

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty

DE 21-049

Reliability Enhancement Program and Vegetation Management Program – Calendar 2020
Annual Report and Reconciliation and Rate Adjustment

Staff Data Requests - Set 1

Date Request Received: 4/1/21
Request No. Staff 1-1

Date of Response: 4/12/21
Respondent: Joel Rivera
Anthony Strabone
Heather Green

REQUEST:

Re: Testimony of Heather Green, Joel Rivera, and Anthony Strabone, dated March 15, 2021 at Bates 14, and Attachment A at Bates 22. Please provide the following information involving the Bridge Street bare wire replacement project:

- a. A detailed explanation describing the causes for the increase in per mile costs from the estimated \$380,000 to \$778,162, including material charges and tree trimming costs.
- b. The detailed original estimate of the project used to prepare the costs estimated in the 2020 proposed REP plan.
 - i. Indicate and quantify where the increased material and labor costs occurred by each major installation i.e. pole sets, tree trimming, installation of spacer cable.
- c. If one of the purposes of the bare wire replacement program is to reduce tree trimming costs and reduce the overall trim zone (6' open wire vs. 2' spacer cable footprint) why were tree trimming costs of \$117,000 incurred for this project?
- d. Business Case.
- e. Change Order Forms.
- f. Work orders and work order detail related to the Bridge Street project including work order #301946-01003.
- g. Project Closeout Report.

RESPONSE:

- a. The Company reduced the amount of bare wire replacement to offset a higher than expected investment in the Bridge Street project. The higher costs for the Bridge Street project were driven by increased per mile costs, increased material charges, and total tree trimming costs.

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The following is a summary of the drivers that led to an increase in per mile costs from the estimated \$380,000 to an actual of \$778,162:

- An estimated \$380,000 per mile was used in the REP proposal to estimate the costs associated with the Bridge Street project. The Company later increased this estimate to \$450,000 per mile after a review of recent and similar completed jobs, but this change occurred after filing of this REP proposal.
 - The original investment grade estimate also assumed a total distance of 1.2 miles and did not include the installation of a new loadbreak switch to allow better sectionalizing and switching flexibility in the area. The installation of the loadbreak switch resulted in an increase of approximately \$30,000. Upon completion of detailed engineering design, review of contractor bids, tree trimming estimates, contractor oversight and traffic control, the actual cost per mile estimate was updated to \$510,352 and the total distance was corrected to 1.38 miles.
 - Actual direct contractor labor charges increased by \$6,841 after the Town of Salem requested the Company to relocate facilities along Bridge St to support a road improvement project.
 - Actual direct contractor oversight charges increased by \$4,258 which was more than anticipated.
 - Actual direct traffic control charges increased by \$16,744. The original estimate assumed that two officers would be used but at certain times three officers were needed to safely route motorists through the construction zone.
 - Actual direct tree trimming charges increased by \$77,479 which was more than anticipated.
 - Actual direct material charges increased by \$71,492, mainly due to rising material costs.
 - Actual direct internal labor increased by \$3,085 which was more than anticipated.
 - Additional direct environmental consulting services were required to support this job and resulted in an increase of \$4,178.
 - The increase in these direct charges listed above resulted in a total increase of \$44,172 of indirect burden charges.
 - The increase in these direct and indirect charges listed above totaled \$228,248 and resulted in a total actual spend of \$933,800 or \$676,667 per mile for 1.38 miles of reconductoring. This amount per mile is different from the \$778,162 amount listed in the direct testimony of Heather Green, Joel Rivera, and Anthony Strabone, dated March 15, 2021, at Bates 014, Line 7, because this figure assumes 1.2 miles of reconductoring.
- b. Please refer to a. above.
- c. The purpose of the bare wire replacement program is not to reduce tree trimming cost or to reduce the overall trim zone. The correlating vegetation and reconductoring related goals are to reduce tree caused interruptions in tree outage prone areas where it is too costly to rely on vegetation management practices alone.

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Through the improved configuration, narrowing footprint and insulation, circuit performance is improved given the protection gained against incidental tree contact at the end of the trim cycle and contact resulting from branches falling from above or outside the trim zone.

The Puc 307.10 clearance corridor is the same, 15', 8', and 10' regardless of the line type, configuration, insulation, or age. The clearance corridor is not reduced for new construction. New construction often creates a new corridor as we are upgrading to taller poles. Taller poles means a new corridor in a taller location and often means tree removals to create this corridor. The clearance corridor require 8' to the primary whether it is located on a cross arm or at the pole in spacer configuration.

- d. Refer to Attachment Staff 1-1.d.pdf for business case and capital project expenditure form.
- e. See Attachment Staff 1-1.d.
- f. Refer to Attachment Staff 1-1.f.xlsx for work orders and work order detail related to the Bridge Street project including work order #301946-01003.
- g. See Attachment Staff 1-1.d.



Capital Project Business Case

2020

NOTE: This form is required for planned Growth, Regulatory Supported, and Discretionary projects as well as combined blanket projects for Safety and Mandated with Growth, Regulatory Supported, and Discretionary Projects with a spend greater than \$100,000 and all unplanned projects. All other Project types can utilize the Capital Expenditure Application Form.

