EVERSOURCE

Project Approval Form

Project Title: Reconductor Little City Rd, Haddam	Project Number: CD01956
Date Prepared: 10/30/2024	**Company:** Eversource CT
Organization: Electric Field Operations	**Class(es) of Plant:** D Line
Project Initiator: [redacted]	**Project Category:** TRMSN DISTR RELIABILTY PERFRM
Project Manager: [redacted]	**Project Type:** Specific
Project Sponsor: [redacted]	**Capital Investment part of original Operating Plan:** Yes
Estimated in service date: 12/31/2025	**Emergency Related Request?** No
Eng./Constr. Resources Budgeted? Yes	**Facility Type** (check all that apply): ☐ PTF ☐ non-PTF ☒ Distribution
Total Gross Capital Request: $1.90M	**Authorization Type: Full Funding**

1. Executive Summary

Full funding is being requested for this project at a cost of $1.90M which is 92% of the partial funding capital estimate of $2.06M. CD01956 was partially approved on 4/28/2023. There is no scope change on the project, and the full funding value falls within the 15% threshold relative to the partial funding request, with no further changes anticipated.

The original project was presented as follows:

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

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2025	Year 2	Year 3+	Total
Internal Labor and Construction Equipment	0.0	0.0	0.0	0.0
Outside Services	768.2	0.0	0.0	768.2
Materials	167.8	0.0	0.0	167.8
Removals	46.8	0.0	0.0	46.8
Risk and Contingency	132.6	0.0	0.0	132.6
Other	0.0	0.0	0.0	0.0
Subtotal	**1,115.4**	**0.0**	**0.0**	**1,115.4**

Indirect Capital Costs	Year 1	Year 2	Year 3+	Total
Indirects/Overheads (including benefits)	784.8	0.0	0.0	784.8
Capitalized interest or AFUDC, if any	0.0	0.0	0.0	0.0
Subtotal	**784.8**	**0.0**	**0.0**	**784.8**
Total Capital Costs (Gross)	**1,900.2**	**0.0**	**0.0**	**1,900.2**
Less Total Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Project Costs (Net of Reimbursement)	**1,900.2**	**0.0**	**0.0**	**1,900.2**

Explain unique payment provisions, if applicable:

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

[redacted]

[redacted]

[redacted]

[redacted]

DEMI = Device Experiencing Multiple Interruptions (number of times the device in question opened).
CEMI = Customers Experiencing Multiple Interruptions (all outages affecting customers on device in question and upstream device operations).

b. Project Need

[redacted]

c. Project Scope

This project addresses the aging infrastructure and reliability performance in a high impact zone through the following proposal:

[redacted]

Major Material:

- Wood poles – 46
- 556 tree wire – 9,650 ft of three phase
- Single-phase dual voltage transformers – 36
- Three-phase step-down transformer – 1
- Single-phase step-down transformers – 5
- Three-phase cutouts – 2

- 336 tree wire – 4,090 ft of single phase

4. Alternatives Considered

1 – Do Nothing – This alternative was not selected because it does not address the aging infrastructure and heavy vegetation on this circuit and would not improve reliability.

2 – Extensive Vegetation Trimming – $436K – 2023 – This alternative was not selected because it addresses only the heavy vegetation and does not replace the aging infrastructure.

3 – [redacted].

4 – [redacted] – $2,060K – 2024, 2025 – [redacted]

5 – [redacted] – $2,336K – 2025 – [redacted]

Design Criteria	Option			
	2	3	4	5
Cost	$436K	$1,595K	$1,900K	$2,336K
Preferred Option			X	

5. Project Schedule

Add any additional milestones that are pertinent to the project

Milestone/Phase Name	Estimated Date
100% Engineering Completion	12/31/2023
Reconductoring Construction Start	1/1/2025
In Service Date	12/31/2025

6. Regulatory Decisions

N/A

7. Codes and Standards

N/A

8. Risk and Contingencies

Risk Mitigation:

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2024 & 2025	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 & 2025	Medium	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Internal construction resources not available to perform the work.	2024 & 2025	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.	2023 & 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 & 2025	High	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2024 & 2025	High	If storm activity delays work, we may be forced to use external resources.

System abnormal configuration	2024 & 2025	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 & 2025	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 & 2025	Low	Use of mats and specialty equipment, only work during certain times of the year.

