 6/1/2024	
Total Capital Request: $166,066.50	**Authorization Type:** Partial Funding

1. Executive Summary

[redacted]

[redacted]

The total cost of the project will be $166k.

- Project Location:
  - Division: Western
  - District: Newtown AWC
  - Town: Beacon Falls

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	Year 2024	Total
Direct Capital Costs		
Internal Labor and Construction Equipment	$7	$7
Outside Services	$56	$56
Materials	$32	$32
Removals	$7	$7
Risk and Contingency	($0)	($0)
Other	$0	$0
Subtotal – Direct Costs	**$102**	**$102**
Indirect Capital Costs		
Indirect/Overheads (including benefits)	$59	$59
Capitalized interest or AFUDC, if any	$4	$4
Subtotal – Indirect Costs	**$63**	**$63**
Total Gross Capital Costs	**$166**	**$166**
Customer Contribution	**$0**	**$0**
Total Net Capital Project Costs	**$166**	**$166**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

[redacted]

b. Project Need

[redacted]

c. Project Scope

[redacted]

- [redacted]
- [redacted]

Major Material:

[redacted]

- [redacted]

4. Alternatives Considered

[redacted]

Project Option Comparison

	Option	
[redacted]		
Authorization Type	Partial	Partial
Capital Cost	$166 K	$315 K
Expense Cost	$3 K	$5 K
Total Cost	$169 K	$320 K
Total MVA Added	1.41 MVA	1.41 MVA
Cost / MVA added	$119,858 /MVA	$223,273 /MVA
Preferred option	X	

Option 2 is considered due to the proximity and similarity to the [redacted]

5. Project Schedule

Add any additional milestones that are pertinent to the project

Milestone/Phase Name	Estimated Date
Partial Approval	3/2023
100% Detailed Engineering Completion	7/2023
Fully Funded	

Milestone/Phase Name	Estimated Date
Construction Start	1/2024
In Service Date	10/2024

6. Regulatory Decisions

Environmental permitting will be required for work within the ROW.

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	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	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.	2024	High	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	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2024	Low	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
2.
3.
4.
5.

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 Sheet	*YES*
F.	

A. Cost Estimate

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD02101 [redacted]

Work Classification

Category: Line
Type: BLG1
Type Desc: OVERLOADS-SPECIFIC PROJECTS
Work Type:

Ownership / Management

AWC: Newtown
Statewide: No
Owner: [redacted]
Manager:

Project Information

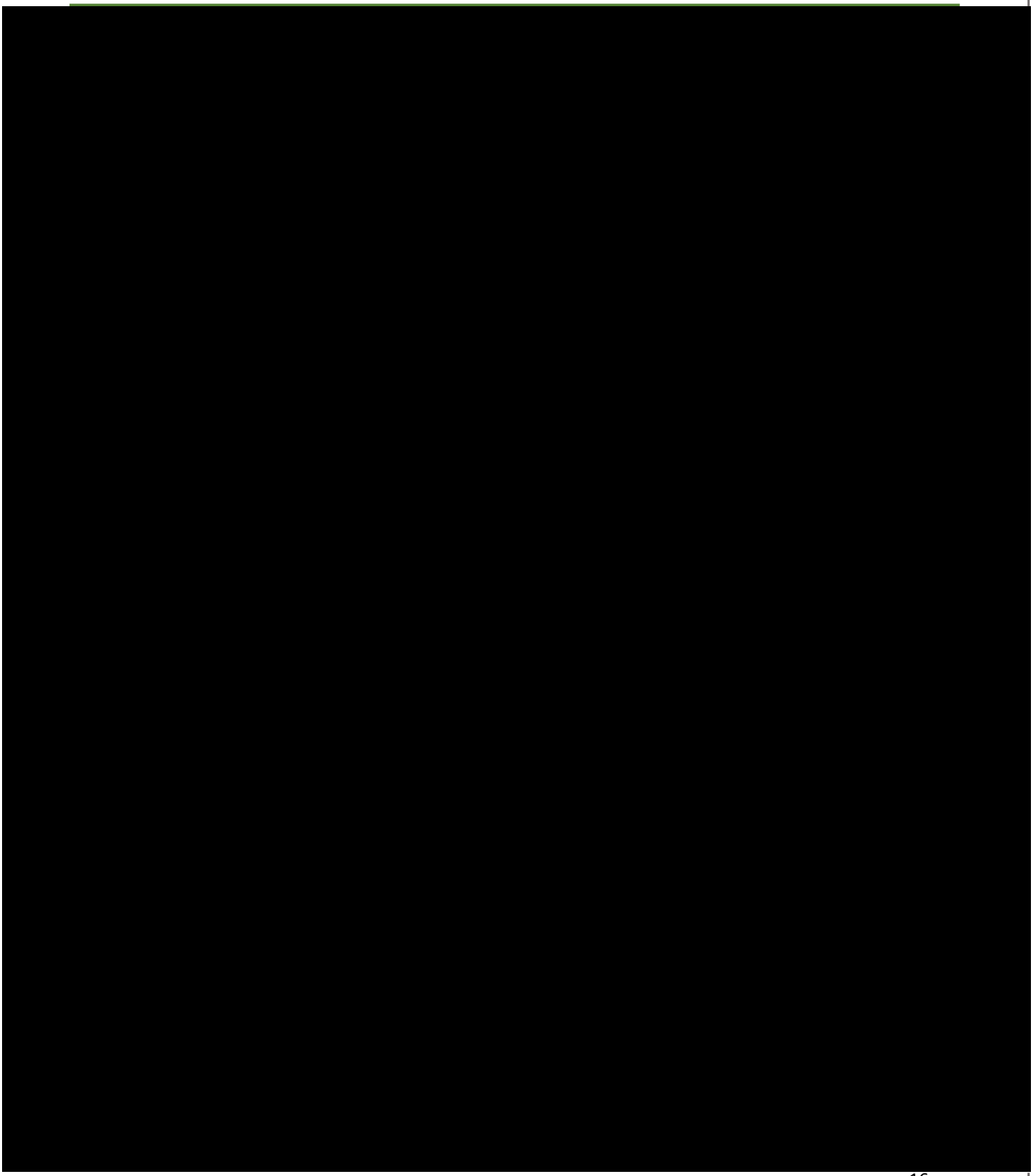
Status: Draft
SPS #:
AIS Score:
Associated Projects:
Assignment ID:
Patrol Find ID:

