EVERSOURCE

Project Approval Form

Project Title [redacted] **Amenia Union Rd Reconductoring**	**Project Number: CD01926**
Date Prepared: 12/14/2023	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** Reliability
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: 1,373.7K	**Authorization Type:** Full Funding

1. Executive Summary

Project CD01926 seeks to address reliability concerns for a [redacted] and has experienced 13 outages over the last 4 years, 12 of which were tree related. [redacted]

The proposed work suggests enhanced tree trimming and reconductoring of existing bare wire overhead with 336 tree wire. The installation and replacement of cutouts, poles, and transformers along each segment is included where required. The suggested work along this lateral segment will reduce the frequency of tree related interruptions in the future. The total cost of all proposed work is $1,373k with a $/CMS of $8.95.

- Project Location
  - Division: Western
  - District: Falls Village AWC
  - Town: Sharon
- Approved Initial Funding Authorization: $1,109K at the 03/03/2022 CT-PAC meeting.
- Requesting Full Funding authorization: $1,373k, a difference of $264K or 124% of the Initial Funding authorization.

The variance is due to the following:

$332k Updated Estimating Units Variance: The legacy estimating units used to produce the initial funding estimate is about 30% lower than the estimates used today, which were updated to reflect increased labor and material costs.

-$71k Material Variance: The initial estimated material costs were $122k. The ACT estimated material costs were $51k. This represents a variance of $71k. Initially this project assumed 100% pole replacement of 99 joint utility poles. The work orders reflect a total of 69 poles, 30 fewer poles than initially assumed. Similarly, there 15,565' of 336 AL TW was written while 16,300' was estimated.

These cost variances equate to a difference of $261k, which is close to the ACT estimate cost overage of $264k.

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	52.8	0.0	0.0	52.8
Outside Services	454.7	0.0	0.0	454.7
Materials	51.0	0.0	0.0	51.0
Removals	149.0	0.0	0.0	149.0
Risk and Contingency	124.9	0.0	0.0	124.9
Other	0.0	0.0	0.0	0.0
Subtotal – Direct Costs	**832.3**	**0.0**	**0.0**	**832.3**
Indirect Capital Costs				
Indirect/Overheads (including benefits)	541.4	0.0	0.0	541.4
Capitalized interest or AFUDC, if any	0.0	0.0	0.0	0.0
Subtotal – Indirect Costs	**541.4**	**0.0**	**0.0**	**541.4**
Total Gross Capital Costs	**1,373.7**	**0.0**	**0.0**	**1,373.7**
Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Total Net Capital Project Costs	**1,373.7**	**0.0**	**0.0**	**1,373.7**

Explain unique payment provisions, if applicable:

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

[redacted]

b. Project Need

[redacted] has experienced 13 outages in the last 4 years. 12 of the outages were tree related and 1 was

not traceable (Patrolled Nothing Found). [redacted]

[redacted]

c. Project Scope

The project proposes the following work:

[redacted]

Major Materials

- 16,300' 336 TW
- 99 1-Ph CL&P Custodian Poles

4. Alternatives Considered

Alternatives considered were to [redacted]

5. Project Schedule

Add any additional milestones that are pertinent to the project

Milestone/Phase Name	Estimated Date
Partial Approval	03/2022
100% Engineering Completion	06/31/2022
Construction Start	12/31/2023
In Service Date	12/31/2024

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	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.	2024	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2024	Medium	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

N/A

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

Attachment	Included in Submittal?
A. Cost Estimate	*YES*
B. Geographic Map	*YES*
C. Pole Summary	*YES*

A.Cost Estimate

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01926
[redacted]Amenia Union Rd Reconductoring

Work Classification

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

Ownership / Management

AWC: Falls Village
Statewide: No
Owner: [redacted]
Manager: [redacted]

Project Information

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

Budget Summary - Preferred Option

Amenia Road Lateral Reconductoring

2023 ID	Title	Status	Rev #	Contingency	Expenditure Amount	Net Estimate
1	Amenia Road Lateral Reconductoring	Draft	0	24%	$1,133,364	$1,133,364
				2023 Total:	$1,133,364	$1,133,364
				Total Project:	$1,133,364	$1,133,364

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Specific Project Proposal - Project #: CD01926

[redacted] Amenia Union Rd Reconductoring

Project Option Summary

ID	Description	Segments	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)	Prfrd
O1	Amenia Road Lateral Reconductoring	1	$1,133,364	$0	100%	$100.09	$7.39	☑

Segments

ID	Title	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)
1	Amenia Road Lateral Reconductoring	$1,133,364			$99.99	$7.38

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Specific Project Proposal - Project #: CD01926
[redacted] Amenia Union Rd Reconductoring

Background / Scope

Issue:

Project Description:

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 #:

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Specific Project Proposal - Project #: CD01926

