EVERSOURCE

Supplement Authorization Form

Project Title: [redacted]	**Project Number: CD01840**
Date Prepared: 05/05/2025	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** Customer Driven
Initiating Organization: Distribution	**Project Type:** Specific
Project DDE: [redacted]	**Capital Investment part of 5-year 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)
Current Authorized Amount: $1,473K **($634k Reimbursable)**	**Approved In-Service Date:** 12/31/2024
Supplement Request: $1,090.4K	**Estimated In-Service Date: 7/1/2025**
Total Capital Request: $2,563.4K	**Authorization Type:** Supplement Request
	Reason: Cost Overage

1. Project Background

Supplemental funding is being requested for this project. The total capital request is $2,563.4K which is $1,090.4K (174%) more than the current authorized amount of $1,473k.

The Original Project was presented as follows:

- *Project CD01840 addresses* [redacted] *located at 1525 Branch Rd.,* [redacted]
- [redacted]
- [redacted]

2. Supplement Justification Overview

The total project cost variance is $1,090.4k. This accounts for $436.3k in direct costs and $654.1k in indirect costs. The cost variance is primarily attributed to additional costs for material & labor charges not accounted for in the full funding estimate.

3. Supplement Justification Detail

The additional $436.3k in direct costs is primarily attributed to additional material and labor charges that were not originally accounted for in the full funding estimate. Of this $436.3k, $62.9k was due to outside services, $247.6k was due to material costs, & $185.8k was due to labor costs. The following shows a breakdown for the cost variances:

Outside Service Actuals: $62.9k - Total

- -$28.1K – Tree Trimming Variance ($279k originally estimated)
- $48K - Pole and anchor core boring
- $23K – Contractor Engineering Charges (Recloser Settings Changes – Nova to Viper)
- $11K – Excavation work
- $9K - pole delivery & job show up trailer

Material Variance Actuals: $247.6k – Total

- $167.6k – Variance for increased material costs. Overall material costs came in higher than anticipated relative to the full funding estimate.
- $30k – Variance for replacement of 7 Cooper Novas (Form 6 Controls) with G&W Vipers (SEL-651R Controls)
- $50k - Outstanding direct material costs due to one recloser being left out of a work order.

Labor Variance Actuals: $185.8k – Total

- $55.8k – Variance for increased labor costs. Labor costs were higher than anticipated relative to the full funding estimate.
- $130k – 5 weeks of remaining labor for project completion.

4. Supplement Cost Summary (Project Total)

Capital Costs	To Date Spend	Prior Authorized	Supplemental Request	Total Request
Internal Labor and Construction Equipment	$217.3	$121.8	$185.8	$307.6
Outside Services	$357.5	$279.2	$62.9	$342.1
Materials	$558.9	$327.1	$247.6	$574.7
Removals	$0.0	$37.8	$18.3	$56.1
Risk and Contingency	$0.0	$133.9	-$97.6	$36.3
Other	$20.1	$0.0	$19.2	$19.2
SUBTOTAL DIRECTS W/ RISKS	$1,153.8	$899.8	$436.3	$1,336.1
Indirect / Overhead (including benefits)	$924.2	$573.2	$633.3	$1,206.5
AFUDC	$20.7	$0.0	$20.7	$20.7
Subtotal – Indirect Costs	$945.0	$573.2	$654.1	$1,227.3
TOTAL CAPITAL REQUEST	$2,098.8	$1,473.0	$1,090.4	$2,563.4
Reimbursables/Customer Contribution	-$633.9	-$736.5	102.6	-633.9
PROJECT TOTAL (LESS REIMBURSABLES)	$1,464.9	$736.5	$1,193	$1,929.5

5. New Total Request by Year (if applicable)

Note: If multi-year project, include actuals for current and years past, and then show forecasted spend for upcoming years.

Line item Category	2024 Actual	2025 Actual	2025 Estimate	TOTAL
Internal Labor and Construction Equipment	$0.8	$216.5	$34.2	$251.6
Outside Services	$14.8	$342.7	$38.0	$395.5
Materials	$561.1	$-2.2	$63.9	$622.8
Removals	$0.0	$0.0	$7.7	$7.7
Risk and Contingency	$0.0	$0.0	$36.3	$36.3
Other	$0.0	$20.1	$2.1	$22.2
SUBTOTAL DIRECTS W/ RISKS	$576.7	$577.2	$182.3	$1,336.1
Indirect / Overhead (including benefits)	$109.9	$814.3	$282.3	$1,206.5
AFUDC	$1.9	$18.9	$0.0	$20.7
Subtotal – Indirect Costs	$111.8	$833.2	$282.3	$1,227.3
TOTAL CAPITAL REQUEST	$688.5	$1,410.3	$464.6	$2,563.4
Reimbursables/Customer Contribution	-$633.9	$0.0	$0.0	-$633.9
PROJECT TOTAL (LESS REIMBURSABLES)	$54.6	$1,410.3	$464.6	$1,929.5

6. Lessons Learned

N/A

EVERSOURCE

Supplement Authorization Form

Project Title: [redacted]	**Project Number: CD01840**
Date Prepared: 05/03/2024	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** Customer Driven
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: 12/31/2024	
Total Capital Request: $1.47M (50% reimbursable)	**Authorization Type:** Full Funding

1. Executive Summary

Full funding is being requested for this project at a cost of **$1.47M** which is 73% of the partial funding capital estimate of $2.03M. There is no scope change on the project. This full funding request shows an overall reduction in the total cost, mainly due to labor being covered by internal resources. 50% of the cost of this project will be reimbursed by the Waterbury Water Plant.

The Original Project was presented as follows:

- *Project CD01840 addresses reliability issues for* [redacted]
- [redacted]
- [redacted]

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	Year 2024	Year 20__	Year 20__+	Total
Direct Capital Costs				
Internal Labor and Construction Equipment	121.8	0.0	0.0	121.8
Outside Services	279.2	0.0	0.0	279.2
Materials	327.1	0.0	0.0	327.1
Removals	37.8	0.0	0.0	37.8
Risk and Contingency	133.9	0.0	0.0	133.9
Other	0.0	0.0	0.0	0.0
Subtotal – Direct Costs	**899.8**	**0.0**	**0.0**	**899.8**
Indirect Capital Costs				
Indirect/Overheads (including benefits)	573.1	0.0	0.0	573.1
Capitalized interest or AFUDC, if any	0.0	0.0	0.0	0.0
Subtotal – Indirect Costs	**573.1**	**0.0**	**0.0**	**573.1**
Total Gross Capital Costs	**1,473.0**	**0.0**	**0.0**	**1,473.0**
Customer Contribution	**-736.5**	**0.0**	**0.0**	**-736.5**
Total Net Capital Project Costs	**736.5**	**0.0**	**0.0**	**736.5**

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

[redacted]

Presented below are the outages associated with this work.

[redacted]

b. Project Need

[redacted]

c. Project Scope

[redacted]

[redacted]

Major Material:

11S15/2B6 Tie:
6 – Reclosers
6 – Recloser Settings
3 – 1254 kVA Auto Transformers

2B6 Line Extension:
3 - 5,000' 556 AL SC
29 – Joint Utility Poles
1 – GOAB Switch

11S15-81M Reconductoring:
3 – 3,300' 556 AL SC
12 – Joint Utility Poles

11S15 Zone Reduction
1 – Recloser
1 - Recloser Settings

4. Alternatives Considered

Project Option Comparison



Total Cost	$582k	$1.47M	$3.83M
Company Cost	$582k	$736.5k	$582k
Customer Cost	$0	$736.5K	$3.25M
Cost / CM Saved	$1,256.59/CM	$15.74/CM	$39.32/CM
Preferred option		X	

Option 2 was chosen because it creates a backup and improved reliability to the critical facilities at a lower cost than option 3.

5. Project Schedule

Add any additional milestones that are pertinent to the project

Milestone/Phase Name	Estimated Date
Partial Approval	12/31/21
100% Detailed Engineering Completion	12/31/22
Fully Funded	10/13/21
Construction Start	3/1/23
In Service Date	12/31/24

6. Regulatory Decisions

7. Codes and Standards

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	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	2023	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach

Internal construction resources not available to perform the work.	2023	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	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Storm delays	2023	Low	If storm activity delays work, we may be forced to use external resources.

9. References

References
1. N/A

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

Attachment	Included in Submittal?
A. Partial Funding PAF File	*YES*
B. Cost Estimate	*YES*
C. One Line	*YES*
D. Load Sheet	*YES*

Operations Project Authorization Form

Date Prepared: 10/13/2021	**Project Title:** [redacted]
Company/ies: Eversource CT	**Project ID Number:CD01840**
Organization: Distribution Electric	**Class(es) of Plant: Distribution**
Project Initiator: [redacted]	**Project Category: Line**
Project Manager: [redacted]	**Project Type: Reliability Improvement Specific Project**
Project Sponsor: [redacted]	**Project Purpose: Critical Customer Reliability**
Estimated in service date: 2023	**If Transmission Project: PTF? N/A**
Eng. /Constr. Resources Budgeted?	**Capital Investment Part of Original Operating Plan?**
Authorization Type: Initial Funding	**O&M Expenses Part of the Original Operating Plan?**
Total Request: $2.09M (1.51M Reimbursable)	

Financial Requirements:

Project Authorization
ERM: _____

FP&A: _____

Executive Summary

Project CD01840 addresses [redacted]
located at 1525 Branch Rd., [redacted]

[redacted]

[redacted]

[redacted]

The total cost of all suggested work is $2,092,971.The total customer contribution is $1,510,666, leaving a company cost of $582,305.

