

**Reliability Enhancement Plan (REP)
and Vegetation Management Plan
(VMP) for Calendar Year 2013
(April 1, 2013 – December 31, 2013)**

January 30, 2013

**Submitted to:
New Hampshire
Public Utilities Commission**

Submitted by:



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Introduction

Granite State Electric Company d/b/a Liberty Utilities (“Liberty Utilities” or the “Company”) is submitting its proposed Reliability Enhancement Plan (“REP”) and Vegetation Management Plan (“VMP”) for the stub-calendar year 2013, April 1, 2013-December 31, 2013. The REP and VMP are being implemented by Liberty Utilities in order to improve the Company’s reliability performance and target such performance to historical levels that existed prior to 2005.¹

Section 1: Proposed O&M Budget

The proposed operating and maintenance (“O&M”) budgets for REP and VMP activities for fiscal year 2013 are shown below in Tables 1 and 2 respectively. For previous National Grid based fiscal years 2009 through 2013, the base O&M budget for REP and VMP has been \$1,360,000. With the support of Staff, the Company spent in excess of the base amount over the past three years to accelerate the removal of hazard trees. For the nine remaining months of calendar year 2013 (the “Stub-Calendar Year”), Liberty Utilities proposes to spend \$1,238,200, which is above the base amount and a pro-ration of the amount spent for the first three months of 2013. The Company is requesting an O&M budget at this higher level to reflect our continued commitment to hazard tree removal, sub-transmission right of way side clearing in the Salem area, and, specific to this year’s plan, vegetation management in underperforming areas.

The spending proposed for Stub-Calendar Year 2013 is necessary to fund the REP and VMP programs required to achieve the targeted reliability performance that existed prior to 2005. The Company’s reliability performance has been on an improving trend due to the REP

¹ Historical performance level is defined as average SAIDI and SAIFI performance over the period 1996 to 2004, plus one standard deviation, excluding storms that meet the IEEE criteria. The goal by the end of fiscal year 2013 is to achieve average SAIFI of 1.8 and average SAIDI of 126.

and VMP programs. It is important that the Company maintains its focus on REP and VMP programs to sustain this improving trend.

The O&M related to proposed capital projects is necessary to support the capital construction proposed in the Plan. This O & M includes vegetation management in underperforming areas as detailed below and in Appendix 2. Hazard tree funds, which are included in the Vegetation Management budget, will be used to remove hazard trees along poor performing portions of some feeders that have experienced repeated interruptions due to tree problems. In some instances, these funds will be used to remove hazard trees which are further from the substation than what traditional EHTM would capture. Further details about the proposed O&M and Vegetation Management activities are set forth in Appendix 1.

Table 1. Proposed REP O&M Activities

Activities	CY 2013 Budgeted Expenses
O&M related to Capital Expenditures	\$67,000
Total	\$67,000

Table 2. Proposed VMP O&M Activities²

Activities	FY 2014 Budgeted Expenses
Spot Tree Trimming	\$47,400
Trouble and Restoration Maintenance	\$47,400
Planned Cycle Trimming	\$584,500
Cycle Trimming Police Detail Expenses	\$68,000
Hazard Tree Removal	\$300,000
Interim Trimming	\$45,900
Tree Planting	\$800
Other Police Detail Expenses	\$17,200
Sub-transmission Right of Way Clearing	\$60,000
Total	\$1,171,200

² Budget items included in Table 2 are based on work price estimates.

