

**Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty
Computation of Revenue Requirement
CY 2020 - Placed in Service**

		<u>CY 2020 - Placed in Service</u>			
1	Total Investment		\$ 11,439,907		
2					
3	<u>Deferred Tax Calculation</u>				
4	Book Depreciation Rate		4.24%		
5	Federal Tax Depreciation Rate		5.07%		
6	FEDERAL Vintage Year Tax Depreciation:				
7		CY Spend	<u>\$580,181</u>		
8	Annual Tax Depreciation		<u>\$580,181</u>		
9					
10	STATE Vintage Year Tax Depreciation:				
11		CY Spend	<u>\$580,181</u>		
12	Annual Tax Depreciation		<u>\$580,181</u>		
13					
14	Book Depreciation		\$484,770		
15					
16	Book/Tax Timer (Federal)				
17	less: Deferred Tax Reserve (State)		<u>\$7,347</u>		
18	Net Book/Tax Timer (Federal)		<u>(\$7,347)</u>		
19	Effective Tax Rate (Federal)		<u>21.00%</u>		
20	Deferred Tax Reserve (Federal)		<u>(\$1,543)</u>		
21	Book/Tax Timer (State)		\$95,411		
22	Effective Tax Rate (State)		<u>7.70%</u>		
23	Deferred Tax Reserve (State)		<u>\$7,347</u>		
24	TOTAL Deferred Tax Reserve		<u><u>\$5,804</u></u>		
25					
26	<u>Rate Base Calculation</u>				
27	Plant In Service		\$11,439,907		
28	Accumulated Book Depreciation		(\$484,770)		
29	Deferred Tax Reserve		<u>(\$5,804)</u>		
30	Year End Rate Base		<u><u>\$10,949,333</u></u>		
31					
32	<u>Revenue Requirement Calculation</u>				
33	Year End Rate Base		\$10,949,333		
34	Pre-Tax ROR		<u>9.36%</u>		
35	Return and Taxes		<u>\$1,024,329</u>		
36	Book Depreciation		\$484,770		
37	Property Taxes	3.06%	<u>\$335,227</u>		
38	Annual Revenue Requirement		<u>\$1,844,326</u>		
39					
40	Adjusted Annual Revenue Requirement		<u>\$1,844,326</u>		
41					
42					
43	<u>Imputed Capital Structure</u>		Weighted		
44		Ratio	Rate	Rate	Pre Tax
45	Long Term Debt	48.00%	5.97%	2.87%	2.87%
46	Common Equity	52.00%	9.10%	4.73%	6.49%
47					
48		<u>100.00%</u>		<u>7.60%</u>	<u>9.36%</u>

Liberty Utilities (Granite State Electric) d/b/a Liberty
 Project List
 In Service as of December 31, 2020

Att. #	2020 Project #	Project Description	Priority	Total Spend ¹	In Service	FERC	Book Rate	Book Amt	MACRS	Tax Amt
Att. 2	8830-1933	Battery Pilot	4. Regulatory Programs	\$1,434,387	Various - 2020	371	10.00%	\$ 143,439	14.29%	\$ 204,974
Att. 3	8830-1946	2019 REP carryover ²	4. Regulatory Programs	\$743,565	Various 2019	364	3.64%	\$ 27,066	3.75%	\$ 27,884
Att. 4	8830-1958	Install Service to Tuscan Village South	3. Growth	\$2,745,711	Various - 2020	364	3.64%	\$ 99,944	3.75%	\$ 102,964
Att. 5	8830-1969	Mall Road Underground	2. Mandated	\$831,354	9/30/2020	364	3.64%	\$ 30,261	3.75%	\$ 31,176
Att. 6	8830-2011	Public Requirements Blanket	2. Mandated	\$1,035,602	Various - 2020	364	3.64%	\$ 37,696	3.75%	\$ 38,835
Att. 7	8830-2012	Damage/Failure Blanket	2. Mandated	\$1,427,816	Various - 2020	364	3.64%	\$ 51,973	3.75%	\$ 53,543
Att. 8	8830-2039	IE-NN URD Cable Replacement	5. Discretionary	\$467,957	Various - 2020	366	1.96%	\$ 9,172	3.75%	\$ 17,548
Att. 9	8830-2068	Main St Salem - Overhead Line Relocation	2. Mandated	\$1,309,994	12/8/2020	364	3.64%	\$ 47,684	3.75%	\$ 49,125
Att. 10	8830-2091	Meter Purchases	2. Mandated	\$847,194	Various 2020	370	1.96%	\$ 16,605	3.75%	\$ 31,770
Att. 11	8830-2092	Transformer Purchases	2. Mandated	\$596,327	Various 2020	368	3.51%	\$ 20,931	3.75%	\$ 22,362
Total				\$11,439,907				\$ 484,770		\$ 580,181
								4.24%		5.07%

¹ Projects that span multiple years may have a 2019 actual spend lower than the total project spend reported in the related Project Close-out Reports. Liberty will provide a breakdown of annual charges by project in each of the three step adjustment filings. The amounts shown here were provided by Liberty and are subject to review and Commission approval in the three individual step adjustment dockets.

² 8830-2051 Enhanced Bare Conductor Replacement was canceled. This project replaces 8830-2051 in this filing.

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
Distribution increase due to Rate Case Expense and Recoupment
Effective For July 1, 2021

1	Rate Case Expense	\$565,077
2	Current Rate Case Expense Level	<u>\$553,642</u>
3	Difference in Current Rate Case Expense Rate Level	\$11,435
4	Actual Billed Revenues July 2019 - February 2020	\$28,169,453
5	Actual Billed Revenues March 2020 - June 2020	<u>\$13,052,360</u>
6	Total	\$41,221,813
7	Calculated July 2019 - June 2020 Revenue @ DE 19-064 Approved Rates	\$43,161,492
8	Estimated Recoupment Level per Settlement Agreement	\$1,835,991
9	Updated Estimated Recoupment (Line 7 - Line 6)	\$1,939,679
10	Difference in Estimated Recoupment Level per Settlement Agreement	\$103,688

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty
Distribution Increase for 20119 Step Adjustment
Effective July 1, 2021

[1] Increase in Annual Revenue Requirement	\$1,844,326
[2] Rate Case Expense	\$11,435
[3] Recoupment Reconciliation	\$103,688
[4] Distribution Revenues per Settlement Agreement in Docket No. DE 19-064	\$46,590,297
[5] Total Revenue Increase	\$1,959,449
[6] Total Revenues	\$48,549,746
[7] Percentage of Adjustment to Distribution Rates	4.04%

- [1] Page 1 line 40
- [2] Page 3 line 3
- [3] Page 3 line 11
- [4] Total revenue requirement in proceeding
- [5] Sum of lines [1] through [3]
- [6] Lines [1]+[2]+[3]+[4]
- [7] Lines [4] / [5]

Liberty Utilities (Granite State Electric) d/b/a Liberty Utilities
Permanent Rate Design 2019 Step Adjustment
Rates Effective July 1, 2021

Rate Class	Distribution Rate Component	Permanent Rates	2020 Capital	Proposed	REP/VMP Adjustment Factor	July 1, 2020 Rates
		Distribution Rates July 1, 2020 Rates	Expenditures Step Adjustment % Increase/ % (Decrease)	July 1, 2021 Base Distribution Charges		
		(a)	(b)	(c)	(d)	(e)
D	Customer Charge	\$14.74	0.00%	\$14.74		\$14.74
	All kWh	\$0.05705	5.86%	\$0.06039	0.00008	\$0.06047
	16 Hour Off Peak kWh	\$0.04926	5.86%	\$0.05214	0.00008	\$0.05222
	Farm kWh	\$0.05385	5.86%	\$0.05700	0.00008	\$0.05708
	D-6 kWh	\$0.05017	5.86%	\$0.05311	0.00008	\$0.05319
D-10	Customer Charge	\$14.74	0.00%	\$14.74		\$14.74
	On Peak kWh	\$0.12143	5.50%	\$0.12810	0.00008	\$0.12818
	Off Peak kWh	\$0.00165	5.50%	\$0.00174	0.00008	\$0.00182
D-11	Customer Charge	\$14.74		\$14.74		\$14.74
	Off Peak	\$0.04196		\$0.03837	0.00008	\$0.03845
	Mid Peak	\$0.06289		\$0.05646	0.00008	\$0.05654
	Critical Peak	\$0.08955		\$0.10233	0.00008	\$0.10241
EV	Customer Charge	\$11.35		\$11.35		\$11.35
	Off Peak	\$0.04196		\$0.03837	0.00008	\$0.03845
	Mid Peak	\$0.06289		\$0.05646	0.00008	\$0.05654
	Critical Peak	\$0.08955		\$0.10233	0.00008	\$0.10241
G-1	Customer Charge	\$426.78	4.21%	\$444.72		\$444.72
	Demand Charge	\$9.06	4.21%	\$9.44		\$9.44
	On Peak kWh	\$0.00580	4.21%	\$0.00604	0.00008	\$0.00612
	Off Peak kWh	\$0.00172	4.21%	\$0.00179	0.00008	\$0.00187
	Credit for High Voltage Delivery > 2.4 kv	(\$0.48)	4.21%	(\$0.50)		(\$0.50)
G-2	Customer Charge	\$71.14	4.21%	\$74.13		\$74.13
	Demand Charge	\$9.11	4.21%	\$9.49		\$9.49
	All kWh	\$0.00230	4.21%	\$0.00239	0.00008	\$0.00247
	Credit for High Voltage Delivery > 2.4 kv	(\$0.48)	4.21%	(\$0.50)		(\$0.50)
G-3	Customer Charge	\$16.36	4.21%	\$17.04		\$17.04
	All kWh	\$0.05182	4.21%	\$0.05399	0.00008	\$0.05407
M	Luminaire Charge					
	<u>Description</u>					
	HPS 4,000	\$8.39	4.21%	\$8.74		\$8.74
	HPS 9,600	\$9.69	4.21%	\$10.09		\$10.09
	HPS 27,500	\$16.07	4.21%	\$16.74		\$16.74
	HPS 50,000	\$19.98	4.21%	\$20.82		\$20.82
	HPS 9,600 (Post Top)	\$11.36	4.21%	\$11.83		\$11.83
	HPS 27,500 Flood	\$16.24	4.21%	\$16.92		\$16.92
	HPS 50,000 Flood	\$21.69	4.21%	\$22.60		\$22.60
	Incandescent 1,000	\$10.75	4.21%	\$11.20		\$11.20
	Mercury Vapor 4,000	\$7.44	4.21%	\$7.75		\$7.75

<u>Rate Class</u>	<u>Distribution Rate Component</u>	Permanent Rates & DE 20-036 Distribtuion Rates July 1, 2020 <u>Rates</u> (a)	2019 Capital Expenditures Step Adjustment % Increase/ % (Decrease) (b)	Proposed July 1, 2020 Base Distribution Charges (c)	REP/VMP Adjustment Factor (d)	July 1, 2020 <u>Rates</u> (e)
	Mercury Vapor 8,000	\$8.36	4.21%	\$8.71		\$8.71
	Mercury Vapor 22,000	\$14.93	4.21%	\$15.55		\$15.55
	Mercury Vapor 63,000	\$25.21	4.21%	\$26.27		\$26.27
	Mercury Vapor 22,000 Flood	\$17.08	4.21%	\$17.79		\$17.79
	Mercury Vapor 63,000 Flood	\$33.06	4.21%	\$34.45		\$34.45
LED-1	<u>LED-1 Fixtures</u>					
	30 Watt Pole Top	\$5.44	4.21%	\$5.66		\$5.66
	50 Watt Pole Top	\$5.67	4.21%	\$5.90		\$5.90
	130 Watt Pole Top	\$8.75	4.21%	\$9.11		\$9.11
	190 Watt Pole Top	\$16.75	4.21%	\$17.45		\$17.45
	30 Watt URD	\$12.67	4.21%	\$13.20		\$13.20
	90 Watt Flood	\$8.62	4.21%	\$8.98		\$8.98
	130 Watt Flood	\$9.90	4.21%	\$10.31		\$10.31
	30 Watt Caretaker	\$4.88	4.21%	\$5.08		\$5.08
	<u>Rates M, LED-1 & LED-2 Pole Accessory Charge</u>					
	Pole -Wood	\$9.47	4.21%	\$9.87		\$9.87
	Fiberglass - Direct Embedded	\$9.81	4.21%	\$10.22		\$10.22
	Fiberglass w/Foundation <25 ft	\$16.65	4.21%	\$17.35		\$17.35
	Fiberglass w/Foundation >=25 ft	\$27.84	4.21%	\$29.01		\$29.01
	Metal Poles - Direct Embedded	\$19.85	4.21%	\$20.68		\$20.68
	Metal Poles with Foundation	\$23.94	4.21%	\$24.95		\$24.95
	<u>Rate M, LED-1</u>					
	All kWh	\$0.03985	4.21%	\$0.04152	0.00008	\$0.04160
	<u>Rate LED-2</u>					
	All kWh	\$0.03985	4.21%	\$0.04152	0.00008	\$0.04160
T	Customer Charge	\$14.74	0.00%	\$14.74		\$14.74
	All kWh	\$0.04631	5.21%	\$0.04872	0.00008	\$0.04880
V	Minimum Charge	\$16.36	4.21%	\$17.04		\$17.04
	All kWh	\$0.05330	4.21%	\$0.05554	0.00008	\$0.05562

Rates D-11 and EV are calculated through the TOU model approved in Docket DE 17-189.

**Liberty Utilities (Granite State Electric) d/b/a Liberty
Bill Calculation**

Usage	650	kWh	Current Rates (a)	July 1, 2021 Proposed Rates (b)	Current Bill	July 1, 2021 Proposed Bill
Customer Charge			\$14.74	\$14.74	\$14.74	\$14.74
Distribution Charge						
All kWh			\$0.05713	\$0.06047	\$37.13	\$39.31
Storm Recovery Adjustment			\$0.00000	\$0.00000	\$0.00	\$0.00
Transmission Charge			\$0.02660	\$0.02660	\$17.29	\$17.29
Stranded Cost Charge			(\$0.00072)	(\$0.00072)	-\$0.47	-\$0.47
System Benefits Charge			\$0.00678	\$0.00678	\$4.41	\$4.41
Electricity Consumption Tax			\$0.00000	\$0.00000	<u>\$0.00</u>	<u>\$0.00</u>
Subtotal Retail Delivery Services					\$73.10	\$75.27
Energy Service Charge			\$0.06426	\$0.06426	<u>\$41.77</u>	<u>\$41.77</u>
				Total Bill	\$114.87	\$117.04
						\$2.17
						1.89%

(a) Rates effective July 1, 2021, per Settlement Agreement in Docket No. DE 19-064

(b) Rates proposed in this filing only and effective July 1, 2021

Liberty Utilities (Granite State Electric) d/b/a Liberty
 DE 19-064 2020 Step Adjustment
 Project #8830-1933

<u>Year</u>	<u>Internal Labor</u>	<u>Materials</u>	<u>Vendors</u>	<u>Overheads</u>	<u>CIAC</u>	<u>Total Spend</u>	<u>Total Budget</u>
2018	\$11,038.52	\$0.00	\$4,504.61	\$12,752.10	\$0.00	\$28,295.23	\$4,500,000
2019	\$3,131.31	\$0.00	\$42,294.18	\$12,680.87	\$0.00	\$58,106.36	\$500,000
<u>2020</u>	<u>\$8,812.38</u>	<u>\$106.44</u>	<u>\$1,235,571.64</u>	<u>\$394,753.87</u>	<u>(\$291,258.00)</u>	<u>\$1,347,986.33</u>	<u>\$1,500,000</u>
Total	\$22,982.21	\$106.44	\$1,282,370.43	\$420,186.84	(\$291,258.00)	\$1,434,387.92	\$6,500,000

2018 budget is for the total project, Phases 1 and 2.

Business Case – IT Projects (>\$100,000)

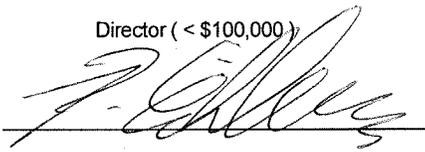
NH Battery Storage Aggregation Project

Prepared By: Heather Tebbetts
Nicole Harris

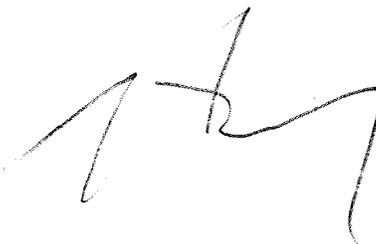
Date: March 15, 2018

Reviewed By: _____
Manager

Approved By: _____
Director (< \$100,000)

Approved By: 
V.P. (< \$251,000)

Approved By: _____
IT Director/s



March 15/18

- Ability to bill customers on a new residential time-of-use rate and charge associated fees in Cogsdale
- Automated bill presentment through Fiserv, not manual Bill Print
- Reporting for Customer and NHPUC

2.2. Out of Scope

- Commercial & Industrial Customers are not eligible to participate
- Energy storage does not qualify for Renewable Energy Certifications (RECs)

2.3. Project Schedule

- Commission Approval: Unsure
- Customer Enrolled by: 3 months after order
- Ready to Bill by: May31, 2019
- Final Battery Installation: 12 months after first battery is installed

2.4. Anticipates Outcome

- Timely Implementation

2.5. Stakeholders

- Internal
 - Regulatory
 - Customer Care (Sale, Communications, Billing & Customer Service)
- External
 - Commission
 - Customers
 - Vendors
 - Community

2.6. Project Organization & Governance Model

- Project Manager: Heather Tebbetts
- Business Owners/Sponsors: Marcia Spence/Nicole Harris
- NH Business Leads: Heather Tebbetts & Laura Sasso

2.7. Alternatives

There aren't any alternatives to the program at this time.