Project Costs Summary
Note: Dollar values are in thousands

	Prior Authorized	2023	2024	2025+	Totals
Capital Additions - Direct	$0	$1,193	$0	$0	$1,193
Removals net of Salvage ____%	$0	$110	$0	$0	$110
Total - Direct Spending	$0	$1,303	$0	$0	$1,303
Capital Additions - Indirect	$0	$710	$0	$0	$710
Subtotal Request	$0	$2,013	$0	$0	$2,013
AFUDC	$0	$16	$0	$0	$16
Total Capital Request	$0	$2,029	$0	$0	$2,029
O&M	$0	$64	$0	$0	$64
Total Request	$0	$2,093	$0	$0	$2,093

Financial Evaluation
Note: Dollar values are in thousands

Direct Capital Costs	2023	2024	2025+	Total
Straight Time Labor	$89	$0	$0	$89
Overtime Labor	$16	$0	$0	$16
Outside Services	$890	$0	$0	$890
Materials	$305	$0	$0	$305
Other, including contingency amounts (describe)	$4	$0	$0	$4
Total Direct Costs	**$1,303**	**$0**	**$0**	**$1,303**

Indirect Capital Costs	2023	2024	2025+	Total
Indirects/Overheads (including benefits)	$710	$0	$0	$710
Capitalized interest or AFUDC, if any	$16	$0	$0	$16
Total Indirect Costs	**$725**	**$0**	**$0**	**$725**
Total Capital Costs	**$2,029**	**$0**	**$0**	**$2,029**
Less Total Customer Contribution	**($1,511)**	**$0**	**$0**	**($1,511)**
Total Capital Project Costs	**$518**	**$0**	**$0**	**$518**
Total O&M Project Costs	**$64**	**$0**	**$0**	**$64**
Total Project Cost	**$ 582**	**$ -**	**$ -**	**$ 582**

Note: Explain unique payment provisions, if applicable

Technical Justification:

Project Need Statement

[redacted]

Project Objectives

Project CD01840 seeks to improve [redacted]

Project Scope

[redacted]

Major Material:

11S15/2B6 Tie:
6 – Reclosers
6 – Recloser Settings
3 – 1254 kVA Auto Transformers

2B6 Line Extension:
3 - 5,000' 556 AL SC

29 – Joint Utility Poles
1 – GOAB Switch

11S15-81M Reconductoring:
3 – 3,300' 556 AL SC
12 – Joint Utility Poles

11S15 Zone Reduction
1 – Recloser
1 - Recloser Settings

Background / Justification

[redacted]

[redacted]

Presented below are the outages associated with this work.

[redacted]

Business Process and / or Technical Improvements:

[redacted]

Alternatives Considered with Cost Estimates

[redacted] The total cost of this option is $ 583k.

[redacted] The total cost for this option is $ 2.09M.

[redacted] The total cost of this option is $ 3.78M.

[redacted]

TOTAL COST	$582k	$2.09M	$3.83M
COMPANY COST	$582k	$582k	$582k
CUSTOMER COST	$0	$1.51M	$3.25M
COST / CM SAVED	$1,256.59/CM	$23.46/CM	$39.32/CM
PREFERRED OPTION		X	

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Preliminary Approval	12/31/21
Detailed Design	12/31/22
Construction Start Date	3/1/23
Construction End Date	6/1/23

Risks and Risk Mitigation Plans

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2023	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	2023	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach
Internal construction resources not available to perform the work.	2023	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	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Storm delays	2023	Low	If storm activity delays work, we may be forced to use external resources.

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

Project Needs Statement:

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01840 [redacted]

Work Classification

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

Ownership / Management

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

Project Information

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

Budget Summary - Preferred Option

Option 2 - 11S15/2B6 Tie, 11S15 Reconductoring, 2B6 Line Extension, &

2023

ID	Title	Status	Rev #	Contingency	Expenditure Amount	Net Estimate
6	[redacted]	Draft	0	24%	$65,099	$65,099
5		Draft	0	24%	$517,206	$517,206
3		Draft	0	24%	$1,087,311	$1,087,311
1		Draft	0	24%	$423,355	$423,355
				2023 Total:	$2,092,971	$2,092,971
				Total Project:	$2,092,971	$2,092,971

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01840

[redacted] Waterbury Water Plant Backup

Project Option Summary

ID	Description	Segments	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)	Prfrd
O7	Option 1 - [redacted] Reconductoring and Zone Reduction	5,6	$582,305	$0	100%	$2,398.76	$1,256.59	☐
O8	Option 2 - [redacted] Zone Reduction	1,3,5,6	$2,092,971	$0	100%	$76.65	$23.46	☑
O9	Option 3 - [redacted] Zone Reduction	1,2,3,5,6	$3,835,009	$0	100%	$140.45	$39.32	☐

Segments

ID	Title	Preliminary Estimate	Construction Estimate	Variance	IEEE $/CMS	All (w/Storm)
1	[redacted]	$423,355			$15.63	$2.58
2		$1,742,038			$0.00	$96.81
3		$1,087,311			$0.00	$0.00
4		$59,507			$0.00	$0.00
5		$517,206			$2,128.42	$1,114.96
6		$65,099			$0.00	$0.00

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01840 [redacted]

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 #:

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01840 [redacted]

Design Alternative CD01840-01

General Information

Segment: 1 - [redacted] Status: Draft

Segment Type: RECLOSERS Town: THOMASTON Budget Year: 2023

Work Type: BB-Sctnlzng-Reclosers Trimming Required: ☑ In Service Date: 12/31/2022

Description: [redacted]

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01840 [redacted]

Design Alternative CD01840-01

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$341,415
Contingency Amount:	$81,940
Estimate:	$423,355
Reimbursement:	$0
Net Amount:	**$423,355**
Description:	

Item Description	CU	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	16-ALL17	$3,509.60
TRAFFIC OH/DB/UG - Traffic Control - Flagger 2 needed, assume 5 days, $300/day/crew	16-ALL19	$3,000.00
SECTIONALIZE OH - Remove Recloser (any) Remove existing [redacted]	16-OH42	$16,968.00
SECTIONALIZE OH - Recloser - 3ph TR, SR, SR, MR, & SS	16-OH38	$287,937.60
XF OH - Stepdowns, 3-1ph - on one POLE XFMR, DIST, OH, POLE TOP, CONV, HV: 13200/22860Y V, LV: 7970 OR 7620Y V, 1254 KVA, 1 PH, OIL FILLED, 4 BUSHING PRIMARY, 2 BUSHING SECONDARY - S/C 534808 ($9,900 each)	16-OH50	$30,000.00

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 #: CD01840 [redacted]

Design Alternative CD01840-01

Reliability Projection

Title:

Outage Start Date: 10/1/2017 Outage End Date: 10/1/2021 Years History: 4.00

[redacted]

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01840 [redacted]

Design Alternative CD01840-02

General Information

Segment: 2 - [redacted] Status: Draft

Segment Type: RECONDUCTORING - OTHER Town: THOMASTON Budget Year: 2023

Work Type: BB-Reconductoring Trimming Required: ☑ In Service Date: 12/31/2022

Description:

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01840 [redacted]

Design Alternative CD01840-02

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$1,404,870
Contingency Amount:	$337,169
Estimate:	$1,742,038
Reimbursement:	$0
Net Amount:	**$1,742,038**
Description:	

Item Description	CU	[redacted]	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	16-ALL17		$3,509.60
POLE OH - POLE - 3ph (Telephone custodian)	16-OH12		$128,160.00
TRAFFIC OH/DB/UG - Traffic Control - Police Officer 2 crews, 3 days, $1000/day/crew	16-ALL18		$6,000.00
OH WIRE OH - Reconductor w/Spacer Cable - 556 kcmil Reconductor existing 1/0 TW & 336 TW w/ 556 SC	16-OH29		$1,228,800.00
OH WIRE OH - Remove circuit wire (3 phase) Remove existing 3-Ph OH Conductor	16-OH37A		$38,400.00

Associated / Impacted Devices

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

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01840 [redacted]

Design Alternative CD01840-02

Reliability Projection

Title:

Outage Start Date: 10/14/2017 Outage End Date: 10/14/2021 Years History: 4.00

[redacted]

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01840 [redacted]

Design Alternative CD01840-03

General Information

Segment: 3 - 2B6 Line Extension
Status: Draft
Segment Type: NEW SERVICE
Town: THOMASTON
Budget Year: 2023
Work Type: Other
Trimming Required: ☑
In Service Date: 12/31/2022
Description:

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01840 [redacted]

Design Alternative CD01840-03

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$876,864
Contingency Amount:	$210,447
Estimate:	$1,087,311
Reimbursement:	$0
Net Amount:	**$1,087,311**
Description:	

