EVERSOURCE

Project Approval Form

Project Title: [redacted]	Project Number: CD01976
Date Prepared: 12/21/2023	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** SMART SWITCHES PROGRAM
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: $163.5K	**Authorization Type:** Full Funding

1. Executive Summary

[redacted]

Legacy estimating units were used to estimate project costs for partial approval which did not account for a 30% increase in cost due to increased labor and material cost.

2. Project Cost Summary

Financial Evaluation ($000's)

Capital Costs	2024	Year2	Year3+	Total
Internal Labor and Construction Equipment	10.4	0.0	0.0	10.4
Outside Services	0.0	0.0	0.0	0.0
Materials	88.3	0.0	0.0	88.3
Removals	2.6	0.0	0.0	2.6
Risk and Contingency	11.4	0.0	0.0	11.4
Other	0.0	0.0	0.0	0.0
Subtotal	**112.7**	**0.0**	**0.0**	**112.7**

Indirect Capital Costs				
Indirects/Overheads (including benefits)	50.8	0.0	0.0	50.8
Capitalized interest or AFUDC, if any	0.0	0.0	0.0	0.0
Subtotal	**50.8**	**0.0**	**0.0**	**50.8**

Total Capital Costs (Gross)	**163.5**	**0.0**	**0.0**	**163.5**

Less Total Customer Contribution	**0.0**	**0.0**	**0.0**	**0.0**

Project Costs (Net of Reimbursement)	**163.5**	**0.0**	**0.0**	**163.5**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

The project was created as part of an initiative to improve circuit reliability by adding automatic sectionalizing devices on overhead distribution circuits to reduce customer zones to less than 500 customers..

b. Project Need

[redacted]

c. Project Scope

The scope of this project is as follows:

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

Major Material:

- 2 Cooper NOVA Reclosers

4. Alternatives Considered

Option 1 - [redacted]

Option 2 – [redacted]

	Option	
[redacted]		
Estimate Type:	Full	Partial
Capital Cost	$163.5K	$163.5K
Expense Cost	$4.9K	$4.9K
Total Cost	$168.4k	$168.4k
Preferred option	X	

Note – All estimates were calculated due to updated estimating units.

5. Project Schedule

Milestone Phase Name	Estimated Date
Partial Approval	Dec 2022
100% Detailed Engineering Completion	Dec 2023
Construction Start	July 2024
In Service Date	August 2024

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

Attachment	Included in Submittal?
A. Cost Estimate	*YES*
B. Detail Map	*YES*
C. One-line	*YES*
D. Load Sheet	*YES*
E. Partial Funding PAF	*YES*

Attachment A: Cost Estimate:

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01976 [redacted]

Project Option Summary

ID	Description	Segments	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)	Prfrd
O1	SR on New Pole	1	$173,083	$0	100%	$0.00	$0.00	☑
O2	SR on Existing Pole # 8810	2	$173,083	$0	100%	$0.00	$0.00	☐

Segments

ID	Title	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)
1	Install SR on New Pole	$173,083			$0.00	$0.00
2	Install SR on Pole # 8810	$173,083			$0.00	$0.00