[redacted] Amenia Union Rd Reconductoring

Design Alternative CD01926-01

General Information

Segment: 1 - Amenia Road Lateral Reconductoring
Status: Draft
Segment Type: RECONDUCTORING - OTHER
Town: SHARON
Budget Year: 2023
Work Type: LT-Reconductoring
Trimming Required: ☑
In Service Date: 12/31/2023
Description:

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed

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[redacted] Amenia Union Rd Reconductoring

Design Alternative CD01926-01

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$914,003
Contingency Amount:	$219,361
Estimate:	$1,133,364
Reimbursement:	$0
Net Amount:	**$1,133,364**
Description:	

Item Description	CU	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	16-ALL17	$28,076.80
TREE OH - Trimming for Taller Pole	16-OH64	$15,000.00
TRAFFIC OH/DB/UG - Traffic Control - Flagger $1000/day	16-ALL19	$15,000.00
POLE OH - POLE - 1ph (CL&P custodian) 100% pole replacement	16-OH13	$141,316.00
OTHER OTHER 20% Contractor Adjustment	16-ALL14	$181,629.00
OTHER OTHER Core Digger for pole installations $750/pole	16-ALL14	$56,250.00
OH WIRE OH-Reconductor w/175 Mil Tree Wire-1ph (any gauge) Install 16,300' 1/0 ACSR TW	16-OH25	$391,200.00
OH WIRE OH - Remove circuit wire (1 phase) Remove 16,300' existing 1/0 ACSR bare	16-OH37	$39,120.00
XF OH - OH XF - 1ph Shift 22 1-phase XFMRs	16-OH45	$46,411.20

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Design Alternative CD01926-01