Item Description	CU	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	16-ALL17	$3,509.60
TRAFFIC OH/DB/UG - Traffic Control - Police Officer $1000/day/police officer, Assume 5 Days: $10000 * 5 * 2 = $10,000	16-ALL18	$10,000.00
POLE OH - POLE - 3ph (CL&P custodian) 45/1 Where applicable	16-OH14	$135,604.00
OTHER OTHER Adjustment for line extension w/ 556 SC versus 556 Bare. $102.40 -	16-ALL14	$124,000.00 0
OTHER OTHER Core Hole Digger - $750/day, assume 5 days: $750 * 5 = $3,750	16-ALL14	$3,750.00
OH WIRE OH - Line Extension - 3ph (556 kcmil) Install 5,000' of 556 SC from pole #1345 to 197	16-OH34	$600,000.00

Associated / Impacted Devices

Status	Type / SysID	Street / Cross St	Structure / Town	Circuit	Map	Cust	Notes

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01840 [redacted]

Design Alternative CD01840-04

General Information

Segment: 4 - Relocation of [redacted] Status: Cancelled

Segment Type: SECTIONALIZING - OH Town: MORRIS Budget Year: 2022

Work Type: BB-Sctnlzng-Reclosers Trimming Required: ☐ In Service Date: 12/31/2022

Description:

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01840 [redacted]

Design Alternative CD01840-04

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$47,990
Contingency Amount:	$11,518
Estimate:	$59,507
Reimbursement:	$0
Net Amount:	**$59,507**

Description:

Item Description	CU	[redacted]	Amount
SECTIONALIZE OH - Recloser - 3ph Relocation of [redacted]	16-OH38		$47,989.60

Associated / Impacted Devices

Status	Type / SysID	Street / Cross St	Structure / Town	Circuit	Map	Cust	Notes

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01840 [redacted]

Design Alternative CD01840-05

General Information

Segment: 5 - [redacted] Reconductoring
Status: Draft
Segment Type: RECONDUCTORING - OTHER
Town: BETHLEHEM
Budget Year: 2023
Work Type: BB-Reconductoring
Trimming Required: ☑
In Service Date: 12/31/2022
Description:

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01840 [redacted]

Design Alternative CD01840-05

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$417,102
Contingency Amount:	$100,104
Estimate:	$517,206
Reimbursement:	$0
Net Amount:	**$517,206**
Description:	

Item Description	CU	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	16-ALL17	$3,509.60
TRAFFIC OH/DB/UG - Traffic Control - Flagger 2 crews needed, assume 5 days, crews $300/day: $300 * 5 * 2 = $3	16-ALL19	$3,000.00
POLE OH - POLE - 3ph (CL&P custodian) Assume 50% pole replacement w/ 45' class 1 (23 poles total)	16-OH14	$56,112.00
TREE OH - Trimming for Taller Pole Assume trimming for 50% of poles	16-OH64	$6,000.00
OH WIRE OH - Reconductor w/Spacer Cable - 556 kcmil Reconductor existing 1/0 ACSR & #4 Bare Conductor w/ 556 SC (3,3	16-OH29	$337,920.00
OH WIRE OH - Remove circuit wire (3 phase) Remove existing 3-phase OH Conductor	16-OH37A	$10,560.00

[redacted]

Associated / Impacted Devices

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

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01840 [redacted]

Design Alternative CD01840-05

Reliability Projection

Title:

Outage Start Date: 12/17/2017 Outage End Date: 12/17/2021 Years History: 4.00

[redacted]

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01840 [redacted]

Design Alternative CD01840-06

General Information

Segment: 6 - [redacted] Reduction
Status: Draft
Segment Type: SECTIONALIZING - OH
Town: BETHLEHEM
Budget Year: 2023
Work Type: BB-Sctnlzng-Switches
Trimming Required: ☐
In Service Date: 12/31/2022
Description:

Itemized Work List

ID	Major Grid	Minor Grid	Description of Work to be Performed

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01840 [redacted]

Design Alternative CD01840-06

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$52,499
Contingency Amount:	$12,600
Estimate:	$65,099
Reimbursement:	$0
Net Amount:	**$65,099**

Description:

Item Description	CU	Amount
SWITCHING OH/DB/UG - SWITCHING NonNetwork - Average	16-ALL17	$3,509.60
TRAFFIC OH/DB/UG - Traffic Control - Police Officer	16-ALL18	$1,000.00
SECTIONALIZE OH - Recloser - 3ph Install 11S15-82M on pole# 221084	16-OH38	47,989.60

Associated / Impacted Devices

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

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01840 [redacted]

Design Alternative CD01840-06

Reliability Projection

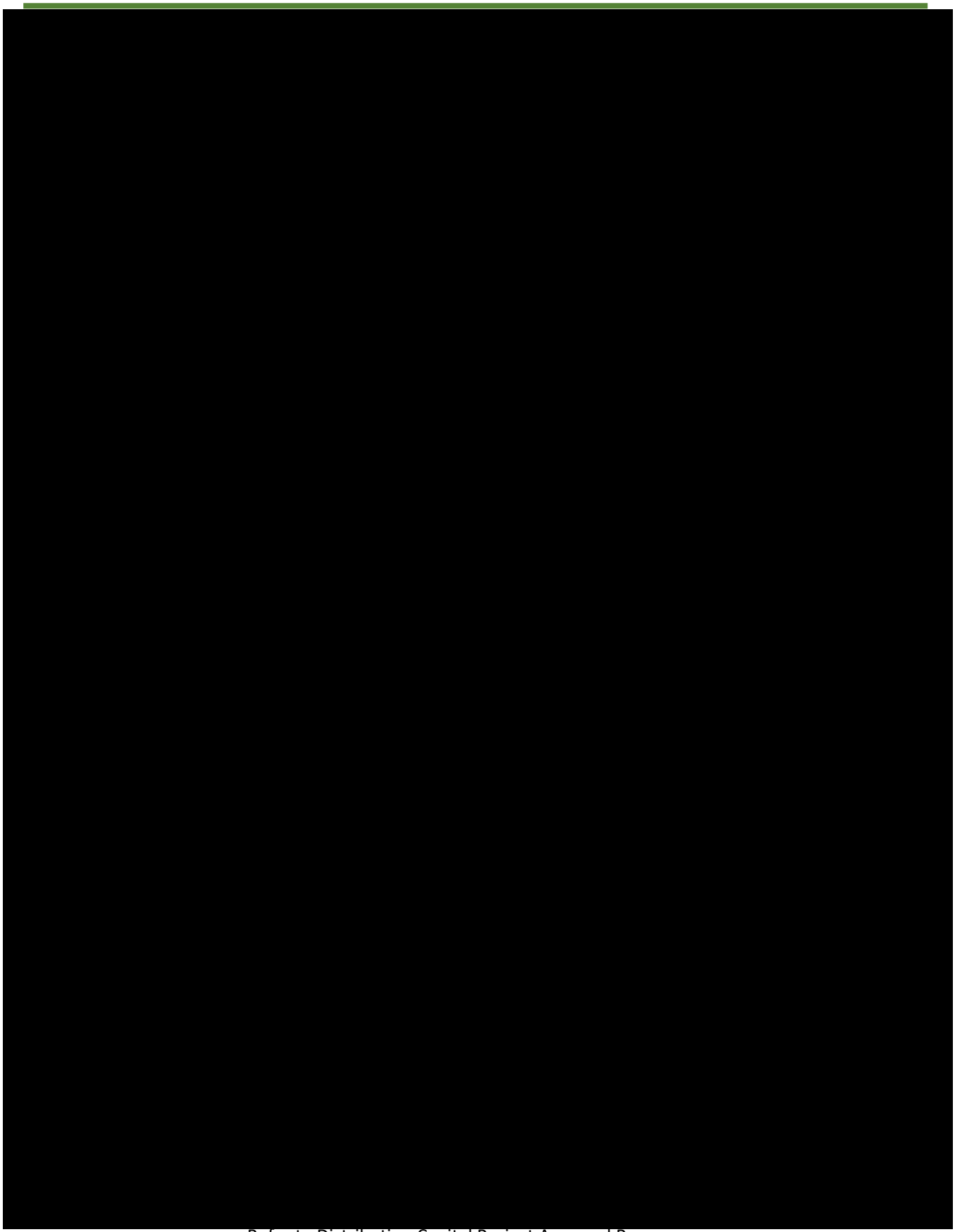
Title:

Outage Start Date: 12/31/2017 Outage End Date: 12/31/2021 Years History: 4.00

[redacted]