2.8. Initiative Priority

In addition to the benefits described in 1.1, If approved, Liberty Utilities would be the first Utility in New Hampshire to participate in a study.

3. Project Risk Assessment

If the pilot doesn't get approved, the Company does not have to purchase batteries or meters. Programming for billing purposes will not start until an order has been received approving the pilot program. The risk of the pilot getting approved is a 1 on a scale of 1-5, with 5 being the highest, as all parties have signed the settlement agreement, with the exception of SunRun and Revision Energy, but they do not oppose the agreement. A hearing was held November 29, 2018. Parties are awaiting a Commission Order to approve the settlement agreement.

Business Groups	Allocation	Amount
APCO	0.00%	\$ -
Liberty	100%	\$ 4,556,185
Total	100%	\$ 4,556,185

Liberty - 4 Factor Allocation

Entity	Allocation	Amount
NH Electric	99%	\$ 4,448,685
CALEPCO	1%	\$ 107,500

Note: CALEPCO split is only for the ITRON and Infrastructure cost = 165K +50K = 215K*50% = \$107,500

5. Risk Assessment

See #3.

6. Assumptions

All assumptions used to determine, both financial and non-financial costs and benefits should be clearly documented.

Please see the direct and supplemental testimony of Heather Tebbetts.

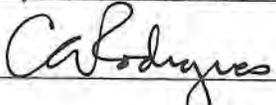
Project Close Out Report 2019

Requesting Region or Group:	Granite State Electric	Date of Closeout (MM/DD/YY):	1/15/2020
Project Name:	GSE Battery Backup Program		
Requesting Region:	East Region	Sponsor (Name):	Charles Rodrigues
Project Champion:	Heather Tebbetts	Project Champion	
Project Status	<input type="checkbox"/> In Service <input type="checkbox"/> Complete <input checked="" type="checkbox"/> Closed		
Project Start Date:	1/1/2019	Project Completion Date:	12/31/19
Requested Capital (\$)	\$1,000,000	Expenditure Included in Approved Budget?	<input checked="" type="checkbox"/> 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
	Project Lead		1/15/20
	Project Sponsor		2/14/20
	Operations Manager		
	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"/>
2.5	Do you agree the project should be closed? If no, please explain:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Project Close Out Report

2019

Item	Question	Response
	<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	5 /5
2.6	Product and/or Service Performance	5 /5
2.7	Scope	5 /5
2.8	Cost (Budget)	5 /5
2.9	Schedule	5 /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, Weospace)	Format
3.4a	Business Case	W:\Regulatory\H & M\001 Dockets\17-189 Battery Storage\business case	<input 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	Budget docs - Finance Invoices - Finance	<input 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 Team ⁱⁱ

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

Project Close Out Report **2019**

Name	Role	Type (e.g., Contractor, Employee)
Heather Tebbetts	Project Manager	Employee

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
N/A			

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
Order not received by 12/31/19 for extension to install batteries	Batteries to be installed in 2020 instead of 2019

Section 8. Project Cost Summary

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

Cost Category	1- Budget	2- Actual	3 = 1 -2 Variance
Cost of Design & Engineering (\$)	0	0	0
Cost of Materials (\$)	0	0	0
Cost of Construction (\$)	0	0	0

Project Close Out Report 2019

External Costs (\$)	0	0	0
Internal Costs (\$)	\$1,000,000	\$34,199	\$965,801
Other (\$)	0	0	0
AFUDC (\$)	0	0	0
Total Project Costs (\$)	\$1,000,000	\$34,199	\$965,801

Reasons for Variance	Impact
Cause 1 batteries were not installed in 2019	\$965,801
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)

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.



Capital Project Business Case

2020
 2018

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:	GSE Backup Battery Program	Date Prepared:	1/1,2020
Project ID#:	8830-1933 1933 1933	Cost Estimate:	\$1,500,000
Project Sponsor:	Charles Rodrigues	Project Start Date:	1/1/2020
Project Lead:	Heather Tebbetts	Project End Date:	12/31/2020
Prepared By:	Heather Tebbetts	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 type="checkbox"/> Regulatory Supported <input checked="" 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>Docket No. DE17-189 Request for Approval of Battery Storage Pilot, direct testimony was presented to the NH PUC on November 20, 2017. Subsequent supplemental testimony by Heather Tebbetts was filed on February 9, 2019. The purpose of the testimony was to present Liberty Utilities' proposed pilot to own and install battery storage in customers' homes. The benefits presented is offering the following opportunities:</p> <ul style="list-style-type: none"> • Aligns with the company's strategic direction as it relates to Utility 2.0. • Reduction of transmission costs in the short term • Study the batteries' long-term effects on the distribution system to determine if there are cost deferrals or avoidances for future upgrades. • Support clean Distributed Energy Resources (DER) • Time of Use customer savings through peak load reduction • Provide customers short-term energy security • Local economic opportunities for local installers 			
Background			
(Insert description of current operational arrangement, and brief history of project & asset)			
Recommendation/Objective			
(Insert the unique problem this project is looking to resolve)			
Reduction to transmission costs.			
Alternatives/Options			
(Describe all reasonably viable alternatives. Discuss the viability of each and provide reasons if rejected)			
N/A – if the pilot doesn't get approved, the Company will not undertake peak reduction for transmission costs through storage.			



Capital Project Business Case

2020
 2018

Financial Assessment/Cost Estimates

(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			

Equipment (rental equipment)	\$ -	\$ -	\$ -	\$ -	\$ -
Contractor/Subcontractor (including consultants)	\$ -	\$ -	\$ -	\$ -	\$ -
AFUDC (\$)					
Total Project Costs (\$)	\$ 1,500,000	\$ -	\$ -	\$ -	\$ 1,500,000

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

Basis of Estimate: *Tesla has provided costs associated with batteries. Cogsdale and internal labor costs have been provided internally.*

For materials, equipment, and construction requiring Engineering drawings please specify the percent complete: 0

Schedule (List key milestone dates)

Key Milestone Description	Forecast Start Date	Forecast End Date
Approval of pilot	Winter 2020	Summer 2020

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

If the Company doesn't receive the requested extension to install batteries, the pilot will not move forward.

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

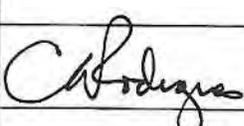
no

Supporting Documentation (Reference drawings, condition assessment reports, vendor quotations, etc. Attach document or where possible include hyperlinks to file located on shared server or SharePoint)

Docket No. DE 17-189 provides all documentation of the project

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Approvals and Signatures ¹

Approved By:				
Role	Approval Authority Limit	Name	Signature	Date
Manager / Staff (requisitioner/buyer):	Up to \$25,000	Heather Tebbetts Manager, Rates & Regulatory Affairs		2/14/20
Senior Manager: :	Up to \$50,000			
Senior Director/Director:	Up to \$250,000	Charles Rodrigues Director, Engineering		2/14/20
Senior Vice President/ Vice President	Up to \$500,000	Richard MacDonald Vice President, Operations		
State President:	Up to \$500,000	Susan Fleck President, NH		3/12/2020
Regional President:	Up to \$3,000,000	James Sweeney President, East Region		5/5/2020
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:	GSE Backup Battery Program		
Financial Work Order (FWO):		Project ID #:	8830-2099 1933
Requesting Region or Group:	Granite State Electric Co.	Date of Request (MM/DD/YY):	1/9/2020
Project Sponsor:	Charles Rodrigues	Project Start Date:	1/1/2020
Project Lead:	Heather Tebbetts	Project End Date:	12/31/2020
Prepared by:	Heather Tebbetts	Requested Capital (\$)	\$1,500,000
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 type="checkbox"/> Regulatory Supported <input checked="" type="checkbox"/> Discretionary		

Details of Request

Project description

This project is to provide funding for the Battery Storage Pilot approved by the NH PUC in Docket No. DE 17-189. 100 customers will receive 2 batteries and a gateway device, along with a cellular meter, to participate in the pilot program. The batteries and gateway will be installed behind the meter by Tesla.

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 from the towns may be required. Tesla will be handling all permitting as the authorized installer for the batteries.

Will there be assets, greater than \$5,000, currently in service removed as a result of this expenditure?

***GUIDANCE:** If yes, please detail the specific assets that will be removed:*

1. *Original Cost of Plant to be removed (if known):* None.
2. *What is the replacement cost of the plant being removed (if original cost not known)?* None.
3. *Original Work Order of Plant to be removed (if known):* None.
4. *Is the Plant being removed reusable?* None.
5. *What is the year of original installation of the plant being removed* None.

 **Liberty Utilities** Capital Project Expenditure Form **2020**

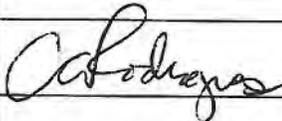
Complete the Financial Summary table only if:

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

Financial Summary

Next Anticipated Test Year	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 – 3 years <input type="checkbox"/> Greater than three years		
Which regulatory constructs will be used for recovering this capital spend?	Rate case		
Please Specify Basis of Estimate For materials, equipment, and construction requiring Engineering drawings please specify the percent complete: ¹	<input checked="" type="checkbox"/> Fixed or Firm Price <input checked="" type="checkbox"/> Estimate – Internal <input type="checkbox"/> Estimate – External <input type="checkbox"/> Other (specify details) The Company has an agreement with Tesla to sell each install for \$16,700.		
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 (\$)	\$1,500,000		

Approvals and Signatures¹

Approved By:				
Role	Approval Limit	Name	Signature	Date
Manager / Staff (requisitioner/buyer):	Up to \$25,000	Heather Tebbetts		February 20, 2020
Senior Manager:	Up to \$50,000			Click here to enter a date.
Senior Director/Director:	Up to \$250,000	Charles Rodrigues		Click here to enter a date.
Senior VP/VP:	Up to \$500,000			



Liberty Utilities Capital Project Expenditure Form

2020

State President:	Up to \$500,000	Susan Fleck		Click here to enter a date. 3/2/20
Regional President:	Up to \$3,000,000	James Sweeney		Click here to enter a date.
Corporate – Sr. VP Operations:	Up to \$5,000,000			Click here to enter a date.
Corporate - Exec Team Member (CEO, CFO, COO, Vice Chair):	Over \$5,000,000			Click here to enter a date.

¹ For Best Practices on estimating project contingencies please see the Capital Policy.

² 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 Overview

Reason for Change: (Please Provide a brief explanation for the cause of the change order)

Project ID:	8830-1933	Project Name:	GSE Battery Backup
Change Order Name:		Date Prepared:	6/24/2020
Change Order #:		Financial Work Order (FWO):ⁱ	
Project Sponsor:	Charles Rodrigues	Revised Start Date:	N/A
Project Lead:	Heather Tebbetts	Revised End Date:ⁱⁱ	12/31/2020
Prepared By:	Heather Tebbetts	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}	

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			\$50,000	50,000
Materials	\$1,500,000		\$166,000	1,660,000
Equipment				
Contractor/Subcontractor				
Burdens/Overheads			\$467,000	\$467,000
AFUDC				
CIAC			(\$131,382)	(\$131,382)
Total Project Cost	\$1,500,000	\$1,500,000	\$683,000	\$2,051,618

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)

In 2019, the budget for the battery program was \$500,000, but due to the request to the NH PUC on an extension to install batteries in November 2019 not being approved until March 2020, that money was not spent and the budget for 2020 was already approved at \$1,500,000. The additional funding provides for the costs that should have been incurred in 2019 being incurred in 2020 due to the delay in approval from the NH PUC.

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		



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	Heather Tebbetts	Heather Tebbetts <small>Digitally signed by Heather Tebbetts DN: cn=Heather Tebbetts, o=Liberty Utilities, ou=regulatory, email=heather.tebbetts@libertyutilities.com, c=US Date: 2020.07.27 09:49:42 -04'00'</small>	
Senior Manager: :	Up to \$50,000			
Senior Director/Director:	Up to \$250,000	Charles Rodrigues	Charles Rodrigues <small>Digitally signed by Charles Rodrigues Date: 2020.07.27 09:58:45 -04'00'</small>	
State President / Senior VP / VP:	Up to \$500,000	Susan Fleck	Susan Fleck <small>Digitally signed by Susan Fleck Date: 2020.07.27 11:20:55 -04'00'</small>	
Regional President:	Up to \$3,000,000	James Sweeney		7/27/2020
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.

Liberty Utilities (Granite State Electric) d/b/a Liberty
 DE 19-064 2020 Step Adjustment
 Project #8830-1946 2019 REP Carryover

<u>Year</u>	<u>Internal Labor</u>	<u>Materials</u>	<u>Vendors</u>	<u>Overheads</u>	<u>Total Spend</u>	<u>Total Budget</u>
<u>2020</u>	<u>\$8,582.08</u>	<u>(\$18,106.26)</u>	<u>\$468,804.26</u>	<u>\$284,284.82</u>	<u>\$743,564.90</u>	<u>\$875,000</u>
<u>Total</u>	<u>\$8,582.08</u>	<u>(\$18,106.26)</u>	<u>\$468,804.26</u>	<u>\$284,284.82</u>	<u>\$743,564.90</u>	<u>\$875,000</u>

The budget amount comes from canceling the Enhanced Bare Conductor project and transferring those dollars to the carryover of this project.

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, Webspac)	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 carry over 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.

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:	1/9/2019
Project ID#:	8830-1946	Cost Estimate:	\$1,450,000
Project Sponsor:	Charles Rodrigues	Project Start Date:	1/1/2019
Project Lead:	Anthony Strabone	Project End Date:	12/31/2019
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 are prioritized.</p> <p>In 2019 the scope of this strategy includes the replacement of approximately 20,000ft of bare wires along Sullivan St Charlestown and Shaker Hill Rd Enfield.</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. 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 the 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)			
None			



Capital Project Business Case

2019

Financial Assessment/Cost Estimates
 (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	2018	2019	Beyond 2019	Total
Internal Labour (including labour and travel)	\$ -	\$ -	\$ 50,000	\$ -	\$ 50,000
Materials (including consumables)	\$ -	\$ -	\$ 550,000	\$ -	\$ 550,000
Equipment (rental equipment)	\$ -	\$ -	\$ -	\$ -	\$ -
Contactor/Subcontractor (including consultants)	\$ -	\$ -	\$ 850,000	\$ -	\$ 850,000
AFUDC (\$)					

Unlevered Internal Rate of Return: Click here to enter text.

Basis of Estimate: *This estimate is of investment grade. A project grade estimate will be provided upon completion of detailed design.*

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	2/1/2019	5/1/2019
Construction	8/1/2019	12/31/2019

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.

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

2019

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)

Approvals and Signatures ¹

Approved By:				
Role	Approval Authority Limit	Name	Signature	Date
Manager / Staff (requisitioner/buyer):	Up to \$25,000	Joel Rivera		3/5/19
Senior Manager: :	Up to \$50,000			
Senior Director/Director:	Up to \$250,000	Charles Rodrigues Director, Engineering		3/5/19
Senior Vice President/ Vice President	Up to \$500,000	Richard MacDonald Vice President, Operations		3/6/19
State President:	Up to \$500,000	Susan Fleck President, NH		3/25/19
Regional President:	Up to \$3,000,000	James Sweeney President, East Region		4/2/19
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		4/2/19

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

2019

Project Name:	Bare Conductor Replacement Program		
Financial Work Order (FWO):		Project ID #:	8830-1946
Requesting Region or Group:	Granite State Electric Co.	Date of Request (MM/DD/YY):	1/9/2019
Project Sponsor:	Charles Rodrigues	Project Start Date:	1/1/2019
Project Lead:	Anthony Strabone	Project End Date:	12/31/2019
Prepared by:	Joel Rivera	Requested Capital (\$)	\$1,450,000
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 2019 the scope of this strategy includes the replacement of approximately 20,000ft of bare wires along Sullivan St Charlestown and Shaker Hill Rd Enfield.

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?
GUIDANCE: If yes, please detail the specific assets that will be removed:
 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
 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.

What alternatives were evaluated and why were they rejected?
 None

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

2019

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 (\$)			



Capital Project Expenditure Form

2019

Approvals and Signatures ⁱⁱ

Approved By:				
Role	Approval Limit	Name	Signature	Date
Manager / Staff (requisitioner/buyer):	Up to \$25,000	Joel Rivera Joel Rivera		3/5/19
Senior Manager:	Up to \$50,000			
Senior Director/Director:	Up to \$250,000	Charles Rodrigues Director, Engineering		3/5/19
Senior VP/VP:	Up to \$500,000	Richard MacDonald Vice President, Operations		3/6/19
State President:	Up to \$500,000	Susan Fleck President, NH		3/25/19
Regional President:	Up to \$3,000,000	James Sweeney President, East Region		
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		4/2/19

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.

Project Close Out Report | 2019

Requesting Region or Group:	Granite State Electric Co.	Date of Closeout (MM/DD/YY):	03/10/2020
Project Name:	Bare Conductor Replacement Program		
Project ID#:	8830-1946	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:	01/01/2019	Project Completion Date:	12/31/2019
Requested Capital (\$)	\$ 1,450,000	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		03/30/2020
Charles Rodrigues	Project Sponsor	Charles Rodrigues <small>Digitally signed by Charles Rodrigues Date: 2020.03.31 08:02:19 -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 **2019**

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)	4/5
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 Team ⁱⁱ

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

Project Close Out Report | 2019

Name	Role	Type (e.g., Contractor, Employee)
Anthony Strabone	Engineering	Employee
Joel Rivera	Engineering	Employee
Jeff Watson	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
None	None

Section 8. Project Cost Summary

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

Cost Category	1- Budget	2- Actual	3 = 1 -2 Variance
Cost of Design & Engineering (\$)		\$ 0	
Cost of Materials (\$)		\$ 187,193.41	
Cost of Construction (\$)		\$ 1,870.10	

Project Close Out Report | 2019

External Costs (\$)		\$ 754,851.61	
Internal Costs (\$)		\$ 0	
Other (burdens \$)		\$ 345,055.85	
CIAC		\$ 0	
AFUDC		\$ 6,629.47	
Total Project Costs (\$)	\$ 1,450,000	\$ 1,295,600.44	\$ 154,399.56

Reasons for Variance	Impact
The 2019 actual charges were less than budgeted amount.	\$ 0
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.

