

STATE OF NEW HAMPSHIRE
BEFORE THE NEW
HAMPSHIRE PUBLIC UTILITIES COMMISSION

Docket No. DE 23-092

Unitil Energy Systems, Inc.

2024 Reliability Enhancement Program and Vegetation
Management Plan

Technical Statement of Jay E. Dudley

Department of Energy, Division of Regulatory Support

&

Joseph J. DeVirgilio and Ronald D. Willoughby

River Consulting Group, Inc.

April 5, 2024

On November 17, 2023, Unitil Energy Systems, Inc. (Unitil or the Company) filed its Reliability Program and Vegetation Management Program Plan – Fiscal Year 2024 with attachments (VMP or the Plan) with the Public Utilities Commission (PUC or Commission). On November 22, 2023, the Commission requested that the New Hampshire Department of Energy (DOE or Department) submit its analysis and recommendation for the Plan on January 30, 2024. On January 29, 2024, DOE requested, and the Commission granted, an extension of the filing date to March 15, 2024. Again on March 12, 2024, DOE requested, and the Commission granted, an extension of the filing date to April 5, 2024. The Department served data requests on Unitil on March 4, 2024, and Unitil responded on March 14, 2024. Follow-up data requests were provided to Unitil by email on March 19, and Unitil responded on April 3, 2024. In addition, on April 1, 2024, Unitil filed its 2023 Reliability Enhancement and Vegetation Management Plan (2023 VMP).¹ The Department has reviewed both the Plan and the Company’s data responses and recommends the Commission accept the 2024 VMP and grant conditional approval of the Plan and the projected Plan costs with final review of the actual costs to take place as part of the

¹ Because Unitil did not provide its 2023 VMP report until four days prior to the filing of the Department’s Technical Statement in this docket, the Department did not have sufficient time to perform an in-depth review of that report or develop any discovery questions for Unitil.

Commission's review of Unitil's annual External Delivery Charge (EDC) filing in 2025, as further explained below.

The Plan contains: a description of Unitil's proposed 2024 Vegetation Management Plan, an O&M budget for various VMP component programs, and the 2023 Reliability Studies for each of the Company's Capital and Seacoast systems which include reliability projects recommended by the Company.

Department Analysis

Upon reviewing Unitil's VMP and attachments, along with Unitil's discovery responses, the Department finds the following:

The five components that make up the Plan (circuit pruning, hazard tree mitigation, mid-cycle review, forestry reliability assessment, and storm resiliency work) form a complete approach to vegetation management and are intended to determine the optimal trimming cycle of five years. This approach is appropriate and consistent with industry practices. Circuit Pruning makes up the core component of any VMP. Hazard Tree Mitigation (HTM) is the next major component. This dual approach, based upon a reliability risk assessment, of integrating the mitigation with cycle trimming where possible or independent scheduling, appears to be a good attribute of the Plan and is also consistent with industry practices. The remaining three components of the VMP (mid-cycle review, forestry reliability assessment, and storm resiliency work) add a valuable assessment aspect. The addition of these components in the Plan is a recognition that trees can have an impact on system reliability performance and may require actions not addressed through normal planned cycle trimming. Mid-Cycle Review provides a periodic assessment of the results to date of the Plan and provides for a "mid-course correction," if necessary, to achieve the Plan's objectives. The Forestry Reliability Assessment component provides a reactive response in the Plan based upon tree related impact on system reliability performance. The Storm Resiliency Program (SRP) is the proactive component of the Plan focused on Unitil's critical circuits and the potential impact from the local tree conditions. Again, all of the measures undertaken by Unitil appear to be consistent and compliant with current industry practices.

In addition, the Department reviewed Unitil's evaluation of its reliability studies and reliability capital expenditures. DOE agrees with the common solutions listed by the Company for improving distribution system reliability such as adding reclosers/sectionalizes, installing tree wire/spacer cable, adding fuses, distribution automation, enhanced tree trimming, and annual pole inspection and replacement. Also, the use of CMI, SAIDI, SAIFI, and CAIDI indices to evaluate reliability performance for both SRP and non-SRP distribution circuits are critical components to measure the effectiveness of the VMP and consistent with IEEE industry standards.² Unitil's system-wide SAIDI and SAIFI performance indices have been on a downward trend since 2018,³ indicating reliability has been consistently improving, and

² IEEE 1366 – *Guide for Electric Power Distribution Reliability Indices*, September 21, 2022.