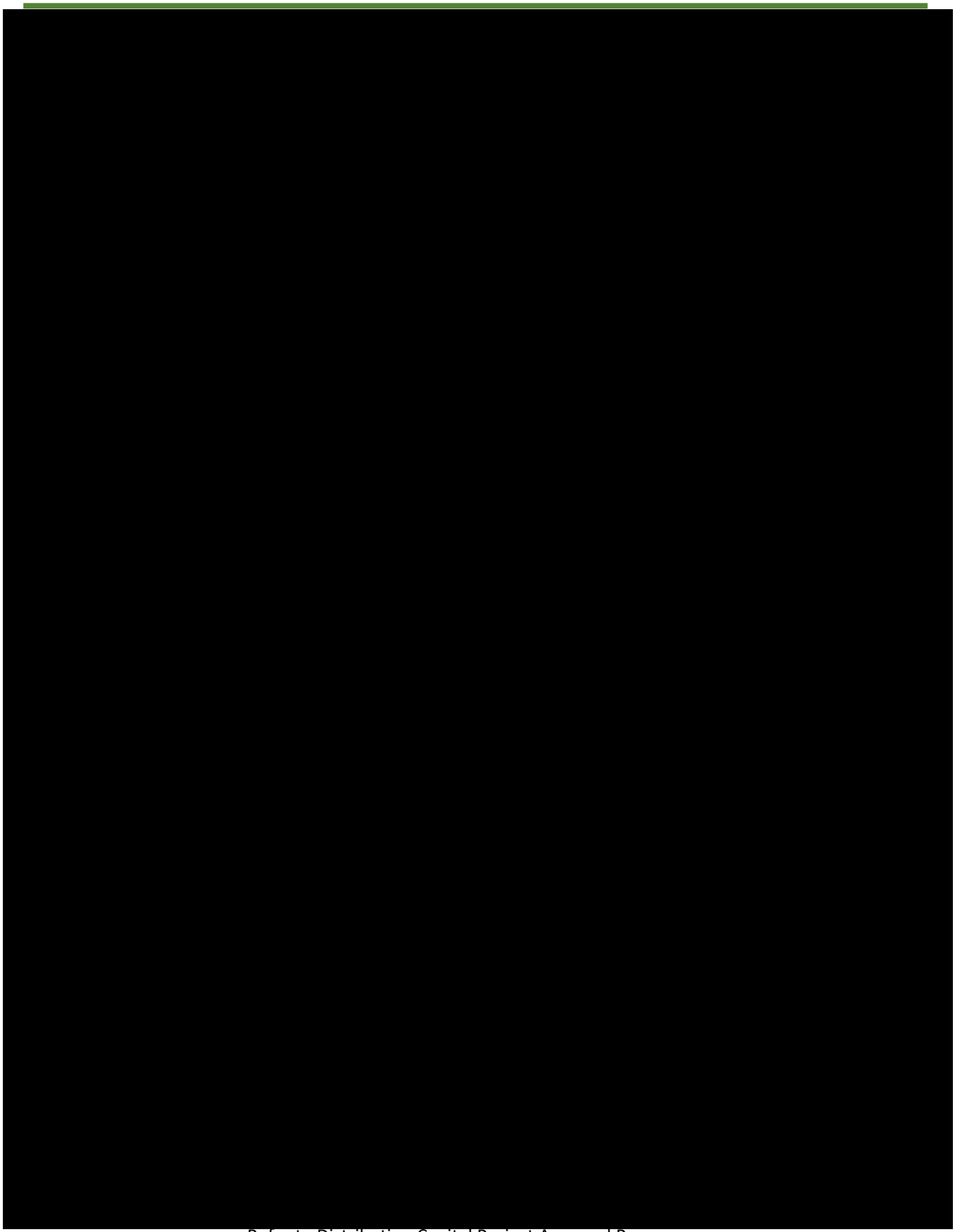
EVERSOURCE

Supplement Authorization Form



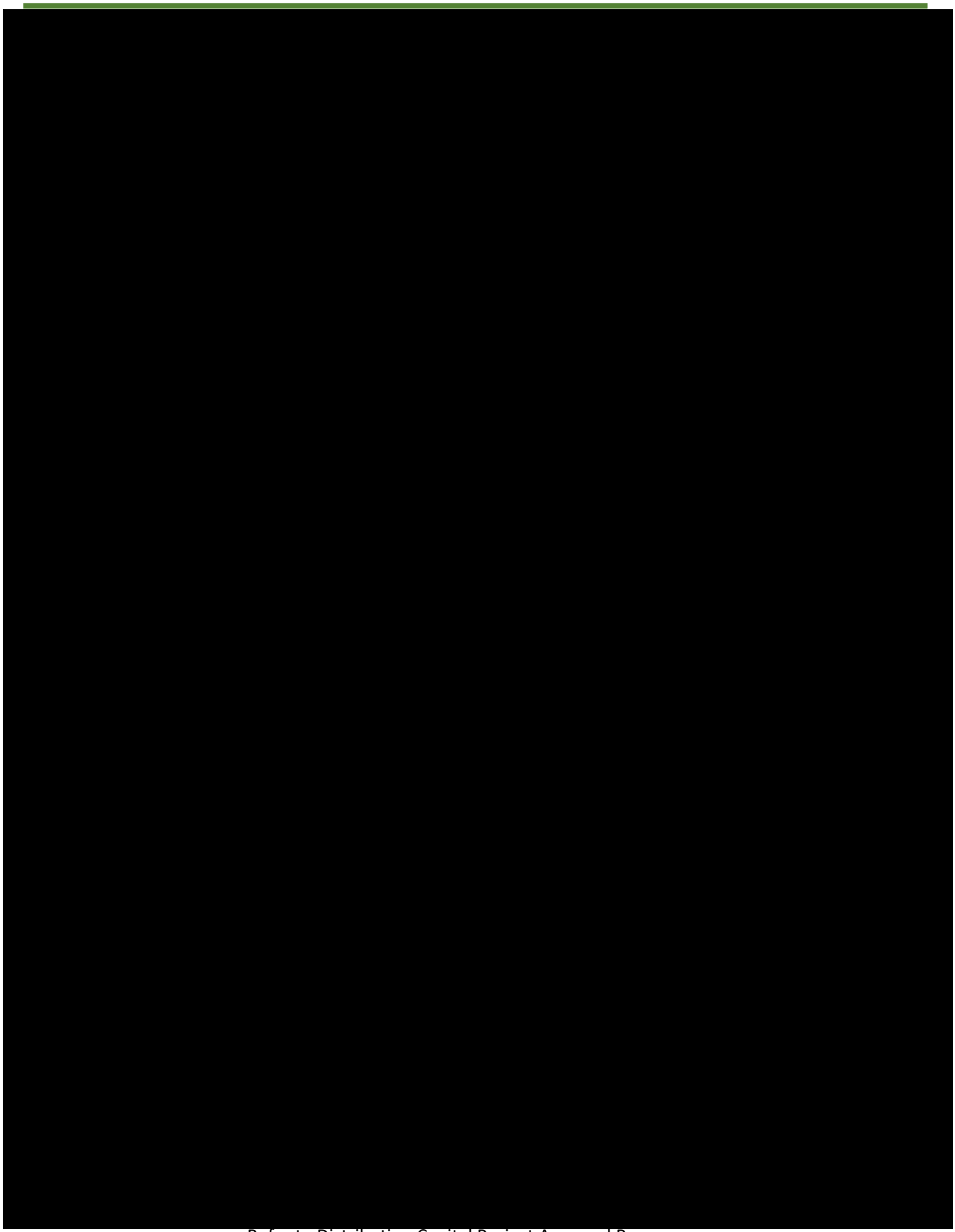
EVERSOURCE

Supplement Authorization Form



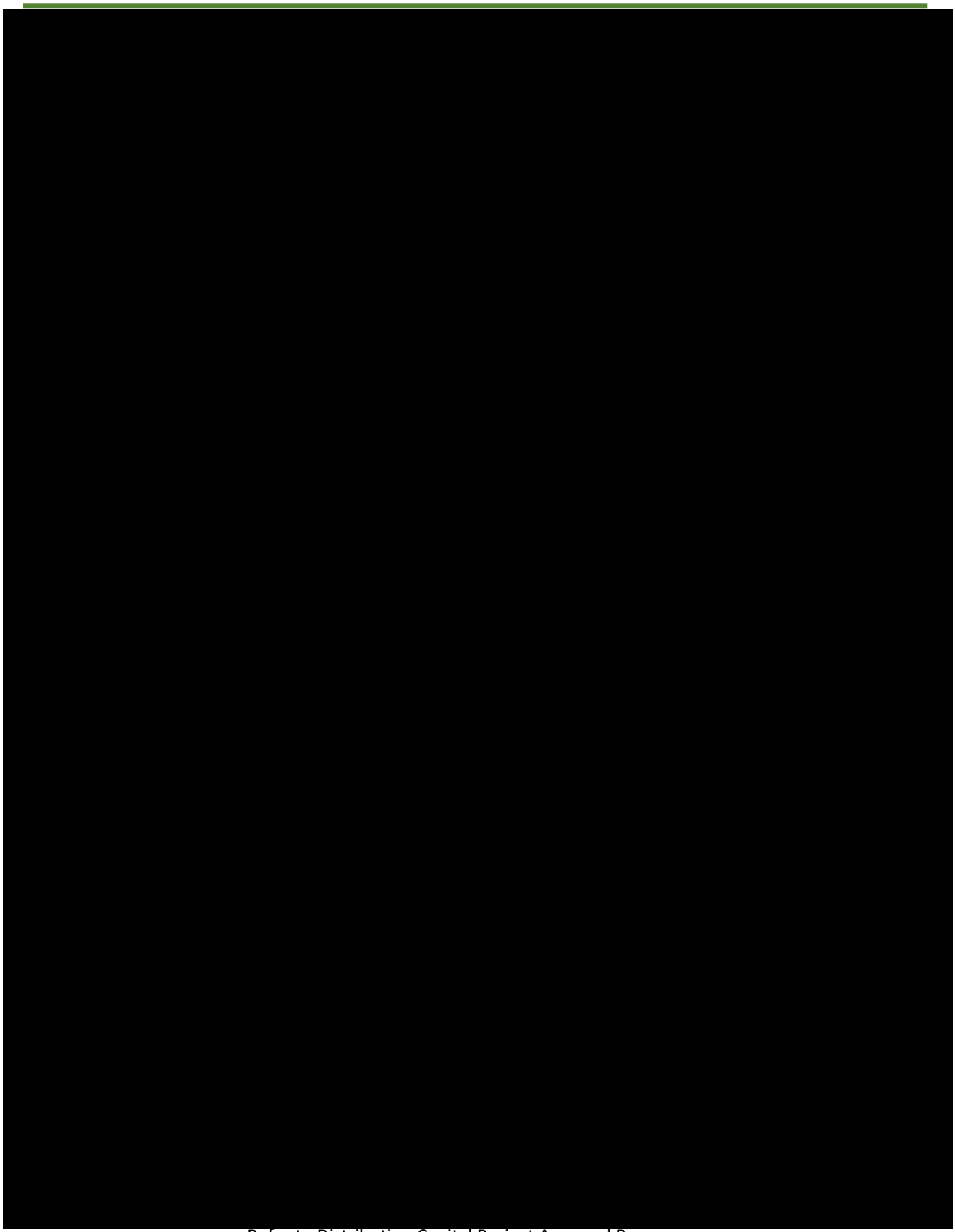
EVERSOURCE

Supplement Authorization Form



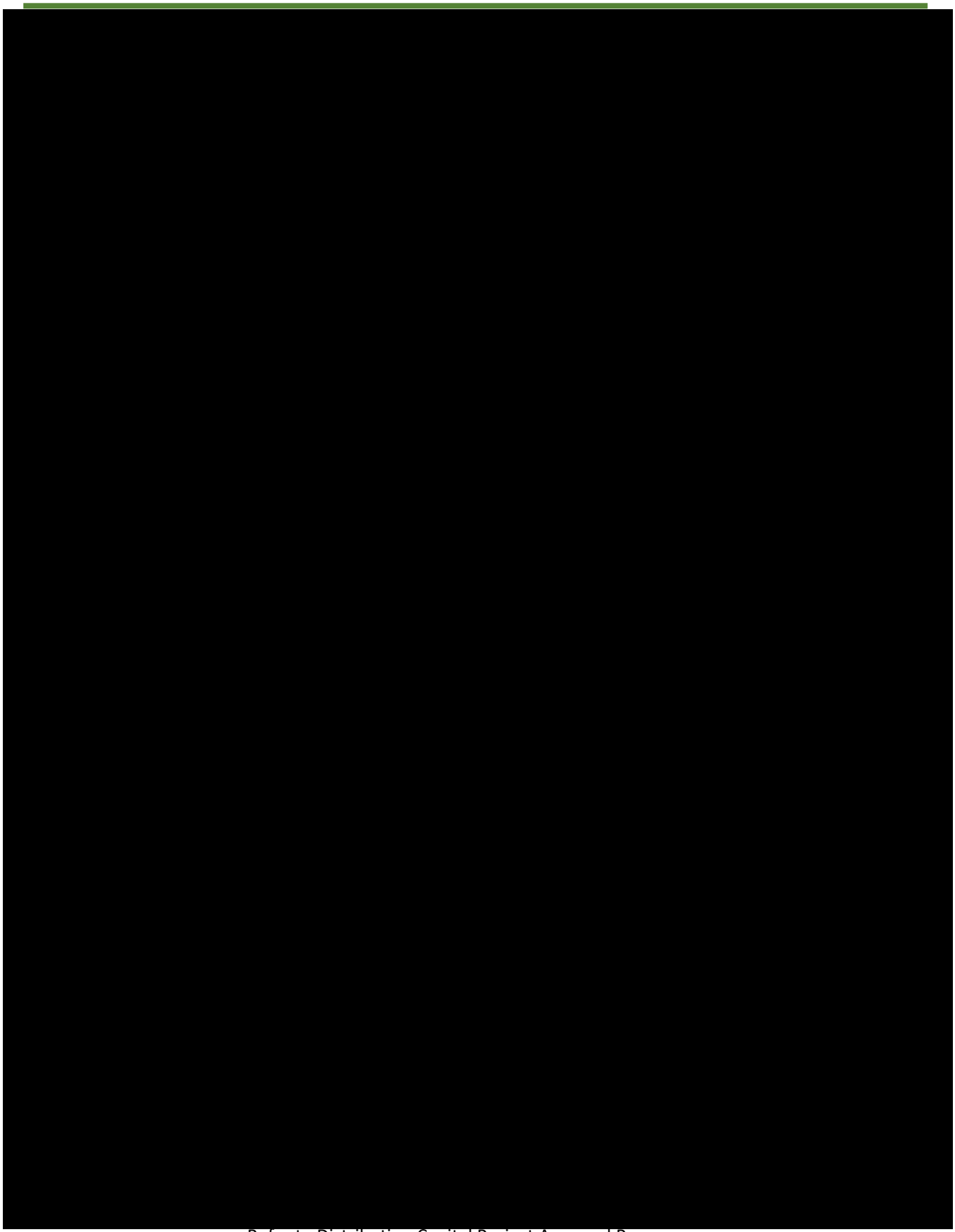
EVERSOURCE

Supplement Authorization Form



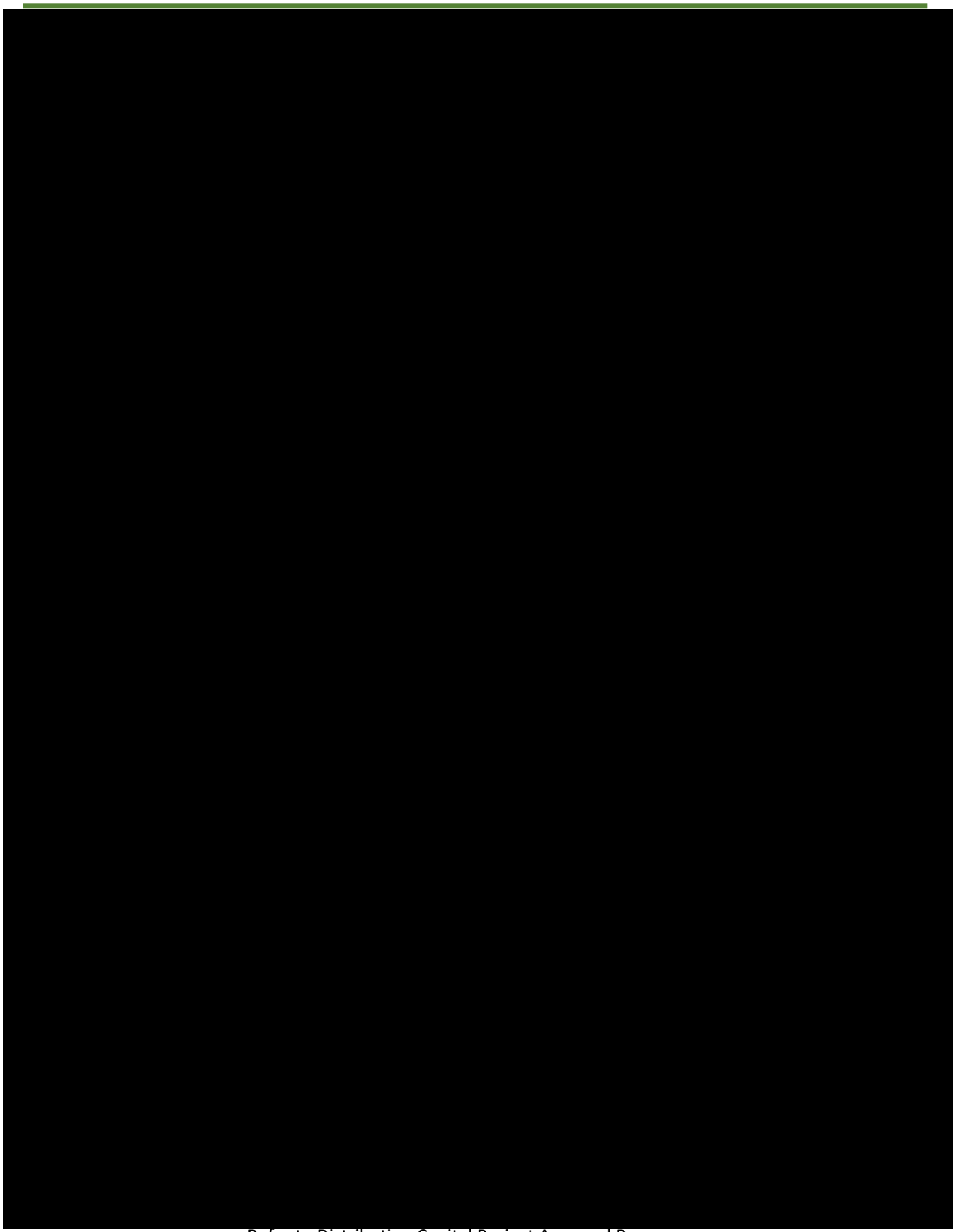
EVERSOURCE

Supplement Authorization Form



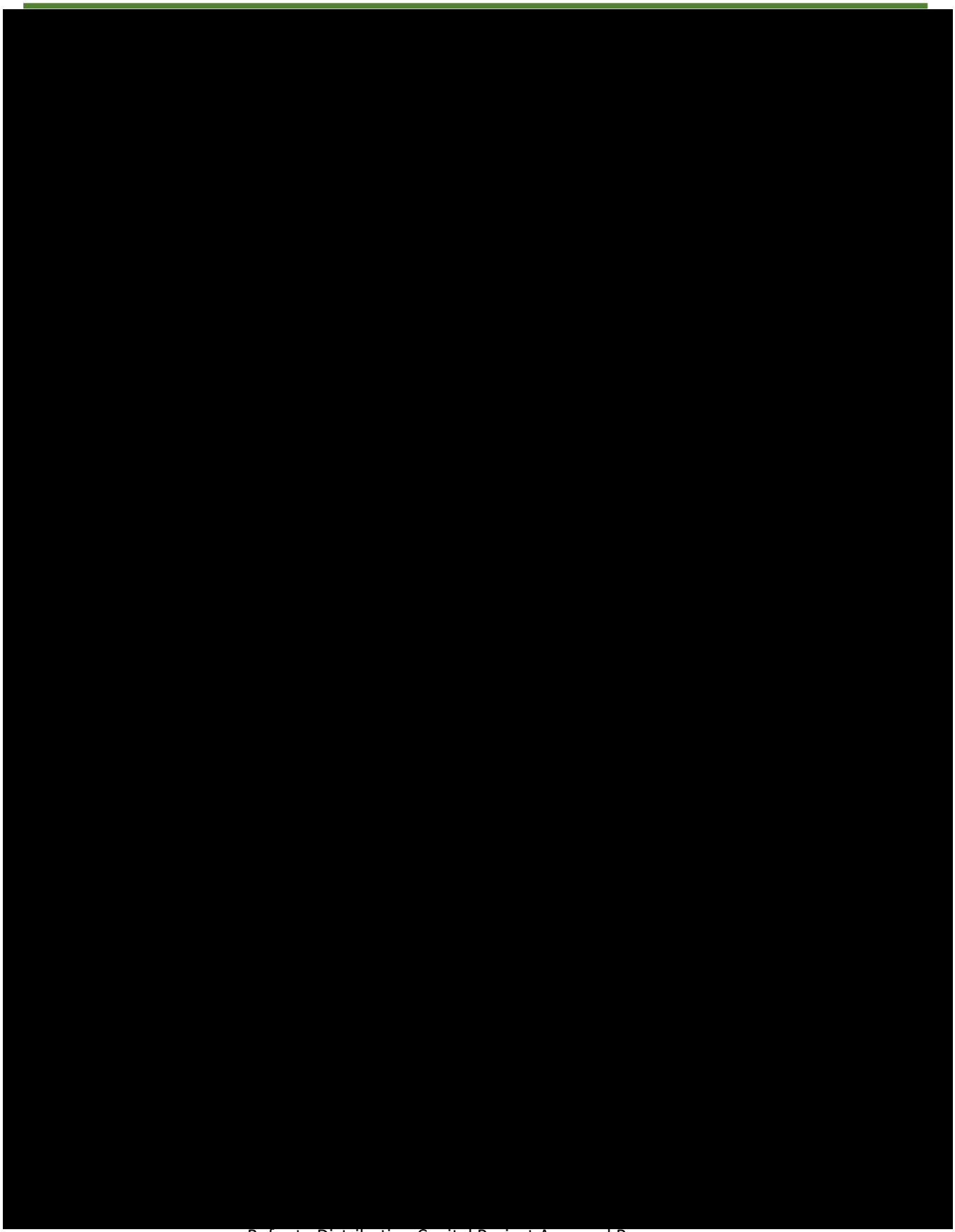
EVERSOURCE

Supplement Authorization Form



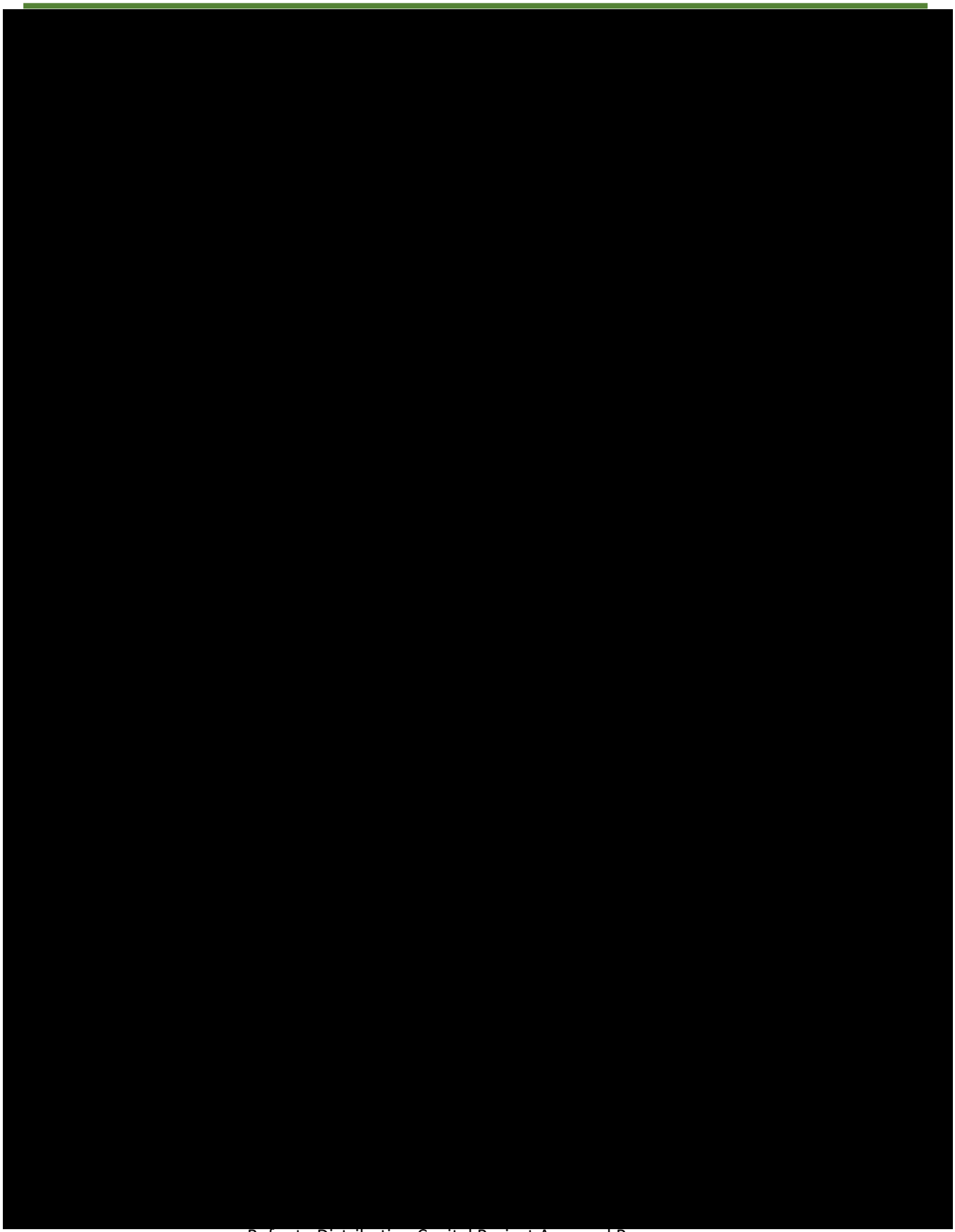
EVERSOURCE

Supplement Authorization Form



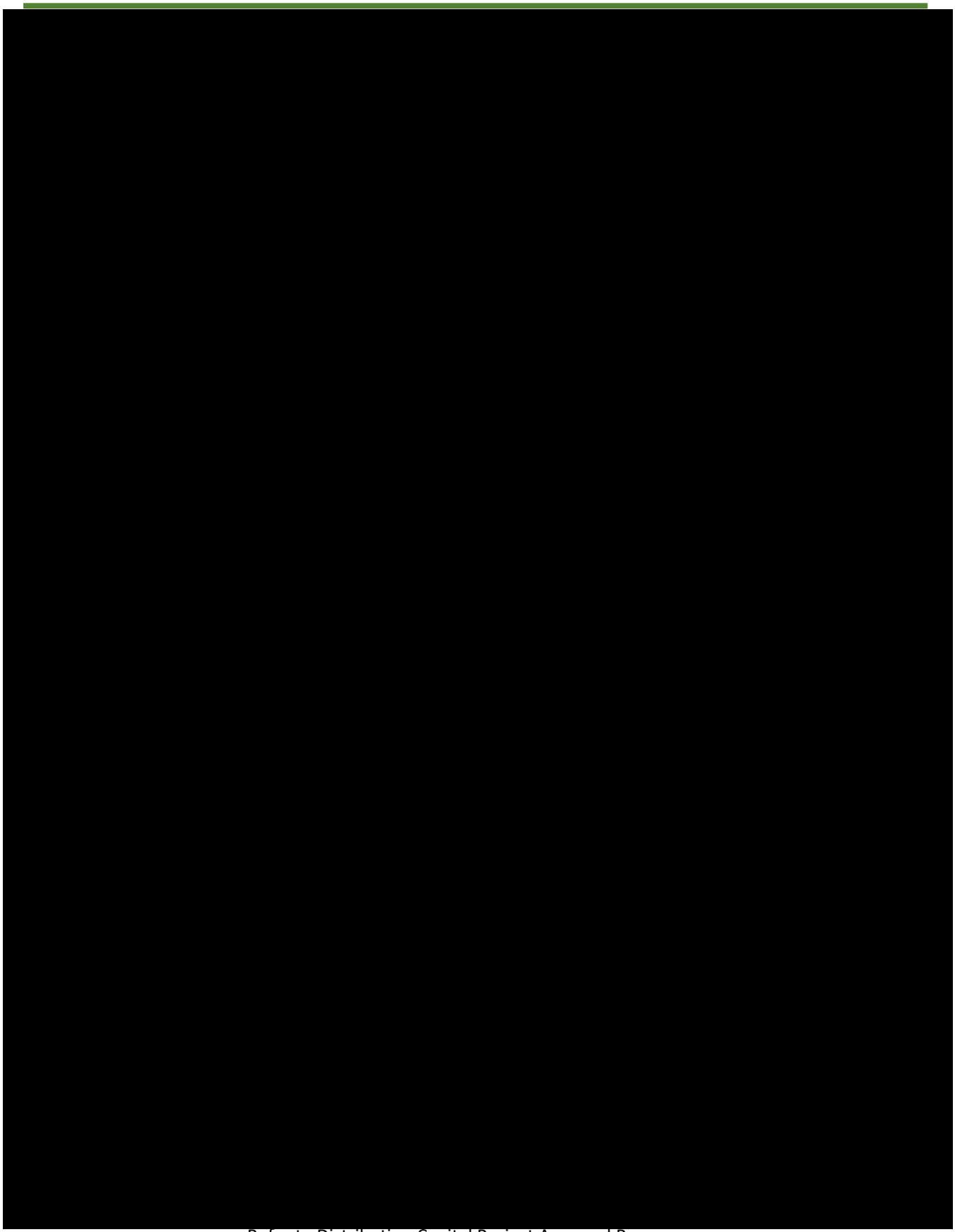
EVERSOURCE

Supplement Authorization Form



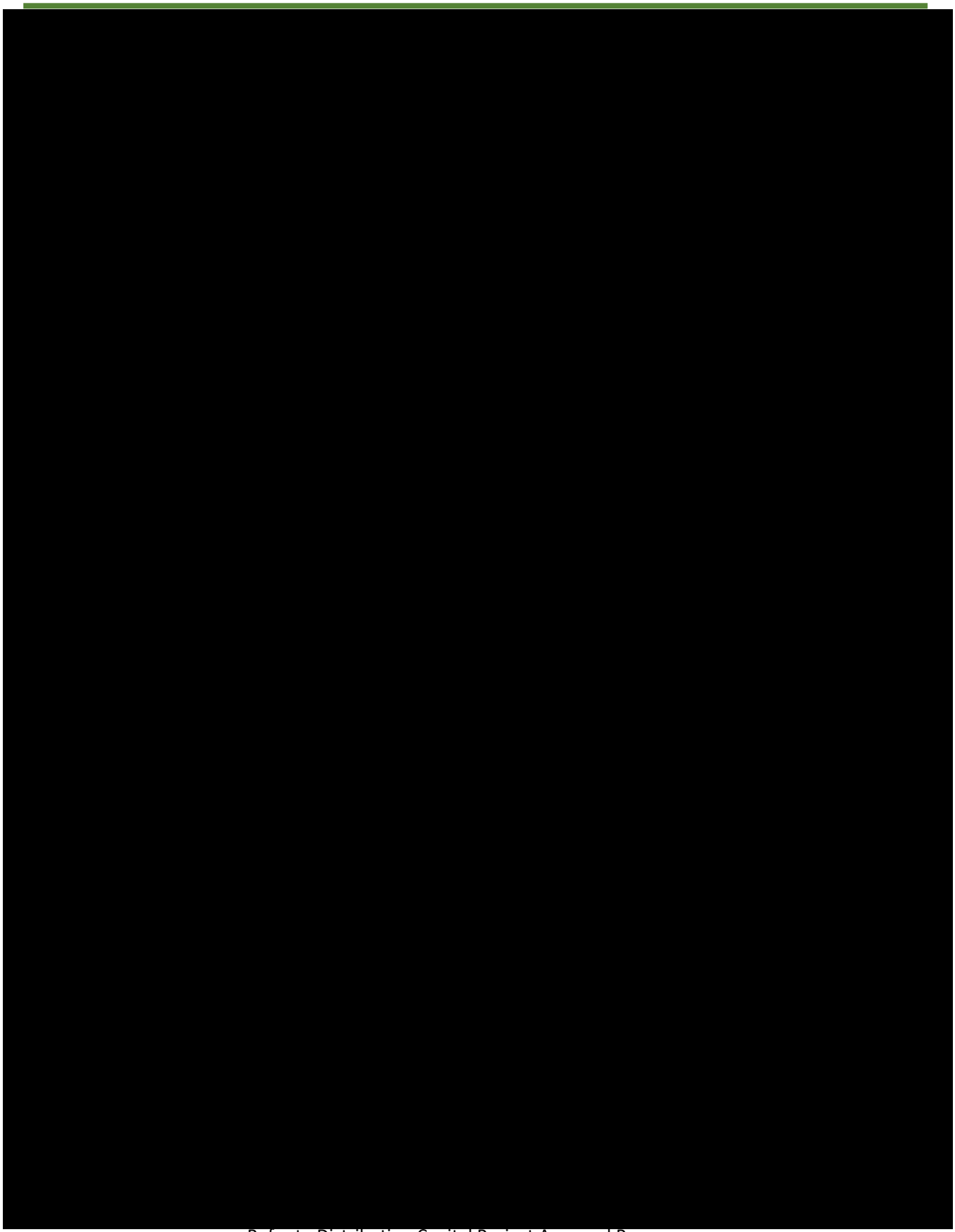
EVERSOURCE

Supplement Authorization Form



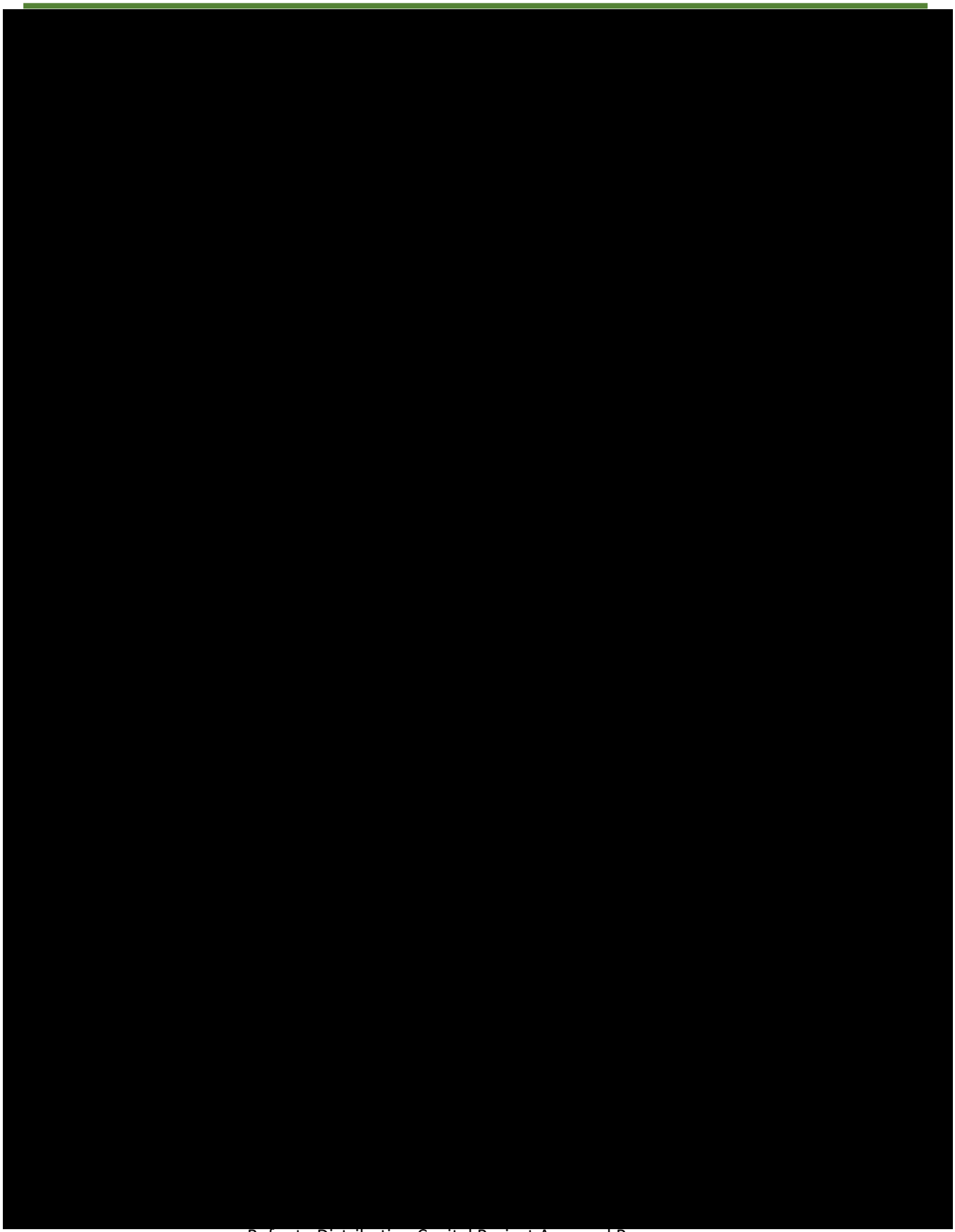
EVERSOURCE

Supplement Authorization Form



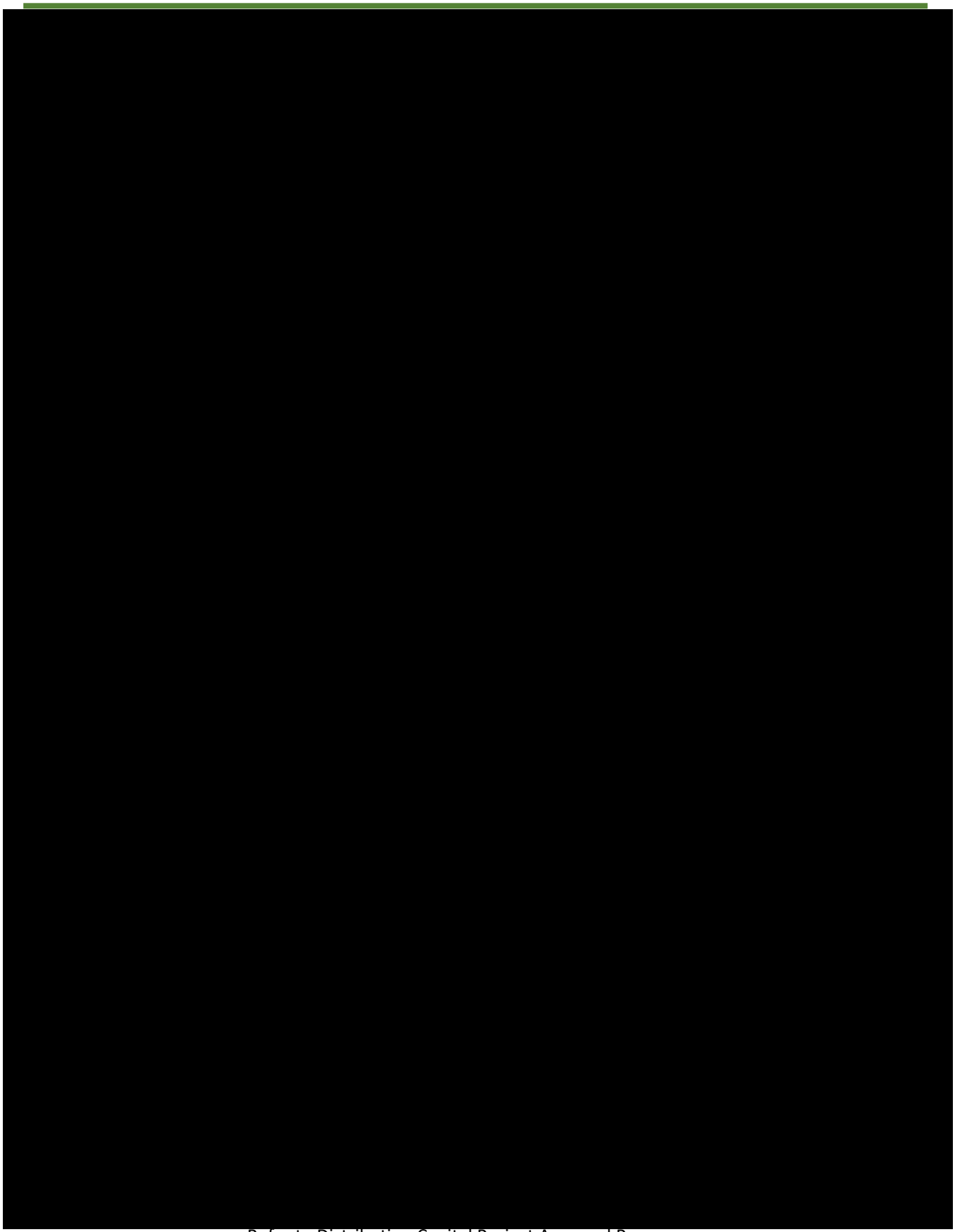
EVERSOURCE

Supplement Authorization Form



EVERSOURCE

Supplement Authorization Form



Operations Project Authorization Form