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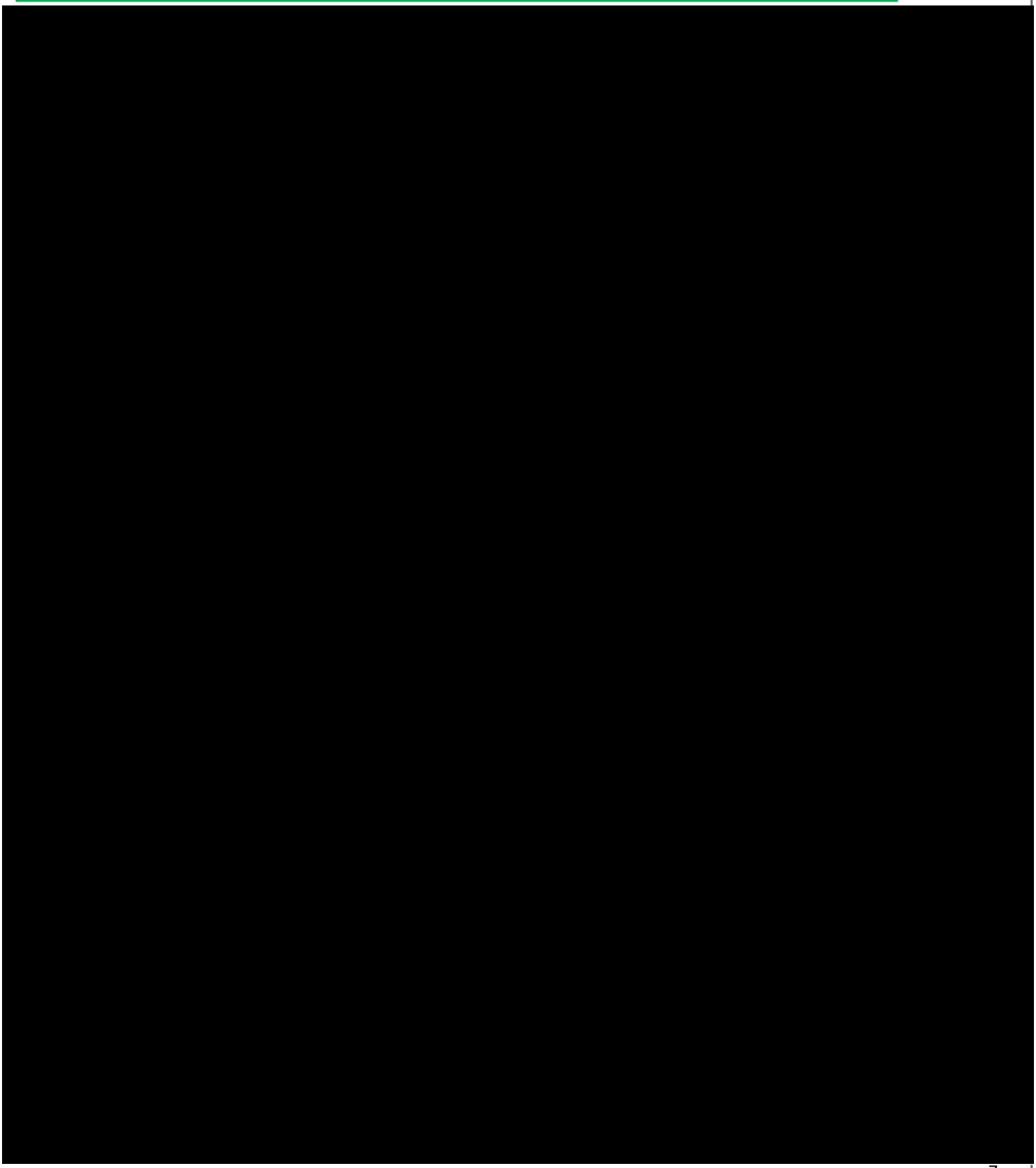
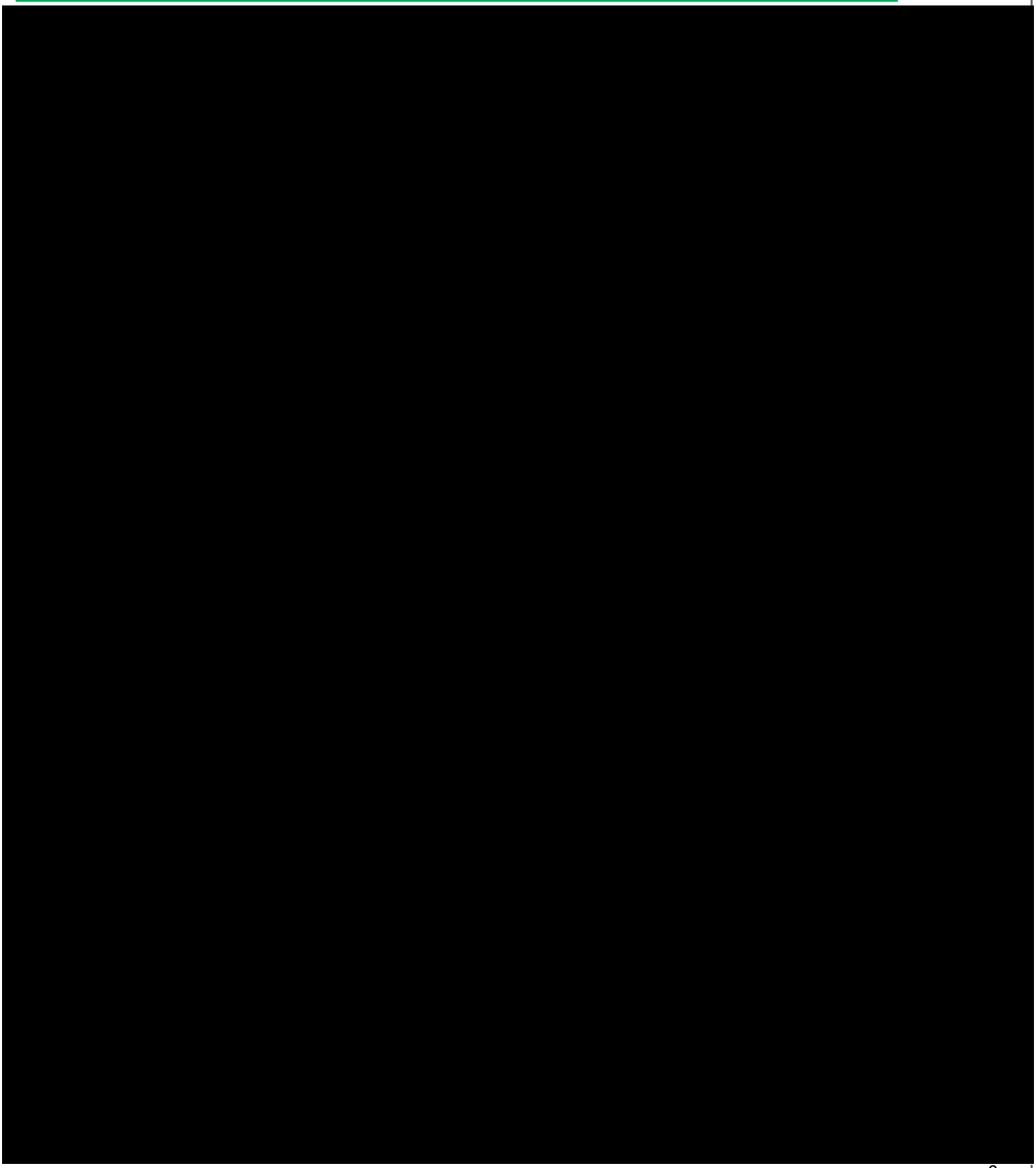