Project Overview			
Project Name:	Bare Conductor Replacement Program	Date Prepared:	1/30/2020
Project ID#:	8830-2046	Cost Estimate:	\$1,700,000
Project Sponsor:	Charles Rodrigues	Project Start Date:	1/1/2020
Project Lead:	Anthony Strabone	Project End Date:	12/31/2020
Prepared By:	Joel Rivera	Planned or Unplanned Projects:	<input checked="" type="checkbox"/> Planned <input type="checkbox"/> Unplanned
Project Type (click appropriate boxes):	<input type="checkbox"/> Safety <input type="checkbox"/> Mandated <input type="checkbox"/> Growth <input checked="" type="checkbox"/> Regulatory Supported <input type="checkbox"/> Discretionary		
Spending Rationale:	<input type="checkbox"/> Growth <input checked="" type="checkbox"/> Improvement <input type="checkbox"/> Replenishment		
Project Scope Statement			
(Insert the scope of work, major deliverables, assumptions, and constraints)			
<p>This strategy replaces primary overhead bare conductors with 477 aluminum spacer cable in areas prone to tree contact. Overhead line sections between the substation and the first protective device (Zone 1) are prioritized. Reconductoring beyond the first protective device (Zone 2) will be considered and prioritized based on reliability performance.</p> <p>In 2020 the scope of this strategy includes the replacement of approximately 4 miles of bare wires along Bridge St Salem, Nashua Rd Pelham, Burns Rd Pelham and Mammoth Rd Pelham.</p>			
Background			
(Insert description of current operational arrangement, and brief history of project & asset)			
<p>Bare mainline primary conductors are targeted for replacement with spacer cable. Spacer cable is installed in areas prone to tree outages that are too costly to rely on vegetation management practices alone to mitigate feeder lockouts and frequent interruptions. The application of spacer cable, a covered conductor resistant to tree related outages, significantly improves mainline circuit performance during windy and stormy conditions as well as affording protection against incidental tree-conductor contact at the end of the trim cycle and contact resulting from branches falling from above the trim zone.</p> <p>This project is part of the reliability enhancement program and is consistent with the requirements to the Settlement Agreement in Docket No. DE 13-063 (the "Settlement Plan") that was approved by the Commission in Order No. 25,638 (March 17, 2014).</p>			
Recommendation/Objective			
(Insert the unique problem this project is looking to resolve)			
<p>The main objective of this strategy is to improve storm resiliency and improve or maintain reliability performance of the Company by minimizing tree related interruptions on the circuit mainline.</p>			
Alternatives/Options			
(Describe all reasonably viable alternatives. Discuss the viability of each and provide reasons if rejected)			
<p>Do Nothing – This option is not preferred given the regulatory impact of not complying with REP commitments.</p> <p>Other bare conductor areas where considered but ultimately rejected given the higher benefit of reliability estimates for preferred reconductoring candidates.</p>			
Financial Assessment/Cost Estimates			



Capital Project Business Case

2020

(Double click embedded excel file to update; include contingency allowance in excel file)

Next Anticipated Test Year	2021	Was this Capital Project included in the current year's Board Approved Budget?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Regulatory Lag (Click appropriate box)	<input type="checkbox"/> Less than 6 Months <input type="checkbox"/> 6-12 Months <input checked="" type="checkbox"/> 1 to 3 years <input type="checkbox"/> Greater than 3 years		

Category	Total Already Approved	2020	2021	Beyond 2021	Total
Internal Labor		\$50,000			
Materials		\$550,000			
Equipment					
Contractor/ Subcontractor		\$1,100,000			
Burden					
AFUDC					
Total Project Cost		\$1,700,000			

Unlevered Internal Rate of Return: [Click here to enter text.](#)

Basis of Estimate: *This estimate is of investment grade. A conceptual grade estimate will be provided upon completion of detailed design. Estimates are based on historical program spend.*

For materials, equipment, and construction requiring Engineering drawings please specify the percent complete:

Schedule (List key milestone dates)

Key Milestone Description	Forecast Start Date	Forecast End Date
Detailed Design Bridge St	1/1/2020	3/1/2020
Detailed Design Nashua Rd	3/1/2020	5/1/2020
Detailed Design Burns/Nashua Rd	5/1/2020	7/1/2020
Construction Bridge St	5/1/2020	8/1/2020
Construction Nashua Rd	7/1/2020	10/1/2020
Construction Burns/Nashua Rd	8/1/2020	11/1/2020

Risk Assessment (Please describe the risk of not completing the project)

Maintaining a favorable relationship with state regulators is important to the Company's future success. Poor performance as measured by reliability goals and customer complaints to the regulator stresses this relationship and results in reduced credibility. This project has a risk score of 42.

Trade Finance (Is there a possibility to apply trade finance products to this project? See Capital Planning for further clarification)

Unknown



Capital Project Business Case

2020

Supporting Documentation
(Reference drawings, condition assessment reports, vendor quotations, etc. Attach document or where possible include hyperlink to file located on shared server or SharePoint)
Refer the Settlement Agreement in Docket No. DE 13-063, as modified in Docket No. DE 16-383. Please reference the following supporting documents: Reliability Enhancement Plan and Vegetation Management Plan for Calendar Year 2020 Bridge St.pdf Burns-Mammoth Rd.pdf Nashua Rd.pdf 2020 REP Projects - Outage History and Reliability Benefits.pdf