Associated / Impacted Devices

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

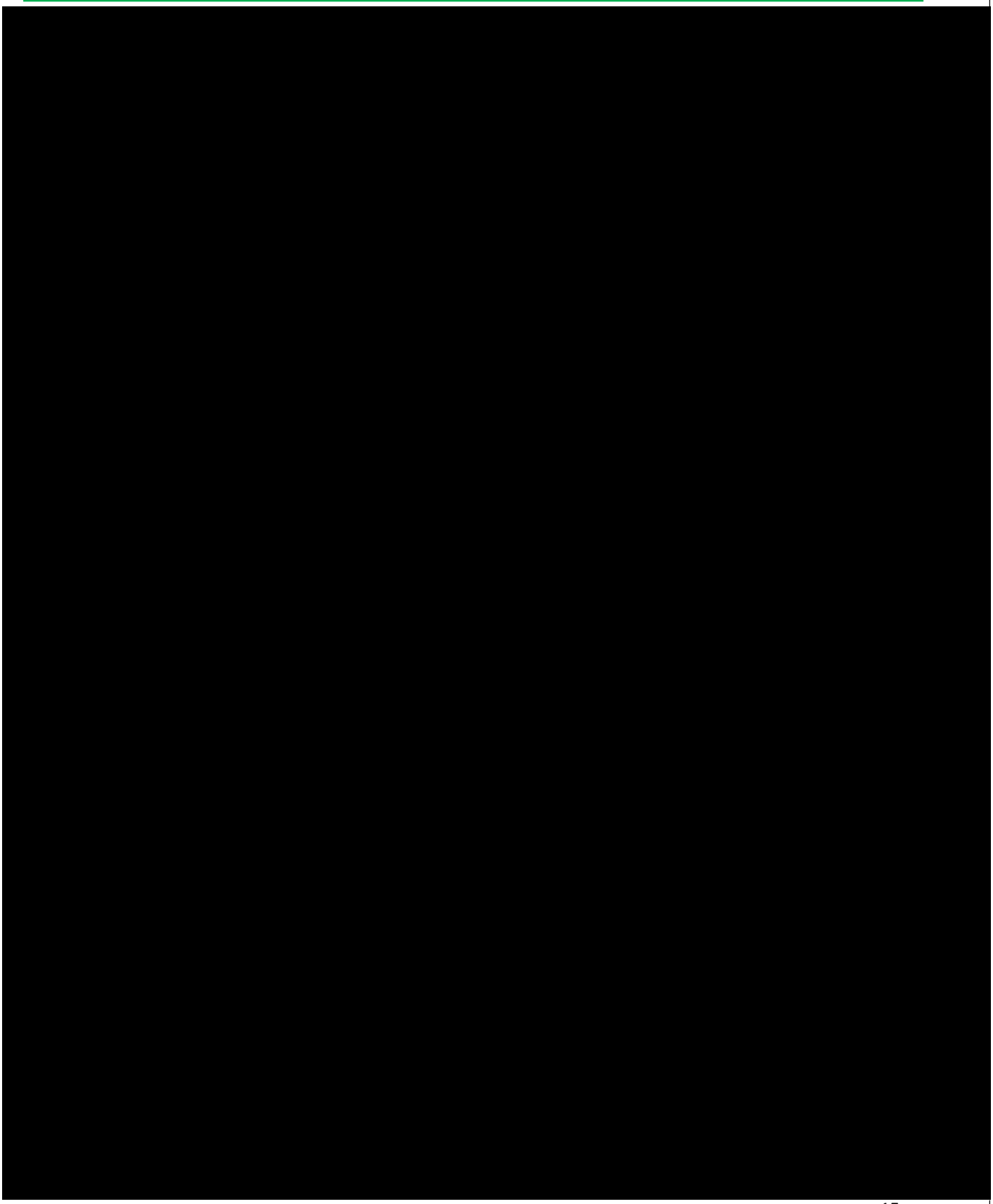
Reliability Projection

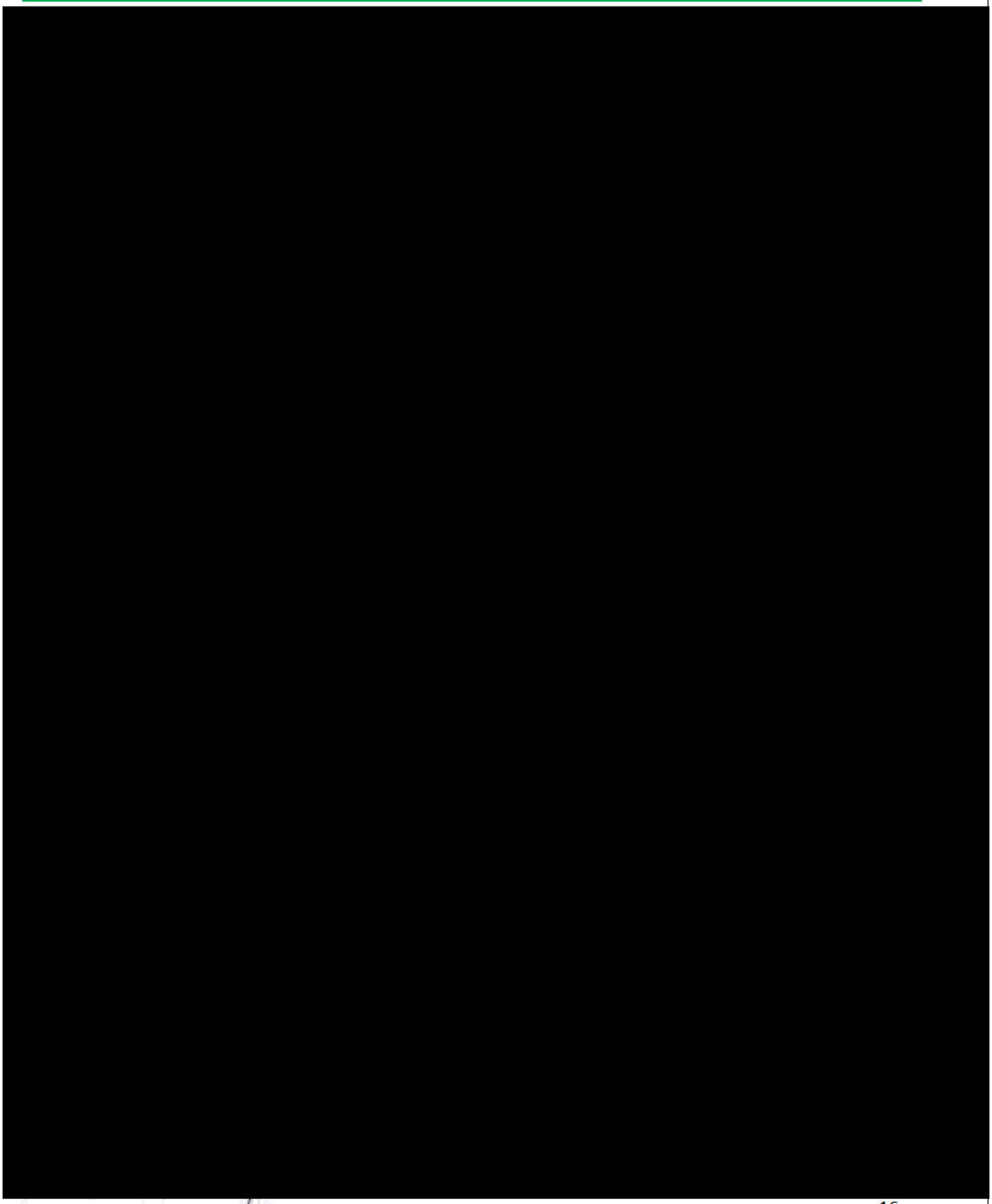
Title:

Outage Start Date: 2/4/2018 Outage End Date: 2/4/2022 Years History: 4.00

[redacted]

B.Geographic Map





C.Pole Summary