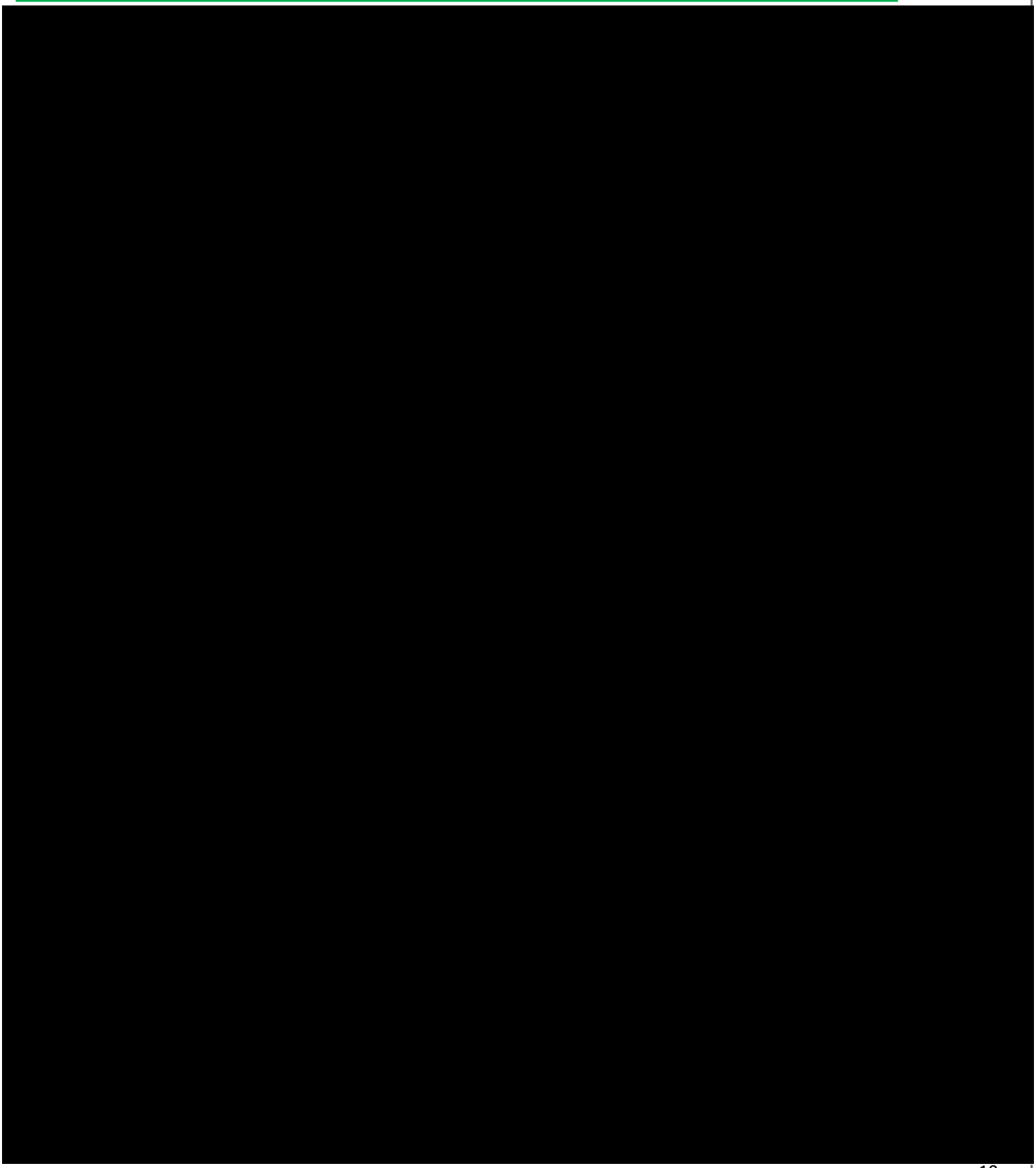
Attachment B: Geographic Map