Approvals and Signatures¹

Approved By:				
Role	Approval Authority Limit	Name	Signature	Date
Manager / Staff (requisitioner/buyer):	Up to \$25,000	Anthony Strabone <i>Manager, Electric Engineering</i>		03/04/2020
Senior Manager :	Up to \$50,000			
Senior Director/Director:	Up to \$250,000	Charles Rodrigues Director, Engineering		2/25/2020
Senior Vice President/ Vice President	Up to \$500,000	Richard MacDonald Vice President, Operations		2/24/2020
State President:	Up to \$500,000	Susan Fleck President, NH		2/26/2020
Regional President:	Up to \$3,000,000	James Sweeney President, East Region		2/26/2020
Corporate - Sr VP Operations:	Up to \$5,000,000			
Corporate - Exec Team Member (CEO, CFO, COO, Vice Chair):	Over \$5,000,000			
Finance (East) – Vice President, Finance & Administration	All Requests	Peter Dawes VP, Finance & Administration		

¹ Approvals for work orders and purchase orders are subject to the limits set forth in the Approval Limits of Authority Policy owned and amended from time to time by the corporate procurement group.



Capital Project Expenditure Form

2020

Project Name:	Bare Conductor Replacement Program		
Financial Work Order (FWO):		Project ID #:	8830-2046
Requesting Region or Group:	Granite State Electric Co.	Date of Request (MM/DD/YY):	1/10/2020
Project Sponsor:	Charles Rodrigues	Project Start Date:	1/1/2020
Project Lead:	Anthony Strabone	Project End Date:	12/31/2020
Prepared by:	Joel Rivera	Requested Capital (\$)	\$1,700,000
Planned or Unplanned Projects:	<input checked="" type="checkbox"/> Planned <input type="checkbox"/> Unplanned		
Project Type: (Click appropriate boxes)	<input type="checkbox"/> Safety <input type="checkbox"/> Mandated <input type="checkbox"/> Growth <input checked="" type="checkbox"/> Regulatory Supported <input type="checkbox"/> Discretionary		
Spending Rationale:	<input type="checkbox"/> Growth <input checked="" type="checkbox"/> Improvement <input type="checkbox"/> Replenishment		

Details of Request

Project description
This strategy replaces primary overhead bare conductors with 477 aluminum spacer cable in areas prone to tree contact. Overhead line sections between the substation and the first protective device are prioritized. In 2020 the scope of this strategy includes the replacement of approximately 4 miles of bare wires along Bridge St Salem, Nashua Rd Pelham, Burns Rd Pelham and Mammoth Rd Pelham.

Is this project growth or customer connection related? If "yes", list the specific locations and how expenditure aligns with customer expansion objectives.
No

Please describe any permitting requirements, environmental impacts, or resulting performance obligations that may or may not result from this expenditure?
Permitting and/or Easement requirements will be undertaken during detailed design activities as applicable.

Will there be assets, greater than \$5,000, currently in service removed as a result of this expenditure?
<i>GUIDANCE: If yes, please detail the specific assets that will be removed:</i>
1. Original Cost of Plant to be removed (if known):
2. What is the replacement cost of the plant being removed (if original cost not known)?
3. Original Work Order of Plant to be removed (if known):
4. Is the Plant being removed reusable?
5. What is the year of original installation of the plant being removed
<i>Yes. As part of this project poles and overhead wires will be removed along the reconducted sections. Replacement costs will be determined during detailed design activity. The plant being removed is not usable. Answers to questions 1, 3 and 5 are unknown at this time.</i>

What alternatives were evaluated and why were they rejected?
Other bare conductor areas where considered but ultimately rejected given the higher benefit of reliability estimates for preferred reconductoring candidates.

What are the risks and consequences of not approving this expenditure?
Maintaining a favorable relationship with state regulators is important to the Company's future success. Poor performance as measured by reliability goals and customer complaints to the regulator stresses this relationship and results in reduced credibility.



Capital Project Expenditure Form

2020

Please describe how Health, Safety and Security concerns and impacts as a result of this expenditure been addressed.

Health, Safety and Security will be addressed using Engineering designs/controls during the detailed design process if applicable.

Are there other pertinent details that may affect the decision making process?

None

Complete the Financial Summary table only if:

- Project is less than \$100,000; or
- Project category is *Mandated* or *Safety* (Business Case Form not required)

Financial Summary

Next Anticipated Test Year		Was this Capital Project included in the current year's Board Approved Budget?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Regulatory Lag (Click appropriate box)	<input type="checkbox"/> Less than 6 months <input type="checkbox"/> 6 – 12 months <input type="checkbox"/> 1 – 3 years <input type="checkbox"/> Greater than three years		
Which regulatory constructs will be used for recovering this capital spend?			
Please Specify Basis of Estimate For materials, equipment, and construction requiring Engineering drawings please specify the percent complete: ¹	<input type="checkbox"/> Fixed or Firm Price <input type="checkbox"/> Estimate – Internal <input type="checkbox"/> Estimate – External <input type="checkbox"/> Other (specify details) Click here to enter text.		
Category	Current Year	Future Years	Authorized Amount (to be filled in by Corporate)
Cost of Design & Engineering (\$)			
Cost of Materials (\$)			
Cost of Construction (\$)			
External Costs (\$)			
Internal Costs (\$)			
Other (\$)			
AFUDC (\$)			
Total Project Costs (\$)	\$1,700,000		



