

STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION

DOCKET DE 19-064

IN THE MATTER OF: **Liberty Utilities (Granite State Electric) Corp.
d/b/a Liberty Utilities**

Distribution Service Rate Case

DIRECT TESTIMONY

OF

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December 6, 2019

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I. INTRODUCTION AND QUALIFICATIONS

Q. Mr. Dudley, please state your full name and business address.

A. My name is Jay E. Dudley. My business address is 21 South Fruit Street, Suite 10, Concord, NH 03301.

Q. Please state your employer and your position.

A. I am employed by the New Hampshire Public Utilities Commission (“Commission”) as a Utility Analyst for the Electric Division.

Q. Please describe your professional background.

A. I started at the Commission in June of 2015 as a Utility Analyst in the Electric Division. Before joining the Commission, I was employed at the Vermont Public Service Board (now known as the Vermont Public Utilities Commission, “VT-PUC”) for seven years as a Utility Analyst and Hearing Officer. In that position I was primarily responsible for the analysis of financing and accounting order requests filed by all Vermont utilities, including review of auditor’s reports, financial projections, and securities analysis. As Hearing Officer, I managed and adjudicated cases involving a broad range of utility-related issues including rate investigations, construction projects, energy efficiency, consumer complaints, utility finance, condemnations, and telecommunications. Prior to working for the VT-PUC, I worked in the commercial banking sector in Vermont for twenty years where I held various management and administrative positions. My most recent role was as Vice President and Chief Credit Officer for Lyndon Bank in Lyndonville, Vermont. In that position I was responsible for directing and administering

1 the analysis and credit risk management of the bank's loan portfolio, including internal
2 loan review, regulatory compliance, and audit. In performing those responsibilities, I
3 also provided oversight for the commercial and retail lending functions with detailed
4 financial analysis of large corporate relationships, critique of loan proposals and loan
5 structuring, consultation on business development efforts, and advised the Board of
6 Directors on loan approvals and loan portfolio quality. Prior to my role as Chief Credit
7 Officer, I held the position of Vice President of Loan Administration. In this position, I
8 was responsible for directing and administering the underwriting, processing, and funding
9 of all commercial, consumer, and residential mortgage loans. My responsibilities also
10 included the management of loan processing and loan origination staff and partnering
11 with the Compliance Officer to monitor and ensure compliance with all banking laws,
12 regulations, and the bank's lending policy. Previous to my position as Loan
13 Administration Vice President, I held the position of Assistant Vice President of
14 Commercial Loan Administration with Passumpsic Savings Bank in St. Johnsbury,
15 Vermont. In that role, I was responsible for supervising loan administration and loan
16 operations within the commercial lending division of the bank.

17
18 **Q. Please describe your educational background?**

19 A. I received my Bachelor of Arts degree in Political Science from St. Michael's College.
20 Throughout my career in banking, I took advantage of numerous Continuing Professional
21 Education (CPE) opportunities involving college level coursework in the areas of
22 accounting, financial analysis, real estate and banking law, economics, and regulatory
23 compliance. Also, during my tenure with the VT-PUC I took advantage of various CPE

opportunities including the Regulatory Studies Program at Michigan State University (sponsored by the National Association of Regulatory Utility Commissioners “NARUC”), Utility Finance & Accounting for Financial Professionals at the Financial Accounting Institute, and Scott Hempling seminars on Electric Utility Law.

Q. Have you previously testified before the Commission?

A. Yes. I previously submitted Staff testimony to the Commission in Docket No. DE 14-238 PSNH Generation Assets, Docket No. DE 15-137 Energy Efficiency Resource Standard, Docket No. DE 16-383 Liberty Utilities Request for Change in Rates, and Docket No. DE 17-136 2018-2020 NH Energy Efficiency Plan.

II. SUMMARY OF TESTIMONY

Q. Please describe the purpose of your testimony today.

A. The purpose of my testimony is to provide Staff’s recommendation involving Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities’ (“Liberty” or the “Company”) request filed on April 30, 2019, to implement a permanent distribution rate increase to be effective on and after July 1, 2019, pending the Commission’s final determination on the Company’s request for a permanent rate increase. Based on the reports of the Company filed with the Commission, and Staff’s extensive review of the Company’s revenue requirement, rate of return, and capital expenditures, Staff believes that a number of adjustments are warranted to the Liberty permanent rate proposal. Staff recommends that the Commission make the following modifications:

• Liberty's proposed revenue requirement:	\$6,673,493
• Staff's reduction to revenue requirement:	<u>(\$6,535,503)</u>
Adjusted revenue requirement	\$ 137,990
• Liberty's proposed rate base:	\$103,024,219
• Staff's reduction to rate base:	<u>(\$ 6,033,781)</u>
Adjusted rate base:	\$96,990,438

In addition, Staff recommends denial of Liberty's proposed step increase of approximately \$2.3 million for 2019 and all subsequent proposed step increases, and Liberty's proposal for a multi-year rate plan.

If the Commission allows a 2019 step increase, then Staff recommends that the Commission open a separate docket for the purposes of conducting an investigation of Liberty's capital budgeting and planning process (after this case concludes), including a prudence review of individual capital projects that comprise Liberty's 2019 step increase request. Further, Staff recommends that the Commission consider hiring a consultant to perform a business processes audit concerning the 2019 capital investments, and otherwise assist Staff in that investigation.

III. DISCUSSION OF PERMANENT RATE REQUEST AND STAFF'S REVIEW

Q. What is the statutory foundation for a request for permanent rates?

A. Permanent rates are specifically allowed pursuant to RSA 378:28 which reads as follows:

378:28 Permanent Rates. – So far as possible, the provisions of RSA 378:27 shall be applied by the commission in fixing and determining permanent rates, as well as temporary rates. The commission shall not include in permanent rates any return on any plant, equipment, or capital improvement which has not first been found by the commission to be prudent, used, and useful. Nothing contained in this section shall preclude the commission from receiving and considering any evidence which may be

1 pertinent and material to the determination of a just and reasonable rate base and a just
2 and reasonable rate of return thereon.
3

4 Following the completion of the full proceeding, a “permanent rate” level is determined,
5 and the difference between the temporary rate level and the permanent rate level is then
6 reconciled through either collection from or refund to customers.

7 **Q. Please describe Liberty’s request for the permanent increase in rates.**

8 **A.** According to Liberty, the Company has been unable to earn its authorized rate of return
9 under existing rates because of a deficiency in distribution revenue of \$5.68 million as of
10 fiscal year-end 2018.¹ As a result, Liberty’s return on rate base for 2018, related to the
11 distribution portion of the business, declined to 6.43% as compared with the Company’s
12 authorized return of 7.49%. Liberty is seeking recovery of the \$5.68 million revenue
13 deficiency in permanent rates; however, to allow the Company to earn at least a portion
14 of its authorized return until the Commission makes its final determination on permanent
15 rates, the Company proposed a temporary rate increase of approximately 2.00%, or
16 \$2,093,349 in additional distribution revenue.² After hearing and review, the
17 Commission approved a temporary rate increase of \$2,093,349 (the “June Order”).³ In
18 terms of the permanent rate request, the permanent rate amount constitutes an annual
19 increase of 5.58% in distribution revenue, resulting in an increase to the total bill for the
20 average residential ratepayer (650 kWh) of 6.27% or \$7.75 per month as of July 1, 2019,
21 including an increase in the Customer Charge of \$0.74.⁴ In addition, Liberty has
22 proposed a step increase intended to recover an annual revenue deficiency of

¹ On November 22, 2019, Liberty adjusted this amount to \$6.7 million. *See* Technical Statement of Philip E. Greene and David B. Simek November 22, 2019.

² Greene/Simek Testimony on Temporary Rates at 5 (Bates II 007).

³ Order No. 26,267, Docket No. DE 19-064, dated June 28, 2019.

1 approximately \$2,293,431 based on \$14,967,736⁵ in projected capital additions from
2 January 1 through December 31, 2019. The Company is requesting that the Commission
3 make the step increase effective at the time that permanent rates become effective
4 following the conclusion of this proceeding, but no earlier than January 1, 2020.

5 **Q. As part of this rate case, did Commission Audit Staff complete a financial audit of**
6 **Liberty's books and records?**

7 **A.** No. The Commission's Audit Staff is in the process of completing its audit and has not
8 yet issued a final audit report. My understanding from discussions with the
9 Commission's Director of Audit is that the final audit report will be issued by year-end
10 2019 (after the Company has had an opportunity to respond to draft audit findings). Staff
11 plans to reflect the results of the final audit report in an updated revenue requirement
12 calculation to be completed in advance of the technical sessions/ settlement conference
13 scheduled for in mid-January.

14 **Q. Are you aware of any deficiencies encountered by Audit Staff during the course of**
15 **the audit process and how do those problems relate specifically to issues raised in**
16 **your testimony?**

17 **A.** Yes. Based on discussions with the Audit Director, in reviewing Liberty's capital project
18 costs, Audit discovered inaccuracies in the estimated budget amounts and also large
19 budget variances for some projects. Audit also reviewed several projects for compliance
20 with the Company's capitalization policy and noticed several instances of missing
21 documentation in terms of Business Cases, Over Expenditure Forms, and Project

⁴ Heintz Testimony at 13 (Bates II-313) and Attachment DAH-3 at 2 (Bates II-333).

⁵ On June 21, 2019, in response the Staff data request 3-28, Liberty adjusted this amount upward to \$20 million due to the omission of three additional capital projects, increasing the step adjustment to \$2,860,886.

1 Closeout Reports not provided by Liberty. As we discussed below, these issues
2 constitute an ongoing area of concern for Staff.

3 **Q. Is Staff proposing a decrease to Liberty's revenue requirements in this proceeding?**

4 **A.** Yes. As noted above, please refer to the testimony of Ms. Mullinax in which she
5 provides detailed support for Staff's recommended rate increase of \$137,989 which is
6 \$6,535,504 less than Liberty's revenue requirement as contained in its updated request
7 filed on November 22, 2019. My testimony below addresses adjustments to the
8 Company's rate base.

9 **Q. Is Staff convinced that its recommendations for disallowances in this case will provide**
10 **just and reasonable results?**

11 **A.** Yes. A key element of the just and reasonable standard, coupled with the statutory
12 requirement that a utility's capital investments must be found to have been prudently
13 incurred, is that the Commission must weigh the conflicting interests of both the utility and
14 the ratepayer before finding the proposed rate is just and reasonable. In doing so, the
15 Commission must measure what the public must reasonably pay against what the utility is
16 reasonably entitled to receive. In the present docket, Staff's analysis indicates that Liberty
17 overstated its revenue requirement by \$6.5 million, and to allow such a requirement into rates
18 would be unjust for Liberty's ratepayers. In addition, the Commission's expectation that a
19 utility's investments are prudent, as directed by the statutory requirement referenced above,
20 also rests on the just and reasonable standard such that imprudent expenditures are
21 inconsistent with the standard and should be disallowed. As a result, Staff has found that
22 approximately \$6 million in capital investments and related cost overruns, and approximately
23 \$20 million in current capital investments for 2019, were not adequately explained or
24 justified by the Company and that ratepayers should not be required to pay those costs.

IV. LIBERTY'S CAPITAL EXPENDITURES: HISTORICAL PERSPECTIVE

Q. What explanation does the Company provide for the claimed downward pressure on its rates of return?

A. Liberty testifies that the primary driver behind the need for an increase in rates is approximately \$36 million in capital investments made by the Company since December 31, 2016.⁶ In the period immediately after Liberty's acquisition of Granite State Electric in 2013, and prior to Liberty's last rate case in 2016, Liberty had invested \$50 million in capital additions and improvements. At the time of Liberty's last rate case, Staff expressed concern about this level of investment given that Liberty's load growth had increased very little during that same time period.

Q. Why are Liberty's capital investments under Staff's review in this rate case?

A. First, regulated electric utilities are some of the most capital-intensive entities that exist given the substantial amount of capital investment that is required to build and maintain reliable infrastructure. As a result, the significant and ongoing nature of those investments are frequently the primary causes for utilities to request periodic increases in rates. However, unlike unregulated competitive firms, regulated utilities, because they are regulated, cannot just pursue any investment strategies available that maximize shareholder value. Regulators must find that such expenditures are prudent, just and reasonable, and used and useful. As cited above, Liberty's primary justification for the current rate increase request is the downward pressure additional capital expenditures have placed on the Company's revenues and rates of return.

Second, during the course of Staff's review in Liberty's prior rate case, Docket DE 16-383, Staff found disparities between budgeted amounts and actual expenditures reported

1 by the Company to be both numerous and significant in size, especially the costs incurred
2 in 2014, raising questions as to whether the Company was sufficiently diligent in
3 controlling those costs. Given the increasing number of variances at that time
4 (approximately 42 out of 100 projects funded in 2014, and 49 out of 90 projects funded in
5 2015), which in several instances increased originally budgeted costs several times over,
6 and given that Liberty provided little in the way of specific information as to root causes
7 or how the Company decided that those overages were economic, Staff was unable to
8 determine that Liberty took appropriate measures to control costs or that Liberty's
9 decision-making process was reasonable or in the interest of ratepayers.⁷ Ultimately,
10 Staff recommended a disallowance of \$5.8 million in cost overruns in DE 16-383. That
11 case was resolved by a Settlement Agreement, which the Commission approved.

12 **Q. Did additional information come to Staff's attention during the prior rate case (DE**
13 **16-383) that re-enforced Staff's concerns involving Liberty's capital investments?**

14 **A.** Yes. In Docket No. DG 14-180 Liberty Utilities (EnergyNorth Natural Gas), a prior rate
15 case filed in 2014 by Liberty's New Hampshire natural gas utility EnergyNorth Natural
16 Gas ("EnergyNorth"), the Commission authorized a company-wide audit to review the
17 "effectiveness and efficiency" of Liberty's business processes, including among other
18 areas, Liberty's business planning and budgeting.⁸ As referenced in that Order, Staff's
19 concerns involved the Company's operational performance after the transition from
20 National Grid, especially in the areas of customer service, IT, and capital budgeting and
21 expenditures. The audit assignment was awarded to Liberty Consulting Group ("LCG")

⁶ Greene/Simek Testimony on Permanent Rates at 5 (Bates II-081).

⁷ See Docket DE 16-383, Exhibit 11, Testimony of Jay E. Dudley at 8-11 (Bates 9-12).

⁸ See Docket No. DE 14-180, Order No. 25,797 of 6/26/15 at 15.

1 in 2015 and LCG released its Management and Operations Audit of Liberty Utilities on
2 August 12, 2016.⁹

3 **Q. At that time, what elements of the LCG report did Staff consider relevant to its**
4 **review of Liberty's capital expenditures in the rate case?**

5 **A.** Staff found most of the findings of the LCG report troubling. One important issue,
6 centered on LCG's review of Liberty's planning and budgeting process, and associated
7 capital expenditures, contained at pages III-1 through III-30 of the LCG audit. An
8 excerpt of that section of the report is attached to my testimony as Attachment JED-1.
9 Specifically, the audit report underscored and confirmed many of the same issues
10 encountered by Staff during discovery in DE 16-383, including but not limited to:

- 11 a) Extremely large variances between budgeted and actual capital expenditures in
12 2014.
- 13 b) Capital budget variances that continued into 2015 and 2016.
- 14 c) Lack of detailed explanations supporting and justifying those variances.
- 15 d) Significant lags in timing between capital budget approval and actual capital
16 expenditure analysis.
- 17 e) The commencement of capital projects well in advance of project analysis and
18 approval by management.
- 19 f) Project proposals (business cases) that lacked sufficient detail and content and
20 failed to conform to internal policy and procedures.
- 21 g) Failure by management to effectively monitor and control capital spending.

⁹ It should be noted that the audit covered both the operations of Granite State Electric and EnergyNorth.

h) No evidence that Liberty observed or followed Good Utility Practice in its capital budgeting and planning process.

Q. Have these characteristics reappeared in other subsequent rate cases filed by Liberty?

A. Yes. In Docket DG 17-048, EnergyNorth filed a petition for an increase in permanent gas rates that included a decoupling mechanism, recovery of capital investments, and a step increase, similar to the request filed by Liberty in the present rate case. During Staff's review at that time, Staff discovered substantial cost increases related to the construction of the new Concord Training Center which more than doubled the original cost estimate of \$1.02 million to \$2.3 million. Upon completion of Staff's examination of that project, Staff concluded that both the construction and the cost overruns for the training center were not supported by sufficient financial/economic analysis, credible cost estimates, adequate consideration of alternatives, or reasonable decision-making by Liberty's management.¹⁰ In fact, many of the same deficiencies in documentation found by Staff in DE 16-383 and this current electric case were also discovered by Staff in the gas rate case. Ultimately, based on the considerable evidence presented, Staff recommended disallowance of the training center costs and the Commission disallowed \$1.25 million of those costs from inclusion in the rate base.¹¹

Q. With the filing of the rate case in the current docket, and in light of the previous concerns and evidence involving Liberty's deficient capital planning and budgeting practices, has Staff noticed any improvements in the Company's processes since that time?

¹⁰ See Docket DG 17-048, Testimony of Al-Azad Iqbal, Exhibit No. 18 at Bates 19-27.

¹¹ Docket DG 17-048, Order No. 26,122, dated April 27, 2018, at 19-26, and Appendix 1 at 10.

1 **A.** Noticeable improvements have been few. One positive development observed by Staff
2 was the introduction by Liberty of a new and improved policy and procedures manual for
3 capital expenditures, the “Liberty Way Policy & Procedures” dated October 23, 2018
4 (attached as Attachment JED-2), which better defines the capital budgeting and planning
5 process and also provides a more comprehensive business case design in terms of project
6 analysis. In addition, the occurrence of cost overruns has decreased since 2016, however,
7 the variances for many individual projects remain significant as outlined below.
8 Nevertheless, as discussed below, most of the recommendations made by LCG for
9 improving the capital planning and budgeting process at Liberty have been largely
10 ignored.

11 **Q.** **Please briefly summarize the capital budgeting process at Liberty.**

12 **A.** The capital budget process for Liberty begins in August of each year with the preparation
13 and submission by Liberty Utilities Regional Management of the Long Term Capital
14 Expenditure Plan that is incorporated into Algonquin Power and Utilities Corporation’s
15 (APUC) Corporate Long Term Model.¹² Inclusion of preliminary Business Case and
16 Capital Project Expenditure forms for each project are recommended in Liberty’s policy
17 and procedures for this stage of the process.¹³ With submission of the Long Term
18 Expenditure Plan, the related capital budget is set and approved by the APUC Board and
19 Regional Liberty management is responsible throughout the successive year for planning
20 and overseeing the projects that fall within the capital budget.¹⁴ A five-year capital
21 budget forecast is also part of the Expenditure Plan. A flow chart depicting the budget

¹² Attachment JED-2 at 7.

¹³ Staff learned in the Technical Session held on 10/16/19, that Liberty does not include any business cases in support of its capital budget sent to the APUC Board.

¹⁴ Attachment JED-2 at 7.

1 preparation and approval cycle is included as Appendix G of the Liberty Way Policy &
2 Procedures.¹⁵ In addition, the policy and procedures requires the preparation of a
3 “Business Case” and/or a “Capital Project Expenditure” form for each budgeted project,
4 and a “Change Order” form to request changes to project scope and budget amounts. The
5 policy and procedures sets out specific information requirements for each of these
6 forms.¹⁶

7 **Q. What internal documentation from Liberty did Staff examine as part of its review?**

8 **A.** As part of Staff Data Request 9-3 (Attachments JED-3, 3a, and 3b to my testimony), Staff
9 sought to obtain and review the following documents involving a specific sampling of
10 projects from 2017 and 2018:

- 11 a. Business Cases and/or Capital Expenditure Request forms
- 12 b. Change Order forms
- 13 c. Project Close-out Reports
- 14 d. Work orders
- 15 e. Over Expenditure Applications (pre-2018)
- 16 f. Monthly Capital Reports/ Monthly Cash Spend Reports
- 17 g. Monthly Operations Review
- 18 h. Meeting agendas and minutes of the Financial Planning and Analysis Group

19 As referenced below, not all of the requested documentation was submitted or made
20 available by Liberty. In addition, Staff’s review of some projects was hampered by the
21 Company’s excessive and unexplained delays in submitting additional follow-up
22 responses from the October Technical Sessions.

¹⁵ *Id* at 35.

¹⁶ *Id* at 11-14.

1 **Q. What issues did Staff discover in its review of Liberty's capital budgeting?**

2 **A.** As was the case in DE 16-383, Staff found that the cost estimates contained in the capital
3 budgets were consistently inaccurate, especially for blanket projects and large complex
4 projects, and that the capital planning and budgeting process itself appears to be ad hoc
5 with Liberty management providing only cursory oversight and monitoring as projects
6 progress to completion. For example, from the initial budget phase through project start-
7 up, local management is given a high level of discretion in terms of capital budget
8 tolerances and accuracy with ranges as wide as +100%/-50% for investment grade
9 projects.¹⁷ The LCG report found this to be unusually broad when compared with
10 similarly situated utilities and that more reasonable tolerances tend to be in the 5 percent
11 to 10 percent range.¹⁸ In addition, project analysis documentation such as Business
12 Cases and Capital Project Expenditure forms are not included with the annual
13 Expenditure Plan submitted to APUC, indicating that budgets are approved with little
14 scrutiny of specific projects by upper level management and the Board of Directors.
15 Staff also found little evidence that Liberty considered or utilized basic capital budgeting
16 techniques such as the identification of alternatives and dependencies among alternatives,
17 least cost planning, or risk identification for any of the over-budget projects reviewed in
18 the sample below. It also appears from a review of Liberty's monthly capital spending
19 reports that APUC imposes little in the way of restrictions or cost controls on the level of
20 capital expenditures undertaken by the Company. Similarly, it appears that Liberty
21 Regional Management provides only cursory oversight and monitoring of the capital
22 budgets during the course of the year since they receive the same monthly reports. In

¹⁷ *Id* at 12.

¹⁸ Attachment JED-1 at III-29.

1 addition, as noted below, most of the over-budget projects reviewed by Staff were not
2 specifically tracked by these reports.

3 **Q. What conclusion does Staff draw from the historical perspective discussed above**
4 **involving Liberty's past and present practices and approaches to capital planning,**
5 **budgeting, and expenditures?**

6 **A.** Given that the same issues and deficiencies have occurred repeatedly since Liberty's
7 acquisition of Granite State Electric from National Grid, and the fact that few or no
8 improvements in these processes have been evident, Staff concludes that this ongoing
9 state of affairs establishes a pattern of conduct and business dealings by Liberty that are
10 detrimental to ratepayers and not in compliance with the just and reasonable standard.

11
12 **V. FINDINGS: REVIEW OF CAPITAL PROJECTS SAMPLE AND COST OVER**
13 **RUNS FOR 2018 AND 2017**

14 **Q. What specific projects did Staff include in its examination?**

15 **A.** Staff compiled sample lists (attached as Attachments JED-3a and JED-3b) of projects
16 with cost over runs for 2018 (9 projects) and 2017 (6 projects) from a master list of
17 capital projects provided by Liberty in response to Staff Data Request 1-2 (attached as
18 Attachment JED-4). The list of sample projects for 2018 and 2017 are provided in the
19 table below:

Table 1: 2018 Sample Projects

<u>Project No.</u>	<u>Description</u>	<u>Budget</u>	<u>Actual</u>	<u>Variance</u>
8830-1832	Replace 6L2 No. Main Hanover	\$1,100,000	\$1,295,593	\$195,593
8830-C42930	Install Service to Tuscan Village	\$400,000	\$674,260	\$274,260
8830-C18620	Charlestown 32 Dline	\$250,000	\$354,751	\$104,750
8830-1827	IT Systems Allocations-Corp	\$270,500	\$361,643	91,142
8830-1830	Misc. Capital Imprv. Londonderry	\$35,000	\$60,650	\$25,649
8830-1864	Rockingham Substation	\$200,000	\$1,568,870	\$1,368,869
8830-PE	Preliminary Engineering	\$0	-\$1,497,946	\$1,497,945
8830-1865	Rockingham Sub Transmission	\$300,000	\$575,354	\$275,354
8830-C36426	SCADA Distribution & Auto.	<u>\$90,000</u>	<u>\$171,930</u>	<u>\$81,930</u>
Total		\$2,645,500	\$3,565,105	\$919,602

Table 2: 2017 Sample Projects

<u>Project No.</u>	<u>Description</u>	<u>Budget</u>	<u>Actual</u>	<u>Variance</u>
8830-CD0291	Sky View URD	\$21,286	\$70,683	\$49,394
8830-C18603	Bare Conductor Replacement	\$1,300,000	\$1,784,038	\$484,038
8830-C18620	Charlestown 32 Dline	\$316,992	\$500,281	\$183,289
8830-C36424	Mt. Support New 16L3 Feeder	\$275,000	\$467,936	\$192,936
8830-1867	Rockingham Sub Transmission	\$50,000	\$175,504	\$125,504
8830-C42921	Install Splices 6L2 & 6L4	<u>\$111,562</u>	<u>\$203,305</u>	<u>\$91,743</u>
Total		\$2,074,840	\$3,201,747	\$1,127,444

As referenced above, all of the internal documentation obtained from Liberty, was reviewed by Staff in connection with each of these projects. However, for the purposes of my testimony, only three of the projects from 2018 and two from 2017 will be discussed here as representative of the Company's deficiencies in the areas of capital budgeting, planning, documentation, and execution.

Q. Please provide the results of Staff's review of those projects.

A. Below we provide our findings for the sample projects based on Liberty's responses to Staff Data Request 9-3, and data requests TS 1-13, TS 1-15, TS 1-16, TS 1-17, TS 1-18 (the 2018 projects respectively attached as Attachments JED-3c, 3d, 3e, 3f, and 3g), and

1 data requests TS 2-4, TS 2-6, TS 2-7, TS 2-8, TS 2-9, TS 2-10 (2017 projects
2 respectively attached as Attachments JED-3h, 3i, 3j, 3k, 3l and 3m).

3 Note: The Business Cases and Capital Project Expenditure Applications (CPE) are
4 separate forms but are typically incorporated into a single document package when both
5 are required under Liberty's policy and procedures.

6 **2018 Capital Projects**

7 **1. Project #8830-1832 Replace 6L2 Direct Buried Cable No. Main St. Hanover**

8 **Attachment JED-3d**

9 **2018 Budget: \$1,100,000 Actual: \$1,295,593 Variance: \$195,593**

10 **Revised: \$225,000 Actual: \$1,295,593 Variance: \$1,070,593**

11 **Business Case/CPE:**

- 12 • This project involved the removal and replacement of approximately 1600
13 feet of 500 XLPE AL cables along North Main Street in Hanover, NH.
14 Liberty asserts that this type of underground cable is prone to failure but at
15 the Technical Session held on October 16, 2019, Liberty was unable to
16 identify specific instances of failure of the XLPE AL cables elsewhere
17 within Liberty's service territory. Nor could the Company provide in the
18 follow-up data response any specific documentation evidencing failure or
19 failure rates in Liberty's service territory.
- 20 • The Business Case was dated October 8, 2017, but was not signed by
21 authorized signers until November 30, 2017.
- 22 • Both the Business Case and the attached CPE set the approved budget
23 amount at \$225,000 which conflicts with Table 1 above where Liberty

1 reported the original budget amount to be \$1.1 million.¹⁹ At a Technical
2 Session held on October 16, 2019, the Company attributed this disparity to
3 a correction and update to the original cost estimate which appears to be
4 the amount of the cost increase of \$1.07 million referenced in the Change
5 Order Form described below. However, because the \$225,000 amount is
6 referenced on all of the documentation submitted by Liberty, Staff will
7 consider this amount as the original budget figure for this project.

- 8 • No detailed analysis or decision criteria are provided in the sections
9 addressing Alternatives/Options, Financial Assessment, and Risk
10 Assessment as required under Liberty's Policy & Procedures.²⁰ Instead
11 the word "None" is inserted in these sections. The Implementation/Action
12 Plan section merely states that "construction will take place under
13 individual job numbers." Likewise, the Cost Estimate section of the CPE
14 provides no discussion or detail on the nature of the estimate, timing of
15 spending per quarter, or risks associated with the estimate. Also, the
16 section for Analysis of Project Value is blank except for citing the budget
17 amount of \$225,000.

18 Change Order Form:

- 19 • This change order request was dated March 19, 2019 and approved on
20 March 31, 2019, three months after the project completion date of
21 December 31, 2018. This runs contrary to the apparent intent of the form
22 as described in the Policy & Procedures since engagement of management

¹⁹ Liberty's Form E-22 Report, filed with the Commission February 28, 2018 pursuant to Puc 308.07, shows the original budget as \$225,000.

1 for approval, and alerting management to cost overruns, should have been
2 sought during the course of the project either before or at the time the
3 changes occurred. This after-the-fact notification undermines the purpose
4 of the form.

- 5 • The Financial Assessment section of the form only provides the original
6 budget amount of \$225,000, the amount of the requested increase of \$1.07
7 million, and the new cost figure of \$1.295 million. There is no breakout
8 within the cost categories between original costs and updated costs as
9 required on the form. The Basis for Change section provides no detailed
10 analysis or justification for the increase, or why it was authorized, other
11 than the need to “accommodate *expected* construction costs” and
12 “additional construction oversight was needed.” At the Technical Session
13 held on October 16, 2019, Liberty represented that the project was
14 complicated by road work being conducted by the Town of Hanover at or
15 about the same time, and also by the degradation of some manholes, but
16 Liberty provided no analysis as to how much that road work or manhole
17 construction contributed to the cost increase referenced in the Change
18 Order. In their pre-filed testimony, Mr. Rivera, Mr. Strabone, and Ms.
19 Tebbetts state that the underground cables were relocated but this apparent
20 complication is not discussed or explained in the project documentation or
21 in the data responses provided by Liberty.²¹

²⁰ See Attachment JED-2 at 11-12, and 16-22.

²¹ Testimony of Rivera, Strabone, and Tebbitts at 7-8 (Bates II-185 - II-186).

- In the Schedule Impacts sections, “N/A” was inserted for Baseline Schedule, New Forecast, and Variance.
- This report was not provided by Liberty in the Company’s response to Staff 9-3 as requested by Staff. Instead it was provided in a follow-up request, Staff TS 1-15 (approximately two months after it was originally requested).

Project Close Out Report:

- The Project Documentation Checklist in Section 3 of the form is essentially blank in terms of key documents except for a reference to the Business Case. According to Liberty’s data response in TS 1-20 (Attachment JED-8), Liberty apparently believes this section of the form to be superfluous and unimportant since the Business Cases provide all of the necessary information.
- Under the Project Lessons Learned section in Section 5, “N/A” was inserted in the parts involving Problem Statement, Problem Description, References and Recommendations, despite the apparent problems encountered by Liberty with this project. As a result, no root cause analysis addressing project difficulties and the reasons for the cost overrun were provided.
- In Section 8, Project Cost Summary, Liberty erroneously refers to the original budget amount as \$1.295 million which was actually the total cost for the project. As a result, Liberty incorrectly represents that the cost

1 variance for the project was \$0. Similarly, under Reasons for Variance,
2 the Company reports “No variance between actual and budget.”

3 Work Orders:

- 4 • Copies of individual work orders were not provided for this project. Instead
5 Liberty enters all of the work order information into an Excel spreadsheet and
6 Liberty provided that spreadsheet in its data response. Upon review, Staff noticed
7 that underground construction costs of approximately \$900,000, including
8 underground conductors and devices, appeared to be excessive given that only
9 1600 ft. of cable was replaced. Manhole replacements typically run in the range
10 of \$30,000 to \$35,000 per manhole. Staff estimates that the maximum number of
11 manholes for this length of cable would be approximately five resulting in a total
12 cost (on the high side) of \$175,000.
- 13 • The work orders also show that supplemental engineering was apparently required
14 late in the project (September) at a total cost of \$220,000.
- 15 • After including burdens, labor, and all other costs, the total cost of the project
16 came to \$1.3 million.

17 Monthly Capital/Spend Reports, Meeting Agendas:

- 18 • The 6L2 Buried Cable Replacement project in Hanover, and associated cost
19 overruns, was not one of the projects mentioned or tracked in these reports.
- 20 • The reports provide only a high level review of gross capital budget amounts in a
21 single chart comparing capital dollars spent to budget, and includes no analysis.
22 Only a few select, high profile projects for both the electric and gas divisions are
23 tracked with their own budget schedules.

- Due to the high level nature of these reports, they provide no information as to the degree of oversight, attempts at cost containment (if any), or the thought or decision-making process on the part of upper level management concerning over-budget projects. Because the reports focus on overall levels of spending (both electric and gas), APUC appears to be more concerned with budget overruns on the macro level as opposed to individual projects.
- Based on the dates of the reports, in some instances there was a time lag of two months between the creation of the monthly capital spending updates and review by APUC (e.g. the February 2018 update was provided for the April meeting, and the July 2018 update was provided for the September meeting) indicating a lack of timely review by management.

2. Project #8830-1864 Rockingham Substation Attachment JED-3c

Budget: \$200,000 Actual: \$1,568,870 Variance: \$1,368,870

Project #8830-PE Preliminary Engineering

Budget: \$0 Actual: -\$1,497,946 Variance: \$1,497,946

Business Case/CPE:

- Note: The two projects listed above are apparently interrelated in that the negative amount of -\$1,497,946 for Project 8830-PE works as an adjustment to the amount of \$1,568,870 for Project 8830-1864 presumably to net out other costs for the Rockingham Substation but this was not clearly explained in the Business Case or any of the other documents submitted by Liberty. The Business Case and the CPE both set the preliminary engineering budget at \$100,000 even though the budget amount listed above by Liberty was \$200,000.

- 1 • The \$1.5 million portion of the actual cost for the Rockingham Substation
2 involves the purchase of 1.4 acres of land located at the former Rockingham Park
3 site in Salem, New Hampshire. This amount was not included by the Company in
4 its 2018 test year rate base but instead was booked to “Plant held for future use.”²²
5 According to Liberty, the substation project is a key part of Liberty’s overall
6 buildout plan to serve the additional load forecasted for the Tuscan Village
7 development (see Step Adjustment discussion below). Liberty plans to begin
8 construction at the site in 2020. The Company did not report the land purchase as
9 part of its 2018 E-22 report with the Commission nor did it disclose the purchase
10 in the jointly filed testimony of Mr. Rivera, Mr. Strabone, and Ms. Tebbetts.
11 • The Business Case was dated February 16, 2018, indicating that it was apparently
12 submitted for approval well after the annual budget review and approval by
13 APUC.
14 • The Business Case/CPE makes no reference to the land purchase and thus
15 provides no economic analysis or analysis of alternatives to support the
16 transaction. Given the date of the Business Case, February 2018, and the date of
17 the Purchase and Sale Agreement, December 2017 (see below), it is clear that the
18 land purchase was known to Liberty at the time of project proposal and design.
19 Also, only minimal analysis for construction of the substation is provided with a
20 reference made to the Salem Area Study for more detailed information.²³
21 Consequently, Staff made inquiries about the project and the land purchase at the
22 Technical Session held on October 16, 2019. At the tech session, Liberty

²² See Attachment JED-3c, Staff data response 5-14.

²³ The Salem Area Study is attached to Mr. Demmer’s testimony as Attachment KFD-5.

1 witnesses reiterated the need for both the substation and the land purchase but,
2 when asked, did not provide specific details about the need for both the substation
3 and the land. Liberty provided the following supporting documentation in their
4 follow-up data response (attached as Attachment JED-3c):

5 a) Purchase and Sale Agreement: The agreement is dated December 2017
6 between Rock Acquisition, LLC and Liberty Utilities Corp. for 1.4 acres
7 of vacant land within the “Tuscan Village Project,” including the grant of
8 an easement over Tuscan Village property to access the lot. The
9 agreement is conditioned upon Liberty obtaining a subdivision permit
10 from the Town of Salem, at Liberty’s expense, indicating that the lot was
11 not part of a previously existing subdivision prior to the sale. As noted
12 above, the purchase price was \$1.5 million. Importantly, under Section 20
13 (a) “Construction Obligations,” Liberty agrees to construct at its “sole cost
14 and expense, the Substation which will provide adequate electrical service
15 to the Tuscan Village Project..,” indicating that Tuscan Village, as the
16 primary beneficiary of the project, will not be contributing to the costs of
17 the substation project.

18 b) Appraisal Report: The Appraisal Report is dated July 13, 2017, and lists
19 the market value of the property at \$925,000. Staff inquiries with the
20 Town of Salem’s Tax Assessor’s Office revealed that the tax assessed
21 value for 2018 was \$813,200. The appraisal describes the lot size as a
22 “hypothetical 1.23± acre lot” due the fact that the lot had not yet been
23 subdivided from the larger 120 acre Tuscan Village development at the

1 time of the appraisal. The lot currently lacks existing road frontage and
2 will be accessed from a private road that will be built in conjunction with
3 the rest of the Tuscan Village development.

4 c) Alternative Sites: In response to subpart of d. of Attachment JED-3c, no
5 documentation or analysis involving Liberty's consideration of alternative
6 sites was provided by Liberty. As mentioned above, no analysis of
7 alternative sites was included in any of the Business Case documentation
8 reviewed. As a result, Staff can only conclude that no analysis of
9 alternative sites was undertaken by Liberty at the time of the land purchase
10 from Tuscan Village.

11 d) APUC Involvement and Approval: Based on the Company's response to
12 subpart e. of Attachment JED-3c, Staff concludes that there were no
13 communications or discussions with upper management concerning the
14 land purchase. According to Liberty, approval of the Business Case and
15 Change Order was all that was needed for approval even though the
16 Business Case/CPE provided no description or analysis of the land
17 transaction.

18 e) Salem Depot Substation: The Salem Depot substation is an existing
19 substation owned by Liberty located near the corner of Main Street and
20 Central Street in Salem, New Hampshire. The existing lot consists of two
21 adjoining lots totaling 0.58 acres with a total tax assessed value of
22 \$190,000. According to Liberty, Salem Depot is to be replaced by the
23 Rockingham Substation project and will be taken out of service once the

1 Tuscan Village project is complete and Rockingham Substation is
2 energized.²⁴ In response to subpart g. of Attachment JED-3c, Liberty did
3 not provide a detailed analysis, as requested by Staff, showing why Salem
4 Depot was not considered a viable alternative site for the Rockingham
5 substation. Instead, Liberty merely states that it needs 1.5 acres to
6 accommodate the new substation and the storage of large equipment.²⁵
7 Staff reviewed the submitted site plans and other maps for Rockingham
8 and Salem Depot, and Staff conducted a site visit of both locations on
9 November 19, 2019.²⁶ Photos from that site visit are attached as
10 Attachment JED-5. As a result of that review, Staff witness Kurt
11 Demmer, concluded that ample room currently exists at the Salem Depot
12 site to accommodate expansion to support of the Tuscan Village
13 development. Also, as discussed in Mr. Demmer's testimony, construction
14 of Rockingham Substation is based largely upon load growth that was
15 over-estimated by Liberty as indicated by current load experienced at the
16 finished northern portion of the Tuscan Village development (which is
17 presently 1MW).²⁷ For the reasons stated above, it is apparent that Liberty
18 did not employ least cost planning in terms of reusing and expanding the
19 existing Salem Depot site as an alternative to purchasing real estate (at a

²⁴ See Salem Area Study attached to Mr. Kurt Demmer's testimony as Attachment KFD-5; and Rivera/Strabone/Tebbetts Testimony at 11 (Bates II-189).

²⁵ At the Technical Session held on October 16, 2019, Liberty disclosed that initially the development owner, Rock Acquisition LLC, did not want the Rockingham Substation located at the Tuscan Village site. How this impasse was eventually overcome by Liberty during the course of negotiating the sale was not explained.

²⁶ There also exists a vacant lot abutting the Salem Depot location that once served as the location for a restaurant which was recently destroyed by fire. The lot appears to be available for other development. It is not known whether Liberty explored purchasing this lot.

²⁷ Demmer Testimony at 26-27.

1 premium, *i.e.* above appraised and assessed value) and constructing a new
2 substation. As a result, Staff does not believe Liberty has supported the
3 need to build a new substation or the land purchase costs needed for the
4 project.

5 f) Contributions in Aid of Construction (CIAC): Despite the fact that the
6 Tuscan Village project is the primary beneficiary of the Rockingham
7 substation, it appears that the owners did not offer to contribute the land
8 for the new substation nor did they offer to sell the land at a discount.²⁸
9 Liberty provided no insight as to whether these issues were discussed as
10 part of the negotiation of the land purchase. In addition, it appears that
11 Tuscan Village is contributing little (\$752,982 to date²⁹) towards Liberty's
12 costs of expansion (estimated at \$20 million) to accommodate the overall
13 Tuscan development, indicating that most of those costs will be borne by
14 Liberty's ratepayers (see discussion of Project #8830-1865 below). In
15 response to subpart i. of Attachment JED-3c, Liberty states that CIAC
16 only applies to line extensions.

17 Change Order Form:

- 18 • This change order request was dated March 19, 2019 and approved on March 31,
19 2019, more than six months after the land purchase had been finalized. Again,
20 this runs contrary to the intent of the form as described in the Policy & Procedures
21 and is another example of management's apparent disengagement in terms of
22 large capital investments and the limited scrutiny of those investments.

²⁸ See footnote 24 above.

²⁹ See Attachment JED-3c, Staff data response 5-14.

- The Financial Assessment section of the form only provides the original budget amount of \$100,000 and the additional amount needed for the land purchase which was inputted as \$1.4 million. The Basis for Change section provides no detailed analysis or justification for the increase, or why it was authorized, other than the cost of the substation parcel of \$1.5 million was “transferred” to this project.
- In the Schedule Impacts sections, “N/A” was inserted for Baseline Schedule, New Forecast, and Variance.
- This report was not provided by Liberty in the Company’s response to Staff 9-3 as requested by Staff. Instead it was provided in a follow-up request, Staff TS 1-13 (again approximately two months after Staff initially requested the report).

Project Close Out Report:

- The Project Documentation Checklist in Section 3 of the form is essentially blank in terms of key documents except for a reference to the Business Case. Again, as noted above, Liberty apparently believes this section of the form to be superfluous and irrelevant in terms of complying with the purpose of the form.
- Under the Project Lessons Learned section in Section 5, “N/A” was inserted in the parts involving Problem Statement, Problem Description, References and Recommendations. It is under this section that Staff would expect to see some discussion and analysis as to why the Salem Depot site was determined by Liberty not to be a viable alternative site.
- In Section 8, Project Cost Summary, Liberty erroneously refers to the original budget amount as \$1.568 million which was actually the total cost for the

1 project. As a result, Liberty incorrectly represents that the cost variance for the
2 project was \$0. Similarly, under Reasons for Variance, the Company reports
3 “No variance between actual and budget.”

4 Work Orders:

- 5 • The work order spreadsheet provided by Liberty shows adjustments in the amount
6 of \$1.5 million for the purposes of reclassifying the land purchase and transferring
7 it from Project No. 8830-1865 (referenced below).
- 8 • The work orders show a total expense for Station Equipment of \$45,428.

9 Monthly Capital/Spend Reports, Meeting Agendas:

- 10 • The Rockingham Substation project, and the \$1.5 million land purchase, are not
11 specifically mentioned or tracked in these reports.

12
13 **3. Project #8830-1865 Rockingham Substation Transmission Lines**
14 **Attachment JED-3e**

15 **Budget: \$300,000 Actual: \$575,354 Variance: \$275,354**

16 **Revised: \$200,000 Actual: \$602,418 Variance: \$402,418**

17 Business Case/CPE:

- 18 • This project involved the design and site planning for the construction of two 115
19 kV transmission lines from Golden Rock substation to the new Rockingham
20 substation at Tuscan Village based on the recommendations of the Salem Area
21 Study which projects an increase in Liberty’s load of approximately 14 MW’s due
22 to the Tuscan development project. As discussed in Mr. Demmer’s testimony,
23 this project is both unneeded and unnecessary due to the fact that load growth in

1 the Salem area can be reliably served by modifying the existing 23 kV system,
2 and because the projected load is speculative in nature.³⁰ As Mr. Demmer points
3 out, the Salem Area Study did not consider improvements to the existing 23 kV
4 system as among the available alternatives.³¹

- 5 • The Business Case was dated February 16, 2018, but was not signed by
6 authorized signers until March 27-31, 2018.
- 7 • Both the Business Case and the attached CPE set the approved budget amount at
8 \$200,000 which conflicts with the figure Staff obtained and used in Table 1 above
9 (Liberty reported the original budget amount to be \$300,000).³² Because the
10 \$200,000 amount is referenced on all of the documentation submitted by Liberty,
11 Staff considers this amount to be the original budget figure for this project.
- 12 • No detailed analysis or decision criteria are provided in the sections addressing
13 Alternatives/Options, Financial Assessment, and Risk Assessment as required
14 under Liberty's Policy & Procedures, except for a brief reference to the Salem
15 Area Study and reiteration that the project involves engineering and design. The
16 Implementation/Action Plan section merely states that "construction will take
17 place under individual job number in future years." Likewise, the Cost Estimate
18 section of the CPE provides no discussion or detail on the nature of the estimate,
19 timing of spending per quarter, or risks associated with the estimate except for a
20 reference to "\$100,000 to perform detail engineering." Page 5 of the CPE was
21 omitted which includes relevant sections on alternatives evaluation, risk analysis,

³⁰ Demmer Testimony at 26-27.

³¹ *Id.*

³² Liberty's Form E-22 Report, filed with the Commission February 28, 2018 pursuant to Puc 308.07, does not list this project.

1 safety, decision making process, and Financial Summary, thus Staff was unable to
2 review those sections.

3 Change Order Form:

- 4 • This change order request was dated March 19, 2019 and approved on March 31,
5 2019, three months after the project completion date of December 31, 2018. Like
6 other change orders reviewed for other projects in the sample group, the late
7 submission this form runs contrary to its intent as described in the Policy &
8 Procedures since engagement of management for approval, and alerting
9 management to cost overruns, should take place during the course of the project
10 either before or at the time the changes occurred. This after-the-fact notification
11 essentially obviates the need for and the purpose of the form.
- 12 • The Financial Assessment section of the form only provides the original budget
13 amount of \$200,000, the amount of the requested increase of \$402,418, and the
14 new cost figure of \$602,418. There is no breakout within the cost categories
15 between original costs and updated costs as required on the form. The Basis for
16 Change section provides no detailed analysis or justification for the increase, or
17 why it was authorized, other than additional costs “due to completion of
18 additional tasks such as LiDAR, Staking of structures in ROW; Borings in ROW
19 for proposed structures; Preparation of Construction Cost Estimate and
20 Preparation and submittal of necessary forms to obtain ISO-NE Approval;” all of
21 which are costs that should have been anticipated, analyzed, and accounted for at
22 the time of the initial estimate. When asked in the data request (Staff TS 1-16c)

1 to explain these costs, Liberty merely referred Staff back to this section of the
2 form.

- 3 • In the Schedule Impacts sections, “N/A” was inserted for Baseline Schedule, New
4 Forecast, and Variance.
- 5 • This report was not provided by Liberty in the Company’s response to Staff 9-3 as
6 requested by Staff. Instead it was provided in a follow-up request, Staff TS 1-16
7 (two months after being requested).

8 Project Close Out Report:

- 9 • The Project Documentation Checklist in Section 3 of the form is essentially blank
10 in terms of key documents except for a reference to the Business Case.
11 According to Liberty’s data response in Attachment JED-8, Liberty apparently
12 believes this section of the form to be superfluous and unimportant since the
13 Business Cases provide all of the necessary information.
- 14 • Under the Project Lessons Learned section in Section 5, “N/A” was inserted in the
15 parts involving Problem Statement, Problem Description, References and
16 Recommendations, despite issues encountered by Liberty during implementation
17 of the project. As a result, no root cause analysis addressing those issues and the
18 reasons for the cost overrun were provided.
- 19 • As Staff had observed in other Project Close Out Reports, in Section 8, Project
20 Cost Summary, Liberty erroneously refers to the original budget amount as
21 \$602,418 which was actually the total cost for the project. As a result, Liberty
22 incorrectly represents that the cost variance for the project was \$0. Similarly,

1 under Reasons for Variance, the Company reports “No variance between actual
2 and budget.”

3 Work Orders:

- 4 • The work order spreadsheet provided by Liberty shows accounting adjustments
5 related to the land purchase, including the \$1.5 million purchase and
6 approximately \$200,000 other related costs, for the purposes of reversing and
7 reclassifying the land purchase to project number 8830-1864.
- 8 • The spreadsheets also show costs associated with overhead conductors, poles, and
9 devices totaling approximately \$440,000.
- 10 • Liberty Utilities Service Corp. burden charged to Liberty was \$10,690.
- 11 • After including burdens, labor, and all other costs, the total cost of the project
12 came to \$1.3 million.

13 Monthly Capital/Spend Reports, Meeting Agendas:

- 14 • Like the other projects discussed above, the Rockingham Substation Transmission
15 Lines project, and associated cost overruns, was not one of the “High Profile”
16 projects mentioned or tracked in these reports.

17
18 **Q. Did Staff discover any other capital investment projects for 2018 that appeared to**
19 **be problematic?**

20 **A.** Yes. In reviewing Liberty’s responses to our follow-up data requests from the Technical
21 Sessions held on October 16 and 17, 2019, and in cross-referencing those responses with
22 the Company’s monthly capital spending reports, Staff discovered that Liberty had
23 undertaken a significant improvement project at the Salem Depot substation. The project

1 was first identified in the capital spending report for April 30, 2018, under “Additional
2 Capital Spend Discussion Items” at page 18 (Attachment JED-3a, 9-3.8). The project
3 was described as follows:

Project Number	Project Description	Project Manager	Amount
8830-1866	Replace Salem Depot Feeder Gateways	Anthony Strabone	1,200,000

6 This project was not reported on Liberty’s E-22 Report to the Commission for 2018, nor
7 was it included in the list of 2018 capital projects listed in the Company’s response to
8 data request Staff 9-3 (Attachment JED-3a, 9-3.8). As a result, Staff was unable to serve
9 discovery on Liberty to examine the project since the period for the final round of
10 discovery had ended. Importantly, Staff finds troubling the fact that the project
11 represents a \$1.2 million investment in a substation that is slated by the Company to be
12 taken out of service upon completion of the Rockingham Substation project in 2021.³³
13 According to the capital spending report for July 23, 2019 at page 55, the budget forecast
14 for the project increased by \$200,000 for a total cost of \$1.4 million. Likewise, with the
15 September 27, 2018 capital spending report at page 156, the budget forecast increased
16 again by another \$200,000 for a total project cost of \$1.6 million. In both instances, no
17 explanation for the cost increases was given. Finally, in the January 29, 2019 report at
18 page 149, the final cost of the project appears to be \$1.356 million, coming in at
19 \$244,000 under the revised budget forecast of \$1.6 million, but \$156,000 over the
20 original budget amount of \$1.2 million.

21 **Q. Does Staff have a recommendation for how the Commission should treat this**
22 **expenditure?**

³³ Demmer Testimony at 25, Attachment KFD-5 at 10-11; and Rivera/Strabone/Tebbetts Testimony at 11 (Bates II-189).

A. Yes. The main concern for Staff is that the project was undertaken by Liberty even though the Salem Depot substation is to be taken out of service once the new proposed Rockingham Substation comes on line. A review of the project by Mr. Demmer indicated that there was little possibility that the getaways could be salvaged and redeployed at a different location at some future time if Salem Depot were taken out of service. In addition, Liberty chose to underground the feeders as opposed to installing them overhead thus adding substantial cost to a project that appears to be only temporary in nature. This occurrence serves as another example of Liberty's failure to employ least cost planning and observe good utility practice. Given that the project was complete as of December 31, 2018, and is thus included in Liberty's rate base for the 2018 rate year, Staff recommends that the Commission disallow the entire investment.

Q. What issues did Staff discover concerning the other projects in Staff's sample group?

A. Some of the remaining projects reviewed from the sample list are as follows:

<u>Project No.</u>	<u>Description</u>	<u>Budget</u>	<u>Actual</u>	<u>Variance</u>
8830-C42930	Install Service to Tuscan Village	\$400,000	\$674,260	-\$274,260
8830-C18620	Charlestown 32 Dline	\$250,000	\$354,751	-\$104,750
8830-1830	Misc. Capital Imprv. Londonderry	\$35,000	\$60,650	-\$25,649

All of these projects shared the same documentation deficiencies as the projects analyzed in detail above:

- Business Cases/CPE forms that exhibited differing initial budget estimates and missing or incomplete analysis involving alternatives, financial assessment, implementation plan, risks, and decision making process.

- Change Orders that were filed after project completion and nondescript in terms of analysis to support the cost increase.
- Project Closeout Reports that left key sections blank, provided no analysis of project difficulties (i.e. lessons learned) and misreported variances.
- Monthly Capital Spend reports that did not include discussion or reference to significant cost overruns of certain projects.

Q. In your discussion above related to Project #8830-1864 Rockingham Substation Transmission Lines, you make reference to Liberty's construction of a 115 kV system in Salem to replace the existing 23 kV system. Does this conversion raise any additional concerns for Staff?

A. Yes. Liberty's main justification for this upgrade to a 115 kV system in Salem is based on the findings of the Salem Area Study attached to Mr. Demmer's testimony. According to the study, in order to adequately and reliably serve the substantial projected load growth associated with the Tuscan Village project (between 14 and 17 MW), and to meet Liberty's new planning criteria, conversion to the 115 kV system is necessary. However, as Mr. Demmer points out in his testimony, the proposed upgrade is unneeded because the new load can be sufficiently met through modifications to the existing 23 kV system at a much lower cost.³⁴ Mr. Demmer also states that a 115 kV system constitutes excess capacity based on speculative load growth, and does not substantially increase the resiliency or reliability of the overall system with respect to the future needs of the Salem area. Consequently, Staff concludes that all of the 115 kV improvements made by

³⁴ Demmer Testimony at 26.

Liberty in Salem are unnecessary in that they deliver no additional benefits or cost savings to ratepayers over the life of those assets.

2017 Capital Projects

1. Project #8830-1867 Rockingham Substation Transmission Supply PE

Attachment JED-3h

Budget: \$50,000 Actual: \$175,504 Variance: \$125,504

Business Case/CPE:

- This project involved the design and preliminary engineering for the construction of two 115 kV transmission lines from Golden Rock substation to the new Rockingham substation at Tuscan Village based on the recommendations of the Salem Area Study. Note that this project appears to overlap with Project 8830-1865 Rockingham Substation Transmission Lines reviewed above.
- The Business Case was dated July 20, 2017, at least eight months after approval of 2017 capital budget.
- Both the Business Case and the attached CPE set the approved budget amount at \$50,000 for 2017. The total cost of the project is estimated to be \$5.5 million upon completion in 2021.
- No detailed analysis or decision criteria are provided in the sections addressing Alternatives/Options, Financial Assessment, and Risk Assessment as required under Liberty's Policy & Procedures, except for a brief reference to the Salem Area Study and reiteration that the project involves engineering and design. The Implementation/Action Plan section merely states that "construction will take

1 place under individual job number between 2017 and 2021.” Likewise, the Cost
2 Estimate section of the CPE provides no discussion or detail on the nature of the
3 estimate, timing of spending per quarter, or risks associated with the overall cost
4 estimate of \$5.5 million.

5 Change Order Form:

- 6 • The requested Change Order form was not provided by Liberty despite the fact
7 that spending on this project increased by \$125,504. In the Company’s attached
8 data response, they only mention the missing Project Close Out Report, not the
9 requested Change Order. As a result, Staff is without a documented explanation
10 from Liberty for the cost increase.
- 11 • In addition, this form was not provided by Liberty in the Company’s response to
12 Staff 9-3, which was the reason for Staff’s follow-up request.

13 Project Close Out Report:

- 14 • As noted above, and in Liberty’s response to the attached data request, apparently
15 a Project Close Out does not exist for this project. Staff assumes that the
16 proposed preliminary engineering and design for the project were completed in
17 2017, but Staff has no documented confirmation from Liberty to verify that
18 assumption or the final expenditure amount. According to Liberty’s data response
19 in Attachment JED-3h, Liberty states that nothing was charged to the project and
20 the capital spend was \$0 for the year, therefore the report was not required.
21 However, the budget amount and variance are shown in Table 2 above, and
22 expenditures were recorded in the attached work order spread sheet for 2017 (see
23 below). Also, if the project is of an ongoing nature as Liberty seems to indicate,

then it should appear on the project list for 2018 submitted by Liberty which it does not.

Work Orders:

- The work order spreadsheet provided by Liberty shows numerous accounting adjustments and reversals performed in 2018 and 2019 presumably related to the land purchase, including the \$1.5 million purchase and approximately \$400,000 in other related costs, for the purposes of reversing and reclassifying the land purchase to project number 8830-1864.
- The work orders show some charges to this project in 2017, approximately \$185,000 that had not been reversed (identified as “Preliminary Survey and investigation”), but because of the numerous accounting adjustments and transaction reversals between this project and project number 8830-1864, Staff was unable to precisely trace and verify the actual costs assigned to the project leading up to the variance of -\$125,504.

Monthly Capital/Spend Reports, Meeting Agendas:

- Like the other projects discussed above, this project and associated cost overruns were not tracked in these reports.

2. Project #8830-C18620 GSE – Charlestown 32 Dline

Attachment JED-3i

Budget: \$316,992 Actual: \$500,281 Variance: -\$183,289

Note: This project carried over into 2018 for an additional \$354,751.

Business Case/CPE:

- This project involved distribution line work needed to retire the 8L1 feeder at the Charlestown substation located in Charlestown to be replaced by a new feeder from the Michael Avenue Substation consisting of 1,300 ft. of new 1000 MCM, 3,500 ft. of 477 Spca, a new 40L2 breaker, and three 167 kVA regulators.
- Both the Business Case and the attached CPE set the approved budget amount at \$316,992 for 2017.
- No detailed analysis or decision criteria are provided in the sections addressing Alternatives/Options, Financial Assessment, and Risk Assessment as required under Liberty's Policy & Procedures. The Implementation/Action Plan section merely states that "construction will take place under individual job number throughout the year." Likewise, the Cost Estimate section of the CPE provides no discussion or detail on the nature of the estimate, timing of spending per quarter, or risks associated with the cost estimate.

Over Expenditure Form:

- The form reflects that spending for the project increased to \$499,069 in August but the "cause" section merely states that bids from contractors were greater than expected at the time of estimate. No information regarding the number or bids, the amounts, or timing of the bidding process were provided.
- In addition, this form was not provided by Liberty in the Company's response to Staff 9-3, which was the reason for Staff's follow-up request.

Project Close Out Report:

- The report closed out this project despite the fact that is of an ongoing nature as Liberty seems to indicate.
- As noted above, this project apparently continued into 2018 at an additional cost of \$354,751 despite the fact that it was closed out in 2017. Liberty explains in its response to Staff TS 2-6 e. that charges for materials occurred in 2018.

Work Orders:

- The work order spreadsheet for 2017 was not provided by Liberty. Instead, the spreadsheet for 2018 was provided confirming the additional amount of \$354,751. Because the 2017 spreadsheet was not provided Staff was unable to precisely trace and verify the actual costs assigned to the project leading up to the variance of -\$183,289.

Monthly Capital/Spend Reports, Meeting Agendas:

- Like the other projects discussed above, this project and associated cost overruns were not tracked or addressed in these reports.

Q. What issues did Staff discover concerning the other projects in Staff's 2017 sample group?

A. Some of the remaining projects reviewed from the sample list are as follows:

<u>Project No.</u>	<u>Description</u>	<u>Budget</u>	<u>Actual</u>	<u>Variance</u>
8830-CD0291	Sky View URD	\$21,286	\$70,683	-\$49,394
8830-C36424	Mt. Support New 16L3 Feeder	\$275,000	\$467,936	-\$192,936
8830-C42921	Install Splices 6L2 & 6L4	\$111,562	\$203,305	-\$91,743

As seen in the 2018 sample above, all of the 2017 projects shared the same or similar documentation deficiencies such as in Business Cases/CPE's containing incomplete or nonspecific analysis, Change Orders that were nondescript and filed long after project completion, Project Close Out Reports containing little or no analysis, and Monthly Capital Spend reports that did not include discussion or reference to significant cost overruns for certain projects.

Q. In the above discussion of projects reviewed for both 2018 and 2017, you refer to some instances of missing documentation not provided by Liberty. Please explain.

A. At the Technical Sessions held on October 17 and 21, 2019, Liberty represented that it would provide missing project documentation by way of follow-up that was not originally filed with the Company's responses to Staff data request 9-3. Data request 9-3 (Attachment JED-3) was quite specific in terms of the types of documentation Staff was interested in reviewing. Although some missing documents were eventually provided (e.g. Change Orders, Business Cases), as the period for discovery expired key documentation for the projects listed below were not provided by Liberty despite Staff's subsequent requests. As a result, Staff will recommend disallowance for the over-expenditures associated with those projects since they were not supported by Liberty.

<u>Project No.</u>	<u>Description</u>	<u>Documentation</u>
8830-C36424	Mt. Support – 16L3	Verification of 1.8% load growth and work orders spreadsheet
8830-1830	Misc. Capital Improvements- Londonderry	Change order forms
8830-CD0291	Sky View URD	CIAC received and work orders spreadsheet

A complete list of Staff's recommended disallowances for the projects reviewed here and in Mr. Demmer's testimony can found in Section VII below.

1 **Q. Please summarize Staff's findings based on the review of sample projects for 2018**
2 **and 2017 and the documentation and reports obtained from Liberty.**

3 **A.** My response is divided in two parts. First, Staff's review was largely dependent upon the
4 quality of documentation provided by Liberty in their data responses. Although Liberty
5 appears to have been consistent in filing and processing all of the standard documentation
6 and reports required under Liberty Utilities' internal processes and procedures, most of
7 the documentation examined by Staff lacked the level of detail and analysis required by
8 those same policies and procedures, in most instances providing only a cursory
9 assessment of the capital projects mentioned, containing information that was repetitive
10 and rudimentary in nature. In terms of data responses both written and obtained at the
11 Technical Sessions, Liberty was given ample opportunity to provide root causes and
12 detailed analysis for the cost overruns reviewed, but the answers received were vague and
13 lacking in specifics. Staff's overall findings for each of the documents reviewed are as
14 follows:

15 a) Business Cases: In Staff's view, this is a key piece of documentation since, under
16 Liberty Utilities' policy and procedures for capital expenditures, the business case
17 provides the essential details, and primary justifications for, a given capital
18 project.³⁵ Specifically, for all of the business cases reviewed, most of the sections
19 requiring detailed information and descriptions, such as "Recommendation,"
20 "Background," "Alternatives," "Financial Assessment," "Risk Assessment," and
21 "Implementation,"³⁶ provided only a perfunctory discussion, or in many cases, the
22 word "None" or "N/A" were inserted, leading Staff to conclude that the

³⁵ Attachment JED-2 at 11-12.

³⁶ *Id.* Appendix B at 20-21.

1 requirements under Liberty's policy and procedures are largely ignored. None of
2 the business cases provided any basis for the proposed budget estimates nor
3 economic justification for the projects. Moreover, for all of the business cases
4 reviewed, the initial budget amounts were consistently under-estimated, in some
5 cases by several times the amount of the actual expenditures as reflected in
6 Attachment JED-3 and Tables 1 and 2 above.

7 Timing was another concern with the business cases. Most of the business cases
8 reviewed for 2018 and 2017 were dated the following year, usually two to three
9 months after the capital budgets had been approved by APUC. Moreover, as
10 noted above, Liberty disclosed in discovery that the business cases are never filed
11 as part of the annual budget process, thus leading Staff to conclude that upper
12 management could not have properly assessed the necessity, scope, and costs of a
13 given project at the time of budget preparation and approval.

- 14 b) Change Orders: These reports are another example poor timing in that they are
15 submitted at least three months after the typical project completion dates of
16 December 31 of the prior year. This practice runs contrary to the apparent intent
17 of the form as described in the Policy & Procedures since engagement of
18 management for approval, and alerting management to cost overruns, presumably
19 should be sought during the course of the project at the time the changes occurred.
20 This after-the-fact notification essentially negates the need for and purpose of the
21 form. Further, there is typically no breakout within the cost categories between
22 original costs and updated costs as required. The Basis for Change section

1 provides no detailed analysis or justification for an increase or why it was
2 authorized.

3 c) Project Close Out Reports: Under Liberty's policy and procedures this report is
4 considered to be "a vital aspect of any project;"³⁷ however, as noted above, the
5 Project Documentation Checklist in Section 3 of the form is typically left blank in
6 terms of key documents except for a reference to the Business Case. According
7 to Liberty's data response in Attachment JED-8, Liberty apparently believes this
8 section of the form to be superfluous and unimportant since Liberty considers that
9 the Business Cases provide all of the necessary information. Also, under the
10 Project Lessons Learned section in Section 5, "N/A" was usually inserted in the
11 parts involving Problem Statement, Problem Description, References and
12 Recommendations, regardless of whether or not Liberty encountered any
13 problems with a project. As a result, no root cause analysis addressing project
14 difficulties and the reasons for a cost overrun were provided. In addition, under
15 Section 8, Project Cost Summary, Liberty will typically refer to the final cost of
16 the project as the original budget amount and, as a result, incorrectly representing
17 that "No variance between actual and budget."

18 d) Monthly Capital/Spend Reports, Meeting Agendas: As noted above, these
19 monthly reports attempt to track capital expenditures and variances on a monthly
20 basis, however, the reports provide only a high level review of gross capital
21 budget amounts in a single chart comparing capital dollars spent to budget, and
22 includes no analysis. Only a few select, high profile projects for both the electric
23 and gas divisions are tracked with their own budget schedules and progress

1 reports. None of the projects reviewed by Staff, except for the Salem Depot
2 Getaway project, were included in any of these reports. Due to the high level
3 nature of these reports, they provide no information as to the degree of oversight,
4 attempts at cost containment (if any), or the thought or decision-making process
5 on the part of upper level management concerning over-budget projects. Because
6 the reports focus on overall levels of spending (both electric and gas), APUC
7 appears to be more concerned with budget overruns on the macro level as
8 opposed to individual projects. Also, based on the dates of some of the reports,
9 there was a time lag of two months between the creation of the monthly capital
10 spending updates and review by APUC, indicating a lack of timely review by
11 management.