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, Webspac)	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 carry over 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) d/b/a Liberty
 DE 19-064 2020 Step Adjustment
 Project #8830-1958 Install Service to Tuscan Village South

<u>Year</u>	<u>Internal Labor</u>	<u>Materials</u>	<u>Vendors</u>	<u>Overheads</u>	<u>CIAC</u>	<u>AFUDC</u>	<u>Total Spend</u>	<u>Total Budget¹</u>
2018	\$3,121.56	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,121.56	\$0.00
2019	\$25,471.14	\$279,591.70	\$283,689.49	\$306,056.34	(\$21,019.83)	\$16,969.67	\$890,758.51	\$1,200,000
2020	\$149,772.24	\$453,920.46	\$459,661.90	\$772,537.58	(\$94,415.57)	\$73,208.90	\$1,814,685.51	\$900,000
<u>2021</u>	<u>\$3,904.24</u>	<u>\$528.04</u>	<u>\$2,875.78</u>	<u>\$21,657.14</u>	<u>\$0.00</u>	<u>\$8,180.07</u>	<u>\$37,145.27</u>	<u>\$0</u>
Total	\$182,269.18	\$734,040.20	\$746,227.17	\$1,100,251.06	(\$115,435.40)	\$98,358.64	\$2,745,710.85	\$2,100,000

¹ Change order form for 2020 was to request an additional \$1.3m for a total budget of \$2,200,000



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:	Install Service to Tuscan Village South Line	Date Prepared:	2/3/2020
Project ID#:	8830-1958	Cost Estimate:	\$900,000
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 checked="" type="checkbox"/> Growth <input type="checkbox"/> Regulatory Supported <input type="checkbox"/> Discretionary		
Spending Rationale:	<input checked="" type="checkbox"/> Growth <input type="checkbox"/> Improvement <input type="checkbox"/> Replenishment		
Project Scope Statement			
(Insert the scope of work, major deliverables, assumptions, and constraints)			
This project will install new underground commercial distribution (UCD) facilities including transformers, conduit, cable, switchgears, manholes, etc. to supply new business commercial growth in the southern portion of the Tuscan Village Development.			
Background			
(Insert description of current operational arrangement, and brief history of project & asset)			
A recent purchase of the Rockingham Park Track by Tuscan Kitchen includes 50 acres for the Northern Village and 120 acres for the Southern Village. Existing master plans include developments for the southern village and is included in this business case. This project addresses specific commercial service requests within the development and installs the necessary UCD infrastructure to provide a "looped" distribution system.			
Recommendation/Objective			
(Insert the unique problem this project is looking to resolve)			
It is recommended to install a new UG conduit loop system with associated switchgears, cables and conduits for the purposes of supplying new commercial load growth in the southern portion of the Tuscan Village Development.			
Alternatives/Options			
(Describe all reasonably viable alternatives. Discuss the viability of each and provide reasons if rejected)			
Do Nothing – This project is customer driven and is required to supply new commercial business growth. As such doing nothing or deferring is not an option. Other Alternatives were not considered.			
Financial Assessment/Cost Estimates			
(Double click embedded excel file to update; include contingency allowance in excel file)			



Capital Project Business Case

2020

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 Labour (including labour and travel)	\$ -	\$ 50,000	\$ -	\$ -	\$ 50,000
Materials (including consumables)	\$ -	\$ 400,000	\$ -	\$ -	\$ 400,000
Equipment (rental equipment)	\$ -	\$ -	\$ -	\$ -	\$ -
Contractor/Subcontractor (including consultants)	\$ -	\$ 450,000	\$ -	\$ -	\$ 450,000
AFUDC (\$)					
Total Project Costs (\$)	\$ -	\$ 900,000	\$ -	\$ -	\$ 900,000

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

Basis of Estimate: *This estimate is of investment grade. A project grade estimate will be provided upon completion of detailed design. This estimate does not include impacts from Customer in aid of Construction (CIAC) payments.*

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	2/1/2020	6/1/2020
Construction	6/1/2020	12/31/2020

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

Not completing this project could result in the Company not being able to supply new customer growth in the area. This project has a risk score of 50.

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

Unknown

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)



Capital Project Business Case

2020

Please reference the following supporting documents:
[DRAFT Conceptual Layout 120 rev15.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		2/21/2020
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:	Install Service to Tuscan Village South Line		
Financial Work Order (FWO):		Project ID #:	8830-1958
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 (\$)	\$900,000
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 checked="" type="checkbox"/> Growth <input type="checkbox"/> Regulatory Supported <input type="checkbox"/> Discretionary		
Spending Rationale:	<input checked="" type="checkbox"/> Growth <input type="checkbox"/> Improvement <input type="checkbox"/> Replenishment		

Details of Request

Project description

This project will install approximately 1.5 miles of new UG conduit loop system along Tuscan Village Park to supply new growth in the commercial development – Southern Village.

Is this project growth or customer connection related? If “yes”, list the specific locations and how expenditure aligns with customer expansion objectives.

Yes. This project supports and is aligned with the planned customer expansions at the Tuscan Village Park in Salem NH.

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?

GUIDANCE: If yes, please detail the specific assets that will be removed:

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*

The scope of this project is to install new underground conductor in a manhole and duct system. There will be no equipment removed associated with this project. Therefore, this section does not apply.

What alternatives were evaluated and why were they rejected?

Do Nothing – This project is customer driven and is required to supply new commercial business growth. As such doing nothing or deferring is not an option.

Other Alternatives were not considered.

What are the risks and consequences of not approving this expenditure?

Not completing this project could result in the Company not being able to supply new customer growth in the area and/or could result in distribution facilities operating above their design limits.



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?

No

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 (\$)	\$900,000		



Capital Project Expenditure Form

2020

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		03/09/2020
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		2/24/2020
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		

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.

Project Overview

Reason for Change: Budget Increase to fund project to accommodate work associated with Tuscan Development

Project ID:	8830-1958	Project Name:	Install Service to Tuscan Village South Line
Change Order Name:	Budget Increase	Date Prepared:	07/27/2020
Change Order #:	8830-1958-01	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

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	\$900,000		\$700,000	\$1,600,000

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 carry over of 2019 charges and burdens and a higher than anticipated burden rate 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

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: 2020.07.28 07:21:29 -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 09:23:20 -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 Overview

Reason for Change: Budget Increase to fund project to accommodate work associated with Tuscan Development

Project ID:	8830-1958	Project Name:	Install Service to Tuscan Village South Line
Change Order Name:	Budget Increase	Date Prepared:	11/19/2020
Change Order #:	8830-1958-02	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

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	\$900,000	\$700,000	\$600,000	\$2,200,000

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 drivers. The first driver is carry over of 2019 charges, burdens and a higher than anticipated burden rate for the first two months of 2020. The second driver is the increase scope of work for 2020. Original scope of work for 2020 was identified in late 2019 with input from the Tuscan Village Development Team. As 2020 progressed, the Tuscan Village Team increase their scope of work associated with the development of the South Village and Liberty needed to increase our scope of work to install the electrical infrastructure to provide electrical service in the development.

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

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>	11/19/2020
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: 2020.11.19 11:18:26 -05'00'</small>	11/19/2020
State President / Senior VP / VP:	Up to \$500,000	Richard MacDonald, VP Operations	Richard MacDonald <small>Digitally signed by Richard MacDonald Date: 2020.12.01 09:49:21 -05'00'</small>	
Regional President:	Up to \$3,000,000	Susan Fleck President, NH	<i>James Sweeney</i> James Sweeney, President East Region	
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.

Liberty Utilities (Granite State Electric) d/b/a Liberty
 DE 19-064 2020 Step Adjustment
 Project #8830-1969 Mall Road Underground

Charges by Work Order

<u>Year</u>	<u>Work Order</u>	<u>Internal Labor</u>	<u>Materials</u>	<u>Vendors</u>	<u>Overheads</u>	<u>AFUDC</u>	<u>Total Spend</u>	<u>Total Budget</u>
2019	301911-01010	\$30,651.80	\$9,384.07	\$27,532.46	\$61,819.97	\$1,237.14	\$130,625.44	\$520,000
2020	301911-01010	\$26,553.47	\$4,313.37	\$27,897.78	\$66,331.24	\$14,031.52	\$139,127.38	\$400,000
2021	<u>301911-01010</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$1,465.98</u>	<u>\$1,465.98</u>	<u>\$0</u>
	Total	\$57,205.27	\$13,697.44	\$55,430.24	\$128,151.21	\$16,734.64	\$271,218.80	\$920,000
2019	301969-01001	\$0.00	\$0.00	\$312,510.00	\$109,077.08	\$0.00	\$421,587.08	\$500,000
2020	301969-01001	\$1,554.64	\$3,108.81	\$98,218.00	\$35,666.57	\$0.00	\$138,548.02	\$400,000
2021	<u>301969-01001</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0</u>
	Total	\$1,554.64	\$3,108.81	\$410,728.00	\$144,743.65	\$0.00	\$560,135.10	\$400,000

Total Charges by Year

<u>Year</u>	<u>Internal Labor</u>	<u>Materials</u>	<u>Vendors</u>	<u>Overheads</u>	<u>AFUDC</u>	<u>Total Spend</u>	<u>Total Budget</u>
2019	\$30,651.80	\$9,384.07	\$340,042.46	\$170,897.05	\$1,237.14	\$552,212.52	\$1,020,000
2020	\$28,108.11	\$7,422.18	\$126,115.78	\$101,997.81	\$14,031.52	\$277,675.40	\$400,000
2021	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$1,465.98</u>	<u>\$1,465.98</u>	<u>\$0</u>
	\$58,759.91	\$16,806.25	\$466,158.24	\$272,894.86	\$16,734.64	\$831,353.90	\$1,420,000



Capital Project Business Case

2018

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:	Mall Rd- Street Lights	Date Prepared:	7/02/2019
Project ID#:	8830-1969	Cost Estimate:	\$500,000
Project Sponsor:	Charles Rodrigues	Project Start Date:	8/01/2019
Project Lead:	Anthony Strabone	Project End Date:	12/31/2019
Prepared By:	Anthony Strabone	Planned or Unplanned Projects:	<input type="checkbox"/> Planned <input checked="" type="checkbox"/> Unplanned
Project Type (click appropriate boxes):	<input type="checkbox"/> Safety <input type="checkbox"/> Mandated <input type="checkbox"/> Growth <input type="checkbox"/> Regulatory Supported <input checked="" 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)			
The scope of this project is to replace the direct buried underground primary and secondary street light circuit along Mall Rd in Salem. The scope of work will include relocation of street lights, distribution pad-mount transformers, installation of underground conduit and new underground primary and secondary electrical cable.			
Background			
(Insert description of current operational arrangement, and brief history of project & asset)			
The Town of Salem and the New Hampshire Department of Transportation has requested the Developers of Tuscan Village to reconstruction Mall Road to include signals and turn lanes to accommodate the expected vehicle traffic. As a result of the proposed improvements, Liberty's equipment (street lights and transformers) will be located in the traveled way and thus need to be relocated.			
Recommendation/Objective			
(Insert the unique problem this project is looking to resolve)			
The recommendation is to complete this project as not to impede the proposed road improvements.			
Alternatives/Options			
(Describe all reasonably viable alternatives. Discuss the viability of each and provide reasons if rejected)			
No alternatives exists as if this work is not performed, Liberty will have electrical equipment (pad-mounted transformers and street lights) located within the travel lanes of Mall Rd.			
Financial Assessment/Cost Estimates			
(Double click embedded excel file to update; include contingency allowance in excel file)			



Capital Project Business Case

2018

Next Anticipated Test Year	2021	Was this Capital Project included in the current year's Board Approved Budget?	<input type="checkbox"/> Yes <input checked="" 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	

Materials (including consumables)	\$ -	\$ -	\$ 100,000	\$ -	\$ 100,000
Equipment (rental equipment)	\$ -	\$ -	\$ -	\$ -	\$ -
Contractor/Subcontractor (including consultants)	\$ -	\$ -	\$ 350,000	\$ -	\$ 350,000
AFUDC (\$)					
Total Project Costs (\$)	\$ -	\$ -	\$ 500,000	\$ -	\$ 500,000

Unlevered Internal Rate of Return:

Basis of Estimate: *The cost estimate is based on a system generated estimate and actual spending of similar projects*

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
Construction	August 2019	October 2019

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

By not completing this project, Liberty will have electrical assets such as transformers and street lights located within the travel lanes of Mall Road.

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

Unknown

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)



Capital Project Business Case

2018

Approvals and Signatures ¹

Approved By:				
Role	Approval Authority Limit	Name	Signature	Date
Manager / Staff (requisitioner/buyer):	Up to \$25,000	Anthony Strabone		8/15/19
Senior Manager :	Up to \$50,000			
Senior Director/Director:	Up to \$250,000	Charles Rodrigues Director, Engineering		8/15/19
Senior Vice President/ Vice President	Up to \$500,000	Richard MacDonald Vice President, Operations		
State President:	Up to \$500,000	Susan Fleck President, NH		
Regional President:	Up to \$3,000,000	James Sweeney President, East Region		
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

Project Close Out Report | 2019

Requesting Region or Group:	Granite State Electric Co.	Date of Closeout (MM/DD/YY):	03/10/2020
Project Name:	GSE Mall Road - Street Lights		
Project ID#:	8830-1969	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:	01/01/2019	Project Completion Date:	12/31/2019
Requested Capital (\$)	\$ 500,000	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		03/30/2020
Charles Rodrigues	Project Sponsor	Charles Rodrigues <small>Digitally signed by Charles Rodrigues Date: 2020.03.31 08:13:32 -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 | 2019

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)	4/5
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 Team ⁱⁱ

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

Project Close Out Report | 2019

Name	Role	Type (e.g., Contractor, Employee)
Anthony Strabone	Engineering	Employee
Joel Rivera	Engineering	Employee
Melvin Emerson	Engineering	Employee
Mark Parker	Operations	Employee
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
None	None

Section 8. Project Cost Summary

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

Cost Category	1- Budget	2- Actual	3 = 1 -2 Variance
Cost of Design & Engineering (\$)		\$ 0	
Cost of Materials (\$)		\$ 0	
Cost of Construction (\$)		\$ 0	

Project Close Out Report | 2019

External Costs (\$)		\$ 312,510.00	
Internal Costs (\$)		\$ 0	
Other (burdens \$)		\$ 109,077.08	
CIAC		\$ 0	
AFUDC		\$ 0	
Total Project Costs (\$)	\$ 500,000	\$ 421,587.08	\$ 78,412.92

Reasons for Variance	Impact
Actual costs were less than budget.	\$ 78,412.92
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)
301969-01001

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.



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:	Mall Rd/Rockingham Park BLVD– Street Lights	Date Prepared:	2/10/2020
Project ID#:	8830-1969	Cost Estimate:	\$400,000
Project Sponsor:	Charles Rodrigues	Project Start Date:	8/01/2019
Project Lead:	Anthony Strabone	Project End Date:	12/31/2020
Prepared By:	Anthony Strabone	Planned or Unplanned Projects:	<input checked="" type="checkbox"/> Planned <input type="checkbox"/> Unplanned
Project Type (click appropriate boxes):	<input type="checkbox"/> Safety <input checked="" type="checkbox"/> Mandated <input type="checkbox"/> Growth <input 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)			
The scope of this project is to replace the direct buried underground primary and secondary street light circuit along Rockingham Park Blvd in Salem NH. The scope of work will include relocation of underground facilities and the installation of distribution pad-mount transformers, underground conduit and new underground primary and secondary electrical cables.			
Background			
(Insert description of current operational arrangement, and brief history of project & asset)			
The Town of Salem and the New Hampshire Department of Transportation has requested the Developers of Tuscan Village to reconstruct Mall Road to include signals and turn lanes to accommodate the expected increase in vehicle traffic. As a result of the proposed improvements, Liberty’s equipment (street lights and transformers) will be located in the traveled way and thus will need to be relocated.			
Recommendation/Objective			
(Insert the unique problem this project is looking to resolve)			
It is recommended to address this DOT public requirement and relocate existing underground Company assets to accommodate a wider turning lane.			
Alternatives/Options			
(Describe all reasonably viable alternatives. Discuss the viability of each and provide reasons if rejected)			
Do Nothing – Doing nothing is not an option. Due to the road widening project, Liberty’s facilities (pad-mounted transformers and street lights) will be located in the proposed roadway and need to be relocated.			
Financial Assessment/Cost Estimates			
(Double click embedded excel file to update; include contingency allowance in excel file)			



Capital Project Business Case

2020

Next Anticipated Test Year

2021

Was this Capital Project included in the current year's Board Approved Budget?