Capital Project Expenditure Form

2020

A

Approvals and Signatures ⁱⁱ

Approved By:				
Role	Approval Limit	Name	Signature	Date
Manager / Staff (requisitioner/buyer):	Up to \$25,000	Anthony Strabone Manager, Electric Engineering		03/04/2020
Senior Manager:	Up to \$50,000			
Senior Director/Director:	Up to \$250,000	Charles Rodrigues Director, Engineering		2/25/2020
Senior VP/VP:	Up to \$500,000	Richard MacDonald Vice President, Operations		2/26/2020
State President:	Up to \$500,000	Susan Fleck President, NH		2/26/2020
Regional President:	Up to \$3,000,000	James Sweeney President, East Region		2/26/2020
Corporate – Sr. VP Operations:	Up to \$5,000,000			
Corporate - Exec Team Member (CEO, CFO, COO, Vice Chair):	Over \$5,000,000			
Finance (East) – Vice President, Finance & Administration:	All Requests	Peter Dawes VP, Finance & Administration		

ⁱ For Best Practices on estimating project contingencies please see the Capital Policy.

ⁱⁱ Approvals for work orders and purchase orders are subject to the limits set forth in the Approval Limits of Authority Policy owned and amended from time to time by the corporate procurement group.



Change Order Form

Project Overview

Reason for Change: Budget Increase to fund project to accommodate work associated with Bare Conductor Replacement Program

Project ID:	8830-2046	Project Name:	Bare Conductor Replacement Program
Change Order Name:	Budget Increase	Date Prepared:	07/27/2020
Change Order #:	8830-2046-01	Financial Work Order (FWO):ⁱ	Various
Project Sponsor:	Charles Rodrigues	Revised Start Date:	
Project Lead:	Anthony Strabone	Revised End Date:ⁱⁱ	12/31/2020
Prepared By:	Anthony Strabone	Change Typeⁱⁱⁱ	<input checked="" type="checkbox"/> In Scope <input type="checkbox"/> Out of Scope
Project Contingency Available?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If No is Selected, Please specify source of funds^{iv}	2020 Capital Budget Project 8830-2051

Financial Assessment/Cost Estimates

(Double click embedded excel file to update; include contingency allowance in excel file)

Category	Original Project Value	Previous Approved Charges	Current Change Order Amount	Total
Internal Labor				
Materials				
Equipment				
Contractor/Subcontractor				
Burdens/Overheads				
AFUDC				
Total Project Cost	\$1,700,000		\$800,000	\$2,500,000

Updated Unlevered Internal Rate of Return:

Basis of Current Change Order Amount:

Provide brief explanation on basis of the requested amount (i.e. revised contract amount, estimate based on revised engineering design, etc)

Over expenditure is being driven by two factors. First is the carry over costs and associated burdens from 2019. The second driver is higher than estimated construction costs based on bids received from contractors. Additional funding for this project is from project 8830-2051 (\$800,000). The funding for this project has been increased to accommodate these carry over costs and the anticipated work associated work for 2020.

Schedule Impacts

(As a result of the Change Order, where applicable, List the Impacts to schedule)

Baseline Schedule (BL)	New Forecast (NF)	Variance (BL – NF)
N/A	N/A	N/A



Change Order Form

2020

Approvals and Signatures^v

Approved By:				
Role	Approval Authority Limit	Name	Signature	Date
Manager / Staff (requisitioner/buyer):	Up to \$25,000	Anthony Strabone Manager, Electric Engineering	<i>Anthony Strabone</i>	07/27/2020
Senior Manager: :	Up to \$50,000			
Senior Director/Director:	Up to \$250,000	Charles Rodrigues Director, Engineering	Charles Rodrigues <small>Digitally signed by Charles Rodrigues Date: 2020.07.30 17:28:37 -04'00'</small>	
State President / Senior VP / VP:	Up to \$500,000	Richard MacDonald, VP Operations	Richard MacDonald <small>Digitally signed by Richard MacDonald Date: 2020.07.31 09:17:24 -04'00'</small>	
Regional President:	Up to \$3,000,000	Susan Fleck President, NH		
Corporate - Sr VP Operations:	Up to \$5,000,000			
Corporate - Exec Team Member (CEO, CFO, COO, Vice Chair):	Over \$5,000,000			

ⁱ The Financial Work Order Section captures the work order this change falls under when the job was initially set-up

ⁱⁱ The Revised project end date is dependent on changes in scope that may deviate the schedule from the original plan

ⁱⁱⁱ The Change type for In scope or Out of scope changes fall within the following scenario:

- In Scope changes are deviations of scope from the original plan and approved budget that align to the original scope of the project but have revised pricing as a result of changes in pricing of labour, materials, and equipment
- Out of Scope changes are scope changes that were not originally planned for in the project baselines and approved budget. Examples of this type of change are related to changes in technology, missed deliverables, a change in the project design altering the scope of the project, etc.

^{iv} In cases where the project no longer has contingency to cover project change orders, please specify any other sources of funds that would address the project variance (i.e. not executing another project, delaying scope of another project, etc)

^v Approvals for work orders and purchase orders are subject to the limits set forth in the Approval Limits of Authority Policy owned and amended from time to time by the corporate procurement group.