12 e) Work Orders: Copies of individual work orders were not provided for the
13 projects reviewed. Instead, Liberty enters all of the work order information into
14 an Excel spreadsheet. Typically, in addition the work orders and amounts, the
15 spreadsheets also contained numerous accounting adjustments and transaction
16 reversals, making it difficult for Staff to precisely trace and verify the actual costs
17 assigned to a project leading up to the variance. Note: In Staff data request 9-3,
18 copies of work orders were among the documents requested but not submitted by
19 Liberty. If Liberty had provided this information, it would have given Staff the
20 opportunity to work through the line items with the Company's witnesses during
21 the Technical Sessions held in October.

22 Second, as detailed above, Staff is troubled by two projects that occurred in 2018 but
23 were not fully disclosed by Liberty in terms of its reporting to the Commission (E-22

³⁷ *Id.* at 13.

1 Report) or in providing complete responses to Staff's inquiries. Those projects are the
2 land purchase from Tuscan Village for \$1.5 million, embedded in project #8830-1864
3 Rockingham Substation, and the installation of getaways at the Salem Depot substation in
4 project #8830-1866 in the amount of \$1.356 million. Both of these projects represent
5 substantial investments for which Liberty provided no financial analysis, alternatives
6 analysis, or efficiency gains for the benefit of the ratepayers. In short, Liberty did not
7 provide sufficient justification that makes these projects appropriate additions to rate
8 base. Staff believes that when a public utility undertakes investments of this magnitude
9 the decision making process should involve consideration of different future scenarios
10 and options. A prudent manager would have used reasonable assumptions to assess those
11 scenarios and options. Since Liberty did not do this, Staff recommends disallowance of
12 the entire costs for both projects.

13 **Q. Did Staff have reasonable expectations in terms of informational content involving**
14 **the documents requested from Liberty?**

15 **A.** Staff expected that it would obtain information from Liberty that would provide details
16 and support for the presumption that some or all of the cost overruns were reasonably
17 incurred. In particular, Staff was looking for the following:

- 18 a) Specific causes of the cost increases for certain projects from inception to
19 completion.
- 20 b) Extent of project management involvement and methodologies utilized to
21 assure cost control.

1 c) Documentation evidencing the existence of cost-effectiveness and
2 efficiency in project management, engineering, procurement, and
3 construction.

4 d) Amount or level of interaction with contractors in containing costs.

5 e) Techniques used to review and measure the performance of project
6 management and cost control.

7 Staff believes that these measures represent reasonable and typical management
8 practices. Moreover, for a public utility, management's judgment should be substantiated
9 in a way that permits thorough review. Unfortunately, Staff was unable to find
10 sufficient evidence that Liberty's budgeting and planning process incorporated any of
11 these types, or similar types, of project management and cost control. Therefore, based
12 on the substantial record Staff reviewed, Staff cannot conclude that such metrics were
13 considered by Liberty and we are unable to conclude that the costs were reasonably
14 incurred.

15
16 **VI. STEP ADJUSTMENTS AND PROPOSED MULTI-YEAR RATE PLAN**

17 **Q. Did Liberty propose any step adjustment increases as part of its overall rate**
18 **request?**

19 **A.** Yes. Similar to Liberty's previous request in Docket DE 16-383, the Company proposed
20 an initial step adjustment increase for 2019 in the amount of \$2.3 million. This increase
21 incorporates costs associated with Liberty's entire 2019 capital spending budget totaling
22 \$14.98 million and is to take effect concurrently with the Commission's approval of the

1 permanent rate increase.³⁸ Liberty later modified this request on July 1, 2019, in response
2 to Staff Data Request 3-28b (Attachment JED-6), in which Liberty disclosed that three
3 capital projects had been omitted from the original filing: Project Nos. 8830-1958 Install
4 Service to Tuscan Village South Line \$900,000; 8830-1937 GSE-Dist-New Bus-Resid
5 Blanket \$1.0 million; and 8830-1938 GSE-Dist-New Bus-Comm Blanket \$1.4 million.
6 These project additions resulted in an increase to the 2019 capital spending budget of \$5
7 million for a new total budget amount of \$20 million, with a revised revenue requirement
8 for the first step adjustment of \$2.9 million. Liberty filed a corrected version of
9 Attachment PEG/DBS-2 with its response to data request Staff 3-28; however, this
10 correction was not included as part of the Company's Technical Statement filed with the
11 Commission on November 27, 2019.

12 **Q. In Docket DE 16-383 the parties agreed through Settlement that the first step**
13 **increase in that proceeding should be approved by the Commission. Does Staff**
14 **support approval of Liberty's first step increase (as revised) in the present docket?**

15 **A.** No. As the question indicates, the first step adjustment in Liberty's last rate case was
16 ultimately subsumed, along with several other negotiated issues, into a broad-based
17 Settlement Agreement resolving the issues between the parties. Unfortunately, due to the
18 schedule in that case, and the timing of the Settlement discussions, there was no
19 opportunity for Staff to conduct a thorough review of Liberty's 2016 capital budget, nor
20 did the Audit Division have time to perform an audit. Moreover, by the time the final
21 2016 capital spending numbers were available from Liberty (with the year-end closure of
22 Liberty's books), i.e. actual expenditures as compared with the budgeted amounts, the

³⁸ Greene/Simek Testimony on Permanent Rates at 17 (Bates II-093) and Attachment PEG/DBS-2 at 1 and 2 (Bates II-134 and II-135).

1 time for discovery and testimony involving individual projects had passed. In terms of
2 the present rate case, a near identical situation is emerging whereby Liberty's capital
3 spending budget for 2019 has been proposed by Liberty as the first step increase, and like
4 the prior rate case, the final expenditure amounts for those projects are not yet available
5 for Staff or Audit to review (not to mention projects that may have been postponed or
6 cancelled in the interim³⁹). This is particularly important since some of the more
7 significant capital investments are related to the Tuscan Village project in Salem which
8 we discuss below. Also, the time for serving discovery and submitting testimony related
9 to the 2019 capital projects has now passed. Consequently, Staff is recommending that
10 the Commission not approve the 2019 step increase concurrently with the permanent
11 rates as requested by Liberty. Instead, Staff recommends that the Commission order the
12 scheduling of a separate proceeding to take up this matter at some point in 2020 so as to
13 allow sufficient time for a complete review of the 2019 capital expenditures by both Staff
14 and Audit.

15 **Q. Is Staff deviating from precedent by not recommending approval of the first step**
16 **increase as requested by Liberty?**

17 **A.** Staff is not aware of any precedent that requires the automatic acceptance and approval of
18 any step increase without an adequate and reasonable process for review by Staff, Audit,
19 and the Commission. As we have thoroughly documented above, Liberty's history of
20 capital planning and budgeting is not stellar, thus justifying the need for a comprehensive
21 review.

³⁹ Liberty has included Project #8830-1933 GSE Backup Battery Program as part of the 2019 step increase in the amount of \$1 million. However, as part of Staff discovery in this case, Liberty disclosed that it has not yet purchased any of the batteries due to a delay in rolling out the program which was approved by the Commission in Docket No. DE 17-189.

1 **Q. Has Liberty proposed other step adjustments in addition to the 2019 increase?**

2 **A.** Yes, but the Company's proposal is very different from the request approved by the
3 Commission in DE 16-383. According to the submitted joint testimony of Mr. Rivera,
4 Mr. Strabone, and Ms. Tebbetts, additional "system capacity and reinforcement projects"
5 will be undertaken by Liberty from 2019 through 2023.⁴⁰ For capital projects placed in
6 service after 2019, Liberty proposes a series of annual step increases based on the change
7 in its net plant between January 1 and July 1 of each year, subject to a prudence review.
8 The actual change will be based on an annual reconciliation of forecasted capital
9 increases with actual increases whereby 80 percent of the net change in plant (non-RFP)
10 will be allowed in rates.⁴¹

11 **Q. How is this step increase proposal different from the one requested by Liberty in**
12 **Docket DE 16-383?**

13 **A.** In Docket DE 16-383, two additional step increases beyond the initial increase in 2016
14 were agreed to by all parties as part of the Settlement Agreement in that case. However,
15 unlike the current proposal, the additional step increases in the prior rate case involved
16 five specific capital projects comprising only a portion of Liberty's annual capital
17 spending: Pelham Substation Transformer, Pelham 14L4 Feeder, Pelham 14L5 Feeder,
18 Charlestown DSub, and Charlestown 32 Dline. Liberty subsequently removed the last
19 three projects from consideration as part of the step increase leaving only the Pelham
20 Transformer and the 14L4 Feeder for inclusion. At that time, a separate process for
21 review and audit of those projects was agreed to and ultimately performed in 2019.
22 Under the current proposal as filed, Liberty provided no specifics on future investments

⁴⁰ Rivera, Strabone, and Tebbetts Testimony at 9 – 11 (Bates II-187 – II-189), and Attachment JED-9.

⁴¹ *Id.* at 12 – 13 (Bates II-190 – II-191).

1 that were to be included in subsequent annual step increases. All that is known about
2 these projects is that they are varied and necessary for future growth. Consequently, Staff
3 requested more specific information through Staff Data Request 9-1 (Attachment JED-7)
4 and in response Liberty provided a list of planned capital projects and forecasted
5 expenditures based on its 5-year capital plan for years 2020 through 2023. According to
6 that response, Liberty projects total investments of \$23.7 million in 2020, \$47.7 million
7 in 2021, \$25.2 in 2022, \$24 million in 2023, and \$21 million in 2024. Whereas the
8 number of capital projects and associated costs comprising the step increase in DE 16-
9 383 were limited, specific, and reasonably certain, the projects and amounts in the
10 aforementioned list are merely budget estimates for numerous future investments that
11 provide no known or knowable benefits to ratepayers and are subject to modification in
12 future years. Moreover, Liberty's proposal essentially requests recovery on an annual
13 basis, of the revenue requirement of eighty percent of Liberty's entire capital spending
14 plan as opposed to reviewing those expenditures in a subsequent rate case. Further,
15 Liberty seeks recovery of future property tax increases as part of its multi-year plan.⁴²

16 **Q. What is Staff's recommendation for future step increases involving Liberty's annual**
17 **net plant reconciliation proposal and Mr. Mullen's proposed multi-year plan?**

18 **A.** Staff does not support the proposals and instead recommends that the Commission retain
19 a more traditional rate-making scheme where plant and property taxes are reviewed
20 comprehensively in periodic rate cases, resulting in just and reasonable rates. Staff in
21 particular recommends base rate case review of Liberty's plant investments, based on its
22 position that Liberty's capital investments have been overly aggressive, and in some
23 instances unnecessary, especially given the Company's relatively flat load growth,

⁴² Mullen Testimony at 3-7 (Bates II-203 – II-207).

1 satisfactory reliability, and the adoption of more stringent performance standards as
2 described in Mr. Demmer's testimony.⁴³ For those reasons, Staff recommends that the
3 Commission deny the Company's proposals involving future step increases and a multi-
4 year plan.

5 **Q. Does Staff have any additional concerns related to Liberty's future step increases**
6 **and capital investments?**

7 **A.** Yes. A significant component of Liberty's current and future capital additions involves
8 supplying projected load growth in the Salem service area driven mostly by the Tuscan
9 Village project. The Tuscan Village development is a 170 acre project located at the
10 former Rockingham Park Race Track that involves a combination of both commercial
11 and residential uses divided between two sections: Tuscan North and Tuscan South.⁴⁴
12 Tuscan North is near completion and approximately 25 percent of the total electric
13 service work required for that part of the development has been installed by Liberty. As
14 stated in the Salem Area Study, load growth from the development is projected to be the
15 14MW to 17MW range. A critical assessment of The Salem Area Study and associated
16 load growth forecasts can be found in Mr. Demmer's testimony.⁴⁵ To date, Liberty has
17 invested a total of \$6.8 million in Tuscan Village related projects and expects to add
18 \$29.95 million in investments to rate base upon completion in 2023.⁴⁶ Liberty has also
19 forecasted \$2.9 million in annual revenue growth resulting from the project.

⁴³ Demmer Testimony at 13-19 and 22-27.

⁴⁴ See Attachment JED-11.

⁴⁵ Demmer Testimony at 19-27.

⁴⁶ See Attachment JED-10.

1 The development as a whole constitutes a significant and complex undertaking. Based on
2 the detailed analysis we provide above, and as referenced in Mr. Demmer's testimony,⁴⁷
3 Staff is not confident in Liberty's ability to plan, budget, and efficiently manage such
4 large capital projects. As the record in this case shows, the Company has already carried
5 out uneconomic projects such the Rockingham land purchase, the expansion of Golden
6 Rock substation, and the costly installation of getaways at Salem Depot, all pursuant to
7 over-optimistic load growth and excessive performance standards. As Mr. Demmer
8 reports in his testimony, with Tuscan North now mostly complete current load growth for
9 the development has only increased by 1MW.⁴⁸ Further, Liberty's assertion at the
10 Technical Sessions of October that Liberty would have made the Salem area investments
11 regardless of whether or not the Tuscan Village development was built, due primarily to
12 asset deterioration and maintenance issues associated with the Salem Depot and Barron
13 Avenue substations. As mentioned above, Staff visited the Salem Depot site and did not
14 observe any serious deterioration or degradation issues with the equipment located within
15 the substation.

17 **VII. CONCLUSIONS AND RECOMMENDATIONS**

18 **Q. Please summarize Staff's findings.**

19 **A.** In summary, based on the extensive review outlined above, Staff is unable to find that
20 Liberty provided sufficient economic justification and analysis to support the capital
21 projects reviewed or the sizeable cost overruns associated with some of those projects, for
22 the following reasons:

⁴⁷ Demmer Testimony at 21.

⁴⁸ Demmer Testimony at 25-26.

- 1 • Staff found no evidence that Liberty analyzed alternatives, considered least cost
2 planning, performed sufficient financial analysis, or complied with its own policy
3 and procedures involving the Business Case/CPE's, Change Orders, and Project
4 Closeout Reports reviewed.
- 5 • Staff found initial budgeted amounts, both in spreadsheets and the Business
6 Case/CPE's, to be consistently underestimated, unreliable, and lacking
7 documentary support thus calling into question the quality of the figures
8 contained in Liberty's reports and other related documentation.
- 9 • Liberty bases the need for many of its capital investments on more stringent
10 performance standards than other New Hampshire utilities, thus encouraging the
11 building of projects beyond what is needed or necessary to maintain reliability.
- 12 • Staff found little evidence that Liberty's project planning and management
13 constitutes an efficient or organized process or that proper processes and controls
14 are in place for reasonable and prudent decision making.
- 15 • Liberty provided little evidence that its project management employed any form
16 of cost control methodology or techniques, or that it reasonably responded to
17 changing circumstances or new challenges as projects progressed.
- 18 • Staff found that Liberty does not always observe Good Utility Practice and did
19 not conduct its capital budgeting and planning in a manner that was economic,
20 efficient, or comparable to other similarly situated utilities.
- 21 • Liberty's approach to capital budgeting and planning directly impacts rates given
22 that this rate case was filed primarily because of \$36 million in capital
23 expenditures invested by the Company since the last rate case.

- The delays by Liberty in providing key documents, or not providing them at all, hampered Staff's review in this case.

Q. What recommendations does Staff propose as a result of its analysis of Liberty's revenue requirement?

A. First, Staff incorporates the recommendations of witnesses Mullinax and Demmer. Ms. Mullinax recommends a total reduction of \$6.5 million from the proposed revenue requirement based on her extensive review of Liberty's proposed revenue requirement and Staff's recommended adjustments. Mr. Demmer recommends a reduction in the requested \$2.3 million for the Veg Management program proposed by Liberty of approximately \$666,301 for a revised program amount of \$1.7 million. Mr. Demmer also supports with the plant disallowances referenced below involving Rockingham Substation and Tuscan Village based on the Company's failure to demonstrate that the benefits of its more stringent system planning criteria outweigh the increased costs to ratepayers. Staff also recommends that the Commission reject the proposed step increase for 2019, and Liberty's proposal for a net plant calculation and multi-year plan for all future step increases, given Staff's overall determination that Liberty has exhibited defective capital planning and budgeting based on the evidence provided above. Instead, Staff recommends that the Commission open a separate docket for the purposes of conducting an investigation of Liberty's capital budgeting and planning processes, including (if the Commission approves a step increase for 2019 investments) a prudence review of individual capital projects that comprise Liberty's step increase request for 2019, and consider hiring a consultant to perform a business processes audit in support of that investigation.

Second, Staff incorporates the recommendations of witness Woolridge that Liberty's appropriate cost of capital should be 7.11% and that its ROE should be 8.25%.

Lastly, based on our review of capital projects for 2017 and 2018, Staff recommends the following disallowances from Liberty's proposed rate base:

<u>Project No.</u>	<u>Description</u>	<u>Year</u>	<u>Amount</u>
8830-1832	Replace 6L2 No. Main Hanover	2018	\$1,070,593
8830-C42930	Install Service to Tuscan Village	2018	\$ 674,260
8830-C18620	Charlestown 32 Dline	2018	\$ 104,750
8830-1830	Misc. Capital Imprv. Londonderry	2018	\$ 25,649
8830-1865	Rockingham Sub Transmission	2018	\$ 575,354**
8830-1866	Salem Depot Feeder Getaways	2018	\$1,356,000
8830-1845	Golden Rock Dist. Feeders	2018	\$ 16,978
8830-1744	Golden Rock Substation	2018	\$ 309,324
8830-CD0291	Sky View URD	2017	\$ 49,394
8830-C18620	Charlestown 32 Dline	2017	\$ 183,289
8830-C36424	Mt. Support New 16L3 Feeder	2017	\$ 467,937
8830-C36425	Mt. Support New 16L5 Feeder	2017	\$ 555,143
8830-1867	Rockingham Sub Transmission	2017	\$ 175,504
8830-C42921	Install Splices 6L2 & 6L4	2017	<u>\$ 203,305</u>
	Total Project Disallowance		\$5,767,480
	Veg Management Disallowance (Demmer)	2018	<u>\$666,301</u>
	Total Disallowances		\$7,100,082

****Note:** The total cost for the land purchase associated with Project #8830-1864 Rockingham Substation in the amount \$1,568,870 is not included above. This amount is not currently in rate base but instead is posted on Liberty's books as "Plant held for future use." As discussed in Section V. above, Staff recommends that the Commission disallow the expenditure.

1	Total Rate Base	\$103,024,219 ⁴⁹
2	Less:	
3	Adjustment for Capital Expenditures	(\$5,767,480)
4	Adjustment for Veg Management Program	<u>(\$ 266,301)⁵⁰</u>
5	Total Rate Base Disallowance	\$ 6,033,781
6	Impact on Rate Base:	
7	Rate Base	\$103,024,219
8	Less Disallowance	<u>(\$ 6,033,781)</u>
9	Adjusted Rate Base	\$96,990,438

10

11 **Q. Does Staff have any additional recommendations for the Commission to consider?**

12 **A.** Yes. Related to the tariffs filed by Liberty, Staff proposes to meet with Liberty at some
13 point during this case to discuss non-substantive changes to the tariffs, which could be
14 incorporated into a compliance filing following the Commission's final order.

15 **Q. Does that conclude your testimony?**

16 **A.** Yes, it does.

17

18

⁴⁹ Mullinax Testimony at 11.

⁵⁰ Demmer Testimony at 27-29.

III. Planning and Budgeting

A. Background

1. APUC's Overarching Strategy

APUC's business model focuses on growth, has depended on high rates of growth since its 1997 inception, and appears destined to continue to depend on acquisitions of small utility distribution and generation operations across the United States and Canada.

The parent's web-site describes this strategy clearly, focusing very strongly on APUC's process of "becoming." The following statement, with emphasis added, introduces searchers to the holding company's self-description:

*Algonquin Power & Utilities Corp. is a **growing** renewable energy and regulated utility company with **assets across North America**. The Corporation **actively invests** in hydroelectric, wind, thermal and solar power facilities, and sustainable utility distribution businesses (water, electricity and natural gas).*

*Algonquin Power & Utilities Corp. is focused on delivering reliable earnings, cash flow and dividend growth through **strategic acquisitions** and operational excellence. The Corporation is a member of the S&P/TSX Composite Index and trades on the Toronto Stock Exchange under the symbol AQN.*

*The Corporation is recognized for **developing and acquiring** long lived sustainable assets that are built for the long term, and has grown to over 66 power generation facilities and utilities in Canada and the United States. The company has approximately 1,450 skilled and motivated employees contributing to the success and growth of the business.*

Our Business	OUR BUSINESS
About Us	Algonquin Power & Utilities Corp. is a growing renewable energy and regulated utility company with assets across North America. The Corporation acquires and operates green and clean energy assets including hydroelectric, wind, thermal, and solar power facilities, as well as sustainable utility distribution businesses (water, electricity and natural gas) through its two operating subsidiaries: Algonquin Power Company and Liberty Utilities.
Acquisition Criteria	

The strength of focus on acquisitions shows in the three "buttons" on the web page describing the business: "Our Business," "About Us," and, notably, "Acquisition Criteria." The last offers, to say the least, a rare point of emphasis in a utility holding company's succinct message to stakeholders describing its business.

The two New Hampshire utilities that APUC owns are fairly small ones. That status particularly means that operation in the APUC family presents both opportunity and risk. Opportunity comes from the leverage (size) that other family members contribute to producing. That leverage should enable investment in organizations, systems, tools, and people that two, small, stand-alone companies simply could not justify on their own.

Risk arises from two principal sources. The first arises from the great financial needs that growth through acquisition requires. While striving to retain the financial ability to make acquisitions,

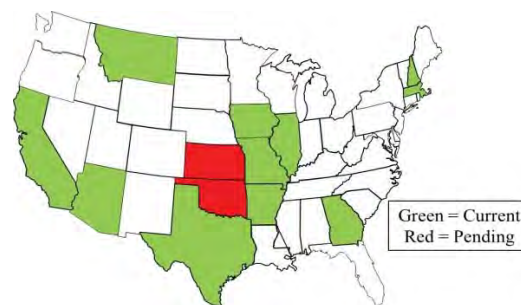
which requires flexibility to act when opportunities arise, parent company leadership must ensure that sufficient focus remains on meeting utility capital and operating needs. Second, from the perspective of New Hampshire interests (or those of any other state, for that matter), retaining top-level focus on two utility distribution businesses operating among many small, far-flung, trans-national businesses takes structure and focus. That the parent's operations split largely between generation and distribution sectors (moreover with relatively few individual operations combining them materially) complicates things. That the parent's roots lie in developing generation also complicates matters. Moreover, and perhaps most significantly, its culture, physical location, and corporate-level resources are not, at least on the surface, well grounded in U.S. energy distribution utility experience. For example, all of its distribution utilities operate within the United States. However, all of its corporate support structure and personnel operate from Ontario.

Factors like these that lie on the surface of the APUC strategy and structure make it appropriate to examine the degree to which APUC can move and has moved from an "acquisition" to and "operation" mentality, or, more precisely, given the continued focus on acquisition, how well it can support the maturation of an operations emphasis within the context of the acquisition and growth philosophy that has defined it since its origins.

Certainly, there is acknowledgement of and commitment to operational excellence in public statements and in what management told us during our field work. Just as certainly, there have been problems in integrating New Hampshire operations into the Liberty Utilities family. As our examinations in the areas addressed by the other chapters of this report demonstrate, significant improvement opportunities remain. It also appears that they may have to be captured at the same time that APUC digests yet another acquisition. Its pending acquisition of Empire District Electric would bring another 217,000 customers (in four states) to an existing base of 560,000 (a nearly 40 percent increase) across in 11 states. In microcosm, this pending acquisition captures the tension between APUC's priority on "becoming" (through growth) and its need for a focus on "being" (establishing a strong and sustainable operations model and focus).

2. U.S. Distribution Utility Territorial Breadth

The map shows the vast dispersion of Liberty Utilities operations. All distribution utilities operate in the U.S. The generation business (operated by APUC subsidiary Algonquin Power Company) owns all or portions of 33 generating facilities (1,100 megawatts). The 24 Canadian generators extend from the Maritimes to Alberta in Canada and the nine in the U.S. extend from three in New England to one in California. While predominantly Canadian, they too exhibit an extremely large territorial dispersion.



As determined by customer connections, natural gas distribution comprises the largest Liberty Utilities segment, with six U.S. operators providing service to some 293,000 customer connections. New Hampshire represents 30 percent of them. The second largest segment, water distribution and wastewater treatment includes 26 operations serving over 175,000 customer

connections. Electricity, the smallest segment by this measure includes two operations serving over 92,000 customer connections. New Hampshire represents close to half of them. APUC has a very short history in the electric utility distribution business. Its first entry came with acquisition of a 47,000 Lake Tahoe area electric company. At the time utility operations were limited to 70,000 water and waste water treatment customers.

The dispersion of both the utility and generation segments heightens the challenges of planning for optimization of operations and in developing budgets and managing expenditures to execute those plans.

The company is also pursuing growth in natural gas with pipelines delivering shale natural gas to markets.

Liberty Utilities, and in turn LU-NH, face significant operational performance challenges, while also meeting the aggressive financial growth expectations of its holding company parent. Meeting these challenges requires well designed and effectively executed budgeting and cost management. Budgeting and cost management begin with board of directors and senior executive leadership, which must articulate a consistent vision, establish a clear mission for meeting public service responsibilities, define objectives and goals, set priorities, develop strategic plans, allocate resources, develop financing plans, and implement and measure performance against these plans. The challenge is not simply to define management's vision and strategic plans in a comprehensive and specific way, but to bring them to fruition in a far-flung organization and in a way that responds generally to public service responsibilities and specifically to the requirements and expectations of regulators and stakeholders in New Hampshire.

The corporate processes for budgeting of capital expenditures and of operating expenses must be effective for good planning and strategies execution. The LU-NH processes must effectively provide for gas and electric system reliability through investments and operations and maintenance activities, while maintaining corporate financial health. Specific plans for funding utility capital requirements and allocation of capital are ultimately the responsibility of the holding company, whose leadership should play a strong planning and budgeting role, and recognize the need to give appropriate priority to utility needs when allocating resources.

Good practice builds O&M budgets from the bottom-up by management within each major organization. The use of activity-based budgeting has become a standard for optimizing costs, when properly applied. Once set, budgets require ongoing attention and revision where appropriate. This need has particular relevance for Liberty Utilities, which must not only sustain optimum operations at existing units, but has had to address the challenges and uncertainties of incorporating new operations in new regions on a recurring basis. Management reporting systems need to provide comprehensive, detailed monitoring and cost-control mechanisms for capital and O&M budgets at the Liberty Utilities level and at the New Hampshire levels for both electric and gas operations.

B. Findings

1. Strategic Planning

a. Vision/Mission

Liberty Utilities operates under an established vision statement that we found appropriately communicated to employees. Specifically, Liberty Utilities seeks to be:

*The utility company most admired by customers, communities
and investors for our people, passion and performance.*

Liberty Utilities has also set a high-level mission statement that calls for it to “*Deliver stable and predictable earnings*” and that establishes the investment thesis that, “*Maximum shareholder value is created by minimizing the risk associated with earning the permitted rate of return.*”

The Company has identified a number of attributes needed to attain its mission:

- Constructive Regulatory Relationships
- Caring Customer Experience
- Standardized Processes and Technologies
- High Level of Employee Engagement
- Earnings and Cash Flow through continued rate-base investments and expansion through utility acquisitions.

Liberty Utilities stresses a series of “Organizational Values,” which consist of family, community, quality, commitment, care, and efficiency.

Liberty Utilities prepared formal strategic plans in 2013 and 2014. Each covered the immediately following five-year planning period. Leadership decided that it was not necessary to prepare a 2015 version, placing priority on continuing to execute on existing initiatives.

b. Planning Process - 2013

The strategic planning processes in 2013 (and again in 2014) began with a “SWOT analysis” (strengths, weaknesses, opportunities and threats) prepared by the Liberty Utilities state presidents and the top 10 Oakville officers at the Liberty Utilities level. Leadership undertook this analysis to drive the focus of strategic planning for the next five years. Each of the four SWOT categories included ten areas for examination. We highlight some of them below:

- Strengths
 - Meeting investor expectations
 - Strong access to capital
 - Employee quality
 - Ability to execute transactions
- Weaknesses
 - Lack of business development around organic growth
 - Capital constraints
 - Key personnel stretched thin
 - Specialized knowledge stretched thin
- Opportunities

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- Accelerated infrastructure recovery
- On-main build outs
- Credit rating improvements
- Threats
 - Capital required exceeds Liberty Utilities' access
 - ROEs lowered
 - Access to capital markets closed.

These examples tend to underscore Liberty Utilities' strength in acquisitions, and weaknesses in delivery (thin staffing and knowledge), and a view of opportunities and threats focusing on acquisitions versus operations.

Following the SWOT analysis, the Oakville strategic planning group developed a strategic plan. The plan finally approved set forth strategies and initiatives divided into four major groups.

The first group consisted of "Driving Maximum Returns." It included three notable initiatives:

- *Enhance Regulatory Relationships*
- *Drive Local, Responsive, and Caring Customer Relations*
- *Focus on organic growth and diversified investments.*

The regulatory relationships initiative reflected recent circumstances in New Hampshire, following the transfer from National Grid. Management observed that National Grid did not have extensive contact with New Hampshire regulators. There had been long periods between rate cases. Management added a local regulatory position in New Hampshire and one in Oakville.

The customer relations initiative included planned customer surveys for all utilities in late 2014, using in-depth focus groups organized and conducted by a third-party contractor. One change resulting from this initiative was the introduction of walk-in customer service centers.

The 2013 strategic plan's second group of initiatives focused on "Acquisition Growth." The first of its two initiatives sought to introduce methods to support more discipline in assessing acquisitions and ensuring their financial contribution. The second of these acquisition-related initiatives sought to identify and seek out the "orphans" of large holding companies (*i.e.*, operations too small to attract the attention of other acquirers operating in the industry).

"Operations and Integration" formed the third group of strategic initiatives. Its first element sought to "*Evolve the Transition Management Office*" in order to strengthen the ability to integrate newly acquired operations. Two other initiatives sought to bring commonality to dispersed operations by documenting "*the 'Liberty Way'*" and managing employee cultural transitions.

The fourth area addressed "Business Infrastructure Strategies," including a series of system initiatives. These system initiatives included IT infrastructure, a new nationwide Cogsdale CIS upgrade, and improving the capability of the HRIS, or Human Resources Information System, to support talent management. The other initiatives in this area took a process focus, seeking to:

- Improve human resources processes across the board
- Formalize risk management

- Increase the focus on strategic planning.

c. 2014 Strategic Plan

The 2014 strategic plan, which remains the most recent produced, provided significantly greater detail than did the 2013 version. No change occurred in “business thesis”, including the vision, mission and investment thesis and the organizational values. The plan also included for the first time a summarized five-year forecast that set forth specific financial metrics for gauging success over the planning horizon.

The 2014 strategic plan included sections treating: (a) human resource strategies; (b) operating strategies; (c) operations initiatives; (d) growth strategies; and (e) the five-year forecast. Each category is summarized in the following discussion.

i. Human resource strategies

The plan set forth a three-year roadmap of human resources “strategic objectives” that addressed (a) building a more efficient human resources organization, (b) developing talent and leadership, and (c) developing a “motivated” workforce.

The plan described a reorganization of Liberty Utilities groups that would produce two new business areas:

- Distribution and generation: all utility distribution and generation, as well as California solar operations
- Pipelines and transmission: a new organization to identify and seek investments in natural gas pipelines and electric transmission
- Energy solutions: a new group to house natural gas solutions and home services; management would terminate this group after a single year of operation
- Business development: to manage acquisition growth and to develop a Liberty planning team.

ii. Operating strategies

Operating strategies included the Liberty Way; centralization of commodity procurement; decentralization and driving toward local operations; managing regulatory relationships; managing New Hampshire regulatory reporting; filing quad-annual rate cases; and enhancing regulatory returns.

iii. Operating initiatives

The 2014 strategic plan’s operating initiatives included:

- Managing cultural integration
- Improving customer billing and collections
- Continuing to improve the customer experience
- Enhancing safety, environmental, health and security
- Implementing an enterprise risk management processes
- Evolving the IT platform: including Enterprise Asset Management, the Cogsdale CIS, and the Great Plains system
- Executing growth approaches, including organic, acquisition, and new lines of business

iv. Growth Strategies

The 2014 plan enumerated and discussed at length growth strategies falling into more than 10 categories:

- Organic capital investments: dual-fuel vehicles, smart AMR, solar, specific initiatives within existing utility systems
- Customer expansions
- Tuck-in acquisitions: small utilities that can be managed by existing local operations, such as the Keene propane system
- Large acquisition growth: acting as a “disciplined buyer” to make deals accretive to earnings
- Pipelines and transmission investments: forecasting significant growth in investments
- Gas transmission opportunities: pipeline investments and acquisitions
- Electric transmission opportunities
- Natural gas-specific opportunities: LNG plants, satellite LDCs on pipelines
- Solar and home services: the plan anticipated significant investment, but business area was dropped after one year
- Solar portfolio securitization
- Rooftop solar metering
- Renewables
- Partnership opportunities (since terminated).

2. Five-Year Forecasts

a. Five-Year Forecast Process

Liberty Utilities constructs a “Five-year Forecast” as part of the strategic planning process. The forecasting process begins in March, and becomes final following presentation to and review by the parent board of directors in June or July. The Five-year Forecast provides detailed financial projections that capture expected results of the strategic plan. The key drivers of the forecast are: (a) goals for specific financial metrics determined before the supporting forecasting process begins, (b) the Liberty Utilities five-year capital expenditure plan, (c) regulatory treatments and assumptions that define cost recovery, and (d) operating expenses over the five-year horizon.

Oakville headquarters begins the process with a PowerPoint presentation in March. The presentation provides timelines, a scope of deliverables, roles and responsibilities, and key priorities. Oakville provides the templates and reports for the forecast, leaving the regions to provide their assumptions and inputs, revenue forecasts, operating expenses, and capital expenditures. The process seeks to produce a five-year forecast at a less granular level than the budget cycle for the first year, which immediately ensues.

The forecasting process limits operating expenses to those authorized in rates, unless an existing rate mechanism permits adjustments between base rate cases. The process also anticipates iteration between the regions and Oakville to establish capital expenditure “envelopes.” These envelopes seek to satisfy equity return levels. Oakville also produces an extension of the Five Year Forecast, covering future years six through 20. Those extended views are not used at the regional level.

New Hampshire inputs to the process begin in May, using templates of financial information for EnergyNorth and for Granite State. The New Hampshire financial staff provides operating expenses for five years. The manager of engineering constructs a forecast of capital expenditures and projects. That forecast employs a five-year rolling average of New Hampshire SAIDI and SAIFI requirements as a guide for capital forecasting. Internal New Hampshire review and analysis of this preliminary information occur in May and June. Following New Hampshire state President approval of state input, a review by the Oakville Vice President of Finance and staff takes place. The parent board of directors receives a Five-Year Forecast presentation in June or July of each year.

The next table summarizes the most recent Five-Year Forecast's capital expenditures for Energy North and Granite State.

Latest Five-Year Forecast Information for New Hampshire



The next illustration shows operating expense forecasts for New Hampshire for 2016-2020.

(The following is confidential)



The financial metrics for New Hampshire (shown in the illustration below) form a key product of the forecast process.

(The following is confidential)



b. Earlier Five-Year Forecasts

The 2013, 2014 and 2015 Five-Year Forecasts included what management terms “Baseline” and “Directional” forecasts. The 2013 Baseline forecasts included currently operated Liberty Utilities utility businesses. The Directional forecast in 2013 consolidated this baseline component with projections that considered five acquisition opportunities not in the fold, but considered to be in the business development pipeline. A key financial metric objective in the 2013 forecast was the EBITDA compound growth rate. The EBITDA compound growth rate for the Directional forecasts was almost three times that of the Baseline forecast.

The Directional forecast included an assumed acquisition of a 50,000-customer utility in each year of the forecast. The addition of an acquisition in each year caused the increase in EBITDA compound growth rate. The forecast also included assumed rate increases in New Hampshire of 24 percent for Energy North and 26 percent for Granite State, both in 2014.

Management built the 2014 five-year forecast (for 2015 through 2019) around defined target financial metrics:

- Double EBITDA in five years
- Grow EBITDA in every year
- Grow EBITDA on existing assets in every year
- Maintain a BBB credit rating.

The 2014 forecast version presented three scenarios. As in 2013, the Baseline addressed existing businesses, but added three changes: (a) smart meters, (b) a California business, and (c) an electric transmission line. The 2014 version then added a “Market” scenario; which included the Baseline plus projects that had been announced to the capital markets. The Directional scenario included the Baseline plus Market plus two hypothetical acquisitions in 2018 and 2019.

The Market and Directional scenarios included target financial metrics equal to those of the Baseline, plus an EBITDA interest coverage minimum, a total debt to capital maximum level and an FFO/Debt metric of 13 percent for utility operations. The acquisition of Park Water in 2016 and

investments in LNG in 2015 through 2017 were added. Hypothetical acquisitions were assumed for 2018 and 2019. The results of the Directional forecast were to double EBITDA from 2015 to 2019, as was targeted in the process.

The 2015 forecast for 2016 - 2020 included less aggressive target financial metrics. The financial metrics evolved to the following:

- Achieve allowed ROEs for the regulated businesses
- Grow EBITDA in each year
- Grow EBITDA existing assets in each year
- Invest approximately \$2 billion dollars over five years
- Maintain a BBB credit rating.

The acquisition of Empire Electric was announced by the company in February 2016. It was not included in this forecast. The Baseline scenario included the “as is” utility businesses plus Park Water, and gas and water acquisitions that were certain. The Market scenario included all announced acquisitions that are not yet implemented. In this forecast version, the Market and Baseline scenarios are the same. The Directional scenario included the Baseline plus hypothetical acquisitions in pipeline investments. The Directional forecast also assumed one larger acquisition per year of 150,000 customers in each of 2018, 2019 and 2020.

Targeted financial metrics for this forecast did not include a doubling of EBITDA, but results of the Directional forecast actually did show a doubling in five years. The forecast also included major New Hampshire capital investments for main replacements, new services for residential and commercial customers, and new gas main related to growth.

3. Budgeting

a. Overall Budgeting Processes

For both capital expenditures and operating expenses, the finance leads in each Liberty Utility region work with local operations to develop annual budgets. The finance leads (the Vice President-Finance in New Hampshire) serve as the primary points of contact with Oakville during the budget cycle.

At the New Hampshire level, the budget process begins in August under the senior manager of finance, who oversees the preparation of the operating expense budget. Oakville begins budget work in August as well under the finance executive, who provides assumptions, spending templates, an HR template, and other inputs.

All budget inputs get rolled up to region levels and compared to the first year of the Five-Year forecast. The results then go to the state presidents for initial comments. Several budget iterations may then occur between state department heads and the state president prior to the latter’s approval. The proposed New Hampshire budget then goes to the Oakville finance group. Phone calls in October and November discuss various portions of the New Hampshire budget, leading to approval by Oakville finance in November. A budget presentation is prepared for the Algonquin Board of Directors, to be reviewed and approved in early December.

Oakville supplements the annual budgeting process with an “Emergent Program Process,” in order to provide for the addition to the approved capital budget of new capital items as they “emerge” during the budget year. Addition of new capital projects or programs require justification through an approved business case. One emerging program secured approval in 2014, after which the number skyrocketed to 32 in 2015. The pace during 2016 (13 in the first few months) shows continuation of the 2015 experience.

b. Capital Budgeting

The New Hampshire Director of Engineering prepares the local capital expenditures budget. The manager meets with operations managers throughout the year to discuss the capital needs of the various departments, primarily focusing on smaller capital elements. The manager of engineering meets with the director of gas operations, the director of electric operations and engineering personnel to identify capital work required in the coming year.

The target metrics for SAIDI and SAIFI serve as drivers in developing the local capital budget. The manager of engineering relies on two planning engineers (one in gas and one in electric) to identify mandatory and non-mandatory capital projects.

Management prepares capital expenditure estimates for numerous “blanket” programs conducted routinely on an annual basis, determining their costs on line item basis. Year-to-year reviews are performed on both the gas and electric sides. For gas, inside meters, services, and main replacements are estimated based on a 10-year plan. The gas capital budget is about 90 percent related to compliance. Growth capital projects must have a business case with an analysis for approval. Business cases are also required for discretionary capital projects. For the 2015 budget year, business cases were performed for all line items in both the gas and electric capital budgets. Both the gas and electric businesses use the Synergy model for capital expenditures.

c. 2014 Budgeted versus Capital Actual Expenses

Variances between budgeted and actual capital expenditures in 2014 proved unusually large in magnitude and in the number and nature of their sources. The next table summarizes 2014 capital budget performance for both LU-NHG and LU-NHE. Combined, those variances reached the extreme level of 71.7 percent.

2014 LU – NH Capital Budget and Variances

Company	Budget	Actual	Variance	
			Dollars	Percent
Energy North	\$26.701	\$46.544	\$19.843	74.7%
Granite State	\$18.303	30.736	\$12.433	67.9%
Total LU-NH	\$45.004	\$77.280	\$32.276	71.7%

Dollars are in millions

Examining 2014 capital budgets line-by-line discloses a large number of significant, some extremely large, variances. Most line items showed large variances. Moreover, the underlying reasons reported by management were numerous and varied in nature. We review a number of the significant 2014 variances below. We did not try to reconcile all 2014 capital variances, but the next portions of this chapter illustrate how significant they were.

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First we listed projects that experienced particularly large over-runs. The next chart shows that actual costs for these 10 projects in total ran over-budget cumulatively by about 3.5 times.

Large 2014 Capital Over-Runs

Co.	Projects	Budget	Actual	Variance	Explanation
Electric	7	\$2.978	\$10.076	\$7.098	various
Gas	3	\$0.825	\$2.938	\$2.113	“more complex than estimated”
Total	10	\$3.803	\$13.014	\$9.211	

Dollars are in millions

Next we show budget to actual performance for Information Technology, Software, Equipment, and Infrastructure Capital Charged to New Hampshire. This work overran budget by 18 times.

IT 2014 Capital Charged to New Hampshire

Co.	Budget	Actual	Variance	LU Explanation
Electric	\$0.302	\$5.099	\$4.797	“Charged to LABS Corporate”
Gas	\$0.283	\$5.797	\$5.514	“Charged to LABS Corporate”
Total	\$0.585	\$10.896	\$10.311	

Dollars are in millions

A “Finance Project” that had not been included in the approved budget at all drove a further, very large capital budget overrun of over \$10 million. Not a “project” per se, this item represented a collection of accruals related to the budget’s other line items. The next table summarizes the amounts involved.

Unbudgeted 2014 “Financial Project” Capital Costs

Co.	Budget	Actual	Variance	Explanation
Electric	0	\$7.167	\$7.167	“Finance Project”
Gas	0	\$3.125	\$3.125	
Total LU-NH	0	\$10.292	\$10.292	

Dollars are in millions

Three other, miscellaneous categories contributed another \$12 million in capital cost variances for New Hampshire in 2014. The next table depicts these overruns, which arose from a number of notable sources. First, management explained an approximately \$4.8 million variance for growth projects as “additional growth jobs identified and released in support of growth strategy.” However, growth projects did not appear in approved 2014 Emergent Projects. This category reflects what should exist as a result of the process for approving projects emerging after approval of the base annual capital budget. It thus appears that board approval was not obtained for these major increases.

- A carryover of 2013 work into 2014, described as “unplanned carryover costs from 2013 to 2014” also showed unusual variances, with five projects more than doubling in cost.
- Mischarges arose under four gas projects, with the errors explained as “charges made to blanket accounts instead of other projects.”

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Other Sources of 2014 Capital Overruns

Co.	Budget	Actual	Variance	Explanation
Gas	\$5.083	\$9.874	\$4.791	Growth Jobs
Electric	\$2.250	\$5.237	\$2.987	2013 Carryover
Gas	\$0.939	\$5.503	\$4.564	Mischarged
Total LU-NH	\$8.272	\$20.614	\$12.342	

Dollars are in millions

While the net effect of budget variances produced large added costs for New Hampshire, large variances ran in the other direction as well. The next chart shows substantial budgeted costs not expended due to delays.

2014 Capital Under-Runs Due to Delay

Co.	Budget	Actual	Variance	Explanation
Electric	\$4.399	\$1.116	\$(3.283)	3 projects "delayed to 2015 or later"
Gas	\$3.900	\$0.098	\$(3.802)	4 projects: "permitting did not allow for construction initiation"
Total LU-NH	\$8.299	\$1.214	\$(7.085)	

Dollars are in millions

d. 2015 Budgeted versus Actual Capital Expenses

Capital budget variances for 2015 improved as measured on a total basis, but still generated numerous and large variances. The total variance for LU-NHG was a nominal two percent. The LU-NHE variances, however, remained disturbingly high. Actual costs exceeded those budgeted by 15 percent. The next table summarizes overall 2015 capital budget variances at the top level.

2015 LU-NH Capital Variances

Co.	Budget	Actual	Variance	
			Dollars	Percent
Gas	\$32.268	\$32.875	\$0.617	1.9%
Electric	\$10.012	\$11.522	\$1.510	15.1%
Total LU-NH	\$42.280	\$44.397	\$2.117	5.0%

Despite the lessening of the total variance from budget, a review of 2015 line items continued to show very large individual variances. We summarize some of the larger ones below.

Beginning with 2015's very large over-runs, the next table shows that they were substantial.

Large 2015 Capital Over-Runs

Co.	Projects	Budget	Actual	Variance	Explanation
Gas	7	\$6.570	\$12.012	\$5.442	various
Electric	3	\$1.372	\$5.389	\$4.017	"more complex than estimated"
Total	10	\$7.942	\$17.401	\$9.459	

Dollars are in millions

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The explanations provided for the over-runs were:

- Electric: work proved greater than anticipated at budget preparation
- Gas: work exceeded budgeted amounts; the budget was significantly lower than the historical average.

The “Finance Project” accounted for a very large underrun, for two primary reasons: (a) reversal of an accrual and re-allocation to individual projects, and (b) an unbudgeted project cost under-run. The next table summarizes these effects.

Large 2015 Finance Project Capital Variance

Co.	Budget	Actual	Variance	Explanation
Gas	\$1.512	\$(7.818)	\$(9.333)	Accounting reversal
Electric	0	\$(3.295)	\$(3.295)	Project under-run
Total	\$1.512	\$(11.113)	\$(12.625)	

Dollars are in millions

Unbudgeted 2015 IT capital costs charged out from Oakville caused another 2015 capital cost variance. The next table summarized the increased cost to New Hampshire of about \$1.5 million.

Unbudgeted 2015 IT Costs

Co.	Budget	Actual	Variance	Explanation
Gas	\$0	\$0.954	\$0.954	Oakville “IT and Systems allocation”
Electric	\$0	\$0.506	\$0.506	“Corporate IT Charged out”
Total LU-NH	\$0	\$1.460	\$1.460	

Dollars are in millions

As was true for 2014, growth projects also grew well beyond expectations, increasing New Hampshire 2015 capital costs by \$7.5 million. Management explained the increase as “Additional Growth Jobs Identified and Released in Support of Growth Strategy.” Again, however, 2015 Growth projects did not appear among the significant number of Emergent Projects listed as approved.

Under-Budgeted 2015 Growth Project Costs

Co.	Budget	Actual	Variance	Explanation
Gas	\$7.830	\$13.601	\$5.771	“Growth Total less INAT Gas”
Electric	\$1.350	\$3.110	\$1.760	“Commercial and Residential Blankets”
Total LU-NH	\$9.180	\$16.711	\$7.531	

Dollars are in millions

Unplanned carryover of prior year budgeted costs and incorrect allocations also produced a significant variance in 2015, as they had in 2014. The next table summarizes them.

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Carryover and Misallocation Driven 2015 Capital Overruns

Co.	Budget	Actual	Variance	Explanation
Gas	0	\$1.706	\$1.706	2 projects - "Carryover from 2014 Work"
Electric	\$1.500	\$4.225	\$2.725	14 projects - "Carryover work from 2014"
Gas	\$1.200	\$1.798	\$0.598	"Overhead disproportionately charged to project"
Electric	0	\$0.150	\$0.150	"Expense Project"
LU-NH Total	\$2.700	\$7.879	\$5.179	

Dollars are in millions

Other significant over- and under-runs occurred in 2015 as well. The next table summarizes them.

Co.	Budget	Actual	Variance	Explanation
Gas	\$0.500	\$2.791	\$2.291	Scope expansion added paving, main extension, engineering
Gas	\$3.600	\$0.109	\$(3.491)	"Placeholder" for NH Gas acquisition
Electric	\$5.380	\$0.337	\$(5.043)	"Projects Delayed Until 2016"
Gas	\$12.511	\$6.990	\$(5.521)	"Used main replacement budget for fitting replacement"

Dollars are in millions

LU-NHE added 14 Emergent Projects during 2015, with a budgeted amount of about \$415,000. We observed capital spending of about \$225,000 on three of these projects. LU-NHG added 21 Emergent Projects in 2015 for a budgeted amount of about \$836,000. We observed expenditures of \$138,000 on three of the projects. We found spending of \$596,000 on a fourth, for which only \$15,000 had been requested.

e. 2016 Capital Budgets

The next table shows the 2016 capital budgets for LU-NHG and for LU-NHE. The capital budgets are prepared by line item and are grouped by five capital categories: safety, growth, mandated, regulatory programs and discretionary.

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NLU-NHG 2016 Capital Budget

Priority	Project #	Project Description	EN 2016 Capital Budget
3. Growth	8840-C18806	INAT Gas	160,000
	8840-ENI101C	Growth Customer Contribution Budget Placeholder	-200,000
	8840-ENI101	Growth New Main	1,900,000
	8840-ENI102	New Reinforcement Main for Growth	1,700,000
	8840-ENI158	Marketing & Sales	150,000
	8840-ENI161	Growth Fitting	300,000
	8840-PCN150	New Service Residential	3,500,000
	8840-PCN152	New Service Comm/Industrial	1,000,000
	8840-PCN153	Reserve for Unidentified Growth	4,750,000
3. Growth Total			13,260,000
2. Mandated	8840-C18750	Install Security Equipment - EN Facilities	50,000
	8840-ENI005	Inactive Service Program	160,000
	8840-ENI006	Cathodic Protection Program	750,000
	8840-ENI007	Replacement Services Random (Non Leaks)	425,000
	8840-ENI077	Replacement Services Random (Due to Leaks)	250,000
	8840-ENI100	Meter Work Project (Changes)	200,000
	8840-ENI100P	Meter Work Project (Meter Purchases)	1,300,000
	8840-ENI103	Main Replacement City/State Construction	4,500,000
	8840-ENI137	Service Replacement City/State Construction	600,000
	8840-ENI163	Service Replacement Fitting City/State Construction	60,000
	8840-REL108	LNG/LPG Capital Improvements	165,000
	8840-REL110	Valve Installation/Replacement	100,000
	8840-ENI160	Corrosion & Miscellaneous Fitting	100,000
	8840-ENI002	Meter Protection Program	50,000
2. Mandated Total			8,710,000
4. Regulatory Programs	8840-ENI107	Main Replacement LPP	9,000,000
	8840-ENI117	Service Replacement LPP	1,100,000
	8840-ENI162	Main Replacement Fitting LPP	180,000
4. Regulatory Programs Total			10,280,000
5. Discretionary	8840-C18800	Upgrade Hi Line - Concord to Tilton	12,000,000
	8840-C18801	K Meter Replacement Program	50,000
	8840-C18802	Install Main Daniel Webster Highway Merrimack	500,000
	8840-ENI164	Main Replacement Reactive	250,000
	8840-OTH-111	Dispatch and Control Center	10,000
	8840-OTH-112	Purchase Misc Capital Equipment & Tools	150,000
	8840-OTH-113	Facility Improvements & Additions - Various	300,000
	8840-OTH-114	Transportation Fleet and Equipment Purchases	1,200,000
	8840-OTH-115	IT - Software, Equipment & Infrastructure	230,000
	8840-REL105	Gas System Planning & Reliability	500,000
	8840-REL106	Gas System Control & Regulation	300,000
	8840-REL109	SCADA Capital Improvements	10,000
	8840-C18817	Install Solar Panels - EN Buildings	150,000
	8840-C18823	Pre-Code Stee Pipe Protection Program	100,000
	8840-C18824	Aldyl-A Replacement Program	50,000
5. Discretionary Total			15,800,000
Grand Total			48,050,000

Priority 1 = Safety - there are no safety priority projects in 2016

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NLU-NHE 2016 Capital Budget

Priority	Project #	Project_Description	GSE 2016 Capital Budget
3. Growth	8830-CD0291	Sky View URD - Salem, NH	10,000
	8830-CNN010	GSE-Dist-New Bus-Resid Blanket	1,050,000
	8830-CNN011	GSE-Dist-New Bus-Comm Blanket	1,200,000
	8830-CRSRVNBC_C	Reserve for New Business Residential	50,000
	8830-CRSRVNBC_C	Reserve for New Business Commercial Unident specific & SC	100,000
3. Growth Total			2,410,000
2. Mandated	8830-C14646	IE-NN UG Structures and Equipment	5,000
	8830-C18750	Security Conversion GSE	25,000
	8830-C21595	01663 GS Storm Program Proj	50,000
	8830-C26263	NN D-Line Work Found by Insp.	50,000
	8830-C36433	Distribution Feeder Power Factor Correction	25,000
	8830-C36435	Lebanon Area Low Voltage Mitigation	50,000
	8830-CN4104	01659 Granite St Meter Purchases	250,000
	8830-CN4120	01660 Granite St Transformer Purchases	350,000
	8830-CNN002	01737 GSE-Dist-Subs Blanket	50,000
	8830-CNN004	GSE-Dist-Meter Blanket	20,000
	8830-CNN007	GSE-Dist-Water Heater Blanket	121,000
	8830-CNN009	GSE-Dist-Land/Land Rights Blanket	10,000
	8830-CNN012	GSE-Dist-St Light Blanket	225,000
	8830-CNN013	GSE-Dist-Public Require Blanket	400,000
	8830-CNN014	Dist-Damage&Failure Blanket	800,000
	8830-CNN015	GSE-Dist-Reliability Blanket	400,000
	8830-CNN016	GSE-Dist-Load Relief Blanket	75,000
	8830-CNN017	GSE-Dist-Asset Replace Blanket	400,000
	8830-CNN020	Dist-Transf/Capac Install Blanket	10,000
	8830-CNN021	GSE-Dist-Telecomm Blanket	10,000
	8830-CNN022	GSE-Dist-3rd Party Attach Blanket	110,000
	8830-CNN023	GSE Distributed Generation Blanket	75,000
2. Mandated Total			3,511,000
4. Regulatory Programs	8830-C18603	Bare Conductor Replacement Program	1,200,000
	8830-C20473	IE - NN Recloser Installations	250,000
	8830-C36423	Mt Support Sub- New LP Fdr Pos	3,700,000
	8830-C36424	Mt Support-New 16L3 Feeder	1,550,000
	8830-C36425	Mt Support-New 16L5 Feeder	100,000
4. Regulatory Programs Total			6,800,000
5. Discretionary	8830-C13968	PS&I Activity - New Hampshire	10,000
	8830-C18620	Charlestown 32 Dline	5,000
	8830-C18630	Charlestown DSub	15,000
	8830-C21093	IE-NN Dist Transformer upgrades	25,000
	8830-C22214	NN ERR/Pockets of Poor Perf	50,000
	8830-C26061	NH ARP Relay & related	5,000
	8830-C31402	IE-NN URD Cable Replacement	100,000
	8830-C33766	NEN-NH Electric Fence FY10	25,000
	8830-C36427	Feeder Getaway Cable Replacement	100,000
	8830-C36430	Pelham Sub-Add 2nd Xfmr and Fdr Pos	600,000
	8830-C36431	Pelham-New 14L4 Fdr	350,000
	8830-C42901	Underperforming Feeder Program	50,000
	8830-C42851	Enhanced Bare Conductor Replacement	500,000
	8830-C42852	Pelham-New 14L5 Fdr	150,000
	8830-CNN006	GSE-Dist-Genl Equip Blanket	50,000
	8830-CNN025	IT Systems & Equipment Blanket	25,000
	8830-CNN026	Misc Capital Imprvmnts GSE Facilities Blanket	100,000
	8830-CNN027	Transportation Fleet & Equip. Blanket	250,000
	8830-CRSRVARS_C	Reserve for Sub Asset Repl Specifics	25,000
	8830-CRSRVDF_01	Reserve for Damage/Failure Unidentified Specifics &	75,000
	8830-CRSRVLRL_0	Reserve for Load Relief Unidentified Specifics	25,000
	8830-CRSRVPR_01	Reserve for Public Requirements Unidentified Specifics	50,000
	8830-CRSRVRL_01	Reserve for Reliability Unidentified Specifics	100,000
5. Discretionary Total			2,685,000
Grand Total			15,406,000

Priority 1 = Safety - there are no safety priority projects in 2016

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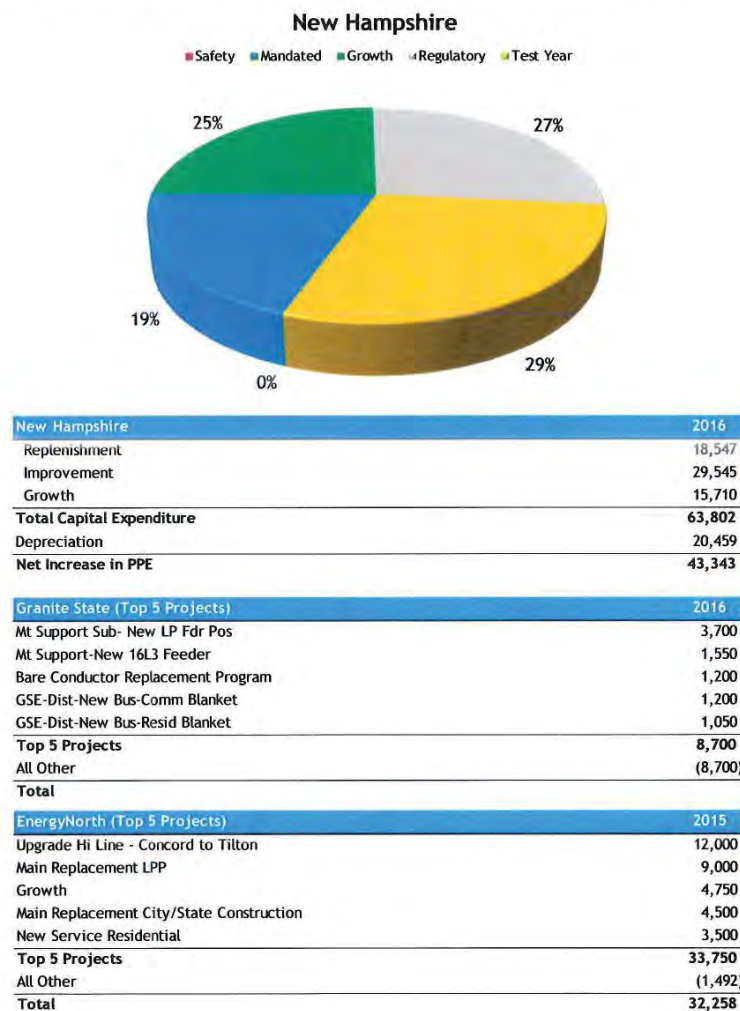
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The annual capital expenditure budget presented to the parent board of directors each December simplifies the underlying details, presenting expenditures in “replenishment”, “improvement” and “growth” categories. It measures the net increase in property, plant and equipment assets (rate base) that results. That budget shows the top five projects for LU-NHG and for LU-NHE. The next illustration depicts a page from the 2016 capital budget for New Hampshire, as presented to the parent board of directors on December 3, 2015.

New Hampshire

New Hampshire’s capital expenditure budget is expected to be \$43.3M million higher than depreciation expense in 2016. The following is a table and chart summarizing New Hampshire’s capital expenditures along with the net increase in PPE.



f. O&M Budgeting

The New Hampshire finance department serves as “coordinator and consolidator” for the annual budget process. The group uses business planning templates to support this effort. The process

begins in August for the O&M budget. The senior manager of finance in New Hampshire issues a memo to department managers describing the budget process, and providing detailed instructions and schedules for budget reviews. The key input for department managers is employees added or reduced for the budget year.

The senior manager finance provides planning guidelines and assumptions. Each budgeting department uses the same input template for operating expenses. Each cost center has responsibility for its own budgets. The functional managers with budget responsibility develop operating expense budgets, using a bottom-up approach.

Human resource information and assumptions are provided by Oakville for use by the cost centers. The departments input salaries, office supplies, facilities costs, vehicles and other direct costs into their operating expense budgets. The operating expense budgeting process schedule includes time allowances for budget iterations. Each cost center builds a one-year budget only.

The Company first focuses on refining the first year of the five-year forecast. Each responsible budget area begins with a dollar target that management expects the budgets to approximate. The dollar amount of operating expenses approved in the last rate order drives that target. Management expects first budget iterations to approximate the target, absent specific new initiatives or explanations supporting exceptions.

The development of revenue for the budget is prepared under the direction of the Vice President of engineering and procurement. Oakville provides a “push-down” of the headquarters business services costs and corporate allocations to New Hampshire.

g. Budget Performance Management

Local management for New Hampshire uses a monthly financial reporting process to manage performance to and variances from the annual budget. The accounting books close monthly on about the seventh business day of each month. The senior manager of finance provides a “flash report” on about the fifth business day of the month. It provides a heads up on performance before the books close. The company prepares actual-to-budget-comparisons after the close of the accounting books (on the 8th or 9th business day), termed the President’s Report.

Budget reporting to Oakville (and budget variance management) takes place in an “operations call” that occurs in the third week of each month. A PowerPoint presentation is prepared for the Oakville finance group. The call participants discuss it. The New Hampshire state president, vice president-finance, and senior manager finance present the financial results summarized in the PowerPoint presentation. The monthly presentation uses a consistent format that covers the same results and financial metrics for each month and for the year after the books close in January.

Financial analysis charts are prepared for New Hampshire as a whole and for electric and gas separately. The next illustration depicts the financial analysis format.

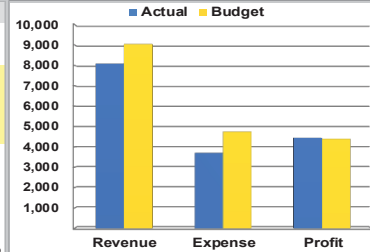
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Financial Analysis – NH

Net Revenue - Nov 2015	Fav / (Unfav)	Operating Profit - Nov 2015	Fav / (Unfav)
Budget	\$9,044	Budget	\$4,389
Customer Count	(100)	Revenue variances	(961)
Volume	(612)	Operating Expense variance	1,053
Price	(45)		
Keene	119		
All Other	(323)	All Other	(40)
Actual	\$8,083	Actual	\$4,440
Variance \$ - Fav / (Unfav)	(961)	Variance \$ - Fav / (Unfav)	51
Variance % - Fav / (Unfav)	(11%)	Variance % - Fav / (Unfav)	1%
Operating Expense - Nov 2015	Fav / (Unfav)		
Budget	\$4,747		
Labor	256		
Operating Expense	14		
Bad Debt Expense	529		
Administrative Expense	254		
All Other	()		
Actual	\$3,694		
Variance \$ - Fav / (Unfav)	1,053		
Variance % - Fav / (Unfav)	22%		



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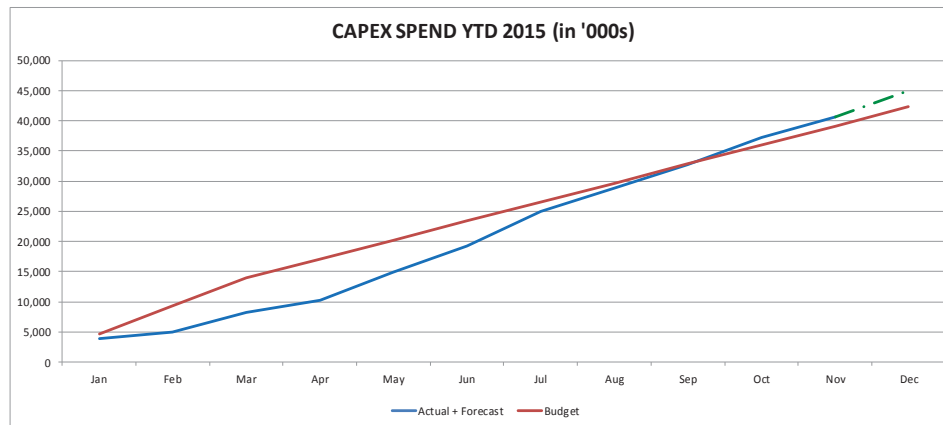
Net revenue variances by customer class are also analyzed, as is a breakdown of the components of earnings before taxes (EBIT). The EBIT budget number is shown graphically, and variances in net revenue, operating expenses, business services, corporate services, depreciation and amortization and other income are shown, to arrive at the actual result for the month, quarter, or the year depending on the period being examined. A scorecard is next shown. It includes red and yellow issues (versus green for positive performance). Scorecards are tied to annual goals. Depictions show scorecard measurables whose results are “in jeopardy,” and need attention. The December 2015 presentation included monthly, quarterly and year-to-date performance measurements. The big issues in this particular month were OSHA recordable injuries, vehicle accidents (MVAs), accurate and timely billing, customer satisfaction survey for electric, net income, bad debt expense, and the outreach program.

