EVERSOURCE

Project Approval Form

Project Title: LILLINONAH LAKE RD N. RECONDUCTORING	Project Number: CD02344
Date Prepared: 09/14/2023	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** RELIABILITY IMPROVE SPEC PROJ
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: 12/1/2023	
Total Capital Request: $830,500.00	**Authorization Type:** Full Funding

1. Executive Summary

This project was established to convert and improve [redacted]

Significant tree trimming and additional labor costs contributed to the high cost of this project.

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2022 Actual	Estimated Future Spend	Total
Internal Labor and Construction Equipment	32.1	123.4	155.5
Outside Services	211.3	23.2	234.5
Materials	13.0	11.5	24.4
Removals	0.0	0.0	0.0
Risk and Contingency	0.0	57.9	57.9
Other	1.0	0.0	1.0
Subtotal	**257.3**	**216.0**	**473.3**

Indirect Capital Costs	Year 1	Year 2	Total
Indirects/Overheads (including benefits)	47.5	306.5	354.0
Capitalized interest or AFUDC, if any	3.2	0.0	3.2
Subtotal	**50.7**	**306.5**	**357.2**
Total Capital Costs (Gross)	**308.0**	**522.5**	**830.5**
Less Total Customer Contribution	**0.0**	**0.0**	**0.0**
Project Costs (Net of Reimbursement)	**308.0**	**522.5**	**830.5**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

[redacted]

b. Project Need

[redacted]

c. Project Scope

[redacted]

4. Alternatives Considered

N/A

Project Option Comparison

[redacted]	
Estimate Type	Full
Total MVA Added	1.7 MVA
Capital Cost	$830 K
Expense Cost	$17 K
Cost / MVA added	$498 K /MVA

Alternative:

The alternative to completing this project would be to leaving as is and upgrading the existing step down transformer and installing a step up transformer to feed new customer. This option was not selected because it would not address the aging infrastructure, reliability or voltage issues in the area.

5. Project Schedule

Add any additional milestones that are pertinent to the project

Milestone/Phase Name	Estimated Date
Partial Approval	N/A
100% Detailed Engineering Completion	2/2022
Fully Funded	9/2023

Milestone/Phase Name	Estimated Date
Construction Start	5/2022
In Service Date	12/2023

6. Regulatory Decisions

N/A

7. Codes and Standards

N/A

8. Risk and Contingencies

Contingencies:

Risk Mitigation:

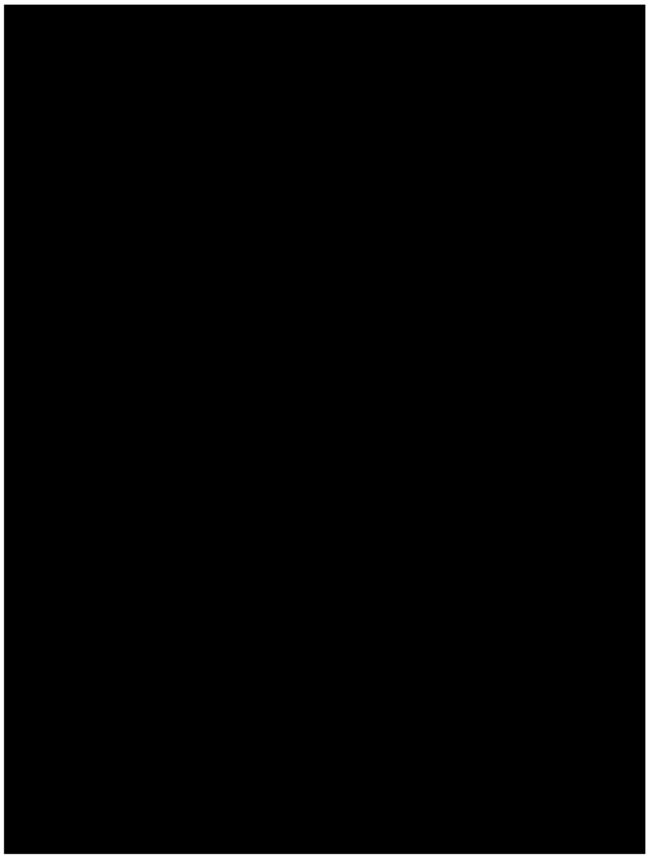
Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2023	Low	Included contingency costs in the funding request. Perform detailed Field Analysis and walk down in project development to avoid potential issues.
Customer Permission / Siting Council / Municipal approvals	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	High	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2023	High	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
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. Install temporary bypasses/equipment if system will be abnormal for extended periods.
Technological risks involving integration of new technology	2023	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	2023	Low	Use of mats and specialty equipment, only work during certain times of the year.

