EVERSOURCE

Project Approval Form

Project Title: [redacted]	**Project Number: CD02350**
Date Prepared: 12/02/2024	**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:** 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: 6/1/2025	
Total Capital Request: $2,598K	**Authorization Type:** Full Funding

1. Executive Summary

Full funding is being requested for this project at a cost of $2,598K which is 102% of the partial funding capital estimate of $2,549K. CD02350 was partially approved on 11/9/2023. There is no scope change on the project. This project falls within the 15% threshold relative to the partial funding estimate and is being requested with no further changes anticipated.

The original project was proposed as follows:

- [redacted]. *The total cost for this option is $2.549M.*
- *Location Details:*
  - *Division: Western*
  - *District: Newtown AWC*
  - *Town(s): Morris, Warren, Washington*

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2023 Actual	2024 Actual	2025 Estimate	Total
Internal Labor and Construction Equipment	0.0	0.4	81.9	82.3
Outside Services	0.1	3.7	844.9	848.7
Materials	0.0	1.3	287.0	288.3
Removals	0.0	0.3	87.4	87.8
Risk and Contingency	0.0	0.0	180.1	180.1
Other	0.0	0.0	0.1	0.1
Subtotal	**0.1**	**5.7**	**1,481.4**	**1,487.2**

Indirect Capital Costs	2023 Actual	2024 Actual	2025 Estimate	Total
Indirects/Overheads (including benefits)	0.1	16.1	1,094.2	1,110.4
Capitalized interest or AFUDC, if any	0.0	0.1	0.0	0.1
Subtotal	**0.1**	**16.2**	**1,094.2**	**1,110.6**

Total Capital Costs (Gross)	**0.3**	**21.9**	**2,575.6**	**2,597.8**
Less Total Customer Contribution				
Project Costs (Net of Reimbursement)	**0.3**	**21.9**	**2,575.6**	**2,597.8**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

[redacted]

b. Project Need

[redacted]

c. Project Scope

[redacted]

Major Material:

5 – 25kV Reclosers

5 – Recloser Settings (1 SS, 1 RR, 1 SR, 1 MR, 1 TR)

3 – 3000kVA 27.6/23.0kV Auto Transformers

3 – 400A 23kV Voltage Regulators

25 – Overhead service transformers

2 – UG Pad transformers

6,350’ – 3 PH 556 AL TW

4,500’ – 1/0 ACSR Neutral

4. Alternatives Considered

There were no alternatives considered for this project. The option presented was originally included within the scope of work for CD02343 but was separated out into its own project due to scope and timeline constraints. [redacted] would be about $22M. ($2.2/ KWH)

Project Option Comparison

	Option	
[redacted]		
Authorization Type	Full	Partial
Capital Cost	$2,597,000	$21,334,600
Expense Cost	$103,911	$665,418
Total Cost	$2,701,000	$22,000,000
Total Cost / MVA added	$234,424.45/MVA	$8,800,000/ MVA
Total Cost / CM Saved	$3.57/CM	$12.05/CM
Total Cost / CI Saved	$140,990.28/CI	$ 1,194,354/ CI

Preferred option	X	

5. Project Schedule

Add any additional milestones that are pertinent to the project

Milestone/Phase Name	Estimated Date
Partial Approval	Nov 2023
Fully Funded	Dec 2024
Construction Start	Jan 2025
In Service Date	June 2025

6. Regulatory Decisions

N/A

7. Codes and Standards

Per DSEM 14.213 the [redacted] Refer to Table 1 below for reference.

[redacted]

8. Risk and Contingencies

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation

Actual cost higher than estimated due to scope changes.	2025	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	2025	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Internal construction resources not available to perform the work.	2025	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.	2025	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2025	High	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2025	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2025	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	2025	Medium	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	2025	Low	Use of mats and specialty equipment, only work during certain times of the year.

9. References

References
1. CD02343 – [redacted] Normal Overload

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

Attachment	Included in Submittal?
A1. Partial Funding PAF Form	*YES*
A. Cost Estimate	*YES*
B. Geographic Map	*YES*
C. Project One line	*YES*
D. Load Summary	*YES*

EVERSOURCE

Project Approval Form

Attachment A1: Partial Funding PAF Form

Project Title: [redacted]	**Project Number: CD02350**
Date Prepared: 10/19/2023	**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: 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: 6/1/2026	
Total Capital Request: $2.549M	**Authorization Type:** Partial Funding

1. Executive Summary

[redacted]

The total cost for this option is $2.549M.