Capital spending for the year to date is showing on a single chart (illustrated below), showing total New Hampshire CAPEX performance. A chart detailing customer service level trends by month is shown next. Finally, the December 2015 report had three slides at the end related to customer expansion projects and sales on those projects.

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The Vice President-finance notes that the presentation for the operating call is in the same general format for every month.

The manager of engineering has a “separate budget meeting” with the heads of electric and gas engineering, project managers, engineers, and New Hampshire finance managers. A monthly report on capital spending and variances is sent to project managers, who then enter the expected forward spend for each project for the quarter, and through the end of the year. Two project managers, one for gas and one for electric, report to the manager of engineering, and on a monthly basis provide updates for all projects. The project managers also provide updates for spending on the “blanket programs”, which are routine categories that are budgeted on an annual basis. The project managers have capital planners on their teams who support capital reporting.

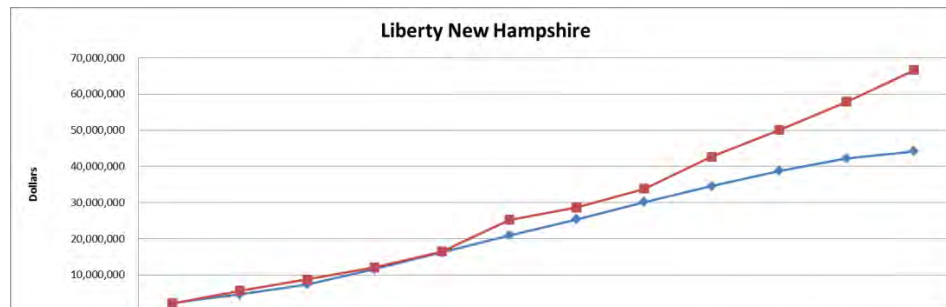
The project managers are responsible for project spending, performance and variances. The project managers are instructed to identify variances before they actually happen to plan mitigation. If capital spending above the project budget is expected, a re-authorization request for additional capital is prepared and sent to Oakville finance. At the end of the year, the manager of engineering prepares a report that explains the CAPEX variances and lessons learned. A memorandum on 2014 capital expenditures variances dated November 1, 2014 addresses these particular issues:

In accordance with the Liberty Utilities Project Expenditures Policy and Procedure, the local management team is responsible to close out the capital year spend through the Overage/Underage process. For all projects, over-budget variances exceeding 10% (Minimum \$50,000) of the approved budget requires approval by the local management team (Local Director of Engineering and State President). Under budget variances will be reviewed in the project close out report and will be reviewed at the local level....

The Liberty Utilities capital budget team has agreed to conduct the budget overage/underage reconciliation at the end of the fiscal year.

The New Hampshire finance group prepares a year-end financial results recap in the form of a PowerPoint presentation. The topics covered in the presentation are an “Efficiency Scorecard” that

includes financial returns, an EBITDA analysis for New Hampshire, an operating cost analysis for New Hampshire, net revenue analyses for both electric and gas, a brief “Efficiency Analysis” and the New Hampshire total capital spending chart by month, as shown below. These presentations were prepared for 2014 and 2015 and were provided for review. The chart below purports to show capital spending for Liberty New Hampshire for 2014; capital expenditures exceeded the approved budget by about 22.5 million, or approximately a 50 percent overspend. Note that these results are not consistent with company reconciliations performed at a later date.



C. Conclusions

1. Liberty Utilities’ strategic plans, as complemented by five-year forecasts, are well organized and thorough, presenting a clear vision, mission and strategies.

Liberty Utilities has a clearly stated vision, mission, investment thesis and values that are communicated through the strategic plan. The vision and mission set the tone and direction for planning and operating the company. Liberty Utilities prepared formal strategic plans in 2013 and 2014; each covered the immediately following five-year planning period. A strategic plan was not prepared in 2015, but a five-year forecast was prepared and utilized.

The strategic planning processes in 2013 and 2014 each began with a “SWOT analysis” prepared by the Liberty Utilities state presidents and the top 10 officers of Liberty Utilities. The SWOT analysis is intended to drive the focus of strategic planning for the next five years. The New Hampshire state president has input on the direction and focus of strategic planning on the front end as a result. The formal strategic plan is prepared by Oakville planners and executives, which is appropriate for high-level planning.

The New Hampshire utilities also have input to the strategic plan through the development of a five-year capital plan that is included in the five-year forecast. This input is the opportunity to place New Hampshire’s future capital needs into the strategic planning process for consideration.

2. Strategic plans and five-year forecasts focus on acquisitions and organic growth initiatives to meet aggressive financial metric targets.

The Liberty Utilities five-year forecast includes specific targeted financial metrics around which the forecast is constructed. The scenarios developed for the forecast include at least one “Directional scenario” that will meet all of the financial goals for five years. For instance, the 2014 strategic plan and financial forecast included the following target financial metrics:

- Double EBITDA in five years
- Grow EBITDA in every year
- Grow EBITDA on existing assets in every year
- Maintain a triple-B credit rating.

The Directional scenario was constructed to meet all of these five-year financial objectives. In addition, the Directional scenario included the target financial metrics, plus an EBITDA interest coverage minimum, a total debt to capital maximum level and an FFO/Debt metric of 13 percent for the regulated utilities. The acquisition of Park Water in 2016 and investments in LNG in 2015 through 2017 were added to the Baseline. Hypothetical acquisitions were planned in 2018 and 2019. The result of the Directional forecast was to double EBITDA from 2015 to 2019, as was targeted in the process. The Directional scenario in this five-year plan is clearly built to show the type of growth projects and growth levels that would be required to meet the five-year financial objectives.

3. Strategic plans have strategies and initiatives for operations, human resources and customer service, but specific goals and target metrics are not evident. (Recommendation 1)

Operating strategies and initiatives had a clear and prominent place in the 2013 and 2014 strategic plans and related five-year forecasts. Strategies included human resources initiatives and operations initiatives related to customer service. However, we observed no target metrics for measurements for human resources, customer service, or operations and reliability set forth in the strategic plans or the five-year forecasts.

Specific and measurable metrics for these functional operations are needed in strategic planning to set specific goals and target levels that are “bought into” at the executive and Oakville levels, while also being understood by local employees. Target operational metrics will also allow the Oakville headquarters to monitor performance against operational metrics, which is required for effective operational control over the New Hampshire operations.

In contrast, the five-year forecasts include very specific financial metrics around which the forecasts are built. Such target metrics should also exist for important operations and service levels.

4. Capital expenditure envelopes allocated by the Oakville headquarters have not been restrictive for New Hampshire operations.

An important outcome of strategic planning and five-year forecasts is the allocation of capital at the holding company level, and its adequacy for New Hampshire utility operations. The process for determining the level of capital expenditures for New Hampshire operations that are included in the five-year forecast is shown in the kick off instructions, “Scope of Deliverables” prepared by Oakville finance:

Oakville to work with regions to establish envelope of CapEx that satisfies ROE% requirements... Oakville will have one-on-one discussions with regions early next week (March)

As noted by this passage, Oakville finance and New Hampshire executives discuss capital expenditure levels for the five-year forecast. New Hampshire supplies a proposed five-year capital expenditure plan that local management believes should meet operational needs. Oakville finance seeks to ensure that long-term financial goals are met, which is a function of assumptions regarding capital expenditures and cost recovery thereon. The two parties work to determine an “envelope”, or range of capital expenditures for each forecast year. This envelope represents a “soft cap” on capital expenditures based on financial metrics.

The total New Hampshire levels for capital expenditures included in the 2015 five-term forecast for the years 2016 through 2020 was \$54 million for 2016, and between \$40 million and \$48 million in each the following four years. We believe that these levels represent sufficient allocations of capital expenditure dollars for New Hampshire operations, based on past capital budget levels.

We also note that the company has an Emergent Program Process to add capital projects or programs to the approved capital budget that “emerge” during the budget year. This process should provide additional flexibility for the New Hampshire operations to obtain the capital required to fund effective utility operations.

5. Strategic planning and the five-year plan are effectively linked to the budgeting processes.

The Liberty Utilities strategic plan and the five-year forecast are developed in an annual planning process that begins in March and ends in July with a presentation to the Algonquin Board of Directors. Both the strategic plan and five-year forecast include a five-year capital plan that is a key component in building the plan.

The board presentation provides a forum for executive and board of directors’ questions and comments regarding the plans. Following the presentation and board comments and any adjustments required, the plans are “finalized” (but not approved by the board), and the Liberty Utilities budgeting processes begin. Using the first year of information in the five-year forecast as a template, budgets are developed from the bottom-up that refine the first year of information.

Budgets are the execution plan for the first year of the strategic plan, including approvals for one year of capital expenditures and operating expenses. The strategic plan, five-year forecast and the budget are closely linked by this process. The budget execution plan should show substantive progress in the first year of the strategic plan toward meeting its five-year goals and objectives.

6. Budgeting processes for operating expenses, revenue and earnings are generally well organized, timely and effective.

The New Hampshire budgeting process for operating expenses, revenue and earnings are effective and efficient in both their construction and results.

The first focus in the operating budget process is to review and refine the first year of the five-year forecast. Each responsible budget area begins with a dollar target that management expects the budgets to approximate. The dollar amount of operating expenses approved in the last rate order drives that target. Management expects first budget iterations to approximate the target, absent specific new initiatives or explanations supporting exceptions.

The management reporting process to Oakville and budget variance management takes place in an “operations call” that occurs in the third week of each month. A PowerPoint presentation is prepared for the Oakville finance group that is presented and discussed on the operations call. The monthly presentation is in a consistent format that covers the same results and financial metrics for each month and quarter.

The New Hampshire finance group also prepares a year-end financial results recap in the form of a PowerPoint presentation. The topics covered in the presentation are an “Efficiency Scorecard” that includes financial returns, an EBITDA analysis for New Hampshire, an operating cost analysis for New Hampshire, net revenue analyses for both electric and gas, a brief “Efficiency Analysis” and the New Hampshire total capital spending chart by month. The 2014 EBITDA for LU-NH was \$43.8 million, or \$2.9 million greater than the budget, a 7 percent favorable variance. Actual operating expenses were about \$2.5 million over budgeted amounts, or a negative variance of about 4.5 percent.

In 2015, earnings before taxes were about \$3.3 million, or about 14.8 percent below budget. The negative variance was caused primarily by depreciation and amortization expenses that were \$5.4 million greater than budget, despite positive performance in net revenue and operating expenses of about \$3.3 million.

7. The CapEx budgeting process does not provide required analysis, business cases and detailed cost estimate packages prior to budget presentation to and approval by the local management, Oakville senior management, or the parent board of directors.
(Recommendation 2)

Liberty Utilities – New Hampshire has significant timing issues in providing capital expenditure analysis and business case packages for review and approval at executive levels. The CapEx budgeting process is one of the most crucial in effectively operating capital-intensive utility companies, making insufficiencies in this area a significant management issue.

The budgeting processes for the 2016 budget cycle specified that completed budgets, including the capital budget, were to be submitted to New Hampshire finance by September 3, 2015. The budgets were consolidated and submitted to the state president for first review by September 11th. Several budget iterations then occurred between department heads and the state president prior to his approval. The budget is then sent to the Oakville finance group. During October and November, the New Hampshire budget is discussed between the state president and Oakville, prior to approval by Oakville finance in November. A budget presentation is prepared for the parent board of directors, to be reviewed and approved in early December.

All analysis, business cases, capital expenditure applications and detailed cost estimates should be completed, packaged and presented to the New Hampshire state president for review and approval before the middle of September. When the capital expenditure packages are sent to Oakville, its management should also review the entire capital expenditure packages before approving the New Hampshire budget in November.

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Our review of the capital budget packages for the budget years of 2014, 2015 and 2016 found that the packages were dated and approved by New Hampshire during the budget year -- not prior to budget review by the state president in September of the previous year. In fact, the capital packages were not approved until May 1, June 1 and March 31 of the budget year in 2014-2016, respectively. Thus many projects were well underway before they had been analyzed and approved by managers. Since this information was not prepared until several months later, the state president, Oakville finance and the parent board were approving capital budgets of 80 plus line items that appeared not to have been:

- Fully analyzed
- Subjected to consideration of alternatives
- Supported by business case and capital expenditure applications
- Subjected to detailed cost estimates.

The table below is a recap of the timing of the capital budget packages for the 2014, 2015 and 2016 capital budgets. The packages generally included an abbreviated 1-page business case and a 2-page Capital Project Expenditure Application.

	Date	Approved by Manager	Board Budget Approval Year	Projects Start	Projects End
2014 Projects	5/1/2014	5/1/2014	2014	1/1/2014	12/31/2014
2015 Projects	6/1/2015	6/1/2015	2015	1/1/2015	12/31/2015
2016 Projects	1/1/2016	3/31/2016	2016	1/1/2016	12/31/2016

8. The New Hampshire capital budget packages do not provide detailed business case analysis for the growth, discretionary and regulatory supported projects as specified in the applicable Capital Expenditure Policy. (Recommendation 2)

Liberty Utilities has a Capital Expenditures Planning and Management Policy and Procedure document (Version 2.1 dated September 21, 2015). However, the New Hampshire operations are not following the policy requirements, especially the requirement that business cases be fully prepared for certain types of expenditures.

Under Section 8.1 of the policy, specifications for the requirement of business case preparation are presented:

8.1 Business Case

The following types of projects require a business case to be approved:

- Growth, Regulatory Supported and Discretionary projects, or portfolios, over \$50,000
- Unplanned projects over \$50,000, outside of safety where an expenditure application should be used

The policy provides a business case example that shows the type of categories and information and analysis to be provided. These business case categories are: recommendation, objective,

background, alternatives/options, financial assessment, risk assessment/qualitative evaluation, and implementation/action plan.

With regard to at least three of the categories, management has not prepared the types of analysis required for its business cases for each of the budget years 2014 to 2016. Management did not provide the types of analysis prescribed for growth, discretionary and regulatory supported projects regarding alternatives/options, financial assessment and qualitative evaluation. The capital expenditure policy for business cases is specific in the type of analysis expected. In particular, we did not find alternatives identified and analyzed, and net present value or internal rate of return analysis was not prepared (as required in the Policy) in the business cases that we reviewed.

9. Recent capital expense variances demonstrate a lack of effective control of capital expenditures. (*Recommendation 3*)

Combined, the electric and gas businesses in New Hampshire experienced capital budget over runs of over 70 percent in 2014. Not only was the total variance large, but the individual variances that comprised it were many and in some cases extremely large. The causes were multiple, and the effects hit both the gas and electric businesses in New Hampshire. We observed:

- Extremely large overruns on individual projects
- An overrun of close to 20 times the corporate IT charges budgeted to be assigned to New Hampshire
- A \$10 million charge to New Hampshire for a “finance project” (similar to that described earlier) that had not been in the capital budget at all
- An increase of \$12 million in New Hampshire capital costs for unbudgeted growth projects, carryover of work from 2013, and mischarged costs
- Over \$10 million in under-runs due to project delays.

The number, size, and nature of the variances is extraordinary, and present a picture much more of opportunistic than well-planned capital spending. Our review evidenced widespread capital planning problems and capital budget execution. APUC’s circumstances heighten the concern further in that utility operations must compete for capital with other demands imposed by a company with an unusually aggressive growth strategy, particularly one that involves acquisitions as a central element. Also discomfiting is the repeated emphasis that planning documents show for investments that drive returns, as compared with less detail and emphasis on utility operating metrics.

Capital expenditure performance in 2014 did not give confidence that the details underlying capital plans (see the preceding conclusion) or attention in managing to those plans is effective.

The total New Hampshire capital budget variance dropped remarkably in 2015, but that drop should not mask what remains a striking number, size, and breadth of variances at the detailed level. The continuation of these variances confirms the concerns about details underlying capital plans (see the preceding conclusion) and whether or not the attention in managing to those plans is effective.

The variance for LU-NHG was low (about two percent). The LU-NHE variance remained high enough to be of concern (costs exceeded budget by 15.1 percent). The continuing large number

and magnitude of capital budget variances at the line item level, and the many and varied reasons for the variances continue to evidence a lack of effective capital planning and capital budget execution.

Major variances were recorded on almost every line of the electric and gas 2015 capital budgets. Gas budget “over-runs” totaled about \$16.7 million, but were more than offset by about \$18.3 million of “under-budgets”. In other words, \$35.0 million of variances were recognized, on a budget of only \$32.3 million. The problem with these huge variances on individual projects and programs is that the capital budgets prepared for and approved by New Hampshire management, Oakville management and the parent board of directors simply are simply not being followed. Dollars are not spent on the capital categories represented in the approved budget.

10. New Hampshire and Oakville management did not effectively monitor and control problems with capital budget timing or 2014 and 2015 capital expenditure performance.
(Recommendation 4)

Conclusion 7 above reports that important analysis, formal applications and project estimating work on capital budgets occurred well after senior management and Board of Directors approvals of the capital budget for each the 2014, 2015 and 2016 budget years. New Hampshire executive management and Oakville executive management approved each of these capital budgets without important analytical and estimating work having yet been performed or reviewed. The capital expenditure approvals were based on insufficient evaluations and assessments performed by senior management as a result. The capital budget processes violate the company’s own capital expenditure policies as well as that of good utility business practice.

The monitoring and control of capital expenditures also shows little attention paid to this area as compared with greater focus on earnings, revenue and operating expenses. New Hampshire’s monthly reports to Oakville include a single chart measuring capital expenditure spend to budget in total, and does not include any analysis. Year-end reports by the New Hampshire utilities to Oakville include analysis on EBITDA, operating costs, net revenue, funds from operations and organic growth. Again, the one-page capital expenditure chart with no analysis is presented.

Also included in the 2014 year-end presentation was an “Efficiency Scorecard” that reports Capital Budget Efficiency scores are “100%” for actual expenditures with a target of 100%. This scorecard misleadingly indicates excellent performance on the capital budget. In the same document, however, capital expenditure actuals are shown at \$66.6 million and the budget at \$44.1 million. We also note that the actual capital spend was inaccurate, as capital expenditures were later reported as \$77.3 million for 2014. The lack of accurate information in the year-end reports also does not indicate effective monitoring or control of the capital budget.

11. New Hampshire executive management and Oakville executive management did not take action to mitigate problems with capital budget process timing and reconciliations of 2014 capital expenditure performance. *(Recommendation 4)*

Senior management at the New Hampshire and Oakville levels has apparently not taken effective action to change the timing of the capital expenditure processes noted in previous conclusions. The capital analysis packages for the 2016 budget were prepared well after senior management and Board approvals of the capital budget, as was also the case in 2015 and in 2014.

The New Hampshire engineering department prepared a variance reconciliation and explanation on a line-by-line basis for the 2014 capital budget. This reconciliation and analysis was reportedly prepared in July 2015. The 2015 capital variance analysis was prepared in early May 2016. We believe that such an important management tool for the capital expenditure budget should be prepared as soon as possible after the books close for the year in January. The lack of timely analysis causes Liberty to conclude that appropriate management action to fix problems with the capital expenditure budget have not yet been implemented.

New top New Hampshire leadership was not present during 2014. We understand leadership's view as not being aware of any 2014 capital budget problems and as focusing on actual levels of capital spend as compared to budget late in 2015, focusing on conforming to the total dollar budget. Under the circumstances, a more granular view appears necessary to bringing meaning to capital planning for New Hampshire.

D. Recommendations

1. Incorporate into the Liberty Utilities' strategic plans and five-year forecasts specific operational metrics as objectives for the planning process. (Conclusion 3)

Liberty Utilities' five-year forecasts are driven by targeted financial metrics that are clearly defined. Liberty believes that operational metrics should be included in the five-year forecast that also drive the planning process, and allow increased monitoring and management of operational issues by Liberty Utilities, Oakville and the holding company.

2. Redesign and rigorously apply the capital budgeting process so as to ensure the provision of full project business cases and program capital expenditure applications by September for the following budget year. (Conclusions 7 and 8)

Business cases for growth, discretionary and regulatory support should also be performed according to the company's capital expenditure policy, which includes NPV analysis for these projects. The budget process should result in capital packages that are finalized and approved by (sequentially) the state president, Oakville finance and by the parent board of directors in December.

3. Manage the capital budgets to annual variance tolerances of plus or minus 5 percent for total expenditures and plus or minus 20 percent for individual projects and line items. (Conclusions 9)

Liberty Utilities New Hampshire should establish and use variance tolerances for capital expenditure budget performance that are specific and provide measurements for performance levels. For instance, "good performance" tolerances should be 5 percent or less, moderate be 5 to 10 percent, and unacceptable for 10 percent or more of the total budget. Tolerances should also be established for individual projects and line items, to emphasize and ensure that capital budget management produces the spending on the priorities and specific needs that are addressed in the Approved Capital Budget.

4. Change monthly and year-end management reporting processes to include monitoring and detailed analysis of capital expenditure spending and variances. (Conclusions 10 and 11)

Monthly management reports and meetings at the New Hampshire level should start to include capital budget reporting, variance analysis and variance mitigation on a line-item basis. Management of the capital budget must become a greater focus for the state president and vice president – finance.

5. Replace the monthly “operating call” presentations and year-end management reporting processes with Oakville with a more structured, documented monitoring and detailed analysis of capital expenditure spending and variances. (Conclusions 9 through 11))

Oakville should begin to monitor and manage line item performance of the capital budget on monthly, quarterly and annual bases.



Liberty Way Policy & Procedures

Capital Expenditures Planning and Management

October 23, 2018
V[3.0]

Policy/Procedure: Capital Expenditures –Planning and Management

Version History

Version	Date	Author	Comments
1.0	December 31, 2013	G. Tremblay	Initial Publication
2.0	March 16, 2015	F. Chen Naden	Material updates to policies, procedures, templates and forms used in the planning and management of Capital Expenditures.
2.1	September 21, 2015	F. Chen Naden	Increased threshold from \$25,000 to \$50,000
3.0	October 23, 2018	J. Peellegoda; R, Caputo	Update to overall policy

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1.0 Executive Summary

Liberty Utilities Co and its subsidiaries (collectively “LU”) incur capital expenditures for a variety of projects each year depending on growth trajectories, maturation of assets, statutory requirements, and extraordinary occurrences. Both planned and unplanned capital expenditures designed to meet business needs are to be subject to the policies and procedures in this document.

Five categories will be utilized to organize and prioritize Capital Expenditure requests. The categories are as follows in descending priority:

- Safety
- Mandated
- Growth
- Regulatory Supported
- Discretionary

For **Safety** and **Mandated** initiatives, a Capital Project Expenditure Form (“CPE”) Form (Appendix A) must be completed and approved regardless of the project size in order to commence with project activities.

For **Growth**, **Regulatory Supported**, and **Discretionary** initiatives greater than \$100,000, a completed Business Case (Appendix B) and CPE Form (excluding the CPE-Financial Summary section) is required for approval to commence with project activities, while projects with estimated costs less than \$100,000 will require a CPE Form completed in order to commence with project activities.

For cases where there may be a blanket of projects combining Safety & Mandated with Growth, Regulatory Supported, and Discretionary the process followed for project approval shall be as outlined in section 5.3.

This document also provides direction as to the level of autonomy regional and functional leadership can exercise as well as procedures to address changes, material variances, ongoing reporting, and expenditure closeout.

2.0 Objectives

To define the processes related to approving, monitoring, and reporting capital expenditures to ensure:

- Appropriate documentation is
 - Prepared to reflect proper necessity, scope, cost, and schedule;
 - Documentation is provided as part of the approval process; and
 - Retained in historical records in accordance with regulatory requirements and needs.
- Appropriate authorization is obtained before the start of all projects.
- Consistent evaluation of capital projects across the enterprise.
- Projects are completed within planned time frames, to approved cost allocations and with full scope delivery.
- Material changes to scope, timing, and costs are authorized appropriately by the regional or corporate leadership prior to their occurrence.

- Effective and efficient deployment of capital resources across the enterprise are managed by regional leadership such that reallocation of capital according to evolving requirements, and priorities change within the region can be executed.
- Financial gains and ancillary benefits used to justify initiatives are achieved and impacts are reflected in subsequent monetary budgeting activities.

3.0 Definitions

Capital projects are projects which are net new to the company or spend which results in the furtherance to the life of an asset. Capital projects at LU are broken into five categories used to assess proposed projects. Respective definitions are provided below. These categories are to be used in both the development of regional capital projects and during the monitoring phase once projects are approved.

3.1 Blanket Projects

Blanket Projects are various smaller capital initiatives that are grouped together to constitute a total spend for projects with similar scope.

3.2 Capital Project

A capital project, both planned and unplanned, are designed to achieve stated objectives where one of the outcomes is materialization of, or improvement to, assets that can be listed on the company's Statement of Financial Position.

3.3 Discretionary

All other capital expenditure projects that do not fit within the four prior grouping will be grouped under the "Discretionary" category. The merits of each project will be assessed individually.

The following definitions are commonly used terms in this document. To prevent misunderstandings, or misinterpretations, explicit definition is provided below.

3.4 Functional Lead

Functional Leads provide corporate strategy, policy and procedural definition for their respective area of knowledge. They are accountable for defining and maintaining the framework under which regional businesses operate.

3.5 Growth

Expenditures categorized as "Growth" are those used to expand the physical plant. For example projects such as extending distribution mains or services, installation of new feeders, and expansion of substations. For capital expenditures where a gas, electric, or water system Line Extension Policy exists and is supported through approved regulations, the management and reporting of individual transactions is exempt from this policy. Rather, activities will be aggregating into a portfolio and managed as a grouped entity.

3.6 Growth Portfolio

To avoid the burdensome chore of administering and reporting on individual customer connections or line extension as independent projects, Growth projects are to be pooled into a group named "Growth Portfolio".

3.7 IT Capital Portfolio

For any LU software application in any work process or functional group the procedure would follow the PMO -1.0 – Work-In-Take Process.

3.8 Mandated (by regulations or laws)

Expenditures categorized as “Mandated” are those used to meet statutory or regulatory compliance. To qualify for inclusion in this category, proposed initiatives must provide a copy of any applicable legislation, statute or regulation.

3.9 Project Champion

On behalf of the Project Sponsor, the Project Champion is accountable for completing project documentation and facilitating approvals. In some scenarios, the project champion may be the Project Manager; however it is acknowledged that many permutations exist where the two roles are separate. In the absence of a Project Manager, the Project Champion is responsible for ensuring appropriate job codes are established in Oakville and the regional utilities.

3.10 Project Completion

The Project Completion is dictated by the handover of the final product to the operations group and the closing of all the contracts and work order associated to the project spend

3.11 Project Manager

The Project Manager is the individual tasked to drive the project on behalf of the project sponsor and achieve the stated objectives. Where a Project Manager has been assigned, they are responsible for adhering to the required documentation (i.e. Business Case and/or CPE), in addition to obtaining relevant FWO codes via the regional LU accounting teams. Project Managers, in the absence of explicit direction, will always abide by Project Management Body of Knowledge principles.

3.12 Project Sponsor

The Project Sponsor is the individual with demonstrable interest in the outcome of a project who is ultimately responsible for securing financial and workforce resources to achieve stated objectives.

3.13 Regional President

Regional Presidents, also referred to as the Regional Lead, oversee their respective utilities and are accountable for achieving financial and operating metrics for their respective businesses. Regional Presidents have authority over workforce and capital resources granted to them provided that utilization is consistent with established corporate policies.

3.14 Regulatory Supported

Expenditures categorized as “Regulatory Supported” are those used to implement projects where special regulatory mechanisms have been established to accelerate the financial returns of specific initiatives.

3.14 Safety

Expenditures categorized as “Safety” are those used to reduce workplace hazards, accidents and exposure to harmful situations and substances. It is noted that expenditures addressing imminent dangers would be completed when identified.

4.0 Capital Planning vs Capital Budget Process

The journey to define capital budgets is often an iterative process characterized by the need for timely and accurate information in order to make informed decisions. The act of

developing a budget is outside the scope of this document. For illustration purposes, Appendix G depicts a simplified budgeting process typically carried out annually between LU and the ultimate parent company, Algonquin Power and Utilities (“APUC”).

In Summary, the Corporate Long Term Model is the driver for setting the capital budget for a succeeding year. At the time of forming a succeeding year’s capital budget, a preliminary Business Case and/or CPE Form (using the templates provided in Appendix A & B) may be submitted for each project prior to the conclusion of the Corporate Long Term Model.

Once the Corporate Long Term Model and related capital budget is set by the APUC Board, Regional Liberty leadership are responsible throughout the successive year for planning the projects that fall within that year’s set capital budget, inclusive of review and approval of CPE Forms and Business Cases not already submitted as part of the capital budget formation process (See Appendix G).

The blue boxes represent tasks that are usually completed within LU exclusively while green boxes depict activities with varying levels of APUC, or Liberty Power Co. (“LPCo”), participation. The contents of this document define requirements and practices related to the act of executing, or expending, the capital budgets. As such, red areas are focal points for this document, while blue areas are spheres of influence.

In preparation for, and in response to, various Board of Director functions, activities on the left side of the cycle shown in Appendix G would be completed in the first half of the year in an idealized scenario; whereas the right side of the process would be completed in the second half.

4.1 Assumptions

- As an input to the procedures outlined in this document, it is assumed all LU capital budgets are developed and approved outside of the activities governed by this document. This document details how expenditures are planned and monitored but does provide direction as to how budgets are to be derived in conjunction with APUC or LPCo.
- Capital projects submitted as part of the annual budget process are approved as part of the larger capital expenditure envelope of spend for any given year. Prior to actual spend on a specific project, the respective LU region will have to follow procedures noted under section 5 of this document.
- This Policy assumes that Regional and APUC Boards have authorize the envelope of spend for the succeeding years Capital Program.
- This Policy assumes that the regional accounting teams have utilized US Generally Accepted Accounting Principles (US GAAP) is assessing capitalization of spend on the respective capital projects For a further discussion on this process please see the Liberty Capitalization Procedure, (<http://community.libertyutilities.com/FinanceAndAdministration/Guidelines%20and%20Procedures/Processes/Liberty%20Utilities%20Capitalization%20Procedure%20-V1.pdf>)
- As an input to the procedures in this document, budgets assigned to regions or functional groups are the responsibility of those parties. As such minor variances to approved projects or portfolios are to be handled within given budgets.
- The Integrated Technology (IT) Project Management Office’s (PMO) Work In Take (WIT) process is outlined within the PMO -1.0 – Work In Take Process and should be followed in accordance to the rules set forth in that document as is beyond the scope of this procedure. For assistance on this process please contact the LABS IT Group.

- Regulatory approved line extension policies outlining specific eligibility criteria and rates of return exist outside of content represented in this document. Expenditures exercised under granted customer connection budgets are exempt from this policy.
- All LPCo Business Development projects which follow the stage gating process, are excluded from this document and should be governed under the APMM (Algonquin Project Management Methodology) policy.

5.0 Applications for Capital Expenditure Approval

All project submissions will have a completed financial assessment pursuant to the following thresholds:

- Safety and Mandated projects will require a completed CPE Form (Appendix A).
- Growth, Regulatory Supported, and Discretionary projects with a capital cost below \$100,000 will require a completed CPE Form
- Growth, Regulatory Supported, and Discretionary projects with a capital cost greater than \$100,000 will require a completed Business Case (Appendix B) as well as a CPE form. Note: the Financial Summary section of the CPE form will not be a requirement as this information is captured within the accompanied business case
- In the event that there is an unexpected, or emergency service disruption which requires immediate capital spend without sufficient time to follow the protocols noted in this policy, the capital spend can be spent on an emergency basis, however, within five (5) business days after the emergency event occurring a CPE form must be completed and submitted for approval pursuant to section 5.2.
- All Blanket Projects combining Safety & Mandated with Growth, Regulatory Supported, and Discretionary shall follow section 5.3.
- All Unplanned Projects will follow those rules outlined in section 5.4 below.
- In summary, the below table outlines the required documentation that will be discussed in sections 5.2 to 5.4:

Table 1: Capital Expenditure Documentation by Category

Category	Amount	CPE	Business Case	Project Close Out Report	Over Expenditure Application
Safety & Mandated	All amounts	Required	N/A	Required	When necessary
Growth, Regulatory Supported, Discretionary	<\$100,000	Required	N/A	Required	When necessary
Growth, Regulatory Supported, Discretionary	>100,000	Required (Cost Sections not required)	Required	Required	When necessary

Instructions for filling out the CPE Forms and Business Cases along with best practices for project estimation and key project metrics can be found in section 6.1 and 6.2 respectively.

For multiyear projects, budgets are defined annually. Every effort will be made to support the capital resources required for multiyear projects.

5.1 Communications of Approvals and Approval Limits

The approval limits for the creation of work orders within the LU financial systems are outlined in Table 2.

Table 2: Work Order Approval Limits

Location	Role	Work Order Value
Corporate	Exec Team Member (CEO, CFO, COO, Vice Chair)	Over 5,000,000
Corporate	Senior VP Operations	Up to \$5,000,000
Regional	Regional President	Up to \$3,000,000
Regional	State President / Senior VP / VP	Up to \$500,000
Regional	Senior Director/Director	Up to \$250,000
State	Senior Manager	Up to \$50,000
State	Manager / Staff (requisitioner/buyer)	Up to \$25,000

Approvals for 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.

5.2 Planned and Budgeted Safety and Mandated Projects

Expenditures categorized as Safety or Mandated in the approved budget are authorized to commence provided that each project has a completed and approved CPE Form. Project details must be entered into the Clarity financial system. Each project should be entered as follows:

- Blanket/Program Project work orders will be established annually to capture work that is part of the normal business cycle and utilizes standard construction materials, methods, and resources.
- The CPE Form will be utilized to summarize the scope, cost, and schedule for blanket projects. The form shall be updated annually as part of the Approval process.
- Specific Projects will be established and budgeted to reflect work of a unique, one-time project nature. A CPE Form will be required for such projects prior to commencement of construction.

Once a project has started, material changes to the timing or variances relative to initial cost will be captured and reported pursuant to section 7 of this policy. A material change to the timing of a project is defined as the movement of an in service date from the scheduled quarter and in to a new one.

5.3 Planned and Budgeted Growth, Regulatory Supported/Discretionary Projects

Projects included in the budget as Growth, Regulatory Supported or Discretionary groups and projected to have a cost of less than \$100,000 will require a completed CPE Form and follow a similar approval process to that of Safety and Mandated projects.

Projects included in the budget as Growth, Regulatory Supported or Discretionary groups and projected to have a cost of greater than \$100,000 will require a more robust review of the project to assess its scope, schedule and benefits.

For projects over \$100,000, a business case must be completed along with a CPE Form as outlined in section 5.0 above. A blanket Business Case can be used for projects where many smaller transactions collate in to one initiative. Similarly, a business case can be used for a portfolio of activities.

The Project Manager (or Champion) is responsible for the preparation of the business case documenting all aspects of the project including cash flow, Internal Rate of Return (IRR) calculation and schedule. After the business case is prepared, approvals are obtained pursuant to section 5.1 of this policy.

All projects in these categories will be assessed based on the following criteria in descending importance

- IRR
- Operational risk
- Business objectives

5.4 Unplanned Projects

Projects that are deemed unplanned will be those projects that were not allotted for in the annual capital planning process or approved within the final annual budget book document. The unplanned projects will be reviewed and approved pursuant to the same manner as noted in sections 5.1 to 5.3 of this document.

5.5 Variances to Budget or Schedule

Any project variances must be approved pursuant to approval limits noted in section 5.1 of this document.

Variances are defined as

- The overall out of scope project costs that draw the full approved estimated project contingency and overrun the respective cost category items outlined in the business case or CPE form; or
- Expected completion date extends beyond originally defined fiscal year impacting capital budgets or stated business case objectives, or
- Scope of deliverables is materially different from what was chartered and approved in the business case.

For multiyear projects, monetary variances are to be tracked both an annual and total project basis. Reporting is carried out pursuant to section 7.2 of this policy.

Material changes in schedule are defined as any delay resulting in a completion date outside of the original scheduled operating quarter. Regional leadership is responsible to manage delays and changes in cash flow to ensure financial metrics are sustained for their respective businesses. The Project Manager is accountable to communicate expected variances to regional leadership when identified, ideally before the variance has occurred. All schedule and cost variances are to be inputted into clarity to accurately reflect any scope growth or project delays.

No expenditure shall be made to cause a project to be over-budget without formal approval unless the delay results in adversely affecting the project or the operation of the company. In case of an emergency the Regional President should take appropriate action to preserve life and public safety.

6.0 Capital Expenditure Documentation

Samples of templates are provided in the appendices. Standalone versions of the documents can be separately obtained on the Community SharePoint.

6.1 Business Case

As noted in Table 1 of this document, both planned and unplanned projects classed as a Growth, Regulatory Supported or Discretionary projects and having a value greater than \$100,000 will require a completed business case.

It is the responsibility of the Project Manager, or Champion, to prepare the business case, with assistance from appropriate stakeholders (See Appendix B). The key sections found in the Business Case form and the general guidelines required to successfully complete this stage of the project planning process are outlined as follows:

- **Project ID#:** This represents the unique project code that defines the project during the budget cycle
- **Project Scope Statement:** This may include but is not limited to deliverables associated to the project, the acceptance criteria, what will not be included in the project, and any assumptions or constraints
- **Background:** This section shall:
 - Describe the current operational asset and risk of not carrying out the respective capital project.
 - Describe any related project previously approved for this project and any funds previously spent that are related to this proposal.
 - Describe the decision criteria used in evaluating the alternatives. i.e. Work process improvement, system improvement, etc.
- **Recommendation/Objective:** This section should look to answer why the Project Scope Statement is looking to be resolved along with the recommended actions or purpose the investment serves for the business (i.e. the asset has reached the end of its useful life, it provides the opportunity to increase site profitability, improves safety, etc.).
- **Alternatives/Options:** Describe reasonably viable alternatives and associated analysis (i.e. pro/con, what if, scenario, etc.), where applicable.
- **Financial Assessment/Cost Estimates:** This section should outline a summary of the project cash flows as broken down in the Business Case template. In addition, the Unlevered Rate of Return (IRR) and basis of estimate will be required in order to address the reasonability of the estimate. Examples of estimating techniques include but are not limited to bidding the scope of work, internal top-down estimate based on historical data points and expert judgement, and parametric estimating techniques. The risk profile of the estimating technique utilized can be summarized in the AACE Estimate Class table below.
- In summary, as the maturity level of the project increases the accuracy of the estimate improves, meaning there is less risk in the variability of the scope. The below Table

may be used as a guideline and or reference for projects greater than \$10M in value in estimating project contingencies:

Table 3: AACE Estimation Class (Policy 18R-97 P. 3)

Estimate Class				
(Indicate AACE class; estimate should achieve a Class 3 when possible)				
Estimate Class	Maturity Level (% of complete definition)	End Usage (typical purpose of estimate)	Methodology (typical estimating method)	Expected Accuracy Range (high/low)
Class 5	0% to 2%	Concept screening	Capacity factored, parametric models, judgement	L: -20% to -50% H: +30% to +100%
Class 4	1% to 15%	Study or feasibility	Equipment factored of parametric models	L: -15% to -30% H: +20% to +50%
Class 3	10% to 40%	Budget authorization or control	Semi-detailed unit costs with assembly level line items	L: -10% to -20% H: +10% to +30%
Class 2	30% to 75%	Control or bid/tender	Detailed unit cost with forced detailed take-off	L: -5% to -15% H: +5% to +20%
Class 1	65% to 100%	Check estimate or bid/tender	Detailed unit cost with detailed take-off	L: -3% to -10% H: +3% to +15%

Note. Reprinted from "Cost Estimate Classification System - As Applied in Engineering, Procurement, and Construction for the Process Industries", by Larry R Dysert AACE International Practice No 18R-97. Retrieved from Rev March 1, 2016.

- **Schedule:** When available a high level logic driven schedule should be produced (via a project planning software tool where applicable) in order to address the key milestone dates
- **Risk Assessment:** Describe the inherent risk associated with not carrying out this project, including impact on the utility customer.

In summary, the Project Managers and Champions are required to exercise professional judgment in the preparation of businesses cases. Information presented and the effort invested in a business case should be tempered against the magnitude of the request. In all cases the document should always seek to provide full and accurate details to support sound decision making.

6.2 Capital Project Expenditure Form

A CPE form is required to be completed in full for all projects under \$100,000 as this document triggers the creation of the job within the accounting software tool.

If a project has a value greater than \$100,000 a business case is required to be submitted in conjunction with the CPE. In these instances, the Financial Summary section of the CPE is skipped as these data items will be covered in the business case.

6.3 Change Orders

Should an approved project require a spend change outside of the original scope of work, a change order form (Appendix D) will need to be completed and approved on a two tier system:

- Each change order will require approval subject to the approval limits pursuant to the Approval Limits of Authority Policy owned and amended from time to time by the corporate procurement group; and

- If the cumulative amount of change orders plus the original approved project cost now exceed the approval limit of the initial approver, an approver from the next approval threshold will be required.
 - *For instance, for a \$400,000 dollar project the payment approval listing would require an initial approval from Senior Director or Director. If subsequent to the initial approval the cumulative change orders total \$110,000, that would bring the total project cost to \$510,000 and now also require an approval from the Regional President (LU).*

It is important to note, that in certain circumstances, the Local Commissions requirements will dictate the threshold for the required submission of the Change Order Form, however, it is under the discretion of the project team to manage the change for the project pursuant to the change order form outlined in this document.

6.4 Project Closeout Report

As a vital aspect of any project, closeout is the physical turnover of deliverables from the project team to the operational group. Every project must complete this step irrespective of project size. A template is provided in Appendix E.

All capital projects require a formal close-out to be conducted; multiyear projects do not require annual close out reports. The report will be prepared by the Project Manager in consultation with Functional Leads or regional Subject Matter Experts. Closeouts must be signed off by the Project Sponsor and are due within 90 days of the project completion date.

7.0 Reporting

The reporting on capital projects is carried through three forms:

- Monthly Operations Review
- Monthly Capital Project Reporting
- Monthly Cash Spend Reporting

7.1 The Monthly Operations Review

On a monthly basis, the Financial Planning & Analysis (FP&A) schedule a meeting to review both regional operating performance and Capital Expenditure variances by region.

7.1.1 Stakeholders Attending the Meeting

- Vice President, Senior Manager, Manager, and the Senior Analyst from FP&A Oakville
- Senior CAPEX Project Analyst, and Director of Capital Planning
- Senior Vice President of Operations
- Regional Presidents (Optional)
- Regional Finance heads

7.1.2 Standing Agenda

The following is the core agenda for each meeting by Regional Presidents and Finance Heads:

- 1.0 Discussion on Major Regional Based Initiatives
- 2.0 Discussion on Health and Safety Results (YTD)
 - 2.1 Recordable Incident Rate (RIR)
 - 2.2 Lost Time Incident Rate (LTIR)
 - 2.3 Motor Vehicle Accident Rate (MVAR)

3.0 Financial Performance

- 3.1 Review of Income Statements variances
- 3.2 Distribution Business Group Profit Bridge
- 3.3 Overall Profit by Line of Business and State
- 3.4 Capex variance discussions on overall regional variances

7.2 Monthly Capital Project Reporting

The definition of a major capital project are those projects that have an accrual accounting annual spend of greater than \$1M. On a monthly basis a meeting will be held by each regional engineering teams to review project status. Project status will be noted in the Monthly Capital Project Reporting template (see Appendix C). The report and resultant meeting will address a brief discussion on risk, cost, and schedule. Key aspects of the report will cover: Subsequent to the meeting, the engineering teams shall share the monthly report to the regional accounting teams for inclusion in the monthly management report at the regional accounting team's discretion.

- Estimate at Completion (EAC)
 - EAC represents the latest contract values, approved or unapproved changed orders, and any potential changes
- Budget: Includes the annual board approved budget as outlined per the budget book
- Actual Cost (AC) including:
 - Year to Date (YTD); and
 - Project to Date (PTD) accrual accounting values
- Color coded matrix outlining status of risk, schedule; and cost.
 - Green - no issues
 - Yellow - potential issues
 - Red - major issues

7.3 Monthly Cash Spend Reporting

On a monthly basis after the Monthly Operations meeting, the capital planning group will prepare a Clarity based report outlining the new accruals forming the beginning and ending accrual by month for the current year. The regional finance heads will be responsible for populating this report with actual cash spend to date along with a project based estimate to complete highlighting the monthly major project cash payment impacts caused in the respective monthly update.

Policy/Procedure: Capital Expenditures –Planning and Management

APPENDIX A: Capital Project Expenditure Form

Project Name:			
Financial Work Order (FWO):		Project ID #:	
Requesting Region or Group:		Date of Request (MM/DD/YY):	Click to select date
Project Sponsor:		Project Start Date:	
Project Lead:		Project End Date:	
Prepared by:		Requested Capital (\$)	
Planned or Unplanned Projects:	<input 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 type="checkbox"/> Discretionary		

Details of Request**Project description**

--

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

--

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

--

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*

--

What alternatives were evaluated and why were they rejected?

--

Policy/Procedure: Capital Expenditures –Planning and Management

--

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

--

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

--

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

--

Complete the Financial Summary table only if:

- Project is less than \$100,000

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:	<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 (\$)			

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Approvals and Signatures

Approved By:				
Role	Approval Authority 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			Click here to enter a date.
State President / Senior VP / VP:	Up to \$500,000			Click here to enter a date.
Regional President:	Up to \$3,000,000			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.

APPENDIX B: Business Case Template

Project Overview			
Project Name:		Date Prepared:	Click here to enter a date.
Project ID#:	Click here to enter text.	Cost Estimate:	
Project Sponsor:	Click here to enter text.	Project Start Date:	Click here to enter a date.
Project Lead:	Click here to enter text.	Project End Date:	Click here to enter a date.
Prepared By:	Click here to enter text.	Planned or Unplanned Projects:	<input 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 type="checkbox"/> Discretionary		
Project Scope Statement (Insert the scope of work, major deliverables, assumptions, and constraints)			
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)			
Alternatives/Options (Describe all reasonably viable alternatives. Discuss the viability of each and provide reasons if rejected)			
Financial Assessment/Cost Estimates (Double click embedded excel file to update; include contingency allowance in excel file)			

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Next Anticipated Test Year	Click to select a date	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 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)	\$ -	\$ -	\$ -	\$ -	\$ -
Materials (including consumables)	\$ -	\$ -	\$ -	\$ -	\$ -
Equipment (rental equipment)	\$ -	\$ -	\$ -	\$ -	\$ -
Contractor/Subcontractor (including consultants)	\$ -	\$ -	\$ -	\$ -	\$ -
AFUDC (\$)					

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

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
<div style="display: flex; justify-content: space-between;"> Click here to enter a date. Click here to enter a date. </div>

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

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)

Policy/Procedure: Capital Expenditures –Planning and Management

Approvals and Signatures

Approved By:				
Role	Approval Authority 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			Click here to enter a date.
State President / Senior VP / VP:	Up to \$500,000			Click here to enter a date.
Regional President:	Up to \$3,000,000			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.

APPENDIX C: Monthly Capital Project Reporting

Policy/Procedure: Capital Expenditures –Planning and Management

Monthly Capital Project Reporting
For Period End:

		Previous Year			Current Year					Overall Project Metrics										
Budget #	FWO/Project #	A Budget	B Actual Costs	C Variance (B - A)	D Clarity Approved Budget	E Actual Costs	F Estimate to Complete	G Total Estimate at Completion Cost (E+F)	H Projected Variance (E + F - D)	I Total Project Budget	J Total Project Estimate at Completion B + G + [2019 if needed]	K Total Project Variance (J - I)	Project Manager	Percent Complete	Scope	Schedule	Cost	Risks	Quality	Comments
TR-124	SMAPLE	\$ 1,000,000	\$ 1,000,000	\$ -	\$ 1,000,000	\$ 1,000,000	\$ 50,000	\$ 1,050,000	\$ 50,000	\$ 2,000,000	\$ 2,050,000	\$ 50,000	John Doe	100%	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	E 100% complete, P 100% complete, C 100% complete
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				\$ -				\$ -	\$ -	\$ -	\$ -	\$ -			<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	
Regional Total		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -								

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APPENDIX D: Change Order Form

Project Overview																																	
Reason for Change: (Please Provide a brief explanation for the cause of the change order)																																	
Project ID:	Click here to enter text.	Project Name:	Click here to enter a date.																														
Change Order Name:	Click here to enter text.	Date Prepared:	Click here to enter a date.																														
Change Order #:	Click here to enter text.	Financial Work Order (FWO):																															
Project Sponsor:	Click here to enter text.	Revised Start Date:	Click here to enter a date.																														
Project Lead:	Click here to enter text.	Revised End Date:	Click here to enter a date.																														
Prepared By:	Click here to enter text.	Change Type	<input type="checkbox"/> In Scope <input type="checkbox"/> Out of Scope																														
Project Contingency Available?	<input type="checkbox"/> Yes <input type="checkbox"/> No	If No is Selected, Please specify source of funds																															
Financial Assessment/Cost Estimates																																	
(Double click embedded excel file to update; include contingency allowance in excel file)																																	
<table border="1"> <thead> <tr> <th>Category</th> <th>Original Project Value</th> <th>Previous Approved Changes</th> <th>Current Change Order Amount</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Internal Labour (including labour and travel)</td> <td>\$ -</td> <td>\$ -</td> <td>\$ -</td> <td>\$ -</td> </tr> <tr> <td>Materials (including consumables)</td> <td>\$ -</td> <td>\$ -</td> <td>\$ -</td> <td>\$ -</td> </tr> <tr> <td>Equipment (rental equipment)</td> <td>\$ -</td> <td>\$ -</td> <td>\$ -</td> <td>\$ -</td> </tr> <tr> <td>Contactor/Subcontractor (including consultants)</td> <td>\$ -</td> <td>\$ -</td> <td>\$ -</td> <td>\$ -</td> </tr> <tr> <td>Total</td> <td>\$ -</td> <td>\$ -</td> <td>\$ -</td> <td>\$ -</td> </tr> </tbody> </table>				Category	Original Project Value	Previous Approved Changes	Current Change Order Amount	Total	Internal Labour (including labour and travel)	\$ -	\$ -	\$ -	\$ -	Materials (including consumables)	\$ -	\$ -	\$ -	\$ -	Equipment (rental equipment)	\$ -	\$ -	\$ -	\$ -	Contactor/Subcontractor (including consultants)	\$ -	\$ -	\$ -	\$ -	Total	\$ -	\$ -	\$ -	\$ -
Category	Original Project Value	Previous Approved Changes	Current Change Order Amount	Total																													
Internal Labour (including labour and travel)	\$ -	\$ -	\$ -	\$ -																													
Materials (including consumables)	\$ -	\$ -	\$ -	\$ -																													
Equipment (rental equipment)	\$ -	\$ -	\$ -	\$ -																													
Contactor/Subcontractor (including consultants)	\$ -	\$ -	\$ -	\$ -																													
Total	\$ -	\$ -	\$ -	\$ -																													
Updated Unlevered Internal Rate of Return:	Click here to enter text.																																
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) Click here to enter text.																																
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)																														
Click here to enter a date.	Click here to enter a date.		Click here to enter a date.																														
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Click here to enter a date.	Click here to enter a date.	Click here to enter a date.
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Click here to enter a date.	Click here to enter a date.	Click here to enter a date.
Click here to enter a date.	Click here to enter a date.	Click here to enter a date.

Approvals and Signatures

Approved By:				
Role	Approval Authority 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			Click here to enter a date.
State President / Senior VP / VP:	Up to \$500,000			Click here to enter a date.
Regional President:	Up to \$3,000,000			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.

APPENDIX E: Project Closeout Report

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Requesting Region or Group:		Date of Closeout (MM/DD/YY):	Click to select date
Project Name:			
Requesting Region:		Sponsor (Name):	
Project Champion:		Project Champion	
Project Status	<input type="checkbox"/> In Service <input type="checkbox"/> Complete <input type="checkbox"/> Closed		
Project Start Date:	Click to select date	Project Completion Date:	Click to select date
Requested Capital (\$)		Expenditure Included in Approved Budget?	<input 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		
	Project Sponsor		
	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 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 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 type="checkbox"/> No <input type="checkbox"/>
2.4	Has the final unitization estimate been provided to Property Accounting?	Yes <input type="checkbox"/> No <input type="checkbox"/>
2.5	Do you agree the project should be closed? If no, please explain:	Yes <input type="checkbox"/> No <input type="checkbox"/>

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Item	Question	Response
	Rate your level of satisfaction with regards to the project outcomes listed below	
2.5	Project Quality	/5
2.6	Product and/or Service Performance	/5
2.7	Scope	/5
2.8	Cost (Budget)	/5
2.9	Schedule	/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 type="checkbox"/> No <input type="checkbox"/>	
3.3	Were audits (e.g., project closeout audit) completed and results documented for future reference?	Yes <input 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		<input 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		<input type="checkbox"/> Electronic <input type="checkbox"/> Manual
3.4d	Status Reports		<input 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

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

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Name	Role	Type (e.g., Contractor, 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 (\$)			
External Costs (\$)			
Internal Costs (\$)			
Other (\$)			
AFUDC (\$)			

Policy/Procedure: Capital Expenditures –Planning and Management

Total Project Costs (\$)			
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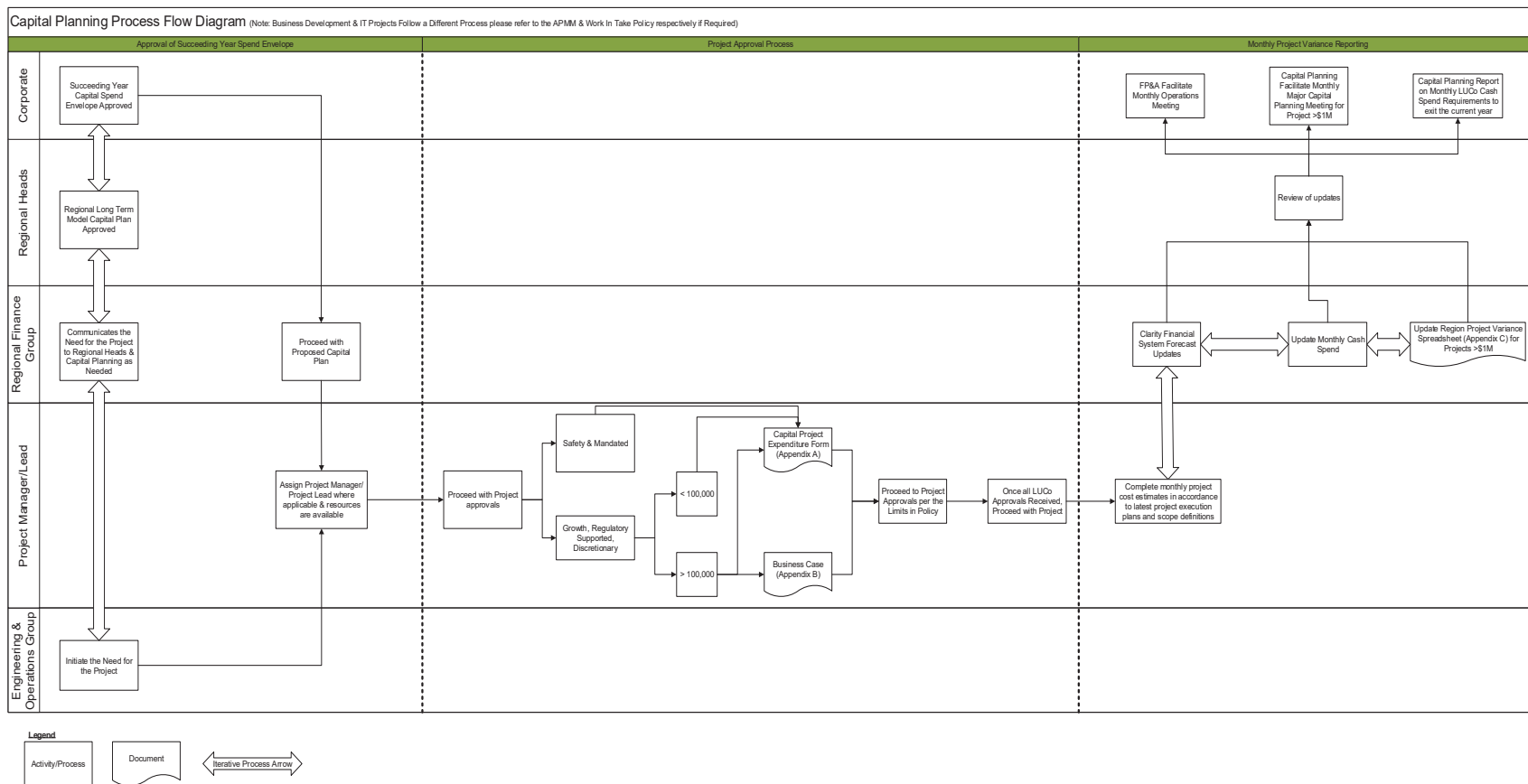
Reasons for Variance	Impact
Cause 1	\$
Cause 2	\$
Cause 3	\$

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

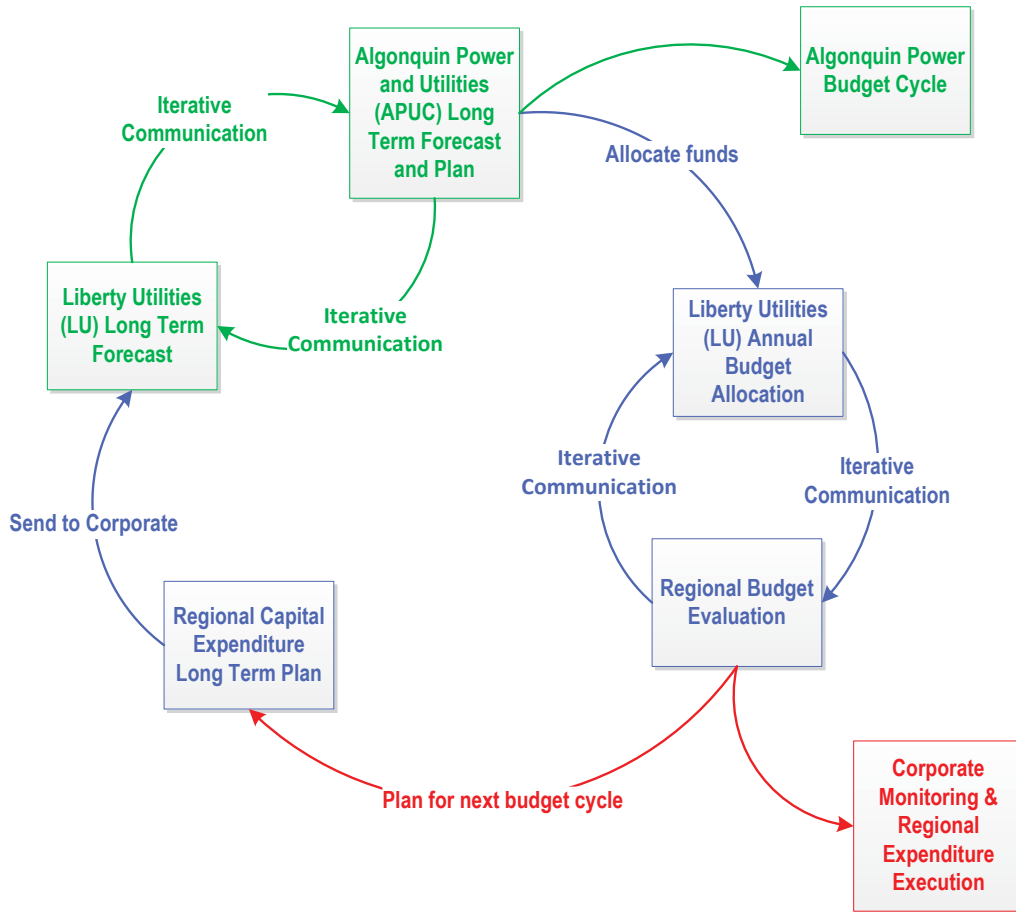
Registry of All Job Codes (Regional, Corporate, LABs)

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APPENDIX F: Process Flow Diagram



APPENDIX G: Capital Budget Cycle



Feedback Comment Tracker (DRAFT DOCUMENT PURPOSES ONLY)

Feedback Group	Feedback Individual	Submitted for Feedback	Sign-off Received
Corporate Procurement	L. DeCamaret R. Borin	8/15/18	8/16/18
Internal Audit	D. Gilpin C. Spriggs	8/17/18	8/23/18
SVP Operations	G. Tremblay	9/19/18	9/20/18
Finance – West	C. Alario	10/16/18	10/16/18
Finance – Central	T. Sanderson	10/16/18	10/16/18
Finance - East	P. Dawes	10/16/18	10/16/18
Engineering – West	R. Dalton (CA)	10/16/18	10/16/18
Engineering – West	J. Matthews (AZ)	10/16/18	10/16/18
Engineering – Central	B. Mertens	10/16/18	10/16/18
Engineering – East	G Munroe (MA)	10/16/18	10/16/18
Engineering – East	R MacDonald (NH)	10/16/18	10/16/18
Engineering – East	H. Woods (GA)	10/16/18	10/16/18
Regulatory – West	E. Jackson	10/16/18	10/16/18
Regulatory – Central	C. Krygier	10/16/18	10/16/18
Regulatory – East	V Duffy (MA)	10/16/18	10/16/18
Regulatory – East	S Mullen (NH)	10/16/18	10/16/18
Regulatory – East	P Bouxsein (GA)	10/16/18	10/16/18
Regulatory – Corporate	G. Girardi	10/16/18	10/16/18
Regulatory – Corporate	P Eichler	10/16/18	10/16/18
Regional Heads – West	G Sorensen	10/16/18	10/16/18
Regional Heads – Central	D Swain	10/16/18	10/16/18
Regional Heads – East	J Sweeney	10/16/18	10/16/18
Treasurer	A Kacprzak		11/29/2018
CFO	D Bronicheski		01/02/2019

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

DE 19-064
Distribution Service Rate Case

Staff Data Requests - Set 9

Date Request Received: 9/26/19
Request No. Staff 9-3

Date of Response: 10/10/19
Respondent: Joel Rivera
Anthony Strabone
Heather M. Tebbetts

REQUEST:

Re: Staff 1-2 and Attachment Staff 1-3. For each of the projects and plant additions listed below for 2016, 2017, and 2018 please provide all copies of all documentation required under the Liberty Way Policy & Procedures for Capital Expenditures including start dates, Capital Project Expenditure Form (CPE), completed Business Case, Project Close Out Report, Change Order, Over Expenditure Application, Blanket Program Project work orders, Monthly Capital Project Report, Monthly Cash Spend Reporting, and Monthly Operations Review including meeting minutes and all reports and analysis utilized or produced by the Financial Planning & Analysis group in relation to CAPEX variance discussions:

Capital Projects GSE CY 2016

		<u>Budget</u>	<u>Actual</u>	<u>Variance</u>
8830-C42851	Enhanced Bare Conductor Replacement	\$500,000	\$972,680	-\$472,680
8830-CNN025	IT Systems & Equipment Blanket	\$25,000	\$914,660	-\$889,660
8830-CNN014	Dist-Damage & Failure Blanket	\$800,000	\$1,940,363	-\$1,040,363
8830-CNN015	Dist-Reliability Blanket	\$400,000	\$1,124,162	-\$724,162
8830-CNN017	Dist-Asset Replace Blanket	\$400,000	\$948,224	-\$548,224

Capital Projects GSE CY 2017

		<u>Budget</u>	<u>Actual</u>	<u>Variance</u>
8830-1705	Dist-Subs Blanket	\$10,000	\$92,608	-\$102,608
8830-C18603	Bare Conductor Replacement	\$1,300,00	\$1,784,038	-\$484,038
8830-C18620	Charlestown 32 Dline	\$316,992	\$500,281	-\$183,289
8830-C36424	Mt. Support New 16L3 Feeder	\$275,000	\$467,936	-\$192,936
8830-1867	Rockingham Sub Transmission	\$50,000	\$175,504	-\$125,504
8830-C42921	Install Splices 6L2 & 6L4	\$111,562	\$203,305	-\$91,743*

*Note: In response to Staff 6-37, Liberty submitted the Business Case and CPE for this project; however, all additional documentation referenced in the above data request must be provided.

Capital Projects GSE CY 2018

		<u>Budget</u>	<u>Actual</u>	<u>Variance</u>
8830-1832	Replace 6L2 No. Main Hanover	\$1,100,000	\$1,295,593	-\$195,593
8830-C42930	Install Service to Tuscan Village	\$400,000	\$674,260	-\$274,260
8830-C18620	Charlestown 32 Dline	\$250,000	\$354,751	-\$104,750
8830-1827	IT Systems Allocations-Corp	\$270,500	\$361,643	-\$91,142
8830-1830	Misc. Capital Imprv. Londonderry	\$35,000	\$60,650	-\$25,649
8830-1864	Rockingham Substation	\$200,000	\$1,568,870	-\$1,368,869**
8830-PE	Preliminary Engineering	\$0	-\$1,497,946	\$1,497,945
8830-1865	Rockingham Sub Transmission	\$300,000	\$575,354	-\$275,354**
8830-C36426	SCADA Distribution & Auto.	\$90,000	\$171,930	-\$81,930

**Note: In response to Staff 5-14, Liberty submitted the Business Cases and CPE's for these projects; however, all additional documentation referenced in the above data request must be provided.