³ See Attachment 1, UES Capital Reliability Study 2023 at 2.

reliability improvement measures are being effectively deployed. Specific circuit reliability performance issues (worst performing feeders) and recommended corrective actions are detailed in the reliability report,⁴ and are consistent with typical industry practices.

The Department compared details of the 2024 VMP Table 1, 2024 VMP O&M Activities Cost Proposal, with the actual results of the Company’s 2022 and 2023 Plan. Notable differences in costs include increased projected costs for Cycle Prune, Mid-Cycle Review, Sub Transmission, and Reliability Enhancement, culminating in a total cost increase of approximately \$1.3 million over actual costs experienced in 2023.⁵ Unutil attributes the increases in part to costs needed to complete cycle pruning and hazard tree mitigation, components that experienced significant cost escalation in 2022 and are projected to continue for 2024. The Company identified ongoing factors that include contractor labor shortages and the impact of inflationary pressures. Unutil used a 3% inflation factor in projecting cycle pruning in its 2024 budget and a 5% factor projecting hazard tree costs.⁶ Historically, these costs have been partially offset by third-party reimbursements and Unutil represents that there have been no contractual changes that will impact those reimbursements in 2024.⁷ As an apparent result of these increases, total miles to be completed have trended downward for some key areas in 2024 as follows:⁸

<u>Category</u>	<u>Miles 2022</u>	<u>Miles 2023</u>	<u>Miles Projected 2024</u>
Cycle Pruning	263.7	226.8	225
Mid-Cycle	129.4	69.6	75.3

The Department remains concerned about the continued uptrend in VMP costs since Unutil’s last rate case in DE 21-030, particularly given that the Settlement Agreement in that case attempted to set some parameters around VMP spending.⁹ The Company’s request for recovery of those costs in rates occurs annually with the filing of their Stranded Cost Recovery and External Delivery Charge Reconciliation petition. Unutil’s currently approved tariff provides for any final over- or under- collection of VMP expenses to flow through the EDC.¹⁰ Unutil’s upcoming 2023 EDC filing is subject to audit by the Department’s Audit Division which will

⁴ *Id.* at 10-24.

⁵ See Attachment JED-RCG-1, Data Request DOE 1-2, Attachment 1.

⁶ See Plan at 4 and Attachment JED-RCG-2, Data Response DOE 1-5.

⁷ See Attachment JED-RCG-1, Data Request DOE 1-2, Attachment 1. Unutil responded to DOE’s follow-up question that no changes in third-party reimbursements were anticipated for 2024.

⁸ See Attachment JED-RCG-3, Data Response DOE 1-4. Miles Completed for 2023 are provided in the 2023 VMP at 5-7.

⁹ Docket No. DE 21-030, Exhibit 12, Settlement Agreement, at Bates 16-17.

¹⁰ See Unutil Energy Systems, Inc approved Tariff No. 3 Nineteenth Revised Page 66 for Schedule EDC – External Delivery Charge which includes “In addition, the EDC shall include the calendar year over- or under-collection from the Company’s Vegetation Management Program, Storm Resiliency Program and Reliability Enhancement Program, including third party reimbursements. The over- or under- collection shall be credited or charged to the EDC on May 1 of the following year, or, with approval of the Commission, the Company may credit unspent amounts to future Vegetation Management Program expenditures.”

include a review of VMP expenditures. The Department believes that the audit will inform the Department's review of the issues associated with the VMP cost escalations occurring not only in 2023 but also projected for 2024. As a result, the DOE will make its recommendation on the 2023 costs to the PUC in that upcoming proceeding when the audit is completed, and DOE has had an opportunity to review the audit report in detail.

Department's Recommendation

Based on the Department's review of the Company's filing outlined above, and the additional information obtained through discovery, the Department concludes that Unitil's VMP is complete in terms of implementation and stated objectives and is consistent with current industry standards. However, the cost escalations related to certain components of the Plan remain an area of concern for the Department. Therefore, the DOE recommends PUC approval of Unitil's 2024 VMP be conditioned upon satisfactory review and approval of actual Plan costs in the Company's 2025 EDC proceeding.