Yes
 No

Regulatory Lag
 (Click appropriate box)

Less than 6 Months 6-12 Months 1 to 3 years Greater than 3 years

Category	Total Already Approved	2020	2021	Beyond 2021	Total
Internal Labour (including labour and travel)	\$ -	\$ 50,000	\$ -	\$ -	\$ 50,000
Materials (including consumables)	\$ -	\$ 100,000	\$ -	\$ -	\$ 100,000
Equipment (rental equipment)	\$ -	\$ -	\$ -	\$ -	\$ -
Contractor/Subcontractor (including consultants)	\$ -	\$ 250,000	\$ -	\$ -	\$ 250,000
AFUDC (\$)					
Total Project Costs (\$)	\$ -	\$ 400,000	\$ -	\$ -	\$ 400,000

Unlevered Internal Rate of Return:

Basis of Estimate: *The cost estimate is based on a system generated estimate and actual spending of similar projects*

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	1/1/2020	2/1/2020
Construction	7/1/2020	10/1/2020

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

Not completing this project could result in the Company not being able to supply safe and reliable electric service to the facilities within and around the proposed widened intersection. Also, if Liberty does not complete the relocation of our underground facilities, the Town will not be able to proceed with their plans of reconstructing this area.
 This project has a risk score of 50. Public Requirements – Mandated

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

Unknown

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)

Please reference the following supporting documents:
[Mall Rd-Rock Blvd Lights Relocation.pdf](#)



Capital Project Business Case

2020

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		2/21/2020
State President:	Up to \$500,000	Susan Fleck President, NH		2/26/2020
Regional President:	Up to \$3,000,000			
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		

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Capital Project Expenditure Form

2020

Project Name:	Mall Rd/Rockingham Park BLVD– Street Lights		
Financial Work Order (FWO):		Project ID #:	8830-1969
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 (\$)	\$400,000
Planned or Unplanned Projects:	<input checked="" type="checkbox"/> Planned <input type="checkbox"/> Unplanned		
Project Type: (Click appropriate boxes)	<input type="checkbox"/> Safety <input checked="" type="checkbox"/> Mandated <input type="checkbox"/> Growth <input 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

The scope of this project is to replace the direct buried underground primary and secondary street light circuit along Rockingham Park Blvd in Salem NH. The scope of work will include relocation of underground facilities and the installation of distribution pad-mount transformers, underground conduit and new underground primary and secondary electrical cables.

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 will be required with both the Town of Salem and NHDOT for the Company to install underground man-holes and conduits.

Will there be assets, greater than \$5,000, currently in service removed as a result of this expenditure?

GUIDANCE: If yes, please detail the specific assets that will be removed:

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

It is assumed that direct buried underground cables will be abandoned in place. The existing transformers and vaults will be removed. At this time answers to questions 1, 2, 3 and 5 is unknown. The plant being removed is not usable.

What alternatives were evaluated and why were they rejected?

Do Nothing – Doing nothing is not an option. Due to the road widening project, Liberty's facilities (pad-mounted transformers and street lights) will be located in the proposed roadway and need to be relocated.



Capital Project Expenditure Form

2020

What are the risks and consequences of not approving this expenditure?

Not completing this project could result in the Company not being able to supply safe and reliable electric service to the facilities within and around the proposed widened intersection. Also, if Liberty does not complete the relocation of our underground facilities, the Town will not be able to proceed with their plans of reconstructing this area.

This project has a risk score of 50. Public Requirements – Mandated

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

All work associated with this project will be performed in accordance with Liberty Safety/Health policies and procedures as well as good industry work practices.

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

No

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	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 – 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 (\$)			



Capital Project Expenditure Form

2020

Total Project Costs (\$)	\$400,000	
---------------------------------	-----------	--

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			
State President:	Up to \$500,000	SUSAN FUELL PRESIDENT NH		2/26/2020
Regional President:	Up to \$3,000,000			
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.

Project Close Out Report **2019**

Requesting Region or Group:	Granite State Electric Co.	Date of Closeout (MM/DD/YY):	03/10/2021
Project Name:	GSE Mall Road - Street Lights		
Project ID#:	8830-1969	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 (\$)	\$ 400,000	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	<i>Anthony Strabone</i>	03/29/2021
Charles Rodrigues	Project Sponsor	Charles Rodrigues <small>Digitally signed by Charles Rodrigues Date: 2021.03.30 08:25:42 -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 **2019**

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, Webspaces)	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 | 2019

Name	Role	Type (e.g., Contractor, Employee)
Anthony Strabone	Engineering	Employee
Joel Rivera	Engineering	Employee
Melvin Emerson	Engineering	Employee
Mark Parker	Operations	Employee
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
None	None

Section 8. Project Cost Summary

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

Cost Category	1- Budget	2- Actual	3 = 1 -2 Variance
Cost of Design & Engineering (\$)		\$ 0	
Cost of Materials (\$)		\$ 7,422.18	
Cost of Construction (\$)		\$ 0	

Project Close Out Report | 2019

External Costs (\$)		\$ 125,455.78	
Internal Costs (\$)		\$ 24,771.36	
Other (burdens \$)		\$ 88,747.05	
CIAC		\$ 0	
AFUDC		\$ 14,031.52	
Total Project Costs (\$)	\$ 400,000	\$ 260,427.89	\$ 139,572.11

Reasons for Variance	Impact
Actual project costs were less than budget and therefore this project came in under-budget.	\$ 139,572.11
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)
301969-01001
301911-01010

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) d/b/a Liberty
 DE 19-064 2020 Step Adjustment
 Project #8830-2011 Public Requirements Blanket

<u>Year</u>	<u>Internal Labor</u>	<u>Materials</u>	<u>Vendors</u>	<u>Overheads</u>	<u>CIAC</u>	<u>AFUDC</u>	<u>Total Spend</u>	<u>Total Budget</u>
2017	\$264.74	\$0.00	\$0.00	\$759.18	\$0.00	\$0.00	\$1,023.92	\$505,000
2018	\$97.62	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$97.62	\$725,000
2019	\$37,235.49	\$4,487.85	\$13,347.63	\$60,438.47	\$0.00	\$1,963.39	\$117,472.83	\$630,000
<u>2020</u>	<u>\$204,647.53</u>	<u>\$70,265.14</u>	<u>\$213,407.77</u>	<u>\$435,428.30</u>	<u>(\$9,517.67)</u>	<u>\$2,776.12</u>	<u>\$917,007.19</u>	<u>\$1,000,000</u>
Total	\$204,647.53	\$70,265.14	\$213,407.77	\$435,428.30	(\$9,517.67)	\$2,776.12	\$1,035,601.56	\$2,860,000

*Total for 2020 is different from Project Close Out form as not all of the projects in the required close out form are in service.
 The 2017, 2018, 2019 and 2020 represents the total dollars for projects that went in service as of 12/31/2020.



Liberty UtilitiesSM
WATER GAS ELECTRIC

B U S I N E S S
C A S E

PROJECT TITLE: **GSE-DIST-PUBLIC REQUIREMENTS' BLANKET**

PROJECT SPONSOR: **CHRIS BROUILLARD**

PROJECT LEAD: **ANTHONY STRABONE**

DATE: **9/6/2016**

PROJECT ID: **8830-1711**

BUSINESS PLAN NUMBER:

RECOMMENDATION:

This Blanket Project is for Public Requirements

BACKGROUND

This blanket project will provide for public requirement to cover DOT / Municipal requirements necessitating relocation, removal or installation of our facilities.

Includes:

- Relocate existing overhead/underground facilities (i.e. poles; padmount transformers) due to road or bridge work, and other public requirements
- Relocate existing overhead/underground facilities per customer requests
- Construction requested (overhead/underground) by Telephone Company, Public Authorities, Towns and/or Municipalities
- Environmental Expenditures.

ALTERNATIVES/OPTIONS

None

FINANCIAL ASSESSMENT

This blanket project is based on historical spending trends and anticipated year ahead activity in this investment category.

RISK ASSESSMENT AND QUALITATIVE EVALUATION

None

IMPLEMENTATION/ACTION PLAN

The construction will take place under individual jobs numbers throughout the year.

REVIEWED BY:

PROJECT LEADER:

DIRECTOR/VP: *C.P. Grumillo*

FINANCE: *Jessica Anderson 1117*



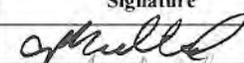
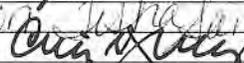
Liberty UtilitiesSM

WATER GAS ELECTRIC

LIBERTY UTILITIES - CAPITAL PROJECT EXPENDITURE APPLICATION

DIVISION/COMPANY: Capital / Granite State Electric Co.	HOME OFFICE REF #: 8830-1711
PROJECT TITLE: GSE-Dist-Public Requirements'	EXPECTED PROJECT TOTAL: \$387,000
PROJECT TYPE (circle one): System Maint / System Project / Growth /	
PROJECT START DATE: 1/1/2017	PROJECT END DATE: 12/31/2017
CURRENT UTILITY EARNINGS STATUS:	JOB COST/FWO #:
Type of Capital Project: <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <input type="checkbox"/> Growth <input type="checkbox"/> Improvement Upgrades <input checked="" type="checkbox"/> Infrastructure Replacement </div>	
PROJECT DESCRIPTION & LOCATION: This Blanket Project is to cover DOT/Municipal requirements necessitating relocation, removal or installation of our facilities.	
IS THIS PROJECT GROWTH RELATED? IF "YES", DESCRIBE THE SPECIFIC LOCATION (MAP) AND LIST APPLICABLE DEVELOPERS WHERE GROWTH WILL OCCUR (CONSULT WITH DEVELOPMENT SERVICES REGARDING FUNDING). No	
PERMITTING REQUIREMENTS, INCLUDING POTENTIAL IMPACT ON EXISTING PERMITS, AND TIMING OF AND RISKS ASSOCIATED WITH OBTAINING APPROPRIATE PERMITS FOR PROJECT. Pole Licensing and Environmental Permitting as required.	
COST ESTIMATE FOR TOTAL PROJECT, NATURE OF ESTIMATE (FIRM FIXED PRICE, INTERNALLY OR EXTERNALLY GENERATED), TIMING OF SPENDING BY QUARTER, AND RISKS ASSOCIATED WITH COST ESTIMATES. Cost estimates will be calculated on an individual job basis.	
WILL THERE BE ASSETS GREATER THAN \$5,000 THAT ARE CURRENTLY IN SERVICE REMOVED AS A RESULT OF THIS PROJECT? Yes, Asset Removal will be calculated on a job specific basis.	

Business Case

IF YES, PLEASE DETAIL THE SPECIFIC ASSETS THAT WILL BE REMOVED: 1. Original Cost of Plant to be removed (if known): Not known 2. What is the replacement cost of the plant being removed (if original cost not known)? Not known 3. Original Work Order of Plant to be removed (if known): Not known 4. Is the Plant being removed reusable? No 5. What is the year of original installation of the plant being removed? Varied																							
PROPOSED SOURCE OF FUNDS (COMPANY, DEVELOPER LXA, HUF, ETC.) The 2017 Approved Capital Budget.																							
CATEGORY & STATUS OF PROJECT (tick as appropriate)		FINANCIAL SUMMARY NEXT ANTICIPATED TEST YEAR <input type="text"/> Rate Recovery (over 18 months) <input type="text"/> Will this, and other approved projects, cause a rate shock? <input type="text"/>	If yes, is customer affordability an issue? No																				
Safety	<input type="checkbox"/>	Have Health & Safety implications been considered?	<input type="text"/>																				
Mandated	<input checked="" type="checkbox"/>	Has Environmental Compliance review been done?	<input type="text"/>																				
Impending Regulatory Obligation	<input type="checkbox"/>	Has Tech Services review been done?	<input type="text"/>																				
Rate Recovery-Immediate Return	<input checked="" type="checkbox"/>																						
Rate Recovery (3 to 6 months)	<input type="checkbox"/>																						
Rate Recovery (6 to 12 months)	<input type="checkbox"/>																						
Rate Recovery (12 to 18 months)	<input type="checkbox"/>																						
Was this Capital Expenditure included in the Annual Budget?	<input checked="" type="checkbox"/>																						
ANALYSIS OF PROJECT VALUE		CAPITAL EXPENDITURE BUDGET UTILIZATION																					
Design/Engineering	<input type="text"/>	(A) Capital budget (B) Over (under) run vs. Budget (C) (A+B) Total Estimated Project Cost (D) Less Approved Spend to Date (E) Less Future Approval Requests (F) (C-D-E) Approval Amount Requested (current application)	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Authorized Amount</th> <th colspan="2">To be spent in:</th> </tr> <tr> <th>Current Year</th> <th>Future Years</th> </tr> </thead> <tbody> <tr> <td style="text-align: right;">\$387,000</td> <td style="text-align: right;">\$387,000</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Authorized Amount	To be spent in:		Current Year	Future Years	\$387,000	\$387,000													
Authorized Amount	To be spent in:																						
	Current Year		Future Years																				
\$387,000	\$387,000																						
External contractor costs	<input type="text"/>																						
Internal costs	<input type="text"/>																						
Other costs (contingency)	<input type="text"/>																						
Working capital requirements	<input type="text"/>																						
Project Total Cost	\$387,000																						
	Name	Signature	Date																				
Requesting Party	Anthony Strabone		1/12/17																				
Region Director (\$250K)	Tisha Sanderson		1/11/17																				
Region Vice President (\$500K)	Craig Jennings		1/31/17																				
Region President (\$1M)																							
Corp Senior VP (\$1.5M)																							
Corp President (\$3M)																							

Attachment:



Liberty UtilitiesSM
WATER | GAS | ELECTRIC

B U S I N E S S
C A S E

PROJECT TITLE: **GSE-DIST-PUBLIC REQUIREMENTS' BLANKET**

PROJECT SPONSOR: **CHARLES RODRIGUES**

PROJECT MANAGER: **ANTHONY STRABONE**

DATE: **10/18/2017**

PROJECT ID: **8830-1811**

BUSINESS PLAN NUMBER:

RECOMMENDATION:

This Blanket Project is for Public Requirements

BACKGROUND

This blanket project will provide for public requirement to cover DOT / Municipal requirements necessitating relocation, removal or installation of our facilities.

Includes:

- Relocate existing overhead/underground facilities (i.e. poles; padmount transformers) due to road or bridge work, and other public requirements
- Relocate existing overhead/underground facilities per customer requests
- Construction requested (overhead/underground) by Telephone Company, Public Authorities, Towns and/or Municipalities
- Environmental Expenditures.

ALTERNATIVES/OPTIONS

None

FINANCIAL ASSESSMENT

This blanket project is based on historical spending trends and anticipated year-ahead activity in this investment category.

RISK ASSESSMENT AND QUALITATIVE EVALUATION

None

IMPLEMENTATION/ACTION PLAN

The construction will take place under individual jobs numbers throughout the year.

REVIEWED BY:

PROJECT LEADER:

Anthony Strabone / Anthony Strabone

DIRECTOR/VP:

CHARLES RODRIGUES / Charles Rodrigues

FINANCE:

Jisha Sankaran 12/21/17



Liberty UtilitiesSM

WATER GAS ELECTRIC

LIBERTY UTILITIES - CAPITAL PROJECT EXPENDITURE APPLICATION

DIVISION/COMPANY: Capital / Granite State Electric Co.	HOME OFFICE REF #: 8830-1811
PROJECT TITLE: GSE-Dist-Public Requirements'	EXPECTED PROJECT TOTAL: \$520,000
PROJECT TYPE (circle one): System Maint / System Project / Growth /	
PROJECT START DATE: 1/1/2018	PROJECT END DATE: 12/31/2018
CURRENT UTILITY EARNINGS STATUS:	JOB COST/FWO #:
Type of Capital Project: <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <input type="checkbox"/> Growth <input type="checkbox"/> Improvement Upgrades <input checked="" type="checkbox"/> Infrastructure Replacement </div>	
PROJECT DESCRIPTION & LOCATION: This Blanket Project is to cover DOT/Municipal requirements necessitating relocation, removal or installation of our facilities.	
IS THIS PROJECT GROWTH RELATED? IF "YES", DESCRIBE THE SPECIFIC LOCATION (MAP) AND LIST APPLICABLE DEVELOPERS WHERE GROWTH WILL OCCUR (CONSULT WITH DEVELOPMENT SERVICES REGARDING FUNDING). No	
PERMITTING REQUIREMENTS, INCLUDING POTENTIAL IMPACT ON EXISTING PERMITS, AND TIMING OF AND RISKS ASSOCIATED WITH OBTAINING APPROPRIATE PERMITS FOR PROJECT. Pole Licensing and Environmental Permitting as required.	
COST ESTIMATE FOR TOTAL PROJECT, NATURE OF ESTIMATE (FIRM FIXED PRICE, INTERNALLY OR EXTERNALLY GENERATED), TIMING OF SPENDING BY QUARTER, AND RISKS ASSOCIATED WITH COST ESTIMATES. Cost estimates will be calculated on an individual job basis.	
WILL THERE BE ASSETS GREATER THAN \$5,000 THAT ARE CURRENTLY IN SERVICE REMOVED AS A RESULT OF THIS PROJECT? Yes, Asset Removal will be calculated on a job specific basis.	

Business Case

IF YES, PLEASE DETAIL THE SPECIFIC ASSETS THAT WILL BE REMOVED;

1. Original Cost of Plant to be removed (if known): **Not known**
2. What is the replacement cost of the plant being removed (if original cost not known)? **Not known**
3. Original Work Order of Plant to be removed (if known): **Not known**
4. Is the Plant being removed reusable? **No**
5. What is the year of original installation of the plant being removed? **Varied**

PROPOSED SOURCE OF FUNDS (COMPANY, DEVELOPER LXA, HUF, ETC.)

The 2018 Approved Capital Budget.