RESPONSE:

Please see the following:

Attachment Staff 9-3.1	2016 business cases and project close out forms for the requested projects
Attachment Staff 9-3.2	2017 business cases and project close out forms for 8830-1864 and 8830-1865. All other forms were provided in Attachments OCA 2-14.d.2, OCA 2-14.d.3, and OCA 2-14.d.4.
Attachment Staff 9-3.3	2018 business cases. All other forms were provided in Attachments OCA 2-14.d.5 and OCA 2-14.d.6. <ul style="list-style-type: none"> - 8830-C18620 does not have a business case because the project was completed in 2017, but charges came through in 2018. - A business case is not created for 8830-PE because this is a project number for preliminary engineering for projects that may come about during the year.
Attachment Staff 9-3.4	2016 meeting agendas
Attachment Staff 9-3.5.xlsx	Final 2016 Monthly Capital Report
Attachment Staff 9-3.6	2017 meeting agendas
Attachment Staff 9-3.7.xlsx	Final 2017 Monthly Capital Report
Attachment Staff 9-3.8	2018 meeting agendas
Attachment Staff 9-3.9.xlsx	Final 2018 Monthly Capital Report



Liberty UtilitiesSM
WATER GAS ELECTRIC

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

PROJECT TITLE: Misc Capital Imprvmnts GSE Facilities Londonderry

PROJECT SPONSOR: **RICHARD FOLEY**

PROJECT LEAD: **DOUG DORN**

DATE: **01/01/2018**

PROJECT ID: 8830-1830

BUSINESS PLAN NUMBER:

Business Case

RECOMMENDATION:

This project is a Blanket project to provide funding for the Liberty Utilities (Granite State Electric) Corp. portion of various capital facility improvements of the buildings and grounds located at 15 Buttrick Rd Londonderry NH during 2018

BACKGROUND

This project is an annual request to provide Liberty Utilities (Granite State Electric) Corp's funding for any capital needs which may be required to support the facility infrastructure located 15 Buttrick Rd Londonderry NH 03053. This can include the purchase of office furnishings, replacement of HVAC or roofing systems to ensure the integrity of the building. Additionally, this budget will be used to support capital requests for improvements based on safety audits performed at this location.

The key drivers for this project include :

- Risk mitigation
- Employee and Customer Safety
-

ALTERNATIVES/OPTIONS

None

FINANCIAL ASSESSMENT

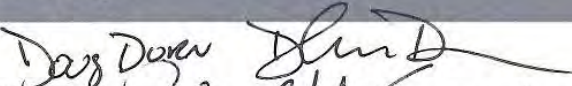
This request is based on the historical spending and forecasting of capital improvements identified in prior facilities audits.

RISK ASSESSMENT AND QUALITATIVE EVALUATION

IMPLEMENTATION/ACTION PLAN

These expenditure are expected to take place over 2018

REVIEWED BY:

DIRECTOR/VP:  12/4/17

FINANCE:  12/18/17

Business Case



LIBERTY UTILITIES - CAPITAL PROJECT EXPENDITURE APPLICATION

DIVISION/COMPANY: Capital / Granite State	HOME OFFICE REF #: 8830-1830
PROJECT TITLE: Misc Capital Imprvmnts GSE Facilities Londonderry	EXPECTED PROJECT TOTAL: \$25,000
PROJECT TYPE (circle one): System Maint / System improvement / 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; margin: 5px 0;"> <input type="checkbox"/> Growth <input checked="" type="checkbox"/> Improvement Upgrades <input type="checkbox"/> Infrastructure Replacement </div>	
PROJECT DESCRIPTION & LOCATION: Infrastructure and capital site improvements required to maintain the building envelope and systems required to operate the Londonderry facility. This funding will also address capital improvements identified in company safety audits of the building and grounds. This represents the portion assigned to Liberty Utilities (Granite State Electric) Corp. for 2018.	
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. Permitting may be required dependent upon the particular jobs that are prioritized for 2018	
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? No	

<p>IF YES, PLEASE DETAIL THE SPECIFIC ASSETS THAT WILL BE REMOVED:</p> <ol style="list-style-type: none"> Original Cost of Plant to be removed (if known): Not known What is the replacement cost of the plant being removed (if original cost not known)? Not known Original Work Order of Plant to be removed (if known): Not known Is the Plant being removed reusable? No What is the year of original installation of the plant being removed? Varied 				
<p>PROPOSED SOURCE OF FUNDS (COMPANY, DEVELOPER LXA, HUF, ETC.)</p> <p>The 2018 Approved Capital Budget.</p>				
<p>CATEGORY & STATUS OF PROJECT</p> <p>(tick as appropriate)</p>		<p>FINANCIAL SUMMARY</p> <p>NEXT ANTICIPATED TEST YEAR</p> <p>Rate Recovery (over 18 months)</p> <p>Will this, and other approved projects, cause a rate shock</p> <p>Have Health & Safety implications been considered?</p> <p>Has Environmental Compliance review been done?</p> <p>Has Tech Services review been done?</p>		
<p>Safety</p> <p>Mandated</p> <p>Impending Regulatory Obligation</p> <p>Rate Recovery-Immediate Return</p> <p>Rate Recovery (3 to 6 months)</p> <p>Rate Recovery (6 to 12 months)</p> <p>Rate Recovery (12 to 18 months)</p>		<p>2018</p> <p>X</p> <p>No</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>		
<p>Was this Capital Expenditure included in the Annual Budget?</p>		<p>Yes</p>		
<p>ANALYSIS OF PROJECT VALUE</p> <p>Design/Engineering</p> <p>External contractor costs</p> <p>Internal costs</p> <p>Other costs (contingency)</p> <p>Working capital requirements</p> <p>Project Total Cost</p>		<p>CAPITAL EXPENDITURE BUDGET UTILIZATION</p> <p>(A) Capital budget</p> <p>(B) Over (under) run vs. Budget</p> <p>(C) (A+B) Total Estimated Project Cost</p> <p>(D) Less Approved Spend to Date</p> <p>(E) Less Future Approval Requests</p> <p>(F) (C-D-E) Approval Amount Requested (current application)</p>		
<p>\$25,000</p>		<p>Authorized Amount</p> <p>To be spent in:</p> <p>Current Year</p> <p>Future Years</p> <p>\$25,000</p> <p>\$25,000</p>		
<p>Requesting Party</p> <p>Director</p> <p>President— LU East</p> <p>Director of Finance</p> <p>CFO</p> <p>CEO</p>		<p>Name</p> <p>Richard Foley</p> <p>Tisha Sanderson</p>		
<p>Signature</p> <p>Date</p>		<p>12-4-17</p> <p>12/18/17</p>		

Attachment:



Liberty UtilitiesSM
WATER GAS ELECTRIC

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

PROJECT TITLE	Replace 6L2 direct buried cables No Main St Hanover
PROJECT SPONSOR:	Charles Rodrigues
PROJECT MANAGER:	Anthony Strabone
DATE:	10/8/17
PROJECT ID	8830-1832
BUSINESS PLAN NUMBER:	(Assigned by Corporate Finance)

Business Case

RECOMMENDATION:

- It is recommended to replace approximately 1600ft of 500 XLPE AL cables along North Main St in Hanover NH. The direct buried cables will be replaced with a duct lay cable system.
- This project is estimated at \$225,000 and will take place in 2018.

OBJECTIVE(S)

Replace approximately 1600ft of direct buried cables along No Main St.

BACKGROUND

The Costs associated with this project is to improve cable reliability and address the forward risk of a cable outage.

The Hanover 6L2 feeder supplies Dartmouth College West Campus and provides backup supply to the Dartmouth College North Campus.

The existing underground cable is 500 kCMIL Al XLPE of 1970's vintage and is installed in a direct buried arrangement. The cross linked polyethylene (XLPE) insulated cables of this vintage have a high failure rate. Voids and contamination in the insulation and shields as well as other design and manufacturing deficiencies, leads to voltage stress concentrations within the cable. These voltage stresses, combined with moisture creates water trees. These water trees degrade insulation over time, ultimately causing the cables to fail.

ALTERNATIVES/OPTIONS

None

FINANCIAL ASSESSMENT

None

RISK ASSESSMENT AND QUALITATIVE EVALUATION

None

IMPLEMENTATION/ACTION PLAN

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

REVIEWED BY:

PROJECT MANAGER:

Anthony Strabone

DIRECTOR/VP:

CHARLES RODRIGUES

FINANCE:

Jisha Sanderson



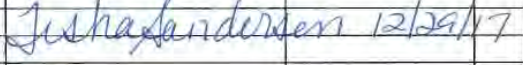
12/29/17

Business Case



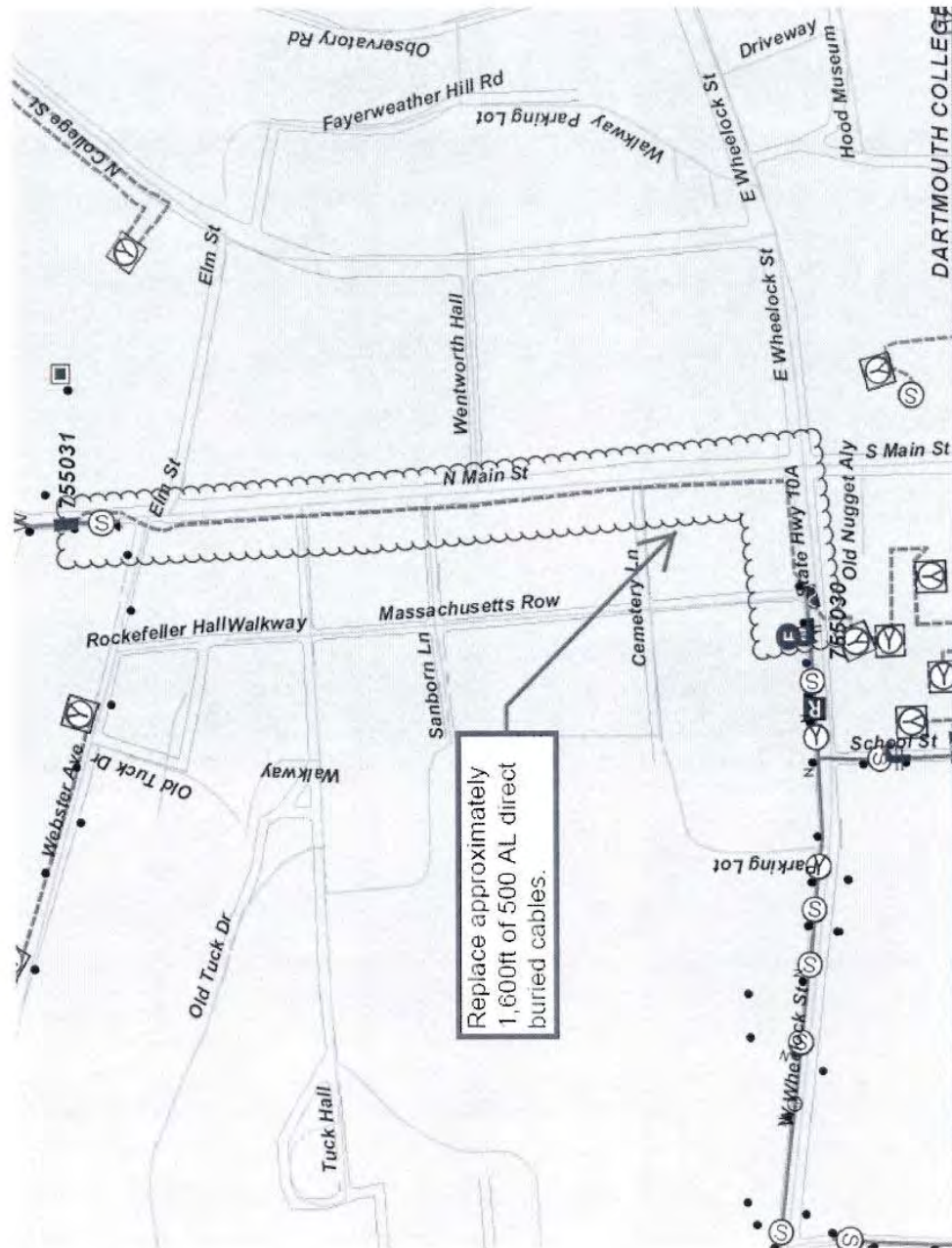
LIBERTY UTILITIES - CAPITAL PROJECT EXPENDITURE APPLICATION

DIVISION/COMPANY: Capital / Granite State Electric Co.		HOME OFFICE REF #: 8830-1832	
PROJECT TITLE: Replace 6L2 direct buried cables No Main St Hanover		EXPECTED PROJECT TOTAL: \$225,000	
PROJECT TYPE (circle one): System Maint / <u>System Project</u> / Growth / LXA			
PROJECT START DATE: 1/1/18		PROJECT END DATE: 12/1/18	
CURRENT UTILITY EARNINGS STATUS:		JOB COST/FWO #:	
Type of Capital Project: <div style="border: 1px solid black; padding: 5px;"> <input type="checkbox"/> Growth <input type="checkbox"/> Improvement Upgrades <input checked="" type="checkbox"/> Infrastructure Replacement </div>			
PROJECT DESCRIPTION & LOCATION: Replace the direct buried cables along No Main St due to concerns with asset condition.			
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. Underground equipment 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. \$225,000			
WILL THERE BE ASSETS GREATER THAN \$5,000 THAT ARE CURRENTLY IN SERVICE REMOVED AS A RESULT OF THIS PROJECT? yes 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? Not known			

PROPOSED SOURCE OF FUNDS (COMPANY, DEVELOPER LXA, HUF, ETC.)			
2018 Approved Capital Budget			
CATEGORY & STATUS OF PROJECT (tick as appropriate)		FINANCIAL SUMMARY	
		NEXT ANTICIPATED TEST YEAR	2018
		Rate Recovery (over 18 months)	X
Safety		Will this, and other approved projects, cause a rate shock	No
Mandated	X		
Impending Regulatory Obligation			
Rate Recovery-Immediate Return		Have Health & Safety implications been considered?	
Rate Recovery (3 to 6 months)		Has Environmental Compliance review been done?	
Rate Recovery (6 to 12 months)		Has Tech Services review been done?	
Rate Recovery (12 to 18 months)			
Was this Capital Expenditure included in the Annual Budget?		Yes	What amount was budgeted? \$225,000
ANALYSIS OF PROJECT VALUE		CAPITAL EXPENDITURE BUDGET UTILIZATION	
Design/Engineering		Authorized Amount	To be spent in:
Material			Current Year
External contractor costs			Future Years
Internal costs		(A) Capital budget	\$225,000
Other costs (contingency)		(B) Over (under) run vs. Budget	
Working capital requirements		(C) (A+B) Total Estimated Project Cost	
		(D) Less Approved Spend to Date	
		(E) Less Future Approval Requests	
Project Total Cost	\$225,000	(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 of Operations	Craig Jennings		
President - LU East			
Director Finance	Tisha Sanderson		12/29/17
CFO			
CEO			

Business Case

Attachment





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

PROJECT TITLE	Rockingham Substation
PROJECT SPONSOR:	Charles Rodrigues
PROJECT MANAGER:	Anthony Strabone
DATE:	02-16-18
PROJECT ID	8830-1864
BUSINESS PLAN NUMBER:	(Assigned by Corporate Finance)

Business Case

RECOMMENDATION:

- Construct a new 115-13.2 kV Substation with eight (8) feeder positions at Tuscan Village.

OBJECTIVE(S)

- Perform site and civil detailed design engineering for a new 115-13.2kV Substation (Rockingham Substation) at Tuscan Village.

BACKGROUND

- Construction of the a new 115-13.2 kV Substation is part of the recommended plan in the Salem Area Study perform by Control Point Technologies in 2017, with input and acceptance by Liberty Utilities.
- The Salem Area will experience more than expected load growth over the next few years due to the recent purchase of the Rockingham Race Track. The developer, known as Tuscan Village, plans to redevelop this land which will result in an increase of Liberty's Salem Area Load by 13 MW.
- The supply and distribution system serving the Salem service territory is expected to be loaded beyond the capability of the equipment to reliably serve the load under LU planning and loading criteria during contingent system configurations.
- To mitigate these risks, along with other capital invests in the Salem Area, the plan recommends that Liberty Constructs a new 115 -13.2 KV Substation. This new substation will be served by two (2) new 115 kV Transmission lines originating at Liberty's Golden Rock Substation.

ALTERNATIVES/OPTIONS

- Other alternatives were considered and can be reviewed in Salem Area Study Report.

FINANCIAL ASSESSMENT

- Initial estimate is \$100,000 to perform detailed civil and site engineering/design work for the installation of this station. Once detailed engineering is complete, the estimated cost of this project will be revised.

RISK ASSESSMENT AND QUALITATIVE EVALUATION

- None

Business Case

IMPLEMENTATION/ACTION PLAN

Engineering to be performed in 2018. Construction will take place under an individual job number in future years.

REVIEWED BY:

PROJECT MANAGER: Anthony Strabone

DIRECTOR/VP: CHARLES A. RODRIGUES

FINANCE:



LIBERTY UTILITIES - CAPITAL PROJECT EXPENDITURE APPLICATION

DIVISION/COMPANY:	Capital / Granite State Electric Co.	HOME OFFICE REF #: 8830-1864
PROJECT TITLE:	Electric Vehicle Charging Stations	EXPECTED PROJECT TOTAL: \$ 100,000
PROJECT TYPE (circle one):	System Maint / <u>System Project</u> / Growth / LXA	
PROJECT START DATE:	1/1/2018	PROJECT END DATE: 12/31/2018
CURRENT UTILITY EARNINGS STATUS:		JOB COST/FWO #:
Type of Capital Project: <input type="checkbox"/> Growth <input type="checkbox"/> Improvement Upgrades <input checked="" type="checkbox"/> Infrastructure Replacement		
PROJECT DESCRIPTION & LOCATION: Construct a new 115-13.2 kV Substation with eight (8) feeder positions at Tuscan Village.		
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). Yes. Due to the recent purchase of the Rockingham Race Track, the develop plans to repurpose this land (Tuscan Village) which is expected to increase the Salem Area load by 13 MW		
PERMITTING REQUIREMENTS, INCLUDING POTENTIAL IMPACT ON EXISTING PERMITS, AND TIMING OF AND RISKS ASSOCIATED WITH OBTAINING APPROPRIATE PERMITS FOR PROJECT. Yes. Permitting with the Town of Salem will be 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. \$40,000 to perform detail civil and site engineering. Once engineering is complete, the estimate cost of this project will be revised.		
WILL THERE BE ASSETS GREATER THAN \$5,000 THAT ARE CURRENTLY IN SERVICE REMOVED AS A RESULT OF THIS PROJECT? Asset Removal will be calculated on a job specific basis.		
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): 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 		

Business Case

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	
Safety		Will this, and other approved projects, cause a rate shock	No	
Mandated		Have Health & Safety implications been considered? Has Environmental Compliance review been done? Has Tech Services review been done?	Yes	
Impending Regulatory Obligation				
Rate Recovery-Immediate Return				
Rate Recovery (3 to 6 months)				
Rate Recovery (6 to 12 months)				
Rate Recovery (12 to 18 months)				
Was this Capital Expenditure included in the Annual Budget?		No	What amount was budgeted? \$0	
ANALYSIS OF PROJECT VALUE		CAPITAL EXPENDITURE BUDGET UTILIZATION		
Design/Engineering		(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)	Authorized Amount	To be spent in:
Material			Current Year	Future Years
External contractor costs			\$100,000	\$100,000
Internal costs				
Other costs (contingency)				
Working capital requirements				
Project Total Cost	\$100,000		\$100,000	\$100,000
	Name	Signature	Date	
Requesting Party	Anthony Strabone		2/27/18	
Director of Engineering	Charles Rodrigues		3/12/18	
VP of Operations	Craig Jennings		3/16/18	
President - LU East	Susan Fleck			
V				
CFO				
CEO				
Director of Finance	Anthony Totter		7/13/18	



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

PROJECT TITLE	Rockingham Substation- Transmission Lines
PROJECT SPONSOR:	Charles Rodrigues
PROJECT MANAGER:	Anthony Strabone
DATE:	02-16-18
PROJECT ID	8830-1865
BUSINESS PLAN NUMBER:	(Assigned by Corporate Finance)

Business Case

RECOMMENDATION:

- Construct two (2) 115 kV Transmission lines from Golden Rock Substation to Rockingham Substation.

OBJECTIVE(S)

- Perform Site, Environmental and line design of two (2) 115 kV Transmission Lines from Golden Rock Substation to Rockingham Substation.

BACKGROUND

- Construction of the Transmission lines are part of the recommended plan in the Salem Area Study perform by Control Point Technologies 2017, with input and acceptance by Liberty Utilities.
- The Salem Area will experience more than expected load growth over the next few years due to the recent purchase of the Rockingham Race Track. The developer, known as Tuscan Village, plans to redevelop this land which will result in an increase of Liberty's Salem Area Load by 13 MW.
- The supply and distribution system serving the Salem service territory is expected to be loaded beyond the capability of the equipment to reliably serve the load under LU planning and loading criteria during contingent system configurations.
- To mitigate these risks, along with other capital invests in the Salem Area, the plan recommends that Liberty Constructs a new 115 -13.2 KV Substation. This new substation will be served by two (2) new 115 kV Transmission lines originating at Liberty's Golden Rock Substation.

ALTERNATIVES/OPTIONS

- Other alternatives were considered and can be reviewed in Salem Area Study Report.

FINANCIAL ASSESSMENT

- Initial estimate is \$ ~~2,000,000~~ to perform detailed engineering/design for the installation of the Transmission Lines. Once detailed engineering is complete, the estimated cost of this project will be revised.
-

RISK ASSESSMENT AND QUALITATIVE EVALUATION

- None

Business Case

IMPLEMENTATION/ACTION PLAN

Engineering to be performed in 2018. Construction will take place under an individual job number in future years.

REVIEWED BY:

PROJECT MANAGER: Anthony Strabone

DIRECTOR/VP: CHARLES A. RODRIGUES

FINANCE:

Business Case

Liberty UtilitiesSM
WATER • GAS • ELECTRIC

LIBERTY UTILITIES - CAPITAL PROJECT EXPENDITURE APPLICATION

DIVISION/COMPANY:	Capital / Granite State Electric Co.	HOME OFFICE REF #: 8830-1865
PROJECT TITLE:	Electric Vehicle Charging Stations	EXPECTED PROJECT TOTAL: \$ 203,000
PROJECT TYPE (circle one):	System Maint / <u>System Project</u> / Growth / LXA	
PROJECT START DATE:	1/1/2018	PROJECT END DATE: 12/31/2018
CURRENT UTILITY EARNINGS STATUS:		JOB COST/FWO #:
Type of Capital Project: <input type="checkbox"/> Growth <input type="checkbox"/> Improvement Upgrades <input checked="" type="checkbox"/> Infrastructure Replacement		
PROJECT DESCRIPTION & LOCATION: Construct two (2) 115 kV Transmission lines from Golden Rock Substation to Rockingham Substation..		
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). Yes. Due to the recent purchase of the Rockingham Race Track, the develop plans to repurpose this land (Tuscan Village) which is expected to increase the Salem Area load by 13 MW		
PERMITTING REQUIREMENTS, INCLUDING POTENTIAL IMPACT ON EXISTING PERMITS, AND TIMING OF AND RISKS ASSOCIATED WITH OBTAINING APPROPRIATE PERMITS FOR PROJECT. Permitting will be needed from the Town of Salem NH and NHDOT		
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. \$100,000 to perform detail engineering. Once engineering is complete, the estimate cost of this project will be revised.		
WILL THERE BE ASSETS GREATER THAN \$5,000 THAT ARE CURRENTLY IN SERVICE REMOVED AS A RESULT OF THIS PROJECT? Asset Removal will be calculated on a job specific basis.		
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		

Business Case

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		
Safety		Will this, and other approved projects, cause a rate shock	No		
Mandated		Have Health & Safety implications been considered? Has Environmental Compliance review been done? Has Tech Services review been done?	Yes		
Impending Regulatory Obligation					
Rate Recovery-Immediate Return					
Rate Recovery (3 to 6 months)					
Rate Recovery (6 to 12 months)					
Rate Recovery (12 to 18 months)					
Was this Capital Expenditure included in the Annual Budget?		No	What amount was budgeted? \$0		
ANALYSIS OF PROJECT VALUE		CAPITAL EXPENDITURE BUDGET UTILIZATION			
Design/Engineering		(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)	Authorized Amount	To be spent in:	
Material				Current Year	Future Years
External contractor costs					
Internal costs					
Other costs (contingency)					
Working capital requirements					
Project Total Cost					
	Name	Signature	Date		
Requesting Party	Anthony Strabone		2/27/18		
Director of Engineering	Charles Rodrigues		3/2/19		
VP of Operations	Craig Jennings		3/2/19		
President - LU East	Susan Fleck				
VP of Finance	Tisha Sanderson				
CFO					
CEO					
			7/13/18		



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

PROJECT TITLE	Replace Lyme Rd P3 Recloser
PROJECT SPONSOR:	Charles Rodrigues
PROJECT LEAD:	Anthony Strabone
DATE:	2/14/18
PROJECT ID	8830-1863
BUSINESS PLAN NUMBER:	(Assigned by Corporate Finance)

Business Case

RECOMMENDATION:

- Replace existing Cooper oil filled recloser at P3 Lyme Rd with new Viper-S recloser due to damage. Install new bypass disconnect.
- This project is estimated at \$100,000 which includes contingency and appropriate round off.

OBJECTIVE(S)

Replace existing damaged recloser at P3 Lyme Rd Hanover due to damage.

BACKGROUND

- Costs associated with this project are to resolve damage to existing breaker unit.
- Existing recloser has experienced a flash which was identified as part of the inspection and maintenance program.

ALTERNATIVES/OPTIONS

- None

FINANCIAL ASSESSMENT

- This project estimate is based on design and estimate for previous similar projects.

RISK ASSESSMENT AND QUALITATIVE EVALUATION

- None

IMPLEMENTATION/ACTION PLAN

- The construction will take place under an individual job number throughout 2018.

REVIEWED BY:

PROJECT MANAGER: Anthony Strabone

DIRECTOR/VP: CHARLES A. RODRIGUES

FINANCE:

Business Case**LIBERTY UTILITIES - CAPITAL PROJECT EXPENDITURE APPLICATION**

DIVISION/COMPANY: Capital / Granite State Electric Co.		HOME OFFICE REF # 8830-1863
PROJECT TITLE: Replace Lyme Rd P3 Recloser		EXPECTED PROJECT TOTAL: \$ 100,000
PROJECT TYPE (circle one):	System Maint / <u>System Project</u> / Growth / LXA	
PROJECT START DATE:	2/1/18	PROJECT END DATE: 12/31/18
CURRENT UTILITY EARNINGS STATUS:	JOB COST/FWO #:	
Type of Capital Project: <input type="checkbox"/> Growth <input checked="" type="checkbox"/> Improvement Upgrades <input type="checkbox"/> Infrastructure Replacement		
PROJECT DESCRIPTION & LOCATION: Replace existing recloser at P3 Lyme Rd due to damage.		
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). N/A		
PERMITTING REQUIREMENTS, INCLUDING POTENTIAL IMPACT ON EXISTING PERMITS, AND TIMING OF AND RISKS ASSOCIATED WITH OBTAINING APPROPRIATE PERMITS FOR PROJECT. N/A		
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. \$75,000		
WILL THERE BE ASSETS GREATER THAN \$5,000 THAT ARE CURRENTLY IN SERVICE REMOVED AS A RESULT OF THIS PROJECT? yes 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? No 5. What is the year of original installation of the plant being removed? 		

Business Case

PROPOSED SOURCE OF FUNDS (COMPANY, DEVELOPER LXA, HUF, ETC.) 2018 Capital Budget			
CATEGORY & STATUS OF PROJECT (tick as appropriate)		FINANCIAL SUMMARY	
		NEXT ANTICIPATED TEST YEAR	2018
		Rate Recovery (over 18 months)	X
Safety		Will this, and other approved projects, cause a rate shock	No
Mandated		If yes, is customer affordability an issue?	
Impending Regulatory Obligation			
Rate Recovery-Immediate Return			
Rate Recovery (3 to 6 months)			
Rate Recovery (6 to 12 months)		Have Health & Safety implications been considered?	Yes
Rate Recovery (12 to 18 months)		Has Environmental Compliance review been done?	No
		Has Tech Services review been done?	
Was this Capital Expenditure included in the Annual Budget?	No	What amount was budgeted? 0	
ANALYSIS OF PROJECT VALUE		CAPITAL EXPENDITURE BUDGET UTILIZATION	
Design/Engineering		Authorized Amount	To be spent in:
Material			Current Year
External contractor costs			Future Years
Internal costs		(A) Capital budget	\$100,000
Other costs (contingency)		(B) Over (under) run vs. Budget	
Working capital requirements		(C) (A+B) Total Estimated Project Cost	
		(D) Less Approved Spend to Date	
		(E) Less Future Approval Requests	
Project Total Cost	\$100,000	(F) (C-D-E) Approval Amount Requested (current application)	\$100,000
	Name	Signature	Date
Requesting Party	Anthony Strabone		2/27/18
Director of Engineering	Charles Rodrigues		3/2/19
VP of Operations	Craig Jennings		8/16/19
President - LU East	Susan Fleck		
CFO			
CEO			
Director of Finance	Lyttles Trotter		7/13/18

Business Case





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

PROJECT TITLE	Rockingham Substation- Transmission Lines
PROJECT SPONSOR:	Charles Rodrigues
PROJECT MANAGER:	Anthony Strabone
DATE:	02-16-18
PROJECT ID	8830-1865
BUSINESS PLAN NUMBER:	(Assigned by Corporate Finance)

Business Case**RECOMMENDATION:**

- Construct two (2) 115 kV Transmission lines from Golden Rock Substation to Rockingham Substation.

OBJECTIVE(S)

- Perform Site, Environmental and line design of two (2) 115 kV Transmission Lines from Golden Rock Substation to Rockingham Substation.

BACKGROUND

- Construction of the Transmission lines are part of the recommended plan in the Salem Area Study perform by Control Point Technologies 2017, with input and acceptance by Liberty Utilities.
- The Salem Area will experience more than expected load growth over the next few years due to the recent purchase of the Rockingham Race Track. The developer, known as Tuscan Village, plans to redevelop this land which will result in an increase of Liberty's Salem Area Load by 13 MW.
- The supply and distribution system serving the Salem service territory is expected to be loaded beyond the capability of the equipment to reliably serve the load under LU planning and loading criteria during contingent system configurations.
- To mitigate these risks, along with other capital invests in the Salem Area, the plan recommends that Liberty Constructs a new 115 -13.2 KV Substation. This new substation will be served by two (2) new 115 kV Transmission lines originating at Liberty's Golden Rock Substation.

ALTERNATIVES/OPTIONS

- Other alternatives were considered and can be reviewed in Salem Area Study Report.

FINANCIAL ASSESSMENT

- Initial estimate is \$ ~~200,000~~ to perform detailed engineering/design for the installation of the Transmission Lines. Once detailed engineering is complete, the estimated cost of this project will be revised.
-

RISK ASSESSMENT AND QUALITATIVE EVALUATION

- None

Business Case

IMPLEMENTATION/ACTION PLAN

Engineering to be performed in 2018. Construction will take place under an individual job number in future years.

REVIEWED BY:

PROJECT MANAGER: Anthony Strabone
DIRECTOR/VP: CHARLES A. RODRIGUES
FINANCE:



LIBERTY UTILITIES - CAPITAL PROJECT EXPENDITURE APPLICATION

DIVISION/COMPANY:	Capital / Granite State Electric Co.	HOME OFFICE REF #: 8830-1865
PROJECT TITLE:	Electric Vehicle Charging Stations	EXPECTED PROJECT TOTAL: \$ 800,000
PROJECT TYPE (circle one):	System Maint / <u>System Project</u> / Growth / LXA	
PROJECT START DATE:	1/1/2018	PROJECT END DATE: 12/31/2018
CURRENT UTILITY EARNINGS STATUS:		JOB COST/FWO #:
Type of Capital Project: <input type="checkbox"/> Growth <input type="checkbox"/> Improvement Upgrades <input checked="" type="checkbox"/> Infrastructure Replacement		
PROJECT DESCRIPTION & LOCATION: Construct two (2) 115 kV Transmission lines from Golden Rock Substation to Rockingham Substation..		
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). Yes. Due to the recent purchase of the Rockingham Race Track, the develop plans to repurpose this land (Tuscan Village) which is expected to increase the Salem Area load by 13 MW		
PERMITTING REQUIREMENTS, INCLUDING POTENTIAL IMPACT ON EXISTING PERMITS, AND TIMING OF AND RISKS ASSOCIATED WITH OBTAINING APPROPRIATE PERMITS FOR PROJECT. Permitting will be needed from the Town of Salem NH and NHDOT		
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. \$100,000 to perform detail engineering. Once engineering is complete, the estimate cost of this project will be revised.		
WILL THERE BE ASSETS GREATER THAN \$5,000 THAT ARE CURRENTLY IN SERVICE REMOVED AS A RESULT OF THIS PROJECT? Asset Removal will be calculated on a job specific basis.		
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		

Business Case

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		
Safety		Will this, and other approved projects, cause a rate shock	No		
Mandated		Have Health & Safety implications been considered? Has Environmental Compliance review been done? Has Tech Services review been done?	Yes		
Impending Regulatory Obligation					
Rate Recovery-Immediate Return					
Rate Recovery (3 to 6 months)					
Rate Recovery (6 to 12 months)					
Rate Recovery (12 to 18 months)					
Was this Capital Expenditure included in the Annual Budget?		No	What amount was budgeted? \$0		
ANALYSIS OF PROJECT VALUE		CAPITAL EXPENDITURE BUDGET UTILIZATION			
Design/Engineering		(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)	Authorized Amount	To be spent in:	
Material				Current Year	Future Years
External contractor costs					
Internal costs					
Other costs (contingency)					
Working capital requirements					
Project Total Cost					
	Name	Signature	Date		
Requesting Party	Anthony Strabone		2/27/18		
Director of Engineering	Charles Rodrigues		3/2/18		
VP of Operations	Craig Jennings		3/1/18		
President – LU East	Susan Fleck				
VP of Finance	Tisha Sanderson				
CFO					
CEO					
			7/13/18		



Liberty UtilitiesSM
WATER GAS ELECTRIC

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

PROJECT TITLE	SCADA & DISTRIBUTION AUTOMATION PROGRAM
PROJECT SPONSOR:	Charles Rodrigues
PROJECT MANAGER:	Anthony Strabone
DATE:	10-9-17
PROJECT ID	8830-C36426
BUSINESS PLAN NUMBER:	(Assigned by Corporate Finance)

Business Case

RECOMMENDATION:

- This specific project is to provide SCADA & Distribution Automation.
- This is being recommended as approval for a budgeted item.
- The total cost is estimated at \$75,000 in 2018.
- The expected start date is January 1, 2018 and the expected completion date is December 31, 2018.
- The following project will be part of the 2018 SCADA & DA program: Replace B switchgear at Rockingham Mall with S&C auto switchgear.

OBJECTIVE(S)

This Specific project will provide SCADA & Distribution Automation to resolve and/or improve reliability performance.

BACKGROUND

The installation of SCADA will improve system data acquisition and improve response to system outages.

ALTERNATIVES/OPTIONS

None

FINANCIAL ASSESSMENT

This specific project is based on historical spending trends, reliability improvement strategy, and anticipated year-ahead activity in this investment category.

RISK ASSESSMENT AND QUALITATIVE EVALUATION

None

IMPLEMENTATION/ACTION PLAN

The construction will take place under an individual job number throughout the year.

REVIEWED BY:

PROJECT MANAGER: Anthony Strabone

DIRECTOR/VP: CHARLES RODRIGUES / *Charles Rodrigues*

FINANCE: *Joshua Henderson 12/29/17*

Business Case



LIBERTY UTILITIES - CAPITAL PROJECT EXPENDITURE APPLICATION

DIVISION/COMPANY:	Capital / Granite State Electric Co.	HOME OFFICE REF #: 8830-C36426
PROJECT TITLE:	SCADA Distribution & Automation Specific	EXPECTED PROJECT TOTAL: \$75,000
PROJECT TYPE (circle one):	System Maint / <u>System Project</u> / Growth / LXA	
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;"> <input type="checkbox"/> Growth <input checked="" type="checkbox"/> Improvement Upgrades <input type="checkbox"/> Infrastructure Replacement </div>		
PROJECT DESCRIPTION & LOCATION: Replace B switchgear at Rockingham Mall with S&C auto switchgear.		
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. Site 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. \$75,000		
WILL THERE BE ASSETS GREATER THAN \$5,000 THAT ARE CURRENTLY IN SERVICE REMOVED AS A RESULT OF THIS PROJECT? Asset Removal will be calculated on a job specific basis. 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.		

Business Case

CATEGORY & STATUS OF PROJECT		FINANCIAL SUMMARY			
(tick as appropriate)		NEXT ANTICIPATED TEST YEAR			
Safety	<input type="checkbox"/>	Rate Recovery (over 18 months)	2018 X		
Mandated	<input type="checkbox"/>	Will this, and other approved projects, cause a rate shock?	No		
Impending Regulatory Obligation	<input type="checkbox"/>				
Rate Recovery-Immediate Return	<input type="checkbox"/>				
Rate Recovery (3 to 6 months)	<input type="checkbox"/>	Have Health & Safety implications been considered?	Yes		
Rate Recovery (6 to 12 months)	<input type="checkbox"/>	Has Environmental Compliance review been done?	Yes		
Rate Recovery (12 to 18 months)	<input type="checkbox"/>	Has Tech Services review been done?	Yes		
Was this Capital Expenditure included in the Annual Budget?	No	What amount was budgeted? \$0			
ANALYSIS OF PROJECT VALUE		CAPITAL EXPENDITURE BUDGET UTILIZATION			
Design/Engineering	<input type="checkbox"/>	(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)	Authorized Amount	To be spent in:	
Material	<input type="checkbox"/>		Current Year	Future Years	
External contractor costs	<input type="checkbox"/>				
Internal costs	<input type="checkbox"/>		\$0	\$75,000	TBD
Other costs (contingency)	<input type="checkbox"/>		\$75,000		
Working capital requirements	<input type="checkbox"/>				
	<input type="checkbox"/>				
Project Total Cost	\$75,000		\$75,000		
Name		Signature	Date		
Requesting Party		Anthony Strabone	11/30/17		
Director of Engineering		Charles Rodrigues	11/30/17		
VP of Operations		Craig Jennings			
President – LU East					
Director Finance		Tisha Sanderson			
CFO					
CEO					



Liberty UtilitiesSM
WATER GAS ELECTRIC

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

PROJECT TITLE	Install Service to Tuscan Village South Line
PROJECT SPONSOR:	Charles Rodrigues
PROJECT MANAGER:	Anthony Strabone
DATE:	10-09-17
PROJECT ID	8830-C42930
BUSINESS PLAN NUMBER:	(Assigned by Corporate Finance)

Business Case

RECOMMENDATION:

- Install approximately 1.5 mile of new UG conduit loop system along Tuscan Village Park to supply new growth in the commercial development – Southern Village.
- It is anticipated that the conduit system will be 6"- 4X3 with 1000MCM Cu conductors.
- This is being recommended as approval for a budgeted item.
- The total capital project cost is estimated at \$900,000 in 2018.
- The expected start date is January 1, 2018 and the expected completion date is December 1, 2019.

OBJECTIVE(S)

Install approximately 1.5 mile of new UG conduit loop system along Tuscan Village Park to supply new growth in the commercial development.

BACKGROUND

- 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 northern village and is included in this business case.
- The Southern Village will be mostly commercial and large retail.

ALTERNATIVES/OPTIONS

- None

FINANCIAL ASSESSMENT

- None

RISK ASSESSMENT AND QUALITATIVE EVALUATION

- None

IMPLEMENTATION/ACTION PLAN

The construction will take place under an individual job number throughout 2018 and 2019.

Business Case

REVIEWED BY:

PROJECT MANAGER: Anthony Strabone

DIRECTOR/VP:

CHARLES RODRIGUES

FINANCE:

Jisha Sanderson

12/22/17

Business Case

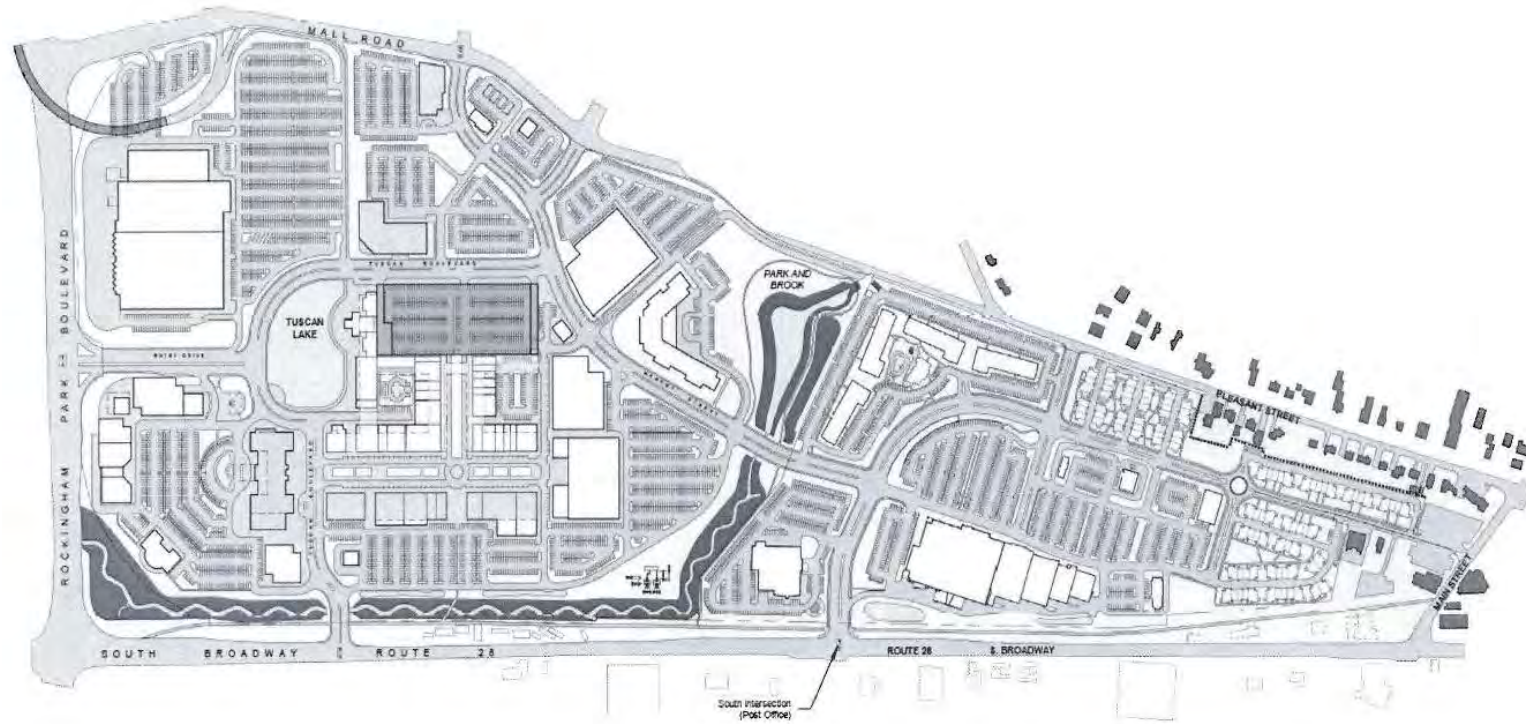


LIBERTY UTILITIES - CAPITAL PROJECT EXPENDITURE APPLICATION

DIVISION/COMPANY:	Capital / Granite State Electric Co.	HOME OFFICE REF #: 8830-C42930
PROJECT TITLE:	Install Service to Tuscan Village South Line	EXPECTED PROJECT TOTAL: \$900,000
PROJECT TYPE (circle one):	System Maint / System Project / <u>Growth</u> / LXA	
PROJECT START DATE:	1/1/2018	PROJECT END DATE: 12/1/2019
CURRENT UTILITY EARNINGS STATUS:		JOB COST/FWO #:
Type of Capital Project: <div style="border: 1px solid black; padding: 5px;"> <input checked="" type="checkbox"/> Growth <input type="checkbox"/> Improvement Upgrades <input type="checkbox"/> Infrastructure Replacement </div>		
PROJECT DESCRIPTION & LOCATION: Install approximately 1 mile of new UG conduit loop system along Tuscan Village Park to supply new growth in the commercial development.		
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). Yes – Tuscan Village Salem NH		
PERMITTING REQUIREMENTS, INCLUDING POTENTIAL IMPACT ON EXISTING PERMITS, AND TIMING OF AND RISKS ASSOCIATED WITH OBTAINING APPROPRIATE PERMITS FOR PROJECT. 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. \$900,000		
WILL THERE BE ASSETS GREATER THAN \$5,000 THAT ARE CURRENTLY IN SERVICE REMOVED AS A RESULT OF THIS PROJECT? No IF YES, PLEASE DETAIL THE SPECIFIC ASSETS THAT WILL BE REMOVED: <ol style="list-style-type: none"> Original Cost of Plant to be removed (if known): None What is the replacement cost of the plant being removed (if original cost not known)? None Original Work Order of Plant to be removed (if known): None Is the Plant being removed reusable? N/A What is the year of original installation of the plant being removed? N/A 		

Business Case

Attachment

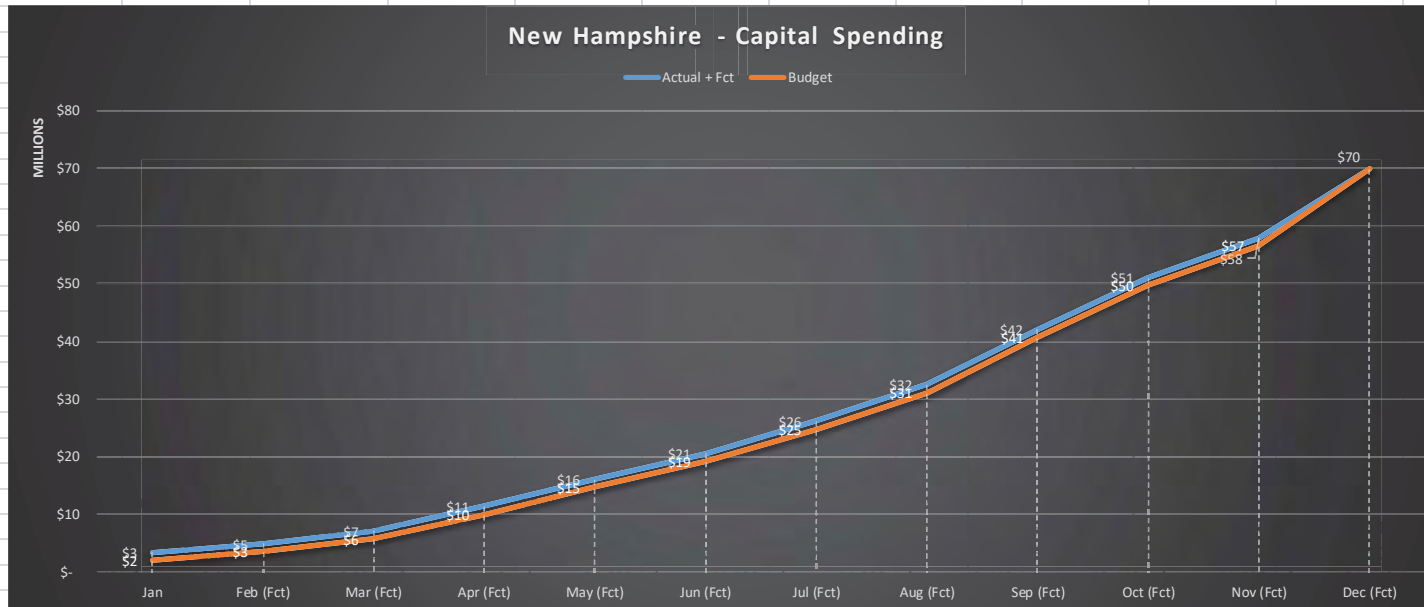


JANUARY 2018 CAPITAL SPENDING UPDATE – 02/20/2018

Agenda

1. Safety Moment
2. January 2018 Capital Spending Results
 - a. New Hampshire Overview
 - b. Entity Overview
3. High Profile Project Presentations
 - a. Fleet
 - b. CNG Fast Fill Stations
 - c. Windham/Pelham
 - d. Pelham Substation
 - e. Pelham Feeder
 - f. City/State Construction
 - g. CIBS
4. Project Closure Forms
5. 2018 Budget Discussion
6. Emergent Projects
7. Questions?

Capital Spending YTD													
	Jan	Feb (Fct)	Mar (Fct)	Apr (Fct)	May (Fct)	Jun (Fct)	Jul (Fct)	Aug (Fct)	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)	Variance
Actual + Fct	\$ 3,382,822	\$ 4,852,990	\$ 7,082,095	\$ 11,373,157	\$ 16,044,269	\$ 20,564,496	\$ 26,079,705	\$ 32,474,285	\$ 42,092,952	\$ 50,996,765	\$ 57,924,245	\$ 69,913,700	
Budget	\$ 2,020,848	\$ 3,491,015	\$ 5,720,121	\$ 10,011,182	\$ 14,682,294	\$ 19,202,522	\$ 24,717,731	\$ 31,112,311	\$ 40,730,978	\$ 49,634,791	\$ 56,562,271	\$ 69,913,700	\$ 0
	Jan	Feb (Fct)	Mar (Fct)	Apr (Fct)	May (Fct)	Jun (Fct)	Jul (Fct)	Aug (Fct)	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)	Annual
Actual EN	\$ 3,136,894	\$ 542,298	\$ 1,318,171	\$ 2,709,828	\$ 3,599,780	\$ 3,040,197	\$ 4,058,977	\$ 4,932,200	\$ 7,339,555	\$ 6,689,356	\$ 4,328,736	\$ 7,173,709	\$ 48,869,700
Actual GSE	\$ 238,556	\$ 903,876	\$ 902,956	\$ 1,559,743	\$ 1,033,476	\$ 1,415,357	\$ 1,376,749	\$ 1,259,029	\$ 2,209,973	\$ 2,125,567	\$ 2,515,195	\$ 4,609,523	\$ 20,150,000
Actual Keene	\$ 7,372	\$ 23,993	\$ 7,978	\$ 21,491	\$ 37,855	\$ 64,673	\$ 79,483	\$ 203,350	\$ 69,140	\$ 88,891	\$ 83,549	\$ 206,224	\$ 894,000
	3,382,822	1,470,168	2,229,105	4,291,062	4,671,112	4,520,227	5,515,209	6,394,580	9,618,667	8,903,813	6,927,480	11,989,455	\$ 69,913,700
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Budget EN	\$ 986,074	\$ 542,298	\$ 1,318,171	\$ 2,709,828	\$ 3,599,780	\$ 3,040,197	\$ 4,058,977	\$ 4,932,200	\$ 7,339,555	\$ 6,689,356	\$ 4,328,736	\$ 9,324,529	\$ 48,869,700
Budget GSE	\$ 1,025,264	\$ 903,876	\$ 902,956	\$ 1,559,743	\$ 1,033,476	\$ 1,415,357	\$ 1,376,749	\$ 1,259,029	\$ 2,209,973	\$ 2,125,567	\$ 2,515,195	\$ 3,822,815	\$ 20,150,000
Budget Keene	\$ 9,510	\$ 23,993	\$ 7,978	\$ 21,491	\$ 37,855	\$ 64,673	\$ 79,483	\$ 203,350	\$ 69,140	\$ 88,891	\$ 83,549	\$ 204,086	\$ 894,000
	\$ 2,020,848	\$ 1,470,168	\$ 2,229,105	\$ 4,291,062	\$ 4,671,112	\$ 4,520,227	\$ 5,515,209	\$ 6,394,580	\$ 9,618,667	\$ 8,903,813	\$ 6,927,480	\$ 13,351,429	\$ 69,913,700



FEBRUARY 2018 CAPITAL SPENDING UPDATE – 04/06/2018

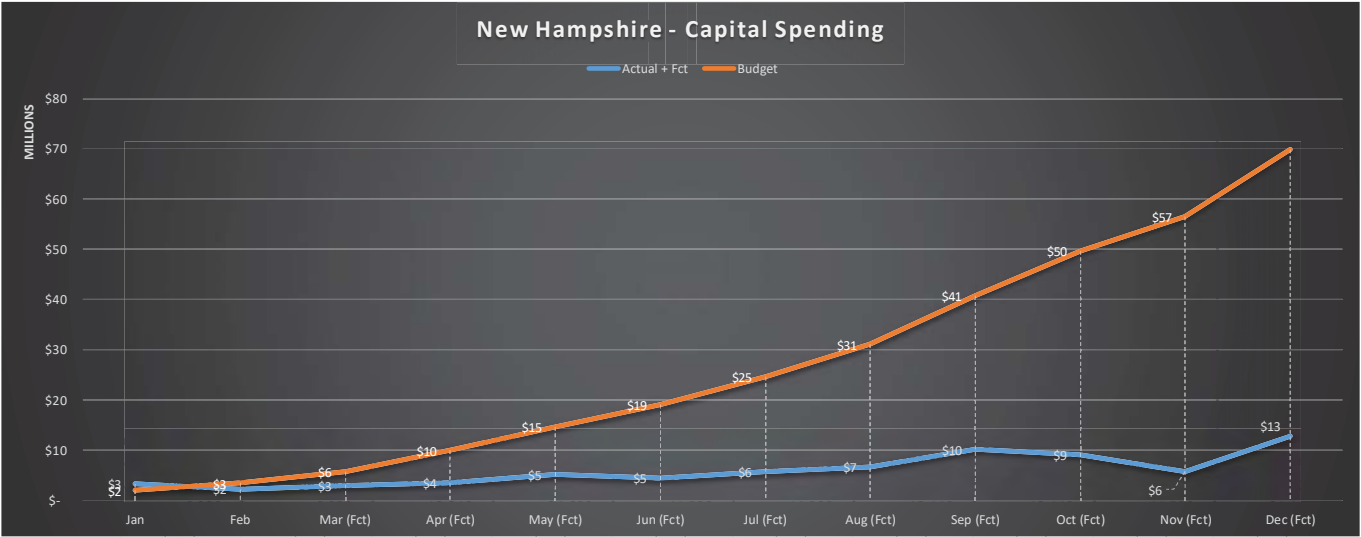
Agenda

1. Safety Moment
2. February 2018 Capital Spending Results
 - a. New Hampshire Overview
 - b. Entity Overview
3. High Profile Project Presentations
 - a. Fleet
 - b. CNG Fast Fill Stations
 - c. Windham/Pelham
 - d. Pelham Substation
 - e. Pelham Feeder
 - f. City/State Construction
 - g. CIBS
4. Project Closure Forms
5. 2018 Budget Discussion
6. Emergent Projects
7. Questions?

Capital Spending YTD													
	Jan	Feb	Mar (Fct)	Apr (Fct)	May (Fct)	Jun (Fct)	Jul (Fct)	Aug (Fct)	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)	Variance
Actual + Fct	\$ 3,382,603	\$ 2,363,427	\$ 2,963,066	\$ 3,649,621	\$ 5,221,952	\$ 4,533,561	\$ 5,814,526	\$ 6,792,540	\$ 10,168,662	\$ 9,183,183	\$ 5,831,000	\$ 12,839,886	
Budget	\$ 2,020,848	\$ 3,491,015	\$ 5,720,121	\$ 10,011,182	\$ 14,682,294	\$ 19,202,522	\$ 24,717,731	\$ 31,112,311	\$ 40,730,978	\$ 49,634,791	\$ 56,562,271	\$ 69,913,700	\$ (57,073,814)

	Jan	Feb	Mar (Fct)	Apr (Fct)	May (Fct)	Jun (Fct)	Jul (Fct)	Aug (Fct)	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)	Annual
Actual EN	\$ 3,141,615	\$ 1,121,582	\$ 2,441,749	\$ 2,568,484	\$ 3,817,883	\$ 3,286,932	\$ 4,032,252	\$ 4,586,686	\$ 6,998,300	\$ 6,180,736	\$ 4,028,525	\$ 8,623,765	\$ 50,828,508
Actual GSE	\$ 238,491	\$ 1,203,143	\$ 498,013	\$ 1,031,619	\$ 1,339,689	\$ 1,192,202	\$ 1,709,683	\$ 2,117,646	\$ 3,039,099	\$ 2,882,813	\$ 1,725,059	\$ 4,049,358	\$ 21,026,814
Actual Keene	\$ 2,497	\$ 38,701	\$ 23,305	\$ 49,518	\$ 64,380	\$ 54,427	\$ 72,592	\$ 88,209	\$ 131,263	\$ 119,634	\$ 77,416	\$ 166,763	\$ 888,704
	3,382,603	2,363,427	2,963,066	3,649,621	5,221,952	4,533,561	5,814,526	6,792,540	10,168,662	9,183,183	5,831,000	12,839,886	\$ 72,744,026

	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Budget EN	\$ 986,074	\$ 542,298	\$ 1,318,171	\$ 2,709,828	\$ 3,599,780	\$ 3,040,197	\$ 4,058,977	\$ 4,932,200	\$ 7,339,555	\$ 6,689,356	\$ 4,328,736	\$ 9,324,529	\$ 48,869,700
Budget GSE	\$ 1,025,264	\$ 903,876	\$ 902,956	\$ 1,559,743	\$ 1,033,476	\$ 1,415,357	\$ 1,376,749	\$ 1,259,029	\$ 2,209,973	\$ 2,125,567	\$ 2,515,195	\$ 3,822,815	\$ 20,150,000
Budget Keene	\$ 9,510	\$ 23,993	\$ 7,978	\$ 21,491	\$ 37,855	\$ 64,673	\$ 79,483	\$ 203,350	\$ 69,140	\$ 88,891	\$ 83,549	\$ 204,086	\$ 894,000
	\$ 2,020,848	\$ 1,470,168	\$ 2,229,105	\$ 4,291,062	\$ 4,671,112	\$ 4,520,227	\$ 5,515,209	\$ 6,394,580	\$ 9,618,667	\$ 8,903,813	\$ 6,927,480	\$ 13,351,429	\$ 69,913,700





March 2018 Capital Spending Monthly Update

April 30, 2018



March 2018 Capital Spend Update - Agenda

1. Safety Moment
2. March 2018 Capital Spending Results
 - New Hampshire Overview
 - Entity Overview
3. High Profile Project Presentations
 - Golden Rock
 - Rte. 12 Widening
 - GSE New Business (Residential & Commercial)
 - Bare Conductor
 - Extend 14L4
 - CIBS
 - EN Meter Purchases
 - City/State Construction
4. Additional Capital Spending Discussion Items
5. Questions?



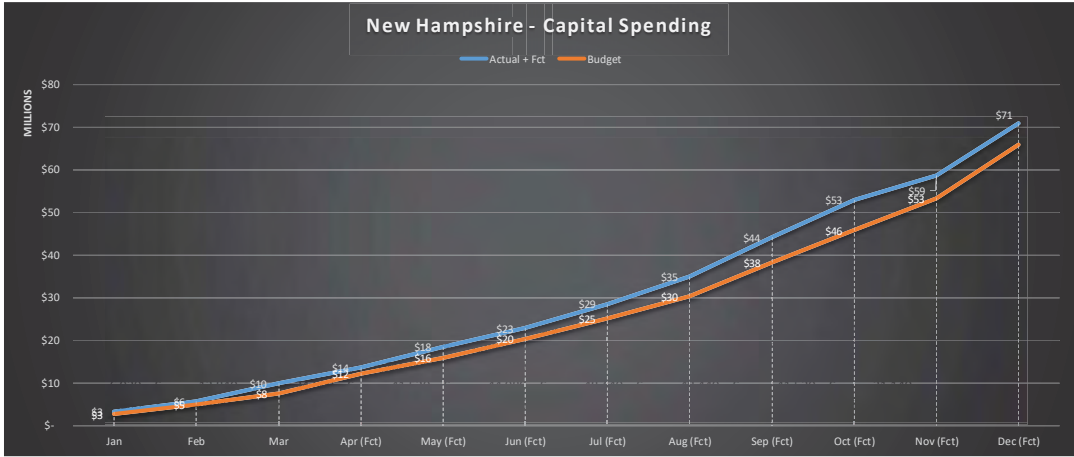
Capital Spending YTD + Forecast

Capital Spending YTD												
	Jan	Feb	Mar	Apr (Fct)	May (Fct)	Jun (Fct)	Jul (Fct)	Aug (Fct)	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)
Actual + Fct	\$ 3,362,297	\$ 5,710,844	\$ 9,969,402	\$ 13,633,908	\$ 18,455,318	\$ 22,844,283	\$ 28,536,272	\$ 34,899,269	\$ 44,154,441	\$ 52,972,099	\$ 58,714,879	\$ 70,948,223
Budget	\$ 2,694,042	\$ 4,949,888	\$ 7,507,583	\$ 12,111,862	\$ 15,930,182	\$ 20,393,063	\$ 25,205,038	\$ 30,239,375	\$ 38,244,932	\$ 45,814,613	\$ 53,271,305	\$ 65,813,700

	Jan	Feb	Mar	Apr (Fct)	May (Fct)	Jun (Fct)	Jul (Fct)	Aug (Fct)	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)	Annual
Actual EN	\$ 3,141,615	\$ 1,121,582	\$ 2,276,867	\$ 2,581,479	\$ 3,420,209	\$ 3,141,148	\$ 3,910,129	\$ 4,157,647	\$ 6,085,562	\$ 5,813,062	\$ 3,940,748	\$ 8,018,177	\$ 47,608,225
Actual GSE	\$ 218,185	\$ 1,188,263	\$ 1,964,959	\$ 1,016,619	\$ 1,334,689	\$ 1,191,202	\$ 1,709,683	\$ 2,117,646	\$ 3,039,099	\$ 2,882,813	\$ 1,725,059	\$ 4,049,358	\$ 22,437,575
Actual Keene	\$ 2,497	\$ 38,701	\$ 16,732	\$ 66,408	\$ 66,512	\$ 56,616	\$ 72,177	\$ 87,704	\$ 130,512	\$ 121,783	\$ 76,973	\$ 165,809	\$ 902,423
	3,362,297	2,348,547	4,258,558	3,664,506	4,821,409	4,388,966	5,691,989	6,362,997	9,255,173	8,817,658	5,742,780	12,233,343	70,948,223

	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Budget EN	\$ 406,579	\$ 223,601	\$ 543,510	\$ 1,117,319	\$ 1,484,265	\$ 1,253,537	\$ 1,673,601	\$ 2,033,649	\$ 3,026,252	\$ 2,758,161	\$ 1,784,828	\$ 3,844,698	\$ 20,150,000
Budget GSE	\$ 2,277,953	\$ 2,008,252	\$ 2,006,208	\$ 3,465,470	\$ 2,296,200	\$ 3,144,671	\$ 3,058,890	\$ 2,797,338	\$ 4,910,165	\$ 4,722,629	\$ 5,588,314	\$ 8,493,611	\$ 44,769,700
Budget Keene	\$ 9,510	\$ 23,993	\$ 7,978	\$ 21,491	\$ 37,855	\$ 64,673	\$ 79,483	\$ 203,350	\$ 69,140	\$ 88,891	\$ 83,549	\$ 204,086	\$ 894,000
	2,694,042	2,255,846	2,557,695	4,604,280	3,818,320	4,462,881	4,811,975	5,034,338	8,005,556	7,569,681	7,456,692	12,542,395	65,813,700

Forecasted Variance: \$ (5,134,523)



March 2018 Capital Spend Reporting

High Profile Projects



Golden Rock Substation

Project: Golden Rock Substation (8830-1744)

Objective:													Expected Date of Completion: 12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ 3,389	\$ 2,877	\$ 1,570										\$ 7,836
Budget	\$ 50,882	\$ 44,857	\$ 44,812	\$ 77,407	\$ 51,289	\$ 70,241	\$ 68,325	\$ 62,483	\$ 109,676	\$ 105,487	\$ 124,824	\$ 189,718	\$ 1,000,000
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

YTD Cost Profile

Legend: Labor (Blue), Material (Orange), Voucher (Grey), Outside Srvc (Yellow), Overhead (Dark Blue), Other (Green)

Values: Labor 53%, Material 0%, Voucher 27%, Outside Srvc 0%, Overhead 19%, Other 0%

PM: A. Strabone

Update: Final engineering has been awarded to TRC. Owner's engineering has been awarded to Control Point Technologies.

Circuit breakers have been ordered with expected delivery Summer 2018. Motor operated disconnect ordered.

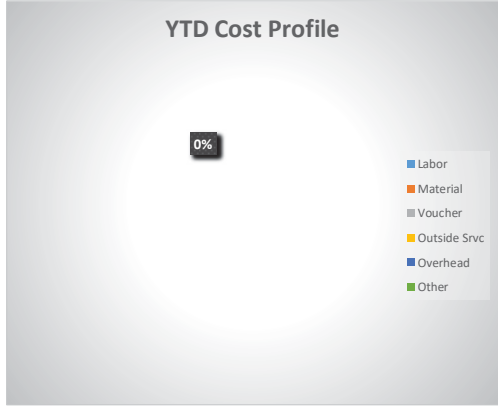
YEP has been revised to \$400,000 to account for Engineering only in 2018

Value Engineering:
Timeline Risks:
Budget Risks:

Cost Element	Amount	Field Completion:	0%
Labor	\$ 121.71	Financial Completion:	0.8%
Material	\$ -		
Voucher	\$ 6,751.72	Spend to Date:	\$ 7,836
Outside Srvc	\$ -	Remain. Budget	\$ 992,164
Overhead	\$ 3,365.58	Total Budget	\$ 1,000,000
Other	\$ (2,403.00)		
Total	\$ 7,836.01	Capital Recovery Begins:	7/1/2019


Rte. 12 Widening, Walpole/Charlestown

Project: Rte. 12 Widening, Walpole/Charlestown (8830-1818)														
Objective:													Expected Date of Completion:	12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
Actual	\$ -	\$ -	\$ -										\$ -	
Budget	\$ 76,322	\$ 67,286	\$ 67,218	\$ 116,110	\$ 76,934	\$ 105,362	\$ 102,488	\$ 93,724	\$ 164,514	\$ 158,231	\$ 187,235	\$ 284,577	\$ 1,500,000	
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	



Cost Element	Amount	Field Completion:	0%
Labor	\$ -	Financial Completion:	0.0%
Material	\$ -		
Voucher	\$ -	Spend to Date:	\$ -
Outside Svc	\$ -	Remain. Budget	\$ 1,500,000
Overhead	\$ -	Total Budget	\$ 1,500,000
Other	\$ -		
Total	\$ -	Capital Recovery Begins:	7/1/2019

PM: A. Strabone



Update: Engineering in progress however we have experienced delays with engineering progress due to STORM Response required in March.