Section 2: Proposed Capital Investment Budget

Liberty Utilities has also included a capital investment budget of \$661,000 reflecting actual capital closed to plant and removal costs, as part of its Stub-Calendar Year 2013 plan. As has been noted in previous plan filings, there is a lag from the time in which costs are incurred and when assets are recorded as in-service, and this lag can span fiscal years. This occurs since costs are incurred as capital work progresses, while the plant records are updated once the work is complete, placed into service, and processed through the accounting system. This lag is what accounts for the difference in the capital budget. Capital investment projects proposed for 2013 as part of the REP are shown below in Table 3. Details about these projects are set forth in Appendix 2. The significant portion of this budget is targeted towards the re-conductoring of bare mainline primary conductor with spacer cable in tree outage prone areas that are too costly to rely on vegetation management practices alone to mitigate feeder lockouts. A second grouping of funds is directed towards the installation of single phase reclosers and “Trip Saver” cutout mounted reclosing devices. Lastly, funding is also requested for mitigation of underperforming areas that have a history of tree, deterioration, animal, or lightning caused outages. As both the single phase recloser applications and Trip Saver applications are new for the Company, we may need to make modifications in type and application of these devices as final engineering and design is completed. The Company will discuss any changes to this plan with the PUC staff in a timely manner. The Company has estimated the plant in-service for all of these programs for stub-calendar year 2013 in Table 3.

Table 3. Proposed REP Capital Investments

Projects	Goal	CY 2013 Capital Investment Budget	FY2014 Estimated Capital Investment Closed to Plant (FERC 101/106/108³)
Single Phase Reclosing Applications	1	\$50,000	\$56,000
Single Phase Trip Saver Applications	2	\$30,000	\$34,000
Underperforming Area Mitigation	2	\$100,000	\$112,000
Bare Conductor Replacement	1.0 mile	410,000	\$459,000
Total		\$590,000	\$661,000

Section 3: Potential Rate Impacts

As previously indicated, for Stub-Calendar Year 2013, the Company is proposing to spend \$661,000 on capital, including removal, which has an associated incremental revenue requirement of \$84,367. The Company is also proposing an O&M budget of \$1,238,200 for Stub-Calendar Year 2013 which has an associated incremental revenue requirement of \$290,933.

As proposed in the Verified Petition, the Company would make its reconciliation filing with the Commission on February 15, 2014 to show actual O&M and capital expenses incurred from implementing the REP and VMP for the Stub-Calendar Year 2013. Actual expenses incurred by the Company in implementing the O&M components of the annual REP and VMP would be reconciled to the proposed O&M amount of \$1,238,200. In addition, the revenue requirement associated with capital expenses incurred as part of the REP would be included in a

³ Capital Investment (FERC 101/106/108) includes both plant in service and cost of removal closings.

Capital Investment Allowance which the Company proposes to be adjusted annually at the same time as the O&M expense.

Conclusion

The Company believes that implementation of the REP and VMP programs described in this plan is necessary to ensure that the Company remains on its current path targeted to restoring reliability performance back to historical levels. These programs have contributed to actual performance improvement seen in recent years, and the Company is committed to sustaining this improvement.

Appendix 1

VMP O&M Details

Fiscal Year 2013 VMP Details

<u>Activities</u>	<u>FY 2013 Program Details</u>
Spot Tree Trimming	As needed
Trouble and Restoration Maintenance	As needed
Planned Cycle Trimming	134.19 (adjusted for stub-CY13)
Cycle Trimming Police Detail Expenses	As needed
Hazard Tree:	As needed
Interim Trimming	As needed
Tree Planting	As needed
Subtransmission Right of Way Clearing	4.97 Miles (see below)
Other Police Detail Expenses	As needed

Fiscal Year 2013 Planned Cycle Trimming Details

District	Substation Name	Feeder	Overhead Miles	CY13 Target
Lebanon	Monroe #15	15H1	12.46	12.46
Lebanon	Mount Support #16	16L2	4.52	4.52
Lebanon	Hanover #6	6L4	1.21	1.21
Charlestown	Vilas Bridge #12	12L1	132.15	87.40
Salem	Pelham #14	14L1	28.60	28.60

Fiscal Year 2013 Sub-Transmission Clearing Details

District	Feeder	Substation Name	Miles
Salem	2352 Line MA S/L to Barron Ave. to Salem Depot	Barron Ave. #10	3.15
Salem	2393 Line MA S/L to Barron Ave.	Barron Ave. #10	0.89
Salem	2376 MA S/L to Spicket River	Spicket River #13	0.93

Definitions

Augmented Tree-Trimming and Clearing: This program involves the removal of hazard trees and limbs beyond what is normally included in tree trimming to reduce the risk of interruptions on the overhead distribution system. In addition to removing dead, dying, and damaged limbs from above the conductor, we also increase overhead clearances to fifteen feet outside of residential areas. This additional work is integrated into routine scheduled trimming program to create a more aggressive approach to removing tree hazards and overhang.