Location Details:

Division: Western

District: Newtown AWC

Town(s): Morris, Warren, Washington

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2026	2027	2028+	Total
Direct Capital Costs				
Internal Labor and Construction Equipment	106.7	0.0	0.0	106.7
Outside Services	867.6	0.0	0.0	867.6
Materials	435.2	0.0	0.0	435.2
Removals	192.6	0.0	0.0	192.6
Other	16.9	0.0	0.0	16.9
Risk and Contingency	0.0	0.0	0.0	0.0
Subtotal	**1,619.0**	**0.0**	**0.0**	**1,619.0**
Indirect Capital Costs				
Indirects/Overheads (including benefits)	872.1	0.0	0.0	872.1
Capitalized interest or AFUDC, if any	57.8	0.0	0.0	57.8
Subtotal	**929.9**	**0.0**	**0.0**	**929.9**
Total Capital Costs (Gross)	**2,548.9**	**0.0**	**0.0**	**2,548.9**
Less Total Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**
Project Costs (Net)	**2,548.9**	**0.0**	**0.0**	**2,548.9**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

[redacted]

b. Project Need

[redacted]

c. Project Scope

[redacted]

Major Material:

5 – 25kV Reclosers

5 – Recloser Settings (1 SS, 1 RR, 1 SR, 1 MR, 1 TR)

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4. Alternatives Considered

There were no alternatives considered for this project. The option presented was originally included within the scope of work for CD02343 but was separated out into its own project due to scope and timeline constraints. [redacted] would be about $22M. ($2.2/ KWH)

Project Option Comparison

[redacted]

Type	Partial	Partial
Capital Cost	$2,548,883.28	$21,334,600

Expense Cost	$79,498.72	$665,418
Total Cost	$2,628,382.00	$22,000,000
Total Cost / MVA added	$230,011.03/MVA	$8,800,000/ MVA
Total Cost / CM Saved	$3.50/CM	$12.05/CM
Total Cost / CI Saved	$138,335.90/CI	$ 1,194,354/ CI
Preferred option	X	

5. Project Schedule

Add any additional milestones that are pertinent to the project

Milestone/Phase Name	Estimated Date
Partial Approval	10/19/23
100% Detailed Engineering Completion	5/1/25
Fully Funded	6/1/25
Construction Start	1/1/26
In Service Date	6/1/26

6. Codes and Standards

Per DSEM 14.213 the [redacted]

[redacted] Refer to Table 1 below for reference

[redacted]

7. Risk and Contingencies

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
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System abnormal configuration	2026	Low	Schedule work to minimize system abnormal time. Install temporary bypasses/equipment if system will be abnormal for extended periods.
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8. References

References
1. CD02343 - [redacted] Normal Overload

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

Attachment	Included in Submittal?
A. Cost Estimate	*YES*
B. Geographic Map	*YES*
C. Project One line	*YES*
D. Load Summary	*YES*

Attachment A: Cost Estimate

Connecticut Light & Power
A Northeast Utilities Company

Project Design Alternative: 1
Project: CD02350 - [redacted]

Design Alternative CD02350-01

General Information

Segment: 1 - 17B1 Creation/[redacted]Replacement Status: Draft
Segment Type: LOAD/CAPACITY Town: MORRIS Budget Year: 2026
Work Type: BB-Sctnlzng-Rclsrs+Recond Trimming Required: ☑ In Service Date: 12/31/2026
Description: Scope of Work:

[redacted]

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed

Connecticut Light & Power
A Northeast Utilities Company

Project Design Alternative: 1
Project: CD02350 - [redacted]

Design Alternative CD02350-01

Estimate

Preliminary Estimate Summary

Revision Number:	0
Contingency:	32.00%
SubTotal:	$1,991,198
Contingency Amount:	$637,183
Estimate:	$2,628,381
Reimbursement:	$0
Net Amount:	**$2,628,381**
Description:	

Item Description	CU	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	23-ALL17	$36,499.84
SECTIONALIZE OH - Cutouts or Arresters - 1ph	23-OH19	$3,565.12
SECTIONALIZE OH - Remove Recloser (any) *Cost for removing single phase regulator on [redacted]	23-OH42	$7,352.80
OTHER OTHER 2 23kV Pad XFMRs - $2,000 per	23-ALL14	$4,000.00
TRAFFIC OH/DB/UG - Traffic Control - Police Officer 2 Officers, 14 Days	23-ALL18	$28,000.00
OTHER OTHER 25 OH XFMR - $1,787 per	23-ALL14	$45,000.00
OTHER OTHER 3 - 3000kVA 27.6/23kV AutoXFMRS (S.C.534989)	23-ALL14	$51,000.00
OTHER OTHER 3 - 576kVA 23kV Voltage Regulators (S.C.590226)	23-ALL14	$57,000.00
OTHER OTHER 30% Contractor cost adder	23-ALL14	$600,000.00

Asset & Investment Management System 10/18/2023 Page 2 of 4

Connecticut Light & Power
A Northeast Utilities Company

Project Design Alternative: 1
Project: CD02350 - [redacted]

