

2.2 2021 VMP Estimated Expenditures and Work To Be Completed

Table 1 depicts the 2021 VMP expenditures by activity and the estimated proposed VMP activity details. Unitil proposes to spend \$4,499,476 on VMP activities and another \$1,465,690 on vegetation storm resiliency, explained in more detail below, for a total of \$5,965,166.¹ This amount includes the required work to complete the known minor sub-transmission carry over from 2020, discussed further in this document. The major cost drivers when comparing 2020 proposed cost to 2021 are a 5% increase in cycle pruning and hazard tree mitigation, and a 3% increase in all other activities, driven largely by cost of labor increases due to rising costs of employment and workforce retention. **Table 1 was modified to include a 2021 Cost Update. After receiving bid responses, adjusting traffic control due to labor increases, and correcting VM Staff costs, there is a \$237,671 total increase.**

Table 1

2021 VMP O&M Activities Cost Proposal		
VM Activity	2021 Cost Proposal	2021 Cost Update
Cycle Prune	\$ 1,564,500	\$ 1,746,507
Hazard Tree Mitigation	\$ 840,000	\$ 840,000
Forestry Reliability Work	\$ 25,603	\$ 25,603
Mid-Cycle Review	\$ 115,360	\$ 115,360
Brush Control	\$ -	\$ -
Police / Flagger	\$ 545,385	\$ 619,515
Core Work	\$ 154,500	\$ 154,500
Distribution Total	\$ 3,245,348	\$ 3,501,485
Sub-T	\$ 616,584	\$ 620,069
Substation Spraying	\$ 11,352	\$ 13,431
VM Staff	\$ 389,162	\$ 364,491
Program Total	\$ 4,262,446	\$ 4,499,476
Storm Resiliency Program (SRP)	\$ 1,465,690	\$ 1,465,690
Grand Total	\$ 5,728,136	\$ 5,965,166

Tables 2 through 6 provide more detail on each of the VMP activities planned for 2021. The activities include 223 miles of cycle pruning (Table 2), 85.8 miles of hazard tree mitigation (Table 3), 3.7 miles of forestry reliability work (Table 4), 36.4 miles of mid-cycle pruning (Table 5), and 18.3 miles of sub-transmission clearing (Table 6). The sub-transmission clearing includes \$72,744 of carry-over work

¹ This figure is as of **January 28, 2021** and is a best estimate which does not include final pricing for 2021 SRP work, as SRP work is being planned, not yet out to bid, and contracts are not yet finalized. This amount includes the identified minor carryover of work from 2020 to 2021 known as of this date and does not include any carryover that could arise from a disruptive storm event, loss of workforce due to pandemic, or other work interruption before the end of the year.

2.3. 2021 Vegetation Management Storm Resiliency Program Planned

For 2021, storm resiliency work on 37.6 miles of line in the Capital service area is proposed, at a total cost of \$1,465,690.

Table 7

2021 SRP Planned Work Details		
Circuit	Overhead Miles	Scheduled Miles
E2X3	13.7	7.2
E21W1	29.8	8.7
E2X2	19.7	12.9
E11X2	11.9	6.6
E20H1	4.5	2.2
Total		37.6

3. Reliability O&M Expenditures

The Company has allocated \$300,000 to Reliability O&M expenditures for enhanced tree trimming. The Enhanced Tree Trimming funding is intended to target “problem” areas identified through engineering analysis.

3.1. Enhanced Tree Trimming

Each year, the Company completes reliability analysis on the distribution and subtransmission system. The reliability analysis identifies areas of the system which have experienced an abnormal or increasing amount of tree related outages in the previous year. Distribution Engineering provides the System Arborist a prioritized list of recommended subtransmission lines and/or distribution circuits which would benefit the most from enhanced tree trimming.

For 2021, once the reliability analysis information is completed for 2020, Distribution Engineering will recommend the areas of line to be worked. The work is budgeted not to exceed \$300,000.

4. Reliability Planning and Performance

The Reliability Program covers capital and O&M activities and projects intended to maintain or improve the reliability of the electric system including: (1) system hardening measures, i.e., equipment upgrades; installation of additional fuses, sectionalizers and reclosers; SCADA and automation projects; improvements to lightning protection; installation of animal guards; and other activities to mitigate the