Construction is expected to start in July

Value Engineering:

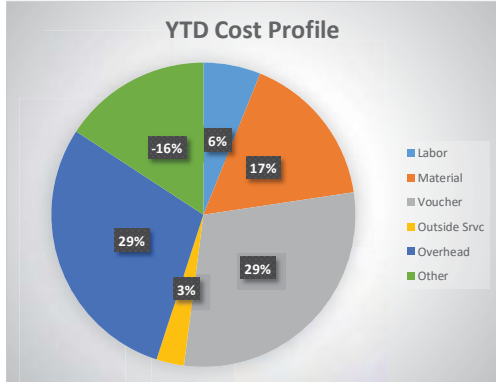
Timeline Risks: This job is closely tied to NHDOT work. Any delays with NHDOT scope of work will significantly impact Liberty's schedule.

Budget Risks: Labor has been charged against 2017 project number 301711-01010

INSERT PROJECT PHOTO HERE

GSE New Business - Residential & Commercial


Project: GSE New Business Residential & Commercial (8830-1837 & 8830-1838)													
Objective:													Expected Date of Completion: 12/31/2018
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Spending													
Actual	\$ 327,254	\$ 249,176	\$ 463,346										\$ 1,039,776
Budget	\$ 160,277	\$ 141,301	\$ 141,157	\$ 243,831	\$ 161,561	\$ 221,259	\$ 215,224	\$ 196,821	\$ 345,480	\$ 332,285	\$ 393,194	\$ 597,611	\$ 3,150,000
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



YTD Cost Profile

Category	Percentage
Labor	29%
Material	17%
Voucher	29%
Outside Srv	3%
Overhead	16%
Other	6%

PM: A. Strabone



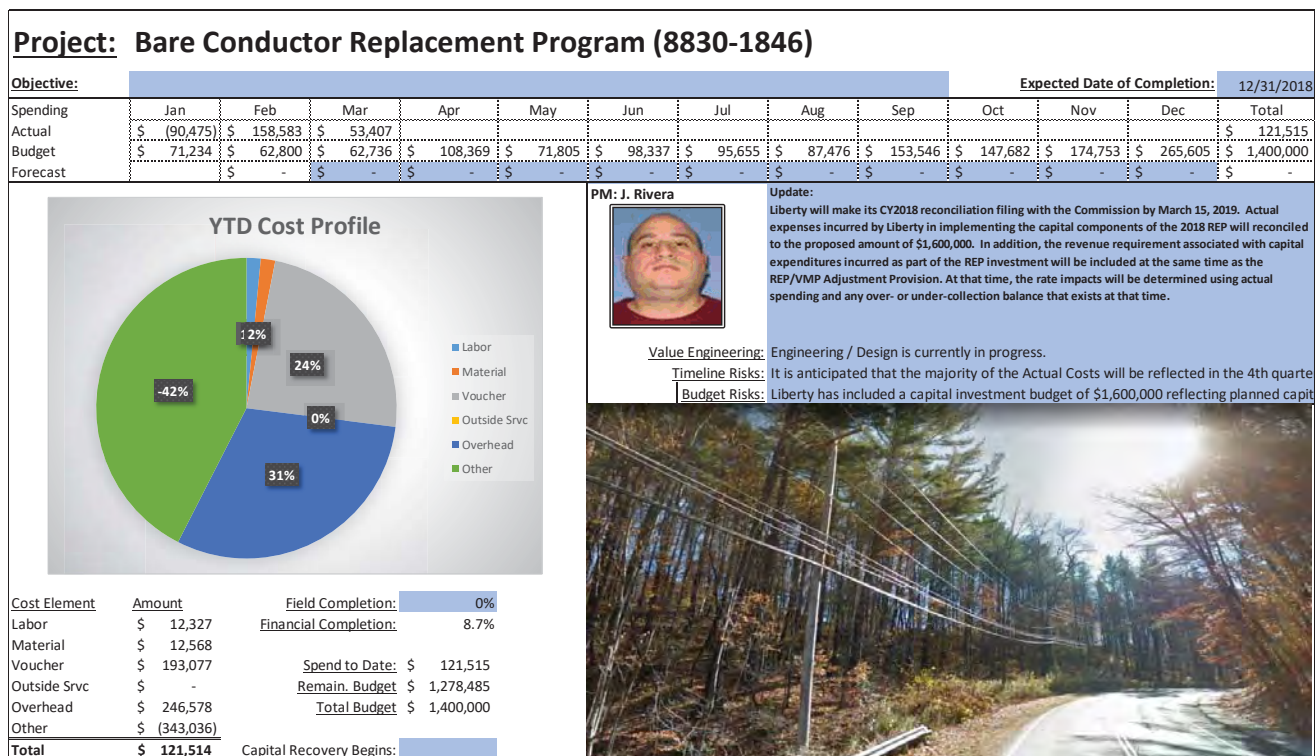
Update: This is normal run of the business projects.

Value Engineering:
Timeline Risks:
Budget Risks:

INSERT PROJECT PHOTO HERE

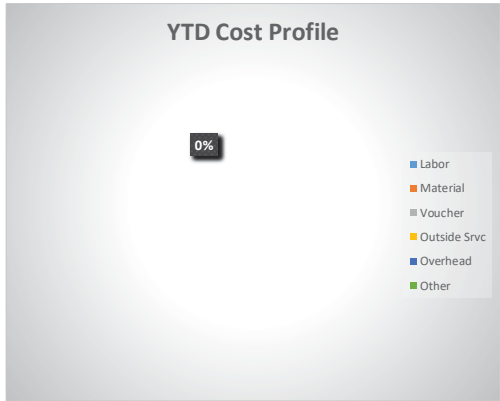
Cost Element	Amount	Field Completion:	0%
Labor	\$ 92,518	Financial Completion:	33.0%
Material	\$ 251,335		
Voucher	\$ 446,812	Spend to Date:	\$ 1,039,776
Outside Srv	\$ 44,689	Remain. Budget	\$ 2,110,225
Overhead	\$ 444,104	Total Budget	\$ 3,150,000
Other	\$ (239,683)		
Total	\$ 1,039,775	Capital Recovery Begins:	7/1/2019

Bare Conductor Replacement Program




Extend Pelham 14L4 to Salem

Project: Extend Pelham 14L4 to Salem (8830-1860)													
Objective:												Expected Date of Completion:	12/31/2018
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Spending													
Actual	\$ -	\$ -											\$ -
Budget	\$ 50,882	\$ 44,857	\$ 44,812	\$ 77,407	\$ 51,289	\$ 70,241	\$ 68,325	\$ 62,483	\$ 109,676	\$ 105,487	\$ 124,824	\$ 189,718	\$ 1,000,000
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



Cost Element	Amount	Field Completion:	0%
Labor	\$ -	Financial Completion:	0.0%
Material	\$ -		
Voucher	\$ -	Spend to Date:	\$ -
Outside Srvc	\$ -	Remain. Budget	\$ 1,000,000
Overhead	\$ -	Total Budget	\$ 1,000,000
Other	\$ -		
Total	\$ -	Capital Recovery Begins:	7/1/2019

PM: A. Strabone



Update: Engineering in progress. Fairpoint has been contacted and made aware of project.

Construction expected to start in July.

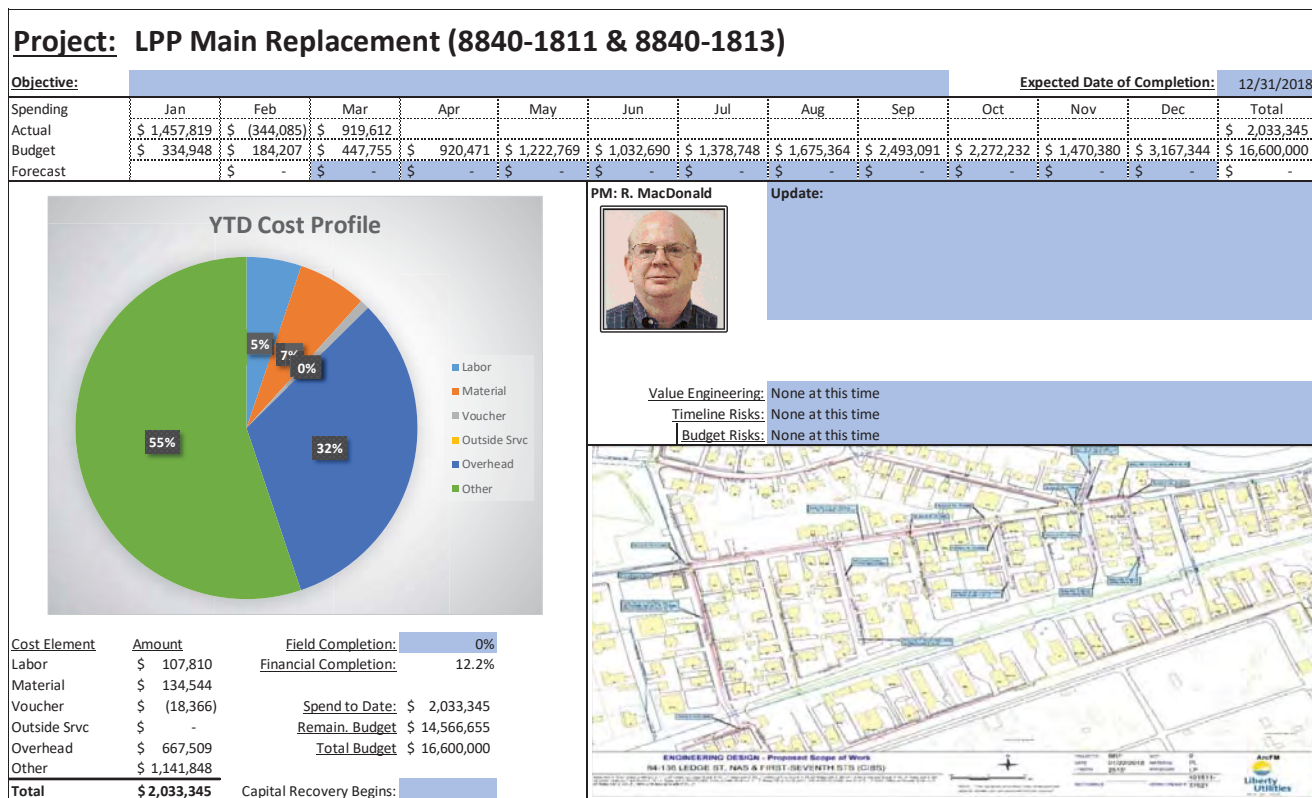
Value Engineering:

Timeline Risks: Weather and Fairpoint Sets could impact schedule. Fairpoint has been notified Liberty contractor to start in July

Budget Risks:

INSERT PROJECT PHOTO HERE

LPP Main Replacement



Meter Purchases

Project: Meter Purchases (8840-1807)													
Objective:											Expected Date of Completion:	12/31/2018	
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ (13,514)	\$	\$ (2,844)										\$ (16,358)
Budget	\$ 29,258	\$ 16,090	\$ 39,111	\$ 80,403	\$ 106,808	\$ 90,205	\$ 120,433	\$ 146,342	\$ 217,770	\$ 198,478	\$ 128,437	\$ 276,666	\$ 1,450,000
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

YTD Cost Profile

Legend: Labor (0%), Material (47%), Voucher (-53%), Outside Svc (0%), Overhead (0%), Other (0%).

PM: B. Mostone

Update: Report is based on current Main Relay and Growth Projections, will have to make adjustments according to needs.

Cost Element	Amount	Field Completion:	0%
Labor	\$ -	Financial Completion:	-1.1%
Material	\$ -		
Voucher	\$ 116,980	Spend to Date:	\$ (16,358)
Outside Svc	\$ -	Remain Budget	\$ 1,466,358
Overhead	\$ -	Total Budget	\$ 1,450,000
Other	\$ (133,338)		
Total	\$ (16,358)	Capital Recovery Begins:	7/1/2020

Value Engineering:

Timeline Risks: Meter and ERT's on average take 6 to 12 weeks for delivery

Budget Risks: Due to field requirement meters adjustments maybe needed

Main Replacement City/State Construction

Project: Main Replacement City/State Construction (8840-1823)													
Objective:											Expected Date of Completion:	12/31/2018	
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ 78,544	\$ (87,596)	\$ (64,646)										\$ (73,698)
Budget	\$ 90,799	\$ 49,936	\$ 121,379	\$ 249,525	\$ 331,474	\$ 279,946	\$ 373,757	\$ 454,165	\$ 675,838	\$ 615,967	\$ 398,597	\$ 858,617	\$ 4,500,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

YTD Cost Profile

Legend: Labor (blue), Material (orange), Voucher (green), Outside Svc (yellow), Overhead (grey), Other (dark green).

PM: R. MacDonald

Update: Expect to spend all budgeted funding in 2018 no changes to the forecast at this time

Value Engineering: None at this time
Timeline Risks: None at this time
Budget Risks: None at this time

Cost Element	Amount	Field Completion:	0%
Labor	\$ 1,591	Financial Completion:	-1.6%
Material	\$ 14,769		
Voucher	\$ (126,363)	Spend to Date:	\$ (73,698)
Outside Svc	\$ 2,203	Remain. Budget	\$ 4,573,698
Overhead	\$ 50,325	Total Budget	\$ 4,500,000
Other	\$ (16,222)		
Total	\$ (73,697)	Capital Recovery Begins:	7/1/2020

EnergyNorth Growth Projects

Project: EnergyNorth Growth Projects

Objective:

Expected Date of Completion:

12/31/201

Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ 339,548	\$ 224,652	\$ 606,695										\$ 1,170,896
Budget	\$ 299,763	\$ 164,856	\$ 400,719	\$ 823,777	\$ 1,094,319	\$ 924,208	\$ 1,233,913	\$ 1,499,370	\$ 2,231,196	\$ 2,033,538	\$ 1,315,919	\$ 2,834,621	\$ 14,856,200
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

YTD Cost Profile

Category	Percentage
Labor	43%
Material	27%
Voucher	17%
Outside Svc	10%
Overhead	3%
Other	0%

Cost Element	Amount	Field Completion:	0%
Labor	\$ 112,176	Financial Completion:	7.9%
Material	\$ 31,672		
Voucher	\$ 321,930	Spend to Date:	\$ 1,170,896
Outside Svc	\$ -	Remain. Budget	\$ 13,685,304
Overhead	\$ 504,202	Total Budget	\$ 14,856,200
Other	\$ 200,916		
Total	\$ 1,170,896	Capital Recovery Begins:	

PM: R. MacDonald

Update: Budget and forecast requires review with the group to true up to re-allocations.

Value Engineering:

None at this time

Timeline Risks:

None at this time

Budget Risks:

None at this time

Additional Capital Spend Discussion Items

- New Projects for 2018 – Needs identified but not funded in budget

- \$1.975m new projects identified for 2018

Project Number	Project Description	Project Manager	Amount
8830-1861	Solar Area Lighting - 9 Lowell Rd Salem	Anthony Strabone	50,000
8830-1862	Electric Charging Station - Exit 2 Park & Ride Salem	Anthony Strabone	50,000
8830-1866	Replace Salem Depot Feeder Gateways	Anthony Strabone	1,200,000
8840-1860	Incremental Transit-Connect Vehicles & Pipe Locating Equipment	Rich MacDonald	302,400
8840-1861	Concord Office Noise Reduction	Richard Foley	40,416
8840-1863	Gas Control Alarm Management Software	Greg Clement	108,000
8830-1803	01659 Granite St Meter Purchases	Rich Foley	225,000
Total Needed:			1,975,816

- \$950k possible available funds in 2018 budget

Project Number	Project Description	Project Manager	Amount
8840-1807	Meter Work Project (Meter Purchases)	Bob Mostone	400,000
8840-1814	K Meter Replacement Program	Rich MacDonald	150,000
8840-1815	Aldyl-A Replacement Program	Rich MacDonald	100,000
8840-1831	Gas System Planning & Reliability	Ryan Burns	300,000
Total Available:			950,000

- Emergent Projects & Funding

- Budget Planning for 2019

- Questions?





April 2018 Capital Spending Monthly Update

May 29, 2018



April 2018 Capital Spend Update - Agenda

1. Safety Moment
2. Introduction
3. April 2018 Capital Spending Results
 - New Hampshire Overview
 - Entity Overview
4. High Profile Project Presentations
 - Golden Rock
 - Rte. 12 Widening
 - GSE New Business (Residential & Commercial)
 - Bare Conductor
 - Extend 14L4
 - CIBS
 - EN Meter Purchases
 - City/State Construction
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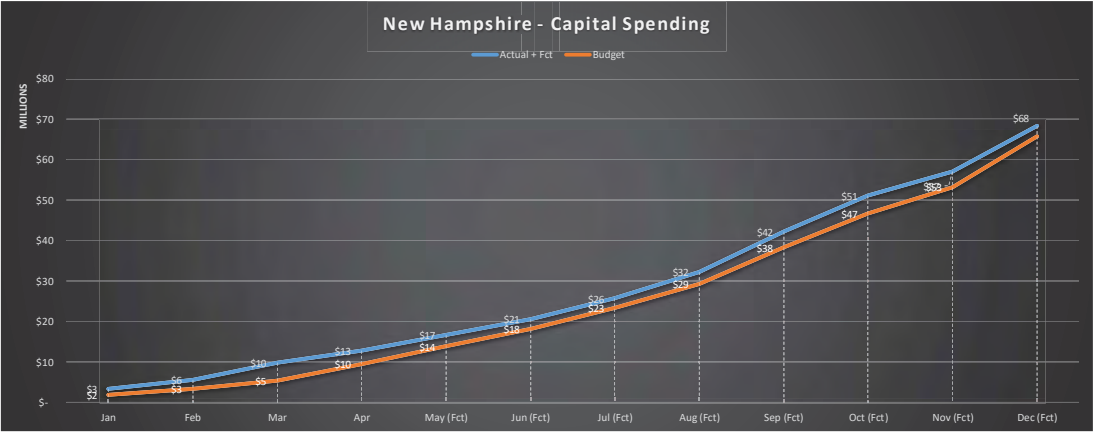
Capital Spending YTD + Forecast

Capital Spending YTD												
	Jan	Feb	Mar	Apr	May (Fct)	Jun (Fct)	Jul (Fct)	Aug (Fct)	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)
Actual + Fct	\$ 3,362,297	\$ 5,710,844	\$ 9,969,402	\$ 12,910,917	\$ 16,733,547	\$ 20,659,683	\$ 25,778,667	\$ 32,221,042	\$ 42,275,526	\$ 51,217,846	\$ 57,155,905	\$ 68,362,328
Budget	\$ 1,942,944	\$ 3,372,941	\$ 5,494,122	\$ 9,560,878	\$ 13,925,513	\$ 18,191,155	\$ 23,362,325	\$ 29,334,930	\$ 38,329,603	\$ 46,665,474	\$ 53,234,583	\$ 65,800,928

	Jan	Feb	Mar	Apr	May (Fct)	Jun (Fct)	Jul (Fct)	Aug (Fct)	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)	Annual
Actual EN	\$ 3,141,615	\$ 1,121,582	\$ 2,276,867	\$ 2,589,936	\$ 2,914,739	\$ 2,917,054	\$ 3,800,660	\$ 4,430,838	\$ 6,457,574	\$ 5,964,244	\$ 4,054,562	\$ 7,700,422	\$ 47,370,092
Actual GSE	\$ 218,185	\$ 1,188,263	\$ 1,964,959	\$ 308,250	\$ 845,800	\$ 956,254	\$ 1,251,131	\$ 1,919,889	\$ 3,475,409	\$ 2,804,505	\$ 1,811,838	\$ 3,351,641	\$ 20,096,125
Actual Keene	\$ 2,497	\$ 38,701	\$ 16,732	\$ 43,329	\$ 62,092	\$ 52,828	\$ 67,193	\$ 91,649	\$ 121,501	\$ 173,570	\$ 71,659	\$ 154,360	\$ 896,111
	3,362,297	2,348,547	4,258,558	2,941,515	3,822,630	3,926,136	5,118,984	6,442,375	10,054,484	8,942,319	5,938,059	11,206,423	68,362,328

	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Budget EN	\$ 899,870	\$ 494,889	\$ 1,202,934	\$ 2,472,930	\$ 3,285,082	\$ 2,774,418	\$ 3,704,135	\$ 4,501,019	\$ 6,697,919	\$ 6,104,561	\$ 3,950,311	\$ 8,509,363	\$ 44,597,431
Budget GSE	\$ 1,033,613	\$ 911,237	\$ 910,310	\$ 1,572,445	\$ 1,041,893	\$ 1,426,884	\$ 1,387,961	\$ 1,269,283	\$ 2,227,971	\$ 2,142,877	\$ 2,535,679	\$ 3,853,947	\$ 20,314,100
Budget Keene	\$ 9,461	\$ 23,870	\$ 7,936	\$ 21,380	\$ 37,661	\$ 64,340	\$ 79,074	\$ 202,303	\$ 68,784	\$ 88,433	\$ 83,119	\$ 203,035	\$ 889,397
	\$ 1,942,944	\$ 1,429,997	\$ 2,121,181	\$ 4,066,756	\$ 4,364,635	\$ 4,265,642	\$ 5,171,170	\$ 5,972,605	\$ 8,994,673	\$ 8,335,871	\$ 6,569,108	\$ 12,566,346	\$ 65,800,928

Forecasted Variance: (2,561,400)



March 2018 Capital Spend Reporting

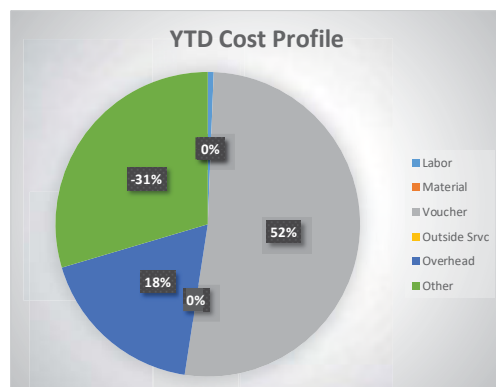
High Profile Projects



Golden Rock Substation

Project: Golden Rock Substation (8830-1744)

Objective:										Expected Date of Completion:		12/31/2018	
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ 3,389	\$ 2,877	\$ 1,570	\$ 154									\$ 7,990
Budget	\$ 20,353	\$ 17,943	\$ 17,925	\$ 30,963	\$ 20,516	\$ 28,096	\$ 27,330	\$ 24,993	\$ 43,870	\$ 42,195	\$ 49,929	\$ 75,887	\$ 400,000
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



Cost Element	Amount	Field Completion: 0%
Labor	\$ 122	Financial Completion: 2.0%
Material	\$ -	
Voucher	\$ 10,141	Spend to Date: \$ 7,990
Outside Srvc	\$ -	Remain. Budget: \$ 392,010
Overhead	\$ 3,519	Total Budget: \$ 400,000
Other	\$ (5,792)	
Total	\$ 7,990	Capital Recovery Begins: 7/1/2019

PM: A. Strabone



Update: Final engineering has been awarded to TRC. Owner's engineering has been awarded to Control Point Technologies.

Circuit breakers have been received. Motor operated disconnects have been ordered with an expected Summer arrival date.
YEP has been revised to \$400,000 to account for Engineering only in 2018

Value Engineering:

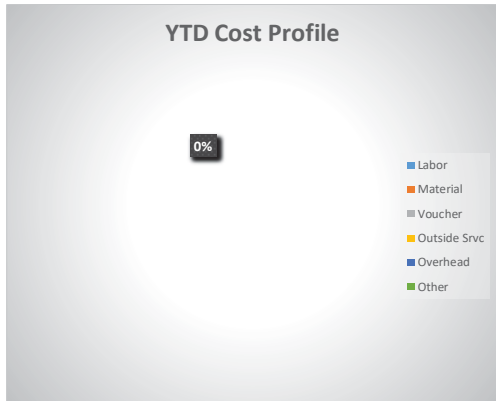
Timeline Risks:

Budget Risks:




Rte. 12 Widening, Walpole/Charlestown

Project: Rte. 12 Widening, Walpole/Charlestown (8830-1818)													
<u>Objective:</u>													<u>Expected Date of Completion:</u>
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ -	\$ -	\$ -										\$ -
Budget	\$ 76,322	\$ 67,286	\$ 67,218	\$ 116,110	\$ 76,934	\$ 105,362	\$ 102,488	\$ 93,724	\$ 164,514	\$ 158,231	\$ 187,235	\$ 284,577	\$ 1,500,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



Cost Element	Amount	Field Completion:	0%
Labor	\$ -	Financial Completion:	0.0%
Material	\$ -		
Voucher	\$ -		
Outside Svc	\$ -	Spend to Date:	\$ -
Overhead	\$ -	Remain. Budget	\$ 1,500,000
Other	\$ -	Total Budget	\$ 1,500,000
Total	\$ -	Capital Recovery Begins:	7/1/2019

PM: A. Strabone



Update: Engineering in progress however we have experienced delays with engineering progress due to STORM Response required in March.
Construction is expected to start in July

Value Engineering:

Timeline Risks: This job is closely tied to NHDOT work. Any delays with NHDOT scope of work will significantly impact Liberty's schedule.

Budget Risks: Labor has been charged against 2017 project number 301711-01010 (\$5,739)

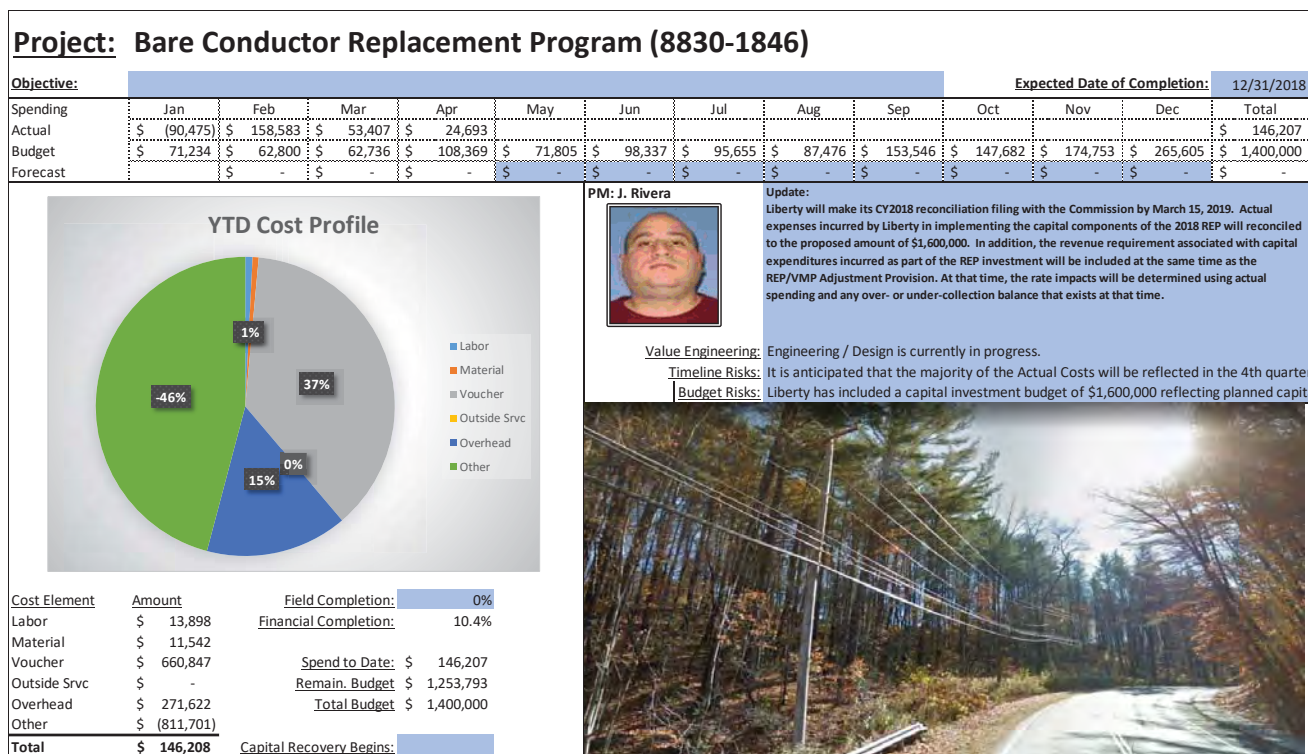
INSERT PROJECT PHOTO HERE

GSE New Business - Residential & Commercial

Project: GSE New Business Residential & Commercial (8830-1837 & 8830-1838)													
Objective:													Expected Date of Completion: 12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ 327,254	\$ 249,176	\$ 463,346	\$ 290,447									\$ 1,330,223
Budget	\$ 160,277	\$ 141,301	\$ 141,157	\$ 243,831	\$ 161,561	\$ 221,259	\$ 215,224	\$ 196,821	\$ 345,480	\$ 332,285	\$ 393,194	\$ 597,611	\$ 3,150,000
Forecast													
<div> <div> <p>YTD Cost Profile</p> <p>Legend: Labor (34%), Material (15%), Voucher (26%), Outside Srvc (3%), Overhead (7%), Other (-15%)</p> </div> <div> <p>Cost Element Amount Field Completion: 0% Financial Completion: 42.2%</p> <p>Labor \$ 137,370</p> <p>Material \$ 288,237</p> <p>Voucher \$ 493,898</p> <p>Outside Srvc \$ 59,920</p> <p>Overhead \$ 637,204</p> <p>Other \$ (286,407)</p> <p>Total \$ 1,330,222</p> </div> <div> <p>Spend to Date: \$ 1,330,223</p> <p>Remain. Budget: \$ 1,819,778</p> <p>Total Budget: \$ 3,150,000</p> <p>Capital Recovery Begins: 7/1/2019</p> </div> </div>													
<div> <div> <p>PM: A. Strabone</p> </div> <div> <p>Update: This is normal run of the business projects.</p> </div> <div> <p>Value Engineering:</p> <p>Timeline Risks:</p> <p>Budget Risks:</p> </div> <div> <p>Two Tuscan projects (301738-01028; 8830-18001946) are tied to 8830-1738 totalling approx \$540k. These projects should be tied to 8830-1858. One Tuscan project (301738-01199) should be tied to 8830-C42930</p> </div> </div>													
<p style="color: red; text-align: center;">INSERT PROJECT PHOTO HERE</p>													



Bare Conductor Replacement Program



Extend Pelham 14L4 to Salem

Project: Extend Pelham 14L4 to Salem (8830-1860)														
Objective:													Expected Date of Completion:	12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
Actual	\$ -	\$ -	\$ -	\$ 5,235	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,235	
Budget	\$ 50,882	\$ 44,857	\$ 44,812	\$ 77,407	\$ 51,289	\$ 70,241	\$ 68,325	\$ 62,483	\$ 109,676	\$ 105,487	\$ 124,824	\$ 189,718	\$ 1,000,000	
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	

YTD Cost Profile

0%

100%

- Labor
- Material
- Voucher
- Outside Svc
- Overhead
- Other

PM: A. Strabone

Update: Engineering is complete. Bids have been received from Contractors, reiew of bids in progress.

Fairpoint has been contacted and made aware of project.

Construction expected to start in July.

Value Engineering:

Timeline Risks: Weather and Fairpoint Sets could impact schedule. Fairpoint has been notified Liberty contractor to start in July

Budget Risks:

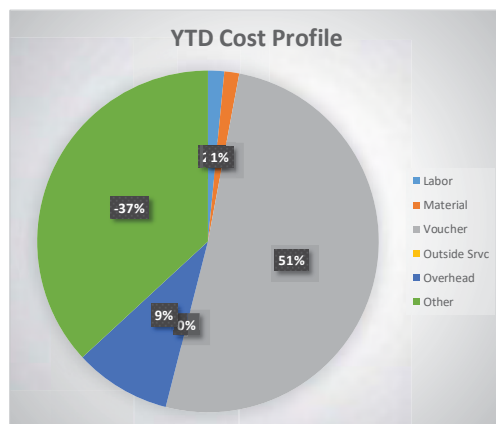
INSERT PROJECT PHOTO HERE

Cost Element	Amount	Field Completion:	0%
Labor	\$ -	Financial Completion:	0.5%
Material	\$ -		
Voucher	\$ 5,235	Spend to Date:	\$ 5,235
Outside Svc	\$ -	Remain. Budget	\$ 994,765
Overhead	\$ -	Total Budget	\$ 1,000,000
Other	\$ -		
Total	\$ 5,235	Capital Recovery Begins:	7/1/2019

LPP Main Replacement

Project: LPP Main Replacement (8840-1811 & 8840-1813)

Objective:													Expected Date of Completion: 12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ 1,457,819	\$ 344,085	\$ 919,612	\$ 661,236	\$ 1,222,769	\$ 1,032,690	\$ 1,378,748	\$ 1,675,364	\$ 2,493,091	\$ 2,272,232	\$ 1,470,380	\$ 3,167,344	\$ 2,694,581
Budget	\$ 334,948	\$ 184,207	\$ 447,755	\$ 920,471	\$ 1,222,769	\$ 1,032,690	\$ 1,378,748	\$ 1,675,364	\$ 2,493,091	\$ 2,272,232	\$ 1,470,380	\$ 3,167,344	\$ 16,600,000
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



Cost Element	Amount	Field Completion: 13%
Labor	\$ 157,369	Financial Completion: 16.2%
Material	\$ 144,202	
Voucher	\$ 5,232,518	Spend to Date: \$ 2,694,581
Outside Svc	\$ -	Remain. Budget \$ 13,905,419
Overhead	\$ 939,063	Total Budget \$ 16,600,000
Other	\$ (3,778,570)	
Total	\$ 2,694,582	Capital Recovery Begins:

PM: R. MacDonald



Update:

Value Engineering: None at this time
Timeline Risks: None at this time
Budget Risks: None at this time



Meter Purchases

Project: Meter Purchases (8840-1807)

Objective:													Expected Date of Completion: 12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ (13,514)	\$ -	\$ (2,844)	\$ (8,287)									\$ (24,645)
Budget	\$ 21,186	\$ 11,652	\$ 28,322	\$ 58,223	\$ 77,344	\$ 65,321	\$ 87,210	\$ 105,972	\$ 157,696	\$ 143,726	\$ 93,006	\$ 200,344	\$ 1,050,000
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

YTD Cost Profile

Legend: Labor (0%), Material (45%), Voucher (0%), Outside Srvc (0%), Overhead (0%), Other (-55%)

PM: B. Mostone

Update: Report is based on current Main Relay and Growth Projections, will have to make adjustments according to needs.

Value Engineering:

Timeline Risks: Meter and ERT's on average take 6 to 12 weeks for delivery

Budget Risks: Due to field requirement meters adjustments maybe needed

Cost Element	Amount	Field Completion: 0%
Labor	\$ -	Financial Completion: -2.3%
Material	\$ -	
Voucher	\$ 108,693	Spend to Date: \$ (24,645)
Outside Srvc	\$ -	Remain Budget: \$ 1,074,645
Overhead	\$ -	Total Budget: \$ 1,050,000
Other	\$ (133,338)	
Total	\$ (24,645)	Capital Recovery Begins: 7/1/2020

Main Replacement City/State Construction

Project: Main Replacement City/State Construction (8840-1823)													
Objective:													Expected Date of Completion: 12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ 78,544	\$ (87,596)	\$ (64,646)	\$ 473,974									\$ 400,276
Budget	\$ 90,799	\$ 49,936	\$ 121,379	\$ 249,525	\$ 331,474	\$ 279,946	\$ 373,757	\$ 454,165	\$ 675,838	\$ 615,967	\$ 398,597	\$ 858,617	\$ 4,500,000
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

YTD Cost Profile

Category	Percentage
Labor	7%
Material	0%
Voucher	0%
Outside Svc	0%
Overhead	0%
Other	60%

PM: R. MacDonald

Update: Expect to spend all budgeted funding in 2018 no changes to the forecast at this time

Value Engineering: None at this time
Timeline Risks: None at this time
Budget Risks: None at this time

Cost Element	Amount	Field Completion: 40%
Labor	\$ 1,907	Financial Completion: 8.9%
Material	\$ 47,954	
Voucher	\$ 517,404	Spend to Date: \$ 400,276
Outside Svc	\$ 2,203	Remain. Budget \$ 4,099,724
Overhead	62,053	Total Budget \$ 4,500,000
Other	\$ (231,245)	
Total	\$ 400,276	Capital Recovery Begins: 7/1/2020

EnergyNorth Growth Projects

Project: EnergyNorth Growth Projects													
Objective:											Expected Date of Completion: 12/31/2018		
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ 339,548	\$ 224,652	\$ 606,695	\$ 563,245									\$ 1,734,141
Budget	\$ 273,481	\$ 150,403	\$ 365,586	\$ 751,554	\$ 998,376	\$ 843,179	\$ 1,125,732	\$ 1,367,914	\$ 2,035,579	\$ 1,855,250	\$ 1,200,547	\$ 2,586,099	\$ 13,553,700
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<div> <div> <p>YTD Cost Profile</p> <p>49% Other 32% Labor 14% Overhead 3% Material 2% Voucher 0% Outside Svc</p> </div> <div> <p>PM: R. MacDonald</p> <p>Update: Budget and forecast requires review with the group to true up to re-allocations.</p> <p>Value Engineering: None at this time Timeline Risks: None at this time Budget Risks: None at this time</p> </div> </div>													
Cost Element	Amount	Field Completion: 13%											
Labor	\$ 152,599	Financial Completion: 12.8%											
Material	\$ 79,718												
Voucher	\$ 2,319,974	Spend to Date: \$ 1,734,141											
Outside Svc	\$ -	Remain. Budget: \$ 11,819,559											
Overhead	668,808	Total Budget: \$ 13,553,700											
Other	\$(1,486,958)												
Total	\$ 1,734,140	Capital Recovery Begins:											

Additional Capital Spend Discussion Items

- New Projects for 2018 – Needs identified but not funded in budget

\$1.6m new projects identified for 2018

Project Number	Project Description	Project Manager	Amount
8830-1861	Solar Area Lighting - 9 Lowell Rd Salem	Anthony Strabone	50,000
8830-1862	Electric Charging Station - Exit 2 Park & Ride Salem	Anthony Strabone	50,000
8830-1866	Replace Salem Depot Feeder Gateways	Anthony Strabone	1,200,000
8830-1873	EAP - Cogsdale CIS Systems Modifications	Marcia Spence	269,541
Total Needed:			1,569,541

- Monthly updates to forecast spending; new monthly reporting for Oakville
- Carry-over spend from 2017 – Roughly ~\$2.2m from prior year projects not included in 2018 budget
- Emergent Projects & Funding
- Budget Planning for 2019 – Meeting scheduled for June 4th.
- Questions?



May 2018 Capital Spending Monthly Update

June 21, 2018



May 2018 Capital Spend Update - Agenda

1. Safety Moment
2. Introduction
3. May 2018 Capital Spending Results
 - New Hampshire Overview
 - Entity Overview
4. High Profile Project Presentations
 - Golden Rock
 - Rte. 12 Widening
 - GSE New Business (Residential & Commercial)
 - Bare Conductor
 - Extend 14L4
 - CIBS
 - EN Meter Purchases
 - City/State Construction
5. Additional Capital Spending Discussion Items
6. Questions?

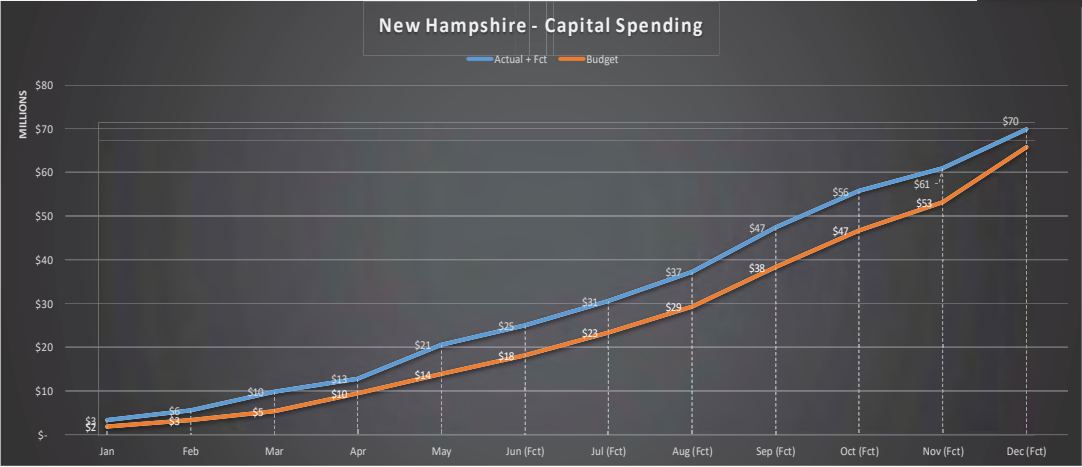


Capital Spending YTD + Forecast

Capital Spending YTD												
	Jan	Feb	Mar	Apr	May	Jun (Fct)	Jul (Fct)	Aug (Fct)	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)
Actual + Fct	\$ 3,362,297	\$ 5,710,844	\$ 9,969,402	\$ 12,910,917	\$ 20,675,552	\$ 25,102,286	\$ 30,546,413	\$ 37,343,924	\$ 47,400,623	\$ 55,760,197	\$ 61,053,256	\$ 69,902,082
Budget	\$ 1,942,944	\$ 3,372,941	\$ 5,494,122	\$ 9,560,878	\$ 13,925,513	\$ 18,191,155	\$ 23,362,325	\$ 29,334,930	\$ 38,329,603	\$ 46,665,474	\$ 53,234,583	\$ 65,800,928

	Jan	Feb	Mar	Apr	May	Jun (Fct)	Jul (Fct)	Aug (Fct)	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)	Annual
Actual EN	\$ 3,141,615	\$ 1,121,582	\$ 2,276,867	\$ 2,589,936	\$ 6,508,821	\$ 3,370,969	\$ 3,980,299	\$ 4,596,217	\$ 6,225,970	\$ 5,384,131	\$ 3,431,232	\$ 5,417,463	\$ 48,045,103
Actual GSE	\$ 218,185	\$ 1,188,263	\$ 1,964,959	\$ 308,250	\$ 1,200,621	\$ 966,529	\$ 1,328,780	\$ 2,097,538	\$ 3,653,059	\$ 2,871,879	\$ 1,811,838	\$ 3,351,641	\$ 20,961,543
Actual Keene	\$ 2,497	\$ 38,701	\$ 16,732	\$ 43,329	\$ 55,192	\$ 89,237	\$ 135,047	\$ 103,755	\$ 177,672	\$ 103,562	\$ 49,989	\$ 79,722	\$ 895,435
	3,362,297	2,348,547	4,258,558	2,941,515	7,764,635	4,426,735	5,444,127	6,797,511	10,056,700	8,359,573	5,293,059	8,848,826	69,902,082
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Budget EN	\$ 899,870	\$ 494,889	\$ 1,202,934	\$ 2,472,930	\$ 3,285,082	\$ 2,774,418	\$ 3,704,135	\$ 4,501,019	\$ 6,697,919	\$ 6,104,561	\$ 3,950,311	\$ 8,509,363	\$ 44,597,431
Budget GSE	\$ 1,033,613	\$ 911,237	\$ 910,310	\$ 1,572,445	\$ 1,041,893	\$ 1,426,884	\$ 1,387,961	\$ 1,269,283	\$ 2,227,971	\$ 2,142,877	\$ 2,535,679	\$ 3,853,947	\$ 20,314,100
Budget Keene	\$ 9,461	\$ 23,870	\$ 7,936	\$ 21,380	\$ 37,661	\$ 64,340	\$ 79,074	\$ 202,303	\$ 68,784	\$ 88,433	\$ 83,119	\$ 203,035	\$ 889,397
	\$ 1,942,944	\$ 1,429,997	\$ 2,121,181	\$ 4,066,756	\$ 4,364,635	\$ 4,265,642	\$ 5,171,170	\$ 5,972,605	\$ 8,994,673	\$ 8,335,871	\$ 6,569,108	\$ 12,566,346	\$ 65,800,928

Forecasted Variance: (4,101,154)



May 2018 Capital Spend Reporting

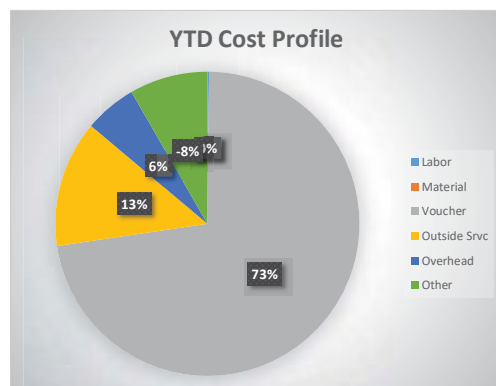
High Profile Projects

Golden Rock Substation

Project: Golden Rock Substation (8830-1744)

Objective: **Expected Date of Completion:** 12/31/2018

Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ 3,389	\$ 2,877	\$ 1,570	\$ 154	\$ 50,060	\$ 28,096	\$ 27,330	\$ 24,993	\$ 43,870	\$ 42,195	\$ 49,929	\$ 75,887	\$ 58,050
Budget	\$ 20,353	\$ 17,943	\$ 17,925	\$ 30,963	\$ 20,516	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 400,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



Cost Element	Amount	Field Completion:	0%
Labor	\$ 122	Financial Completion:	14.5%
Material	\$ -		
Voucher	\$ 50,477	Spend to Date:	\$ 58,050
Outside Svc	\$ 9,374	Remain. Budget	\$ 341,950
Overhead	\$ 3,870	Total Budget	\$ 400,000
Other	\$ (5,792)		
Total	\$ 58,050	Capital Recovery Begins:	7/1/2019

PM: A. Strabone



Update: Final engineering has been awarded to TRC. Owner's engineering has been awarded to Control Point Technologies.

Circuit breakers have been received. Motor operated disconnects have been ordered with an expected Summer arrival date.

YEP has been revised to \$400,000 to account for Engineering only in 2018

Value Engineering:

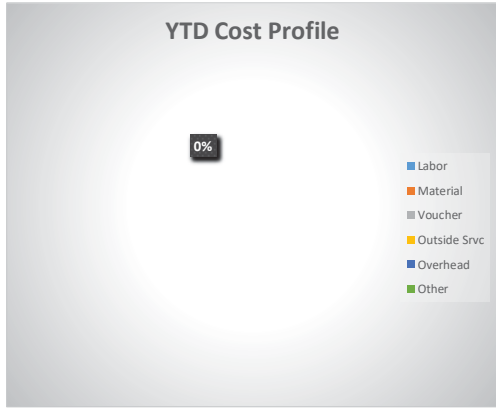
Timeline Risks:

Budget Risks:




Rte. 12 Widening, Walpole/Charlestown

Project: Rte. 12 Widening, Walpole/Charlestown (8830-1818)													
Objective:													Expected Date of Completion: 12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Budget	\$ 76,322	\$ 67,286	\$ 67,218	\$ 116,110	\$ 76,934	\$ 105,362	\$ 102,488	\$ 93,724	\$ 164,514	\$ 158,231	\$ 187,235	\$ 284,577	\$ 1,500,000
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



Cost Element	Amount	Field Completion:	0%
Labor	\$ -	Financial Completion:	0.0%
Material	\$ -		
Voucher	\$ -	Spend to Date:	\$ -
Outside Svc	\$ -	Remain. Budget	\$ 1,500,000
Overhead	\$ -	Total Budget	\$ 1,500,000
Other	\$ -		
Total	\$ -	Capital Recovery Begins:	7/1/2019

PM: A. Strabone



Update: Engineering Complete.
Construction has been awarded to IC Reed. Construction to start week of 7/9/18

Value Engineering:

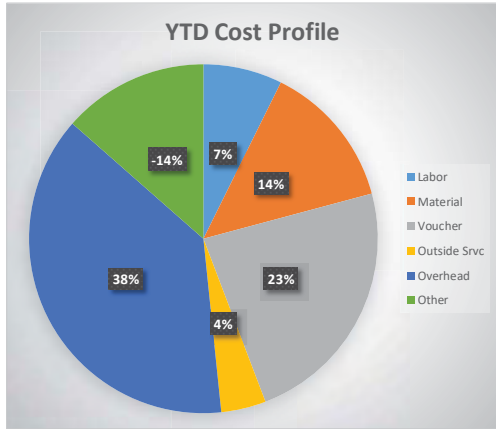
Timeline Risks: This job is closely tied to NHDOT work. Any delays with NHDOT scope of work will significantly impact Liberty's schedule.

Budget Risks: Labor has been charged against 2017 project number 301711-01010 (\$5,739)

INSERT PROJECT PHOTO HERE

GSE New Business - Residential & Commercial


Project: GSE New Business Residential & Commercial (8830-1837 & 8830-1838)													
Objective:													Expected Date of Completion: 12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ 327,254	\$ 249,176	\$ 463,346	\$ 290,447	\$ 297,485								\$ 1,627,708
Budget	\$ 160,277	\$ 141,301	\$ 141,157	\$ 243,831	\$ 161,561	\$ 221,259	\$ 215,224	\$ 196,821	\$ 345,480	\$ 332,285	\$ 393,194	\$ 597,611	\$ 3,150,000
Forecast													



YTD Cost Profile

Category	Percentage
Labor	38%
Material	14%
Voucher	23%
Outside Svc	4%
Overhead	7%
Other	-14%

PM: A. Strabone



Update: This is normal run of the business projects.

Value Engineering:

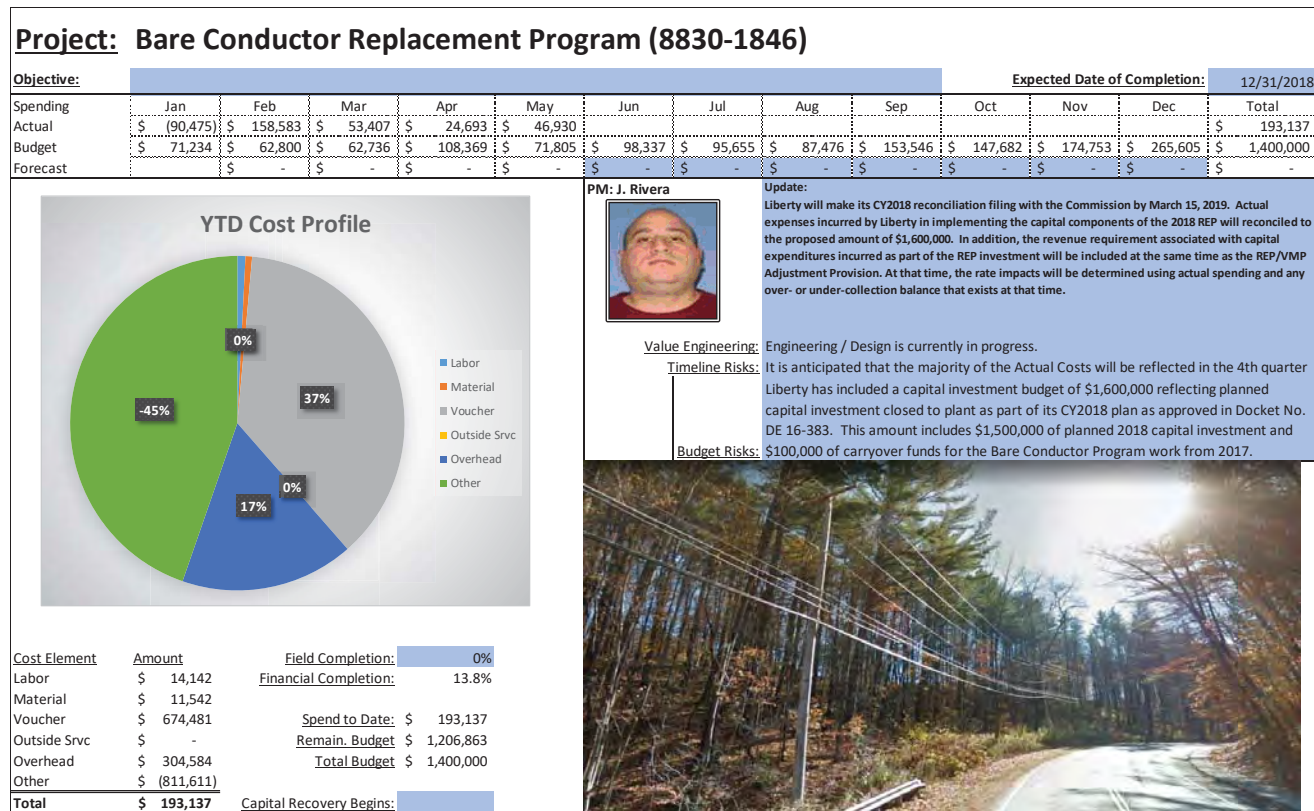
Timeline Risks:

Budget Risks: Two Tuscan projects (301738-01028; 8830-18001946) are tied to 8830-1738 totalling approx \$540k. These projects should be tied to 8830-1858. One Tuscan project (301738-01199) should be tied to 8830-C42930

INSERT PROJECT PHOTO HERE

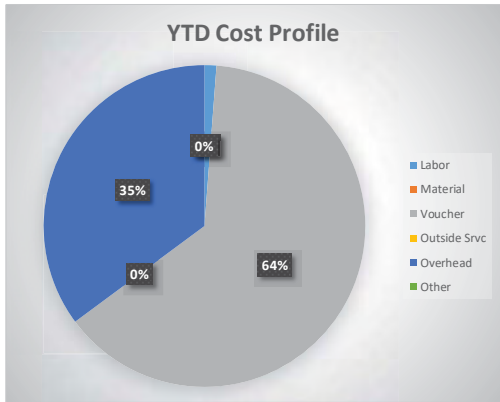
Cost Element	Amount	Field Completion:	0%
Labor	\$ 163,556	Financial Completion:	51.7%
Material	\$ 301,246		
Voucher	\$ 521,509	Spend to Date:	\$ 1,627,708
Outside Svc	\$ 92,697	Remain Budget	\$ 1,522,293
Overhead	\$ 850,458	Total Budget	\$ 3,150,000
Other	\$ (301,758)		
Total	\$ 1,627,708	Capital Recovery Begins:	7/1/2019

Bare Conductor Replacement Program



Extend Pelham 14L4 to Salem


Project: Extend Pelham 14L4 to Salem (8830-1860)													
Objective:												Expected Date of Completion:	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Spending	\$ -	\$ -	\$ -	\$ 5,235	\$ 15,109	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,344
Actual	\$ -	\$ -	\$ -	\$ 5,235	\$ 15,109	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,344
Budget	\$ 50,882	\$ 44,857	\$ 44,812	\$ 77,407	\$ 51,289	\$ 70,241	\$ 68,325	\$ 62,483	\$ 109,676	\$ 105,487	\$ 124,824	\$ 189,718	\$ 1,000,000
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



YTD Cost Profile

Category	Percentage
Labor	35%
Material	0%
Voucher	0%
Outside Srv	0%
Overhead	64%
Other	0%

PM: A. Strabone



Update: Engineering is complete. Construction has been awarded to Northline Construction

Fairpoint has been contacted and made aware of project.

Construction to start week of July 9, 2018

Value Engineering:

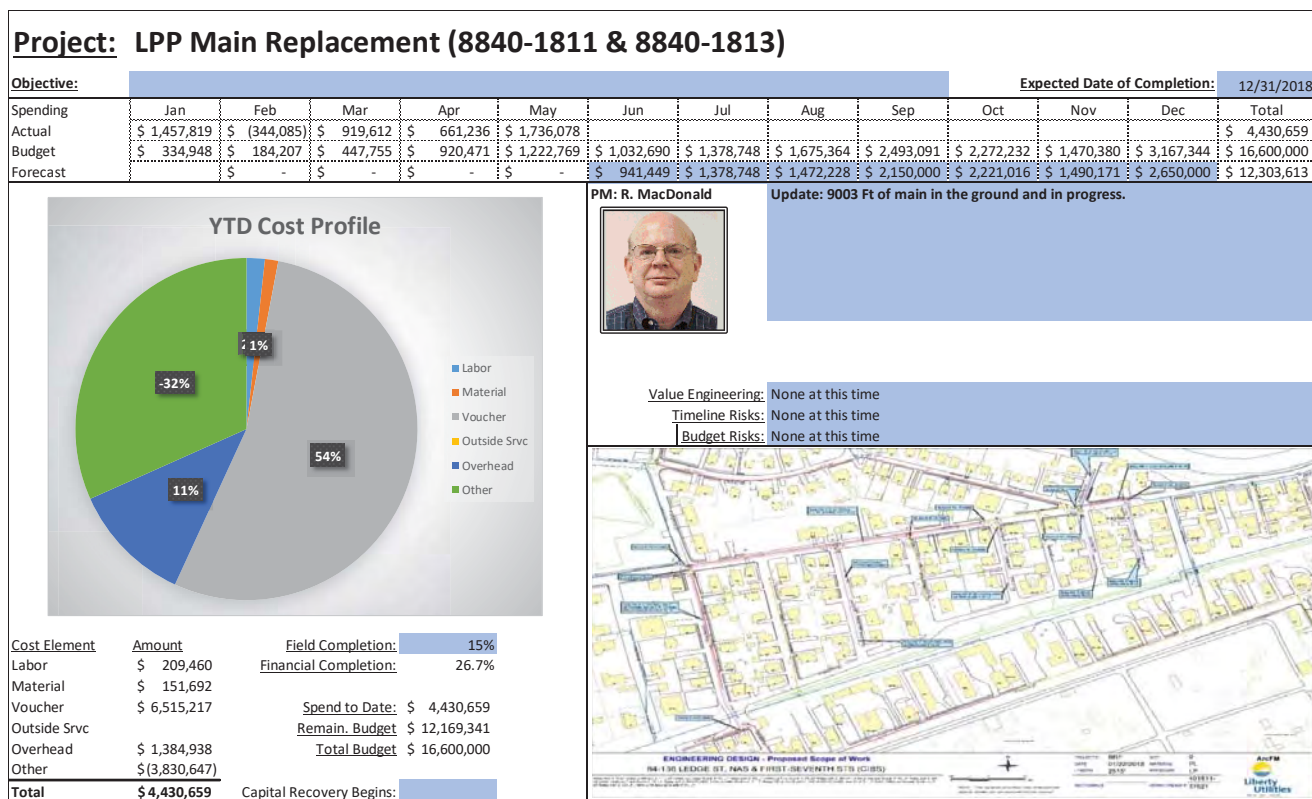
Timeline Risks: Weather and Fairpoint Sets could impact schedule. Fairpoint has been notified Liberty

Budget Risks: contractor to start in July

Cost Element	Amount	Field Completion:	Financial Completion:
Labor	\$ 243	0%	2.0%
Material			
Voucher	\$ 12,953		
Outside Srv	\$ -		
Overhead	\$ 7,148		
Other	\$ -		
Total	\$ 20,344	Capital Recovery Begins:	7/1/2019

INSERT PROJECT PHOTO HERE

LPP Main Replacement



Meter Purchases

Project: Meter Purchases (8840-1807)													
Objective:													Expected Date of Completion: 12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ (13,514)	\$ -	\$ (2,844)	\$ (8,287)	\$ 170,206								\$ 145,561
Budget	\$ 21,186	\$ 11,652	\$ 28,322	\$ 58,223	\$ 77,344	\$ 65,321	\$ 87,210	\$ 105,972	\$ 157,696	\$ 143,726	\$ 93,006	\$ 200,344	\$ 1,050,000
Forecast						\$ 80,000	\$ 150,000	\$ 60,000	\$ 160,000	\$ 175,000	\$ 175,000	\$ 104,439	\$ 904,439

YTD Cost Profile		<ul style="list-style-type: none"> Labor Material Voucher Outside Svc Overhead Other
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Cost Element	Amount	Field Completion: 0%
Labor	\$ -	Financial Completion: 13.9%
Material	\$ -	
Voucher	\$ 278,899	Spend to Date: \$ 145,561
Outside Svc	\$ -	Remain. Budget: \$ 904,439
Overhead	\$ -	Total Budget: \$ 1,050,000
Other	\$ (133,338)	
Total	\$ 145,561	Capital Recovery Begins: 7/1/2020

PM: B. Mostone Value Engineering: Timeline Risks: Meter and ERT's on average take 6 to 12 weeks for delivery Budget Risks: Due to field requirement meters adjustments maybe needed	Update: Report is based on current Main Relay and Growth Projections, will have to make adjustments according to needs. We are also experiencing delays in delivery of ERT's and Meter.
--	--

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Main Replacement City/State Construction

Project: Main Replacement City/State Construction (8840-1823)													
Objective:													Expected Date of Completion: 12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ 78,544	\$ (87,596)	\$ (64,646)	\$ 473,974	\$ 1,859,998								\$ 2,260,274
Budget	\$ 90,799	\$ 49,936	\$ 121,379	\$ 249,525	\$ 331,474	\$ 279,946	\$ 373,757	\$ 454,165	\$ 675,838	\$ 615,967	\$ 398,597	\$ 858,617	\$ 4,500,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ 513,064	\$ 467,442	\$ 486,194	\$ 520,000	\$ 310,000	\$ 105,000	\$ 55,000	\$ 2,456,701

YTD Cost Profile

Category	Percentage
Labor	84%
Material	10%
Voucher	2%
Outside Svc	4%
Overhead	1%
Other	1%

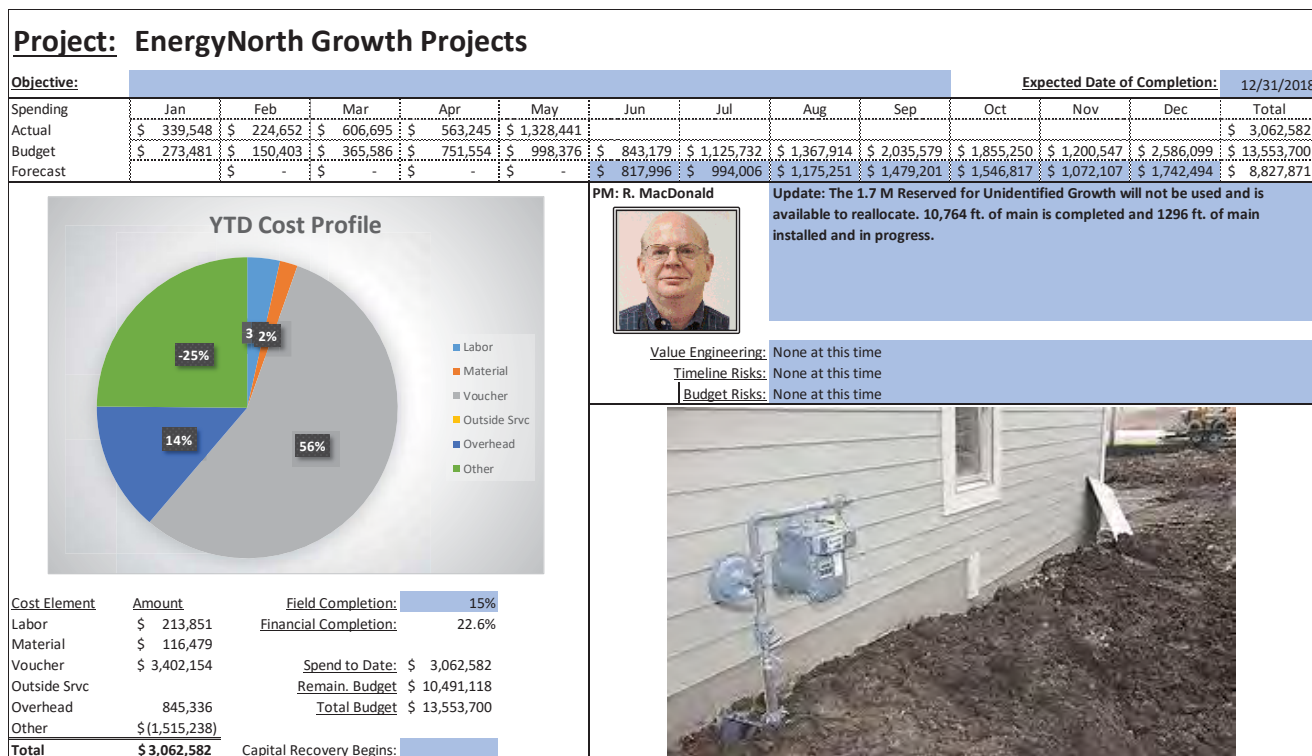
PM: R. MacDonald

Update: Expect to spend all budgeted funding in 2018 no changes to the forecast at this time. 3830 ft. completed and 8875 ft installed and in progress.

Value Engineering: None at this time
Timeline Risks: None at this time
Budget Risks: None at this time

Cost Element	Amount	Field Completion: 65%
Labor	\$ 9,133	Financial Completion: 50.2%
Material	\$ 68,413	
Voucher	\$ 2,359,445	Spend to Date: \$ 2,260,274
Outside Svc	\$ 2,203	Remain. Budget \$ 2,239,726
Overhead	\$ 97,719	Total Budget \$ 4,500,000
Other	\$ (276,638)	
Total	\$ 2,260,274	Capital Recovery Begins: 7/1/2020

EnergyNorth Growth Projects



Additional Capital Spend Discussion Items

- Monthly updates to forecast spending; impact to monthly reporting for Oakville
 - Need to ensure updates provided to finance promptly
 - Projected year end variance of \$0 unless projecting under/(over) spend; necessary over-expenditure forms can be submitted anytime.
 - Plan for meetings to review June capital spend results and forecast for remainder of 2018
- Carry-over spend from 2017 – Roughly **~\$2.6m** (spent 2018)

Project	Project Description	2018		Jan	Feb	Mar	Apr	May
		Budget	May (YTD)					
8840-1772	2017 System Reinforcement - Manchester West Side Loop	-	1,078,478	134,029	134,715	296,560	313,955	199,219
8840-1761	Windham/Pelham Managed Expansion Project	-	1,051,264	137,736	33,458	426,151	285,063	168,855
8840-C18800	Upgrade Hi Line - Concord to Tilton	-	173,767	1,150	99,535	92,163	(93,983)	74,901
8830-C18620	Charlestown DSub	-	129,128	977	75,784	19,031	1,784	31,552
8840-1767	TD Williamson Tapping & Stoppering Equipment Replace & Upgra	-	114,789	114,789	-	-	-	-
			2,547,425					

- These are prior year projects not included in the 2018 budget
 - Above represents 2017 projects > \$100k carry-over in 2018
 - Total carry-over of \$2.57m (net of some credits applied in 2018)
- Capital budget planning for 2019 on-going
- Questions?