9. References

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. Outage History	*YES*
E. Partial Funding PAF	*YES*

A. Cost Estimate

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01956

Reconductor Little City Rd, Haddam

Work Classification

Category: Line
Type: REL1
Type Desc: RELIABILITY IMPROVE SPEC PROJ
Work Type:

Ownership / Management

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

Project Information

Status: Prelim Design Approved
SPS #:
AIS Score:
Associated Projects:
Assignment ID:
Patrol Find ID:

Budget Summary - Preferred Option

Opt. 4 - Reconductor 556 TW & Convert

2025

ID	Title	Status	Rev #	Contingency	Expenditure Amount	Net Estimate
4	Opt. 4 - Reconductor 556 TW & Convert	Draft	0	28%	$2,092,618	$2,092,618
				2025 Total:	**$2,092,618**	**$2,092,618**
				Total Project:	**$2,092,618**	**$2,092,618**

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01956

Reconductor Little City Rd, Haddam

Project Option Summary

ID	Description	Segments	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)	Prfrd
O1	Opt. 4 - Reconductor 556 TW & Convert	4	$2,092,618	$0	100%	$84.96	$44.62	☑

Segments

ID	Title	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)
1	Opt. 1 - Do Nothing	$0			$0.00	$0.00
2	Opt. 2 - Extensive Vegetation Trimming	$446,400			$0.00	$0.00
3	Opt. 3 - Reconductor Only	$1,629,921			$0.00	$0.00
4	Opt. 4 - Reconductor 556 TW & Convert	$2,092,618			$84.88	$44.58
5	Opt. 5 - Reconductor 556 SC & Convert	$2,386,787			$0.00	$0.00

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01956

Reconductor Little City Rd, Haddam

Background / Scope

Issue:

[redacted]

Project Description:

[redacted]

Other Considerations:

Revision / ACT Comments:

If we don't do this project, what will happen?

Environmental

Water Pollution: No Change Soil Contamination: No Change Natural Habitats: No Change

Alternatives considered based on Environmental Impact or Description of Aspects Oil Spill Risks Considered? ☐

Safety Concerns With This Project? ☐

Explain:

External Stakeholders

Customer Impact / Involvement

Cust. Impacted:	Approx. Pole Count (NU):
Crit. Cust. Impacted:	Approx. Pole Count (Other):
Adjoining Property Owner Consent Required: ☐	Town Hearing Required: ☐
Other Utility Pole Custodian Area: ☐	Easement Required: ☐
State Highway Permit Required: ☐	

Relocation / New Service

New Srvc. Contact:	Requestor Type:
Customer Type:	State Highway Project #:
Request Number:	Route #:

Connecticut Light & Power
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Specific Project Proposal - Project #: CD01956

Reconductor Little City Rd, Haddam

Design Alternative CD01956-01

General Information

Segment: 1 - Opt. 1 - Do Nothing
Status: Revision Prelim Design
Segment Type: LATERAL REHAB
Town: HADDAM
Budget Year: 2023
Work Type: Other
Trimming Required: ☐
In Service Date: 12/31/2023
Description: Do Nothing

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed
1	CT K10-3	G-6	Do Nothing

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Specific Project Proposal - Project #: CD01956

Reconductor Little City Rd, Haddam

Design Alternative CD01956-01

Estimate

	Preliminary Estimate Summary
Revision Number:	1
Contingency:	24.00%
SubTotal:	$0
Contingency Amount:	$0
Estimate:	$0
Reimbursement:	$0
Net Amount:	**$0**

Description:

Item Description	CU	$ / Per	Qty	Amount

Associated / Impacted Devices

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

Reliability Projection

Title:

Outage Start Date: 2/23/2018 Outage End Date: 2/23/2022 Years History: 4.00

[redacted]

Connecticut Light & Power
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Specific Project Proposal - Project #: CD01956

Reconductor Little City Rd, Haddam

Design Alternative CD01956-02

General Information

Segment: 2 - Opt. 2 - Extensive Vegetation Trimming
Status: Prelim Design Submitted
Segment Type: LATERAL REHAB
Town: HADDAM
Budget Year: 2023
Work Type: LT-Rehab
Trimming Required: ☑
In Service Date: 12/31/2023
Description: Extensive Vegetation Trimming Only.

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed
1	CT K10-3	G-6	Extensive Vegetation Trimming Only.