Date Prepared: 10/13/2021	**Project Title:** [redacted]
Company/ies: Eversource CT	**Project ID Number:CD01840**
Organization: Distribution Electric	**Class(es) of Plant: Distribution**
Project Initiator: [redacted]	**Project Category: Line**
Project Manager: [redacted]	**Project Type: Reliability Improvement Specific Project**
Project Sponsor: [redacted]	**Project Purpose: Critical Customer Reliability**
Estimated in service date: 2023	**If Transmission Project: PTF? N/A**
Eng. /Constr. Resources Budgeted?	**Capital Investment Part of Original Operating Plan?**
Authorization Type: Initial Funding	**O&M Expenses Part of the Original Operating Plan?**
Total Request: $2.09M (1.51M Reimbursable)	

Financial Requirements:

Project Authorization
ERM: _____

FP&A: _____

Executive Summary

Project CD01840 addresses [redacted] located at 1525 Branch Rd., [redacted]

The total cost of all suggested work is $2,092,971.The total customer contribution is $1,510,666, leaving a company cost of $582,305.

Project Costs Summary
Note: Dollar values are in thousands

	Prior Authorized	2023	2024	2025+	Totals
Capital Additions - Direct	$0	$1,193	$0	$0	$1,193
Removals net of Salvage ____%	$0	$110	$0	$0	$110
Total - Direct Spending	$0	$1,303	$0	$0	$1,303
Capital Additions - Indirect	$0	$710	$0	$0	$710
Subtotal Request	$0	$2,013	$0	$0	$2,013
AFUDC	$0	$16	$0	$0	$16
Total Capital Request	$0	$2,029	$0	$0	$2,029
O&M	$0	$64	$0	$0	$64
Total Request	$0	$2,093	$0	$0	$2,093

Financial Evaluation
Note: Dollar values are in thousands

Direct Capital Costs	2023	2024	2025+	Total
Straight Time Labor	$89	$0	$0	$89
Overtime Labor	$16	$0	$0	$16
Outside Services	$890	$0	$0	$890
Materials	$305	$0	$0	$305
Other, including contingency amounts (describe)	$4	$0	$0	$4
Total Direct Costs	**$1,303**	**$0**	**$0**	**$1,303**

Indirect Capital Costs	2023	2024	2025+	Total
Indirects/Overheads (including benefits)	$710	$0	$0	$710
Capitalized interest or AFUDC, if any	$16	$0	$0	$16
Total Indirect Costs	**$725**	**$0**	**$0**	**$725**
Total Capital Costs	**$2,029**	**$0**	**$0**	**$2,029**
Less Total Customer Contribution	**($1,511)**	**$0**	**$0**	**($1,511)**