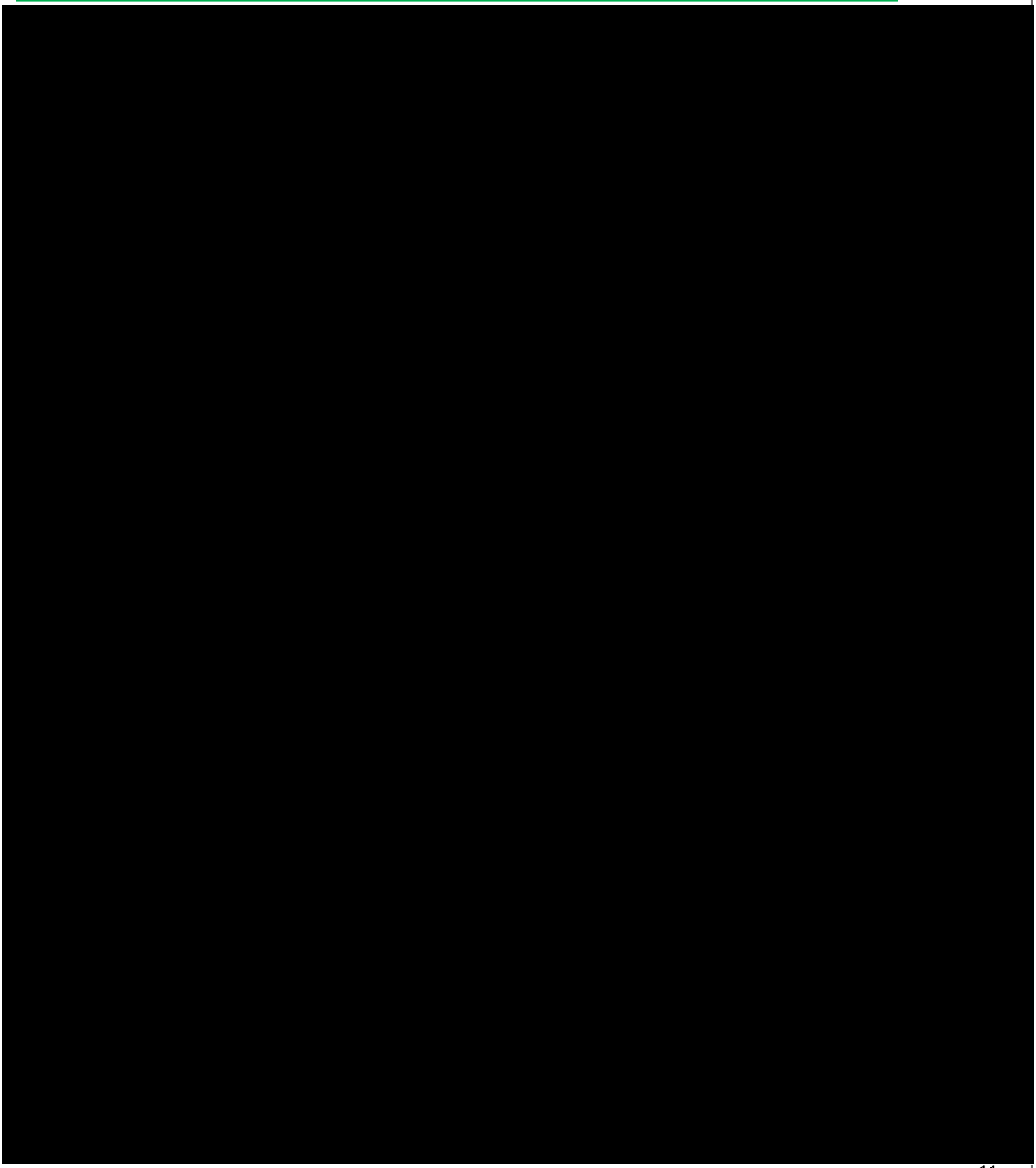