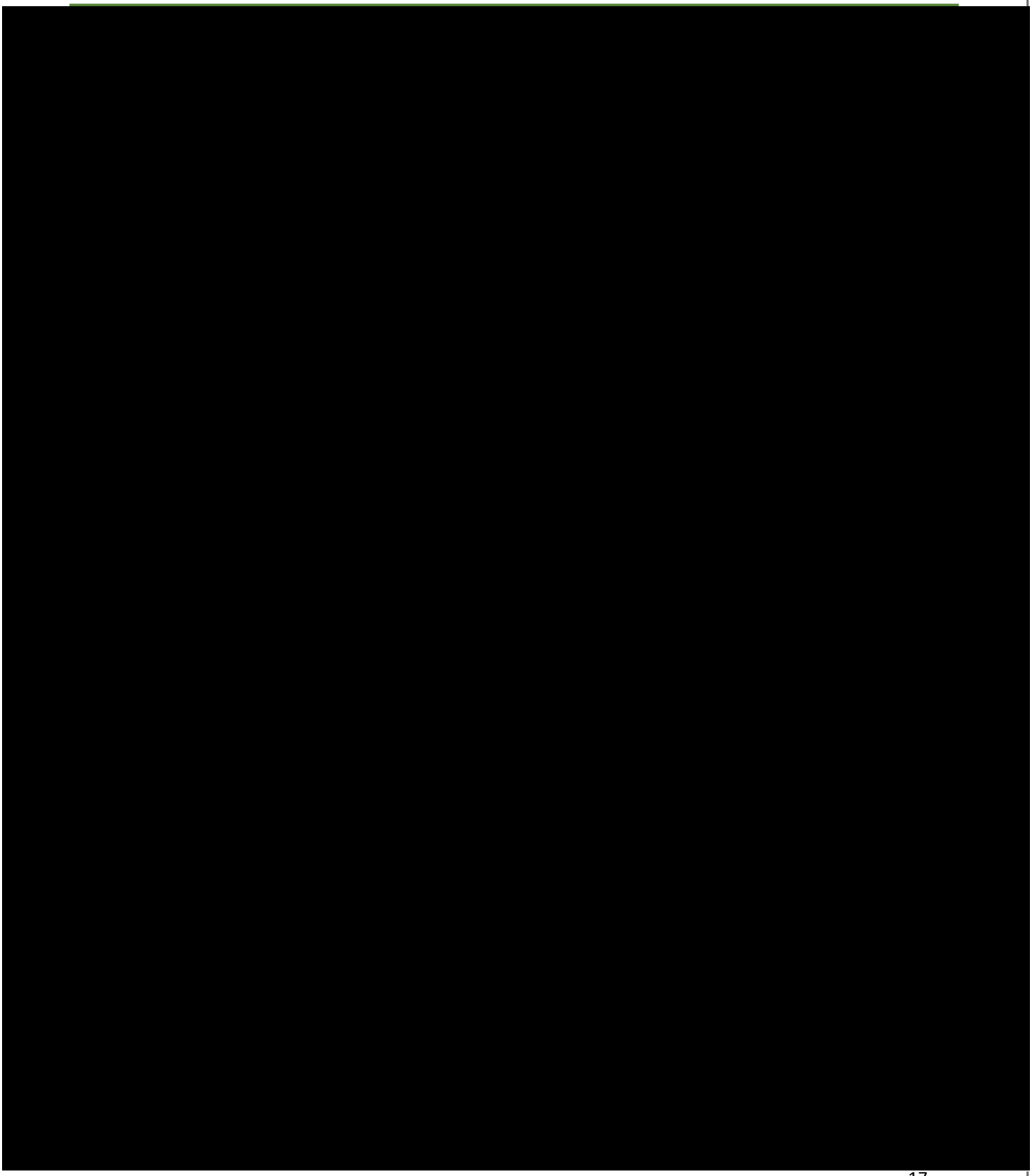
Budget Summary - Preferred Option — 11N86 Overload Resolution

