EVERSOURCE
Project Authorization Form

Operations Project Authorization Form

Date Prepared: 03/19/21	**Project Title: [redacted] 3/5/10 Or More**
Company/ies: Eversource CT	**Project ID Number: CD01688**
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: Multiple Interruptions**
Estimated in service date: 12/31/2022	**If Transmission Project: PTF? N/A**
Eng. /Constr. Resources Budgeted?	**Capital Investment Part of Original Operating Plan?**
Authorization Type: Full funding	**O&M Expenses Part of the Original Operating Plan?**
Total Request: $189,285	

Financial Requirements:

Project Authorization

ERM: _____

FP&A: _____

Executive Summary

The portion of the [redacted]

Project Costs Summary
Note: Dollar values are in thousands

	Prior Authorized	2021	2022	2023	Totals
Capital Additions - Direct	$0	$106	$0	$0	$106
Less Customer Contribution	$0	$0	$0	$0	$0
Removals net of Salvage ____%	$0	$10	$0	$0	$10
Total - Direct Spending	$0	$115	$0	$0	$115
Capital Additions - Indirect	$0	$67	$0	$0	$67
Subtotal Request	$0	$182	$0	$0	$182
AFUDC	$0	$1	$0	$0	$1
Total Capital Request	$0	$184	$0	$0	$184
O&M	$0	$5	$0	$0	$5
Total Request	$0	$189	$0	$0	$189

Financial Evaluation

Note: Dollar values are in thousands

Direct Capital Costs	Year 1	Year 2	Year 3+	Total
Straight Time Labor	$14	$0	$0	$14
Overtime Labor	$1	$0	$0	$1
Outside Services	$59	$0	$0	$59
Materials	$39	$0	$0	$39
Other, including contingency amounts (describe)	$2	$0	$0	$2
Total Direct Costs	**$115**	**$0**	**$0**	**$115**

Indirect Capital Costs	Year 1	Year 2	Year 3+	Total
Indirects/Overheads (including benefits)	$67	$0	$0	$67
Capitalized interest or AFUDC, if any	$1	$0	$0	$1
Total Indirect Costs	**$68**	**$0**	**$0**	**$68**
Total Capital Costs	**$184**	**$0**	**$0**	**$184**
Less Total Customer Contribution	**$0**	**$0**	**$0**	**$0**
Total Capital Project Costs	**$184**	**$0**	**$0**	**$184**
Total O&M Project Costs	**$5**	**$0**	**$0**	**$5**
Total Project Cost	**$ 189**	**$ -**	**$ -**	**$ 189**

Note: Explain unique payment provisions, if applicable

Technical Justification:

Project Need Statement

This project calls to fill the [redacted]

Project Objectives

The objective of this project is to improve the reliability for the [redacted]

Project Scope

[redacted]

Looking East near existing step-down bank.



Looking east at intersection of [redacted]



Looking east near pole 627



Major Material:

- 2,460' 1/0 TW
- 2 – 500kva step down transformers
- 5 customer transformers

Background / Justification

This section of the [redacted]. The area was last trimmed to METTL specifications in 2018 and is scheduled for another trim cycle in 2022. [redacted] offered to trim [redacted] (customer focused ETT) this year, under their budget. Since 2018, the [redacted]

[redacted]

4 Year Outage History

Customer Minutes Saved/Customer Interuptions Saved are normalized over 4 years

Segment/Alternative	Estimated Cost	Number of Events (4 Yrs)			Customer Minutes (4 Yrs)			% CM Improvement	Cost per Customer Minute Saved			% CI Improvement	Number of Customers per Interuption			Cost per Customer Interuptions Saved		
		Non-Storm	Storm	Both	Non-Storm	Storm	Both		Non-Storm	Storm	Both		Non-Storm	Storm	Both	Non-Storm	Storm	Both
Original Preferred Option	$275,749.00	14	6	20	320,282	1,295,342	1,615,624	40%	$8.61	$2.13	$1.71	55%	[redacted]			$978.74	$1,365.09	$386.07
Alternative 1: Reconductor to pole 634	$468,145.14	14	6	20	320,282	1,295,342	1,615,624	40%	$14.62	$3.61	$2.90	55%				$2,343.22	$2,102.96	$1,108.30
Alternative 3: RT 171 feed - [redacted] Recon (preferred)	$176,265.00	14	6	20	320,282	1,295,342	1,615,624	40%	$5.50	$1.36	$1.09	55%				$882.26	$791.80	$417.29
Alternative 4: RT 171 feed - [redacted] Senexet Recon (preferred)	$364,356.00	15	6	21	320,282	1,295,342	1,615,624	40%	$11.38	$2.81	$2.26	55%				$1,823.72	$1,636.73	$862.59

Business Process and / or Technical Improvements:

[redacted]

Alternatives Considered with Cost Estimates

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Alternative 1 calls to [redacted] The total cost for this project with this alternative is $468,145. This is about $180k more.

Alternative 2 is to [redacted] This alternative would cost approximately $91,000.

Alternative 3 (preferred option)

Alternative 4 calls to [redacted] The total for this alternative is $348,661.

Milestone/Phase Name	Estimated Completion Date
Preliminary Approval	03/25/21
Detailed Design	01/01/22
Settings Requested	01/01/22
Construction Start Date	02/01/22
Construction End Date	12/31/22

Risks and Risk Mitigation Plans

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2021	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	2021	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach
Internal construction resources not available to perform the work.	2021	High	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	Medium	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
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. Most of this work will require system to be abnormal for any extended period of time.

References

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


[redacted].vsd


Device Reliability_Stonebridg


[redacted] LOAD SHEET.xlsx


RTS customer outages 46 Stone Bric


Project Map (final approval).vsdx


CD01688_project_needs_statement.pdf