Design Alternative			CD02350-01
XF DB/UG - Padmount XF - 1ph Cost for removing 2 pad mount, single phase XFMRs involved in scop	23-UG130	[redacted]	$8,182.72
XF OH - OH XF - 1ph Cost for removing 25 OH service XFMRs within scope of work	23-OH45		$68,562.00
OTHER OTHER High level cost assumption for Matting in ROW	23-ALL14		$200,000.00
OH WIRE OH - Neutral Install 4,000' 1/0 ACSR N [redacted]	23-OH31		$33,280.00
SECTIONALIZE OH - Recloser - 3ph Install 5 reclosers (1 - RR, 1 - SR, 1 - MR, 1 - SS, & 1 - TR)	23-OH38		$311,932.40
OH WIRE OH - Neutral Install 500' 1/0 ACSR N between [redacted]	23-OH31		$4,160.00
OH WIRE OH - Line Extension - 3ph (556 kcmil) Install 500' 3-PH Line extension between [redacted]	23-OH34		$78,000.00
OH WIRE OH-Reconductor w/175 Mil Tree Wire-3ph- 556 kcmil install 5850' 556 TW betwee [redacted]	23-OH27		$590,148.00
OH WIRE OH - Remove circuit wire (1 phase) Remove 5850' 1-PH 4/0 ACSR [redacted]	23-OH37		$18,252.00

Connecticut Light & Power
A Northeast Utilities Company

Project Design Alternative: 1
Project: CD02350 -[redacted]

Design Alternative CD02350-01

Associated / Impacted Devices

Status	[redacted]	Notes
Existing		
Existing		
Existing		
Existing		
Existing		
Existing		

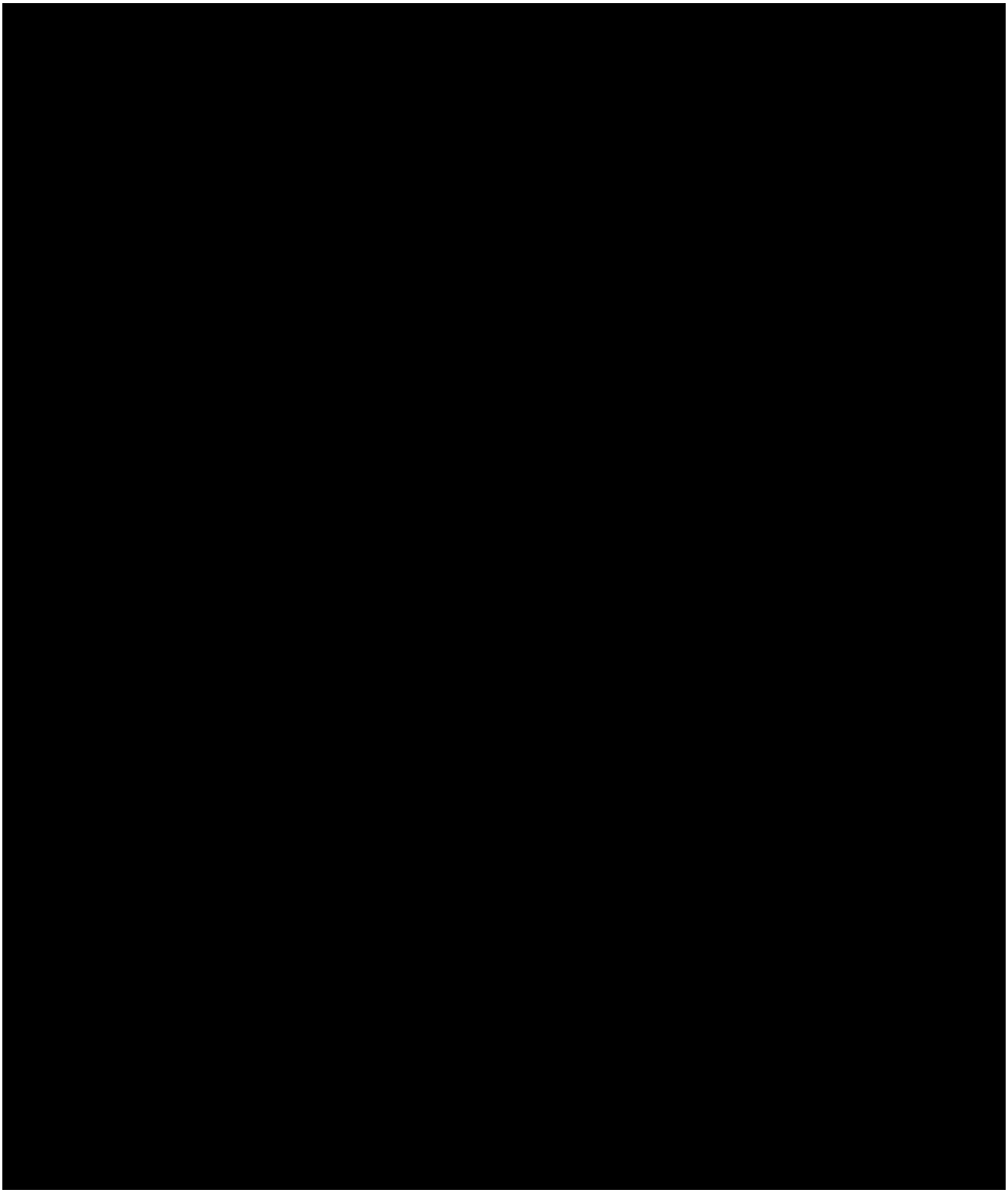
Reliability Projection

Title:

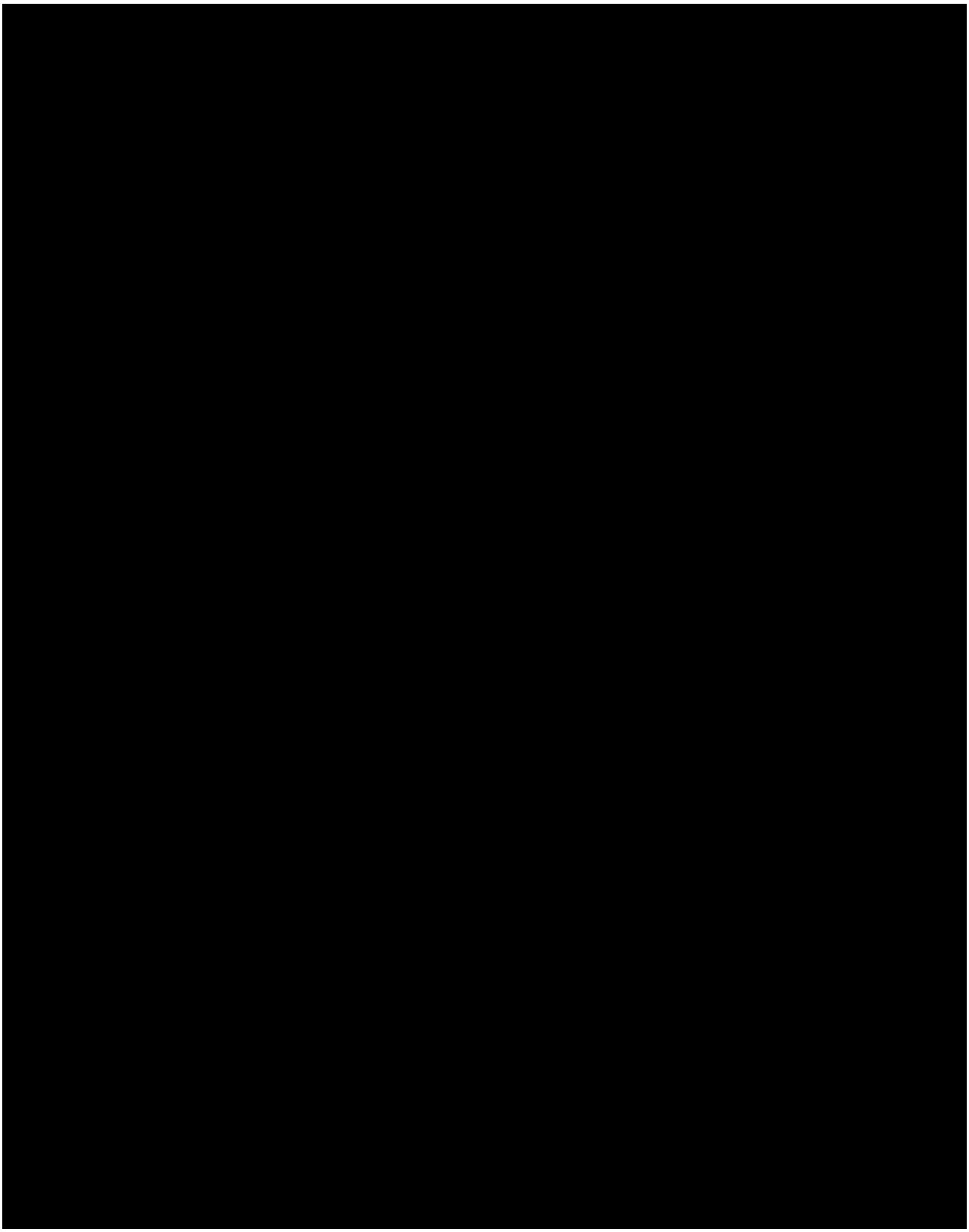
Outage Start Date: 10/5/2019 Outage End Date: 10/5/2023 Years History: 4.00

[redacted]

Attachment B: Geographic Map



Attachment C: Project One Lines



After – Option 1

CD01350

[redacted]

Attachment D: Load Summary

