EVERSOURCE

Project Approval Form

Project Title: [redacted]	**Project Number: CD01368**
Date Prepared: 08/23/2023	**Company:** Eversource CT
Organization: Distribution Engineering	**Project Category:** RELIABILITY IMPROVE SPEC PROJ
Project Initiator: [redacted]	**Project Type:** Specific
Initiating Organization: Distribution	**Capital Investment part of original Op Plan:** No
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: 12/31/22	
Total Capital Request: 841.8K	**Authorization Type:** Full Funding

1. Executive Summary

[redacted]

This project was approved for Partial Funding on 9/19/19 for $1,078K total capital cost. This PAF is being presented for Full Funding approval for $841.8K total capital cost, a difference of $236.2K, or 22% under the Partial Funding amount. No change of scope, project written as engineered. Eversource crews performed the work. Project is complete.

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	Year 2021	Year 2022	Year 2023	Total
Direct Capital Costs				
Internal Labor and Construction Equipment	3.2	127.5	2.2	132.8
Outside Services	0.5	20.9	0.4	21.8
Materials	3.9	154.6	2.7	161.1
Removals	3.6	145.4	2.5	151.5
Risk and Contingency	0.0	0.0	0.0	0.0
Other	0.3	13.7	0.2	14.3
Subtotal – Direct Costs	**11.5**	**462.0**	**8.0**	**481.5**
Indirect Capital Costs				
Indirect/Overheads (including benefits)	8.0	322.3	5.6	335.9
Capitalized interest or AFUDC, if any	0.6	23.4	0.4	24.4
Subtotal – Indirect Costs	**8.6**	**345.7**	**6.0**	**360.3**
Total Gross Capital Costs	**20.2**	**807.7**	**13.9**	**841.8**
Customer Contribution				
Total Net Capital Project Costs	**20.2**	**807.7**	**13.9**	**841.8**

See Attachment "A" for a detailed estimate.

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

[redacted] It will also improve the MBI metric by reducing the number of customers at risk in a zone. This upgrade allows for faster restoration, outage isolation and reconfiguration of the system during planned and unplanned switching events. Circuit load balancing is also improved.

b. Project Need

[redacted]

c. Project Scope

[redacted]

4. Alternatives Considered

There are no other nearby circuits to develop a tie to either circuit due to geographical conditions. To follow the Eversource guideline of customer zones <500, this is the only feasible option.

Segment	Description	ES Poles	Frontier Poles	Cost
1	[redacted]	4	21	$861,110
2	[redacted]			$271,412
Preferred Options 1 & 2			Total	$1,132,522

5. Project Schedule

Add any additional milestones that are pertinent to the project

Milestone/Phase Name	Estimated Date
Partial Approval	8/29/19
100% Detailed Engineering Completion	4/30/20
Fully Funded	8/23/23
Construction Start	1/1/22
In Service Date	12/31/22

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.	2021	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	2021	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Internal construction resources not available to perform the work.	2021	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.	2021	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2021	Low	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2021	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2021	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	2021	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	2021	Low	Use of mats and specialty equipment, only work during certain times of the year.

9. References

References
1.
2.
3.
4.
5.

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

Attachment	Included in Submittal?
A. Cost Estimate	*YES*
B. System and Station One-Lines	*YES*
C. Geographic Map	*YES*

Attachment "A"

Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01368 [redacted]

Segment CD01368-01

Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$694,443
Contingency Amount:	$166,666
Estimate:	$861,110
Reimbursement:	$0
Net Amount:	**$861,110**
Description:	

Item Description	CU	$ / Per	Qty	Amount
TRAFFIC OH/DB/UG - Traffic Control - Police Officer	16-ALL18	[redacted]		$10,000.00
POLE OH - POLE - 3ph (Telephone custodian)	16-OH12			$74,760.00
POLE OH - POLE - 3ph (CL&P custodian)	16-OH14			$18,704.00
SECTIONALIZE OH - Cutouts or Arresters - 1ph	16-OH19			$21,939.20
OH WIRE OH - Reconductor w/Spacer Cable - 556 kcmil	16-OH29			$471,040.00
OH WIRE OH - Line Extension - 3ph (556 kcmil)	16-OH34			$48,000.00
TREE OH - Tree Trimming	16-OH61			$50,000.00

