

Public Service Company of New Hampshire d/b/a Eversource Energy
2025 Vegetation Management Plan for review by the Department of Energy
November 15, 2024

Consistent with the terms of the Settlement Agreement in Docket No. DE 19-057, Public Service Company of New Hampshire d/b/a Eversource Energy (“Eversource” or the “Company”) is providing the Vegetation Management Plan (“VMP”) for calendar year 2025 for review by and discussion with the Department of Energy (DOE) staff.¹

As required by Section 6.2 of the Settlement Agreement, in November of each year, Eversource is to file a proposed vegetation management plan setting out the proposed vegetation management work for the next calendar year. That plan filing must include the following:

- A. A summary of budgeted costs by program (i.e., Hazard Tree Removal, SMT and ROW maintenance Mowing, and Side Trimming.)
- B. Detailed information on each program as follows:
 - i. Hazard Tree Removal: Total Circuit Miles by Division.
 - ii. SMT (Scheduled Maintenance Trimming, Mid-Cycle Trimming, Side Trimming and Customer Request, Hot Spot, and Maintenance ETT): Town; Circuit Number; Total Circuit Miles; and Scheduled Circuit Miles.
 - iii. SMT (ROW Maintenance Mowing and Side Trimming): ROW Number; ROW Name; Voltage; and Total Acreage; and the percentage of the clearing attributable to distribution if transmission ROW.

Included in the narrative below is a presentation of the proposed plan and estimated budgets using information known at this time. The detailed information on each program is provided at the end of the narrative and reflects the scheduled miles for the Company to maintain a five-year maintenance cycle, in line with the five-year cycle pruning requirements of the DOE’s rule En 307.07. This plan is based on the negotiated 2025 pricing with Eversource’s vendors.

Additionally, in the detailed plan noted below, the Company has included, where applicable, the relevant circuits and miles planned for 2025. Information of relevant circuits and miles planned not available at this time due to the evolving nature of those VM activities is noted with a to be determined (“TBD”) designation. The Company looks forward to discussing this plan with the DOE staff.

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2025 Projected Budget:

The table below provides a summary of the 2025 planned VMP gross budget of \$43.8 million excluding any reimbursements to be received from telecommunications service providers related to scheduled maintenance trim and hazard tree removal activities.

¹ In light of the transfer of much of the Commission's personnel and responsibilities to the DOE as of July 1, 2021, Eversource is providing this plan to the DOE staff instead of to the Commission's staff.

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Eversource 2025 Planned Vegetation Management (VM) Activities	
<u>VM Activity</u>	<u>Cost</u>
Scheduled Maintenance Trim	\$19,286,299
METT	\$1,998,566
Mid Cycle	\$300,000
Customer Request	\$500,000
Hot Spot	\$300,000
Sub Transmission (Mowing/Side Trim)	\$2,828,834
<u>Distribution SMT Total</u>	\$25,213,699
Hazard Tree Removal	\$18,586,301
<u>Vegetation Management Program Total</u>	\$43,800,000

Scheduled Maintenance Trimming (“SMT”) Program

The Company’s SMT cycle is based on a 12,000-mile distribution overhead system. The Company’s plan for 2025 is to have tree contractors perform maintenance (SMT and METT) on 2,275 miles. The budgets were constructed around that plan. The table immediately below shows the proposed SMT trimming dollars and miles. The other programs will also each have a respective table.

<u>Eversource SMT Miles</u>		
<u>Total Miles = 2,062</u>	<u>Region</u>	<u>2025 Miles</u>
Budget \$19,286,299	SOUTHERN	265.59
	CENTRAL	397.51
	WESTERN	677.6
	EASTERN	242.98
	NORTHERN	478.7
	<u>Total Annual Miles</u>	<u>2,062.38</u>

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Maintenance Enhanced Tree Trimming (“METT”) Program

METT is maintenance trimming performed on miles that were previously subject to Enhanced Tree Trimming (“ETT”). The amount of METT changes each year based on the circuit schedule. As with the SMT, this work was also part of the four-year contract that was put out to bid in 2024 and the budget and miles reflect the current pricing.

<u>Eversource METT Miles</u>		
<u>Total Miles = 213</u>	<u>Region</u>	<u>2025 Miles</u>
Budget \$1,998,566	SOUTHERN	51.82
	CENTRAL	31.43
	WESTERN	33.89
	EASTERN	29.96
	NORTHERN	65.58
	<u>Total Annual Miles</u>	<u>212.68</u>

Mid-Cycle

Mid-cycle refers to additional trimming that may be completed on a circuit in between the standard cycle under the SMT. This can include vine removal and hazard trees. This program is an emergent one. If the need arises to address circuit miles with this application, the Company will work within the allocated budget to redistribute these funds. In 2025, the Company plans on utilizing analytics such as Power BI to assist with this program. Circuit patrols will be performed by Company Arborists to determine vegetative growth since last trim, along with a windshield survey of tree health.