June 2018 Capital Spending Monthly Update

July 23, 2018



June 2018 Capital Spend Update - Agenda

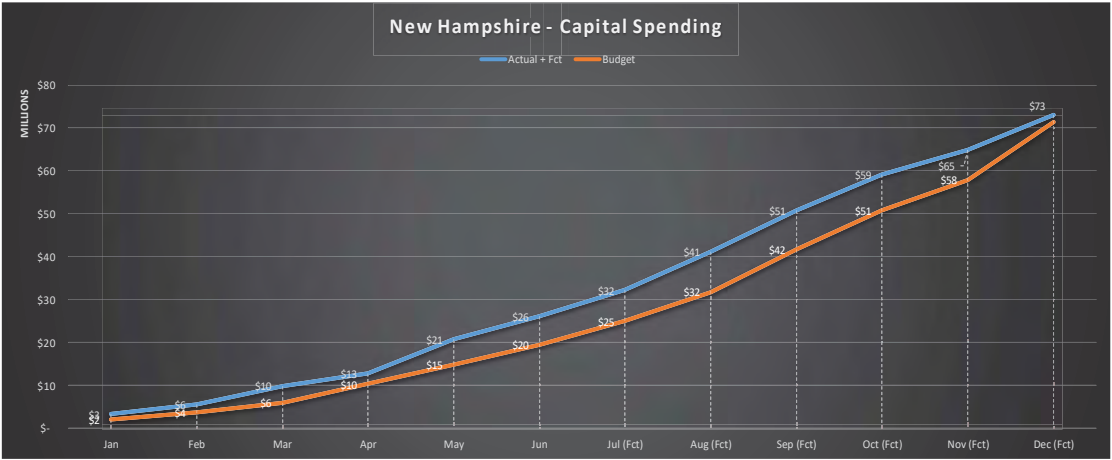
1. Safety Moment
2. June 2018 Capital Spending Results
 - New Hampshire Overview
 - Entity Overview
3. High Profile Project Presentations
 - Golden Rock
 - Rte. 12 Widening
 - GSE New Business (Residential & Commercial)
 - Extend 14L4
 - Salem Depot Getaways
 - EN Meter Purchases
 - Bare Conductor
 - CIBS
 - City/State Construction
 - EN Growth
4. Additional Capital Spending Discussion Items
5. Questions?



Capital Spending YTD + Forecast

Capital Spending YTD													
	Jan	Feb	Mar	Apr	May	Jun	Jul (Fct)	Aug (Fct)	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)	
Actual + Fct	\$ 3,362,297	\$ 5,709,383	\$ 9,966,801	\$ 12,904,818	\$ 20,739,391	\$ 26,166,565	\$ 32,244,807	\$ 41,268,703	\$ 50,808,024	\$ 59,170,561	\$ 64,839,768	\$ 73,133,237	
Budget	\$ 2,117,123	\$ 3,714,012	\$ 5,993,113	\$ 10,345,787	\$ 14,945,355	\$ 19,525,857	\$ 25,033,408	\$ 31,820,900	\$ 41,653,261	\$ 50,828,495	\$ 57,911,263	\$ 71,372,188	
								\$ 264,050	\$ 264,050	\$ 264,050			
	Jan	Feb	Mar	Apr	May	Jun	Jul (Fct)	Aug (Fct)	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)	Annual
Actual EN	\$ 3,141,615	\$ 1,121,582	\$ 2,276,867	\$ 2,589,936	\$ 6,586,321	\$ 4,265,843	\$ 4,136,310	\$ 4,993,170	\$ 5,703,224	\$ 5,260,238	\$ 3,391,732	\$ 5,310,684	\$ 48,777,523
Actual GSE	\$ 218,185	\$ 1,186,803	\$ 1,963,819	\$ 304,751	\$ 1,193,060	\$ 1,088,028	\$ 1,811,038	\$ 3,447,017	\$ 3,665,935	\$ 3,005,580	\$ 2,231,915	\$ 2,912,604	\$ 23,028,736
Actual Keene	\$ 2,497	\$ 38,701	\$ 16,732	\$ 43,329	\$ 55,192	\$ 73,302	\$ 130,894	\$ 583,709	\$ 170,162	\$ 96,718	\$ 45,560	\$ 70,181	\$ 1,326,978
	3,362,297	2,347,087	4,257,418	2,938,016	7,834,574	5,427,174	6,078,242	9,023,896	9,539,321	8,362,537	5,669,207	8,293,469	73,133,237
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Budget EN	\$ 910,726	\$ 500,859	\$ 1,217,446	\$ 2,502,763	\$ 3,324,712	\$ 2,807,887	\$ 3,748,820	\$ 4,804,528	\$ 7,030,459	\$ 6,424,731	\$ 3,997,966	\$ 8,612,017	\$ 45,882,915
Budget GSE	\$ 1,186,619	\$ 1,046,127	\$ 1,045,063	\$ 1,805,213	\$ 1,196,124	\$ 1,638,105	\$ 1,593,420	\$ 1,536,892	\$ 2,652,763	\$ 2,558,250	\$ 2,911,034	\$ 4,424,445	\$ 23,594,055
Budget Keene	\$ 19,779	\$ 49,902	\$ 16,592	\$ 44,698	\$ 78,733	\$ 134,509	\$ 165,310	\$ 446,071	\$ 149,139	\$ 192,254	\$ 173,768	\$ 424,463	\$ 1,895,218
	\$ 2,117,123	\$ 1,596,889	\$ 2,279,101	\$ 4,352,674	\$ 4,599,568	\$ 4,580,501	\$ 5,507,551	\$ 6,787,491	\$ 9,832,361	\$ 9,175,235	\$ 7,082,767	\$ 13,460,925	\$ 71,372,188

Forecasted Variance: (1,761,049)



June 2018 Capital Spend Reporting

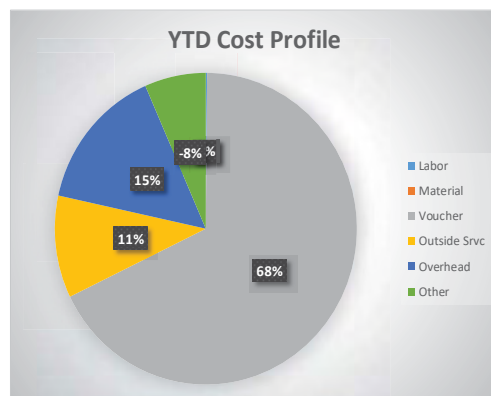
High Profile Projects



Golden Rock Substation

Project: Golden Rock Substation (8830-1744)

Objective:										Expected Date of Completion:			12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ 3,389	\$ 2,877	\$ 1,570	\$ 154	\$ 50,060	\$ 18,707							\$ 76,757
Budget	\$ 20,353	\$ 17,943	\$ 17,925	\$ 30,963	\$ 20,516	\$ 28,096	\$ 27,330	\$ 24,993	\$ 43,870	\$ 42,195	\$ 49,929	\$ 75,887	\$ 400,000
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 37,169	\$ 34,832	\$ 53,710	\$ 52,035	\$ 59,769	\$ 85,727	\$ 400,000



Cost Element	Amount	Field Completion:	0%
Labor	\$ 122	Financial Completion:	19.2%
Material	\$ -		
Voucher	\$ 59,784	Spend to Date:	\$ 76,757
Outside Svc	\$ 9,374	Remain. Budget:	\$ 323,243
Overhead	\$ 13,270	Total Budget:	\$ 400,000
Other	\$ (5,792)		
Total	\$ 76,757	Capital Recovery Begins:	7/1/2019

PM: A. Strabone



Update: Final engineering has been awarded to TRC. Owner's engineering has been awarded to Control Point Technologies.

Circuit breakers have been recieved. Motor operated disconnects have been ordered with an expected Summer arrival date.

YEP has been revised to \$400,000 to account for Engineering only in 2018

Value Engineering:

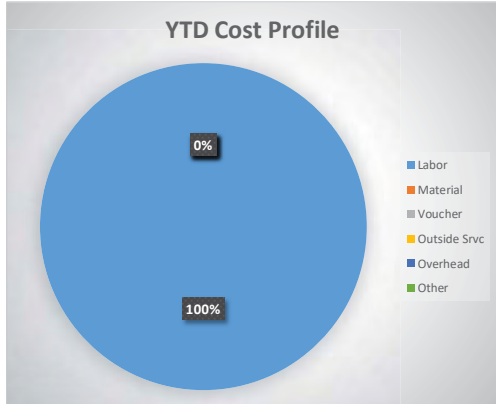
Timeline Risks:

Budget Risks:



Rte. 12 Widening, Walpole/Charlestown

Project: Rte. 12 Widening, Walpole/Charlestown (8830-1818)													
Objective:													Expected Date of Completion: 12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ -	\$ -	\$ -			122							\$ 122
Budget	\$ 76,322	\$ 67,286	\$ 67,218	\$ 116,110	\$ 76,934	\$ 105,362	\$ 102,488	\$ 93,724	\$ 164,514	\$ 158,231	\$ 187,235	\$ 284,577	\$ 1,500,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



Cost Element	Amount	Field Completion:	Financial Completion:
Labor	\$ 121.71	0%	0.0%
Material	\$ -		
Voucher	\$ -		
Outside Svc	\$ -		
Overhead	\$ -		
Other	\$ -		
Total	\$ 121.71		

Field Completion: 0%

Financial Completion: 0.0%


Spend to Date: \$ 122

Remain. Budget: \$ 1,499,878

Total Budget: \$ 1,500,000

Capital Recovery Begins: 7/1/2019

PM: A. Strabone



Update: Engineering Complete.
Construction has been awarded to IC Reed. Construction to start week of 7/9/18

Value Engineering: This job is closely tied to NHDOT work. Any delays with NHDOT scope of work will significantly impact Liberty's schedule.

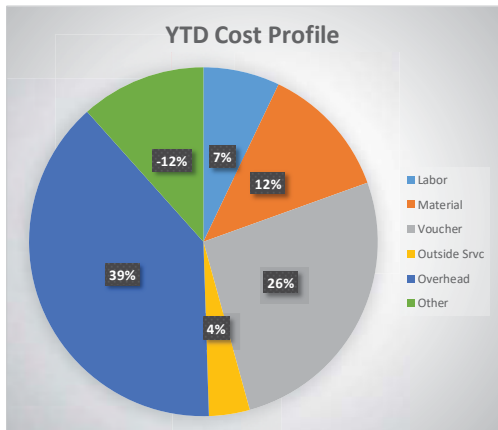
Timeline Risks:

Budget Risks: Labor has been charged against 2017 project number 301711-01010 (\$5,739)

INSERT PROJECT PHOTO HERE

GSE New Business - Residential & Commercial


Project: GSE New Business Residential & Commercial (8830-1837 & 8830-1838)														
Objective:													Expected Date of Completion:	12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
Actual	\$ 327,254	\$ 249,176	\$ 463,346	\$ 290,447	\$ 297,485	\$ 310,203							\$ 1,937,911	
Budget	\$ 160,277	\$ 141,301	\$ 141,157	\$ 243,831	\$ 161,561	\$ 221,259	\$ 137,642	\$ 125,873	\$ 220,944	\$ 212,506	\$ 251,459	\$ 382,190	\$ 2,400,000	
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	



YTD Cost Profile

Category	Percentage
Labor	39%
Material	12%
Voucher	26%
Outside Svc	4%
Overhead	7%
Other	-12%

PM: A. Strabone



Update: This is normal run of the business projects.

Value Engineering:

Timeline Risks:

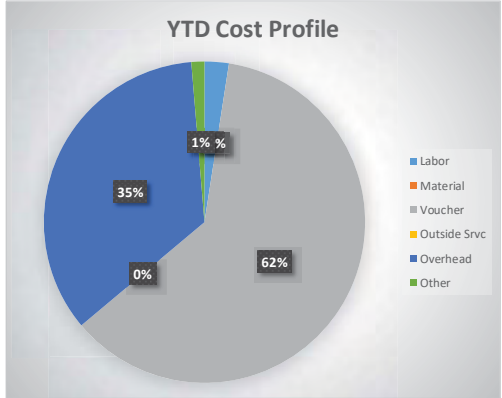
Budget Risks: Two Tuscan projects (301738-01028; 8830-18001946) are tied to 8830-1738 totalling approx \$540k. These projects should be tied to 8830-1858. One Tuscan project (301738-01199) should be tied to 8830-C42930

INSERT PROJECT PHOTO HERE

Cost Element	Amount	Field Completion:	0%
Labor	\$ 179,116	Financial Completion:	80.7%
Material	\$ 313,269		
Voucher	\$ 661,517	Spend to Date:	\$ 1,937,911
Outside Svc	\$ 95,550	Remain. Budget	\$ 462,090
Overhead	\$ 981,675	Total Budget	\$ 2,400,000
Other	\$ (293,216)		
Total	\$ 1,937,911	Capital Recovery Begins:	7/1/2019

Extend Pelham 14L4 to Salem


Project: Extend Pelham 14L4 to Salem (8830-1860)													
Objective:													Expected Date of Completion: 12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ -	\$ -	\$ -	\$ 5,235	\$ 15,109	\$ 4,560							\$ 24,904
Budget	\$ 50,882	\$ 44,857	\$ 44,812	\$ 77,407	\$ 51,289	\$ 70,241	\$ 68,325	\$ 62,483	\$ 109,676	\$ 105,487	\$ 124,824	\$ 189,718	\$ 1,000,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



YTD Cost Profile

Category	Percentage
Labor	35%
Material	0%
Voucher	62%
Outside Svc	1%
Overhead	0%
Other	0%

PM: A. Strabone



Update: Engineering is complete. Construction has been awarded to Northline Construction

Fairpoint has delayed contractor start date. Currently working with LU Legal to resolve issue. LU contractor, Northline proposed to start week of 7/30/18

Value Engineering:

Timeline Risks: Weather and Fairpoint Sets could impact schedule. Fairpoint has been notified Liberty contractor to start in July

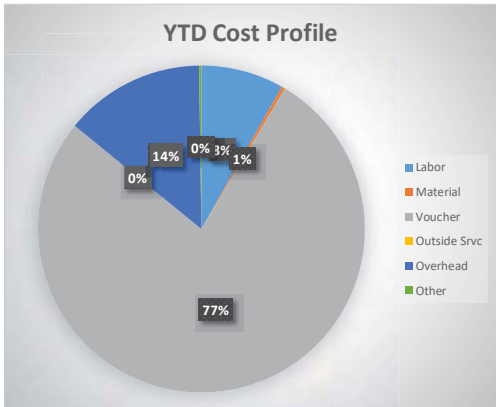
Budget Risks:

INSERT PROJECT PHOTO HERE

Cost Element	Amount	Field Completion:	0%
Labor	\$ 609	Financial Completion:	2.5%
Material	\$ -		
Voucher	\$ 15,305	Spend to Date:	\$ 24,904
Outside Svc	\$ -	Remain. Budget	\$ 975,096
Overhead	\$ 8,665	Total Budget	\$ 1,000,000
Other	\$ 326		
Total	\$ 24,904	Capital Recovery Begins:	7/1/2019

Salem Depot Getaways


Project: Salem Depot Getaways (8830-1866)													
Objective:													Expected Date of Completion: 12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ -	\$ 538	\$ 1,430	\$ 53,076	\$ 3,305	\$ 40,004							\$ 98,353
Budget	\$ -	\$ -	\$ -	\$ 50,000	\$ 75,000	\$ 75,000	\$ 220,000	\$ 250,000	\$ 300,000	\$ 400,000	\$ 20,000	\$ 10,000	\$ 1,400,000
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



YTD Cost Profile

Category	Percentage
Voucher	77%
Labor	14%
Material	0%
Outside Svc	0%
Overhead	3%
Other	1%

PM: A. Strabone



Update: Engineering Complete.
Civil construction has been awarded to Mirra. Electrical Construction has been awarded to ElecComm. Portion of civil construction between Salem Depot and pole 13 Pleasant st is complete (9L3). ElecComm is on-site pulling in 1000 MCM cable. Once 1000 MCM is complete, Mirra will re-mobilize and install conduit for 9L2.

Value Engineering:

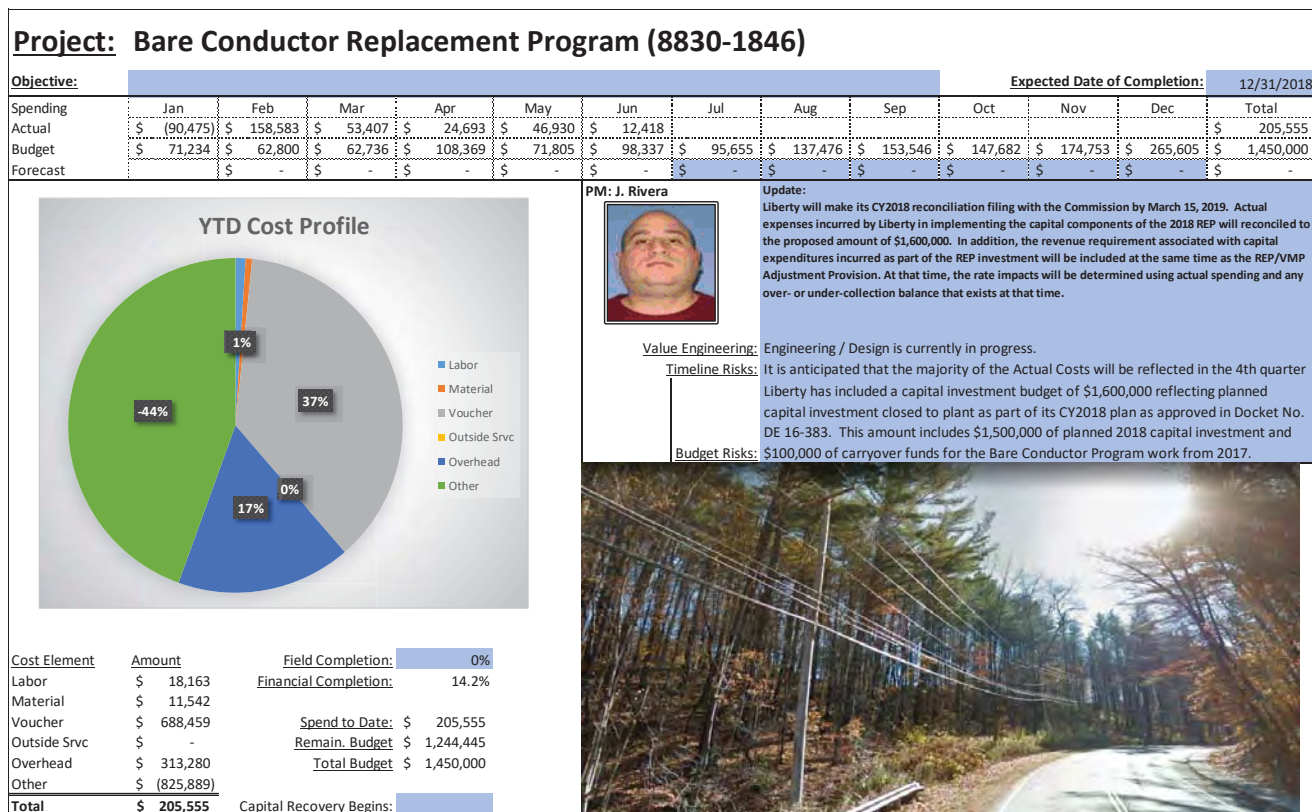
Timeline Risks:

Budget Risks:

INSERT PROJECT PHOTO HERE

Cost Element	Amount	Field Completion:	0%
Labor	\$ 8,086	Financial Completion:	7.0%
Material	\$ 322		
Voucher	\$ 76,051	Spend to Date:	\$ 98,353
Outside Svc	\$ -	Remain Budget	\$ 1,301,647
Overhead	\$ 13,677	Total Budget	\$ 1,400,000
Other	\$ 217		
Total	\$ 98,353	Capital Recovery Begins:	7/1/2019

Bare Conductor Replacement Program



Meter Purchases

Project: Meter Purchases (8840-1807)													
Objective:										Expected Date of Completion: 12/31/2018			
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ (13,514)	\$ -	\$ (2,844)	\$ (8,287)	\$ 170,206	\$ 112,328	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 257,889
Budget	\$ 21,186	\$ 11,652	\$ 28,322	\$ 58,223	\$ 77,344	\$ 65,321	\$ 87,210	\$ 105,972	\$ 157,696	\$ 143,726	\$ 93,006	\$ 200,344	\$ 1,050,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 150,000	\$ 60,000	\$ 160,000	\$ 175,000	\$ 175,000	\$ 104,439	\$ 824,439

YTD Cost Profile

Legend: Labor (75%), Material (0%), Voucher (0%), Outside Srv (0%), Overhead (0%), Other (-25%).

PM: B. Mostone

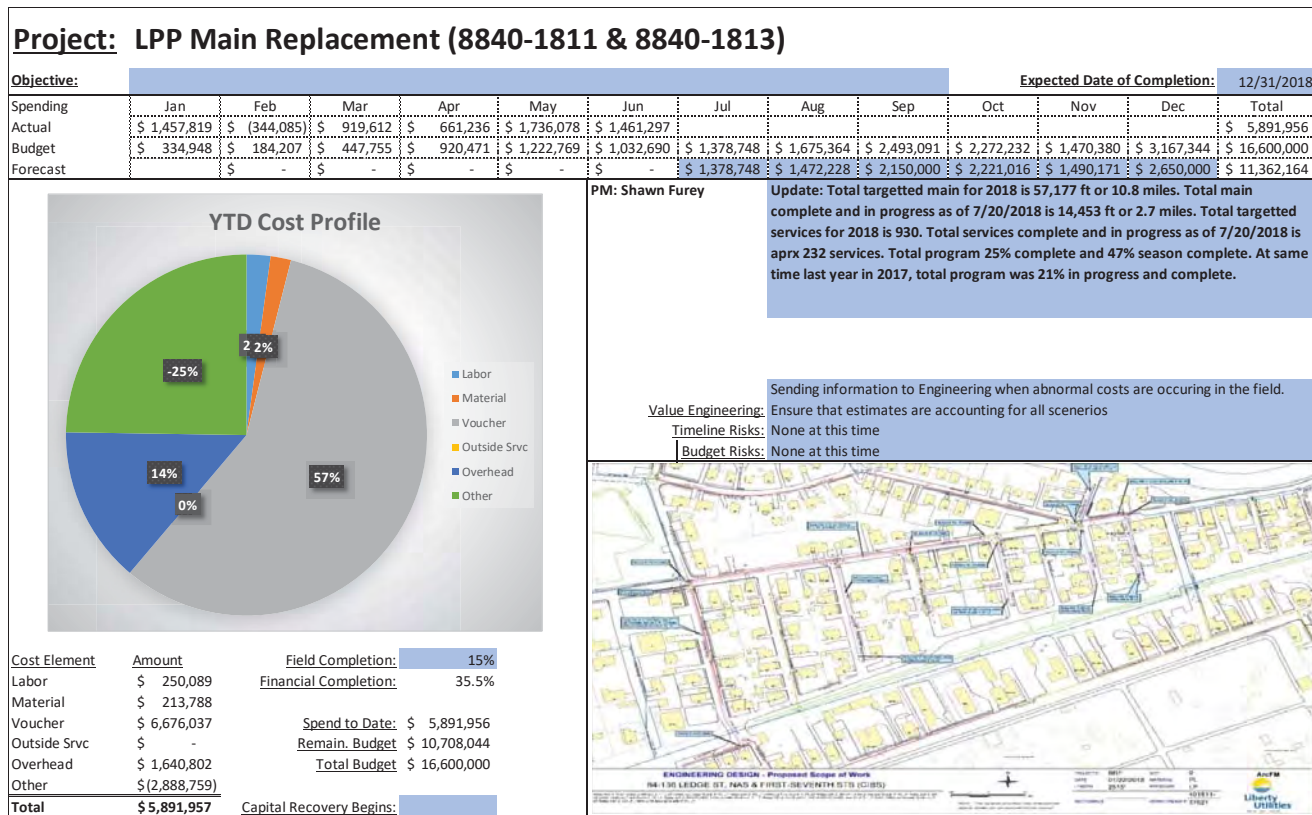
Value Engineering: Update: Report is based on current Main Relay and Growth Projections, will have to make adjustments according to needs. We are also experiencing delays in delivery of ERT's and Meter.

Timeline Risks: Meter and ERT's on average take 6 to 12 weeks for delivery

Budget Risks: Due to field requirement meters adjustments maybe needed

Cost Element	Amount	Field Completion:	0%
Labor	\$ -	Financial Completion:	24.6%
Material	\$ -		
Voucher	\$ 391,227	Spend to Date:	\$ 257,889
Outside Srv	\$ -	Remain. Budget	\$ 792,111
Overhead	\$ -	Total Budget	\$ 1,050,000
Other	\$ (133,338)		
Total	\$ 257,889	Capital Recovery Begins:	7/1/2020

LPP Main Replacement



EnergyNorth Growth Projects

Project: EnergyNorth Growth Projects

Objective:

Expected Date of Completion:

12/31/2018

Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ 339,548	\$ 224,652	\$ 606,695	\$ 563,245	\$ 1,328,441	\$ 923,952							\$ 3,986,533
Budget	\$ 262,259	\$ 144,231	\$ 350,584	\$ 720,712	\$ 957,406	\$ 808,578	\$ 1,079,535	\$ 1,311,779	\$ 1,952,045	\$ 1,779,117	\$ 1,151,281	\$ 2,479,973	\$ 12,997,500
Forecast							\$ 994,006	\$ 1,175,251	\$ 1,479,201	\$ 1,546,817	\$ 1,072,107	\$ 1,742,494	\$ 8,009,875

YTD Cost Profile

Labor

Material

Voucher

Outside Svc

Overhead

Other

PM: Shawn Furey

Update: Total targetted main for 2018 is 100,000 ft or 18.9 miles. Currently 80,363 ft or 15.2 miles is in the sytem. Expect additional 20k to be sold and in system in 2018. As of 7/20/2018, 22,939 ft or 4.34 miles is in progress or complete. Total targetted growth services for 2018 is 1260. As of 7/20/2018 712 services are in the system. 365 services have been installed in 2018. At same time last year, for main there was 59,899 ft or 11.3 miles and for services there were 760 services in the system

Value Engineering:

None at this time

Timeline Risks:

None at this time

Budget Risks:

None at this time

Cost Element	Amount	Field Completion:	15%
Labor	\$ 277,630	Financial Completion:	30.7%
Material	\$ 153,676		
Voucher	\$ 3,279,936	Spend to Date:	\$ 3,986,533
Outside Svc	\$ -	Remain. Budget	\$ 9,010,967
Overhead	\$ 1,067,997	Total Budget	\$ 12,997,500
Other	\$ (792,705)		
Total	\$ 3,986,533	Capital Recovery Begins:	

Additional Capital Spend Discussion Items

- Monthly updates to forecast spending; impact to monthly reporting for Oakville
 - Need to ensure updates provided to finance promptly
 - Projected year end variance of \$0 unless projecting under/(over) spend; necessary over-expenditure forms can be submitted anytime.
- Capital budget planning for 2019
 - File located in Engineering shared drive should be updated with latest on proposed 2019 capex budget
- Questions?



July 2018 Capital Spending Monthly Update

September 6, 2018



July 2018 Capital Spend Update - Agenda

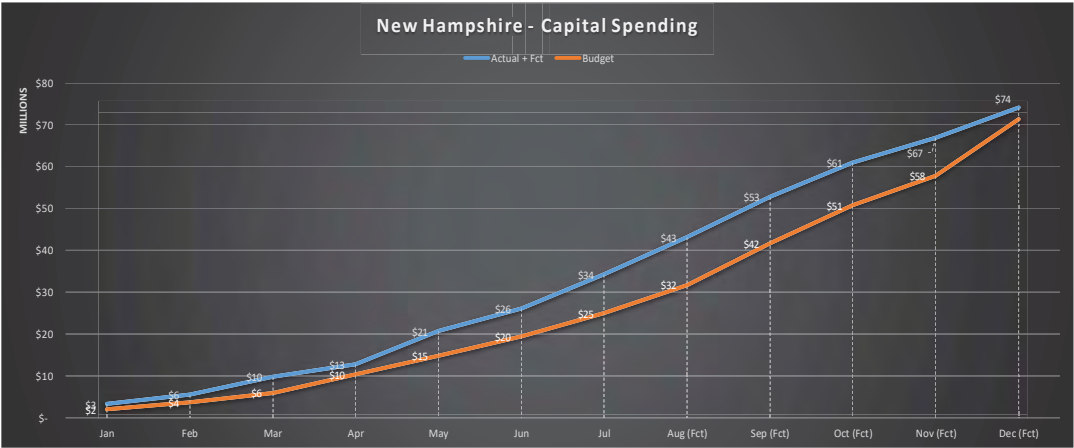
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 - Rte. 12 Widening
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 - Extend 14L4
 - Salem Depot Getaways
 - EN Meter Purchases
 - Bare Conductor
 - CIBS
 - City/State Construction
 - EN Growth
4. Additional Capital Spending Discussion Items
5. Questions?



Capital Spending YTD + Forecast

Capital Spending YTD													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug (Fct)	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)	
Actual + Fct	\$ 3,362,297	\$ 5,709,383	\$ 9,966,801	\$ 12,904,818	\$ 20,739,391	\$ 26,166,565	\$ 34,242,987	\$ 43,143,714	\$ 52,837,338	\$ 60,978,006	\$ 66,988,901	\$ 74,209,945	
Budget	\$ 2,117,123	\$ 3,714,012	\$ 5,993,113	\$ 10,345,787	\$ 14,945,355	\$ 19,525,857	\$ 25,033,408	\$ 31,820,900	\$ 41,653,261	\$ 50,828,495	\$ 57,911,263	\$ 71,372,188	
								\$ 264,050	\$ 264,050	\$ 264,050			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug (Fct)	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)	Annual
Actual EN	\$ 3,141,615	\$ 1,121,582	\$ 2,276,867	\$ 2,589,936	\$ 6,586,321	\$ 4,265,843	\$ 6,405,222	\$ 4,776,628	\$ 5,935,927	\$ 5,062,885	\$ 3,688,149	\$ 4,411,659	\$ 50,262,634
Actual GSE	\$ 218,185	\$ 1,186,803	\$ 1,963,819	\$ 304,751	\$ 1,193,060	\$ 1,088,028	\$ 1,617,407	\$ 3,514,268	\$ 3,538,550	\$ 2,921,146	\$ 2,229,181	\$ 2,726,759	\$ 22,501,957
Actual Keene	\$ 2,497	\$ 38,701	\$ 16,732	\$ 43,329	\$ 55,192	\$ 73,302	\$ 53,794	\$ 609,831	\$ 219,147	\$ 156,638	\$ 93,564	\$ 82,627	\$ 1,445,354
	3,362,297	2,347,087	4,257,418	2,938,016	7,834,574	5,427,174	8,076,422	8,900,727	9,693,624	8,140,668	6,010,894	7,221,044	74,209,945
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Budget EN	\$ 910,726	\$ 500,859	\$ 1,217,446	\$ 2,502,763	\$ 3,324,712	\$ 2,807,887	\$ 3,748,820	\$ 4,804,528	\$ 7,030,459	\$ 6,424,731	\$ 3,997,966	\$ 8,612,017	\$ 45,882,915
Budget GSE	\$ 1,186,619	\$ 1,046,127	\$ 1,045,063	\$ 1,805,213	\$ 1,196,124	\$ 1,638,105	\$ 1,593,420	\$ 1,536,892	\$ 2,652,763	\$ 2,558,250	\$ 2,911,034	\$ 4,424,445	\$ 23,594,055
Budget Keene	\$ 19,779	\$ 49,902	\$ 16,592	\$ 44,698	\$ 78,733	\$ 134,509	\$ 165,310	\$ 446,071	\$ 149,139	\$ 192,254	\$ 173,768	\$ 424,463	\$ 1,895,218
	\$ 2,117,123	\$ 1,596,889	\$ 2,279,101	\$ 4,352,674	\$ 4,599,568	\$ 4,580,501	\$ 5,507,551	\$ 6,787,491	\$ 9,832,361	\$ 9,175,235	\$ 7,082,767	\$ 13,460,925	\$ 71,372,188

Forecasted Variance: (2,837,757)



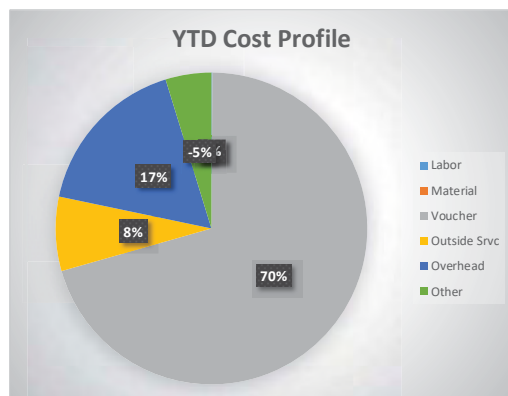
July 2018 Capital Spend Reporting

High Profile Projects



Project: Golden Rock Substation (8830-1744)

 <p>YTD Cost Profile</p>	<p>PM: A. Strabone</p> 	<p>Update: Final engineering has been awarded to TRC. Owner's engineering has been awarded to Control Point Technologies.</p> <p>Circuit breakers have been recieved. Motor operated disconnect has been recieved. Engineering review has begun for the design.</p> <p>YEP has been revised to \$400,000 to account for Engineering only in 2018</p>
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Cost Element	Amount	Field Completion:	0%
Labor	\$ 122	Financial Completion:	27.6%
Material	-		
Voucher	\$ 85,875	Spend to Date:	\$ 110,238
Outside Svc	\$ 9,374	Remain. Budget	\$ 289,762
Overhead	\$ 20,659	Total Budget	\$ 400,000
Other	\$ (5,792)		
Total	\$ 110,237	Capital Recovery Begins:	7/1/2019



Update: Final engineering has been awarded to TRC. Owner's engineering has been awarded to Control Point Technologies.

Circuit breakers have been recieved. Motor operated disconnect has been recieved. Engineering review has begun for the design.
YEP has been revised to \$400,000 to account for Engineering only in 2018

Value Engineering:

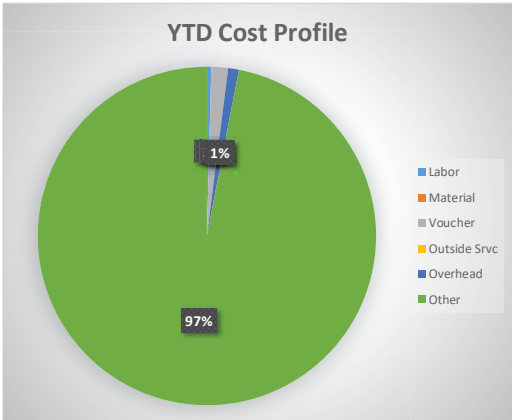
Timeline Risks:

Budget Risks:



Rte. 12 Widening, Walpole/Charlestown

Project: Rte. 12 Widening, Walpole/Charlestown (8830-1818)													
Objective:													Expected Date of Completion:
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Spending						122	28,978						
Actual	\$ -	\$ -	\$ -										\$ 29,100
Budget	\$ 76,322	\$ 67,286	\$ 67,218	\$ 116,110	\$ 76,934	\$ 105,362	\$ 102,488	\$ 93,724	\$ 164,514	\$ 158,231	\$ 187,235	\$ 284,577	\$1,500,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 398,567	\$ 398,567	\$ 224,589	\$ 224,589	\$ 224,589	\$1,500,000



YTD Cost Profile

The pie chart shows that 97% of the cost is categorized as 'Other' (green) and 1% as 'Labor' (blue). The legend includes Labor, Material, Voucher, Outside Srvc, Overhead, and Other.

Cost Element	Amount	Field Completion:	Financial Completion:
Labor	\$ 122	0%	1.9%
Material	\$ -		
Voucher	\$ 464		
Outside Srvc	\$ -		
Overhead	\$ 298		
Other	\$ 28,216		
Total	\$ 29,100		


Spend to Date: \$ 29,100

Remain. Budget \$ 1,470,900

Total Budget \$ 1,500,000

Capital Recovery Begins: 7/1/2019

PM: A. Strabone



Update: Engineering Complete.
Construction has been awarded to IC Reed. Construction to start week of 7/9/18
Pole sets complete. Poles are being framed and pull wire installed.

Value Engineering:

Timeline Risks: This job is closely tied to NHDOT work. Any delays with NHDOT scope of work will significantly impact Liberty's schedule.

Budget Risks: Labor has been charged against 2017 project number 301711-01010 (\$40k)

INSERT PROJECT PHOTO HERE

GSE New Business - Residential & Commercial

Project: GSE New Business Residential & Commercial (8830-1837 & 8830-1838)												
Objective:											Expected Date of Completion: 12/31/2018	
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Actual	\$ 327,254	\$ 249,176	\$ 463,346	\$ 290,447	\$ 297,486	\$ 310,203	\$ 400,428					
Budget	\$ 160,277	\$ 141,301	\$ 141,157	\$ 243,831	\$ 161,561	\$ 221,259	\$ 137,642	\$ 125,873	\$ 220,944	\$ 212,506	\$ 251,459	\$ 382,190
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,000	\$ 200,000	\$ 222,142	\$ 185,000	\$ 185,000
												\$ 2,338,340
												\$ 2,400,000
												\$ 3,330,482

YTD Cost Profile

Cost Element	Percentage
Labor	42%
Material	23%
Voucher	13%
Outside Svc	4%
Overhead	8%
Other	-10%

Cost Element

Labor	\$ 230,582
Material	\$ 388,983
Voucher	\$ 680,411
Outside Svc	\$ 120,694
Overhead	\$ 1,222,024
Other	\$ (304,353)
Total	\$ 2,338,340

Field Completion: 0%

Financial Completion: 97.4%

Spend to Date: \$ 2,338,340

Remain. Budget: \$ 61,660

Total Budget: \$ 2,400,000

Capital Recovery Begins: 7/1/2019

PM: A. Strabone

Update: This is normal run of the business projects.

Value Engineering:

Timeline Risks:

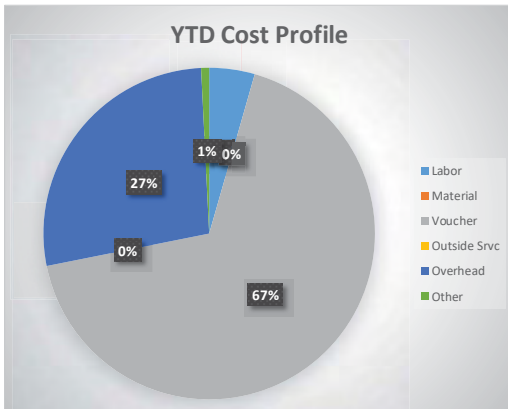
Budget Risks:

Two Tuscan projects (301738-01028; 8830-18001946) are tied to 8830-1738 totalling approx \$1M. These projects should be tied to 8830-1858. One Tuscan project (301738-01199) should be tied to 8830-C42930

INSERT PROJECT PHOTO HERE

Extend Pelham 14L4 to Salem


Project: Extend Pelham 14L4 to Salem (8830-1860)													
Objective:													Expected Date of Completion:
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Spending													
Actual	\$ -	\$ -		\$ 5,235	\$ 15,109	4,560	20,138						\$ 45,042
Budget	\$ 50,882	\$ 44,857	\$ 44,812	\$ 77,407	\$ 51,289	\$ 70,241	\$ 68,325	\$ 62,483	\$ 109,676	\$ 105,487	\$ 124,824	\$ 189,718	\$ 1,000,000
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 362,178	\$ 197,551	\$ 164,626	\$ 131,701	\$ 98,902	\$ 1,000,000



YTD Cost Profile

Category	Percentage
Labor	27%
Material	0%
Voucher	67%
Outside Svc	0%
Overhead	1%
Other	0%

PM: A. Strabone



Update: Engineering is complete. Construction has been awarded to Northline Construction

All pole sets complete. Majority of poles framed and pull rope has been installed.

Value Engineering:

Timeline Risks: Weather and Fairpoint Sets could impact schedule. Fairpoint has been notified Liberty contractor to start in July

Budget Risks:

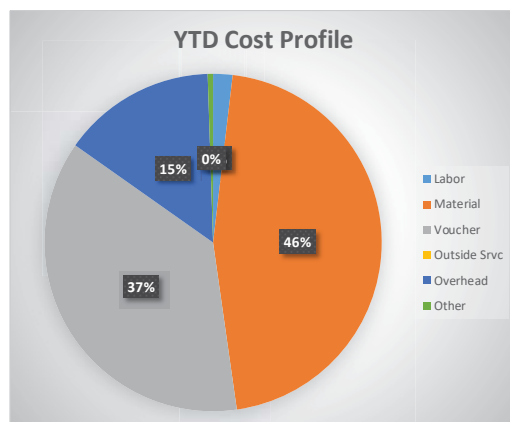
INSERT PROJECT PHOTO HERE

Cost Element	Amount	Field Completion:	0%
Labor	\$ 1,999	Financial Completion:	4.5%
Material	\$ -		
Voucher	\$ 30,371	Spend to Date:	\$ 45,042
Outside Svc	\$ -	Remain. Budget	\$ 954,958
Overhead	\$ 12,322	Total Budget	\$ 1,000,000
Other	\$ 351		
Total	\$ 45,042	Capital Recovery Begins:	7/1/2019

Salem Depot Getaways

Project: Salem Depot Getaways (8830-1866)

Objective:													Expected Date of Completion:	12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
Actual	\$ -	\$ 538	\$ 1,430	\$ 53,076	\$ 3,305	\$ 40,004	448069.95						\$ 546,423	
Budget	\$ -	\$ -	\$ -	\$ 50,000	\$ 75,000	\$ 75,000	\$ 220,000	\$ 250,000	\$ 300,000	\$ 400,000	\$ 20,000	\$ 10,000	\$ 1,400,000	
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 301,051	\$ 226,210	\$ 303,311	\$ 15,336	\$ 7,668	\$ 1,400,000	



Cost Element	Amount	Field Completion:	0%
Labor	\$ 10,175	Financial Completion:	39.0%
Material	\$ 250,718		
Voucher	\$ 202,330	Spend to Date:	\$ 546,423
Outside Svc		Remain. Budget	\$ 853,577
Overhead	\$ 80,400	Total Budget	\$ 1,400,000
Other	\$ 2,800		
Total	\$ 546,423	Capital Recovery Begins:	7/1/2019

PM: A. Strabone



Update: Engineering Complete.
Civil construction is complete. 1000 MCM cable install for the 9L3 is complete.
ElecComm is on-site pulling in 1000 MCM cable for 9L2.

Value Engineering:

Timeline Risks:

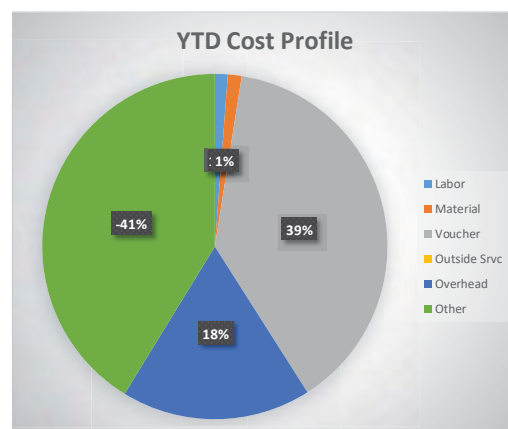
Budget Risks:

INSERT PROJECT PHOTO HERE

Bare Conductor Replacement Program

Project: Bare Conductor Replacement Program (8830-1846)

Objective:										Expected Date of Completion:			12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ (90,475)	\$ 158,583	\$ 53,407	\$ 24,693	\$ 46,930	\$ 12,418	\$ 109,998						\$ 315,553
Budget	\$ 71,234	\$ 62,800	\$ 62,736	\$ 108,369	\$ 71,805	\$ 98,337	\$ 95,655	\$ 137,476	\$ 153,546	\$ 147,682	\$ 174,753	\$ 265,605	\$ 1,450,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 57,586	\$ 161,241	\$ 322,482	\$ 103,655	\$ 489,482	\$ 1,450,000



Cost Element	Amount	Field Completion:	0%
Labor	\$ 21,642	Financial Completion:	21.8%
Material	\$ 23,372		
Voucher	\$ 693,505	Spend to Date:	\$ 315,553
Outside Svc		Remain. Budget	\$ 1,134,447
Overhead	\$ 320,214	Total Budget	\$ 1,450,000
Other	\$ (743,180)		
Total	\$ 315,553	Capital Recovery Begins:	

PM: J. Rivera



Update:

Liberty will make its CY2018 reconciliation filing with the Commission by March 15, 2019. Actual expenses incurred by Liberty in implementing the capital components of the 2018 REP will be reconciled to the proposed amount of \$1,600,000. In addition, the revenue requirement associated with capital expenditures incurred as part of the REP investment will be included at the same time as the REP/VMP Adjustment Provision. At that time, the rate impacts will be determined using actual spending and any over- or under-collection balance that exists at that time.

Value Engineering: Engineering / Design is currently in progress.

Timeline Risks: It is anticipated that the majority of the Actual Costs will be reflected in the 4th quarter. Liberty has included a capital investment budget of \$1,600,000 reflecting planned capital investment closed to plant as part of its CY2018 plan as approved in Docket No. DE 16-383. This amount includes \$1,500,000 of planned 2018 capital investment and

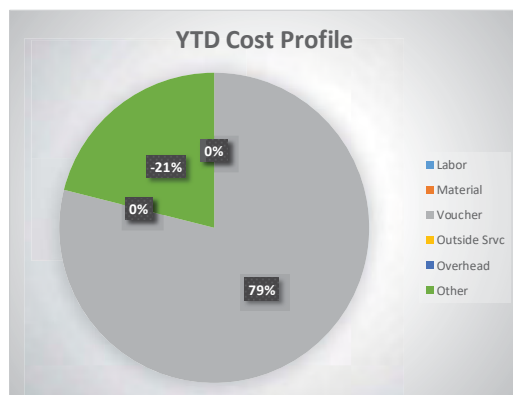
Budget Risks: \$100,000 of carryover funds for the Bare Conductor Program work from 2017.



Meter Purchases

Project: Meter Purchases (8840-1807)

Objective:												Expected Date of Completion:	12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ (13,514)	\$ -	\$ (2,844)	\$ (8,287)	\$ 170,206	\$ 112,328	\$ 108,565						\$ 366,454
Budget	\$ 21,186	\$ 11,652	\$ 28,322	\$ 58,223	\$ 77,344	\$ 65,321	\$ 87,210	\$ 105,972	\$ 157,696	\$ 143,726	\$ 93,006	\$ 200,344	\$ 1,050,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250,000	\$ 225,000	\$ 100,000	\$ 83,546	\$ 25,000	\$ 1,050,000



Cost Element	Amount	Field Completion:	0%
Labor	\$ -	Financial Completion:	34.9%
Material	\$ -		
Voucher	\$ 499,792	Spend to Date:	\$ 366,454
Outside Svc	\$ -	Remain. Budget	\$ 683,546
Overhead	\$ -	Total Budget	\$ 1,050,000
Other	\$ (133,338)		
Total	\$ 366,454	Capital Recovery Begins:	7/1/2020

PM: B. Mostone



Update: Report is based on current Main Relay and Growth Projections, will have to make adjustments according to needs. We are also experiencing delays in delivery of ERT's and Meter.

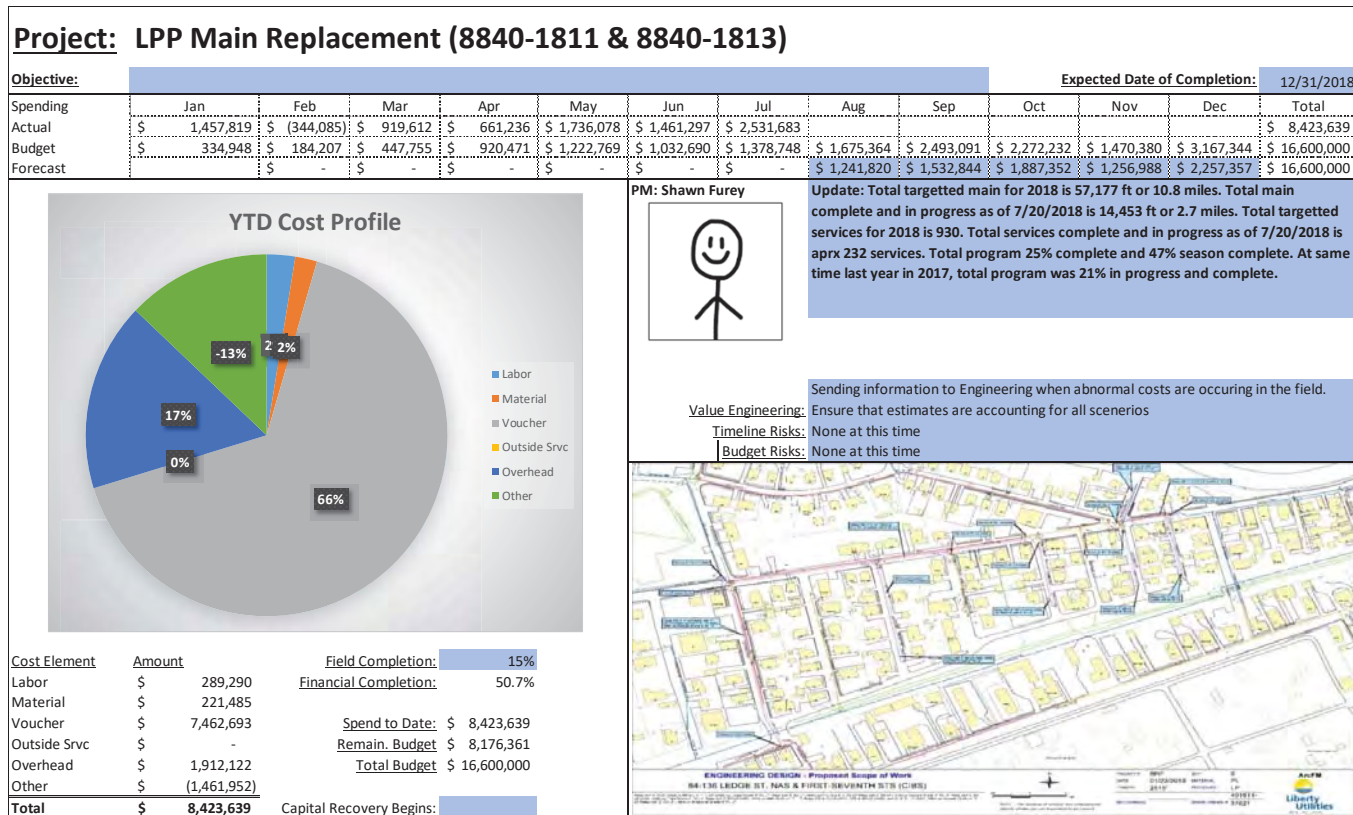
Value Engineering:

Timeline Risks: Meter and ERT's on average take 6 to 12 weeks for delivery

Budget Risks: Due to field requirement meters adjustments maybe needed



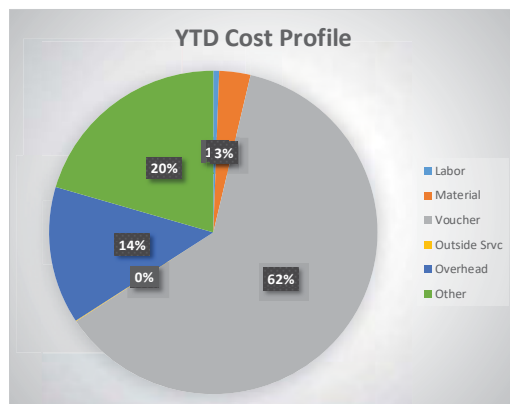
LPP Main Replacement



Main Replacement City/State Construction

Project: Main Replacement City/State Construction (8840-1823)

Objective:	Expected Date of Completion:												12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ 78,544	\$ (87,596)	\$ (64,646)	\$ 473,974	\$ 1,859,998	\$ 702,026	\$ 498,037						\$ 3,460,337
Budget	\$ 90,799	\$ 49,936	\$ 121,379	\$ 249,525	\$ 331,474	\$ 279,946	\$ 373,757	\$ 454,165	\$ 675,838	\$ 615,967	\$ 398,597	\$ 858,617	\$ 4,500,000
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 465,000	\$ 250,000	\$ 250,000	\$ 50,000	\$ 24,664	\$ 4,500,001



Cost Element	Amount	Field Completion:	65%
Labor	\$ 19,834	Financial Completion:	76.9%
Material	\$ 106,521		
Voucher	\$ 2,148,388	Spend to Date:	\$ 3,460,337
Outside Svc	\$ 2,203	Remain. Budget	\$ 1,039,663
Overhead	\$ 475,237	Total Budget	\$ 4,500,000
Other	\$ 708,154		
Total	\$ 3,460,337	Capital Recovery Begins:	7/1/2020

PM: Shawn Furey



Update: Total targetted main for 2018 is 57,177 ft or 10.8 miles. Total main complete and in progress as of 7/20/2018 is 14,453 ft or 2.7 miles. Total targetted services for 2018 is 930. Total services complete and in progress as of 7/20/2018 is aprx 232 services. Total program 25% complete and 47% season complete. At same time last year in 2017, total program was 21% in progress and complete.

Sending information to Engineering when abnormal costs are occurring in the field.

Value Engineering: Ensure that estimates are accounting for all scenarios

Timeline Risks: None at this time

Budget Risks: None at this time



EnergyNorth Growth Projects

Project: EnergyNorth Growth Projects

Objective:												
	Expected Date of Completion: 12/31/2018											
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Actual	\$ 339,548	\$ 224,652	\$ 606,695	\$ 563,245	\$ 1,328,441	\$ 923,952	\$ 1,549,811					
Budget	\$ 249,319	\$ 137,114	\$ 333,286	\$ 685,152	\$ 910,167	\$ 768,682	\$ 1,026,271	\$ 1,247,056	\$ 1,855,731	\$ 1,691,335	\$ 1,094,476	\$ 2,357,611
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,175,000	\$ 1,595,000	\$ 1,530,000	\$ 1,295,000	\$ 1,224,856
												\$ 12,356,201

YTD Cost Profile

64% Voucher, 23% Labor, 4% Material, 4% Outside Svc, 0% Overhead, -4% Other

Cost Element

Labor	\$ 321,480	Field Completion:	15%
Material	\$ 212,298	Financial Completion:	44.8%
Voucher	\$ 3,852,511	Spend to Date:	\$ 5,536,345
Outside Svc	\$ -	Remain. Budget	\$ 6,819,855
Overhead	1,385,751	Total Budget	\$ 12,356,200
Other	\$ (235,695)		
Total	\$ 5,536,345	Capital Recovery Begins:	

PM: Shawn Furey

Update: Total targetted main for 2018 is 100,000 ft or 18.9 miles. Currently 80,363 ft or 15.2 miles is in the sytem. Expect additional 20k to be sold and in system in 2018. As of 7/20/2018, 22,939 ft or 4.34 miles is in progress or complete. Total targetted growth services for 2018 is 1260. As of 7/20/2018 712 services are in the system. 365 services have been installed in 2018. At same time last year, for main there was 59,899 ft or 11.3 miles and for services there were 760 services in the system.

Value Engineering: None at this time
Timeline Risks: None at this time
Budget Risks: None at this time

Additional Capital Spend Discussion Items

- Monthly updates to forecast spending; impact to monthly reporting for Oakville
 - Need to ensure updates provided to finance promptly
 - Projected year end variance of \$0 unless projecting under/(over) spend; necessary over-expenditure forms can be submitted anytime
 - Plan for identifying and submitting over expenditure forms to be discussed at our next meeting late September
 - Process for close-out forms; to be submitted by year end
- Capital budget planning for 2019
 - Updates to capital spend for 2019 in the budget planning model
 - Expect meetings by late September to finalize capital spend plan for 2019 following review and finalization of the overall budget by Oakville
 - Ideas on how to best to facilitate Business Case Forms for 2019 capital projects
 - Team lead/point-person for review (prior to Finance review)
 - Location for saved files
 - Process improvements
- Questions?



August 2018 Capital Spending Monthly Update

September 27, 2018



August 2018 Capital Spend Update - Agenda

1. Safety Moment
2. August 2018 Capital Spending Results
 - New Hampshire Overview
 - Entity Overview
3. High Profile Project Presentations
 - Golden Rock
 - Rte. 12 Widening
 - GSE New Business (Residential & Commercial)
 - Extend 14L4
 - Salem Depot Getaways
 - EN Meter Purchases
 - Bare Conductor
 - CIBS
 - City/State Construction
 - EN Growth
4. Additional Capital Spending Discussion Items
5. Questions?

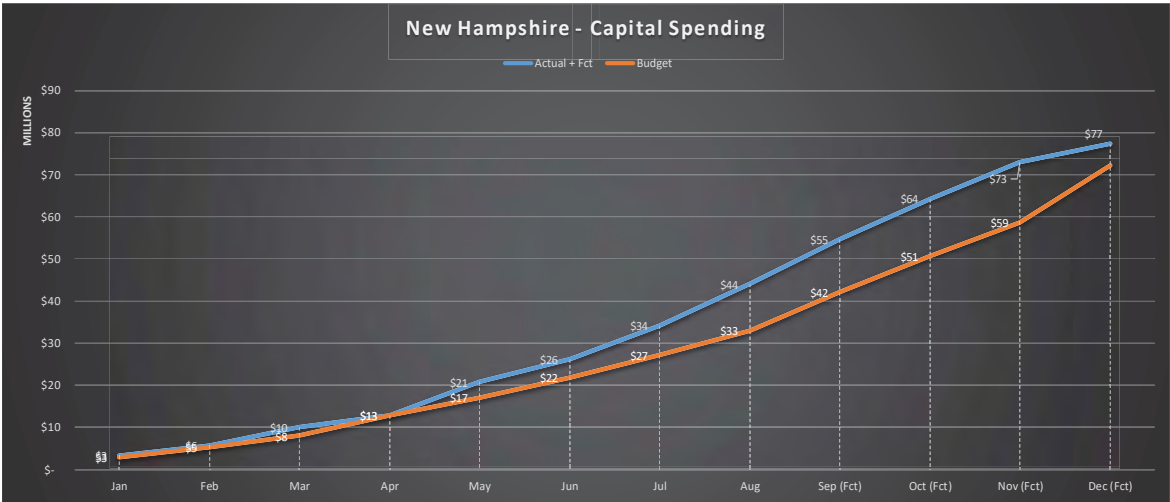


Capital Spending YTD + Forecast

Capital Spending YTD												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)
Actual + Fct	\$ 3,362,297	\$ 5,709,383	\$ 9,966,801	\$ 12,904,818	\$ 20,739,391	\$ 26,166,565	\$ 34,242,987	\$ 44,064,980	\$ 54,706,490	\$ 64,293,302	\$ 73,022,746	\$ 77,452,325
Budget	\$ 2,862,902	\$ 5,266,958	\$ 7,994,814	\$ 12,921,557	\$ 17,064,153	\$ 21,891,902	\$ 27,128,433	\$ 33,044,518	\$ 42,036,580	\$ 50,576,988	\$ 58,599,349	\$ 72,209,939

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)	Annual
Actual EN	\$ 3,141,615	\$ 1,121,582	\$ 2,276,867	\$ 2,589,936	\$ 6,586,321	\$ 4,265,843	\$ 6,405,222	\$ 6,759,423	\$ 6,826,778	\$ 6,026,690	\$ 4,606,308	\$ 2,527,960	\$ 53,134,545
Actual GSE	\$ 218,185	\$ 1,186,803	\$ 1,963,819	\$ 304,751	\$ 1,193,060	\$ 1,088,028	\$ 1,617,407	\$ 2,489,255	\$ 3,639,402	\$ 3,465,786	\$ 4,094,661	\$ 1,869,113	\$ 23,130,271
Actual Keene	\$ 2,497	\$ 38,701	\$ 16,732	\$ 43,329	\$ 55,192	\$ 73,302	\$ 53,794	\$ 573,315	\$ 175,330	\$ 94,337	\$ 28,475	\$ 32,504	\$ 1,187,508
	3,362,297	2,347,087	4,257,418	2,938,016	7,834,574	5,427,174	8,076,422	9,821,993	10,641,510	9,586,812	8,729,444	4,429,578	77,452,325
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Budget EN	\$ 454,450	\$ 249,927	\$ 607,502	\$ 1,248,872	\$ 1,659,022	\$ 1,401,128	\$ 1,870,651	\$ 2,397,447	\$ 3,508,180	\$ 3,205,923	\$ 1,994,974	\$ 4,297,373	\$ 22,895,450
Budget GSE	\$ 2,389,671	\$ 2,106,743	\$ 2,104,599	\$ 3,635,428	\$ 2,408,813	\$ 3,298,896	\$ 3,208,909	\$ 3,095,070	\$ 5,342,266	\$ 5,151,930	\$ 5,862,384	\$ 8,910,166	\$ 47,514,875
Budget Keene	\$ 18,781	\$ 47,385	\$ 15,755	\$ 42,443	\$ 74,761	\$ 127,724	\$ 156,971	\$ 423,569	\$ 141,615	\$ 182,556	\$ 165,002	\$ 403,051	\$ 1,799,614
	2,862,902	2,404,056	2,727,857	4,926,743	4,142,596	4,827,749	5,236,531	5,916,085	8,992,061	8,540,409	8,022,360	13,610,591	72,209,939

Forecasted Variance: (5,242,386)



August 2018 Capital Spend Reporting

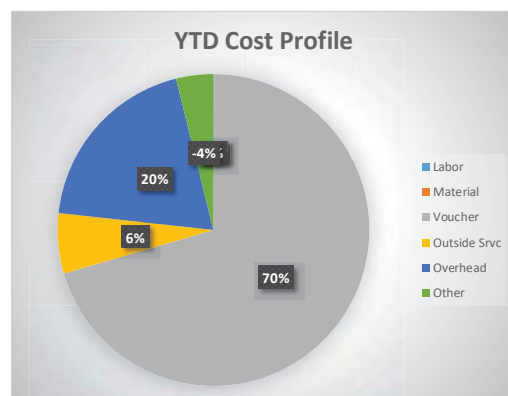
High Profile Projects

Golden Rock Substation

Project: Golden Rock Substation (8830-1744)

Objective: **Expected Date of Completion:** 12/31/2018

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Spending Actual	\$ 3,389	\$ 2,877	\$ 1,570	\$ 154	\$ 50,061	\$ 18,707	\$ 33,480	\$ 28,275					\$ 138,513
Budget	\$ 20,353	\$ 17,943	\$ 17,925	\$ 30,963	\$ 20,516	\$ 28,096	\$ 27,330	\$ 24,993	\$ 43,870	\$ 42,195	\$ 49,929	\$ 75,887	\$ 400,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 78,234	\$ 50,862	\$ 47,388	\$ 85,003	\$ 400,000



Cost Element	Amount	Field Completion:	0%
Labor	\$ 122	Financial Completion:	34.6%
Material	\$ -		
Voucher	\$ 105,676	Spend to Date:	\$ 138,513
Outside Svc	\$ 9,374	Remain. Budget	\$ 261,487
Overhead	\$ 29,133	Total Budget	\$ 400,000
Other	\$ (5,792)		
Total	\$ 138,513	Capital Recovery Begins:	7/1/2019

PM: A. Strabone



Update: Final engineering has been awarded to TRC. Owner's engineering has been awarded to Control Point Technologies.

Circuit breakers have been recieved. Motor operated disconnect has been recieved. Engineering review has begun for the design.
YEP has been revised to \$400,000 to account for Engineering only in 2018

Value Engineering:

Timeline Risks:

Budget Risks:



Rte. 12 Widening, Walpole/Charlestown

Project: Rte. 12 Widening, Walpole/Charlestown (8830-1818)

Objective:

Expected Date of Completion: 12/31/2018

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Spending Actual	\$ -	\$ -	\$ -			122	28,978	41,574					\$ 70,673
Budget	\$ 76,322	\$ 67,286	\$ 67,218	\$ 116,110	\$ 76,934	\$ 105,362	\$ 102,488	\$ 93,724	\$ 164,514	\$ 158,231	\$ 187,235	\$ 284,577	\$1,500,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 750,000	\$ 679,327		\$1,500,000

YTD Cost Profile

Legend: Labor (1%), Material (36%), Voucher (25%), Outside Svc (1%), Overhead (1%), Other (37%)

PM: A. Strabone

Update: Engineering Complete.
Construction has been awarded to IC Reed. Construction to start week of 7/9/18
Pole sets complete. Poles are being framed and pull wire installed.
First 4,000 FT of new wire is installed and energized.

Value Engineering:

Timeline Risks: This job is closely tied to NHDOT work. Any delays with NHDOT scope of work will significantly impact Liberty's schedule.