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Specific Project Proposal - Project #: CD01956

Reconductor Little City Rd, Haddam

Design Alternative CD01956-02

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$360,000
Contingency Amount:	$86,400
Estimate:	$446,400
Reimbursement:	$0
Net Amount:	**$446,400**

Description:

Item Description	CU	[redacted]	Amount
TREE OH - Tree Trimming	16-OH61		$360,000.00

Associated / Impacted Devices

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

Reliability Projection

Title:

Outage Start Date: 2/23/2018 Outage End Date: 2/23/2022 Years History: 4.00

[redacted]

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01956

Reconductor Little City Rd, Haddam

Design Alternative CD01956-03

General Information

Segment: 3 - Opt. 3 - Reconductor Only Status: Draft

Segment Type: LATERAL REHAB Town: HADDAM Budget Year: 2024

Work Type: LT-Reconductoring Trimming Required: ☑ In Service Date: 12/31/2024

Description: [redacted]

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed
1	[redacted]		

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01956

Reconductor Little City Rd, Haddam

Design Alternative CD01956-03

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$1,314,453
Contingency Amount:	$315,469
Estimate:	$1,629,921
Reimbursement:	$0
Net Amount:	**$1,629,921**

Description:

Item Description	CU	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	16-ALL17	$10,528.80
TRAFFIC OH/DB/UG - Traffic Control - Flagger	16-ALL19	$60,500.00
POLE OH - POLE - 3ph (Telephone custodian)	16-OH12	$24,920.00
POLE OH - POLE - 3ph (CL&P custodian)	16-OH14	$70,140.00
SECTIONALIZE OH - Cutouts or Arresters - 3ph	16-OH20	$2,315.20
OH WIRE OH-Reconductor w/175 Mil Tree Wire-3ph- 556 kcmil	16-OH27	$748,840.00
OH WIRE OH - Remove circuit wire (3 phase)	16-OH37A	$30,880.00
XF OH - OH XF - 1ph	16-OH45	$6,328.80
TREE OH - Tree Trimming	16-OH61	$360,000.00

[redacted]

Asset & Investment Management System 4/12/2023 Page 9 of 18

Connecticut Light & Power
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Specific Project Proposal - Project #: CD01956

Reconductor Little City Rd, Haddam

Design Alternative CD01956-03

Associated / Impacted Devices

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

Reliability Projection

Title:

Outage Start Date: 2/23/2018 Outage End Date: 2/23/2022 Years History: 4.00

[redacted]

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01956

Reconductor Little City Rd, Haddam

Design Alternative CD01956-04

General Information

Segment: 4 - Opt. 4 - Reconductor 556 TW & Convert Status: Draft

Segment Type: LATERAL REHAB Town: HADDAM Budget Year: 2025

Work Type: LT-Reconductoring Trimming Required: ☑ In Service Date: 12/31/2025

Description: [redacted]

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed
1	[redacted]		

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01956

Reconductor Little City Rd, Haddam

Design Alternative CD01956-04

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	28.00%
SubTotal:	$1,634,858
Contingency Amount:	$457,760
Estimate:	$2,092,618
Reimbursement:	$0
Net Amount:	**$2,092,618**

Description:

Item Description	CU	[redacted]	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	16-ALL17		$17,548.00
TRAFFIC OH/DB/UG - Traffic Control - Flagger	16-ALL19		$97,900.00
POLE OH - POLE - 3ph (Telephone custodian)	16-OH12		$24,920.00
POLE OH - POLE - 3ph (CL&P custodian)	16-OH14		$70,140.00
SECTIONALIZE OH - Cutouts or Arresters - 1ph	16-OH19		$1,371.20
SECTIONALIZE OH - Cutouts or Arresters - 3ph	16-OH20		$4,630.40
OH WIRE OH-Reconductor w/175 Mil Tree Wire-1ph (any gauge)	16-OH25		$98,160.00
OH WIRE OH-Reconductor w/175 Mil Tree Wire-3ph- 556 kcmil	16-OH27		$748,840.00
OH WIRE OH - Remove circuit wire (1 phase)	16-OH37		$25,944.00

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Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01956