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Connecticut Light & Power
A Northeast Utilities Company

Specific Project Proposal - Project #: CD01368 [redacted]

Segment CD01368-02

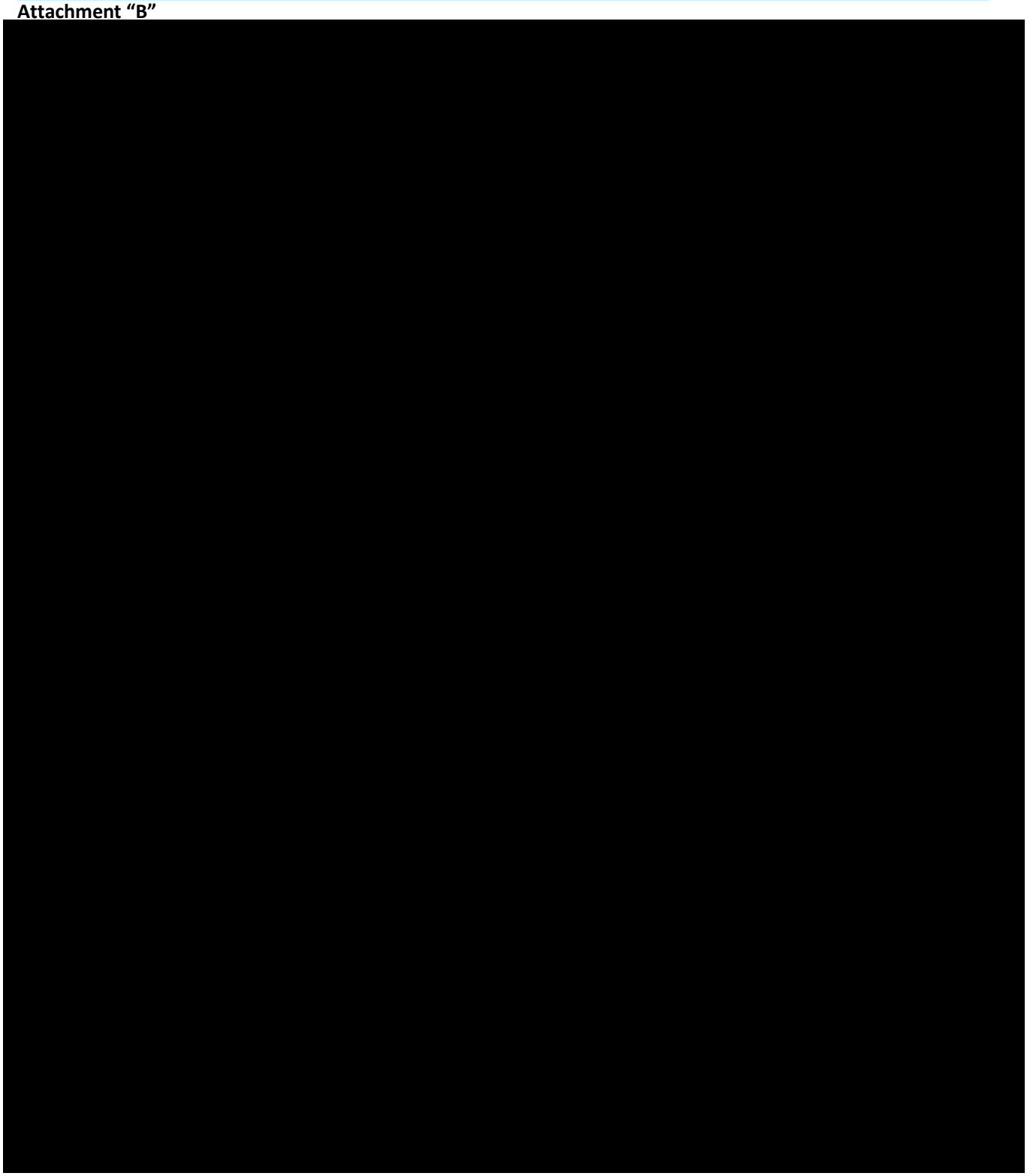
Estimate

	Preliminary Estimate Summary
Revision Number:	0
Contingency:	24.00%
SubTotal:	$218,881
Contingency Amount:	$52,531
Estimate:	$271,412
Reimbursement:	$0
Net Amount:	**$271,412**

