Operations Project Authorization Form

Project Title: Enhanced Tree Removal (ETR) Program	**Project Number: ETR2025**
Date Prepared: 11/11/2024	**Company:** Eversource CT
Organization: Asset Management	**Class(es) of Plant:** Other
Project Initiator: [redacted]	**Project Category:** Annual - General
Project Manager: [redacted]	**Project Type:** Specific
Project Sponsor: [redacted]	**Capital Investment part of original Operating Plan:** Yes
Estimated in service date: 12/31/2025	**Emergency Related Request?** No
Eng./Constr. Resources Budgeted? No	**Facility Type** (check all that apply)**:** ☐ PTF ☐ non-PTF ☐ Distribution
Total Gross Capital Request: 19M	**Authorization Type:** Full Funding

Executive Summary

Briefly describe (in a few sentences) the overall description of the project (do not include technical details)

An authorization of $19,000,000 is requested for the Connecticut Distribution Enhanced Tree Removal (ETR) capital project (id: ETR2025) which is part of Eversource CT's annual distribution vegetation maintenance plan.

The ETR project strategically removes trees to proactively improve system reliability and mitigate long term costs for the distribution cycle trimming programs. Tree removals, in conjunction with cycle pruning, drive improved reliability performance. Additionally, the service area has experienced drought conditions and insect infestations that have negatively impacted tree health and there are signs of increased tree mortality for the coming years.

The CT tree removal program is a Regulatory supported program that targets removals, primarily focused on circuit backbones and large laterals.

Project Costs Summary

See APS3 and APS8 requirements and consult with Plant Accounting for capital/O&M determination. Use published loaders for benefits, materials, and invoices, maintained by the Director, Budget and Internal Reporting.
Note: Dollar values are in thousands
For projects with an O&M component necessary for project completion (eg: training), please note in the appendix what those costs will be and the CCC/business area responsible.

Appendix 2
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Capital Costs	Year 20__	Year 20__	Year 20__+	Total
Direct Capital Costs				
Internal Labor				$ -
Outside Services	18,430			$ 18,430
Materials				$ -
Removals				$ -
Risk and Contingency				$ -
Other				$ -
Subtotal	$ 18,430	$ -	$ -	$ 18,430
Indirect Capital Costs				
Indirect/Overheads (including benefits)	570			$ 570
Capitalized interest or AFUDC, if any				$ -
Subtotal	$ 570	$ -	$ -	$ 570
Total Capital Project Costs	**$ 19,000**	**$ -**	**$ -**	**$ 19,000**

Costs by Entity				Total
Direct Capital	19,000			$ 19,000
Indirect Capital				$ -
Removal net of salvage				$ -
Total Capital Project Costs by Entity	**$ 19,000**	**$ -**	**$ -**	**$ 19,000**

Technical Justification:

Project Need, Objective and Justification

In Connecticut, trees are the number one cause of outages during storm events. The risk posed by entire trees failing and impacting the conductors is not prevented by trimming alone. Hazardous trees that are dead, declining or structurally unsound are more likely to fail and result in customer outages and damage to infrastructure. Removing risk and hazard trees eliminates the chances of the tree causing an outage.

The ETR program removes trees that have the potential to impact the utility plant thereby extending the life of the plant. The ETR program meets the three tests for capitalization:

- Substantial investment towards asset life extension
- One time program cost as the activity can only be performed once
- Standalone program which will be budgeted, charged and tracked separately

Justification:

The 2025 Vegetation Management distribution program requires expenditures across Connecticut Eversource operating company to address hazardous and risk tree removals. These activities improve the system's ability to survive major storms with less extensive damage. This will improve reliability performance across the service area.

Risk Assessment:
The Company has made commitments to customers and regulators to improve reliability and system resiliency. In the case of CT, there are specific vegetation management program goals for ETR as part of the System Resiliency Program.

- CT PURA 12-01-10 specified risk tree removal and the recapture of Enhanced Tree Trimming (ETT) clearances on backbones and large laterals.

There are both operational and regulatory risks associated with a failure to approve this program. Operationally, there is an increased risk of more vegetation caused outages, both on normal days and during adverse weather. The Company is required to report on both maintenance costs and volume and risk/hazard tree removals on an annual basis. The Vegetation Management programs also receive intense scrutiny during storm cost recovery hearings and rate case proceedings, creating a regulatory risk for the Company.

Project Scope

Eversource arborists will evaluate circuits scheduled for scheduled maintenance in 2025 for hazard trees, with the focus on the backbone and large customer count laterals. The highest emphasis will be placed on prioritizing the first zone of distribution overhead out from the substation and vegetation at the substation itself. Evaluations will take into consideration the condition of risk and hazard trees, proximity to electrical infrastructure and potential customer impact. Eversource arborists will utilize a standardized framework for prioritizing tree risk into categories based on likelihood of failure and potential consequences, with each tree's risk being calculated and stored within ArcGIS ESRI Online mapping layers. The following list of circuit backbones will be patrolled for risk and hazard trees threatening reliability. Arborist patrols will begin in November 2024 to identify ETR work for January 1st 2025.