CATEGORY & STATUS OF PROJECT (tick as appropriate)		FINANCIAL SUMMARY	
		NEXT ANTICIPATED TEST YEAR	<input type="text" value="2018"/>
		Rate Recovery (over 18 months)	<input checked="" type="checkbox"/>
Safety	<input type="checkbox"/>	Will this, and other approved projects, cause a rate shock	<input type="text" value="No"/>
Mandated	<input checked="" type="checkbox"/>		
Impending Regulatory Obligation	<input type="checkbox"/>		
Rate Recovery-Immediate Return	<input type="checkbox"/>	Have Health & Safety implications been considered?	<input type="text" value="Yes"/>
Rate Recovery (3 to 6 months)	<input type="checkbox"/>	Has Environmental Compliance review been done?	<input type="text" value="Yes"/>
Rate Recovery (6 to 12 months)	<input type="checkbox"/>	Has Tech Services review been done?	<input type="text" value="Yes"/>
Rate Recovery (12 to 18 months)	<input type="checkbox"/>		
Was this Capital Expenditure included in the Annual Budget?	<input checked="" type="checkbox"/>		

If yes, is customer affordability an issue?

ANALYSIS OF PROJECT VALUE		CAPITAL EXPENDITURE BUDGET UTILIZATION		
		Authorized Amount	To be spent in:	
Design/Engineering	<input type="text"/>		Current Year	Future Years
External contractor costs	<input type="text"/>			
Internal costs	<input type="text"/>			
Other costs (contingency)	<input type="text"/>			
Working capital requirements	<input type="text"/>			
Project Total Cost	<input type="text" value="\$520,000"/>	(A) Capital budget \$520,000	(B) Over (under) run vs. Budget	
		(C) (A+B) Total Estimated Project Cost		
		(D) Less Approved Spend to Date		
		(E) Less Future Approval Requests		
		(F) (C-D-E) Approval Amount Requested (current application)		

	Name	Signature	Date
Requesting Party	Anthony Strabone		11/30/17
Director of Engineering	Charles Rodrigues		11/30/17
VP Engineering & Operations	Craig Jennings		
President - LU Central			
Director Finance	Tisha Sanderson		12/21/17
CFO			
CEO			
NH PRESIDENT	SUSAN FLECK		12/20/17

Attachment:



Capital Project Expenditure Form

2019

Project Name:	GSE-Dist-Public Require Blanket		
Financial Work Order (FWO):		Project ID #:	8830-1911
Requesting Region or Group:	Granite State Electric Co.	Date of Request (MM/DD/YY):	1/9/2019
Project Sponsor:	Charles Rodrigues	Project Start Date:	1/1/2019
Project Lead:	Anthony Strabone	Project End Date:	12/31/2019
Prepared by:	Anthony Strabone	Requested Capital (\$)	\$520,000
Planned or Unplanned Projects:	<input checked="" type="checkbox"/> Planned <input type="checkbox"/> Unplanned		
Project Type: (Click appropriate boxes)	<input type="checkbox"/> Safety <input checked="" type="checkbox"/> Mandated <input type="checkbox"/> Growth <input type="checkbox"/> Regulatory Supported <input type="checkbox"/> Discretionary		
Spending Rationale:	<input type="checkbox"/> Growth <input type="checkbox"/> Improvement <input checked="" type="checkbox"/> Replenishment		

Details of Request

Project description

This project will provide for public requirements to cover DOT / Municipal requirements necessitating relocation, removal or installation of our facilities which includes:

- Relocate existing overhead/underground facilities (i.e. poles; padmount transformers) due to road or bridge work, and other public requirements
- Relocate existing overhead/underground facilities per customer requests
- Construction requested (overhead/underground) by Telephone Company, Public Authorities, Towns and/or Municipalities

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 may be required for pole installation and installation of underground electrical equipment including conduit.

Will there be assets, greater than \$5,000, currently in service removed as a result of this expenditure?

GUIDANCE: If yes, please detail the specific assets that will be removed:

1. *Original Cost of Plant to be removed (if known):* **Not Known**
2. *What is the replacement cost of the plant being removed (if original cost not known)?* **Not Known**
3. *Original Work Order of Plant to be removed (if known):* **Not Known**
4. *Is the Plant being removed reusable?* **No**
5. *What is the year of original installation of the plant being removed:* **Varied**



Capital Project Expenditure Form

2019

What alternatives were evaluated and why were they rejected?

Alternatives will be considered on a case by case basis.

What are the risks and consequences of not approving this expenditure?

Costs associated with this expenditure will need to be captured under other Capital Expenditure Blankets.

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

Work associated with this expenditure will be performed in accordance with the Company's Safety Manual and other industry accepted safety practices.

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

No

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	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 – 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: ^f	<input type="checkbox"/> Fixed or Firm Price <input checked="" 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 (\$)	\$520,000		



Capital Project Expenditure Form

2019

Approvals and Signatures ⁱⁱ

Approved By:				
Role	Approval Limit	Name	Signature	Date
Manager / Staff (requisitioner/buyer):	Up to \$25,000	Anthony Strabone		3/4/19
Senior Manager:	Up to \$50,000			
Senior Director/Director:	Up to \$250,000	Charles Rodrigues Director, Engineering		3/6/19
Senior VP/VP:	Up to \$500,000	Richard MacDonald Vice President, Operations		3/6/2019
State President:	Up to \$500,000	Susan Fleck President, NH		3/25/19
Regional President:	Up to \$3,000,000	James Sweeney President, East Region		
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		4/2/19

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.



Capital Project Expenditure Form

2020

Project Name:	GSE-Dist-Public Require Blanket		
Financial Work Order (FWO):		Project ID #:	8830-2011
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:	Anthony Strabone	Requested Capital (\$)	\$520,000
Planned or Unplanned Projects:	<input checked="" type="checkbox"/> Planned <input type="checkbox"/> Unplanned		
Project Type: (Click appropriate boxes)	<input type="checkbox"/> Safety <input checked="" type="checkbox"/> Mandated <input type="checkbox"/> Growth <input type="checkbox"/> Regulatory Supported <input type="checkbox"/> Discretionary		
Spending Rationale:	<input type="checkbox"/> Growth <input type="checkbox"/> Improvement <input checked="" type="checkbox"/> Replenishment		

Details of Request

Project description

This project will provide for public requirements to cover DOT / Municipal requirements necessitating relocation, removal or installation of our facilities which includes:

- Relocate existing overhead/underground facilities (i.e. poles; padmount transformers) due to road or bridge work, and other public requirements
- Relocate existing overhead/underground facilities per customer requests
- Construction requested (overhead/underground) by Telephone Company, Public Authorities, Towns and/or Municipalities

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 may be required for pole installation and installation of underground electrical equipment including conduit.

Will there be assets, greater than \$5,000, currently in service removed as a result of this expenditure?

GUIDANCE: If yes, please detail the specific assets that will be removed:

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:

Answers to questions 1, 2,3 and 5 are unknown at this time. The Plant being removed/replaced will most likely not be reusable due to age or asset condition.



Capital Project Expenditure Form

2020

What alternatives were evaluated and why were they rejected?

Alternatives will be considered on a case by case basis as part of determining the best option for a specific project.

What are the risks and consequences of not approving this expenditure?

Costs associated with this expenditure will need to be captured under other Capital Expenditure Blankets.

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

Work associated with this expenditure will be performed in accordance with the Company's Safety Manual and other industry accepted safety practices.

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

No



Capital Project Expenditure Form

2020

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	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 – 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 checked="" 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 (\$)	\$520,000		

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		09/04/2020
Senior Manager:	Up to \$50,000			
Senior Director/Director:	Up to \$250,000	Charles Rodrigues Director, Engineering		2/25/2020



Capital Project Expenditure Form

2020

Senior VP/VP:	Up to \$500,000	Richard MacDonald Vice President, Operations	<i>Richard MacDonald</i>	2/21/2020
State President:	Up to \$500,000	Susan Fleck President, NH	<i>Susan Fleck</i>	2/26/2020
Regional President:	Up to \$3,000,000	James Sweeney President, East Region	<i>James Sweeney</i>	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.

Project Overview

Reason for Change: Budget Increase to fund project to accommodate work requested from Local Towns

Project ID:	8830-2011	Project Name:	GSE-Dist-Public Require Blanket
Change Order Name:	Budget Increase	Date Prepared:	06/24/2020
Change Order #:	8830-2011-01	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

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	\$520,000		\$480,000	\$1,000,000

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)

The Company has received requests from local Towns to relocate our assets to accommodate Town improvement projects. Examples of these requests are; relocation of poles and anchors to accommodate road improvement projects; sewer replacement projects; installation of sidewalks and bus stops (public transit).

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

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>	07/06/2020
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: 2020.07.06 08:52:53 -04'00'</small>	07/06/2020
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 09:32:10 -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 **2019**

Requesting Region or Group:	Granite State Electric Co.	Date of Closeout (MM/DD/YY):	03/10/2021
Project Name:	GSE-Dist-Public Require Blanket		
Project ID#:	8830-2011	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 (\$)	\$ 520,000	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	<i>Anthony Strabone</i>	03/29/2021
Charles Rodrigues	Project Sponsor	Charles Rodrigues <small>Digitally signed by Charles Rodrigues Date: 2021.03.30 08:16:21 -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 **2019**

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)	2/5
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, Webspac)	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 | 2019

Name	Role	Type (e.g., Contractor, Employee)
Anthony Strabone	Engineering	Employee
Mark Parker	Overhead Line Operations	Employee
Ryan Tsantoulis	Engineering	Employee
Melvin Emerson	Engineering	Employee
Richard Huntley	Engineering	Employee

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
None	None

Section 8. Project Cost Summary

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

Cost Category	1- Budget	2- Actual	3 = 1 -2 Variance
Cost of Design & Engineering (\$)		\$ 0	
Cost of Materials (\$)		\$ 80,587.37	
Cost of Construction (\$)		\$ 0	

Project Close Out Report | 2019

External Costs (\$)		\$ 378,277.10	
Internal Costs (\$)		\$ 206,105.61	
Other (burdens \$)		\$ 456,372.08	
CIAC (\$)		\$ (9,517.67)	
AFUDC		\$ 2,776.12	
Total Project Costs (\$)	\$ 520,000	\$ 1,114,600.61	\$ (594,600.61)

Reasons for Variance	Impact
Actual project costs were greater than budgeted. See Change Order Form	\$ (594,600.61)
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) d/b/a Liberty
 DE 19-064 2020 Step Adjustment
 Project #8830-2012 Damage/Failure Blanket

<u>Year</u>	<u>Internal Labor</u>	<u>Materials</u>	<u>Vendors</u>	<u>Overheads</u>	<u>Total Spend</u>	<u>Total Budget</u>
2018	\$102.99	\$0.00	\$712.36	\$476.46	\$1,291.81	\$800,000
2019	\$19,023.87	\$737.64	\$3,520.00	\$5,853.30	\$29,134.81	\$1,100,000
<u>2020</u>	<u>\$360,430.41</u>	<u>\$84,307.60</u>	<u>\$237,899.33</u>	<u>\$714,752.38</u>	<u>\$1,397,389.72</u>	<u>\$1,000,000</u>
Total	\$360,430.41	\$84,307.60	\$237,899.33	\$714,752.38	\$1,427,816.34	\$2,900,000

*Total for 2020 is different from Project Close Out form as not all of the projects in the required close out form are in service.
 The 2018, 2019 and 2020 represents the total dollars for projects that went in service as of 12/31/2020.



Liberty UtilitiesSM
WATER GAS ELECTRIC

B U S I N E S S
C A S E

PROJECT TITLE: **GSE-DIST-DAMAGE & FAILURE BLANKET**

PROJECT SPONSOR: **CHARLES RODRIGUES**

PROJECT MANAGER: **ANTHONY STRABONE**

DATE: **10/18/2017**

PROJECT ID: **8830-1812**

BUSINESS PLAN NUMBER:

Business Case

RECOMMENDATION:

This Blanket Project is to Replace Damaged Equipment due to Damage and/or Failure

BACKGROUND

To replace damaged equipment found on inspection and equipment about to fail, including repairs as occurs throughout the year.

Includes:

- Replacement due to storm damage
- Replacement due to damage caused by vehicle
- Replacement due to damage caused by vandalism
- Replacement due to failure caused by age, fatigue, and/or deterioration

ALTERNATIVES/OPTIONS

None

FINANCIAL ASSESSMENT

This blanket project is based on historical spending trends and anticipated year-ahead activity in this investment category.

RISK ASSESSMENT AND QUALITATIVE EVALUATION

None

IMPLEMENTATION/ACTION PLAN

The construction will take place under individual jobs numbers throughout the year.

REVIEWED BY:

DIRECTOR/VP: *CHARLES RODRIGUES / C. Rodrigues.*

FINANCE: *Jishay Sandeisen 12/29/17*

Project Manager Anthony Strabone / Anthony Strabone

[Signature]
12/29/17

Business Case



Liberty UtilitiesSM
 WATER GAS ELECTRIC

LIBERTY UTILITIES - CAPITAL PROJECT EXPENDITURE APPLICATION

DIVISION/COMPANY: Capital / Granite State Electric Co.	HOME OFFICE REF #: 8830-1812
PROJECT TITLE: Dist-Damage & Failure Blanket	EXPECTED PROJECT TOTAL: \$800,000
PROJECT TYPE (circle one): System Maint / System Project / Growth /	
PROJECT START DATE: 1/1/2018	PROJECT END DATE: 12/31/2018
CURRENT UTILITY EARNINGS STATUS:	JOB COST/FWO #:
Type of Capital Project: <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <input type="checkbox"/> Growth <input type="checkbox"/> Improvement Upgrades <input checked="" type="checkbox"/> Infrastructure Replacement </div>	
PROJECT DESCRIPTION & LOCATION: This Blanket Project is to replace damaged equipment found on inspection and equipment about to fail, including repairs as occurs throughout the year.	
IS THIS PROJECT GROWTH RELATED? IF "YES", DESCRIBE THE SPECIFIC LOCATION (MAP) AND LIST APPLICABLE DEVELOPERS WHERE GROWTH WILL OCCUR (CONSULT WITH DEVELOPMENT SERVICES REGARDING FUNDING). No	
PERMITTING REQUIREMENTS, INCLUDING POTENTIAL IMPACT ON EXISTING PERMITS, AND TIMING OF AND RISKS ASSOCIATED WITH OBTAINING APPROPRIATE PERMITS FOR PROJECT. Pole Licensing and Environmental Permitting as required.	
COST ESTIMATE FOR TOTAL PROJECT, NATURE OF ESTIMATE (FIRM FIXED PRICE, INTERNALLY OR EXTERNALLY GENERATED), TIMING OF SPENDING BY QUARTER, AND RISKS ASSOCIATED WITH COST ESTIMATES. Cost estimates will be calculated on an individual job basis.	
WILL THERE BE ASSETS GREATER THAN \$5,000 THAT ARE CURRENTLY IN SERVICE REMOVED AS A RESULT OF THIS PROJECT? Yes, Asset Removal will be calculated on a job specific basis.	

Business Case

IF YES, PLEASE DETAIL THE SPECIFIC ASSETS THAT WILL BE REMOVED:

1. Original Cost of Plant to be removed (if known): **Not known**
2. What is the replacement cost of the plant being removed (if original cost not known)? **Not known**
3. Original Work Order of Plant to be removed (if known): **Not known**
4. Is the Plant being removed reusable? **No**
5. What is the year of original installation of the plant being removed? **Varied**

PROPOSED SOURCE OF FUNDS (COMPANY, DEVELOPER LXA, HUF, ETC.)

The 2018 Approved Capital Budget.

CATEGORY & STATUS OF PROJECT

(tick as appropriate)

FINANCIAL SUMMARY

NEXT ANTICIPATED TEST YEAR

2018

Rate Recovery (over 18 months)

X

Will this, and other approved projects, cause a rate shock

No

If yes, is customer affordability an issue?

Safety

Mandated

X

Impending Regulatory Obligation

Rate Recovery-Immediate Return

Have Health & Safety implications been considered?

Yes

Rate Recovery (3 to 6 months)

Has Environmental Compliance review been done?

Yes

Rate Recovery (6 to 12 months)

Has Tech Services review been done?

Yes

Rate Recovery (12 to 18 months)

Was this Capital Expenditure included in the Annual Budget?

Yes

ANALYSIS OF PROJECT VALUE

Design/Engineering

External contractor costs

Internal costs

Other costs (contingency)

Working capital requirements

Project Total Cost

\$800,000

CAPITAL EXPENDITURE BUDGET UTILIZATION

Authorized Amount	To be spent in:	
	Current Year	Future Years
\$800,000	\$800,000	

- (A) Capital budget
 (B) Over (under) run vs. Budget
 (C) (A+B) Total Estimated Project Cost
 (D) Less Approved Spend to Date
 (E) Less Future Approval Requests
 (F) (C-D-E) Approval Amount Requested (current application)

	Name	Signature	Date
Requesting Party	Anthony Strabone		11/30/17
Director of Engineering	Charles Rodrigues		11/30/17
VP Engineering & Operations	Craig Jennings		
President- LU East	James Sweeney		
Director Finance	Tisha Sanderson		12/20/17
CFO			
CEO			
Director Operations	Rich MacDonald		12/19/17
President - WH	Susan Fleck		12/20/17

Attachment:



Capital Project Expenditure Form

2019

Project Name:	Dist-Damage&Failure Blanket		
Financial Work Order (FWO):		Project ID #:	8830-1912
Requesting Region or Group:	Granite State Electric Co.	Date of Request (MM/DD/YY):	1/9/2019
Project Sponsor:	Charles Rodrigues	Project Start Date:	1/1/2019
Project Lead:	Anthony Strabone	Project End Date:	12/31/2019
Prepared by:	Anthony Strabone	Requested Capital (\$)	\$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 checked="" type="checkbox"/> Mandated <input type="checkbox"/> Growth <input type="checkbox"/> Regulatory Supported <input type="checkbox"/> Discretionary		
Spending Rationale:	<input type="checkbox"/> Growth <input type="checkbox"/> Improvement <input checked="" type="checkbox"/> Replenishment		

Details of Request

Project description

This project is associated with repair/replacement to damaged equipment found on inspection and equipment deemed about to fail. Replacement of equipment can be caused by any of the following:

- Damage caused by vehicle
- Damage caused by vandalism
- Failure caused by age, fatigue, and/or deterioration

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 requirements may be associated with the installation of poles and underground electrical facilities including conduit.