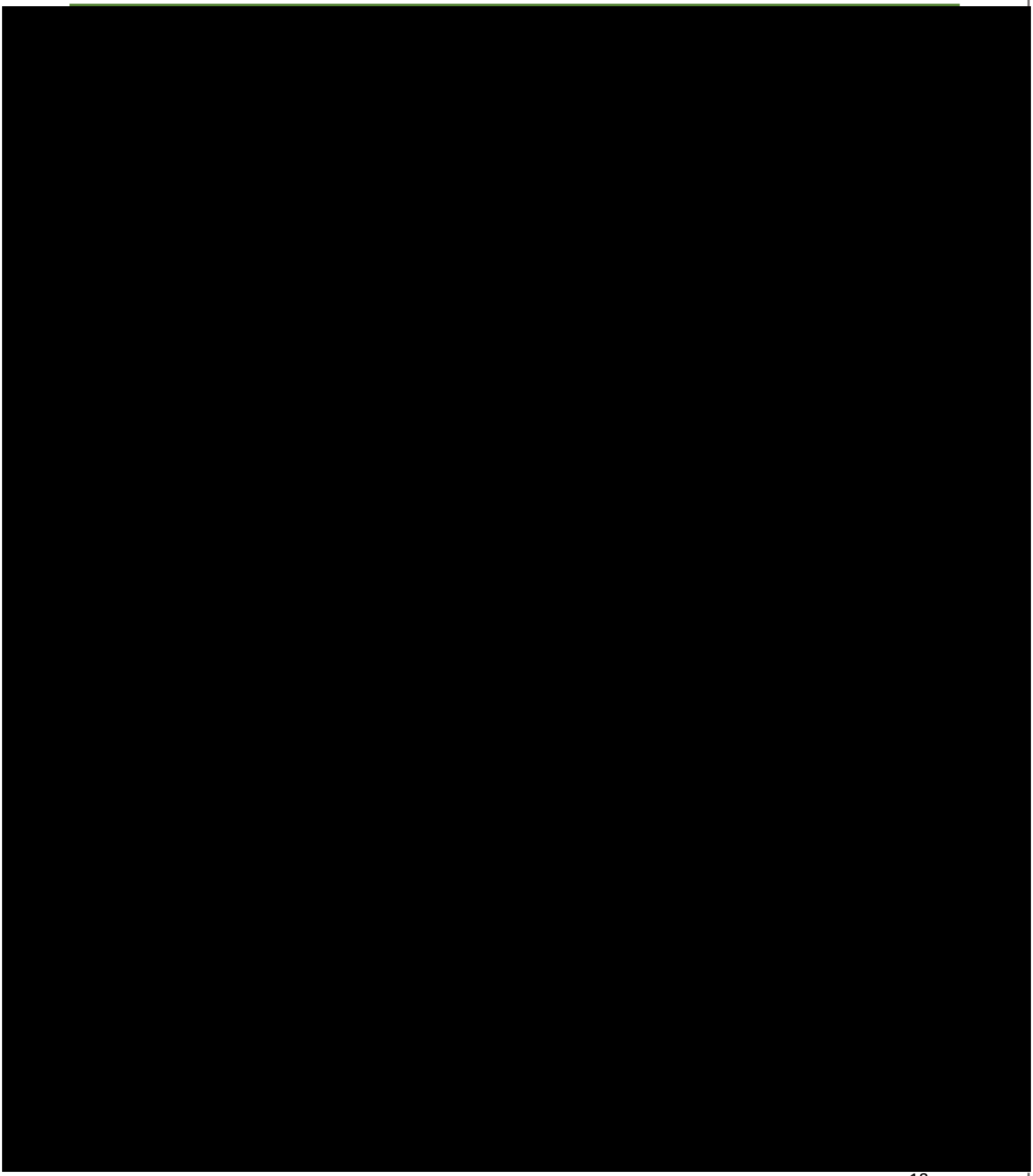
2024

ID	Title	Status	Rev #	Contingency	Expenditure Amount	Net Estimate
1	[redacted] Brk Zone - Change 1000 AL to CU	Draft	0	28%	$169,067	$169,067
				2024 Total:	$169,067	$169,067
				Total Project:	$169,067	$169,067

Item Description	CU	[redacted]	Amount
UG CABLE UG - Cable Removal - all cables	16-UG117		$21,000.00
UG CABLE DB/UG - 750/1000 - 3-1/C (3ph) Cu 1000 CU	16-UG114B		$100,800.00
SECTIONALIZE OH-Vertical Disconnect Switches-600/900 amp 3-1ph 900 Amp rated disconnects	16-OH43		$10,283.20







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Operations Project Authorization Form

Project Title: [redacted] Overload Project	**Project Number: CD02101**
Date Prepared: 10/24/2022	**Company:** Eversource CT
Organization: Distribution Engineering	**Class(es) of Plant:** D Line
Project Initiator: [redacted]	**Project Category:** OVERLOADS-SPECIFIC PROJECTS
Project Manager: [redacted]	**Project Type:** Specific
Project Sponsor: [redacted]	**Capital Investment part of original Operating Plan:** No
Estimated in service date: 10/31/2024	**Emergency Related Request?** No
Eng./Constr. Resources Budgeted? No	**Facility Type** (check all that apply): ☐ PTF ☐ non-PTF ☒ Distribution
Total Gross Capital Request: $155,904.00	**Authorization Type:** Initial Funding

Executive Summary

[redacted]

Project Costs Summary

Note: Dollar values are in thousands

Capital Costs	Year 2024	Year 2025	Year 2026+	Total
Direct Capital Costs				
Internal Labor and Construction Equipment	$6	$0	$0	$6
Outside Services	$52	$0	$0	$52
Materials	$30	$0	$0	$30
Removals	$6	$0	$0	$6
Risk and Contingency	($0)	$0	$0	($0)
Other	$0	$0	$0	$0
Subtotal – Direct Costs	**$95**	**$0**	**$0**	**$95**