9. References

References
1. Work Order 7821934 – Lillinonah Lake Rd. Conversion
2. Work Order 10232366 – Lillinonah Lake Rd. Development
3. DSEM 5.13 - Voltage Limits
4.
5.

DSEM: 5.13 Voltage limits.



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

Attachment	Included in Submittal?
A. Detailed Design Sketches	*YES*
B. Outage Map	*YES*
C. Load Sheet	*YES*
D. Synergi Voltage Models	*YES*
F.	

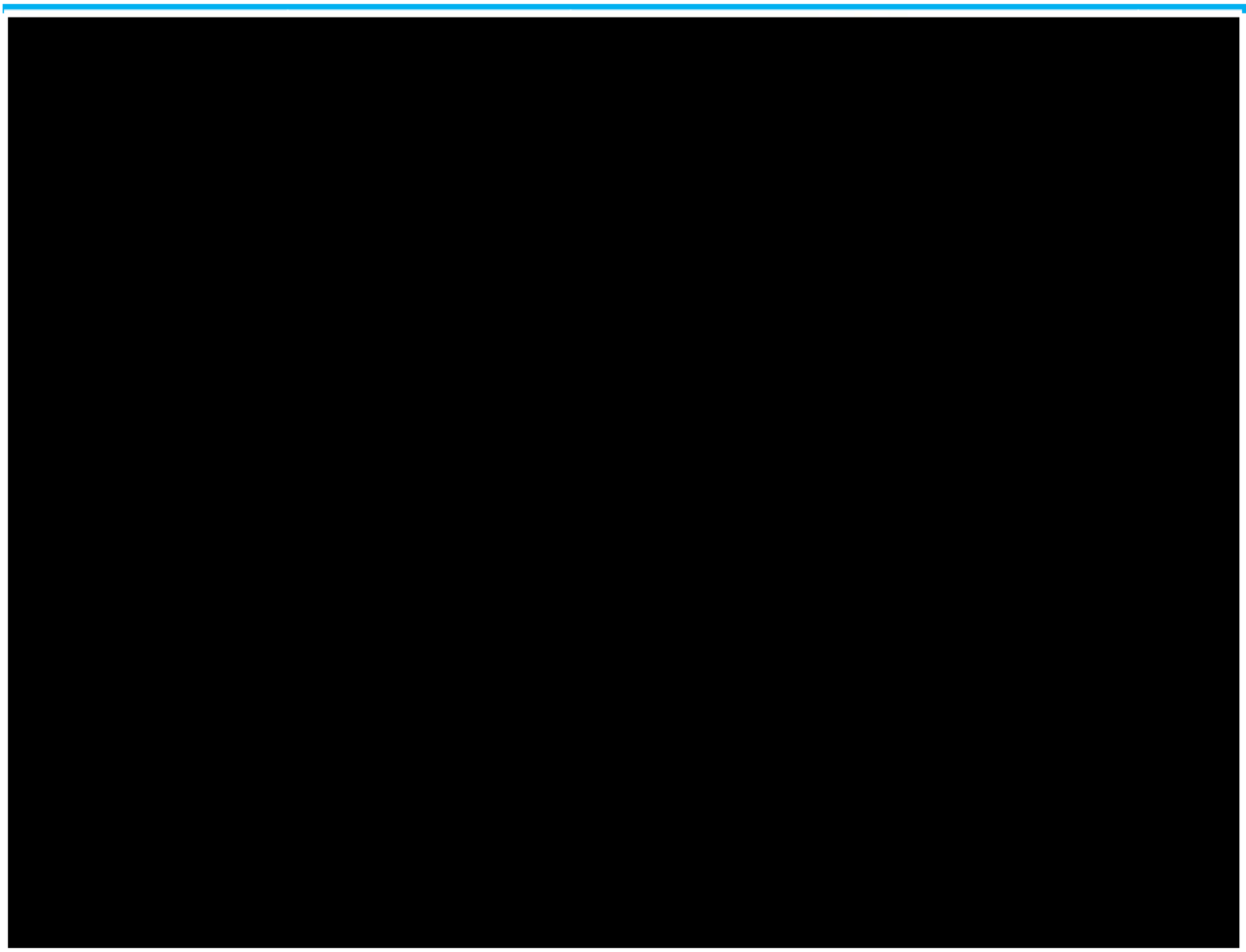
A. Detailed Design Sketches



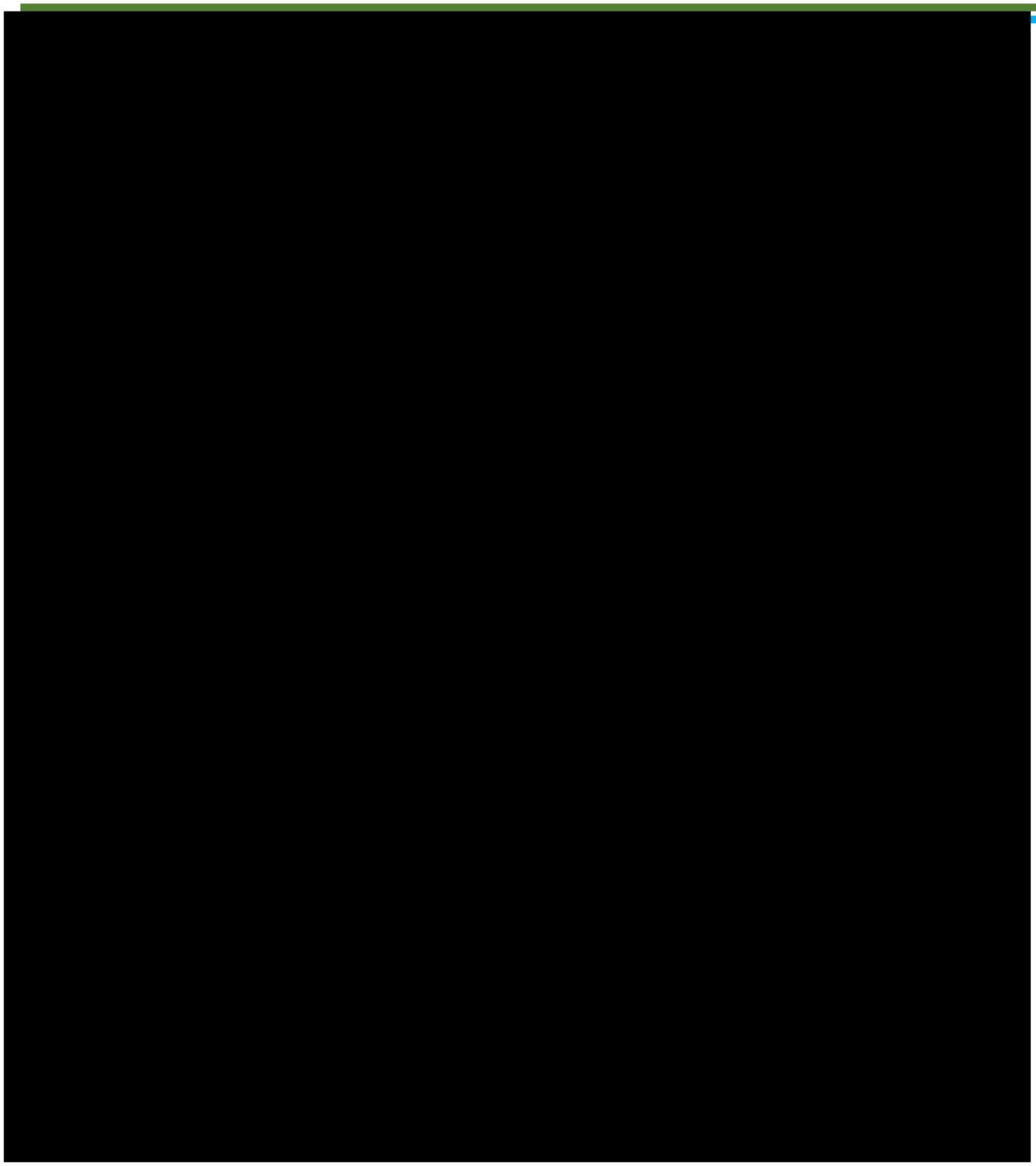














D. Synergi Voltage Models

[redacted]



[redacted]



Project Title: LILLINNONAH LAKE RD N. RECONDUCTORING	Project Number: CD02384
Date Prepared: 09/25/2023	Company: Eversource CT
Organization: Distribution Engineering	Class(es) of Plant: D Line
Project Initiator: [redacted]	Project Category: RELIABILITY IMPROVE SPEC PROJ
Project Manager [redacted]	Project Type: OBSOLETE PLANT OVERHEAD LINES
Project Sponsor: [redacted]	Capital Investment part of 5-year plan? Choose an item
	Emergency Related Request? Choose an item
Total Request ($): $30,000.00	Authorization Type: Initial Funding

1. Project Need Statement

[redacted]

2. Project Objectives

[redacted]

Project Initiator:_____

Engineering Approval:_____

1

Refer to Distribution Capital Project Approval Process
JA-AM-2001-B, Rev.0