Will there be assets, greater than \$5,000, currently in service removed as a result of this expenditure?

GUIDANCE: If yes, please detail the specific assets that will be removed:

1. Original Cost of Plant to be removed (if known): **Not Known**
2. What is the replacement cost of the plant being removed (if original cost not known)? **Not Known**
3. Original Work Order of Plant to be removed (if known): **Not Known**
4. Is the Plant being removed reusable? **No**
5. What is the year of original installation of the plant being removed: **Varied**

What alternatives were evaluated and why were they rejected?

Alternatives will be considered on a case by case basis

What are the risks and consequences of not approving this expenditure?

Costs associated with this expenditure will need to be captured under other Capital Expenditure Blankets.



Capital Project Expenditure Form

2019

Please describe how Health, Safety and Security concerns and impacts as a result of this expenditure been addressed.
 Work associated with this expenditure will be performed in accordance with the Company's Safety Manual and other industry accepted safety practices.

Are there other pertinent details that may affect the decision making process?
 No

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	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 – 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 (\$)	\$700,000		



Capital Project Expenditure Form

2019

Approvals and Signatures ⁱⁱ

Approved By:				
Role	Approval Limit	Name	Signature	Date
Manager / Staff (requisitioner/buyer):	Up to \$25,000	Anthony Strabone		3/6/19
Senior Manager:	Up to \$50,000			
Senior Director/Director:	Up to \$250,000	Charles Rodrigues Director, Engineering		3/6/19
Senior VP/VP:	Up to \$500,000	Richard MacDonald Vice President, Operations		3/6/19
State President:	Up to \$500,000	Susan Fleck President, NH		3/25/19
Regional President:	Up to \$3,000,000	James Sweeney President, East Region		
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		4/2/19

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.



Capital Project Expenditure Form

2020

Project Name:	Dist-Damage&Failure Blanket		
Financial Work Order (FWO):		Project ID #:	8830-2012
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:	Anthony Strabone	Requested Capital (\$)	\$1,000,000
Planned or Unplanned Projects:	<input checked="" type="checkbox"/> Planned <input type="checkbox"/> Unplanned		
Project Type: (Click appropriate boxes)	<input type="checkbox"/> Safety <input checked="" type="checkbox"/> Mandated <input type="checkbox"/> Growth <input type="checkbox"/> Regulatory Supported <input type="checkbox"/> Discretionary		
Spending Rationale:	<input type="checkbox"/> Growth <input type="checkbox"/> Improvement <input checked="" type="checkbox"/> Replenishment		

Details of Request

Project description
This project is associated with repair/replacement to damaged equipment found on inspection and equipment deemed about to fail. Replacement of equipment can be caused by any of the following: <ul style="list-style-type: none"> • Damage caused by vehicle • Damage caused by vandalism • Failure caused by age, fatigue, and/or deterioration

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 requirements may be associated with the installation of poles and underground electrical facilities including conduit.

Will there be assets, greater than \$5,000, currently in service removed as a result of this expenditure?
GUIDANCE: If yes, please detail the specific assets that will be removed: <ol style="list-style-type: none"> 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:
Answers to questions 1, 2,3 and 5 are unknown at this time. The Plant being removed/replaced will most likely be damaged and not reusable.



Capital Project Expenditure Form

2020

What alternatives were evaluated and why were they rejected?

Alternatives will be considered on a case by case basis. However since the majority, if not all, equipment replacement associated with this blanket will be one for one replacements; alternative options may not be considered.

What are the risks and consequences of not approving this expenditure?

Costs associated with this expenditure will need to be captured under other Capital Expenditure Blankets.

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

Work associated with this expenditure will be performed in accordance with the Company's Safety Manual and other industry accepted safety practices.

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

No



Capital Project Expenditure Form

2020

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	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 – 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 (\$)	\$1,000,000		

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		02/04/2020
Senior Manager:	Up to \$50,000			
Senior Director/Director:	Up to \$250,000	Charles Rodrigues Director, Engineering		2/25/2020



Capital Project Expenditure Form

2020

Senior VP/VP:	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		2/26/20
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

2020

Project Overview

Reason for Change: Budget Increase to fund project to accommodate work associated with Damage Failure Blanket

Project ID:	8830-2012	Project Name:	Dist-Damage&Failure Blanket
Change Order Name:	Budget Increase	Date Prepared:	07/27/2020
Change Order #:	8830-2012-01	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

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	\$1,000,000		\$600,000	\$1,600,000

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 costs associate with work identified needing to be addressed under the Damage- Failure Blanket. Taking into account the current spend rate and historic spend rates of July through December, the Company anticipates requiring additional Capital for this blanket in order to address items that have been identified as either damaged or failed and need immediate replacement.

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

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: 2020.07.28 07:28:54 -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 09:33:18 -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 | 2019

Requesting Region or Group:	Granite State Electric Co.	Date of Closeout (MM/DD/YY):	03/10/2021
Project Name:	Dist-Damage&Failure Blanket		
Project ID#:	8830-2012	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 (\$)	\$ 1,000,000	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 08:17:12 -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 **2019**

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)	2/5
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, Webspac)	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 | 2019

Name	Role	Type (e.g., Contractor, Employee)
Anthony Strabone	Engineering	Employee
Mark Parker	Overhead Line Operations	Employee

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
N/A	N/A

Section 8. Project Cost Summary

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

Cost Category	1- Budget	2- Actual	3 = 1 -2 Variance
Cost of Design & Engineering (\$)		\$ 0	
Cost of Materials (\$)		\$ 94,955.39	
Cost of Construction (\$)		\$ 0	

Project Close Out Report | 2019

External Costs (\$)		\$ 288,488.06	
Internal Costs (\$)		\$ 326,586.97	
Other (burdens \$)		\$ 691,707.56	
CIAC		\$ (2,724.91)	
AFUDC		\$ 14.55	
Total Project Costs (\$)	\$1,000,000	\$ 1,399,028	\$ (399,028)

Reasons for Variance	Impact
Actual Project costs were greater than budgeted. See Change Order Form	\$ (399,028)
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) d/b/a Liberty
 DE 19-064 2020 Step Adjustment
 Project #8830-2039 IE-NN URD Cable Replacement

<u>Year</u>	<u>Internal Labor</u>	<u>Materials</u>	<u>Vendors</u>	<u>Overheads</u>	<u>CIAC</u>	<u>AFUDC</u>	<u>Total Spend</u>	<u>Total Budget</u>
2020	\$81,477.25	\$44,559.57	\$201,683.78	\$176,359.86	(\$40,000.00)	\$3,876.99	\$467,957.45	\$450,000
Total	\$81,477.25	\$44,559.57	\$201,683.78	\$176,359.86	(\$40,000.00)	\$3,876.99	\$467,957.45	\$450,000

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:	IE-NN URD Cable Replacement	Date Prepared:	1/30/2020
Project ID#:	8830-2039	Cost Estimate:	\$1,150,000
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 type="checkbox"/> Regulatory Supported <input checked="" type="checkbox"/> Discretionary		
Spending Rationale:	<input type="checkbox"/> Growth <input type="checkbox"/> Improvement <input checked="" type="checkbox"/> Replenishment		
Project Scope Statement			
(Insert the scope of work, major deliverables, assumptions, and constraints)			
<p>The URD Cable Replacement Strategy aims to provide resolution and/or improve reliability and address pocket problems in URD/UCD and includes the following options:</p> <ul style="list-style-type: none"> • Injection of cable rejuvenation fluids to extend the operating life of poor performing cable • Replacement of poor performing cable to reduce interruptions • Installing short runs of primary cable to create loop feed arrangements • Installing fault location equipment to facilitate restoration <p>In 2020 Blueberry Cir Pelham and Hidden Valley Charlestown URDs will be targeted for improvement and will include cable injection, installation of cable in conduit, replacement of sub-surface equipment and installation of fault sensing equipment. In addition Hodges Development in Lebanon will be targeted for improvements to take advantage of existing upgrades from the customer.</p>			
Background			
(Insert description of current operational arrangement, and brief history of project & asset)			
<p>URDs and UCDs have historically been served by 15kV class, #2 or 1/0, solid dielectric cables. Through the years a number of different insulations have been employed across the company including XLPE, and EPR cables. Likewise these cables have been installed directly buried or in conduit systems.</p> <p>Direct buried solid dielectric cables installed from the late 1960's through the late 1980's have shown the most susceptibility for failure. Failure mechanisms have ranged from improper backfill material during initial installation, damage from third party excavations, and an incomplete understanding of XLPE failure mechanisms by the industry (water trees, electrical trees, CN corrosion, etc) during this period. These cable types have also shown a susceptibility to neutral corrosion. These types of cables tend to be XLPE or PE insulated and are in excess of twenty years of age.</p> <p>Since 2012, there have been six cable failures in the Blueberry Cir Pelham URD and 4 since 2017. There have been 3 cable failures in the Hidden Valley Charlestown URD. This has resulted in extended outages and challenges with restoring load given the abnormal conditions and repairs made through the years. The subsurface nature of some of the equipment raises concerns with public and employee safety.</p>			
Recommendation/Objective			
(Insert the unique problem this project is looking to resolve)			



Capital Project Business Case

2020

The URD Cable Strategy recommends that an entire URD or UCD be assessed for cable replacement or cable insulation injection if three failures occur within a three year time frame. Cable sections are also to be replaced or rehabilitated once two cable faults within the same cable section have occurred. This strategy limits the number of repeated interruptions seen by customers within a given URD or UCD. Since URD or UCD cable failures impact a limited number of customers, this strategy has a minor impact on reliability metrics. It impacts customer service and mitigates potential safety issues with aging underground equipment. In 2020 it is recommended to rebuild the Blueberry Cir Pelham URD due to issues with asset condition and repeat cable failures.

Alternatives/Options

(Describe all reasonably viable alternatives. Discuss the viability of each and provide reasons if rejected)

Do Nothing – This option is not recommended given the safety risks, poor condition of the equipment and risk of repeated interruptions in these developments.

Alternatives considered are complete replacement of all underground cable within a URD with either a new conduit system and underground cable; or cable injection into existing cable to extend cable life or installing a cable in conduit solution.

Injection will be considered as an alternative to replacing cables given the amount of repair-splices and condition of neutral wire.

Financial Assessment/Cost Estimates

(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?

Yes
 No

Regulatory Lag (Click appropriate box)

Less than 6 Months 6-12 Months 1 to 3 years Greater than 3 years

Category	Total Already Approved	2020	2021	Beyond 2021	Total
Internal Labour (including labour and travel)	\$ -	\$ -	\$ 100,000	\$ -	\$ 100,000
Materials (including consumables)	\$ -	\$ -	\$ 250,000	\$ -	\$ 250,000
Equipment (rental equipment)	\$ -	\$ -	\$ -	\$ -	\$ -
Contractor/Subcontractor (including consultants)	\$ -	\$ -	\$ 800,000	\$ -	\$ 800,000
AFUDC (\$)					
Total Project Costs (\$)	\$ -	\$ -	\$ 1,150,000	\$ -	\$ 1,150,000

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

Basis of Estimate: *This estimate is of investment grade and will be updated during the detailed engineering process.*

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	2/1/2020	4/1/2020
Construction	5/1/2020	11/1/2020



Capital Project Business Case

2020

Risk Assessment (Please describe the risk of not completing the project)
<p>URD/UCD cable failures contribute a relatively small fraction of the overall reliability and affect the customer or group of customers fed by the development. This strategy allows for the implementation of a reactive approach when dealing with URD/UCD cable failures. Therefore, if not completed, these cable faults will not be minimized and it may result in a high number of cable failures affecting a single customer or group of customers. Some URDs have been identified as being a safety hazard due to deteriorated equipment, abnormal conditions from previous faults and corrosion in the neutral wires.</p> <p>There is a risk that the upgrade for Hodges Dev Lebanon will not take place due to customer timeline and budget. If so, the Company will look for injection opportunities as an alternative.</p> <p>This project has a risk score of 36.</p>
Trade Finance (Is there a possibility to apply trade finance products to this project? See Capital Planning for further clarification)
Unknown
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)
<p>Please reference the following supporting documents:</p> <p>DAS - 014 URD/UCD Cable Strategy Hidden Valley Blueberry Cir URD one-lines.pdf Crafts Hill - Beechwood Pine Tree URD sketch.pdf</p>

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>		2/24/2020
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		2/21/2020
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			



Capital Project Business Case

2020

Finance (East) – Vice President, Finance & Administration	All Requests	Peter Dawes VP, Finance & Administration		
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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:	IE-NN URD Cable Replacement		
Financial Work Order (FWO):		Project ID #:	8830-2039
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 (\$)	\$1,150,000
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 type="checkbox"/> Regulatory Supported <input checked="" type="checkbox"/> Discretionary		
Spending Rationale:	<input type="checkbox"/> Growth <input type="checkbox"/> Improvement <input checked="" type="checkbox"/> Replenishment		

Details of Request

Project description

The URD Cable Replacement Strategy aims to provide resolution and/or improve reliability and address pocket problems in URD/UCD and includes:

- Injection of cable rejuvenation fluids to extend the operating life of poor performing cable
- Replacement of poor performing cable to reduce interruptions
- Installing short runs of primary cable to create loop feed arrangements
- Installing fault location equipment to facilitate restoration

In 2020 underground cables and sub-surface transformers will be replaced at Blueberry Hill Rd Pelham. In addition Hodges Development in Lebanon will be targeted for improvements to take advantage of existing upgrades from the customer.

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?

GUIDANCE: If yes, please detail the specific assets that will be removed:

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

It is assumed that direct buried underground cables will be abandoned in place. In some cases the existing transformers and vaults will be removed. At this time answers to questions 1, 2, 3 and 5 is unknown. The plant being removed is not usable.

What alternatives were evaluated and why were they rejected?

Alternatives will be considered on a case by case basis as part of determining the best option for a specific project.



Capital Project Expenditure Form

2020

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What are the risks and consequences of not approving this expenditure?
 URD/UCD cable failures contribute a relatively small fraction of the overall reliability and affect the customer or group of customers fed by the development. This strategy allows for the implementation of a reactive approach when dealing with URD/UCD cable failures. Therefore, if not completed, these cable faults will not be minimized and it may result in a high number of cable failures affecting a single customer or group of customers. Some URDs have been identified as being a safety hazard due to deteriorated equipment, abnormal conditions from previous faults and corrosion in the neutral wires.

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?
 No

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 (\$)			



Capital Project Expenditure Form

2020

Other (\$)			
AFUDC (\$)			
Total Project Costs (\$)		\$1,150,000	

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		2/21/2020
State President:	Up to \$500,000			2/26/2020
Regional President:	Up to \$3,000,000			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.