Project Close Out Report **2020**

Requesting Region or Group:	Granite State Electric Co.	Date of Closeout (MM/DD/YY):	03/10/2021
Project Name:	Bare Conductor Replacement Program		
Project ID#:	8830-2046	Requesting Region:	East Region
Project Lead:	Anthony Strabone	Project Sponsor:	Charles Rodrigues
Project Status	X In Service C Complete <input type="checkbox"/> Closed		
Project Start Date:	01/01/2020	Project Completion Date:	12/31/2020
Requested Capital (\$)	\$ 1,700,000	Expenditure Included in Approved Budget?	X Yes <input type="checkbox"/> No

Section 1. Approval

Approval of the Project Closeout and Assessment Report indicates an understanding and formal agreement that the project is ready to be closed. By signing this document, each individual agrees all administrative, financial, and logistical aspects of the project should be concluded, executed, and documented as described herein.

Further, by signing this Report, it is accepted that CWIP (FERC Account 107) should be transferred to Utility in Plant Service (FERC Account 101)

Approver Name	Title	Signature	Date
Anthony Strabone	Project Lead		03/29/2021
Charles Rodrigues	Project Sponsor	Charles Rodrigues <small>Digitally signed by Charles Rodrigues Date: 2021.03.30 08:28:48 -04'00'</small>	
Mark Parker	Operations Manager		
Phil Greene	Accounting Manager		

Section 2. Final Deliverable/Deployment Checklist

Sponsor to respond to each question. For each "no" response, include an issue in Open Issues section.

Item	Question	Response
2.1	Do you agree that the product and/or service is ready to be deployed?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2.2	Do you agree the product and/or service has sufficiently met the stated business goals and objectives?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2.3	Do you fully understand and agree to accept all operational requirements, operational risks, maintenance costs, and other limitations and/or constraints imposed as a result of ongoing operations of the product and/or service?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2.4	Has the final unitization estimate been provided to Property Accounting?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Project Close Out Report **2020**

Item	Question	Response
2.5	Do you agree the project should be closed? If no, please explain:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	<i>Scale of 1 thru 5; 5 = highest</i>	
	Rate your level of satisfaction with regards to the project outcomes listed below	
2.5	Project Quality	3/5
2.6	Product and/or Service Performance	3/5
2.7	Scope	3/5
2.8	Cost (Budget)	3/5
2.9	Schedule	3/5

Section 3. Project Documentation Checklist

Project Manager Respond to each question. For each “no” response, include an issue in Open Issues section.

Item	Question	Response	
3.1	Have project documentation and other items (e.g., Business Case, Project Plan, Charter, Budget Documents, Status Reports) been prepared, collected, filed, and/or disposed?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
3.3 ⁱ	Were audits (e.g., project closeout audit) completed and results documented for future reference?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
3.4	Identify the storage location for the following project documents items:		
Item	Document	Location (e.g., Google Docs, Webspace)	Format
3.4a	Business Case	W:\Engineering\Electric Engineering\Electric Planning Engineering\2 - Planning	<input checked="" type="checkbox"/> Electronic <input type="checkbox"/> Manual
3.4b	If available, the Final Project Schedule	N/A	<input type="checkbox"/> Electronic <input type="checkbox"/> Manual
3.4c	Budget Documentation and Invoices	W:\Public\Accounts Payable\New Hampshire	<input checked="" type="checkbox"/> Electronic <input type="checkbox"/> Manual
3.4d	Status Reports	N/A	<input type="checkbox"/> Electronic <input type="checkbox"/> Manual
3.4e	Risks and Issues Log	N/A	<input type="checkbox"/> Electronic <input type="checkbox"/> Manual
3.4f	Final deliverable	N/A	<input type="checkbox"/> Electronic <input type="checkbox"/> Manual
3.4g	If applicable, verify that final project deliverable for the project is attached or storage location is identified in 3.4.		

Section 4. Project Teamⁱⁱ

Project Manager to list resources specified in the Project Plan and used by the project.

Project Close Out Report **2020**

Name	Role	Type (e.g., Contractor, Employee)
Anthony Strabone	Engineering	Employee
Joel Rivera	Engineering	Employee
William Sullivan	Construction Coordinator	Contractor
Tim Fitzgerald	Construction Coordinator	Contractor

Section 5. Project Lessons Learned

Project Team to identify lessons learned specifically for the project. State the lessons learned in terms of a problem (issue). If available please include a Lesson Learned Log in the attached. Please summarize the top three issues on the project and the recommended improvements to correct a similar problem in the future.

Problem Statement	Problem Description	References	Recommendation
None	None	None	None

Section 7. Open Issues

Project Manager and Functional Lead to describe any open issues and plans for resolution within the context of project closeout. Include an open issue for any “no” responses in the Final Product and/or Service Acceptance Checklist and the Project Artifacts Checklist sections.

Issue	Planned Resolution
Carry Over costs from previous years	Continue to work with the project team to ensure charges associated with projects that occur near year end are completed in a timely manner so they can be captured in the current budget year and not carryover and impact the upcoming year’s budget.

Section 8. Project Cost Summary

Project Manager and Functional Lead to provide details for the following tables.

Project Close Out Report 2020

Cost Category	1- Budget	2- Actual	3 = 1 -2 Variance
Cost of Design & Engineering (\$)		\$ 0	
Cost of Materials (\$)		\$ 257,552.76	
Cost of Construction (\$)		\$ 0	
External Costs (\$)		\$ 1,247,772.19	
Internal Costs (\$)		\$ 3,648.23	
Other (burdens \$)		\$ 661,122.54	
CIAC		\$ 0	
AFUDC		\$ 13,330.66	
Total Project Costs (\$)	\$ 1,700,000	\$ 2,183,426.38	\$ (483,426.38)

Reasons for Variance	Impact
See Change Order#1	\$ 800,000
Cause 2	\$
Cause 3	\$

Project Manager to list of all work orders associated with project that should be closed once Close Out Report is accepted.