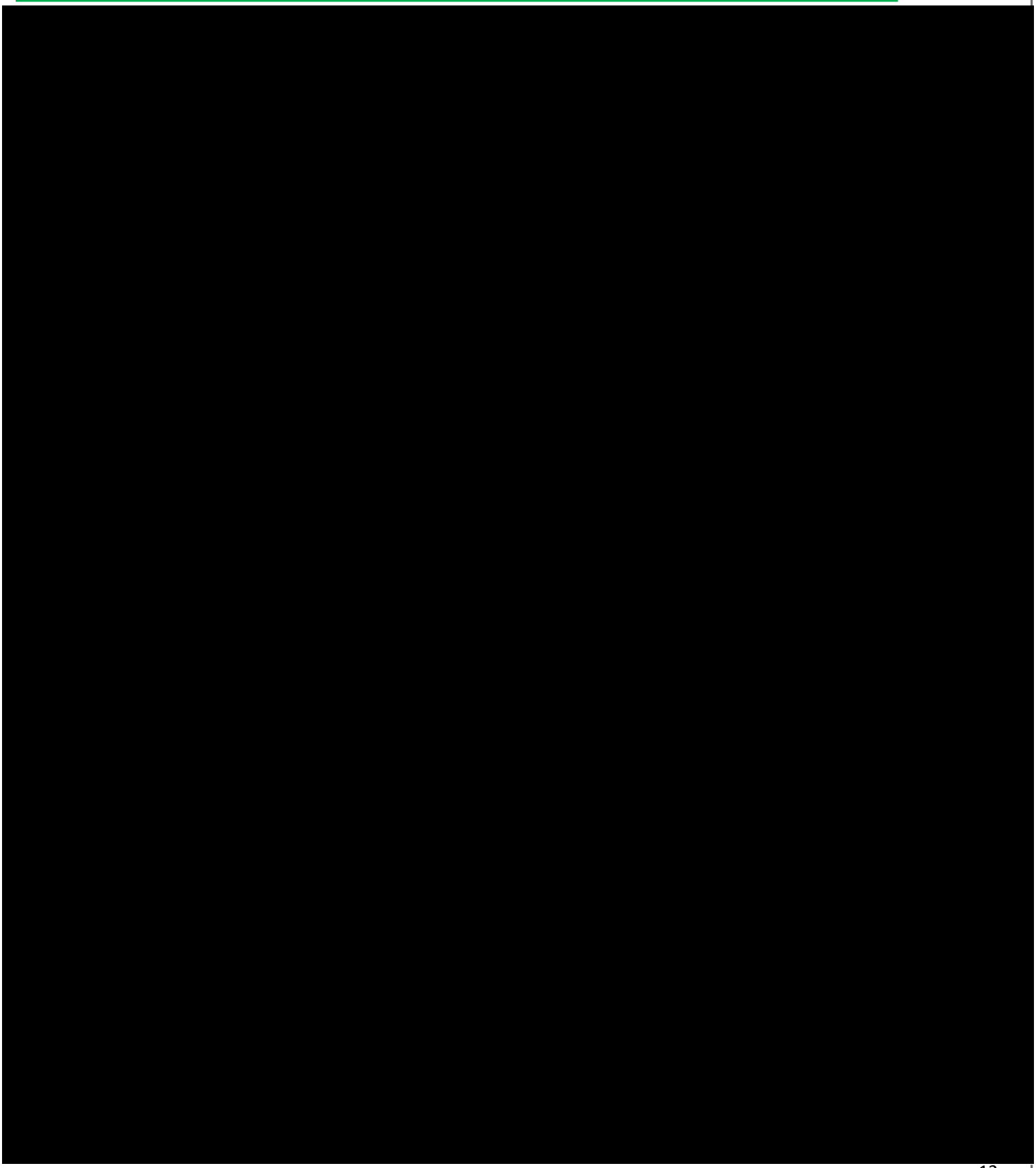
[redacted]