Description:

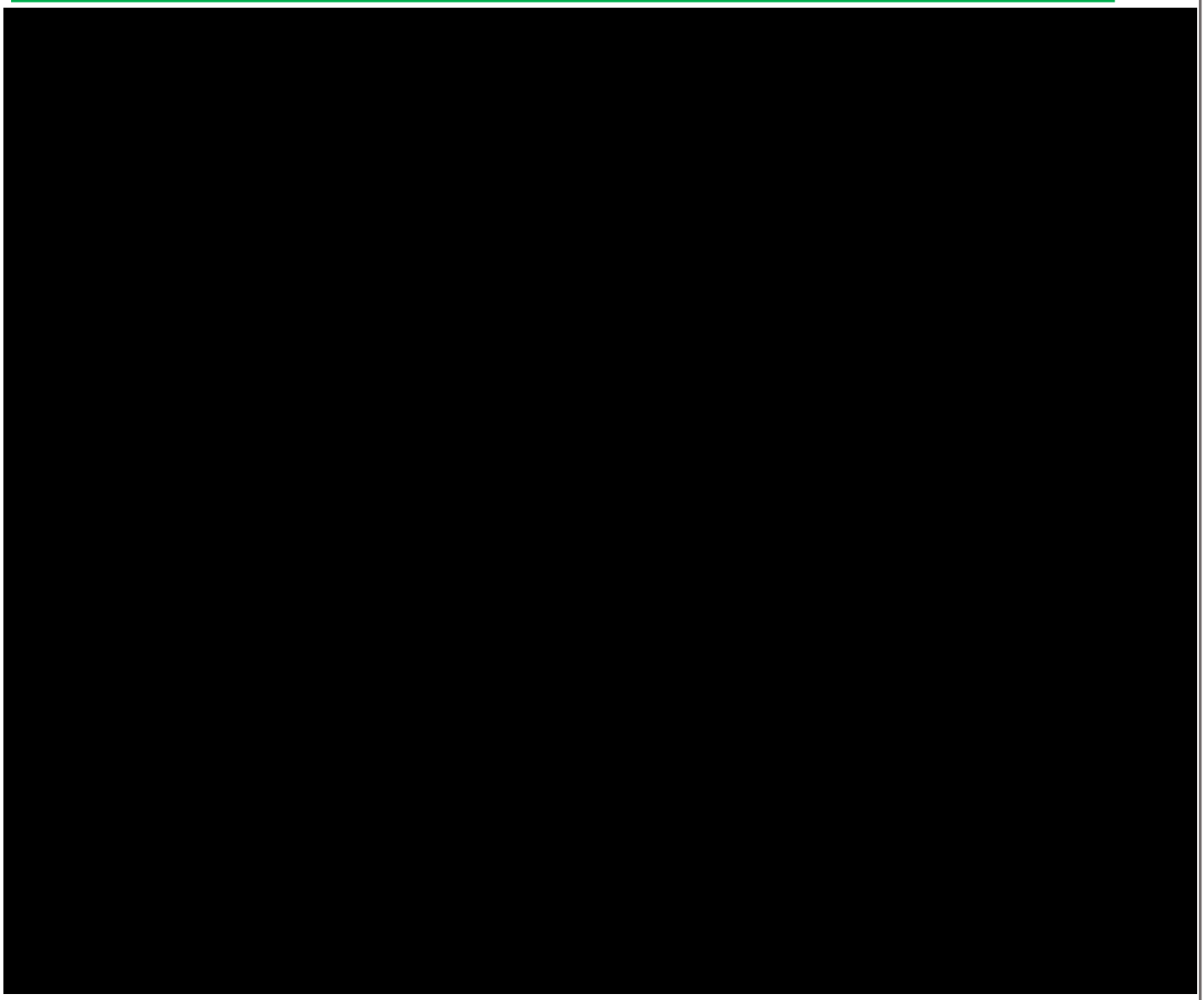
Item Description	CU	$ / Per	Qty	Amount
SECTIONALIZE OH - Recloser - 3ph	16-OH38	[redacted]		$143,968.80
SECTIONALIZE OH - Remove Recloser (any)	16-OH42			$11,312.00
EQUIPMENT OH - Regulators [redacted] 1ph - on RACK	16-OH48			$61,800.00
EQUIPMENT OH - Remove Capacitor, any kVAR	16-OH54			$1,800.00