Registry of All Job Codes (Regional, Corporate, LABs)
Various

ⁱ This section assumes an accounting audit has been completed ensuring all outstanding payments have been reconciled to the project

ⁱⁱ For Section 4 in filling out the Project Team Section, for those projects following the materiality limit set forth in the work order approval limits greater than \$5M please complete this section, all other projects do not require this.

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty

DE 21-049

Reliability Enhancement Program and Vegetation Management Program – Calendar 2020
Annual Report and Reconciliation and Rate Adjustment

Staff Data Requests - Set 1

Date Request Received: 4/1/21
Request No. Staff 1-2

Date of Response: 4/12/21
Respondent: Heather Green

REQUEST:

Re: Testimony of Heather Green, Joel Rivera, and Anthony Strabone, dated March 15, 2021, Docket DE 21-049, Attachment A at Bates 19-20, “However, the Consolidated Communications, Inc. (“CCI”) reimbursements had to be excluded from the total amount of VMP O&M expenses to be recovered because CCI exercised its contractual option to not participate in the vegetation management aspect of the Joint Ownership Agreement after 2019, resulting in the Company taking on all the costs of vegetation activities annually of the VMP expense budget of \$2,449,556 as shown in Appendix 1, line 14.”

- a. Please specify which clause(s) CCI exercised in its contract, the wording relating to that option, and provide a copy of the notification to Liberty regarding CCI’s decision to exercise this option.
- b. What is Liberty’s recourse under the contract?
- c. Please provide all communications, including any relevant attachments, between representatives of Liberty and CCI as it relates to vegetation activity reimbursement.
- d. Has Liberty reduced its communications trim zone in response to CCI’s refusal to reimburse Liberty for trimming activities? Please explain why or why not.
- e. Re: Order 26,352 in Docket DE 20-036, page 7, the Commission stated, “We share the OCA’s concerns about the need for Consolidated and other joint-pole owners to bear a fair share of costs and maintenance associated with joint pole ownership. The agreements that govern joint maintenance were negotiated in an era when both electric and phone providers were regulated monopolies serving new customers, and thus may need to be reviewed by the electric companies to ensure that costs are shared equitably and maintenance is not delayed. We direct Liberty to take steps to protect its interests under the inter-company agreements including, if appropriate, renegotiation of those agreements to reflect current circumstances.”
 - i. Considering that without CCI reimbursement, the Company may be unable to fully execute the vegetation activities that were proposed prior to CCI’s refusal of future payment, has Liberty exercised its rights under the Intercompany Operating Procedures (IOP) contract to compel CCI for reimbursement of future trimming activities? If so, please describe what steps have been taken?

Docket No. DE 21-049 Request No. Staff 1-2

RESPONSE:

- a. Section 7 of IOP-J states: “This agreement will automatically renew itself each year unless either party notified the other in writing at least 30 days prior to the end of such yearly period that it wishes to modify or terminate the agreement.” See Confidential Attachment Staff 1-2.a for CCI’s notification.
- b. Since CCI had the right to unilaterally terminate the contract (IOP-J), Liberty has no recourse under the contract.
- c. See Confidential Attachment Staff 1-2.a., Attachment Staff 1-2.c.1, and Attachment Staff 1-2.c.2.
- d. No, Liberty has not reduced its communications trim zone in response to CCI’s termination of IOP-J. The minimum Puc 307.10 corridor (15’, 8’, and 10’) would still incorporate some of this same clearance zone, and the optimal clearance is to the ground for minimal future vegetation work and future cost efficiencies. For our safety and reliability goals and corridor goals, it does not make sense to trim less.
- e. It is Liberty’s opinion that it does not have the right under the now terminated IOP-J “to compel CCI for reimbursement of future trimming.” Liberty has nonetheless been in confidential discussions with CCI regarding issues related to CCI’s contribution toward trimming costs.

Confidential Attachment Staff 1-2.a contains confidential communications between counsel for Liberty and Consolidated, the confidential nature of which is readily apparent to those who view the confidential version. This information is “confidential, commercial, or financial information” protected from disclosure by RSA 91-A:5, IV. Therefore, pursuant to Puc 203.08(d), the Company has a good faith basis to seek confidential treatment of this information and will submit a motion confirming confidential treatment prior to the final hearing in this docket.

From: [McHugh, Patrick](#)
To: [Michael Sheehan](#)
Subject: Utility Pole Issues & Trim IOP Termination
Date: Monday, July 29, 2019 1:39:53 PM
Attachments: [image005.png](#)
[image006.png](#)

Hi Mike,

This is a follow-up to a call you and I had some time ago. My notes go back to late April. [REDACTED]
[REDACTED]
[REDACTED]

In any event, you may recall we discussed my not sending a formal letter advising of the termination of the tree trim Intercompany Operating Procedure, referenced herein as IOP J. As I explained, Consolidated does want IOP J terminated and this is written notice that Consolidated hereby terminates IOP J.