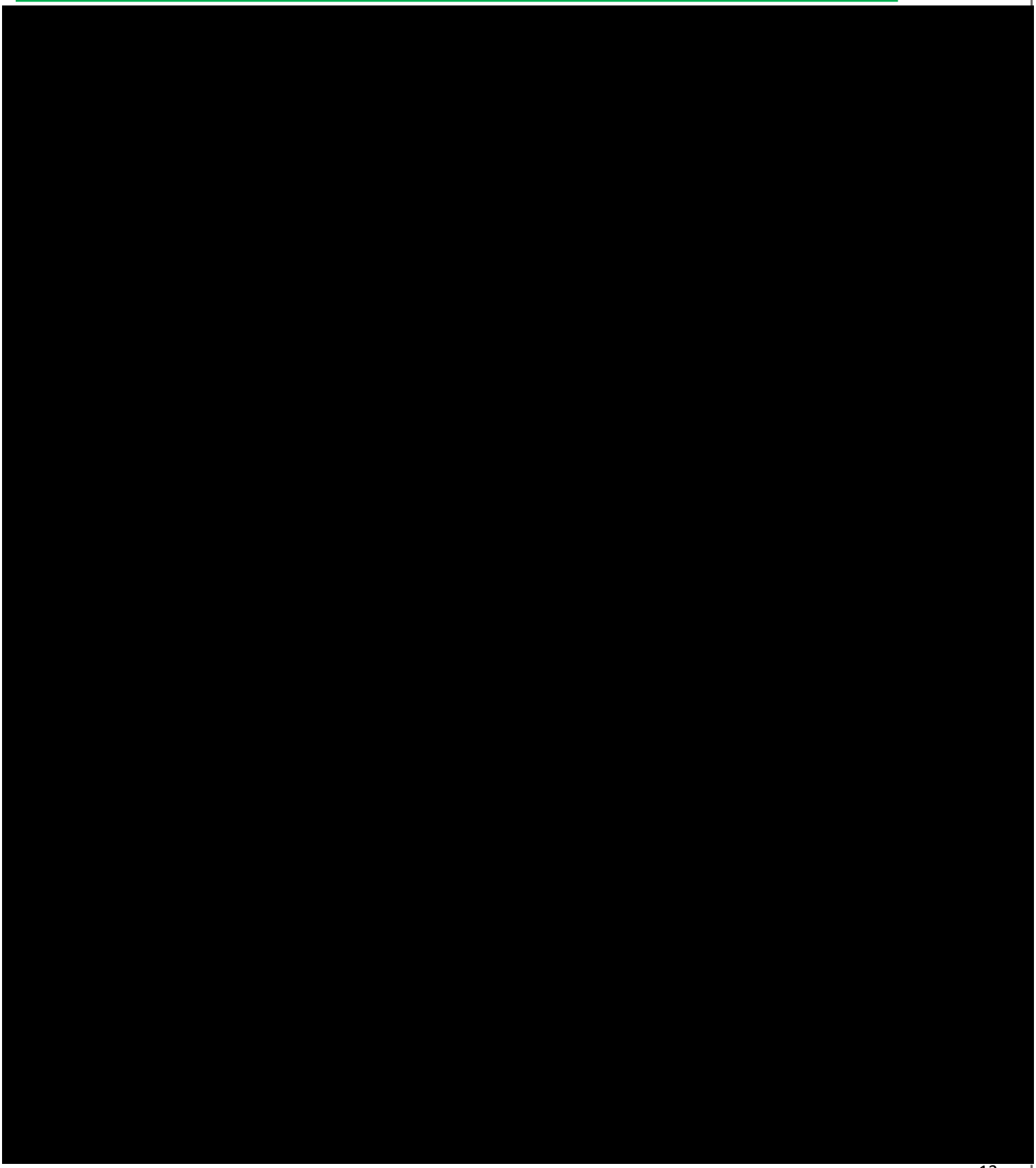












EVERSOURCE

Project Approval Form

Project Title: [redacted]	**Project Number: CD01976**
Date Prepared: 04/20/2022	**Company:** Eversource CT
Organization: Distribution	**Class(es) of Plant:** D Line
Project Initiator: [redacted]	**Project Category: Smart Switch**
Project Manage [redacted]	**Project Type:** Specific
Project Sponsor [redacted]	**Capital Investment part of original Operating Plan:** Yes
Estimated in service date: 12/31/2024	**Emergency Related Request?** No
Eng./Constr. Resources Budgeted? Yes	**Facility Type** (check all that apply)**:** ☐ PTF ☐ non-PTF ✔ Distribution
Total Gross Capital Request: $170,800	**Authorization Type:** Initial Funding

Operations Project Authorization Form

Executive Summary

[redacted]

Project Costs Summary

Note: Dollar values are in thousands

Capital Costs	2022	2023	2024	Total
Direct Capital Costs				
Internal Labor and Construction Equipment	$0.0	$0.0	$14.6	$14.6
Outside Services	$0.0	$0.0	$19.3	$19.3
Materials	$0.0	$0.0	$61.7	$61.7
Removals	$0.0	$0.0	$4.0	$4.0
Risk and Contingency	$0.0	$0.0	$0.6	$0.6
Other	$0.0	$0.0	$0.0	$0.0
Subtotal – Direct Costs	**$0.0**	**$0.0**	**$100.2**	**$100.2**
Indirect Capital Costs				
Indirect/Overheads (including benefits)	$0.0	$0.0	$68.5	$68.5
Capitalized interest or AFUDC, if any	$0.0	$0.0	$2.1	$2.1
Subtotal – Indirect Costs	**$0.0**	**$0.0**	**$70.6**	**$70.6**
Total Gross Capital Costs	**$0.0**	**$0.0**	**$170.8**	**$170.8**
Customer Contribution	**$0**	**$0**	**$0**	**$0**
Total Net Capital Project Costs	**$0**	**$0**	**$175**	**$175**

Technical Justification:

Project Need, Objective and Justification

[redacted]

[redacted]

[redacted]

Project Scope:

[redacted]

Major Material:

- 2 Cooper NOVA Reclosers

Background:

The goal of the Smart Switch program is to reduce the large customer zone by creating automated loops by adding reclosers in various settings profiles to isolate outages. The target of this project is to decrease customer zones to below 500 to improve system reliability and to avoid large customer outage events.

Alternatives Considered:

[redacted]

Option 3 – Do Nothing

There is no cost difference between Option 1 & Option 2.

Option 1 was selected to equally balance the customer counts within each zone.

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	December 2023
Construction Start	July 2024
Testing/Commissioning	August 2024
In Service Date	August 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.
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 if necessary.
Internal engineering resources not available to perform the work.	2023	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost if necessary.
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	Medium	Schedule work to minimize system abnormal time. Install temporary bypasses/equipment if system will be abnormal for extended periods.