Budget Risks: Labor has been charged against 2017 project number 301711-01010 (\$40k)

Cost Element **Amount** **Field Completion:** 0%

Labor \$ 974 **Financial Completion:** 4.7%

Material \$ 25,624

Voucher \$ 17,893 **Spend to Date:** \$ 70,673

Outside Svc \$ - **Remain. Budget** \$ 1,429,327

Overhead \$ 449 **Total Budget** \$ 1,500,000

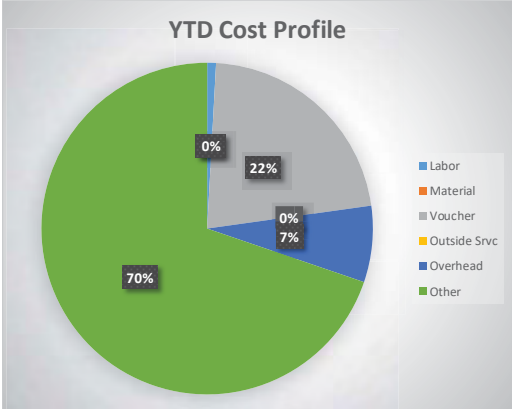
Other \$ 25,733

Total \$ **70,673** **Capital Recovery Begins:** 7/1/2019

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Extend Pelham 14L4 to Salem


Project: Extend Pelham 14L4 to Salem (8830-1860)													
Objective:													Expected Date of Completion:
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Spending													
Actual	\$ -	\$ -	\$ -	\$ 5,235	\$ 15,109	4,560	20,138	215,835					\$ 260,877
Budget	\$ 50,882	\$ 44,857	\$ 44,812	\$ 77,407	\$ 51,289	\$ 70,241	\$ 68,325	\$ 62,483	\$ 109,676	\$ 105,487	\$ 124,824	\$ 189,718	\$ 1,000,000
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250,000	\$ 200,000	\$ 150,000	\$ 139,123	\$ 1,000,000



YTD Cost Profile

Category	Percentage
Other	70%
Labor	22%
Material	0%
Voucher	0%
Outside Svc	7%
Overhead	0%

PM: A. Strabone



Update: Engineering is complete. Construction has been awarded to Northline Construction

New Hendrix from Pole 74 Hobbs to Pole 32 Bridge is installed and energized

Value Engineering:

Timeline Risks: Weather and Fairpoint Sets could impact schedule. Fairpoint has been notified Liberty contractor to start in July

Budget Risks:

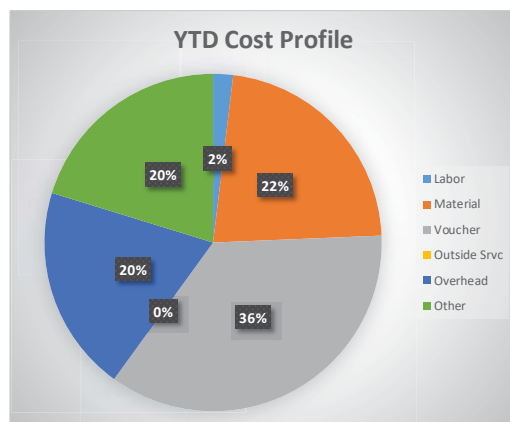
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Cost Element	Amount	Field Completion:	Financial Completion:
Labor	\$ 2,242	0%	26.1%
Material	\$ -		
Voucher	\$ 57,208		
Outside Svc	\$ -		
Overhead	\$ 19,425		
Other	\$ 182,002		
Total	\$ 260,877	Capital Recovery Begins:	7/1/2019

Salem Depot Getaways

Project: Salem Depot Getaways (8830-1866)

Objective:										Expected Date of Completion:			12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ -	\$ 538	\$ 1,430	\$ 53,076	\$ 3,305	\$ 40,004	\$ 448,070	\$ 596,570					\$ 1,142,993
Budget	\$ -	\$ -	\$ -	\$ 57,143	\$ 85,714	\$ 85,714	\$ 251,429	\$ 285,714	\$ 342,857	\$ 457,143	\$ 22,857	\$ 11,429	\$ 1,600,000
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 350,000	\$ 75,000	\$ 32,007		\$ 1,600,000



Cost Element	Amount	Field Completion: 0%
Labor	\$ 21,882	Financial Completion: 71.4%
Material	\$ 256,384	
Voucher	\$ 407,353	Spend to Date: \$ 1,142,993
Outside Svc	\$ -	Remain. Budget: \$ 457,007
Overhead	\$ 225,929	Total Budget: \$ 1,600,000
Other	\$ 231,446	
Total	\$ 1,142,993	Capital Recovery Begins: 7/1/2019

PM: A. Strabone



Update: Engineering Complete.
Complete! Only restoration of area remains

Value Engineering:

Timeline Risks:

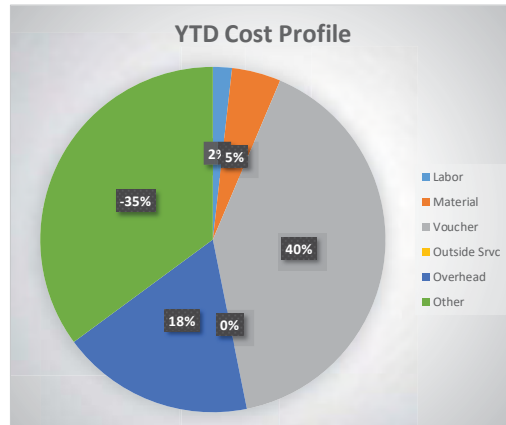
Budget Risks:

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Bare Conductor Replacement Program

Project: Bare Conductor Replacement Program (8830-1846)

Objective:													Expected Date of Completion:	12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
Actual	\$ (90,475)	\$ 158,583	\$ 53,407	\$ 24,693	\$ 46,930	\$ 12,418	\$ 109,998	\$ 234,123					\$ 549,676	
Budget	\$ 71,234	\$ 62,800	\$ 62,736	\$ 108,369	\$ 71,805	\$ 98,337	\$ 95,655	\$ 137,476	\$ 153,546	\$ 147,682	\$ 174,753	\$ 265,605	\$ 1,450,000	
Forecast									\$ 150,000	\$ 300,000	\$ 300,000	\$ 150,324	\$ 1,450,000	



Cost Element	Amount	Field Completion:	0%
Labor	\$ 32,876	Financial Completion:	37.9%
Material	\$ 84,687		
Voucher	\$ 746,394	Spend to Date:	\$ 549,676
Outside Svc	\$ -	Remain Budget:	\$ 900,324
Overhead	\$ 333,180	Total Budget:	\$ 1,450,000
Other	\$ (647,460)		
Total	\$ 549,676	Capital Recovery Begins:	

PM: J. Rivera



Update:

Liberty will make its CY2018 reconciliation filing with the Commission by March 15, 2019. Actual expenses incurred by Liberty in implementing the capital components of the 2018 REP will be reconciled to the proposed amount of \$1,600,000. In addition, the revenue requirement associated with capital expenditures incurred as part of the REP investment will be included at the same time as the REP/VMP Adjustment Provision. At that time, the rate impacts will be determined using actual spending and any over- or under-collection balance that exists at that time.

Value Engineering:

Engineering / Design is currently in progress.

Timeline Risks:

It is anticipated that the majority of the Actual Costs will be reflected in the 4th quarter. Liberty has included a capital investment budget of \$1,600,000 reflecting planned capital investment closed to plant as part of its CY2018 plan as approved in Docket No. DE 16-383. This amount includes \$1,500,000 of planned 2018 capital investment and

Budget Risks:

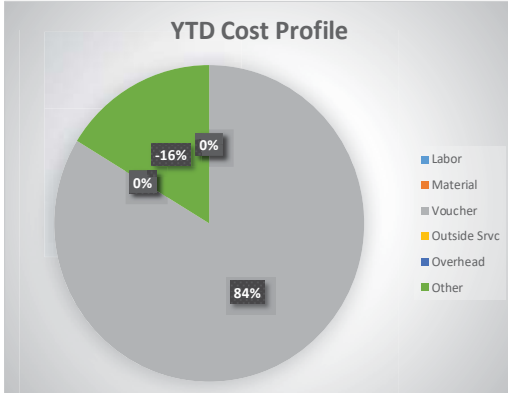
\$100,000 of carryover funds for the Bare Conductor Program work from 2017.



Meter Purchases

Project: Meter Purchases (8840-1807)

Objective:													Expected Date of Completion:	12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
Actual	\$ (13,514)	\$ -	\$ (2,844)	\$ (8,287)	\$ 170,206	\$ 112,328	\$ 108,565	\$ 186,442					\$ 552,896	
Budget	\$ 21,186	\$ 11,652	\$ 28,322	\$ 58,223	\$ 77,344	\$ 65,321	\$ 87,210	\$ 105,972	\$ 157,696	\$ 143,726	\$ 93,006	\$ 200,344	\$ 1,050,000	
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 225,000	\$ 100,000	\$ 83,546	\$ 25,000	\$ 986,442	




YTD Cost Profile

Legend: Labor (Blue), Material (Orange), Voucher (Grey), Outside Svc (Yellow), Overhead (Dark Blue), Other (Green)

Other: 84%, Labor: -16%, Material: 0%, Voucher: 0%, Outside Svc: 0%, Overhead: 0%

PM: B. Mostone




Update: Report is based on current Main Relay and Growth Projections, will have to make adjustments according to needs. We are also experiencing delays in delivery of ERT's and Meter.

Cost Element	Amount	Field Completion:	0%
Labor	\$ -	Financial Completion:	52.7%
Material	\$ -		
Voucher	\$ 686,234	Spend to Date:	\$ 552,896
Outside Svc	\$ -	Remain. Budget	\$ 497,104
Overhead	\$ -	Total Budget	\$ 1,050,000
Other	\$ (133,338)		
Total	\$ 552,896	Capital Recovery Begins:	7/1/2020

Value Engineering:

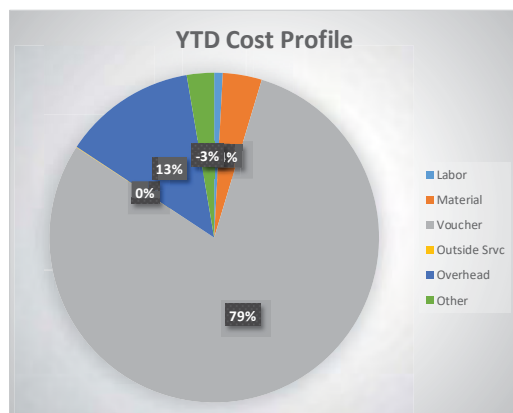
Timeline Risks: Meter and ERT's on average take 6 to 12 weeks for delivery

Budget Risks: Due to field requirement meters adjustments maybe needed



Project: Main Replacement City/State Construction (8840-1823)

Objective:										Expected Date of Completion:				12/31/2018
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
Spending														
Actual	\$ 78,544	\$ (87,596)	\$ (64,646)	\$ 473,974	\$ 1,859,998	\$ 702,026	\$ 498,037	\$ 662,287					\$ 4,122,624	
Budget	\$ 102,906	\$ 56,594	\$ 137,563	\$ 282,795	\$ 375,670	\$ 317,272	\$ 423,591	\$ 514,720	\$ 765,950	\$ 698,095	\$ 451,743	\$ 973,100	\$ 5,100,000	
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 350,000	\$ 350,000	\$ 200,000	\$ 77,376	\$ 5,100,000	



Cost Element	Amount	Field Completion:	65%
Labor	\$ 36,462	Financial Completion:	80.8%
Material	\$ 166,713		
Voucher	\$ 3,465,534	Spend to Date:	\$ 4,122,624
Outside Srvs	\$ 2,203	Remain Budget	\$ 977,376
Overhead	\$ 568,172	Total Budget	\$ 5,100,000
Other	\$ (116,461)		
Total	\$ 4,122,624	Capital Recovery Begins:	7/1/2020

PM: Shawn Furey



Update: Only 2 projects being deferred to 2019 (E-High St, MNC & Chandler St, NAS). Working with Engineering so that we include in 2019 work plan. Expect to come in at budget.

Sending information to Engineering when abnormal costs are occurring in the field.

Value Engineering: Ensure that estimates are accounting for all scenarios

Timeline Risks: None at this time

Timeline Risks:	None at this time
Budget Risks:	None at this time



EnergyNorth Growth Projects

Project: EnergyNorth Growth Projects

Objective:

										Expected Date of Completion:				12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
Actual	\$ 339,548	\$ 224,652	\$ 606,695	\$ 563,245	\$ 1,328,441	\$ 923,952	\$ 1,549,811	\$ 1,829,113					\$ 7,365,457	
Budget	\$ 259,347	\$ 142,630	\$ 346,692	\$ 712,711	\$ 946,777	\$ 799,601	\$ 1,067,550	\$ 1,297,216	\$ 1,930,373	\$ 1,759,365	\$ 1,138,499	\$ 2,452,440	\$ 12,853,200	
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,875,874	\$ 1,875,874	\$ 1,825,874	\$ 128,096	\$ 13,071,175	

YTD Cost Profile

Labor	23%
Material	9%
Voucher	58%
Outside Svc	0%
Overhead	5%
Other	5%

Cost Element	Amount	Field Completion:	15%
Labor	\$ 385,724	Financial Completion:	57.3%
Material	\$ 364,110		
Voucher	\$ 4,272,586	Spend to Date:	\$ 7,365,457
Outside Svc	\$ -	Remain. Budget	\$ 5,487,743
Overhead	1,669,855	Total Budget	\$ 12,853,200
Other	\$ 673,182		
Total	\$ 7,365,457	Capital Recovery Begins:	

PM: Shawn Furey

Value Engineering:

Timeline Risks:

Budget Risks:

None at this time

None at this time

None at this time

Update: No sales projects being deferred to 2019 for MA. Sales and Construction met on 9/26/2018 and confirmed that we are projected to spend budget in 2018. Any changes will be immediately communicated to finance.

Additional Capital Spend Discussion Items

- August Year-to-date Summary

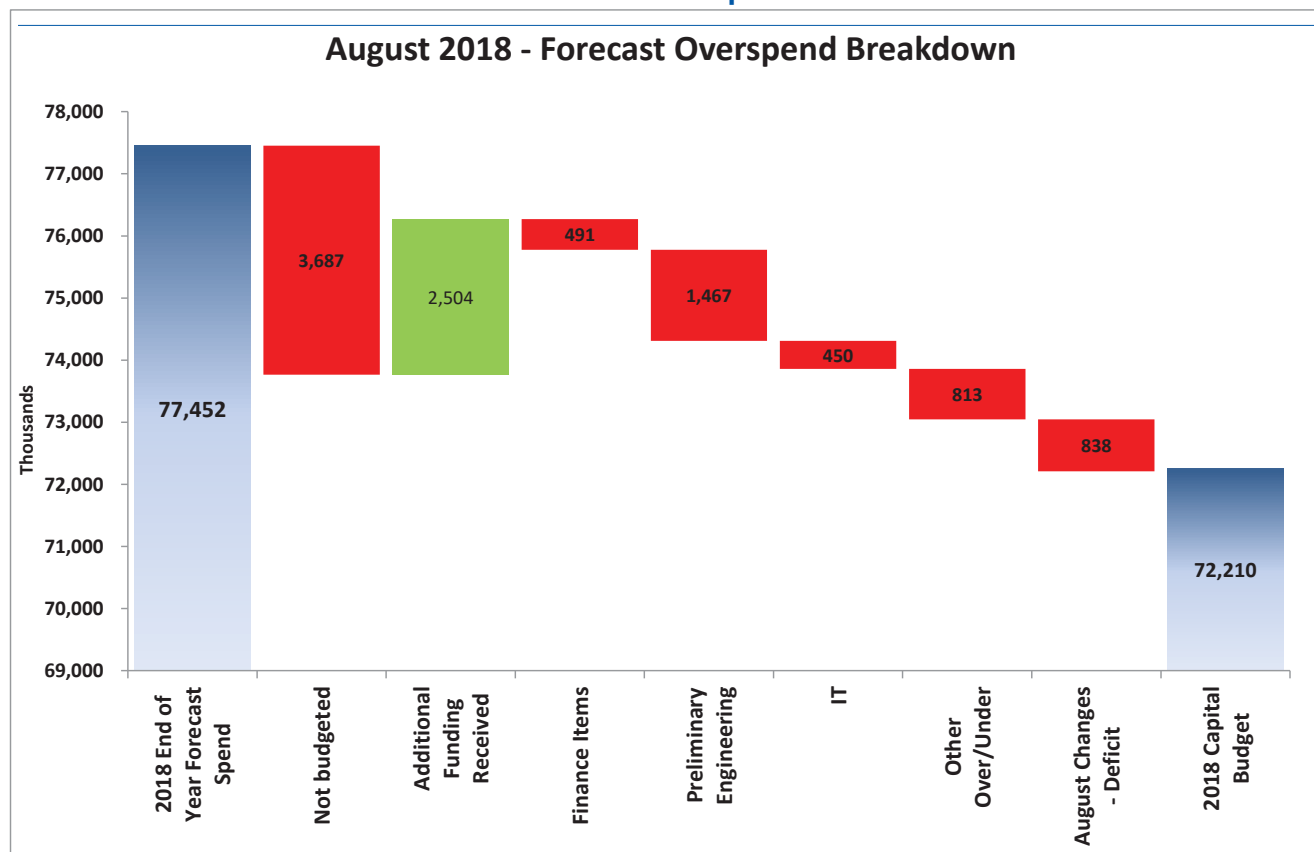
	Budget - Aug YTD	Actual - Aug YTD	Variance
Electric	\$9.5m	\$9.8m	(\$0.3m)
Gas	\$20.2m	\$33.1m	(\$12.9m)
Keene	\$0.4m	\$0.9m	(\$0.5m)
Totals:	\$30.1m	\$43.8m	(\$13.7m)

- Year-to-date August showing **\$13.7m overspend**
- Projected year end **\$5.2m overspend**

- Capital budget planning for 2019

- Updates to capital spend for 2019 in the budget planning model - \$17.5m reduction (gas)
- Update on deferral of gas projects to 2019 (Columbia Gas incident)

Breakdown of Forecasted Overspend





September 2018 Capital Spending Monthly Update

October 31, 2018



September 2018 Capital Spend Update - Agenda

1. Safety Moment
2. September 2018 Capital Spending Results
 - New Hampshire Overview
 - Entity Overview
3. High Profile Project Presentations
 - Golden Rock
 - Rte. 12 Widening
 - GSE New Business (Residential & Commercial)
 - Extend 14L4
 - Salem Depot Getaways
 - EN Meter Purchases
 - Bare Conductor
 - CIBS
 - City/State Construction
 - EN Growth
4. Additional Capital Spending Discussion Items
 - August YTD summary
 - End of year forecast
 - Documentation Plan (closeout & over-expenditure forms)
5. Questions?

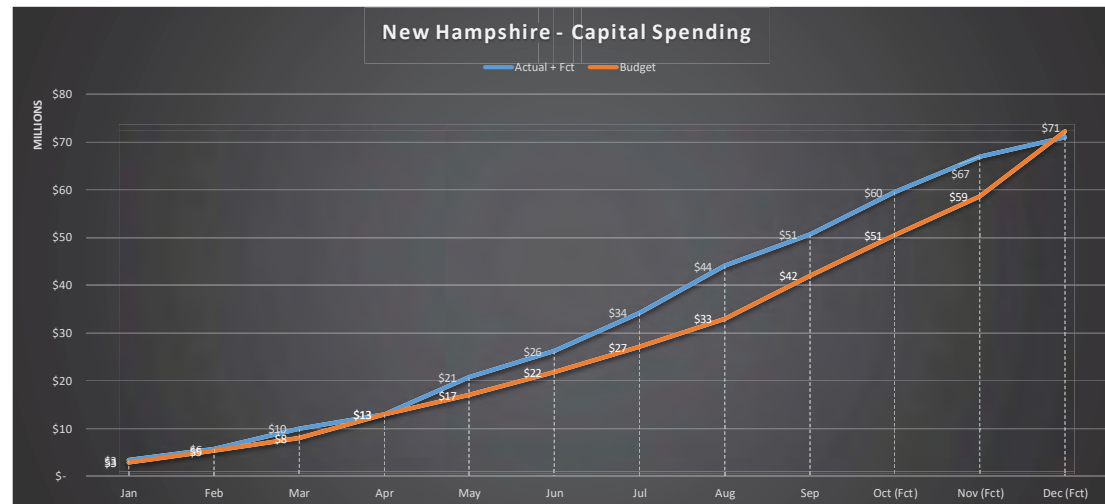


Capital Spending YTD + Forecast

Capital Spending YTD												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct (Fct)	Nov (Fct)	Dec (Fct)
Actual + Fct	\$ 3,362,297	\$ 5,709,383	\$ 9,966,801	\$ 12,904,818	\$ 20,661,891	\$ 26,166,565	\$ 34,242,987	\$ 44,064,980	\$ 50,590,633	\$ 59,547,014	\$ 66,880,799	\$ 71,029,274
Budget	\$ 2,861,355	\$ 5,264,111	\$ 7,990,493	\$ 12,914,573	\$ 17,054,930	\$ 21,880,070	\$ 27,113,771	\$ 33,026,658	\$ 42,013,860	\$ 50,549,652	\$ 58,567,677	\$ 72,170,911

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct (Fct)	Nov (Fct)	Dec (Fct)	Annual
Actual EN	\$ 3,141,615	\$ 1,121,582	\$ 2,276,867	\$ 2,589,936	\$ 6,508,821	\$ 4,343,343	\$ 6,405,222	\$ 6,759,423	\$ 4,555,654	\$ 5,904,911	\$ 3,898,267	\$ 1,974,737	\$ 49,480,378
Actual GSE	\$ 218,185	\$ 1,186,803	\$ 1,963,819	\$ 304,751	\$ 1,193,060	\$ 1,088,028	\$ 1,617,407	\$ 2,489,255	\$ 1,925,441	\$ 2,937,879	\$ 3,388,995	\$ 2,118,130	\$ 20,431,754
Actual Keene	\$ 2,497	\$ 38,701	\$ 16,732	\$ 43,329	\$ 55,192	\$ 73,302	\$ 53,794	\$ 573,315	\$ 44,558	\$ 113,592	\$ 46,522	\$ 55,608	\$ 1,117,142
	3,362,297	2,347,087	4,257,418	2,938,016	7,757,074	5,504,674	8,076,422	9,821,993	6,525,652	8,956,382	7,333,785	4,148,475	71,029,274
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Budget EN	\$ 2,388,380	\$ 2,105,605	\$ 2,103,462	\$ 3,633,463	\$ 2,407,511	\$ 3,297,113	\$ 3,207,174	\$ 3,093,397	\$ 5,339,378	\$ 5,149,145	\$ 5,859,215	\$ 8,905,350	\$ 47,489,194
Budget GSE	\$ 454,204	\$ 249,792	\$ 607,174	\$ 1,248,197	\$ 1,658,125	\$ 1,400,371	\$ 1,869,640	\$ 2,396,151	\$ 3,506,284	\$ 3,204,190	\$ 1,993,896	\$ 4,295,050	\$ 22,883,075
Budget Keene	\$ 18,771	\$ 47,359	\$ 15,746	\$ 42,420	\$ 74,721	\$ 127,655	\$ 156,887	\$ 423,340	\$ 141,539	\$ 182,457	\$ 164,913	\$ 402,833	\$ 1,798,641
	\$ 2,861,355	\$ 2,402,756	\$ 2,726,382	\$ 4,924,080	\$ 4,140,357	\$ 4,825,139	\$ 5,233,701	\$ 5,912,888	\$ 8,987,201	\$ 8,535,793	\$ 8,018,024	\$ 13,603,234	\$ 72,170,911

Forecasted Variance: 1,141,637



September 2018 Capital Spend Reporting

High Profile Projects

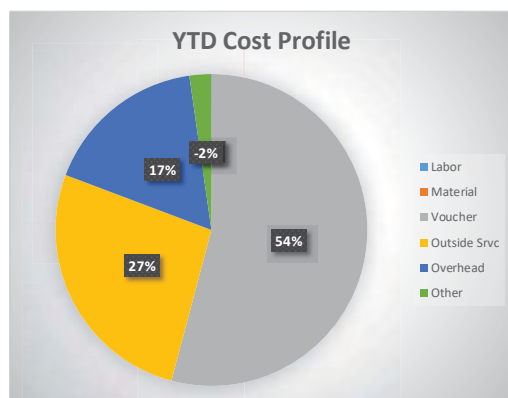


Golden Rock Substation

Project: Golden Rock Substation (8830-1744)

Objective: **Expected Date of Completion:** 12/31/2018

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Spending Actual	\$ 3,389	\$ 2,877	\$ 1,570	\$ 154	\$ 50,061	\$ 18,707	\$ 33,480	\$ 28,275	\$ 64,068				\$ 202,581
Budget	\$ 20,353	\$ 17,943	\$ 17,925	\$ 30,963	\$ 20,516	\$ 28,096	\$ 27,330	\$ 24,993	\$ 43,870	\$ 42,195	\$ 49,929	\$ 75,887	\$ 400,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,862	\$ 47,388	\$ 85,003	\$ 385,834



Cost Element	Amount	Field Completion: 0%
Labor	\$ 122	Financial Completion: 50.6%
Material		
Voucher	\$ 114,761	Spend to Date: \$ 202,581
Outside Svc	\$ 56,454	Remain. Budget: \$ 197,419
Overhead	\$ 36,062	Total Budget: \$ 400,000
Other	\$ (4,818)	
Total	\$ 202,581	Capital Recovery Begins: 7/1/2019

PM: A. Strabone



Update: Final engineering has been awarded to TRC. Owner's engineering has been awarded to Control Point Technologies.

Circuit breakers have been recieved. Motor operated disconnect has been recieved. Engineering review has begun for the design.
YEP has been revised to \$400,000 to account for Engineering only in 2018

Value Engineering:

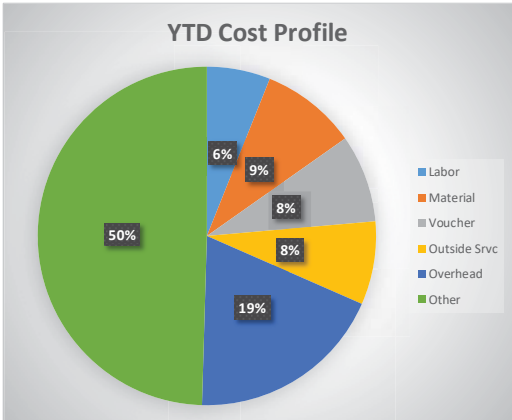
Timeline Risks:

Budget Risks:



Rte. 12 Widening, Walpole/Charlestown


Project: Rte. 12 Widening, Walpole/Charlestown (8830-1818)													
Objective:												Expected Date of Completion:	
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ -	\$ -	\$ -			122	28,978	41,574	208,882				\$ 279,555
Budget	\$ 76,322	\$ 67,286	\$ 67,218	\$ 116,110	\$ 76,934	\$ 105,362	\$ 102,488	\$ 93,724	\$ 164,514	\$ 158,231	\$ 187,235	\$ 284,577	\$1,500,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 500,000	\$ 500,000	\$ 220,445	\$1,500,000



YTD Cost Profile

Category	Percentage
Other	50%
Labor	19%
Overhead	8%
Outside Svc	8%
Voucher	8%
Material	9%
Labor	6%

PM: A. Strabone



Update: Engineering Complete.
Construction has been awarded to IC Reed. Construction to start week of 7/9/18
Pole sets complete. Poles are being framed and wire installed.
8,000 FT of new wire is installed and energized.

Value Engineering:

Timeline Risks: This job is closely tied to NHDOT work. Any delays with NHDOT scope of work will significantly impact Liberty's schedule.

Budget Risks: Labor has been charged against 2017 project number 301711-01010 (\$40k)

INSERT PROJECT PHOTO HERE

Cost Element	Amount	Field Completion:	Financial Completion:
Labor	\$ 16,954		18.6%
Material	\$ 25,624		
Voucher	\$ 23,449	Spend to Date:	\$ 279,555
Outside Svc	\$ 22,235	Remain. Budget	\$ 1,220,445
Overhead	\$ 52,805	Total Budget	\$ 1,500,000
Other	\$ 138,488		
Total	\$ 279,555	Capital Recovery Begins:	7/1/2019



GSE New Business - Residential & Commercial

Project: GSE New Business Residential & Commercial (8830-1837 & 8830-1838)

Objective:

Expected Date of Completion:

12/31/2018

Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ 327,254	\$ 249,176	\$ 463,346	\$ 290,447	\$ 297,486	\$ 310,203	\$ 400,428	\$ 206,481	\$ (915,951)				\$ 1,628,870
Budget	\$ 146,921	\$ 129,526	\$ 129,394	\$ 223,512	\$ 148,097	\$ 202,821	\$ 126,172	\$ 115,383	\$ 202,532	\$ 194,797	\$ 230,504	\$ 350,341	\$ 2,200,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 345,000	\$ 181,250	\$ 181,250	\$ 2,336,370

YTD Cost Profile

Labor

Material

Voucher

Outside Svc

Overhead

Other

PM: A. Strabone

Update: This is normal run of the business projects.

Value Engineering:

Timeline Risks:

Budget Risks:

Two Tuscan projects (301738-01028; 8830-18001946) are tied to 8830-1738 totalling approx \$1M. These projects should be tied to 8830-1858. One Tuscan project (301738-01199) should be tied to 8830-C42930

Cost Element

Amount

Field Completion:

0%

Labor

\$ 253,595

Financial Completion:

74.0%

Material

\$ 237,795

Voucher

\$ 205,300

Spend to Date:

\$ 1,628,870

Outside Svc

\$ 118,584

Remain. Budget

\$ 571,130

Overhead

\$ 1,024,649

Total Budget

\$ 2,200,000

Other

\$ (211,054)

Total

\$ 1,628,870

Capital Recovery Begins:

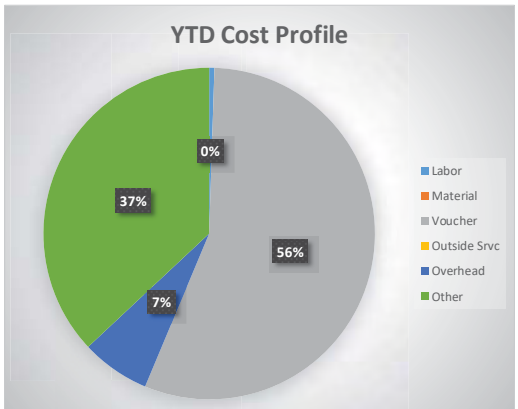
7/1/2019

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Extend Pelham 14L4 to Salem


Project: Extend Pelham 14L4 to Salem (8830-1860)													
Objective:													Expected Date of Completion:
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Spending													
Actual	\$ -	\$ -		\$ 5,235	\$ 15,109	4,560	20,138	215,835	179,876				\$ 440,753
Budget	\$ 50,882	\$ 44,857	\$ 44,812	\$ 77,407	\$ 51,289	\$ 70,241	\$ 68,325	\$ 62,483	\$ 109,676	\$ 105,487	\$ 124,824	\$ 189,718	\$ 1,000,000
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 150,000	\$ 200,000	\$ 200,000	\$ 990,753



YTD Cost Profile

Category	Percentage
Labor	0%
Material	37%
Voucher	56%
Outside Svc	7%
Overhead	
Other	

PM: A. Strabone



Update: Engineering is complete. Construction has been awarded to Northline Construction

New Hendrix from Pole 74 Hobbs to Pole 32 Bridge is installed and energized

Value Engineering:

Timeline Risks: Weather and Fairpoint Sets could impact schedule. Fairpoint has been notified Liberty contractor to start in July

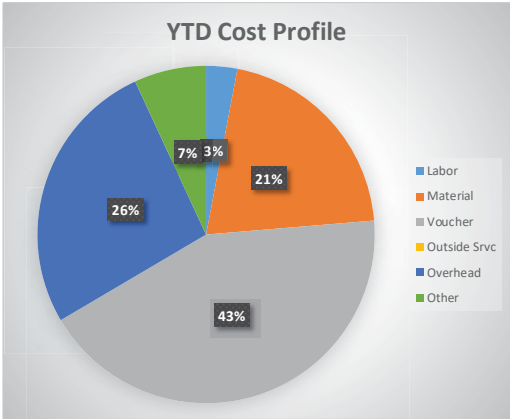
Budget Risks:

INSERT PROJECT PHOTO HERE

Cost Element	Amount	Field Completion:
Labor	\$ 2,242	0%
Material		Financial Completion: 44.1%
Voucher	\$ 245,985	Spend to Date: \$ 440,753
Outside Svc		Remain. Budget \$ 559,248
Overhead	\$ 29,573	Total Budget \$ 1,000,000
Other	\$ 162,952	
Total	\$ 440,753	Capital Recovery Begins: 7/1/2019

Salem Depot Getaways


Project: Salem Depot Getaways (8830-1866)													
Objective:												Expected Date of Completion:	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Spending													
Actual	\$ -	\$ 538	\$ 1,430	\$ 53,076	\$ 3,305	\$ 40,004	\$ 448,070	\$ 596,571	\$ 125,424				\$ 1,268,418
Budget	\$ -	\$ -	\$ -	\$ 57,143	\$ 85,714	\$ 85,714	\$ 251,429	\$ 285,714	\$ 342,857	\$ 457,143	\$ 22,857	\$ 11,429	\$ 1,600,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 75,000	\$ 32,007	\$ 10,000	\$ 1,385,425



YTD Cost Profile

Category	Percentage
Labor	26%
Material	21%
Voucher	43%
Outside Svc	7%
Overhead	3%
Other	0%

PM: A. Strabone



Update: Engineering Complete.
Complete! Only restoration of area remains
Restoration to be completed by Thanksgiving, waiting for Tuscan Village Contractor to finish roadwork.

Value Engineering:

Timeline Risks:

Budget Risks:

INSERT PROJECT PHOTO HERE

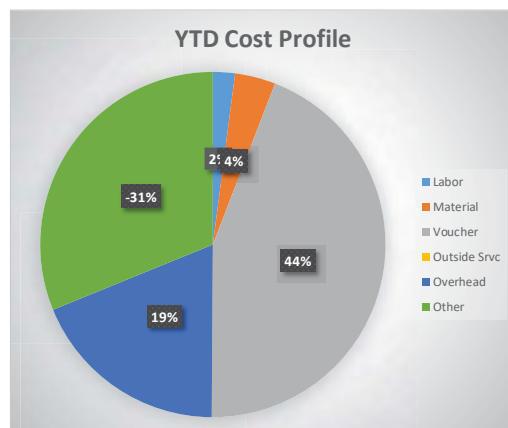
Cost Element	Amount	Field Completion:	Financial Completion:
Labor	\$ 37,887	0%	79.3%
Material	\$ 262,432		
Voucher	\$ 543,562		
Outside Svc			
Overhead	\$ 336,874		
Other	\$ 87,663		
Total	\$ 1,268,418		

Spend to Date: \$ 1,268,418
Remain. Budget: \$ 331,582
Total Budget: \$ 1,600,000

Capital Recovery Begins: 7/1/2019

Project: Bare Conductor Replacement Program (8830-1846)

Objective:										Expected Date of Completion:			12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ (90,475)	\$ 158,583	\$ 53,407	\$ 24,693	\$ 46,930	\$ 12,418	\$ 109,998	\$ 234,123	\$ 288,550				\$ 838,226
Budget	\$ 71,234	\$ 62,800	\$ 62,736	\$ 108,369	\$ 71,805	\$ 98,337	\$ 95,655	\$ 137,476	\$ 153,546	\$ 147,682	\$ 174,753	\$ 265,605	\$ 1,450,000
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 130,000	\$ 150,000	\$ 170,000	\$ 1,288,226



Cost Element	Amount	Field Completion:	0%
Labor	\$ 45,989	Financial Completion:	57.8%
Material	\$ 84,687		
Voucher	\$ 983,872	Spend to Date:	\$ 838,226
Outside Svc		Remain. Budget	\$ 611,774
Overhead	\$ 416,843	Total Budget	\$ 1,450,000
Other	\$ (693,164)		
Total	\$ 838,226	Capital Recovery Begins:	

PM: J. Rivera



Update:

Liberty will make its CY2018 reconciling filing with the Commission by March 15, 2019. Actual expenses incurred by Liberty in implementing the capital components of the 2018 REP will reconcile to the proposed amount of \$1,600,000. In addition, the revenue requirement associated with capital expenditures incurred as part of the REP investment will be included at the same time as the REP/VMP Adjustment Provision. At that time, the rate impacts will be determined using actual spending and any over- or under-collection balance that exists at that time.

Value Engineering: Engineering / Design is currently in progress.

Timeline Risks:	It is anticipated that the majority of the Actual Costs will be reflected in the 4th quarter
	Liberty has included a capital investment budget of \$1,600,000 reflecting planned capital investment closed to plant as part of its CY2018 plan as approved in Docket No. DE 16-383. This amount includes \$1,500,000 of planned 2018 capital investment and
Budget Risks:	\$100,000 of carryover funds for the Bare Conductor Program work from 2017.



Meter Purchases

Project: Meter Purchases (8840-1807)

Objective:										Expected Date of Completion:			12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ (13,514)	\$ -	\$ (2,844)	\$ (8,287)	\$ 170,206	\$ 112,328	\$ 108,565	\$ 186,442	\$ 84,477				\$ 637,373
Budget	\$ 21,186	\$ 11,652	\$ 28,322	\$ 58,223	\$ 77,344	\$ 65,321	\$ 87,210	\$ 105,972	\$ 157,696	\$ 143,726	\$ 93,006	\$ 200,344	\$ 1,050,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 96,496	\$ 160,000	\$ 156,131	\$ 1,050,000

LPP Main Replacement

Project: LPP Main Replacement (8840-1811 & 8840-1813)

Objective:												
	Expected Date of Completion: 12/31/2018											
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Actual	\$ 1,457,819	\$ (344,085)	\$ 919,612	\$ 661,236	\$ 1,736,078	\$ 1,461,297	\$ 2,531,683	\$ 2,034,958	\$ 2,744,995			
Budget	\$ 334,948	\$ 184,207	\$ 447,755	\$ 920,471	\$ 1,222,769	\$ 1,032,690	\$ 1,378,748	\$ 1,675,364	\$ 2,493,091	\$ 2,272,232	\$ 1,470,380	\$ 3,167,344
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,965,000	\$ 765,000	\$ 230,000
												Total
												\$ 13,203,592
												\$ 16,600,000
												\$ 16,163,592

YTD Cost Profile

Category	Percentage
Labor	74%
Material	17%
Voucher	3%
Outside Svc	3%
Overhead	0%
Other	3%

PM: Shawn Furey

Update: Currently sending 4 RHW and 4 Mears crews to Massachusetts. Deferring 6 CIBS projects that either have not started or will be partially completed in 2018 to 2019. Working with Engineering to ensure those projects are included in 2019 work plan. Expect to come in at budget.

Value Engineering: Ensure that estimates are accounting for all scenarios

Timeline Risks: None at this time

Budget Risks: None at this time

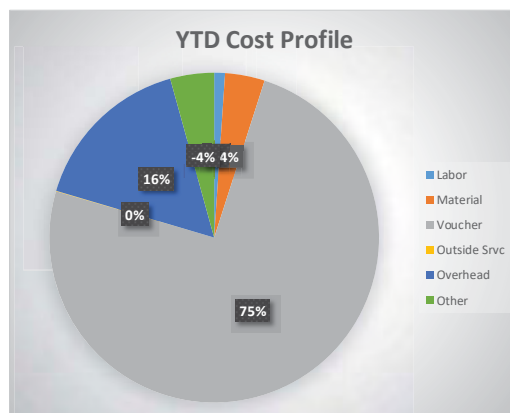
ENGINEERING DESIGN - Proposed Scope of Work
84-136 LORRIS ST. HAS & FIRST SEVENTH STS (CIBS)

Cost Element	Amount	Field Completion: 15%
Labor	\$ 369,799	Financial Completion: 79.5%
Material	\$ 389,122	
Voucher	\$ 9,764,272	Spend to Date: \$ 13,203,592
Outside Svc	\$ -	Remain. Budget: \$ 3,396,408
Overhead	\$ 2,290,014	Total Budget: \$ 16,600,000
Other	\$ 390,386	
Total	\$ 13,203,592	Capital Recovery Begins:

Main Replacement City/State Construction

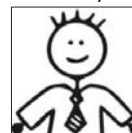
Project: Main Replacement City/State Construction (8840-1823)

Objective:												Expected Date of Completion:	12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ 78,544	\$ (87,596)	\$ (64,646)	\$ 473,974	\$ 1,859,998	\$ 702,026	\$ 498,037	\$ 662,287	\$ 477,084				\$ 4,599,707
Budget	\$ 102,906	\$ 56,594	\$ 137,563	\$ 282,795	\$ 375,670	\$ 317,272	\$ 423,591	\$ 514,720	\$ 765,950	\$ 698,095	\$ 451,743	\$ 973,100	\$ 5,100,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 300,000	\$ 100,000	\$ 50,000	\$ 5,049,707



Cost Element	Amount	Field Completion:	65%
Labor	\$ 53,140	Financial Completion:	90.2%
Material	\$ 195,945		
Voucher	\$ 3,753,397	Spend to Date:	\$ 4,599,707
Outside Svc	\$ 2,203	Remain. Budget	\$ 500,293
Overhead	\$ 811,318	Total Budget	\$ 5,100,000
Other	\$ (216,296)		
Total	\$ 4,599,707	Capital Recovery Begins:	7/1/2020

PM: Shawn Furey



Update: Only 2 projects being deferred to 2019 (E-High St, MNC & Chandler St, NAS). Working with Engineering so that we include in 2019 work plan. Expect to come in at budget.

Sending information to Engineering when abnormal costs are occurring in the field.

Value Engineering: Ensure that estimates are accounting for all scenarios

Timeline Risks: None at this time

Budget Risks: None at this time



EnergyNorth Growth Projects

Project: EnergyNorth Growth Projects													
Objective:											Expected Date of Completion:	12/31/2018	
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ 339,548	\$ 224,652	\$ 606,695	\$ 563,245	\$ 1,328,441	\$ 923,952	\$ 1,549,811	\$ 1,829,112	\$ 1,390,764				\$ 8,756,220
Budget	\$ 259,347	\$ 142,630	\$ 346,692	\$ 712,711	\$ 946,777	\$ 799,601	\$ 1,067,550	\$ 1,297,216	\$ 1,930,373	\$ 1,759,365	\$ 1,138,499	\$ 2,452,440	\$ 12,853,200
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,613,333	\$ 1,591,667	\$ 170,000	\$ 12,131,220

YTD Cost Profile

Category	Percentage
Labor	21%
Material	9%
Voucher	5%
Outside Svc	5%
Overhead	60%
Other	-

PM: Shawn Furey

Update: No sales projects being deferred to 2019 for MA.

Value Engineering: None at this time

Timeline Risks: None at this time

Budget Risks: None at this time

Cost Element	Amount	Field Completion:	15%
Labor	\$ 448,631	Financial Completion:	68.1%
Material	\$ 439,493		
Voucher	\$ 5,280,894	Spend to Date:	\$ 8,756,220
Outside Svc		Remain. Budget	\$ 4,096,980
Overhead	1,850,470	Total Budget	\$ 12,853,200
Other	\$ 736,733		
Total	\$ 8,756,220	Capital Recovery Begins:	

Capital Spend Discussion Items

- September Year-to-date Summary

	Budget - Sept. YTD	Actual - Sept. YTD	Variance
Gas	\$27.6m	\$37.7m	(\$10.1m)
Electric	\$13.4m	\$12m	\$1.4m
Keene	\$1m	\$0.9m	\$0.1m
Totals:	\$42m	\$50.6m	(\$8.6m)

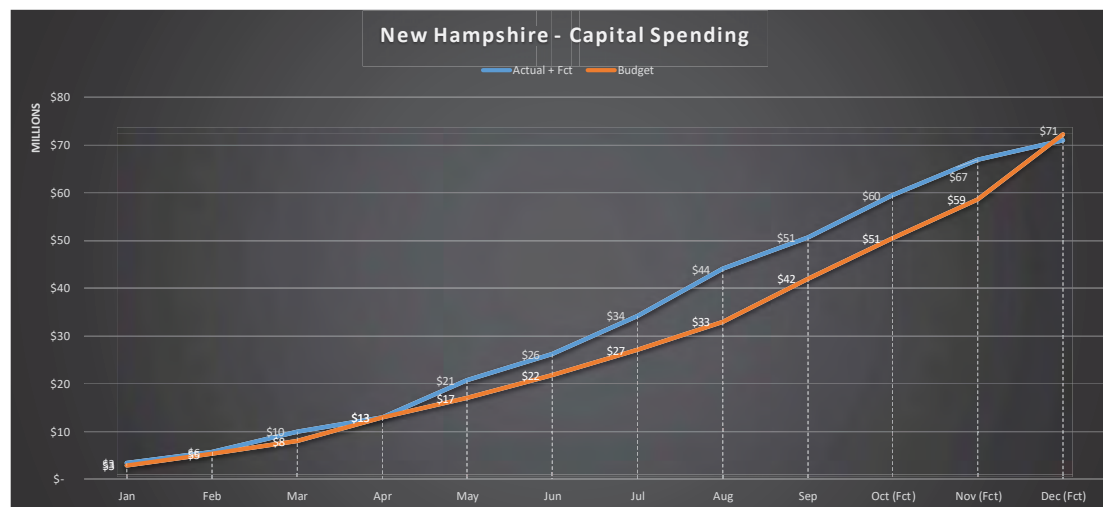
- Year-to-date September **\$8.6m overspend**
 - August YTD was @ \$13.7m overspend
 - September actual @ \$4.1m **less than** prior month forecast amount
- Projected year end \$1.1m **under budget**
 - Favorable pickup in adjusted ROY forecast \$4.1m
 - Exclude preliminary engineering charge for Granite Bridge of \$2.3m
- Capital budget planning for 2019
 - Updates to capital spend for 2019 in the budget planning model; identified \$9.5m of the \$17.5m reduction (gas) mandated by Corporate.
- Year-end Housekeeping - Over expenditure forms/approvals

Capital Spending YTD + Forecast

Capital Spending YTD												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct (Fct)	Nov (Fct)	Dec (Fct)
Actual + Fct	\$ 3,362,297	\$ 5,709,383	\$ 9,966,801	\$ 12,904,818	\$ 20,661,891	\$ 26,166,565	\$ 34,242,987	\$ 44,064,980	\$ 50,590,633	\$ 59,547,014	\$ 66,880,799	\$ 71,029,274
Budget	\$ 2,861,355	\$ 5,264,111	\$ 7,990,493	\$ 12,914,573	\$ 17,054,930	\$ 21,880,070	\$ 27,113,771	\$ 33,026,658	\$ 42,013,860	\$ 50,549,652	\$ 58,567,677	\$ 72,170,911

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct (Fct)	Nov (Fct)	Dec (Fct)	Annual
Actual EN	\$ 3,141,615	\$ 1,121,582	\$ 2,276,867	\$ 2,589,936	\$ 6,508,821	\$ 4,343,343	\$ 6,405,222	\$ 6,759,423	\$ 4,555,654	\$ 5,904,911	\$ 3,898,267	\$ 1,974,737	\$ 49,480,378
Actual GSE	\$ 218,185	\$ 1,186,803	\$ 1,963,819	\$ 304,751	\$ 1,193,060	\$ 1,088,028	\$ 1,617,407	\$ 2,489,255	\$ 1,925,441	\$ 2,937,879	\$ 3,388,995	\$ 2,118,130	\$ 20,431,754
Actual Keene	\$ 2,497	\$ 38,701	\$ 16,732	\$ 43,329	\$ 55,192	\$ 73,302	\$ 53,794	\$ 573,315	\$ 44,558	\$ 113,592	\$ 46,522	\$ 55,608	\$ 1,117,142
	3,362,297	2,347,087	4,257,418	2,938,016	7,757,074	5,504,674	8,076,422	9,821,993	6,525,652	8,956,382	7,333,785	4,148,475	71,029,274
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Budget EN	\$ 2,388,380	\$ 2,105,605	\$ 2,103,462	\$ 3,633,463	\$ 2,407,511	\$ 3,297,113	\$ 3,207,174	\$ 3,093,397	\$ 5,339,378	\$ 5,149,145	\$ 5,859,215	\$ 8,905,350	\$ 47,489,194
Budget GSE	\$ 454,204	\$ 249,792	\$ 607,174	\$ 1,248,197	\$ 1,658,125	\$ 1,400,371	\$ 1,869,640	\$ 2,396,151	\$ 3,506,284	\$ 3,204,190	\$ 1,993,896	\$ 4,295,050	\$ 22,883,075
Budget Keene	\$ 18,771	\$ 47,359	\$ 15,746	\$ 42,420	\$ 74,721	\$ 127,655	\$ 156,887	\$ 423,340	\$ 141,539	\$ 182,457	\$ 164,913	\$ 402,833	\$ 1,798,641
	\$ 2,861,355	\$ 2,402,756	\$ 2,726,382	\$ 4,924,080	\$ 4,140,357	\$ 4,825,139	\$ 5,233,701	\$ 5,912,888	\$ 8,987,201	\$ 8,535,793	\$ 8,018,024	\$ 13,603,234	\$ 72,170,911

Forecasted Variance: 1,141,637





October 2018 Capital Spending Monthly Update

November 30, 2018



October 2018 Capital Spend Update - Agenda

1. Safety Moment
2. October 2018 Capital Spending Results
 - New Hampshire Overview
 - Entity Overview
3. High Profile Project Presentations
 - Golden Rock
 - Rte. 12 Widening
 - GSE New Business (Residential & Commercial)
 - Extend 14L4
 - Salem Depot Getaways
 - EN Meter Purchases
 - Bare Conductor
 - CIBS
 - City/State Construction
 - EN Growth
4. Additional Capital Spending Discussion Items
 - October YTD summary & rest of year forecast vs. approved budget
 - Year end housekeeping
 - 2019 capital expenditure forms

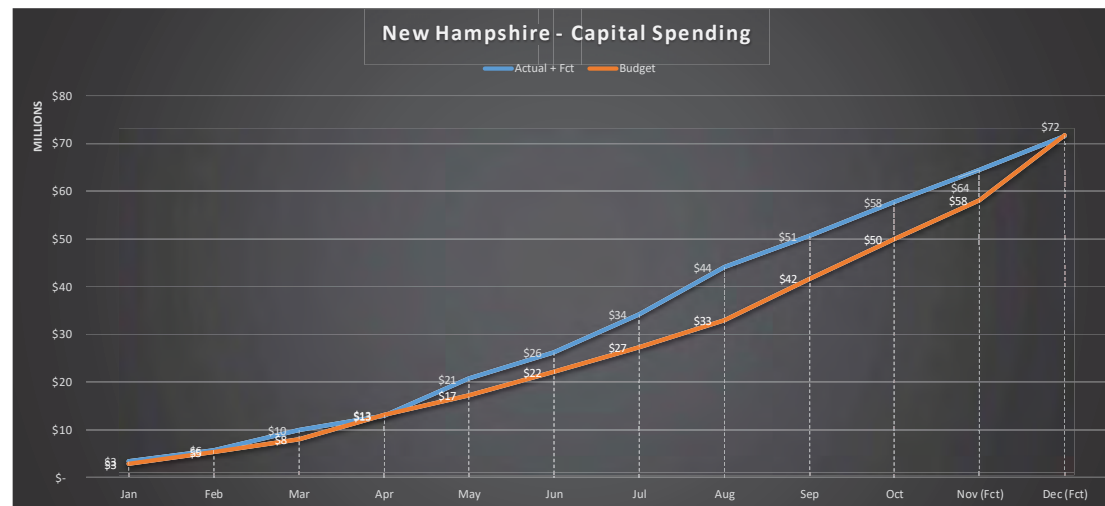


Capital Spending YTD + Forecast

Capital Spending YTD												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov (Fct)	Dec (Fct)
Actual + Fct	\$ 3,362,297	\$ 5,709,383	\$ 9,966,801	\$ 12,904,818	\$ 20,661,891	\$ 26,166,565	\$ 34,242,987	\$ 44,064,980	\$ 50,590,633	\$ 57,759,948	\$ 64,381,789	\$ 71,601,400
Budget	\$ 2,893,175	\$ 5,312,867	\$ 8,071,036	\$ 13,049,217	\$ 17,226,721	\$ 22,080,820	\$ 27,342,306	\$ 32,912,034	\$ 41,660,503	\$ 49,933,500	\$ 58,011,692	\$ 71,685,830

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov (Fct)	Dec (Fct)	Annual
Actual EN	\$ 3,141,615	\$ 1,121,582	\$ 2,276,867	\$ 2,589,936	\$ 6,508,821	\$ 4,343,343	\$ 6,405,222	\$ 6,759,423	\$ 4,555,654	\$ 5,170,478	\$ 4,246,460	\$ 3,552,113	\$ 50,671,514
Actual GSE	\$ 218,185	\$ 1,186,803	\$ 1,963,819	\$ 304,751	\$ 1,193,060	\$ 1,088,028	\$ 1,617,407	\$ 2,489,255	\$ 1,925,441	\$ 1,966,833	\$ 2,286,247	\$ 3,627,918	\$ 19,867,749
Actual Keene	\$ 2,497	\$ 38,701	\$ 16,732	\$ 43,329	\$ 55,192	\$ 73,302	\$ 53,794	\$ 573,315	\$ 44,558	\$ 32,004	\$ 89,134	\$ 39,579	\$ 1,062,137
	3,362,297	2,347,087	4,257,418	2,938,016	7,757,074	5,504,674	8,076,422	9,821,993	6,525,652	7,169,316	6,621,841	7,219,611	71,601,400
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Budget EN	\$ 461,976	\$ 254,066	\$ 617,563	\$ 1,269,554	\$ 1,686,497	\$ 1,424,332	\$ 1,901,631	\$ 2,310,735	\$ 3,438,581	\$ 3,133,962	\$ 2,028,012	\$ 4,368,541	\$ 22,895,450
Budget GSE	\$ 2,417,631	\$ 2,131,393	\$ 2,129,224	\$ 3,677,964	\$ 2,436,997	\$ 3,337,495	\$ 3,246,454	\$ 2,968,864	\$ 5,211,245	\$ 5,012,210	\$ 5,930,977	\$ 9,014,420	\$ 47,514,875
Budget Keene	\$ 13,568	\$ 34,232	\$ 11,382	\$ 30,662	\$ 54,010	\$ 92,272	\$ 113,401	\$ 290,128	\$ 98,644	\$ 126,824	\$ 119,203	\$ 291,177	\$ 1,275,505
	\$ 2,893,175	\$ 2,419,692	\$ 2,758,169	\$ 4,978,181	\$ 4,177,504	\$ 4,854,099	\$ 5,261,486	\$ 5,569,727	\$ 8,748,470	\$ 8,272,996	\$ 8,078,192	\$ 13,674,138	\$ 71,685,830

Forecasted Variance: 84,430



October 2018 Capital Spend Reporting

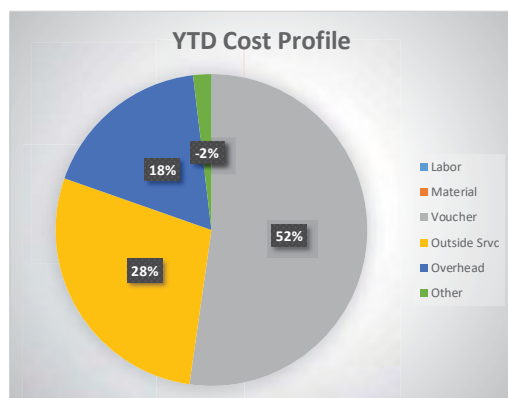
High Profile Projects

Golden Rock Substation

Project: Golden Rock Substation (8830-1744)

Objective: **Expected Date of Completion:** 12/31/2018

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Spending Actual	\$ 3,389	\$ 2,877	\$ 1,570	\$ 154	\$ 50,061	\$ 18,707	\$ 33,480	\$ 28,275	\$ 64,068	\$ 43,016			\$ 245,597
Budget	\$ 20,353	\$ 17,943	\$ 17,925	\$ 30,963	\$ 20,516	\$ 28,096	\$ 27,330	\$ 24,993	\$ 43,870	\$ 42,195	\$ 49,929	\$ 75,887	\$ 400,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 47,388	\$ 85,003	\$ 377,987



Cost Element	Amount	Field Completion: 0%
Labor	\$ 122	Financial Completion: 61.4%
Material		
Voucher	\$ 133,266	Spend to Date: \$ 245,597
Outside Svc	\$ 71,754	Remain. Budget: \$ 154,403
Overhead	\$ 45,273	Total Budget: \$ 400,000
Other	\$ (4,818)	
Total	\$ 245,597	Capital Recovery Begins: 7/1/2019

PM: A. Strabone



Update: Final engineering has been awarded to TRC. Owner's engineering has been awarded to Control Point Technologies.

Circuit breakers have been recieved. Motor operated disconnect has been recieved. Engineering review has begun for the design.
YEP has been revised to \$400,000 to account for Engineering only in 2018

Value Engineering:

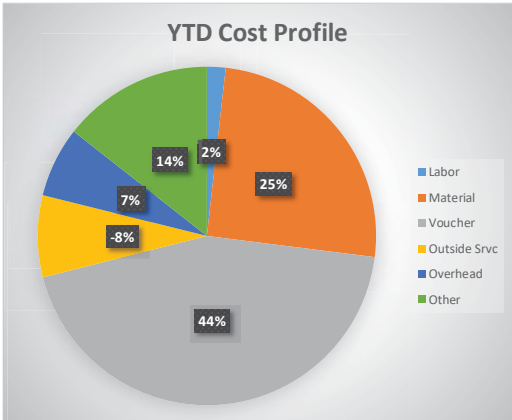
Timeline Risks:

Budget Risks:



Rte. 12 Widening, Walpole/Charlestown


Project: Rte. 12 Widening, Walpole/Charlestown (8830-1818)													
Objective:												Expected Date of Completion:	
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ -	\$ -	\$ -			122	28,978	41,574	208,882	534,796			\$ 814,351
Budget	\$ 76,322	\$ 67,286	\$ 67,218	\$ 116,110	\$ 76,934	\$ 105,362	\$ 102,488	\$ 93,724	\$ 164,514	\$ 158,231	\$ 187,235	\$ 284,577	\$1,500,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 110,000	\$ 390,000	\$1,314,351



YTD Cost Profile

Category	Percentage
Labor	2%
Material	25%
Voucher	44%
Outside Svc	-8%
Overhead	7%
Other	14%

PM: A. Strabone



Update: Engineering Complete.
Construction has been awarded to IC Reed. Construction to start week of 7/9/18
Construction expected to be complete by 12/5/18.

Value Engineering:

Timeline Risks: This job is closely tied to NHDOT work. Any delays with NHDOT scope of work will significantly impact Liberty's schedule.

Budget Risks: Labor has been charged against 2017 project number 301711-01010 (\$40k)

INSERT PROJECT PHOTO HERE

Cost Element	Amount	Field Completion:	0%
Labor	\$ 17,154	Financial Completion:	54.3%
Material	\$ 243,380		
Voucher	\$ 425,284	Spend to Date:	\$ 814,351
Outside Svc	\$ (75,342)	Remain. Budget	\$ 685,649
Overhead	\$ 64,779	Total Budget	\$ 1,500,000
Other	\$ 139,095		
Total	\$ 814,350	Capital Recovery Begins:	7/1/2019



GSE New Business - Residential & Commercial

Project: GSE New Business Residential & Commercial (8830-1837 & 8830-1838)												
Objective:											Expected Date of Completion:	12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Actual	\$ 327,254	\$ 249,176	\$ 463,346	\$ 290,447	\$ 297,486	\$ 310,203	\$ 400,428	\$ 206,481	\$ (915,951)	\$ (40,154)		
Budget	\$ 146,921	\$ 129,526	\$ 129,394	\$ 223,512	\$ 148,097	\$ 202,821	\$ 126,172	\$ 115,383	\$ 202,532	\$ 194,797	\$ 230,504	\$ 350,341
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 181,250	\$ 181,250
												\$ 1,951,216

YTD Cost Profile

Category	Percentage
Labor	46%
Material	13%
Voucher	10%
Outside Svc	10%
Overhead	5%
Other	-16%

Cost Element

Labor	\$ 309,252
Material	\$ 242,244
Voucher	\$ 226,529
Outside Svc	\$ 125,001
Overhead	\$ 1,063,308
Other	\$ (377,618)
Total	\$ 1,588,716

Field Completion: 0%

Financial Completion: 72.2%

Spend to Date: \$ 1,588,716

Remain. Budget: \$ 611,284

Total Budget: \$ 2,200,000

Capital Recovery Begins: 7/1/2019

PM: A. Strabone

Update: This is normal run of the business projects.

Sept credit due to reclass of costs associated with Tuscan.

Oct credit due to reclass of costs to expense (Spent approx \$170k, Reclass approx \$210k)

Value Engineering:

Timeline Risks:

Budget Risks:

INSERT PROJECT PHOTO HERE



Extend Pelham 14L4 to Salem

Project: Extend Pelham 14L4 to Salem (8830-1860)

Objective:

											Expected Date of Completion:		12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ -	\$ -	\$ -	\$ 5,235	\$ 15,109	4,560	20,138	215,835	179,876	201,257			\$ 642,009
Budget	\$ 50,882	\$ 44,857	\$ 44,812	\$ 77,407	\$ 51,289	\$ 70,241	\$ 68,325	\$ 62,483	\$ 109,676	\$ 105,487	\$ 124,824	\$ 189,718	\$ 1,000,000
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 173,000	\$ 315,000	\$ 1,130,009

YTD Cost Profile

PM: A. Strabone

Update: Engineering is complete. Construction has been awarded to Northline Construction

New Hendrix from Pole 74 Hobbs to Pole 32 Bridge is installed and energized

This project expected to be complete by 12/12/18. Construction has been delayed due to weather...currently the crews have lost 18 work days due to weather.

Value Engineering:

Timeline Risks:

Weather see above comment

Budget Risks:

Contributing factor to over expenditure- approx. \$208k in trimming cost due to tree crews being from out of State

Cost Element

Amount

Field Completion:

0%

Labor

\$ 1,800

Financial Completion:

64.2%

Material

Voucher

\$ 415,559

Spend to Date:

\$ 642,009

Outside Svc

Remain. Budget

\$ 357,991

Overhead

\$ 60,534

Total Budget

\$ 1,000,000

Other

\$ 164,116

Total

\$ 642,009

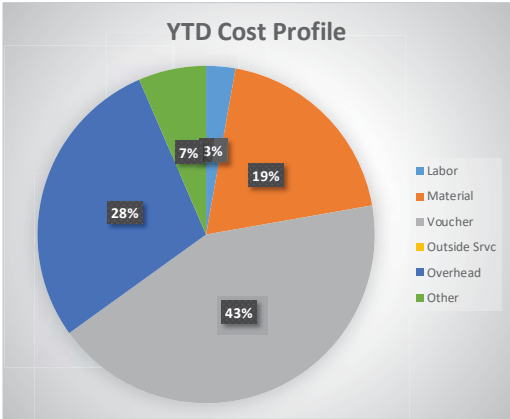
Capital Recovery Begins:

7/1/2019

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Salem Depot Getaways


Project: Salem Depot Getaways (8830-1866)													
Objective:												Expected Date of Completion:	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Spending													
Actual	\$ -	\$ 538	\$ 1,430	\$ 53,076	\$ 3,305	\$ 40,004	\$ 448,070	\$ 596,571	\$ 125,424	\$ 82,483			\$ 1,350,901
Budget	\$ -	\$ -	\$ -	\$ 57,143	\$ 85,714	\$ 85,714	\$ 251,429	\$ 285,714	\$ 342,857	\$ 457,143	\$ 22,857	\$ 11,429	\$ 1,600,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 32,007	\$ 100,000	\$ 1,482,908



YTD Cost Profile

Category	Percentage
Labor	28%
Material	19%
Voucher	43%
Outside Svc	7%
Overhead	3%
Other	

PM: A. Strabone



Update: Engineering Complete.
Complete! Only restoration of area remains
Restoration to be completed by Thanksgiving, waiting for Tuscan Village Contractor to finish roadwork.

Value Engineering:

Timeline Risks:

Budget Risks:

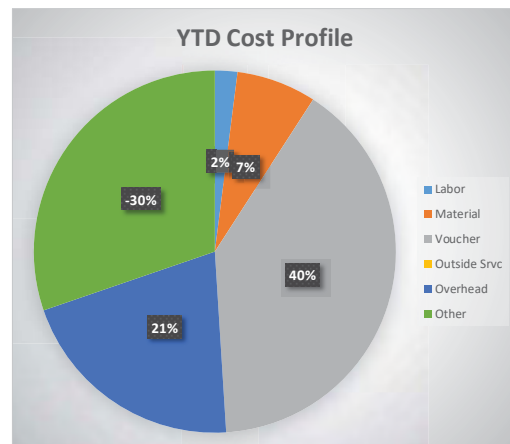
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Cost Element	Amount	Field Completion:	0%
Labor	\$ 37,887	Financial Completion:	84.4%
Material	\$ 262,432		
Voucher	\$ 578,700	Spend to Date:	\$ 1,350,901
Outside Svc		Remain. Budget	\$ 249,099
Overhead	\$ 384,218	Total Budget	\$ 1,600,000
Other	\$ 87,663		
Total	\$ 1,350,901	Capital Recovery Begins:	7/1/2019

Bare Conductor Replacement Program

Project: Bare Conductor Replacement Program (8830-1846)

Objective:													Expected Date of Completion:	12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
Actual	\$ (90,475)	\$ 158,583	\$ 53,407	\$ 24,693	\$ 46,930	\$ 12,418	\$ 109,998	\$ 234,123	\$ 288,550	\$ 65,978			\$ 904,204	
Budget	\$ 71,234	\$ 62,800	\$ 62,736	\$ 108,369	\$ 71,805	\$ 98,337	\$ 95,655	\$ 137,476	\$ 153,546	\$ 147,682	\$ 174,753	\$ 265,605	\$ 1,450,000	
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 150,000	\$ 170,000	\$ 1,224,204	



PM: J. Rivera



Update:

Liberty will make its CY2018 reconciliation filing with the Commission by March 15, 2019. Actual expenses incurred by Liberty in implementing the capital components of the 2018 REP will be reconciled to the proposed amount of \$1,600,000. In addition, the revenue requirement associated with capital expenditures incurred as part of the REP investment will be included at the same time as the REP/VMP Adjustment Provision. At that time, the rate impacts will be determined using actual spending and any over- or under-collection balance that exists at that time.

