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Operations Project Authorization Form

Project Title: 2023 Pole Integrity	Project Number: CD02109
Date Prepared: 10.15.2022	**Company:** Eversource CT
Organization: Electric Field Operations	**Class(es) of Plant:** D Line
Project Initiator: [redacted]	**Project Category:** POLE INTEGRITY PROGRAM
Project Manager: [redacted]ore	**Project Type:** Specific
Project Sponsor: [redacted]	**Capital Investment part of original Operating Plan:** Yes
Estimated in service date: 12.31.2023	**Emergency Related Request?** No
Eng./Constr. Resources Budgeted? Yes	**Facility Type** (check all that apply)**:** ☐ PTF ☐ non-PTF ☒ Distribution
Total Gross Capital Request: $9,247K	**Authorization Type:** Full Funding

Executive Summary

This initiative captures the cost necessary to replace or reinforce wood poles found during the annual pole inspections that cannot remain in service due to loss of strength from decay or insect infestation.

This initiative also captures the replacement of leaning poles that were identified during the pole inspection process, and they are prone to failure posing a risk to public safety and the system's reliability. Leaning pole locations are created when soil disturbances and pole attachments affect the original pole's orientation because of severe weather and or storm damages.

The Poles inspection was completed in 2022, but pole replacement or construction will take place in 2023. Attachment 1 (Towns Inspected in 2022, Construction in 2023), which is included in the attachment section shows the list of towns inspected in 2022. Results of pole's inspection identifying normal rejects, priority rejects and leaning poles are available in the SharePoint Reject Pole Inspection Group.

Project cost estimates were generated using historical costs of contractor resources completing past Defective Pole Project work.

The total project capital request is $9,247K

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Project Costs Summary

Note: Dollar values are in thousands

Capital Costs	2023	2024	2025+	Total
Internal Labor and Construction Equipment	$237	$0	$0	$237
Outside Services	$3,733	$0	$0	$3,733
Materials	$944	$0	$0	$944
Removals	$1,324	$0	$0	$1,324
Risk and Contingency	($68)	$0	$0	($68)
Other	$0	$0	$0	$0
Subtotal	**$6,168**	**$0**	**$0**	**$6,168**

Indirect Capital Costs	2023	2024	2025+	Total
Indirects/Overheads (including benefits)	$2,998	$0	$0	$2,998
Capitalized interest or AFUDC, if any	$80	$0	$0	$80
Subtotal	**$3,078**	**$0**	**$0**	**$3,078**
Total Capital Costs (Gross)	**$9,247**	**$0**	**$0**	**$9,247**
Less Total Customer Contribution	**$0**	**$0**	**$0**	**$0**
Project Costs (Net)	**$9,247**	**$0**	**$0**	**$9,247**

Technical Justification:

Project Need, Objective and Justification:
This project includes the replacement or reinforcement of wood poles found during yearly inspections that cannot remain in service due to loss of strength from decay or insect infestation. Poles that require c-truss reinforcement found during the 2018 inspections will also be addressed.

Project Scope:
Pole data collected by 2022 inspection yielded the scope of work for this 2023 project. Approximate counts are below:

Defective Pole Replacements – 1236
Capital Maintenance Items**
**Due to the recent storms, the Capital Maintenance items will be reevaluated and therefore, the costs are excluded from this PAF

Scope of Work	Approximate Counts	Capital Cost per pole	Capital Cost Total	Expense Cost per pole	Expense Cost Total	Capital + Expense Total
Defective Pole Replacements	1236	$6,544	$8,088K	$1,880	$2,323K	$10,412K
			$8,088K		$2,323K	$10,412K

Major Material:

- 1,236 Poles

Background:
Replacement and reinforcements of defective poles supports safety, reliability, and commitments to the customer.

Alternatives Considered:

Were alternative solutions considered/applicable? Include any cost/benefit analysis.
Alternatives were considered (please describe below)

An alternative would be to do nothing and leave the poles as they are. However, this would result in having defective poles on the grid which are prone to faults.

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	March 2023
Construction Start	April 2023
Construction completion	December 2023

Risks and Risk Mitigation Plans

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2023	Low	Included contingency costs in the funding request. Perform detailed Field Analysis and walk down in project development to avoid potential issues.
Materials Shortage or long lead times	2023	Low	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2023	Medium	If storm activity delays work, we may be forced to use external resources.

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References

Defective pole analysis budget

CD02109 Defective Pole Program	Year 2023
	$M
Defective Poles (CD02109)	10.41
Carry-Over from previous yrs other projects	$1.00
Total Poles Budgeted in 2023	$11.401

Analysis Defective Pole Projects CD02109	
2023	
Avg.Cost to replace (Capital+Expense)	$8,424.00
Defective Poles from Pole inspection 2022, construction in 2023	366
Condition based Defective. Target Poles <Class 2.	600
Condition based Defective. Target Poles Class 5 (Carry Over from 2022 into 2023)	150
West Hartford Poles found in 2022, Construction 2023	120
Total Replacements	1236

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

TOWNS INSPECTED IN 2022, Construction in 2023

TOWNS	POLES INSPECTED IN 2022
CLINTON	2039
DEEP RIVER	1192
EAST HADDAM	5523
ESSEX	1289
OLD SAYBROOK	2564
POMFRET	1124
FARMINGTON	4415
SOUTH WINDSOR	1794
PROSPECT	289
VERNON	98
DANBURY	6449
HARWINTON	1385
WINCHESTER	2959
PLYMOUTH	1221
HARTLAND	929
TOTAL	**33270**