<u>Eversource Mid-cycle Miles</u>		
<u>Total Miles = TBD</u>	<u>Region</u>	<u>2025 Miles</u>
Budget \$300,000	SOUTHERN	
	CENTRAL	
	WESTERN	
	EASTERN	
	NORTHERN	
	<u>Total Annual Miles</u>	<u>TBD</u>

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Customer Requests

Customer Requests are generated or instigated to address an issue identified by a customer rather than as part of the scheduled or planned circuit miles. Most often, these are service trimming requests. The amount of Customer Request work changes every year. Eversource has encouraged customers through social media and the Company’s website to consider hiring professionals to handle their tree concerns. However, due to the prevalence of invasive insects and diseases in New Hampshire, the Company sometimes learns about problematic trees, or groups of trees, from customers themselves. The work needed to mitigate the issues posed by these trees is often performed by Eversource’s contractors. Eversource has estimated \$500,000 of expense related to customer work for 2025.

<u>Eversource Customer Request</u>		
<u>Total Miles = TBD</u>	<u>Region</u>	<u>2025 Miles</u>
Budget \$500,000	SOUTHERN	
	CENTRAL	
	WESTERN	
	EASTERN	
	NORTHERN	
	<u>Total Annual Miles</u>	<u>TBD</u>

Hot Spot Program

The Hot Spot program addresses tree growth in between cycles. The Company has not allocated funds for this program, and any proposed circuit miles have not yet been identified. This type of program can also be called “just in time” trimming. The Company will utilize Power BI, as well as the ESRI platform applications that are used to track tree-related outages. These two programs will help us to strategize and plan Hot Spot trimming when needed on impacted circuits.

<u>Eversource Hot Spot</u>		
<u>Total Miles = TBD</u>	<u>Region</u>	<u>2025 Miles</u>
Budget \$300,000	SOUTHERN	
	CENTRAL	
	WESTERN	
	EASTERN	
	NORTHERN	
	<u>Total Annual Miles</u>	<u>TBD</u>

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ROW Maintenance

The ROW maintenance program includes mowing and side trimming. The acres listed will be mowed. During the Quality Control inspection of the mowing, any tree limbs that are within 20 feet of the line will be noted and a crew will be sent to remove the limb(s).

<u>Eversource ROW Maintenance</u>		
<u>Total Acres = 1,447</u>	<u>Region</u>	<u>2025 Acres</u>
Budget \$2,828,834	SOUTHERN	234.41
	CENTRAL	211.74
	WESTERN	168.12
	EASTERN	454.99
	NORTHERN	407.95
	<u>Total Annual Acres</u>	<u>1,447.21</u>

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Hazard Tree Program

The Company profiles the SMT circuits for hazard trees. Hazard trees are trees that should be removed rather than trimmed due to their potential to impact the electric system. Our strategy is to remove the dead, diseased, and dying trees while trimming the circuit. The customers on whose property the hazard trees grow, and who, therefore, own the hazard trees, are engaged in a conversation for both programs. The total number of trees removed will be compiled monthly.

Additionally, the trees of New Hampshire have been impacted by many abiotic factors over the last several years. These issues include repeated drought years, Emerald Ash Borer (EAB), Spongy Moth, Hemlock Woolly Adelgid, Hemlock Looper, Elongate Hemlock Scale, White Pine Needle Disease (WPND), Beech Bark Disease, and Beech Leaf Disease; the residual effect of the listed factors, plus others, at this time, as well as lesser impact issues, will mean more trees that are standing dead or in declining health along the roadside forest. The Company believes that adherence to a maintenance cycle, along with an aggressive hazard tree removal program, are the key components to a successful and reliable vegetation management program. In 2022, the Company collaborated with the State of New Hampshire Forests and Lands to share mapping data. Forest health personnel shared aerial photography of Spongy Moth and EAB infestations. The maps that included the data were overlaid on our circuit maps, which we then used to target the affected trees that would impact Company lines. This is an innovation that Eversource vetted last year and is now included into our maintenance program. We expect to have similar 2024 data from the New Hampshire Division of Forest and Lands in December 2024.