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Indirect Capital Costs				
Indirect/Overheads (including benefits)	$54	$0	$0	$54
Capitalized interest or AFUDC, if any	$4	$0	$0	$4
Subtotal – Indirect Costs	**$58**	**$0**	**$0**	**$58**
Total Gross Capital Costs	**$153**	**$0**	**$0**	**$153**
Customer Contribution	**$0**	**$0**	**$0**	**$0**
Total Net Capital Project Costs	**$153**	**$0**	**$0**	**$153**

Technical Justification:

Project Need, Objective and Justification:

[redacted]

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Project Scope:

[redacted]

Major Material:

Option 1:

- 1100' of 1000 CU EPR underground cable, 15KV rated.

Option 2:

- Added two reclosers to [redacted] to reduce

Option 3:

Background:

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Alternatives Considered:

Were alternative solutions considered/applicable? Include any cost/benefit analysis.

Alternatives were considered (please describe below)

[redacted]

Option 2

Option 3

Project Option Comparison

	Option		
[redacted]			
Total MVA Added	2.44 MVA	4.44 MVA	4.44 MVA
Cost	$529 K	$1.28 M	$1.28 M
Cost / MVA added	$216,605 /MVA	$287,655 /MVA	$289,064 /MVA
Preferred option			X

Regulatory Approvals:

Are Regulatory body approvals needed for the project?

No

If yes, provide detailed regulatory approvals

Project Schedule

Milestone/Phase Name	Estimated Date
100% Engineering Completion	July 2023

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Milestone/Phase Name	Estimated Date
Construction Start	January 2024
Testing/Commissioning	August 2024
In Service Date	October 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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