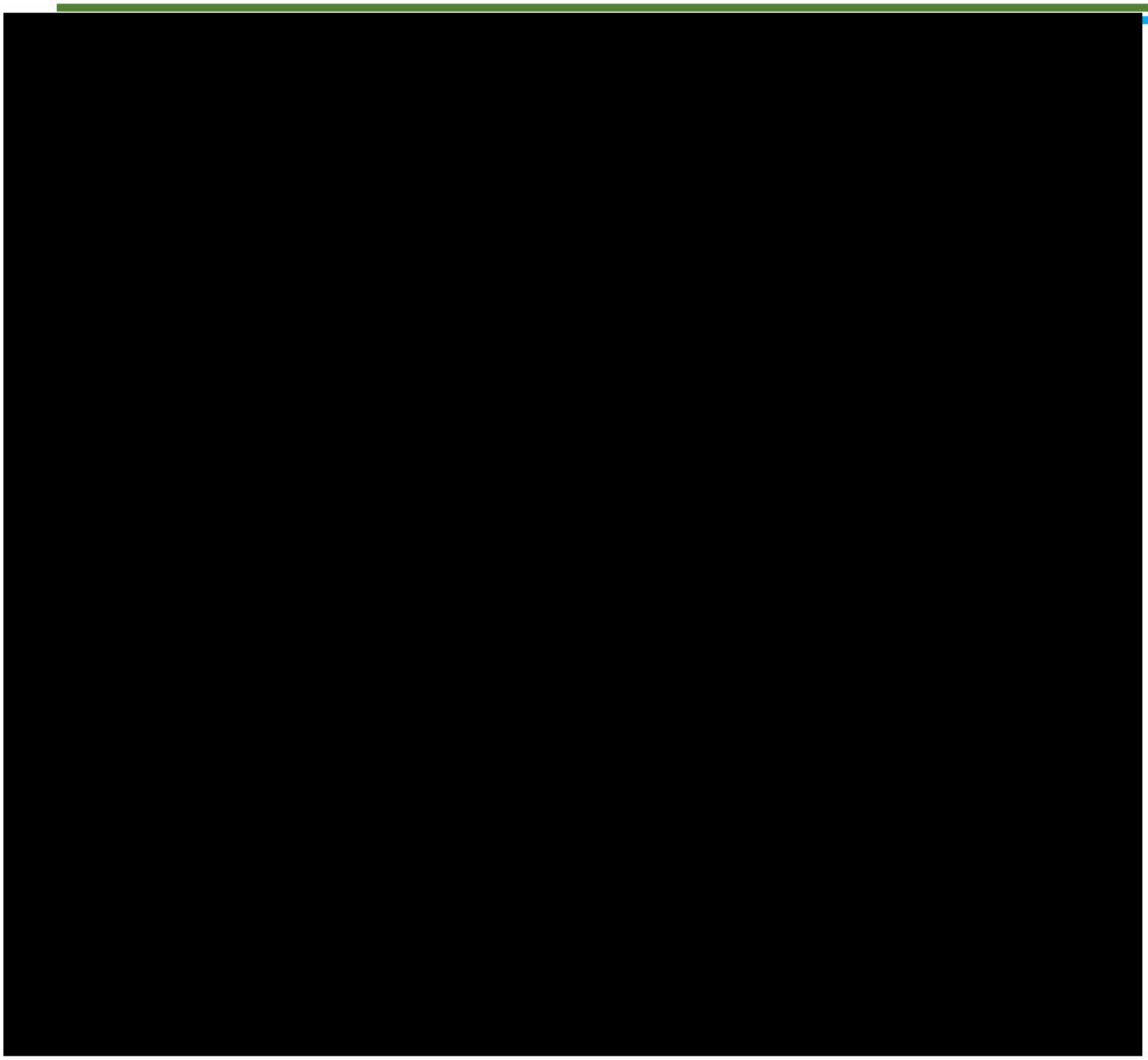
Attachment "B"