CIRCUIT NAME					
119	12H59	18P6	25G3	32P5	7A72
11A57	12J6	18P8	25L2	32R2	7A76
11A71	12J8	18P9	26N7	33M2	7A80
11A72	12N15	19Y2	27H7	35A10	7A82
11B62	12N18	1C02	27H9	35A11	7L82
11B63	12S3	1G16	27K7	35A7	7L84
11C13	12S6	1G20	27K9	35A8	8A2
11H72	12Y9	1G21	28A4	35L8	9L02
11H75	13B25	1G26	28F1	36F3	9L03
11J41	13B9	1G28	28F6	37F1	9L10
11J45	13F62	1K03	28M10	37F2	9P5

11K1	13F63	1K06	28M4	37F3	9S17
11K43	13F66	1K17	28M5	39E1	9S18
11K44	13H3	1Q02	28M6	3A03	9S19
11K45	13H4	1Q21	28M8	3A04	9S26
11K48	13H91	1Q6	28M9	3A06	9S42
11K49	13H93	20S2	2905	3A08	9S43
11K5	13H97	20Y2	29A1	3B02	
11K6	13H98	21H15	29A3	3B03	
11N81	13K1	21H8	2A11	3B07	
11N86	13K2	21M15	2A17	3B13	
11N89	13K48	21M2	2A2	3R02	
11R2	13S10	21U1	2A3	3R03	
11R51	13S5	21Y3	2H01	3R12	
11R52	13S9	22E32	2H03	42J1	
11R55	14A1	22M13	2H04	43F3	
11S13	14A53	22M15	2N05	43F6	
11S15	14L5	22M5	301G1	4403	
11W44	14M14	22M6	301G3	4404	
11W45	14N1	22M9	302P1	49S1	
11W47	14S32	22N1	308B4	49S2	
11W76	14S37	22N3	30A2	4A12	
11Y2	14W10	22N4	30K11	4A3	
11Y7	15C8	23J32	30K15	4A8	
120	15L6	23K17	30L28	4C12	
12A15	15L68	23N2	30R14	4C14	
12A16	15Q3	23N4	30R8	4C17	
12A18	15Q6	23R1	30Y10	4L09	
12A5	15U3	24F1	30Y8	4R08	
12B31	15U5	24F3	30Y9	4R09	
12B36	16M3	24H9	31C2	4R10	
12C48	16Q7	24J1	320P1	4R12	
12F4	16Q9	24J3	320P2	5L03	
12F42	17F1	24R1	320P3	5L04	
12F46	17F2	24R2	320P5	5R5	
12F52	18J1	25G1	32G8	5R7	
12H16	18P4	25G2	32P3	6A25	

Background

Connecticut is a densely forested state with an aging tree population that has been subjected to numerous stressors over the past decade. Invasive insects such as Emerald Ash Borer, Spongy Moth, Beech Leaf

Disease and others have resulted in widespread tree mortality. Environmental factors such as drought have further stressed Connecticut's trees. Dead, declining and trees with defects pose an increased risk to causing an outage during blue sky days and storm events. In addition to hazard trees, risk trees may be identified for removal based on their species, structure, lean and proximity to electrical conductors. Addressing risk and hazard trees along backbone distribution segments is one of the best ways to improve reliability and resiliency for Eversource's customers.

Alternatives Considered:

Were alternative solutions considered/applicable? Include any cost/benefit analysis.

Alternatives were considered (please describe below)

Eversource has delineated the benefits of enhanced tree removal programs to regulatory bodies in CT as an important component of the vegetation management program for both day-to-day reliability improvement and increasing system resiliency for adverse weather events. Additionally, the majority of our customer and community officials have come to appreciate the impact of these programs and expect the company to have robust line clearance efforts. The deferral of this proactive maintenance approach to address only specific instances of insufficient clearance runs counter to the goals of improved reliability and system resiliency.

Regulatory Approvals:

Are Regulatory body approvals needed for the project?
No

If yes, provide detailed regulatory approvals

Project Schedule

Milestone/Phase Name	Estimated Date
Arborist Backbone Surveys begin	November 2024
Project Start	01/01/2025
Assessment of Emergent Tree Issues	On-Going
Project Completion	12/31/25

Risks and Risk Mitigation Plans

List top risks and mitigation plans associated with this project. Include any contingency related to each risk. (Permitting/siting; environmental; outage constraints; customer/community outreach; material delivery; constructability challenges; excavation; etc.)

Future Financial Benefits:

If yes, provide a detailed explanation in the appendix section

No - project is not undertaken for financial benefits

References

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

Reference appendices items in the appropriate section of the PAF and list items in the same order as referenced in the PAF