Total Capital Project Costs	**$518**	**$0**	**$0**	**$518**
Total O&M Project Costs	**$64**	**$0**	**$0**	**$64**
Total Project Cost	**$ 582**	**$ -**	**$ -**	**$ 582**

Note: Explain unique payment provisions, if applicable

Technical Justification:

Project Need Statement

[redacted]

Project Objectives

Project CD01840 seeks to improve [redacted]

Project Scope

[redacted]

Major Material:

11S15/2B6 Tie:
6 – Reclosers
6 – Recloser Settings
3 – 1254 kVA Auto Transformers

2B6 Line Extension:
3 - 5,000' 556 AL SC
29 – Joint Utility Poles
1 – GOAB Switch

11S15-81M Reconductoring:
3 – 3,300' 556 AL SC
12 – Joint Utility Poles

11S15 Zone Reduction
1 – Recloser
1 - Recloser Settings

Background / Justification

[redacted]

[redacted]

Presented below are the outages associated with this work.

[redacted]

Business Process and / or Technical Improvements:

[redacted]

Alternatives Considered with Cost Estimates

[redacted]

[redacted]

[redacted]

[redacted]

TOTAL COST	$582k	$2.09M	$3.83M
COMPANY COST	$582k	$582k	$582k
CUSTOMER COST	$0	$1.51M	$3.25M
COST / CM SAVED	$1,256.59/CM	$23.46/CM	$39.32/CM
PREFERRED OPTION		X	

Project Schedule

Milestone/Phase Name	Estimated Completion Date
Preliminary Approval	12/31/21

Milestone/Phase Name	Estimated Completion Date
Detailed Design	12/31/22
Construction Start Date	3/1/23
Construction End Date	6/1/23

Risks and Risk Mitigation Plans

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2023	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	2023	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach
Internal construction resources not available to perform the work.	2023	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	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Storm delays	2023	Low	If storm activity delays work, we may be forced to use external resources.

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

Project Need Statement:

CD01840_project_needs_statement.pdf

Geographic Project Map:

CD01840 Geographic Map.pd

Project One-Line:

CD01840 Project Oneline.pdf

Load Sheet:

CD01840 Load Sheet.pdf