Appendix 2
Operations Project Authorization Form

Operations Project Authorization Form

Project Title: Reliability Tree Removal (REL) Program	**Project Number: REL2024 (CTREL24)**
Date Prepared: 10/03/2023	**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:** Choose an item
Estimated in service date: 12/31/2024	**Emergency Related Request?** No
Eng./Constr. Resources Budgeted? No	**Facility Type** (check all that apply)**:** ☐ PTF ☐ non-PTF ☐ Distribution
Total Gross Capital Request: 14.8M	**Authorization Type:** Full Funding

Executive Summary

- An authorization of $14,800,000 is requested for the Connecticut Distribution Reliability Tree Removal (REL) capital project (id: REL2024) which is part of Eversource CT's annual distribution vegetation plan.

- The REL project focuses removal of trees in poor performing isolating device zones to improve system reliability and resiliency. The data driven selection of circuit segments is based on a weighted evaluation of customers interrupted (CI), customer minutes interrupted (CMI), cost per customer, and customer served at the isolating device level. Tree removals will be performed to obtain full clearance, remove hazard trees and higher risk trees, trees that are not hazardous but more likely to fail (due to species, lean or site conditions).

Appendix 2
Operations Project Authorization Form

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

Capital Costs	Year 2024__	Year 20__	Year 20__+	Total
Direct Capital Costs				
Internal Labor and Construction Equipment				
Outside Services	14,376.6			14,376.6
Materials				
Removals				
Risk and Contingency				
Other				
Subtotal – Direct Costs	14,376.6			14,376.6
Indirect Capital Costs				
Indirect/Overheads (including benefits)	423.4			423.4
Capitalized interest or AFUDC, if any				
Subtotal – Indirect Costs	423.4			423.4
Total Gross Capital Costs	**14,800**			**14,800**
Customer Contribution				
Total Net Capital Project Costs	**14,800**			**14,800**

Technical Justification:

The REL program removes trees that have the potential to impact the utility plant thereby extending the life of the plant. The REL 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 2024 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. 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 Need, Objective and Justification

Project Need

The Reliability Tree Removal (REL) project uses a data driven approach to target vegetation on poor performing circuit segments. While the Enhanced Tree Trimming (ETR) project is focused on removing risk and hazard trees along circuits scheduled for maintenance trimming in the current year, the REL project is designed to address emergent reliability concerns on circuits across Connecticut regardless of the scheduled circuit year.

Project Scope

The REL project will focus tree removals on circuit segments that are identified as poor performing. The REL specification seeks to obtain full 10 foot clearance through tree removals. Eversource arborists will also seek removal of hazard and risk trees outside the trim zone that are more likely to fail to due species characteristics or environmental factors. The reliability analysis for 2024 REL segment selection is in progress in coordination with engineering, system planning, and operations. The analysis will identify the 10 worst performing circuits in Connecticut and break down poor performing circuit segments by isolating device. Vegetation management and engineering will work together to evaluate specific segments on the 10 worst performing circuits to create recommendations on the most effective and cost-effective approach to improve reliability. Options may include vegetation-focused solutions, engineering-focused solutions, and combined approaches that include both vegetation management and engineering solutions. Proposed solutions will be presented for review and approval prior to an approach being selected for each poor performing segment selected for assessment.

Background

The REL project focuses tree removal efforts on circuit segments that have poor reliability. The isolating device segments are selected through a statewide analysis which considers the customers interrupted, the duration of events, the cost per customer and the total number of customers served downstream. In areas that have experienced repeat outages, removing trees to obtain full ground to sky clearance will result in greater reliability and resiliency benefits compared to maintenance trimming. Arborists also target hazard and risk trees that are outside the trim zone but due to their height and location pose significant risk to the overhead conductors. The combination of establishing full clearance and selecting risk and hazard trees to remove from outside the clearance zone will result in fewer tree caused outages along the poor performing circuit segment.

Alternatives Considered:

Alternatives were considered (please describe below)
One alternative is to only address poor performing areas through maintenance trimming which would not achieve the same overall reliability benefit. Failure to address vegetation issues or establishing ground to sky clearance along poor performing circuit segments would result in continued poor reliability for customers and negative impacts to Eversource reliability metrics and performance.

Eversource has delineated the benefits of 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:

No

Project Schedule

Milestone/Phase Name	Estimated Date
Work Scope and Segment Selection	On-going
Project Start	1/1/2024
Project Completion	12/31/24

Risks and Risk Mitigation Plans

References

Appendix 2
Operations Project Authorization Form

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

If the project has future financial benefits, please use the following table to provide the yearly amounts.

Financial Benefits	Year 20__	Year 20__	Year 20__	Year 20__
Capital				
O&M				
Other				
Total Financial Benefits				

Describe the estimated future Capital, O&M and/or Other benefits noted above:

What functional area(s) will these benefits be reflected in?_____

A representative from the respective functional area is required to be included as a project approver.