Reconductor Little City Rd, Haddam

Design Alternative		[redacted]	CD01956-04
OH WIRE OH - Remove circuit wire (3 phase)	16-OH37A		$30,880.00
XF OH - OH XF - 1ph	16-OH45		$75,945.60
XF OH - Stepdown - 1ph - on POLE	16-OH49		$34,000.00
XF OH - Stepdowns, 3-1ph - on one POLE	16-OH50		$10,000.00
EQUIPMENT OH - Conversion Prep Work - 3ph	16-OH57		$10,300.00
EQUIPMENT OH - Conversion - CUTOVER	16-OH58		$22,478.40
TREE OH - Tree Trimming	16-OH61		$360,000.00
EQUIPMENT OH - Remove Capacitor, any kVAR P.2187	16-OH54		$1,800.00

Associated / Impacted Devices

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

Connecticut Light & Power
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Specific Project Proposal - Project #: CD01956

Reconductor Little City Rd, Haddam

Design Alternative CD01956-04

Reliability Projection

Title:

Outage Start Date: 2/23/2018 Outage End Date: 2/23/2022 Years History: 4.00

[redacted]

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01956

Reconductor Little City Rd, Haddam

Design Alternative CD01956-05

General Information

Segment: 5 - Opt. 5 - Reconductor 556 SC & Convert Status: Draft

Segment Type: LATERAL REHAB Town: HADDAM Budget Year: 2025

Work Type: LT-Reconductoring Trimming Required: ☑ In Service Date: 12/31/2025

Description: [redacted]

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed
1	[redacted]		

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01956

Reconductor Little City Rd, Haddam

Design Alternative CD01956-05

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	28.00%
SubTotal:	$1,864,678
Contingency Amount:	$522,110
Estimate:	$2,386,787
Reimbursement:	$0
Net Amount:	**$2,386,787**

Description:

Item Description	CU	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	16-ALL17	$17,548.00
TRAFFIC OH/DB/UG - Traffic Control - Flagger	16-ALL19	$88,400.00
POLE OH - POLE - 3ph (Telephone custodian)	16-OH12	$24,920.00
POLE OH - POLE - 3ph (CL&P custodian)	16-OH14	$70,140.00
SECTIONALIZE OH - Cutouts or Arresters - 1ph	16-OH19	$1,371.20
SECTIONALIZE OH - Cutouts or Arresters - 3ph	16-OH20	$4,630.40
OH WIRE OH-Reconductor w/175 Mil Tree Wire-1ph (any gauge)	16-OH25	$98,160.00
OH WIRE OH - Reconductor w/Spacer Cable - 556 kcmil	16-OH29	$988,160.00
OH WIRE OH - Remove circuit wire (1 phase)	16-OH37	$25,944.00

[redacted]

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Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01956

Reconductor Little City Rd, Haddam

Design Alternative		[redacted]	CD01956-05
OH WIRE OH - Remove circuit wire (3 phase)	16-OH37A		$30,880.00
XF OH - OH XF - 1ph	16-OH45		$75,945.60
XF OH - Stepdown - 1ph - on POLE	16-OH49		$34,000.00
XF OH - Stepdowns, 3-1ph - on one POLE	16-OH50		$10,000.00
EQUIPMENT OH - Remove Capacitor, any kVAR	16-OH54		$1,800.00
EQUIPMENT OH - Conversion Prep Work - 3ph	16-OH57		$10,300.00
EQUIPMENT OH - Conversion - CUTOVER	16-OH58		$22,478.40
TREE OH - Tree Trimming	16-OH61		$360,000.00

Associated / Impacted Devices

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

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01956

Reconductor Little City Rd, Haddam

Design Alternative CD01956-05

Reliability Projection

Title:

Outage Start Date: 2/23/2018 Outage End Date: 2/23/2022 Years History: 4.00



[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

E. Partial Funding PAF

Operations Project Authorization Form

Project Title: Reconductor Little City Rd, Haddam	**Project Number: CD01956**
Date Prepared: 04/20/2023	**Company:** Eversource CT
Organization: Electric Field Operations	**Class(es) of Plant:** D Line
Project Initiator: [redacted]	**Project Category:** RELIABILITY IMPROVE SPEC PROJ
Project Manager: [redacted]	**Project Type:** Specific
Project Sponsor: [redacted]	**Capital Investment part of original Operating Plan:** Yes
Estimated in service date: 12/31/2025	**Emergency Related Request?** No
Eng./Constr. Resources Budgeted? Yes	**Facility Type** (check all that apply): ☐ PTF ☐ non-PTF ☒ Distribution
Total Gross Capital Request: $2,060K	**Authorization Type:** Initial Funding

Executive Summary

Eversource identified the top ten worst performing circuits (WPC) in Connecticut based on the total number of customer minutes experienced on these circuits over the last four years. The devices with the most customer minutes for each circuit were identified as high impact zones. Cross functional teams were created with members from Engineering, Operations, System Planning, Vegetation Management and Standards to review the aging infrastructure within each high impact zone where outages have occurred. CD01956 focuses on infrastructure replacement and vegetation management, which includes trimming and removals.