<u>Eversource Hazard Tree Miles</u>		
<u>Total Miles = 2,275</u>	<u>Region</u>	<u>2025 Miles</u>
Budget \$18,586,301	SOUTHERN	317.41
	CENTRAL	428.94
	WESTERN	711.49
	EASTERN	272.94
	NORTHERN	544.28
	<u>Total Annual Miles</u>	<u>2,275.06</u>

2025 plan overview

There are several topics addressed in this program update. They are the contracted workforce, the 4-year contract (2025 will be year 1 of new contract), cost drivers, technology, and strategy.

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Eversource has experienced professionals managing its Vegetation Management programs. However, there are some longer-term concerns with the work force. There are very few programs in high school or college to attract students to Arboriculture/Forestry. This has had a direct impact on the work the Company does and the availability of trained individuals to do it, and, as has been seen in recent bids, has had a material impact on costs.

It is a difficult job performed in all types of weather, usually aloft. The salary for tree trimmers is not commensurate with many other professions. The tree worker contingent in both New Hampshire and New England has shrunk, which oftentimes requires the larger contractors to bring in outside workers to complete their assigned work. There are additional costs associated with “travel crews”. Another issue, which is hard to quantify monetarily, is the speed in which the travel crews get acclimated to New Hampshire trees, terrain, and weather. The workplan for 2025 includes six tree contractors which should provide a workforce large enough to complete the planned work.

As noted above, the Company recently completed a competitive request for proposals (RFP) process for a new 4-year contract for SMT in NH. The pricing was higher than expected. Eversource’s procurement agents worked diligently with the tree contractors to refine their bid prices. The final pricing in this competitive process resulted in similar pricing for the funding of the SMT and METT as compared to 2024. For the first two years of the new contract (2025, 2026), the prices are “locked in.”

One of the benefits of a multi-year contract is thought to be workforce stability. Whether it has been the pandemic, inflation, or other pressures that have caused contractors to struggle with obtaining a reliable roster of crews, the fact remains it is more expensive to contract for vegetation management than ever before.

Each contractor listed the same items for cost increase justification: labor, fuel, equipment, supply chain, and the biggest driver - police traffic control. The “police detail” work is the largest risk for the contractor when bidding because every town’s policy and charges are different. Factors include how many officers on each road, for what duration, do they require a cruiser, annual hourly rate increases, and charges that in some communities can approach \$125/hour per officer. One of our contractors suggested that they estimate over \$3,000/mile for police details in some towns.

These cost increases will result in manageable budget pressure regarding the SMT trimming program and allow Eversource to maintain the planned five-year trimming cycle. As noted, the recent contract pricing resulted in a significant increase in the costs associated with unit price hazard tree removal program; accordingly, the cost of performing the necessary hazard tree removals across the system will be impacted as will the total number of trees the program is able to remove in 2025. The Company’s vegetation management team continues to brainstorm solutions to that challenge by reviewing analytics, technology, equipment, and processes.

The New Hampshire team has utilized the ESRI platform to create mobile applications which streamline our work. ESRI tools are easy to use and modify and give the arborist team real-

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time access to maps, parcel data, and other pertinent information. We are confident that Company Arborists and contractor personnel will adapt to this technology quickly.

Power BI is a dashboard that pulls data from the outage management system that the Company Arborist team uses every week. The data about circuit performance is available both historically and in real-time. Tree reliability issues for each circuit are analyzed prior to sending crews out to trim and/or remove trees.

Both of the above programs will be part of redefining workloads and crew resources for the vegetation management team as necessary to achieve enhanced cost containment, where possible. Included in this approach will be a strategy to implement circuit patrols to identify areas of immediate need for maintenance. These patrols will focus on backbone circuits first, as a tree-related outage on backbone circuits would impact more customers. Arborists will also patrol the laterals of each circuit, starting with devices that have high customer counts. Maintenance will be performed on the proper miles to comply with the five-year cycle requirement; however, due to the significant hazard tree removal cost increases for contractors, the Company will utilize internal field personnel, vendor Arborists, and technology in concert to maintain the system.

Eversource has continued to look for solutions with different types of equipment in 2024. Three separate contractors brought mechanical trimmers (a/k/a Jaraff or SkyTrim) onto the system, which were utilized for selected miles of SMT. These units consist of a hydraulic boom mounted on a large tractor; at the end of the boom is an articulating circular saw. This tool works well in the right application, but it will probably not replace human occupied bucket trucks. Another new tool was a Rotor Blade helicopter unit. The helicopter has 10 saws attached to the helicopter and the unit can be used to “hedge/side trim” difficult-to-access ROW lines. The Company also contracted with tree companies for “grapple saw boom trucks” and “knuckle boom cranes.” All of those units have a future in New Hampshire as “work force multipliers.” The Company will continue to explore other tools and innovations as they become available to improve vegetation management in New Hampshire.

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Eversource 2025 Planned Vegetation Management Activities Detail

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