The parties have a Joint Ownership Agreement that dates back to October 1, 1980, between Granite State Electric Company and New England Telephone and Telegraph Company. IOP J controls tree trim. It has the following provision regarding termination: "This agreement will automatically renew itself each year unless either party

notified the other in writing at least 30 days prior to the end of such yearly period that it wishes to modify or terminate the agreement." Thus, under this provision, September 1 would be the last required notification date. [REDACTED]

[REDACTED] We have been terminating JOA(s) and JUA(s) in their entirety with various electric utilities. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]

Many thanks and feel free to buzz if you want to discuss. Have a nice day.

Pat

Patrick C. McHugh
C: 603.591.5465
patrick.mchugh@consolidated.com
consolidated.com | NASDAQ: CNSL



From: [Diaz, Roberto](#)
To: [Heather Green](#)
Cc: [Freeman, Steven](#)
Subject: RE: 2020 REP VEG Program
Date: Tuesday, April 14, 2020 5:10:10 PM

Hi Heather,

Good afternoon. I am unclear as to where this billing for trim is coming from. It is my understanding that CCI terminated the Trimming IOP with Liberty per Pat McHugh's correspondence with Michael Sheehan. This was done on Monday July 29th 2019.

Have a good afternoon.

Thanks
Roberto

ROBERTO E DIAZ | NH OSP Engineering Manager
D: 603.621.4733 | C: 603.703.9354
Roberto.Diaz@consolidated.com
consolidated.com | NASDAQ: CNSL



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From: Heather Green [mailto:Heather.Green@libertyutilities.com]
Sent: Wednesday, April 08, 2020 10:14 AM
To: Diaz, Roberto
Subject: FW: 2020 REP VEG Program

Mr. Diaz,

Good morning. I am writing to alert you to the current status of the 2020 Cycle Work Plan for Vegetation Management.

Please find attached the circuit maps CY2020 REP VEG Program in subsequent e-mails, as a zip file is

too large. The 2020 program is approximately 223.78 miles and includes tree removals. Consolidated Communications portion of the expenses is expected to be about \$838,880.

The following circuits are planned for 2020:

Feeder		OH Miles - Distribution
11L1		14.66
39L2		30.31
6L2		4.06
7L1		78.41
13L3		29.65
14L2		35.39
9L1		10.40
9L2		1.36
9L3		15.04
40L3		4.5
Total OH Miles - Distribution		223.78

Please contact me if you have any questions. Thank you.

Heather Green | Liberty Utilities (New Hampshire) | Program Manager, Vegetation and Inspections
 P: 603-306-8270 | C: 603-401-1192 | E: Heather.Green@libertyutilities.com
 407 Miracle Mile #2, Lebanon, NH 03766

From: [Heather Green](#)
To: ["Diaz, Roberto"](#)
Subject: RE: 2020 REP VEG Program
Date: Wednesday, April 8, 2020 2:33:00 PM

Approximately 25% - 4 year cycle.

Heather Green | Liberty Utilities (New Hampshire) | Program Manager, Vegetation and Inspections
P: 603-306-8270 | C: 603-401-1192 | E: Heather.Green@libertyutilities.com

From: Diaz, Roberto [mailto:Roberto.Diaz@consolidated.com]
Sent: Wednesday, April 8, 2020 2:32 PM
To: Heather Green <Heather.Green@libertyutilities.com>
Subject: RE: 2020 REP VEG Program

Can you tell me what percentage of your distribution plant is being trimmed this year?

Thanks
Roberto

ROBERTO E DIAZ | NH OSP Engineering Manager
D: 603.621.4733 | C: 603.703.9354
Roberto.Diaz@consolidated.com
consolidated.com | NASDAQ: CNSL



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Please contact me if you have any questions. Thank you.

Heather Green | Liberty Utilities (New Hampshire) | Program Manager, Vegetation and Inspections
P: 603-306-8270 | C: 603-401-1192 | E: Heather.Green@libertyutilities.com
407 Miracle Mile #2, Lebanon, NH 03766

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty

DE 21-049

Reliability Enhancement Program and Vegetation Management Program – Calendar 2020
Annual Report and Reconciliation and Rate Adjustment

Staff Data Requests - Set 1

Date Request Received: 4/1/21
Request No. Staff 1-4

Date of Response: 4/12/21
Respondent: Heather Green

REQUEST:

Re: Testimony of Heather Green, Joel Rivera, and Anthony Strabone, dated March 15, 2021, Attachment A at Bates 20, “The Company spent \$55,123 more on planned cycle pruning due to the 8L1 delayed work in relation to the railroad permitting and additional operational costs for new work management program which includes the costs for tablets, licenses, and training.”

- a. What portion of the \$55,123 was spent on additional operational costs for each below:
 - i. new work management program
 - ii. tablets
 - iii. licenses
 - iv. training
- b. Re: Docket 20-036, Liberty response to Staff data request 1-1 d. stated hardware related cost “for a total of \$1,037.40” and “No other charges related to the licensing or hardware of the software were made to VMP.”
 - i. Including the costs detailed above in this response, what are the total costs to-date for this new work management system?
 - ii. Will there be future costs? Please quantify.
- c. Other than Empire District, is the work management program a system-wide initiative? Please explain why or why not?
- d. What specific cost efficiencies are expected to be realized by this new program? Please quantify these savings and timeframe achieved.