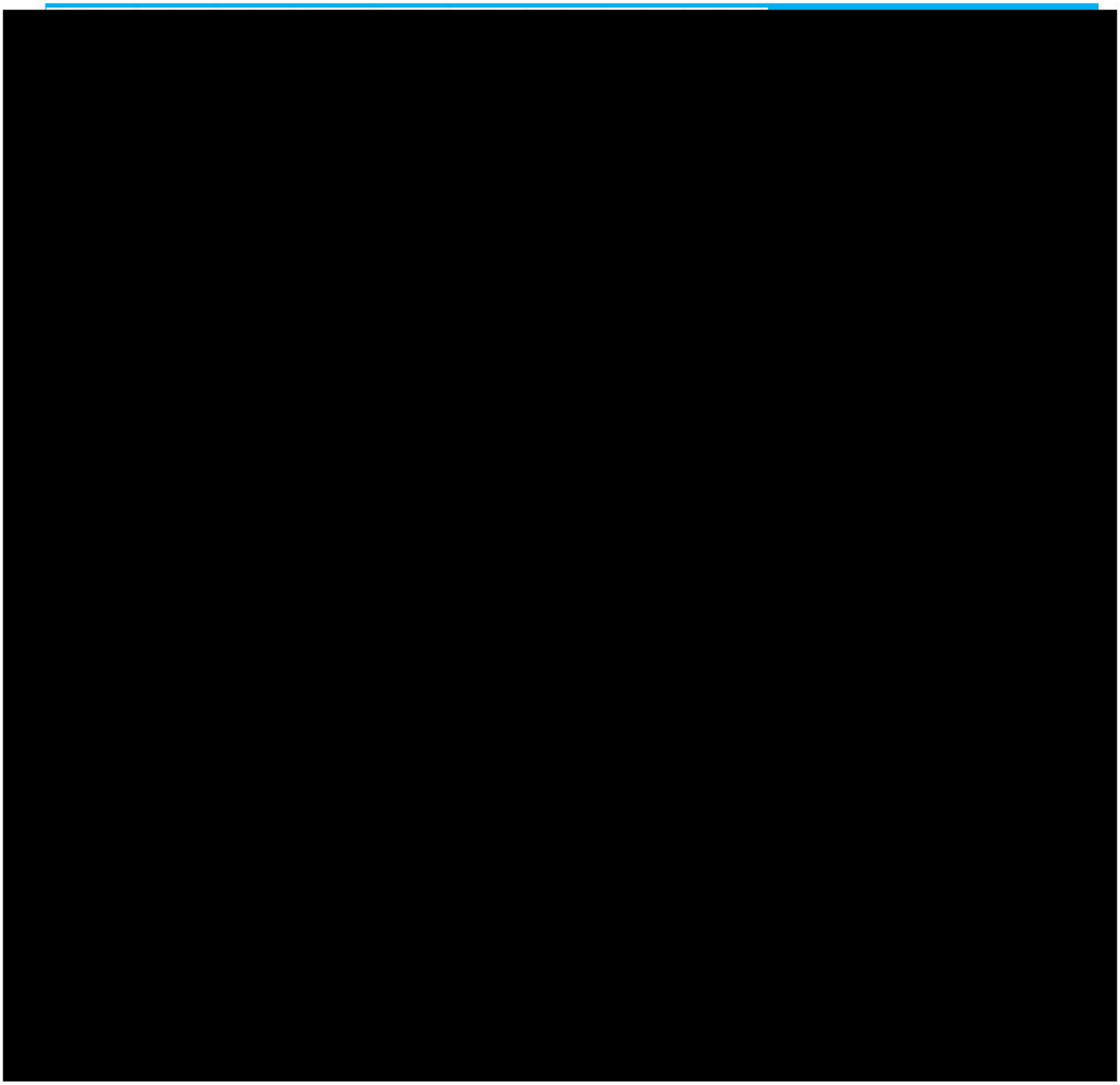


Attachment "C"