Project Close Out Report | 2020

Requesting Region or Group:	Granite State Electric Co.	Date of Closeout (MM/DD/YY):	03/10/2021
Project Name:	IE-NN URD Cable Replacement		
Project ID#:	8830-2039	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 (\$)	\$ 450,000	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 08:02:13 -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, Webspac)	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)
Robert Johnson	Engineering	Employee
Mark Parker	Operations	Employee

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
None	None

Section 8. Project Cost Summary

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

Cost Category	1- Budget	2- Actual	3 = 1 -2 Variance
Cost of Design & Engineering (\$)		\$ 0	
Cost of Materials (\$)		\$ 44,559.41	
Cost of Construction (\$)		\$ 0	

Project Close Out Report | 2020

External Costs (\$)		\$ 199,376.27	
Internal Costs (\$)		\$ 79,682.18	
Other (burdens \$)		\$ 173,470.95	
CIAC		\$ (40,000.00)	
AFUDC		\$ 3,876.99	
Total Project Costs (\$)	\$ 450,000	\$ 460,965.80	\$ (10,965.80)

Reasons for Variance	Impact
Project scope was revised in 2020 to include cable injection and emergency repair of a failed URD in Hanover. Actual 2020 charges were slightly greater than estimated due actual charges associated with internal labor and outside resources being greater than originally estimated	\$ (10,965.80)
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)
301939-01001
301939-01003

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) d/b/a Liberty
DE 19-064 2020 Step Adjustment
Project #8830-2068 Main St Salem - Overhead Line Relocation

<u>Year</u>	<u>Internal Labor</u>	<u>Materials</u>	<u>Vendors</u>	<u>Overheads</u>	<u>AFUDC</u>	<u>Total Spend</u>	<u>Total Budget</u>
2020	\$10,928.40	\$194,230.88	\$751,141.19	\$346,164.32	\$7,529.17	\$1,309,993.96	\$1,200,000
Total	\$10,928.40	\$194,230.88	\$751,141.19	\$346,164.32	\$7,529.17	\$1,309,993.96	\$1,200,000



Capital Project Business Case

2020

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:	Main St Salem - Overhead Line Relocation	Date Prepared:	2/3/2020
Project ID#:	8830-2072 8830-2068	Cost Estimate:	\$1,200,000
Project Sponsor:	Charles Rodrigues	Project Start Date:	1/1/2020
Project Lead:	Anthony Strabone	Project End Date:	12/31/2020
Prepared By:	Anthony Strabone	Planned or Unplanned Projects:	<input checked="" type="checkbox"/> Planned <input type="checkbox"/> Unplanned
Project Type (click appropriate boxes):	<input type="checkbox"/> Safety <input checked="" type="checkbox"/> Mandated <input type="checkbox"/> Growth <input 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>Due to a road widening project, the Company is required to relocate the overhead facilities in the intersection of Main St and Broadway in the Town of Salem from overhead to underground. The scope of work will include the installation of 1000 MCM UG cables, manholes and conduit system. This project also includes the removal of the overhead facilities in and around this intersection.</p>			
Background			
(Insert description of current operational arrangement, and brief history of project & asset)			
<p>The town of Salem, NH intends to reconfigure the intersection of Main St and Broadway. Their plans include widening both roads to accommodate turning lanes. The addition of turning lanes will result in the existing overhead facilities being located in the proposed roadway.</p>			
Recommendation/Objective			
(Insert the unique problem this project is looking to resolve)			
<p>The recommended plan is to install a manhole and conduit system to accommodate the relocation of overhead Company assets from overhead to underground. The scope of work will also include the installation of 1000 MCM UG cable and removal of the overhead facilities in and around the Main Street and Broadway Intersection.</p>			
Alternatives/Options			
(Describe all reasonably viable alternatives. Discuss the viability of each and provide reasons if rejected)			
<p>Do Nothing – This is not an option. It is good utility practice to comply with all industry standards and support state/local design criteria. Due to the road widening project, Liberty’s facilities will be located in the proposed roadway and need to be relocated. The alternative of relocating the overhead facilities onto new poles was evaluated but determined not to be feasible due to insufficient right-of-way for poles to accommodate set back requirements from edge of pavement; inability to meet NESC clearances for electrical overhead equipment to building structures and the inability to secure easements from private land owners for placement of poles and guys/anchors. In addition to these reasons, the Town of Salem has also indicated they will not grant a pole license for any new proposed poles within 200 FT of the intersection and thus underground is the only alternative for relocation of Company assets located in the intersection.</p>			
Financial Assessment/Cost Estimates			
(Double click embedded excel file to update; include contingency allowance in excel file)			



Capital Project Business Case

2020

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 Labour (including labour and travel)	\$ -	\$ 15,000	\$ -	\$ -	\$ 15,000
Materials (including consumables)	\$ -	\$ 385,000	\$ -	\$ -	\$ 385,000
Equipment (rental equipment)	\$ -	\$ -	\$ -	\$ -	\$ -
Contractor/Subcontractor (including consultants)	\$ -	\$ 800,000	\$ -	\$ -	\$ 800,000
AFUDC (\$)					
Total Project Costs (\$)	\$ -	\$ 1,200,000	\$ -	\$ -	\$ 1,200,000

Unlevered Internal Rate of Return: Click here to enter text.

Basis of Estimate: *This estimate is of investment grade. A project grade estimate will be provided upon completion of detailed design.*

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	1/1/2020	5/1/2020
Construction	8/1/2020	11/1/2020

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

Not completing this project could result in the Company not being able to supply safe and reliable electric service to the customers within and around the Main Street and Broadway Intersection. Also, if Liberty does not complete the relocation of our overhead facilities, the Town will not be able to proceed with their plans of reconstructing this intersection. This project has a risk score of 50. Public Requirements – Mandated

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

Unknown

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)



Capital Project Business Case

2020

Please reference the following supporting documents:
[Depot Intersection One Line - DRAFT.pdf](#)

Approvals and Signatures¹

Approved By:				
Role	Approval Authority Limit	Name	Signature	Date
Manager / Staff (requisitioner/buyer):	Up to \$25,000	Anthony Strabone Manager, 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 Vice President/ Vice President	Up to \$500,000	Richard MacDonald Vice President, Operations		2/21/2020
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:	Main St Salem - Overhead Line Relocation		
Financial Work Order (FWO):		Project ID #:	8830-2072 8830-2068
Requesting Region or Group:	Granite State Electric Co.	Date of Request (MM/DD/YY):	1/10/2020 <small>Ryan Patnode Date: 2020/01/10 11:17:00 AM</small>
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 (\$)	\$1,200,000
Planned or Unplanned Projects:	<input checked="" type="checkbox"/> Planned <input type="checkbox"/> Unplanned		
Project Type: (Click appropriate boxes)	<input type="checkbox"/> Safety <input checked="" type="checkbox"/> Mandated <input type="checkbox"/> Growth <input 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

Due to a road widening project, the Company is required to relocate the overhead facilities in the intersection of Main St and Broadway in the Town of Salem from overhead to underground. The scope of work will include the installation of 1000 MCM UG cables, manholes and conduit system. This project also includes the removal of the overhead facilities in and around this intersection.

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 with the Town of Salem and NHDOT will be required for the company to install new poles, underground conduit and man-holes.

Will there be assets, greater than \$5,000, currently in service removed as a result of this expenditure?

GUIDANCE: If yes, please detail the specific assets that will be removed:

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

Yes. As part of this program overhead assets will be removed. 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.

What alternatives were evaluated and why were they rejected?

Do Nothing – This is not an option. It is good utility practice to comply with all industry standards and support state/local design criteria. Due to the road widening project, Liberty's facilities will be located in the proposed roadway and need to be relocated. The alternative of relocating the overhead facilities onto new poles was evaluated but determined not to be feasible due to insufficient right-of-way for poles to accommodate set back requirements from edge of pavement; inability to meet NESC clearances for electrical overhead equipment to



Capital Project Expenditure Form

2020

building structures and the inability to secure easements from private land owners for placement of poles and guys/anchors. In addition to these reasons, the Town of Salem has also indicated they will not grant a pole license for any new proposed poles within 200 FT of the intersection and thus underground is the only alternative for relocation of Company assets located in the intersection.

What are the risks and consequences of not approving this expenditure?

Not completing this project could result in the Company not being able to supply safe and reliable electric service to the customers within and around the Main Street and Broadway Intersection. Also, if Liberty does not complete the relocation of our overhead facilities, the Town will not be able to proceed with their plans of reconstructing this intersection.
 This project has a risk score of 50. Public Requirements – Mandated

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

All work associated with this project will be performed in accordance with Liberty Safety/Health policies and procedures as well as good industry work practices.

This project will also mitigate the impact to public safety by removing the Company's assets out of the proposed traveled way.

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

No

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	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 – 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: ⁱ	<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)



Capital Project Expenditure Form

2020

Cost of Design & Engineering (\$)		
Cost of Materials (\$)		
Cost of Construction (\$)		
External Costs (\$)		
Internal Costs (\$)		
Other (\$)		
AFUDC (\$)		
Total Project Costs (\$)	\$1,200,000	

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		2/21/2020
State President:	Up to \$500,000	SUSAN FUEK		2/20/2020
Regional President:	Up to \$3,000,000			
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.

Project Overview

Reason for Change: Budget Increase to fund project to accommodate scope change revision and increase traffic costs

Project ID:	8830-2068	Project Name:	Main St Salem - Overhead Line Relocation
Change Order Name:	Budget Increase	Date Prepared:	11/04/2020
Change Order #:	8830-2068-01	Financial Work Order (FWO):ⁱ	302068-01001
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

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	\$1,200,000		\$300,000	\$1,500,000

Updated Unlevered Internal Rate of Return:

Basis of Current Change Order Amount:

Over expenditure is being driven by two factors. The first cause is actual cost of traffic control greater than originally estimated due to need of additional Police officers needed to direct traffic in the intersection. The second driver of the over-expenditure is due to a change in scope due to a relocation of riser pole as requested by the Town of Salem

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

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>	11/04/2020
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: 2020.11.05 08:04:35 -05'00'</small>	
State President / Senior VP / VP:	Up to \$500,000	Richard MacDonald, VP Operations	Richard MacDonald <small>Digitally signed by Richard MacDonald Date: 2020.11.18 17:06:06 -05'00'</small>	
Regional President:	Up to \$3,000,000	Susan Fleck President, NH	<i>Susan Fleck</i>	
Corporate - Sr VP Operations:	Up to \$5,000,000		<i>[Signature]</i>	
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:	Main St Relocate OH to UG -8830-2068		
Requesting Region:	East Region	Sponsor (Name):	Charles Rodrigues
Project Champion:	Anthony Strabone	Project Champion	Charles Rodrigues
Project Status	X In Service X Complete <input type="checkbox"/> Closed		
Project Start Date:	01/01/2020	Project Completion Date:	12/31/2020
Requested Capital (\$)	\$1,200,000	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 08:31:36 -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	4/5
2.6	Product and/or Service Performance	4/5
2.7	Scope	3/5
2.8	Cost (Budget)	3/5
2.9	Schedule	4/5

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, Webspac)	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
Ryan Tsantoulis	Engineering	Employee
Tim Fitzgerald	Construction	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
None	None

Section 8. Project Cost Summary

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

Cost Category	1- Budget	2- Actual	3 = 1 -2 Variance
Cost of Design & Engineering (\$)		\$ 0	
Cost of Materials (\$)		\$ 194,231.39	
Cost of Construction (\$)		\$ 0	

Project Close Out Report | 2020

External Costs (\$)		\$ 971,196.81	
Internal Costs (\$)		\$ 10,611.18	
Burdens (\$)		\$ 350,334.35	
AFUDC (\$)		\$ 7,850.05	
Total Project Costs (\$)	\$1,200,000	\$1,534,224	\$ (334,223.78)

Reasons for Variance	Impact
Change order#1	\$ 300,000
Change order#2	\$ 34,224
Cause 3	\$ 0

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)
302068-01001

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) d/b/a Liberty
DE 19-064 2020 Step Adjustment
Project #8830-2091 Meter Purchases

<u>Year</u>	<u>Internal Labor</u>	<u>Vendors</u>	<u>Overheads</u>	<u>Total Spend</u>	<u>Total Budget</u>
2020	<u>\$395,624.24</u>	<u>\$271,902.60</u>	<u>\$179,666.75</u>	<u>\$847,193.59</u>	<u>\$840,000</u>
	\$395,624.24	\$271,902.60	\$179,666.75	\$847,193.59	\$840,000



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:	Meter Purchases - Electric	Date Prepared:	17-Jan-2020
Project ID#:	8830-2091	Cost Estimate:	\$ 840,000
Project Sponsor:	Mark Parker	Project Start Date:	17-Jan-2020
Project Lead:	Richard Foley	Project End Date:	31-Dec-2020
Prepared By:	Richard Foley	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 checked="" type="checkbox"/> Growth <input checked="" type="checkbox"/> Regulatory Supported <input type="checkbox"/> Discretionary		
Spending Rationale:	<input type="checkbox"/> Growth <input type="checkbox"/> Improvement <input checked="" type="checkbox"/> Replenishment		
Project Scope Statement			
(Insert the scope of work, major deliverables, assumptions, and constraints)			
This Project represents the annual purchases of electric meters required for Liberty Utilities (Granite State Electric) Corp. The scope is for the purchase and receipt of meters and includes the precapitalized installation costs.			
Background			
(Insert description of current operational arrangement, and brief history of project & asset)			
Liberty Utilities has an obligation to replace and install meters for customers on a regular basis. This expenditure is to purchase, receive and install meters required for existing and new customers. The key drivers for this project are: <ul style="list-style-type: none"> • Identification of older meters subject to replacement • Results of “pick for test” program and the need to perform additional meter replacement • New customer growth and upgrades requiring new or larger sized meters based on customer demand. 			
Recommendation/Objective		(Insert the	
unique problem this project is looking to resolve)			
Purchase electric meters to meet the obligation of replacement units and support any new requirements for Electric service along our distribution system.			
Alternatives/Options			
(Describe all reasonably viable alternatives. Discuss the viability of each and provide reasons if rejected)			
None – Regulatory requirement			



Capital Project Business Case

2020

Financial Assessment/Cost Estimates
 (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 checked="" type="checkbox"/> 6-12 Months <input type="checkbox"/> 1 to 3 years <input type="checkbox"/> Greater than 3 years		

Category	Total Already Approved	2020	2021	Beyond 2021	Total
Internal Labor					
Materials					
Equipment		840,000			
Contractor/ Subcontractor					
AFUDC					
Total Project Cost		840,000			

Unlevered Internal Rate of Return:

Basis of Estimate: *Provide brief explanation on basis of estimate, activities completed to determine costs*

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
Purchase Meters	01-01-2020	06-30-2020
Receive Meters	01-01-2020	09-30-2020

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

Inability to replace older meters will result in being non-compliant with our obligations to replace older meters.

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

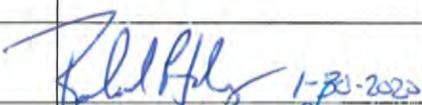
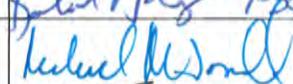
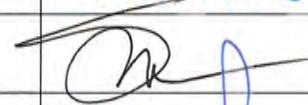
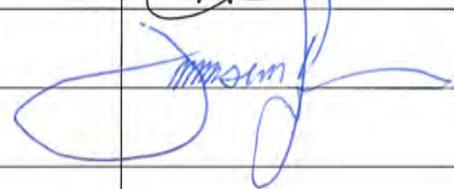


Capital Project Business Case

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)

Approvals and Signatures¹

Approved By:				
Role	Approval Authority Limit	Name	Signature	Date
Manager / Staff (requisitioner/buyer):	Up to \$25,000			
Senior Manager: :	Up to \$50,000			
Senior Director/Director:	Up to \$250,000	Richard Foley		
Senior Vice President/ Vice President	Up to \$500,000	Richard MacDonald		3/9/2020
State President:	Up to \$500,000	Susan Fleck		2/5/2020
Regional President:	Up to \$3,000,000	James Sweeney		
Corporate - Sr VP Operations:	Up to \$5,000,000			
Corporate - Exec Team Member (CEO, CFO, COO, Vice Chair):	Over \$5,000,000			

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:	Meter Purchases - Electric		
Financial Work Order (FWO):	TBD	Project ID #:	8830-2091
Requesting Region or Group:	New Hampshire-Granite State Electric	Date of Request (MM/DD/YY):	1/17/2020
Project Sponsor:	Mark Parker	Project Start Date:	1/17/2020
Project Lead:	Richard Foley	Project End Date:	12/31/2020
Prepared by:	Richard Foley	Requested Capital (\$)	
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 checked="" type="checkbox"/> Growth <input checked="" type="checkbox"/> Regulatory Supported <input type="checkbox"/> Discretionary		

Details of Request

Project description

This Project represents the annual purchases of electric meters for Liberty Utilities (Granite State Electric) Corp. We are required to provide new meters as part of our replacement program as well as meters required for new business.

Is this project growth or customer connection related? If "yes", list the specific locations and how expenditure aligns with customer expansion objectives.

Yes – Replacement meters that are on our system are identified by operations and are based on annual testing requirements. Some population of the new meters will also be used to support customer growth. The specific locations develop as the year progresses.

Please describe any permitting requirements, environmental impacts, or resulting performance obligations that may or may not result from this expenditure?

NA

Will there be assets, greater than \$5,000, currently in service removed as a result of this expenditure?

GUIDANCE: If yes, please detail the specific assets that will be removed:

- Original Cost of Plant to be removed (if known):
- What is the replacement cost of the plant being removed (if original cost not known)?
- Original Work Order of Plant to be removed (if known):
- Is the Plant being removed reusable?
- What is the year of original installation of the plant being removed

Yes there will be some plant removed. The exact plant removed will be contingent upon the arrival of the new equipment and the locations selected as part of the meter testing program. New meter installations to support growth will not have plant removed.



Capital Project Expenditure Form

2020

What alternatives were evaluated and why were they rejected?

We have an obligation to perform meter testing to confirm the accuracy of the metering devices. New meters are purchased to remove the vintage meters that are in the field. Leaving older meters which have the potential for failure or create reading/billing issues can impact the customer. For new customers, a mechanism is required to ensure we can measure customer usage.

What are the risks and consequences of not approving this expenditure?

We fall out of compliance with our meter testing and change program. Additionally we will be unable to install any new meters on new customers and unable to provide service.

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

Meter installation follows company safety standard operating procedures.

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

No



Capital Project Expenditure Form

2020

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	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 checked="" 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?	Rate Case		
Please Specify Basis of Estimate For materials, equipment, and construction requiring Engineering drawings please specify the percent complete: ⁱ	<input type="checkbox"/> Fixed or Firm Price <input checked="" 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 (\$)	\$ 840,000		
Cost of Construction (\$)			
External Costs (\$)			
Internal Costs (\$)			
Other (\$)			
AFUDC (\$)			
Total Project Costs (\$)			

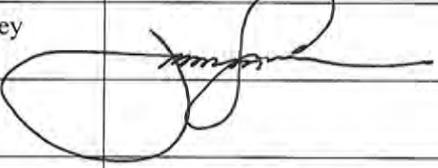
Approvals and Signaturesⁱⁱ

Approved By:				
Role	Approval Limit	Name	Signature	Date
Manager / Staff (requisitioner/buyer):	Up to \$25,000			Click here to enter a date.
Senior Manager:	Up to \$50,000			Click here to enter a date.
Senior Director/Director:	Up to \$250,000	Richard Foley		January 23, 2019
Senior VP/VP:	Up to \$500,000	Richard MacDonald		1/31/2020



Capital Project Expenditure Form

2020

State President:	Up to \$500,000	Susan Fleck		Click here to enter a date. 2/5/2020
Regional President:	Up to \$3,000,000	James Sweeney		Click here to enter a date: 2/6/2020
Corporate – Sr. VP Operations:	Up to \$5,000,000			Click here to enter a date.
Corporate - Exec Team Member (CEO, CFO, COO, Vice Chair):	Over \$5,000,000			Click here to enter a date.

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.