Spot Tree Trimming:

This captures all charges for field follow up, review and execution of corrective action required, if any, to mitigate vegetation management concerns requested or reported by a customer.

Trouble and Restoration Maintenance:

This captures all charges for response and corrective action to mitigate isolated tree related trouble, overhead line requests to mitigate tree related trouble and storm responses not covered by a storm specific charge number.

Planned Cycle Trimming:

This captures all charges for annual fiscal year planned cycle pruning activities but does not include police detail expenses.

Cycle Trimming Police Detail Expenses:

This captures all charges for police detail expenses associated with annual planned cycle trim and tree removals.

Tree Hazard Removal:

This captures all charges for removal of dead, dying and/or structurally weak trees, limbs and leads.

Enhanced Hazard Tree Removal –EHTM: captures all charges for the hazard tree removal program directed at improving reliability of on and off cycle poor performing circuits based on

removing dead, dying and/or structurally weak trees, limbs and leads on the three phase portions of those targeted circuits using a Customer Served approach beyond each major reliability device point including the lockout section or station breaker to the first reliability device.

Interim Trimming:

This captures all charges for mitigation of tree conditions that threaten reliability of one or more sections of primary conductor on a circuit or circuits not contained in the current fiscal year's annual plan of work.

Tree Planting:

This captures all charges for tree replacements in exchange for tree removals of full clearance, tree replacement to remediate property owner complaints, trees planted for Arbor Day events.

Sub-transmission Right of Way Clearing:

This captures all charges for activities related to cutting, clearing, herbicide application and danger tree removal on substation supply lines up to 46 kV.

Other Police Detail Expenses:

This captures charges for all O&M police detail expenses not associated with Planned Cycle Trim.

Appendix 2

REP Capital Investment and O&M Descriptions

Specific details regarding components of the fiscal year 2013 Capital and related O&M budget for REP are listed below.

Program / Feeder	Description of Capital Work	Estimated Capital Cost	Estimated Capital Related Expense Cost
Villas Bridge 12L2 Single Phase Reclosers	Replace one Form 3 vintage 3-phase recloser application with three 1-phase reclosers on Prospect Hill.	\$50,000	\$4,000
Pelham 14L1 Single Phase Trip Savers	Install two 3-phase trip saver cutout installations in Marsh Rd and Dutton Rd. both in Pelham.	\$30,000	\$2,200
Villas Bridge 12L2 and Spicket River 13L2 Underperforming Area Mitigation	Install mitigation on two underperforming areas, Zion Hill Rd. in Salem and Acworth Rd. in Walpole. Mitigation includes protection application, asset replacement, and stepdown transformer upgrade.	\$100,000	\$8,000
Spicket River 13L1 Bare Conductor Replacement	Reconductor 1.0 mile of bare mainline conductor with spacer cable on 13L1 from the Substation to p.54 North Main St.	\$410,000	\$32,800
Total		\$590,000	\$47,000

Activities	CY 2013	CY 2013	CY 2013
	Capital Related O&M Expenses	Veg. Mgmt. Expenses	Total O&M Expenses
Villas Bridge 12L2 Single Phase Reclosers	\$4,000	\$0	\$4,000
Pelham 14L1 Single Phase Trip Savers	\$2,200	\$0	\$2,200
Villas Bridge 12L2 and Spicket River 13L2 Underperforming Area Mitigation	\$8,000	\$20,000	\$28,000
Spicket River 13L1 Bare Conductor Replacement	\$32,800	\$0	\$32,800
Total	\$47,000	\$20,000	\$67,000