Operations Project Authorization Form

Date Prepared: 8/29/2019	Project Title: [redacted]
Company/ies: CT	Project ID Number: CD01368
Organization: Distribution Electric	Class(es) of Plant: Distribution
Project Initiator [redacted]	Project Category: Reliability Improvement
Project Manager [redacted]	Project Type: Specific
Project Sponsor [redacted]	Project Purpose: Contingency Overload and cust at risk
Estimated in service date: 12/31/2021	If Transmission Project: PTF? NA
Eng. /Constr. Resources Budgeted? No	Capital Investment Part of Original Operating Plan?
Authorization Type: Partial Funding	O&M Expenses Part of the Original Operating Plan?
Total Request: $1,132,522	

Financial Requirements:

Project Authorization
ERM: _____

FP&A: _____

Executive Summary

[redacted]

Project Costs Summary

Note: Dollar Values are in thousands

	Prior Authorized	2021	2022	2023	Totals
Capital Additions - Direct	$0	$483	$0	$0	$483
Less Customer Contribution	$0	$0	$0	$0	$0
Removals net of Salvage ___%	$0	$146	$0	$0	$146
Total - Direct Spending	$0	$629	$0	$0	$629
Capital Additions - Indirect	$0	$439	$0	$0	$439
Subtotal Request	$0	$1,069	$0	$0	$1,069
AFUDC	$0	$10	$0	$0	$10
Total Capital Request	$0	$1,079	$0	$0	$1,079
O&M	$0	$54	$0	$0	$54
Total Request	$0	$1,133	$0	$0	$1,133

Financial Evaluation

Note: Dollar Values are in thousands

Direct Capital Costs	2021	2022	2023	Total
Straight Time Labor	$79	$0	$0	$79
Overtime Labor	$18	$0	$0	$18
Outside Services	$381	$0	$0	$381
Materials	$147	$0	$0	$147
Other, including contingency amounts (describe)	$4	$0	$0	$4
Total Direct Costs	**$629**	**$0**	**$0**	**$629**

Indirect Capital Costs	Year 1	Year 2	Year 3+	Total
Indirects/Overheads (including benefits)	$439	$0	$0	$439
Capitalized interest or AFUDC, if any	$10	$0	$0	$10
Total Indirect Costs	**$449**	**$0**	**$0**	**$449**
Total Capital Costs	**$1,078**	**$0**	**$0**	**$1,078**
Less Total Customer Contribution	**$0**	**$0**	**$0**	**$0**
Total Capital Project Costs	**$1,078**	**$0**	**$0**	**$1,078**
Total O&M Project Costs	**$55**	**$0**	**$0**	**$55**
Total Project Cost	**$1,133**	**$ -**	**$ -**	**$1,133**

Technical Justification:

Project Need Statement

[redacted]

Project Objectives:

[redacted]

Project Scope:

[redacted]

CD01368 SEGMENT SUMMARY

Segment	Description	ES Poles	Frontier Poles	Cost
[redacted]				$861,110
				$271,412
				$1,132,522

Background / Justification

[redacted]

[redacted]

Business Process and / or Technical Improvements:

This proposal will improve the MBI metric by reducing the number of customers at risk in a zone. This upgrade allows for better system visibility, faster restoration, outage isolation and reconfiguration of the system during planned and unplanned switching events. It also allows for better circuit balance.

Alternatives Considered with Cost Estimates

There are no other nearby circuits to develop a tie to either circuit due to geographical conditions.

Project Schedule

Milestone / Phase Name	Estimated Completion Date
Preliminary Engineering	4/30/2020
Detail Design	3/31/2021
Construction	12/31/2021

Regulatory Approvals
None

Risks and Risk Mitigation Plans

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2021	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	2021	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach
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References
none

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