Project Close Out Report **2020**

Requesting Region or Group:		Date of Closeout (MM/DD/YY):	12-31-2020
Project Name:	01659 Granite St Meter Purchases 8830-2091		
Requesting Region:		Sponsor (Name):	Richard Foley
Project Champion:	Mark Parker	Project Champion	
Project Status	<input type="checkbox"/> In Service <input checked="" type="checkbox"/> Complete <input type="checkbox"/> Closed		
Project Start Date:		Project Completion Date:	
Requested Capital (\$)	\$840,000	Expenditure Included in Approved Budget?	<input checked="" type="checkbox"/> 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
Mark Parker	Project Lead		
Richard Foley	Project Sponsor	Richard Foley	Digitally signed by Richard Foley DN: cn=Richard Foley, o=Liberty Utilities, ou, email=richard.foley@libertyutilities.com, c=US Date: 2021.03.16 19:03:30 -04'00'
	Operations Manager		
	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	5/5
2.6	Product and/or Service Performance	5/5
2.7	Scope	5/5
2.8	Cost (Budget)	5/5
2.9	Schedule	5/5

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, Webspac)	Format
3.4a	Business Case	Finance Sharepoint Site	<input checked="" type="checkbox"/> Electronic <input type="checkbox"/> Manual
3.4b	If available, the Final Project Schedule		<input type="checkbox"/> Electronic <input type="checkbox"/> Manual
3.4c	Budget Documentation and Invoices	Accounts Payable – Great Plains -	<input checked="" type="checkbox"/> Electronic <input type="checkbox"/> Manual
3.4d	Status Reports	Finance Sharepoint Site	<input checked="" type="checkbox"/> Electronic <input type="checkbox"/> Manual
3.4e	Risks and Issues Log		<input type="checkbox"/> Electronic <input type="checkbox"/> Manual
3.4f	Final deliverable		<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 Team ⁱⁱ

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)
Shawn Furey	Meter Supervisor – Client	Employee
Mark Parker	Director, Electric Operations	Employee
Richard Foley	Director, Supply Chain – East	Employee

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

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

Section 8. Project Cost Summary

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

Cost Category	1- Budget	2- Actual	3 = 1 -2 Variance
Cost of Design & Engineering (\$)			
Cost of Materials (\$)			
Cost of Construction (\$)			

Project Close Out Report | 2020

External Costs (\$)			
Internal Costs (\$)			
Other (\$)			
AFUDC (\$)			
Total Project Costs (\$)	\$840,000	\$ 846,550	(\$6,550)

Reasons for Variance	Impact
Cause 1	\$
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)
302091-77001

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) d/b/a Liberty
DE 19-064 2020 Step Adjustment
Project #8830-2092 Transformer Purchases

<u>Year</u>	<u>Vendors</u>	<u>Overheads</u>	<u>Total Spend</u>	<u>Total Budget</u>
2020	\$447,941.15	\$148,385.85	\$596,327.00	\$600,000
Total	\$447,941.15	\$148,385.85	\$596,327.00	\$600,000



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:	Transformer Purchases – Electric	Date Prepared:	17-Jan-2020
Project ID#:	8830-2092	Cost Estimate:	\$ 600,000
Project Sponsor:	Mark Parker	Project Start Date:	17-Jan-2020
Project Lead:	Richard Foley	Project End Date:	31-Dec-2020
Prepared By:	Richard Foley	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 checked="" type="checkbox"/> Growth <input checked="" type="checkbox"/> Regulatory Supported <input type="checkbox"/> Discretionary		
Spending Rationale:	<input checked="" type="checkbox"/> Growth <input type="checkbox"/> Improvement <input checked="" type="checkbox"/> Replenishment		
Project Scope Statement			
(Insert the scope of work, major deliverables, assumptions, and constraints)			
This Project represents the annual purchases of electric transformers for Liberty Utilities (Granite State Electric) Corp. The scope is for the purchase and receipt of transformers to support equipment failures and growth.			
Background			
(Insert description of current operational arrangement, and brief history of project & asset)			
Liberty Utilities has an obligation to replace and install transformers to support reliability of electric service to customers. Additionally transformers are needed to support system growth for residential and commercial customers along our distribution system.			
Recommendation/Objective		(Insert the	
unique problem this project is looking to resolve)			
Purchase electric transformers to meet the obligation of replacement units and support any new requirements for electric service along our distribution system.			
Alternatives/Options			
(Describe all reasonably viable alternatives. Discuss the viability of each and provide reasons if rejected)			
None – Regulatory requirement			
Financial Assessment/Cost Estimates			
(Double click embedded excel file to update; include contingency allowance in excel file)			



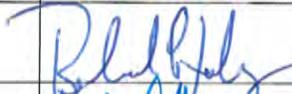
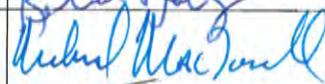
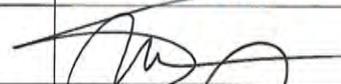
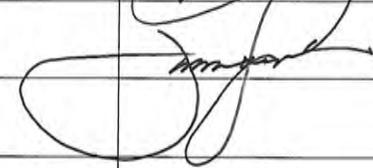
Capital Project Business Case

2020

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 checked="" type="checkbox"/> 6-12 Months <input type="checkbox"/> 1 to 3 years <input type="checkbox"/> Greater than 3 years					
Category	Total Already Approved	2020	2021	Beyond 2021	Total
Internal Labor					
Materials					
Equipment		600,000			
Contractor/ Subcontractor					
AFUDC					
Total Project Cost		600,000			
Unlevered Internal Rate of Return:					
Basis of Estimate: <i>Provide brief explanation on basis of estimate, activities completed to determine costs</i>					
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			
Purchase Transformers	01-01-2020	06-30-2020			
Receive Transformers	01-01-2020	09-30-2020			
Risk Assessment (Please describe the risk of not completing the project)					
Inability to replace older meters will result in being non-compliant with our obligations to replace older meters.					
Trade Finance (Is there a possibility to apply trade finance products to this project? See Capital Planning for further clarification)					

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)

Approvals and Signatures¹

Approved By:				
Role	Approval Authority Limit	Name	Signature	Date
Manager / Staff (requisitioner/buyer):	Up to \$25,000			
Senior Manager: :	Up to \$50,000			
Senior Director/Director:	Up to \$250,000	Richard Foley		1-30-2020
Senior Vice President/ Vice President	Up to \$500,000	Richard MacDonald		1/31/2020
State President:	Up to \$500,000	Susan Fleck		2/5/2020
Regional President:	Up to \$3,000,000	James Sweeney		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			

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:	Electric Transformers		
Financial Work Order (FWO):	TBD	Project ID #:	8830-2092
Requesting Region or Group:	New Hampshire-Granite State Electric	Date of Request (MM/DD/YY):	1/17/2020
Project Sponsor:	Mark Parker	Project Start Date:	1/17/2020
Project Lead:	Richard Foley	Project End Date:	12/31/2020
Prepared by:	Richard Foley	Requested Capital (\$)	
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 checked="" type="checkbox"/> Growth <input checked="" type="checkbox"/> Regulatory Supported <input type="checkbox"/> Discretionary		

Details of Request

Project description

This Project represents the annual purchases of electric transformers for Liberty Utilities (Granite State Electric) Corp. We are required to provide replacement transformers for equipment failures as well as transformers required to support new business.

Is this project growth or customer connection related? If "yes", list the specific locations and how expenditure aligns with customer expansion objectives.

Yes – Replacement transformers on our system are required in the event of equipment failure. To support our efforts to provide continuous reliable service, transformers are purchased and maintained on hand to support any failures. Additionally to support residential and commercial development along our distribution lines, transformers are needed to support this expansion.

Please describe any permitting requirements, environmental impacts, or resulting performance obligations that may or may not result from this expenditure?

NA

Will there be assets, greater than \$5,000, currently in service removed as a result of this expenditure?

GUIDANCE: If yes, please detail the specific assets that will be removed:

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



Capital Project Expenditure Form

2020

Yes there will be some plant removed. The exact plant removed will be contingent upon the arrival of the new equipment and the locations where equipment failures take place as well as new growth.

What alternatives were evaluated and why were they rejected?

None

What are the risks and consequences of not approving this expenditure?

Transformers are required to support the ongoing operations and growth to provide safe electrical services to the customer.

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

Transformer installation follows company safety standard operating procedures.

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

No



Capital Project Expenditure Form

2020

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	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 checked="" 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?	Rate Case		
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 checked="" 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 (\$)	\$ 600,000		
Cost of Construction (\$)			
External Costs (\$)			
Internal Costs (\$)			
Other (\$)			
AFUDC (\$)			
Total Project Costs (\$)			

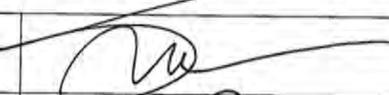
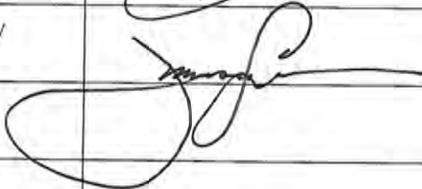
Approvals and Signaturesⁱⁱ

Approved By:				
Role	Approval Limit	Name	Signature	Date
Manager / Staff (requisitioner/buyer):	Up to \$25,000			Click here to enter a date.
Senior Manager:	Up to \$50,000			Click here to enter a date.
Senior Director/Director:	Up to \$250,000	Richard Foley		January 23, 2019
Senior VP/VP:	Up to \$500,000	Richard MacDonald		3/9/2020



Capital Project Expenditure Form

2020

State President:	Up to \$500,000	Susan Fleck		Click here to enter a date. 2/5/2020 2/5/2020
Regional President:	Up to \$3,000,000	James Sweeney		Click here to enter a date. 2/26/2020
Corporate – Sr. VP Operations:	Up to \$5,000,000			Click here to enter a date.
Corporate - Exec Team Member (CEO, CFO, COO, Vice Chair):	Over \$5,000,000			Click here to enter a date.

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.

Project Close Out Report 2020

Requesting Region or Group:		Date of Closeout (MM/DD/YY):	12-31-2020
Project Name:	01660 Granite St Transformer Purchases 8830-2092		
Requesting Region:		Sponsor (Name):	Richard Foley
Project Champion:	Mark Parker	Project Champion	
Project Status	<input type="checkbox"/> In Service <input checked="" type="checkbox"/> Complete <input type="checkbox"/> Closed		
Project Start Date:		Project Completion Date:	
Requested Capital (\$)	\$600,000	Expenditure Included in Approved Budget?	<input checked="" type="checkbox"/> 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
Mark Parker	Project Lead		
Richard Foley	Project Sponsor	Richard Foley	
	Operations Manager		
	Accounting Manager		

Digitally signed by Richard Foley
 DN: cn=Richard Foley, o=Liberty Utilities, ou,
 email=richard.foley@libertyutilities.com, c=US
 Date: 2021.03.16 19:04:43 -04'00'

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	4/5
2.6	Product and/or Service Performance	4/5
2.7	Scope	4/5
2.8	Cost (Budget)	4/5
2.9	Schedule	4/5

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, Webspaces)	Format
3.4a	Business Case	Finance Sharepoint Site	<input checked="" type="checkbox"/> Electronic <input type="checkbox"/> Manual
3.4b	If available, the Final Project Schedule		<input type="checkbox"/> Electronic <input type="checkbox"/> Manual
3.4c	Budget Documentation and Invoices	Accounts Payable – Great Plains	<input checked="" type="checkbox"/> Electronic <input type="checkbox"/> Manual
3.4d	Status Reports	Finance Sharepoint Site	<input checked="" type="checkbox"/> Electronic <input type="checkbox"/> Manual
3.4e	Risks and Issues Log		<input type="checkbox"/> Electronic <input type="checkbox"/> Manual
3.4f	Final deliverable		<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 Team ⁱⁱ

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	Manger – Electric Engineering	Employee
Mark Parker	Director – Electric Operations	Employee
Richard Foley	Director – Supply Chain	Employee

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

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

Section 8. Project Cost Summary

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

Cost Category	1- Budget	2- Actual	3 = 1 -2 Variance
Cost of Design & Engineering (\$)			
Cost of Materials (\$)			
Cost of Construction (\$)			

Project Close Out Report | 2020

External Costs (\$)			
Internal Costs (\$)			
Other (\$)			
AFUDC (\$)			
Total Project Costs (\$)	\$600,000	\$592,686	\$ 7,314

Reasons for Variance	Impact
Cause 1	\$
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)
302092-99001
302092-99002

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) d/b/a Liberty
Project List
In Service as of December 31, 2021

<u>2020 Project #</u>	<u>Project Description</u>	<u>Priority</u>	<u>Budget</u>	<u>FERC</u>	<u>Book Rate</u>	<u>Book Amt</u>	<u>MACRS</u>	<u>Tax Amt</u>
8830-1933	Battery Pilot	4. Regulatory Programs	\$600,000	371	10.00%	\$ 60,000	14.29%	\$ 85,740
8830-1944	Golden Rock Substation ¹	3. Growth	\$400,000	362	3.00%	\$ 12,000	3.75%	\$ 15,000
8830-1958	Install Service to Tuscan Village South	3. Growth	\$1,000,000	364	3.64%	\$ 36,400	3.75%	\$ 37,500
8830-1960	Golden Rock Underground	3. Growth	\$160,000	364	3.64%	\$ 5,824	3.75%	\$ 6,000
8830-2095	Tuscan Village EV Chargers	4. Regulatory Programs	\$400,000	392	7.50%	\$ 30,000	3.75%	\$ 15,000
8830-2069	Golden Rock Feeder 19L2 ¹	3. Growth	\$2,100,000	364	3.64%	\$ 76,440	3.75%	\$ 78,750
8830-2108	SCADA & Distribution Automation	5. Discretionary	\$200,000	397	4.17%	\$ 8,340	3.75%	\$ 7,500
8830-1966	Install 9L2 9L3 Tie Line	5. Discretionary	\$356,405	364	3.64%	\$ 12,973	3.75%	\$ 13,365
8830-2014	3rd Party Attachment Blanket	2. Mandated	\$170,667	364	3.64%	\$ 6,212	3.75%	\$ 6,400
8830-2111	Public Requirements Blanket	2. Mandated	\$520,000	364	3.64%	\$ 18,928	3.75%	\$ 19,500
8830-2112	Damage/Failure Blanket	2. Mandated	\$1,200,000	364	3.64%	\$ 43,680	3.75%	\$ 45,000
8830-2113	Distribution Asset Replacement Blanket	2. Mandated	\$200,000	364	3.64%	\$ 7,280	3.75%	\$ 7,500
8830-2121	Distribution Reliability Blanket	2. Mandated	\$161,540	364	3.64%	\$ 5,880	3.75%	\$ 6,058
8830-2114	3rd Party Attachment Blanket	2. Mandated	\$125,000	364	3.64%	\$ 4,550	3.75%	\$ 4,688
8830-2124	LED Street Light Conversion	2. Mandated	\$125,000	364	3.54%	\$ 4,425	3.75%	\$ 4,688
8830-2139	URD Cable Replacement	5. Discretionary	\$500,000	364	3.64%	\$ 18,200	3.75%	\$ 18,750
8830-2146	Bare Conductor Replacement Program	4. Regulatory Programs	\$1,000,000	364	3.64%	\$ 36,400	3.75%	\$ 37,500
8830-2191	Meter Purchases	5. Discretionary	\$250,000	370	5.00%	\$ 12,500	3.75%	\$ 9,375
8830-2192	Transformer Purchases	2. Mandated	\$420,000	368	3.51%	\$ 14,742	3.75%	\$ 15,750
8830-2190	Transportation Fleet & Equip Blanket	5. Discretionary	\$1,000,000	392	7.50%	\$ 75,000	3.75%	\$ 37,500
	Total		\$10,888,612			\$ 489,774	4.50%	\$471,563
								4.33%

¹ Project in original 2020 Step Adjustment list in Settlement Agreement, but was postponed to 2021

NHPUC NO. 21 - ELECTRICITY DELIVERY
 LIBERTY UTILITIES

Original Page 21C
 Terms and Conditions

shortfall/surplus, will be allocated to the classes using the Rate Class Allocation as detailed on Line 115 of Attachment 5, page 4 of the Settlement Agreement in Docket No. DE 19-064.

f) The amount allocated to each rate class will be allocated to the kWh and kW rate adjustments for each class on the basis of the actual kWh and kW's of the decoupling year.

ii. Revenue Decoupling Adjustment Formulas

$$RD_T = \sum_{CC=1}^{CC=3} [(BRPC_{T-1}^{CC} - ARPC_{T-1}^{CC}) \times ACUSTS_{T-1}^{CC}]$$

And

$$RDAF = \frac{RD}{FV}$$

Where the terms in the above equation have the following meanings:

$ACUSTS_{T-1}^{CC}$: The actual number of customers for the applicable Customer Class for the most recently completed Decoupling Year. Actual number of customers for each Decoupling Year shall be the average number monthly customers in that season, calculated by summing the number of billed customers in each month of the most recently completed Decoupling Year, and dividing by the number of months in that year.

$ARPC_{T-1}^{CC}$: The Actual Base Revenue Per Customer for the applicable Customer Class Group for the most recently completed Decoupling Year (T-1), as defined in Section i.

$BRPC_{T-1}^{CC}$: The Benchmark Base Revenue Per Customer for the applicable Customer Class Group as determined in accordance with Section i.2. for the most recently completed Decoupling Year (T-1).

cc Customer Classes as defined in Section i.3.

RD The Revenue Decoupling adjustment to revenues.

$RDAF_T$: The Revenue Decoupling Adjustment Factor.

FV Forecast sales volumes for the Billing Year.

Issued: XX XX, XXXX

Issued by: /s/ Susan L. Fleck

Effective: July 1, 2021

Susan L. Fleck
 Title: President