[redacted]

CD01956 addresses one of the two high impact zones on the [redacted] where Eversource has experienced outages within the past four years. These proposals include aging infrastructure replacement, upgrading conductor sizes to increase reliability and ampacity as well as extensive vegetation trimming.

The zone that this project does not address is being addressed under project CD02207 that is currently proposed for 2024 construction. These project proposals were deemed as the best solutions by the cross functional teams that performed the reviews.

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	$56	$21	$0	$77
Outside Services	$531	$199	$0	$729
Materials	$164	$62	$0	$226
Removals	$85	$32	$0	$117
Risk and Contingency	$72	$27	$0	$100
Other	$0	$0	$0	$0
Subtotal	**$909**	**$340**	**$0**	**$1,249**
Indirect Capital Costs	**Year 1**	**Year 2**	**Year 3+**	**Total**
Indirects/Overheads (including benefits)	$552	$218	$0	$769
Capitalized interest or AFUDC, if any	$30	$11	$0	$41
Subtotal	**$582**	**$229**	**$0**	**$811**
Total Capital Costs (Gross)	**$1,491**	**$569**	**$0**	**$2,060**

Technical Justification

Project Need, Objective and Justification:

Eversource created the top ten worst performing circuits (WPC) for each operating company based on the total number of customer minutes experienced on these circuits over the last four years. The devices with the most customer minutes for each circuit were identified as high impact zones. Cross functional teams

were created with members from Engineering, Operations, System Planning, Vegetation Management and Standards to review the high impact zones. CD01956 focuses on infrastructure replacement to improve the reliability of the [redacted]

This project addresses the reliability of the fuse pole 2002 high impact zone through aging infrastructure replacement, vegetation removals, conductor replacement that will increase both reliability and ampacity, [redacted]

A Synergi loadflow was performed on the circuit and no overloads were identified and all voltages after the project's changes were within PURA guidelines.

Project Scope:

This project addresses the aging infrastructure and reliability performance in a high impact zone through the following proposal:

[redacted]

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

Major Material:

- Wood poles – 46
- 556 tree wire – 9,650 ft of three phase
- Single-phase dual voltage transformers – 36
- Three-phase step-down transformer – 1
- Single-phase step-down transformers – 5

- Three-phase cutouts – 2
- 336 tree wire – 4,090 ft of single phase

Background:

[redacted]

[redacted]

[redacted]

Alternatives Considered:

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

Alternatives were considered (please describe below)

1 – Do Nothing – This alternative was not selected because it does not address the aging infrastructure and heavy vegetation on this circuit and would not improve reliability.

2 – Extensive Vegetation Trimming – $436K – 2023 – This alternative was not selected because it addresses only the heavy vegetation and does not replace the aging infrastructure.

3 – [redacted], keep at 4.8 kV – $1,595K – 2024 – [redacted]

4 – [redacted] – $2,060K – 2024, 2025 – [redacted]

5 – [redacted] – $2,336K – 2025 – [redacted]

Design Criteria	Option			
	2	3	4	5
Cost	$436K	$1,595K	$2,060K	$2,336K
Preferred Option			X	

Regulatory Approvals:

Are Regulatory body approvals needed for the project?

No

Project Schedule

Milestone/Phase Name	Estimated Date
100% Engineering Completion	12/31/2023
Reconductoring Construction Start	1/1/2024
Conversion Construction Start	1/1/2025
In Service Date	12/31/2025

Risks and Risk Mitigation Plans

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2024 & 2025	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 & 2025	Medium	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Internal construction resources not available to perform the work.	2024 & 2025	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.	2023 & 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 & 2025	High	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.

Storm delays	2024 & 2025	High	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2024 & 2025	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 & 2025	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 & 2025	Low	Use of mats and specialty equipment, only work during certain times of the year.

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

CD01956 Needs Statement - Rev4.12

CD01956 Geographic Map - R

CD01956 Geographic Map - R

CD01956 One Line.vsdx

CD01956 One Line.pdf

CD01956 Outage History_2018-2022.xl