RESPONSE:

- a. The percentage of costs for the new work management program are below. The remaining 14% is attributed to the work on the 8L1.
 - i. The new work management program is not a software. It is made up of purchasing tablets, licenses, and providing tablets.
 - ii. Tablets – 41%

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- iii. Licenses – 37%
 - iv. Training - 8%
- b. The answers are below.
- i. The program costs to date are \$80,149.63 and details are below.
 - 2019 costs are \$1,037.40
 - 2020 costs are \$49,949.12
 - 2021 costs are \$29,163.11
 - ii. The current and future crew tablet costs are included in the bid work costs, similar to a phone, chainsaw, etc. The 2022 ECI work planner tablet costs are reduced to data charges only. The licensing costs are annual. Licenses are at a bulk purchasing rate of \$1,193 each. We have 19 currently at a total of \$22,667.00. We have bulk purchasing power with LU Central. They have approximately 75 licenses. The training costs are unknown.
- c. Liberty's Central Region was the first to utilize Terra Spectrum. Liberty's West Region is also looking to incorporate Terra Spectrum as their Vegetation Management Work Management System. All three electric Liberty VM programs in the various regions will then run on the same program.
- d. Specific efficiencies are expected to be numerous. The ability to have a closed loop work order system and report ability allows for many improved efficiencies. Some of those are below.
- Pre-loading job accounting and costing for invoice preparation and increased reporting abilities, for example Make Safe work.
 - Permission tracking, and recording in an accessible and reportable manner.
 - Clear work order communication from inception, permission, performance, and quality control review.
 - Ability to efficiently assign work based on resource needs.
 - Information immediately accessible to multiple parties.
 - Improved tree crew communications on abilities, resource needs, and work completion.
 - Ability to report on production of crews.
 - Improved communication on land owner permissions.
 - Improved ability to review and communicate audits and reworks from failed audits.
 - Ability to report in dashboards.
 - Ability for tree crews to digitally record work in one step, and to create the related multiple required reports, which are currently generated by hand.
 - Improved communication, access, and reporting on tracking of landowner restrictions and refusals.

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The savings and timeframe are currently unknown as they are expected to accrue over time and are not easily quantifiable.

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty

DE 21-049

Reliability Enhancement Program and Vegetation Management Program – Calendar 2020
Annual Report and Reconciliation and Rate Adjustment

Staff Data Requests - Set 1

Date Request Received: 4/1/21
Request No. Staff 1-8

Date of Response: 4/12/21
Respondent: Heather Green

REQUEST:

Re: Testimony of Heather Green, Joel Rivera, and Anthony Strabone, dated March 15, 2021, Appendix 4 at Bates pages 30. The planned and actually completed miles are not depicted as they have been in previous reconciliation reports tables listed as “Vegetation Management Activities” (see Docket DE-19-051, Appendix 4, Bates page 24; Docket DE 20-036, Appendix 4, Bates page 20).

- a. Please resubmit the Vegetation Management Activities table including both “Miles - Planned” and “Miles - Completed” as a revision to the initial filing dated March 15, 2021.
- b. Please confirm that the 194.13 miles were completed and reconcile this amount with the approximately 220-230 miles completed in previous 4-year cycle years.

RESPONSE:

- a. See Attachment Staff 1-8.a.xlsx.
- b. Upon review, Liberty identified two small portions were inadvertently omitted in the previous filing; 8L1 and 2376W. Those were added to this version. The miles completed in 2020 were 195.37. This is 29.66 miles difference of our annual work of about 220–230 miles to accommodate for the reduced funding available in 2020.

**REVISED Appendix 4 - O&M Expenses
CY 2020 Vegetation Management Activities**

Line	Activities	Program Plan	Reference
1	Spot Tree Trimming	As needed	See Appendix 6 for definitions
2	Trouble and Restoration Maintenance	As needed	See Appendix 6 for definitions
3	Planned Cycle Trimming	225.03	See Appendix 6 for definitions
4	Cycle Trimming Police Detail Expenses	As needed	See Appendix 6 for definitions
5	Hazard Tree Removal	As needed	See Appendix 6 for definitions
6	Enhanced Hazard Tree Removal	As needed	See Appendix 6 for definitions
7	Interim Trimming	As needed	See Appendix 6 for definitions
8	Tree Planting	As needed	See Appendix 6 for definitions
10	Other Police Detail Expenses	As needed	See Appendix 6 for definitions
11	Substation	Feeder	OH Miles - Distribution
12	Craft Hill #11	11L1	14.66
13	Slayton Hill #39	39L2	30.31
15	Hanover #6	6L2	4.06
16	Enfield #7	7L1	78.41
17	Spicket River #13	13L3	29.66
18	Pelham #14	14L2	35.39
20	Salem Depot #9	9L1	10.40
22	Salem Depot #9	9L2	1.36
23	Salem Depot #9	9L3	15.04
24	Michael Ave #40	40L3	4.5
25	Charlestown #8	8L1	1.24
26		Total OH Miles - Distribution	225.03
			195.37
27	Sub transmission		OH Miles - Sub transmission
28	BARRON AVE. #10/SALEM DEPOT #9	2352	3.15 Miles/ 30.13 Acres
29	BARRON AVE. #10	2393	.89 Miles/ 6.57 Acres
30	HANOVER #6/MT. SUPPORT #16/LEB #1*	1303/1304	3.15 Miles (6.3 Total)
31	SPICKET RIVER #13	2376W	0.15
32		Total OH Miles - Sub transmission	7.24 mi/36.7 acres
			7.19

33 * Portion completed in 2019

34 ** Deferred to 2021