Value Engineering: Engineering / Design is currently in progress.

Timeline Risks: It is anticipated that the majority of the Actual Costs will be reflected in the 4th quarter. Liberty has included a capital investment budget of \$1,600,000 reflecting planned capital investment closed to plant as part of its CY2018 plan as approved in Docket No. DE 16-383. This amount includes \$1,500,000 of planned 2018 capital investment and

Budget Risks: \$100,000 of carryover funds for the Bare Conductor Program work from 2017.



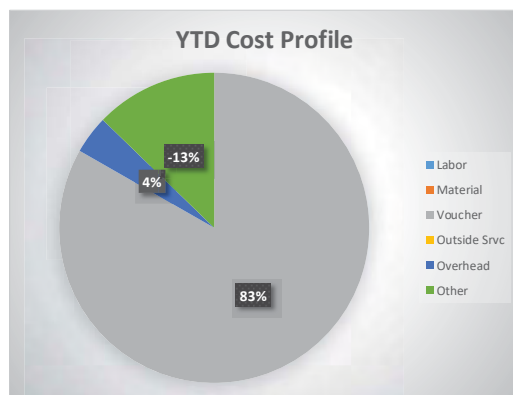
Cost Element	Amount	Field Completion:	0%
Labor	\$ 45,989	Financial Completion:	62.4%
Material	\$ 163,248		
Voucher	\$ 913,004	Spend to Date:	\$ 904,204
Outside Svc		Remain. Budget	\$ 545,796
Overhead	\$ 474,944	Total Budget	\$ 1,450,000
Other	\$ (692,980)		
Total	\$ 904,204	Capital Recovery Begins:	



Meter Purchases

Project: Meter Purchases (8840-1807)

Objective:												Expected Date of Completion:	12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ (13,514)	\$ -	\$ (2,844)	\$ (8,287)	\$ 170,206	\$ 112,328	\$ 108,565	\$ 186,442	\$ 84,477	\$ 141,474			\$ 778,847
Budget	\$ 21,186	\$ 11,652	\$ 28,322	\$ 58,223	\$ 77,344	\$ 65,321	\$ 87,210	\$ 105,972	\$ 157,696	\$ 143,726	\$ 93,006	\$ 200,344	\$ 1,050,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,251	\$ 45,223	\$ 835,321



Cost Element	Amount	Field Completion:	0%
Labor		Financial Completion:	74.2%
Material			
Voucher	\$ 870,578	Spend to Date:	\$ 778,847
Outside Srv		Remain. Budget	\$ 271,153
Overhead	\$ 41,607	Total Budget	\$ 1,050,000
Other	\$ (133,338)		
Total	\$ 778,847	Capital Recovery Begins:	7/1/2020

PM: B. Mostone



Update: Report is based on current Main Relay and Growth Projections, will have to make adjustments according to needs. We have also experienced delays in delivery of ERT's and Meter.

Value Engineering:

Timeline Risks: Meter and ERT's on average take 6 to 12 weeks for delivery

Budget Risks: Due to field requirement meters adjustments maybe needed



LPP Main Replacement

Project: LPP Main Replacement (8840-1811 & 8840-1813)

Objective:												
	Expected Date of Completion: 12/31/2018											
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Actual	\$ 1,457,819	\$ (344,085)	\$ 919,612	\$ 661,236	\$ 1,736,078	\$ 1,461,297	\$ 2,531,683	\$ 2,034,958	\$ 2,744,995	\$ 1,046,965		
Budget	\$ 334,948	\$ 184,207	\$ 447,755	\$ 920,471	\$ 1,222,769	\$ 1,032,690	\$ 1,378,748	\$ 1,675,364	\$ 2,493,091	\$ 2,272,232	\$ 1,470,380	\$ 3,167,344
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,065,000	\$ 530,000
												\$ 15,845,557

YTD Cost Profile

Category	Percentage
Labor	17%
Material	1%
Voucher	3%
Outside Svc	76%
Overhead	
Other	

PM: Shawn Furey

Update: Target mileage is 9.0 miles. Currently about 5 miles is in progress and is estimated to be complete by December 14th. Final restoration has been suspended as of 11/20/2018 due to weather. Projected to come in 750k under budget due to projects being cut short and final restoration delays.

Sending information to Engineering when abnormal costs are occurring in the field.

Value Engineering: Ensure that estimates are accounting for all scenarios

Timeline Risks: None at this time

Budget Risks: None at this time

Cost Element	Amount	Field Completion:	15%
Labor	\$ 407,169	Financial Completion:	85.8%
Material	\$ 415,888		
Voucher	\$ 10,878,671	Spend to Date:	\$ 14,250,557
Outside Svc		Remain. Budget	\$ 2,349,443
Overhead	\$ 2,437,793	Total Budget	\$ 16,600,000
Other	\$ 111,036		
Total	\$ 14,250,557	Capital Recovery Begins:	



Main Replacement City/State Construction

Project: Main Replacement City/State Construction (8840-1823)

Objective:												
	Expected Date of Completion: 12/31/2018											
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Actual	\$ 78,544	\$ (87,596)	\$ (64,646)	\$ 473,974	\$ 1,859,998	\$ 702,026	\$ 498,037	\$ 662,287	\$ 477,084	\$ 717,487		
Budget	\$ 102,906	\$ 56,594	\$ 137,563	\$ 282,795	\$ 375,670	\$ 317,272	\$ 423,591	\$ 514,720	\$ 765,950	\$ 698,095	\$ 451,743	\$ 973,100
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 400,000	\$ 100,000
												\$ 5,817,195

YTD Cost Profile

77% Voucher, 14% Labor, 3% Material, -5% Overhead, 0% Other

Cost Element

Labor	\$ 54,203
Material	\$ 200,631
Voucher	\$ 4,482,118
Outside Svc	\$ 2,203
Overhead	\$ 842,542
Other	\$ (264,501)
Total	\$ 5,317,195

Field Completion: 65%

Financial Completion: 104.3%

Spend to Date: \$ 5,317,195

Remain. Budget: \$ (217,195)

Total Budget: \$ 5,100,000

Capital Recovery Begins: 7/1/2020

PM: Shawn Furey

Update: Target milage is 3.6 miles. Currently about 1 mile is in progress and is estimated to be complete by December 14th. Final restoration has been suspended as of 11/20/2018 due to weather. Projected to come in 700k over budget due to rock drill in Franklin. Higher amounts of ledge than anticipated on drill. Kinsley St Nashua restoration required grind on temp patch.

Value Engineering: Ensure that estimates are accounting for all scenerios

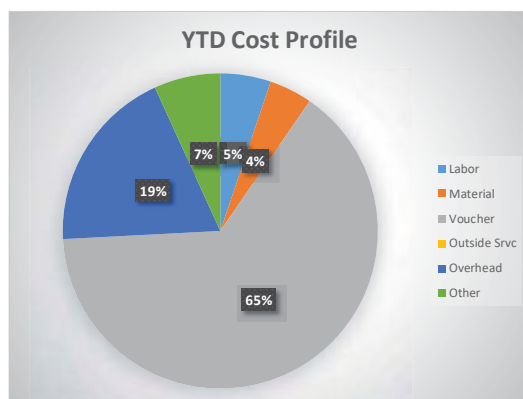
Timeline Risks: None at this time

Budget Risks: None at this time

Sending information to Engineering when abnormal costs are occurring in the field.

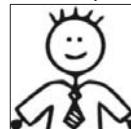
Project: EnergyNorth Growth Projects

Objective:										Expected Date of Completion:			12/31/2018
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Spending													
Actual	\$ 339,548	\$ 224,652	\$ 606,695	\$ 563,245	\$ 1,328,441	\$ 923,952	\$ 1,549,811	\$ 1,829,112	\$ 1,390,764	\$ 2,084,173			\$10,840,392
Budget	\$ 259,407	\$ 142,663	\$ 346,773	\$ 712,877	\$ 946,998	\$ 799,788	\$ 1,067,799	\$ 1,297,519	\$ 1,930,824	\$ 1,759,775	\$ 1,138,765	\$ 2,453,013	\$12,856,200
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,425,000	\$ 520,000	\$12,785,392



Cost Element	Amount	Field Completion:	15%
Labor	\$ 561,915	Financial Completion:	84.3%
Material	\$ 478,690		
Voucher	\$ 7,000,203	Spend to Date:	\$ 10,840,392
Outside Srvs		Remain. Budget	\$ 2,015,808
Overhead	2,061,769	Total Budget	\$ 12,856,200
Other	\$ 737,815		
Total	\$ 10,840,392	Capital Recovery Begins:	

PM: Shawn Furey



Update: Random services shut off as of 11/23/2018. December growth projects include 102, Pelham, and misc sub division work. Projected total milage for 2018 is 15 miles with about 2 miles currently in progress. Expected to come in at budget between growth new main, growth fitting, new service residential and commercial combined.

Value Engineering: None at this time

Timeline Risks: None at this time

Budget Risks: None at this time



Capital Spend Discussion Items

- October Budget Year-to-date Summary

- October YTD Spend vs. Approved YTD Budget

	Budget - Oct. YTD	Actual - Oct. YTD	Variance
Gas	\$35.2m	\$43.8m	(\$8.6m)
Electric	\$15.4m	\$13.5m	\$1.9m
Totals:	\$50.7m	\$57.3m	(\$6.6m)

- October YTD Spend vs. Approved Full Year Budget

	Budget - Full Year	Actual - Oct. YTD	Variance
Gas	\$46m	\$43.8m	\$2.2m
Electric	\$21.8m	\$13.5m	\$8.3m
Totals:	\$67.9m	\$57.3m	\$10.5m

- Year-to-date October **\$6.6m overspend vs** approved YTD budget
- Year-to-date October \$10.5m under total approved annual budget
- Forecast spend for November & December \$13.8m

- Forms & Year-end Housekeeping

- Over-expenditure forms – 2018 projects
- Capital Expenditure Applications/Business Case Forms – 2019 Projects

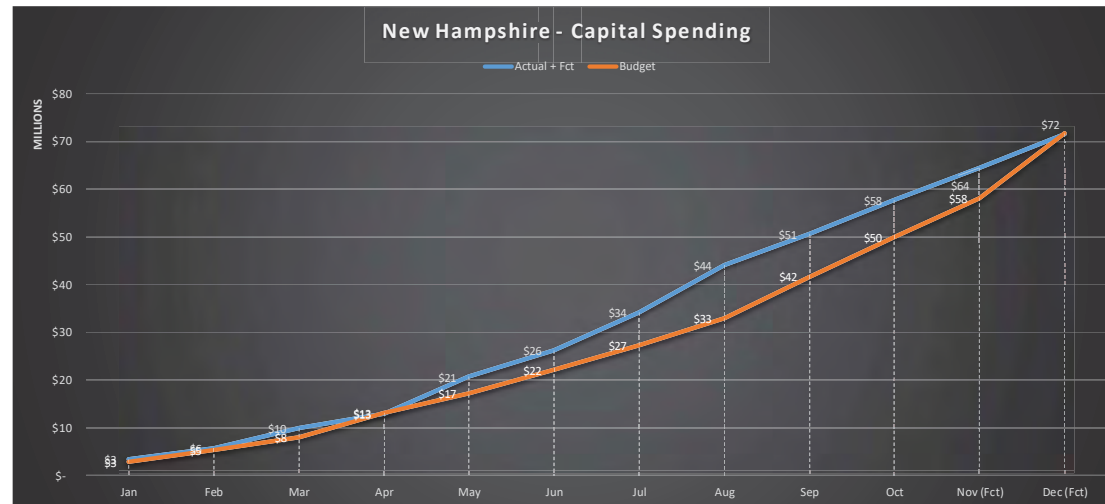


Capital Spending YTD + Forecast

Capital Spending YTD												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov (Fct)	Dec (Fct)
Actual + Fct	\$ 3,362,297	\$ 5,709,383	\$ 9,966,801	\$ 12,904,818	\$ 20,661,891	\$ 26,166,565	\$ 34,242,987	\$ 44,064,980	\$ 50,590,633	\$ 57,759,948	\$ 64,381,789	\$ 71,601,400
Budget	\$ 2,893,175	\$ 5,312,867	\$ 8,071,036	\$ 13,049,217	\$ 17,226,721	\$ 22,080,820	\$ 27,342,306	\$ 32,912,034	\$ 41,660,503	\$ 49,933,500	\$ 58,011,692	\$ 71,685,830

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov (Fct)	Dec (Fct)	Annual
Actual EN	\$ 3,141,615	\$ 1,121,582	\$ 2,276,867	\$ 2,589,936	\$ 6,508,821	\$ 4,343,343	\$ 6,405,222	\$ 6,759,423	\$ 4,555,654	\$ 5,170,478	\$ 4,246,460	\$ 3,552,113	\$ 50,671,514
Actual GSE	\$ 218,185	\$ 1,186,803	\$ 1,963,819	\$ 304,751	\$ 1,193,060	\$ 1,088,028	\$ 1,617,407	\$ 2,489,255	\$ 1,925,441	\$ 1,966,833	\$ 2,286,247	\$ 3,627,918	\$ 19,867,749
Actual Keene	\$ 2,497	\$ 38,701	\$ 16,732	\$ 43,329	\$ 55,192	\$ 73,302	\$ 53,794	\$ 573,315	\$ 44,558	\$ 32,004	\$ 89,134	\$ 39,579	\$ 1,062,137
	3,362,297	2,347,087	4,257,418	2,938,016	7,757,074	5,504,674	8,076,422	9,821,993	6,525,652	7,169,316	6,621,841	7,219,611	71,601,400
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Budget EN	\$ 461,976	\$ 254,066	\$ 617,563	\$ 1,269,554	\$ 1,686,497	\$ 1,424,332	\$ 1,901,631	\$ 2,310,735	\$ 3,438,581	\$ 3,133,962	\$ 2,028,012	\$ 4,368,541	\$ 22,895,450
Budget GSE	\$ 2,417,631	\$ 2,131,393	\$ 2,129,224	\$ 3,677,964	\$ 2,436,997	\$ 3,337,495	\$ 3,246,454	\$ 2,968,864	\$ 5,211,245	\$ 5,012,210	\$ 5,930,977	\$ 9,014,420	\$ 47,514,875
Budget Keene	\$ 13,568	\$ 34,232	\$ 11,382	\$ 30,662	\$ 54,010	\$ 92,272	\$ 113,401	\$ 290,128	\$ 98,644	\$ 126,824	\$ 119,203	\$ 291,177	\$ 1,275,505
	\$ 2,893,175	\$ 2,419,692	\$ 2,758,169	\$ 4,978,181	\$ 4,177,504	\$ 4,854,099	\$ 5,261,486	\$ 5,569,727	\$ 8,748,470	\$ 8,272,996	\$ 8,078,192	\$ 13,674,138	\$ 71,685,830

Forecasted Variance: 84,430





November 2018 Capital Spending Monthly Update

December 20, 2018



November 2018 Capital Spend Update - Agenda

1. Safety Moment
2. November 2018 Capital Spending Results
 - New Hampshire Overview
 - Entity Overview
3. High Profile Project Presentations
 - Golden Rock
 - Rte. 12 Widening
 - GSE New Business (Residential & Commercial)
 - Extend 14L4
 - Salem Depot Getaways
 - EN Meter Purchases
 - Bare Conductor
 - CIBS
 - City/State Construction
 - EN Growth
4. Additional Capital Spending Discussion Items
 - November YTD summary & rest of year forecast vs. approved budget
 - Year end housekeeping
 - 2019 capital expenditure forms



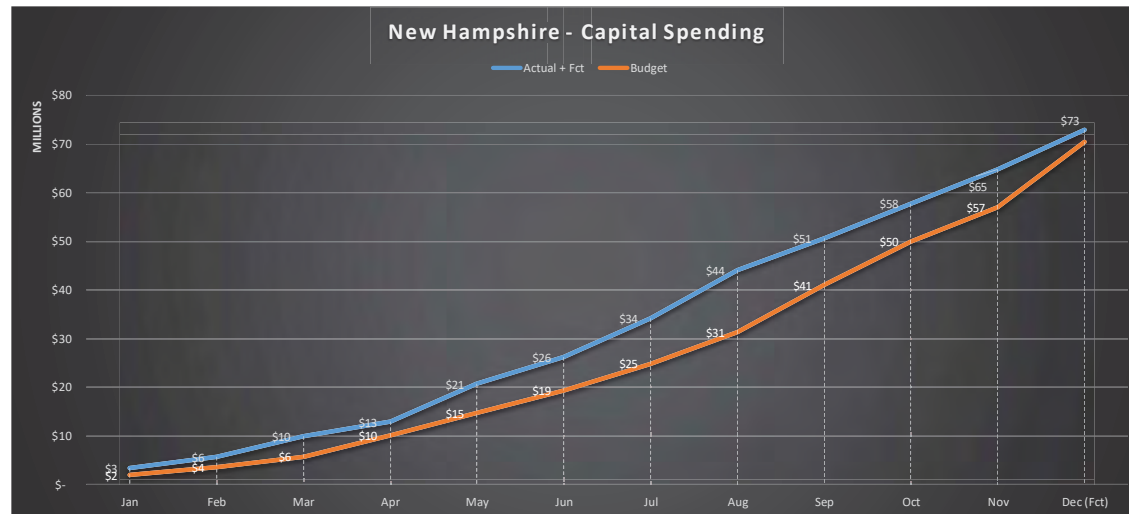
Capital Spending YTD + Forecast

Capital Spending YTD												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec (Fct)
Actual + Fct	\$ 3,362,297	\$ 5,709,383	\$ 9,966,801	\$ 12,904,818	\$ 20,661,891	\$ 26,166,565	\$ 34,242,987	\$ 44,064,980	\$ 50,590,633	\$ 57,759,948	\$ 64,775,794	\$ 72,899,128
Budget	\$ 2,038,888	\$ 3,536,021	\$ 5,777,233	\$ 10,089,959	\$ 14,773,933	\$ 19,333,717	\$ 24,887,660	\$ 31,378,873	\$ 41,021,475	\$ 49,963,390	\$ 56,952,655	\$ 70,418,053

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec (Fct)	Annual
Actual EN	\$ 3,141,615	\$ 1,121,582	\$ 2,276,867	\$ 2,589,936	\$ 6,508,821	\$ 4,343,343	\$ 6,405,222	\$ 6,759,423	\$ 4,555,654	\$ 5,170,478	\$ 5,113,241	\$ 4,730,432	\$ 52,716,615
Actual GSE	\$ 218,185	\$ 1,186,803	\$ 1,963,819	\$ 304,751	\$ 1,193,060	\$ 1,088,028	\$ 1,617,407	\$ 2,489,255	\$ 1,925,441	\$ 1,966,833	\$ 1,791,121	\$ 3,351,976	\$ 19,096,680
Actual Keene	\$ 2,497	\$ 38,701	\$ 16,732	\$ 43,329	\$ 55,192	\$ 73,302	\$ 53,794	\$ 573,315	\$ 44,558	\$ 32,004	\$ 111,484	\$ 40,927	\$ 1,085,834
	3,362,297	2,347,087	4,257,418	2,938,016	7,757,074	5,504,674	8,076,422	9,821,993	6,525,652	7,169,316	7,015,845	8,123,335	72,899,128

	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Budget EN	\$ 978,256	\$ 537,998	\$ 1,307,720	\$ 2,688,344	\$ 3,571,240	\$ 3,016,093	\$ 4,026,796	\$ 4,893,096	\$ 7,281,364	\$ 6,636,320	\$ 4,294,416	\$ 9,250,600	\$ 48,482,244
Budget GSE	\$ 1,045,963	\$ 922,125	\$ 921,186	\$ 1,591,232	\$ 1,054,341	\$ 1,443,932	\$ 1,404,544	\$ 1,284,448	\$ 2,254,590	\$ 2,168,480	\$ 2,565,974	\$ 3,899,993	\$ 20,556,809
Budget Keene	\$ 14,669	\$ 37,010	\$ 12,305	\$ 33,150	\$ 58,392	\$ 99,759	\$ 122,603	\$ 313,669	\$ 106,648	\$ 137,115	\$ 128,875	\$ 314,804	\$ 1,379,000
	\$ 2,038,888	\$ 1,497,133	\$ 2,241,212	\$ 4,312,726	\$ 4,683,973	\$ 4,559,784	\$ 5,553,943	\$ 6,491,213	\$ 9,642,602	\$ 8,941,914	\$ 6,989,266	\$ 13,465,398	\$ 70,418,053

Forecasted Variance: (2,481,075)



November 2018 Capital Spend Reporting

High Profile Projects

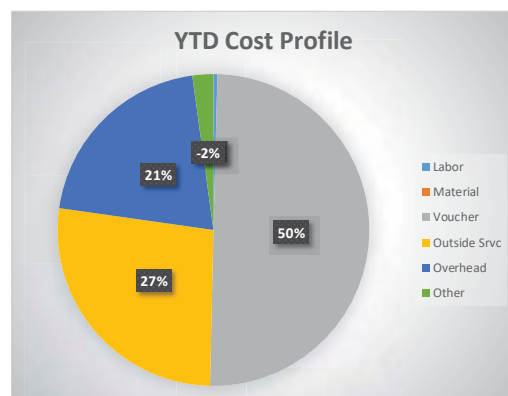


Golden Rock Substation

Project: Golden Rock Substation (8830-1744)

Objective: **Expected Date of Completion:** 12/31/2018

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Spending Actual	\$ 3,389	\$ 2,877	\$ 1,570	\$ 154	\$ 50,061	\$ 18,707	\$ 33,480	\$ 28,275	\$ 64,068	\$ 43,016	\$ 9,671		\$ 255,267
Budget	\$ 20,353	\$ 17,943	\$ 17,925	\$ 30,963	\$ 20,516	\$ 28,096	\$ 27,330	\$ 24,993	\$ 43,870	\$ 42,195	\$ 49,929	\$ 75,887	\$ 400,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 85,003	\$ 340,270



Cost Element	Amount	Field Completion:	0%
Labor	\$ 1,095	Financial Completion:	63.8%
Material			
Voucher	\$ 133,266	Spend to Date:	\$ 255,267
Outside Svc	\$ 71,754	Remain. Budget	\$ 144,733
Overhead	\$ 54,944	Total Budget	\$ 400,000
Other	\$ (5,792)		
Total	\$ 255,267	Capital Recovery Begins:	7/1/2019

PM: A. Strabone



Update: Final engineering has been awarded to TRC. Owner's engineering has been awarded to Control Point Technologies.

Circuit breakers have been recieved. Motor operated disconnect has been recieved. Engineering review has begun for the design.
YEP has been revised to \$400,000 to account for Engineering only in 2018

Value Engineering:

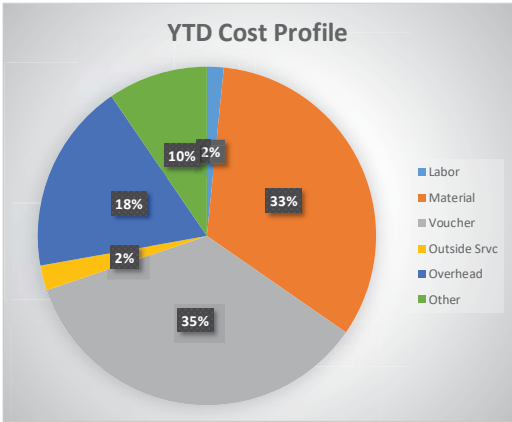
Timeline Risks:

Budget Risks:



Rte. 12 Widening, Walpole/Charlestown


Project: Rte. 12 Widening, Walpole/Charlestown (8830-1818)													
Objective:												Expected Date of Completion:	
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ -	\$ -	\$ -			122	28,978	41,574	208,882	534,796	270,625		\$1,084,976
Budget	\$ 76,322	\$ 67,286	\$ 67,218	\$ 116,110	\$ 76,934	\$ 105,362	\$ 102,488	\$ 93,724	\$ 164,514	\$ 158,231	\$ 187,235	\$ 284,577	\$1,500,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 390,000	\$1,474,976



YTD Cost Profile

Category	Percentage
Labor	2%
Material	33%
Voucher	35%
Outside Svc	2%
Overhead	18%
Other	10%

PM: A. Strabone



Update: Engineering Complete.
Construction has been awarded to IC Reed. Construction to start week of 7/9/18
Construction expected to be complete by 12/5/18.

Value Engineering:

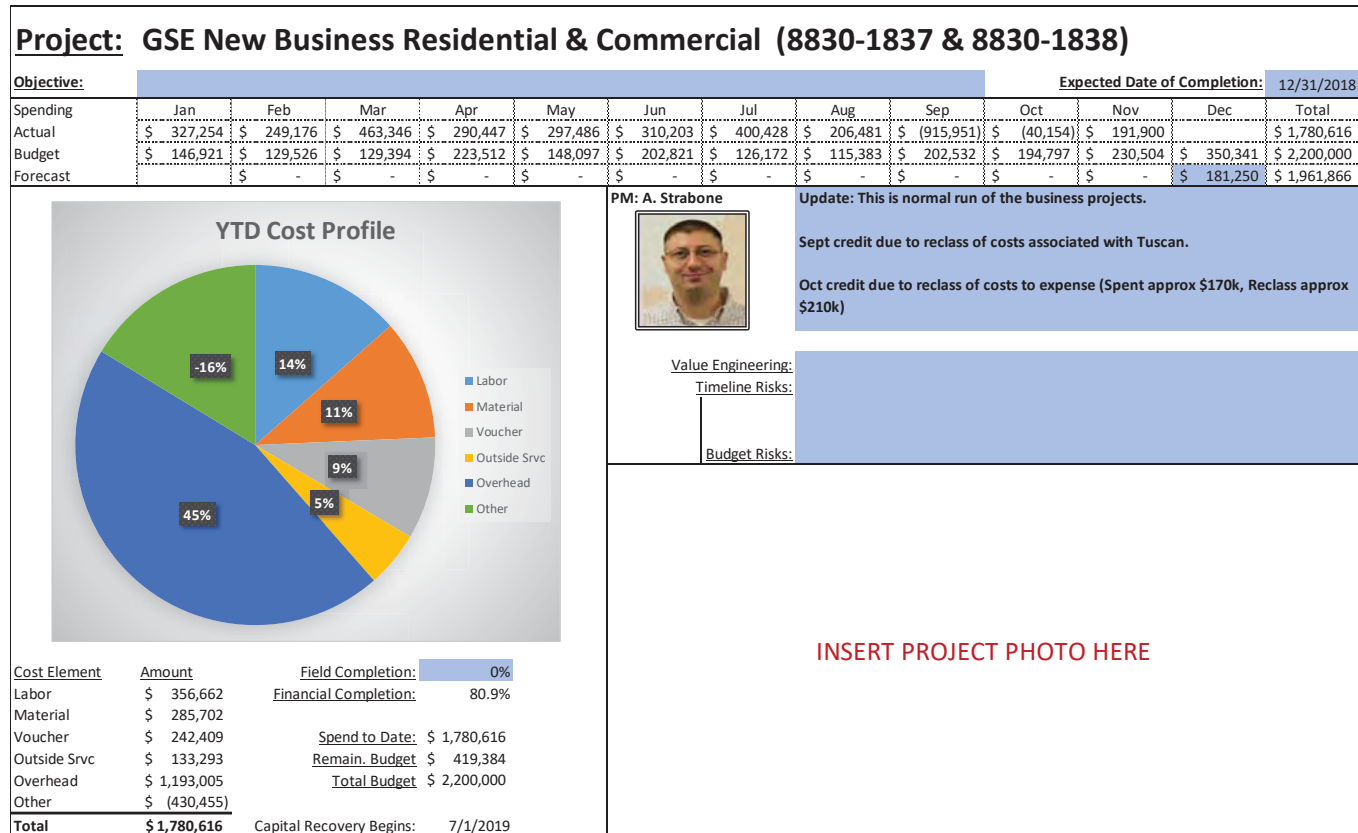
Timeline Risks: This job is closely tied to NHDOT work. Any delays with NHDOT scope of work will significantly impact Liberty's schedule.

Budget Risks: Labor has been charged against 2017 project number 301711-01010 (\$40k)

INSERT PROJECT PHOTO HERE

Cost Element	Amount	Field Completion:	0%
Labor	\$ 17,398	Financial Completion:	72.3%
Material	\$ 358,516		
Voucher	\$ 381,480	Spend to Date:	\$ 1,084,976
Outside Svc	\$ 25,869	Remain. Budget	\$ 415,024
Overhead	\$ 198,162	Total Budget	\$ 1,500,000
Other	\$ 103,552		
Total	\$ 1,084,976	Capital Recovery Begins:	7/1/2019

GSE New Business - Residential & Commercial



Extend Pelham 14L4 to Salem

Project: Extend Pelham 14L4 to Salem (8830-1860)

Objective:

Expected Date of Completion:

12/31/2018

Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ -	\$ -	\$ -	\$ 5,235	\$ 15,109	4,560	20,138	215,835	179,876	201,257	186,367		\$ 828,376
Budget	\$ 50,882	\$ 44,857	\$ 44,812	\$ 77,407	\$ 51,289	\$ 70,241	\$ 68,325	\$ 62,483	\$ 109,676	\$ 105,487	\$ 124,824	\$ 189,718	\$ 1,000,000
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 315,000	\$ 1,143,376

YTD Cost Profile

Labor

Material

Voucher

Outside Svc

Overhead

Other

Cost Element	Amount	Field Completion:	0%
Labor	\$ 2,242	Financial Completion:	82.8%
Material	\$ 164,379		
Voucher	\$ 454,022		
Outside Svc			
Overhead	\$ 100,270		
Other	\$ 107,463		
Total	\$ 828,376	Capital Recovery Begins:	7/1/2019

Spend to Date:

\$ 828,376

Remain. Budget

\$ 171,624

Total Budget

\$ 1,000,000

PM: A. Strabone

Update: Engineering is complete. Construction has been awarded to Northline Construction

All new wire has been installed and portions of new wire already energized.

Remaining wire expected to be energized, in-service and carrying load by 12/28/18.

Construction has been delayed due to weather...currently the crews have lost 18 work days due to weather.

Value Engineering:

Timeline Risks:

Budget Risks:

Weather see above comment

Contributing factor to over expenditure- approx. \$208k in trimming cost due to tree crews being from out of State

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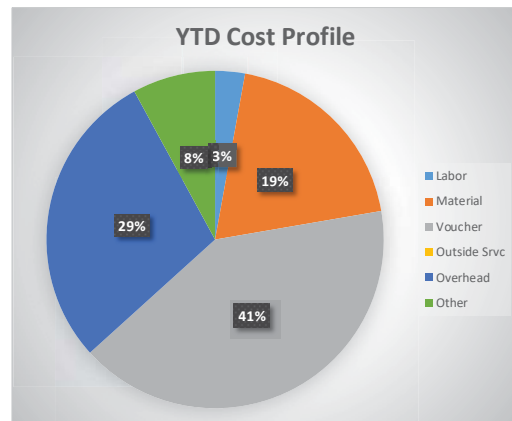


Salem Depot Getaways

Project: Salem Depot Getaways (8830-1866)

Objective: **Expected Date of Completion:** 12/31/2018

Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ -	\$ 538	\$ 1,430	\$ 53,076	\$ 3,305	\$ 40,004	\$ 448,070	\$ 596,571	\$ 125,424	\$ 82,483	\$ (307)		\$ 1,350,594
Budget	\$ -	\$ -	\$ -	\$ 57,143	\$ 85,714	\$ 85,714	\$ 251,429	\$ 285,714	\$ 342,857	\$ 457,143	\$ 22,857	\$ 11,429	\$ 1,600,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000	\$ 1,450,594



Cost Element	Amount	Field Completion: 0%
Labor	\$ 38,617	Financial Completion: 84.4%
Material	\$ 262,429	
Voucher	\$ 553,891	Spend to Date: \$ 1,350,594
Outside Svc		Remain. Budget: \$ 249,406
Overhead	\$ 388,341	Total Budget: \$ 1,600,000
Other	\$ 107,317	
Total	\$ 1,350,594	Capital Recovery Begins: 7/1/2019

PM: A. Strabone



Update: Engineering Complete.
Complete!

Value Engineering:

Timeline Risks:

Budget Risks:

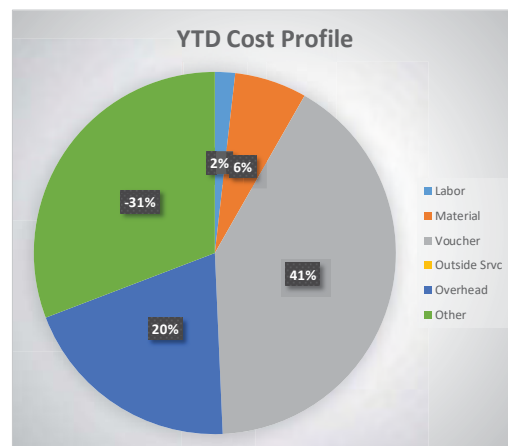
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Bare Conductor Replacement Program

Project: Bare Conductor Replacement Program (8830-1846)

Objective:												
	Expected Date of Completion: 12/31/2018											
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Actual	\$ (90,475)	\$ 158,583	\$ 53,407	\$ 24,693	\$ 46,930	\$ 12,418	\$ 109,998	\$ 234,123	\$ 288,550	\$ 65,978	\$ 79,293	\$ 983,497
Budget	\$ 71,234	\$ 62,800	\$ 62,736	\$ 108,369	\$ 71,805	\$ 98,337	\$ 95,655	\$ 137,476	\$ 153,546	\$ 147,682	\$ 174,753	\$ 265,605
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 170,000
												\$ 1,153,497



Cost Element	Amount	Field Completion: 0%
Labor	\$ 46,232	Financial Completion: 67.8%
Material	\$ 165,275	
Voucher	\$ 1,051,822	Spend to Date: \$ 983,497
Outside Svc		Remain. Budget \$ 466,503
Overhead	\$ 509,467	Total Budget \$ 1,450,000
Other	\$ (789,299)	
Total	\$ 983,497	Capital Recovery Begins:

PM: J. Rivera



Update:

Liberty will make its CY2018 reconciliation filing with the Commission by March 15, 2019. Actual expenses incurred by Liberty in implementing the capital components of the 2018 REP will be reconciled to the proposed amount of \$1,600,000. In addition, the revenue requirement associated with capital expenditures incurred as part of the REP investment will be included at the same time as the REP/VMP Adjustment Provision. At that time, the rate impacts will be determined using actual spending and any over- or under-collection balance that exists at that time.

Value Engineering: Engineering / Design is currently in progress.

Timeline Risks: It is anticipated that the majority of the Actual Costs will be reflected in the 4th quarter. Liberty has included a capital investment budget of \$1,600,000 reflecting planned capital investment closed to plant as part of its CY2018 plan as approved in Docket No. DE 16-383. This amount includes \$1,500,000 of planned 2018 capital investment and

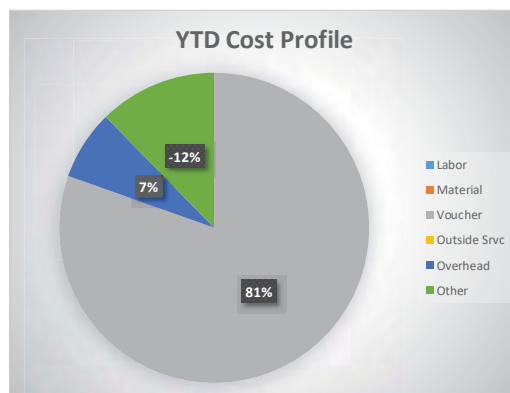
Budget Risks: \$100,000 of carryover funds for the Bare Conductor Program work from 2017.



Meter Purchases

Project: Meter Purchases (8840-1807)

Objective:												Expected Date of Completion:	12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ (13,514)	\$ -	\$ (2,844)	\$ (8,287)	\$ 170,206	\$ 112,328	\$ 108,565	\$ 186,442	\$ 84,477	\$ 141,474	\$ 36,953		\$ 815,800
Budget	\$ 21,186	\$ 11,652	\$ 28,322	\$ 58,223	\$ 77,344	\$ 65,321	\$ 87,210	\$ 105,972	\$ 157,696	\$ 143,726	\$ 93,006	\$ 200,344	\$ 1,050,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 39,667	\$ 855,467



Cost Element	Amount	Field Completion:	0%
Labor		Financial Completion:	77.7%
Material			
Voucher	\$ 870,578	Spend to Date:	\$ 815,800
Outside Srvc		Remain. Budget	\$ 234,200
Overhead	\$ 78,560	Total Budget	\$ 1,050,000
Other	\$ (133,338)		
Total	\$ 815,800	Capital Recovery Begins:	7/1/2020

PM: B. Mostone



Update: Report is based on current Main Relay and Growth Projections, will have to make adjustments according to needs. We have also experienced delays in delivery of ERT's and Meter.

Value Engineering:

Timeline Risks: Meter and ERT's on average take 6 to 12 weeks for delivery

Budget Risks: Due to field requirement meters adjustments maybe needed



LPP Main Replacement

Project: LPP Main Replacement (8840-1811 & 8840-1813)

Objective:												Expected Date of Completion:	12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ 1,457,819	\$ (344,085)	\$ 919,612	\$ 661,236	\$ 1,736,078	\$ 1,461,297	\$ 2,531,683	\$ 2,034,958	\$ 2,744,995	\$ 1,046,965	\$ 1,554,063		\$ 15,804,620
Budget	\$ 334,948	\$ 184,207	\$ 447,755	\$ 920,471	\$ 1,222,769	\$ 1,032,690	\$ 1,378,748	\$ 1,675,364	\$ 2,493,091	\$ 2,272,232	\$ 1,470,380	\$ 3,167,344	\$ 16,600,000
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,180,000	\$ 16,984,620

YTD Cost Profile

75% Other, 17% Labor, -2% Material, 3% Voucher, Outside Srvc, Overhead

Cost Element

Labor	\$ 446,741	Field Completion: 15%
Material	\$ 560,107	Financial Completion: 95.2%
Voucher	\$ 12,377,000	
Outside Srvc		Spend to Date: \$ 15,804,620
Overhead	\$ 2,713,958	Remain. Budget \$ 795,380
Other	\$ (293,186)	Total Budget \$ 16,600,000
Total	\$ 15,804,620	Capital Recovery Begins:

PM: Shawn Furey

Update: Target mileage is 9.0 miles and 874 services. Projecting to come in slightly over budget 2%. Concord St Nashua restoration 4,000 relay project where construction encountered concrete under asphalt. Inspector cost not originally included in estimates. Ensuring costs are baked into estimates for 2019. New estimating tool now in place for 2019 to separate main costs from restoration to better track carryover costs. Going to start 2019 CIBS project in Nashua in December.

Sending information to Engineering when abnormal costs are occurring in the field.

Value Engineering: Ensure that estimates are accounting for all scenarios

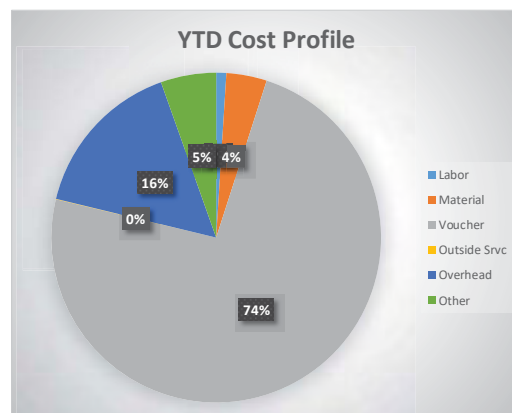
Timeline Risks: None at this time

Budget Risks: None at this time

Main Replacement City/State Construction

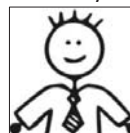
Project: Main Replacement City/State Construction (8840-1823)

Objective:												Expected Date of Completion:	12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ 78,544	\$ (87,596)	\$ (64,646)	\$ 473,974	\$ 1,859,998	\$ 702,026	\$ 498,037	\$ 662,287	\$ 477,084	\$ 717,487	\$ 308,268		\$ 5,625,463
Budget	\$ 102,906	\$ 56,594	\$ 137,563	\$ 282,795	\$ 375,670	\$ 317,272	\$ 423,591	\$ 514,720	\$ 765,950	\$ 698,095	\$ 451,743	\$ 973,100	\$ 5,100,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,000	\$ 5,825,463



Cost Element	Amount	Field Completion:	65%
Labor	\$ 55,705	Financial Completion:	110.3%
Material	\$ 223,314		
Voucher	\$ 4,150,393	Spend to Date:	\$ 5,625,463
Outside Svc	\$ 2,203	Remain. Budget	\$ (525,463)
Overhead	\$ 888,079	Total Budget	\$ 5,100,000
Other	\$ 305,769		
Total	\$ 5,625,463	Capital Recovery Begins:	7/1/2020

PM: Shawn Furey



Update: Target milage is 3.6 miles and 242 services. Projected to come in aprx 700k over budget due to rock drill in Franklin 14%. Higher amounts of ledge than anticipated on drill. Kinsley St Nashua restoration required grind on temp patch. About to start W Pearl St Nashua due to City requiring work to be completed ASAP. Other than that there are no City State projects in progress.

Sending information to Engineering when abnormal costs are occuring in the field.

Value Engineering: Ensure that estimates are accounting for all scenerios

Timeline Risks: None at this time

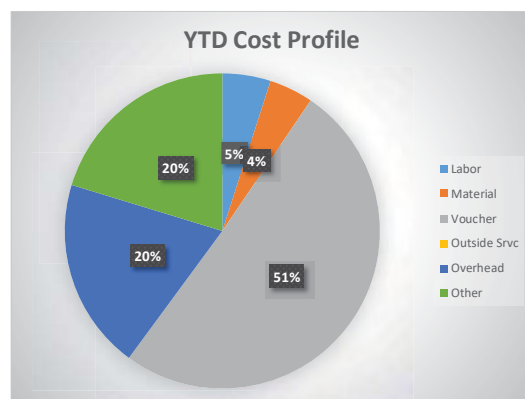
Budget Risks: None at this time



EnergyNorth Growth Projects

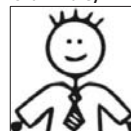
Project: EnergyNorth Growth Projects

Objective:												Expected Date of Completion:	12/31/2018
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Spending													
Actual	\$ 339,548	\$ 224,652	\$ 606,695	\$ 563,245	\$ 1,328,441	\$ 923,952	\$ 1,549,811	\$ 1,829,112	\$ 1,390,764	\$ 2,084,173	\$ 2,177,891		\$13,018,283
Budget	\$ 259,407	\$ 142,663	\$ 346,773	\$ 712,877	\$ 946,998	\$ 799,788	\$ 1,067,799	\$ 1,297,519	\$ 1,930,824	\$ 1,759,775	\$ 1,138,765	\$ 2,453,013	\$12,856,200
Forecast												\$ 1,090,000	\$14,108,283



Cost Element	Amount	Field Completion:	15%
Labor	\$ 645,359	Financial Completion:	101.3%
Material	\$ 588,087		
Voucher	\$ 6,590,258	Spend to Date:	\$ 13,018,283
Outside Svc		Remain. Budget	\$ (162,083)
Overhead	2,554,070	Total Budget	\$ 12,856,200
Other	\$ 2,640,509		
Total	\$ 13,018,283	Capital Recovery Begins:	

PM: Shawn Furey



Update: Random services shut off as of 11/23/2018. December growth projects include 102, Pelham, and misc sub division work. Projected total mileage for 2018 is 15 miles with about 2 miles currently in progress. Expected to come in at budget between growth new main, growth fitting, new service residential and commercial combined.

Value Engineering: None at this time

Timeline Risks: None at this time

Budget Risks: None at this time



Capital Spend Summary - November

- Forecast Annual (Year End)

Company	YTD November (Actual)	December (Forecast)	Total Annual (Actual + Forecast)	Budget Annual*	Year End Fct. Under/(Over)
Granite State	15,744,704	3,351,976	19,096,680	20,556,809	1,460,129
Energy North	47,986,183	4,730,432	52,716,615	48,482,244	(4,234,371)
Keene	1,044,907	40,927	1,085,834	1,379,000	293,166
Totals:	64,775,794	8,123,335	72,899,128	70,418,053	(2,481,075)

* Budget Annual represents approved annual budget amount by utility

- Total forecast overspend on NH budget of **\$2.5m**
 - GSE \$1.5m under budget
 - EN \$4.2m over budget
 - Keene \$293k under budget
 - Adjustments to Electric – CWIP reclassified to expenses
 - Street Lighting: \$187k
 - Damage & Failure: \$739k
 - Storm: \$502k
 - Growth & CIBS - Forecast spend over full year budget
 - Growth: \$1.3m
 - CIBS: \$518k
 - Growth and CIBS mechanism capex allow for recovery outside rate case process
- Forms & Year-end Housekeeping



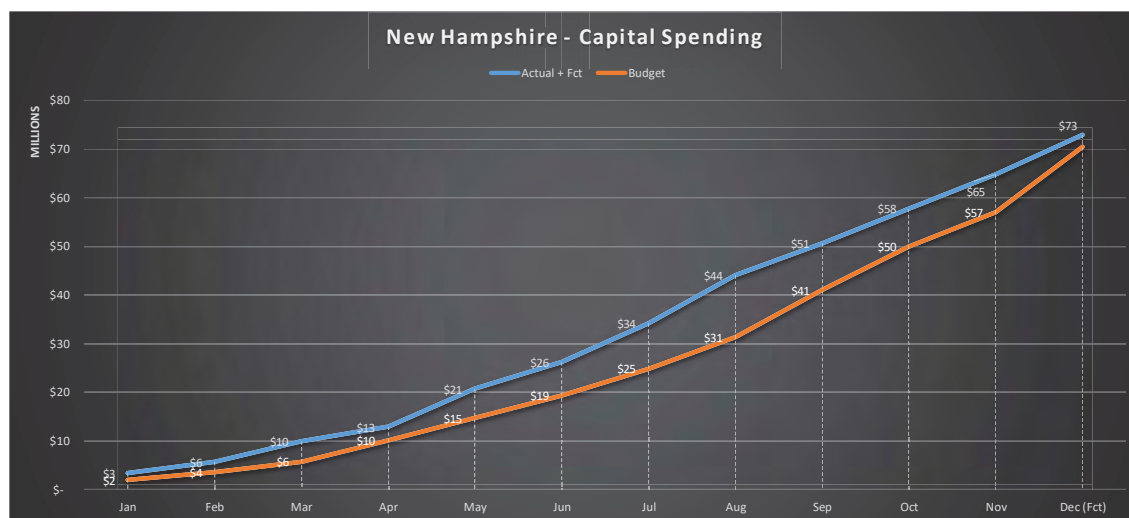
Capital Spending YTD + Forecast

Capital Spending YTD												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec (Fct)
Actual + Fct	\$ 3,362,297	\$ 5,709,383	\$ 9,966,801	\$ 12,904,818	\$ 20,661,891	\$ 26,166,565	\$ 34,242,987	\$ 44,064,980	\$ 50,590,633	\$ 57,759,948	\$ 64,775,794	\$ 72,899,128
Budget	\$ 2,038,888	\$ 3,536,021	\$ 5,777,233	\$ 10,089,959	\$ 14,773,933	\$ 19,333,717	\$ 24,887,660	\$ 31,378,873	\$ 41,021,475	\$ 49,963,390	\$ 56,952,655	\$ 70,418,053

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec (Fct)	Annual
Actual EN	\$ 3,141,615	\$ 1,121,582	\$ 2,276,867	\$ 2,589,936	\$ 6,508,821	\$ 4,343,343	\$ 6,405,222	\$ 6,759,423	\$ 4,555,654	\$ 5,170,478	\$ 5,113,241	\$ 4,730,432	\$ 52,716,615
Actual GSE	\$ 218,185	\$ 1,186,803	\$ 1,963,819	\$ 304,751	\$ 1,193,060	\$ 1,088,028	\$ 1,617,407	\$ 2,489,255	\$ 1,925,441	\$ 1,966,833	\$ 1,791,121	\$ 3,351,976	\$ 19,096,680
Actual Keene	\$ 2,497	\$ 38,701	\$ 16,732	\$ 43,329	\$ 55,192	\$ 73,302	\$ 53,794	\$ 573,315	\$ 44,558	\$ 32,004	\$ 111,484	\$ 40,927	\$ 1,085,834
	3,362,297	2,347,087	4,257,418	2,938,016	7,757,074	5,504,674	8,076,422	9,821,993	6,525,652	7,169,316	7,015,845	8,123,335	72,899,128

	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Budget EN	\$ 978,256	\$ 537,998	\$ 1,307,720	\$ 2,688,344	\$ 3,571,240	\$ 3,016,093	\$ 4,026,796	\$ 4,893,096	\$ 7,281,364	\$ 6,636,320	\$ 4,294,416	\$ 9,250,600	\$ 48,482,244
Budget GSE	\$ 1,045,963	\$ 922,125	\$ 921,186	\$ 1,591,232	\$ 1,054,341	\$ 1,443,932	\$ 1,404,544	\$ 1,284,448	\$ 2,254,590	\$ 2,168,480	\$ 2,565,974	\$ 3,899,993	\$ 20,556,809
Budget Keene	\$ 14,669	\$ 37,010	\$ 12,305	\$ 33,150	\$ 58,392	\$ 99,759	\$ 122,603	\$ 313,669	\$ 106,648	\$ 137,115	\$ 128,875	\$ 314,804	\$ 1,379,000
	\$ 2,038,888	\$ 1,497,133	\$ 2,241,212	\$ 4,312,726	\$ 4,683,973	\$ 4,559,784	\$ 5,553,943	\$ 6,491,213	\$ 9,642,602	\$ 8,941,914	\$ 6,989,266	\$ 13,465,398	\$ 70,418,053

Forecasted Variance: (2,481,075)





December 2018 Capital Spending Monthly Update

January 29, 2019



December 2018 Capital Spend Update - Agenda

1. Safety Moment

2. December 2018 Capital Spending Results

- New Hampshire Overview
- Entity Overview

3. High Profile Project Presentations

- Golden Rock
- Rte. 12 Widening
- GSE New Business (Residential & Commercial)
- Extend 14L4
- Salem Depot Getaways
- EN Meter Purchases
- Bare Conductor
- CIBS
- City/State Construction
- EN Growth

4. Additional Capital Spending Discussion Items

- Full Year 2018 Summary
- Year-end Housekeeping – Closeout & Over-expenditure Forms
- 2019 Capital Expenditure Forms
- 2019 Reporting & Presentation Format



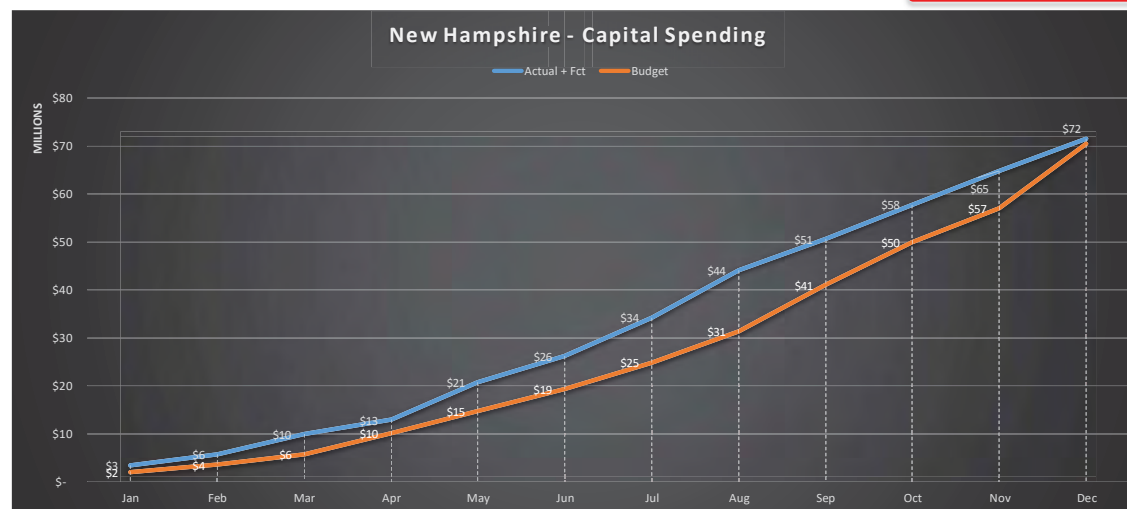
Capital Spending – Full Year 2018

Capital Spending YTD												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Actual + Fct	\$ 3,362,297	\$ 5,709,383	\$ 9,966,801	\$ 12,904,818	\$ 20,661,891	\$ 26,166,565	\$ 34,242,987	\$ 44,064,980	\$ 50,590,633	\$ 57,759,948	\$ 64,775,794	\$ 71,543,423
Budget	\$ 2,038,888	\$ 3,536,021	\$ 5,777,233	\$ 10,089,959	\$ 14,773,933	\$ 19,333,717	\$ 24,887,660	\$ 31,378,873	\$ 41,021,475	\$ 49,963,390	\$ 56,952,655	\$ 70,418,053

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Actual EN	\$ 3,141,615	\$ 1,121,582	\$ 2,276,867	\$ 2,589,936	\$ 6,508,821	\$ 4,343,343	\$ 6,405,222	\$ 6,759,423	\$ 4,555,654	\$ 5,170,478	\$ 5,113,241	\$ 3,134,643	\$ 51,120,826
Actual GSE	\$ 218,185	\$ 1,186,803	\$ 1,963,819	\$ 304,751	\$ 1,193,060	\$ 1,088,028	\$ 1,617,407	\$ 2,489,255	\$ 1,925,441	\$ 1,966,833	\$ 1,791,121	\$ 3,110,260	\$ 18,854,964
Actual Keene	\$ 2,497	\$ 38,701	\$ 16,732	\$ 43,329	\$ 55,192	\$ 73,302	\$ 53,794	\$ 573,315	\$ 44,558	\$ 32,004	\$ 111,484	\$ 522,726	\$ 1,567,633
	3,362,297	2,347,087	4,257,418	2,938,016	7,757,074	5,504,674	8,076,422	9,821,993	6,525,652	7,169,316	7,015,845	6,767,630	71,543,423

	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Budget EN	\$ 978,256	\$ 537,998	\$ 1,307,720	\$ 2,688,344	\$ 3,571,240	\$ 3,016,093	\$ 4,026,796	\$ 4,893,096	\$ 7,281,364	\$ 6,636,320	\$ 4,294,416	\$ 9,250,600	\$ 48,482,244
Budget GSE	\$ 1,045,963	\$ 922,125	\$ 921,186	\$ 1,591,232	\$ 1,054,341	\$ 1,443,932	\$ 1,404,544	\$ 1,284,448	\$ 2,254,590	\$ 2,168,480	\$ 2,565,974	\$ 3,899,993	\$ 20,556,809
Budget Keene	\$ 14,669	\$ 37,010	\$ 12,305	\$ 33,150	\$ 58,392	\$ 99,759	\$ 122,603	\$ 313,669	\$ 106,648	\$ 137,115	\$ 128,875	\$ 314,804	\$ 1,379,000
	\$ 2,038,888	\$ 1,497,133	\$ 2,241,212	\$ 4,312,726	\$ 4,683,973	\$ 4,559,784	\$ 5,553,943	\$ 6,491,213	\$ 9,642,602	\$ 8,941,914	\$ 6,989,266	\$ 13,465,398	\$ 70,418,053

Variance - Full Year 2018 Overspend: (1,125,370)



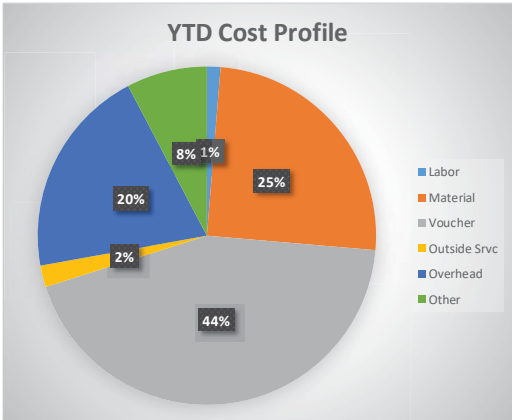
December 2018 Capital Spend Reporting

High Profile Projects



Rte. 12 Widening, Walpole/Charlestown


Project: Rte. 12 Widening, Walpole/Charlestown (8830-1818)													
Objective:												Expected Date of Completion:	
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ -	\$ -	\$ -			122	28,978	41,574	208,882	534,796	270,625	258,598.69	\$1,343,575
Budget	\$ 76,322	\$ 67,286	\$ 67,218	\$ 116,110	\$ 76,934	\$ 105,362	\$ 102,488	\$ 93,724	\$ 164,514	\$ 158,231	\$ 187,235	\$ 284,577	\$1,500,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$1,343,575



YTD Cost Profile

Category	Percentage
Labor	20%
Material	25%
Voucher	44%
Outside Svc	2%
Overhead	8%
Other	1%

PM: A. Strabone



Update: Engineering Complete.
Construction has been awarded to IC Reed. Construction to start week of 7/9/18
Construction expected to be complete by 12/5/18.

Value Engineering:

Timeline Risks: This job is closely tied to NHDOT work. Any delays with NHDOT scope of work will significantly impact Liberty's schedule.

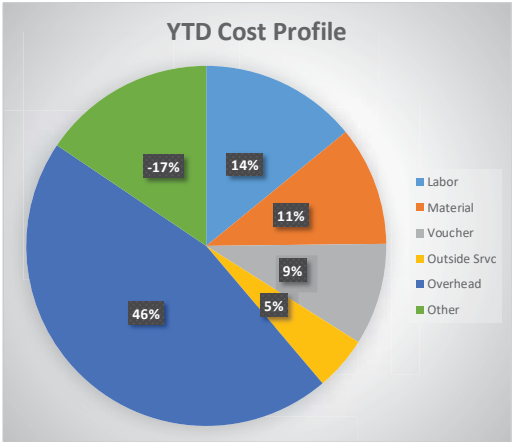
Budget Risks: Labor has been charged against 2017 project number 301711-01010 (\$40k)

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Cost Element	Amount	Field Completion:	Financial Completion:
Labor	\$ 17,398		89.6%
Material	\$ 336,801		
Voucher	\$ 587,661	Spend to Date:	\$ 1,343,575
Outside Svc	\$ 27,721	Remain. Budget	\$ 156,425
Overhead	\$ 270,442	Total Budget	\$ 1,500,000
Other	\$ 103,552		
Total	\$ 1,343,575	Capital Recovery Begins:	7/1/2019

GSE New Business - Residential & Commercial

Project: GSE New Business Residential & Commercial (8830-1837 & 8830-1838)													
Objective:											Expected Date of Completion: 12/31/2018		
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ 327,254	\$ 249,176	\$ 463,346	\$ 290,447	\$ 297,486	\$ 310,203	\$ 400,428	\$ 206,481	\$ (915,951)	\$ (40,154)	\$ 191,900	\$ 181,946	\$ 1,962,562
Budget	\$ 146,921	\$ 129,526	\$ 129,394	\$ 223,512	\$ 148,097	\$ 202,821	\$ 126,172	\$ 115,383	\$ 202,532	\$ 194,797	\$ 230,504	\$ 350,341	\$ 2,200,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,962,562



YTD Cost Profile

Category	Percentage
Labor	46%
Material	14%
Voucher	11%
Outside Svc	9%
Overhead	5%
Other	-17%

Cost Element

Cost Element	Amount
Labor	\$ 401,669
Material	\$ 305,389
Voucher	\$ 260,813
Outside Svc	\$ 138,101
Overhead	\$ 1,299,910
Other	\$ (443,320)
Total	\$ 1,962,562

Field Completion: 0%

Financial Completion: 89.2%


Spend to Date: \$ 1,962,562

Remain. Budget: \$ 237,438

Total Budget: \$ 2,200,000

Capital Recovery Begins: 7/1/2019

PM: A. Strabone



Update: This is normal run of the business projects.

Sept credit due to reclass of costs associated with Tuscan.

Oct credit due to reclass of costs to expense (Spent approx \$170k, Reclass approx \$210k)

Value Engineering:

Timeline Risks:

Budget Risks:

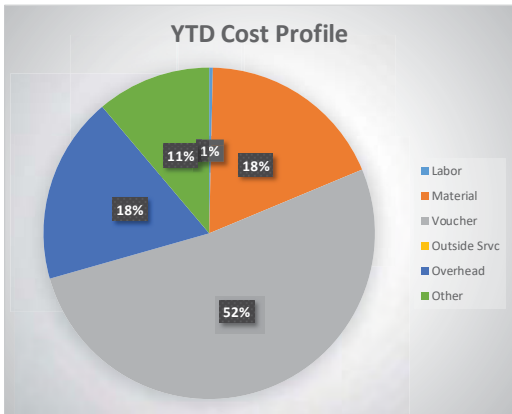
INSERT PROJECT PHOTO HERE



Extend Pelham 14L4 to Salem

Project: Extend Pelham 14L4 to Salem (8830-1860)


Objective:													Expected Date of Completion:	12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
Actual	\$ -	\$ -	\$ -	\$ 5,235	\$ 15,109	4,560	20,138	215,835	179,876	201,257	186,367	169,553.7	\$ 997,930	
Budget	\$ 50,882	\$ 44,857	\$ 44,812	\$ 77,407	\$ 51,289	\$ 70,241	\$ 68,325	\$ 62,483	\$ 109,676	\$ 105,487	\$ 124,824	\$ 189,718	\$ 1,000,000	
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 997,930	



YTD Cost Profile

- Labor: 18%
- Material: 18%
- Voucher: 52%
- Outside Svc: 1%
- Overhead: 11%
- Other: 1%

PM: A. Strabone



Update: Engineering is complete. Construction has been awarded to Northline Construction. All new wire has been installed and portions of new wire already energized. Remaining wire expected to be energized, in-service and carrying load by 12/28/18. Construction has been delayed due to weather...currently the crews have lost 18 work days due to weather.

Value Engineering:

Timeline Risks: Weather see above comment

Budget Risks: Contributing factor to over expenditure- approx. \$208k in trimming cost due to tree crews being from out of State

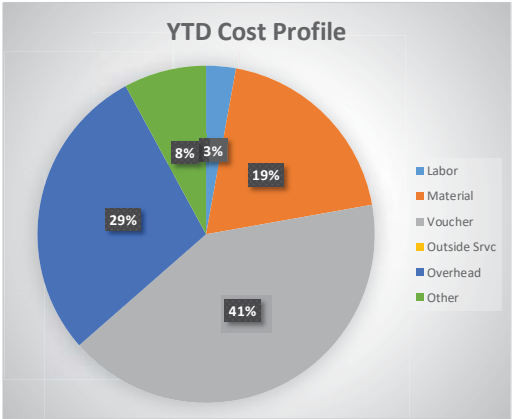
Cost Element	Amount	Field Completion:	0%
Labor	\$ 3,571	Financial Completion:	99.8%
Material	\$ 183,187		
Voucher	\$ 517,664	Spend to Date:	\$ 997,930
Outside Svc		Remain. Budget	\$ 2,070
Overhead	\$ 182,090	Total Budget	\$ 1,000,000
Other	\$ 111,418		
Total	\$ 997,930	Capital Recovery Begins:	7/1/2019

INSERT PROJECT PHOTO HERE



Salem Depot Getaways


Project: Salem Depot Getaways (8830-1866)													
Objective:												Expected Date of Completion:	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Spending													
Actual	\$ -	\$ 538	\$ 1,430	\$ 53,076	\$ 3,305	\$ 40,004	\$ 448,070	\$ 596,571	\$ 125,424	\$ 82,483	\$ (307)	\$ 5727.43	\$ 1,356,321
Budget	\$ -	\$ -	\$ -	\$ 57,143	\$ 85,714	\$ 85,714	\$ 251,429	\$ 285,714	\$ 342,857	\$ 457,143	\$ 22,857	\$ 11,429	\$ 1,600,000
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,356,321



YTD Cost Profile

Category	Percentage
Labor	29%
Material	19%
Voucher	41%
Outside Svc	8%
Overhead	3%
Other	0%

PM: A. Strabone



Update: Engineering Complete. Complete!

Value Engineering:

Timeline Risks:

Budget Risks:

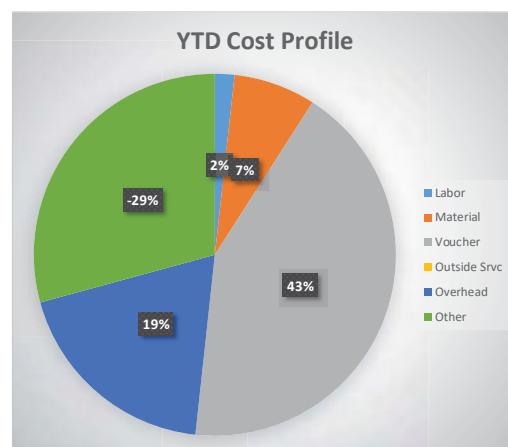
Cost Element	Amount	Field Completion:	0%
Labor	\$ 38,617	Financial Completion:	84.8%
Material	\$ 262,429		
Voucher	\$ 561,015	Spend to Date:	\$ 1,356,321
Outside Svc		Remain. Budget	\$ 243,679
Overhead	\$ 386,944	Total Budget	\$ 1,600,000
Other	\$ 107,316		
Total	\$ 1,356,321	Capital Recovery Begins:	7/1/2019

INSERT PROJECT PHOTO HERE

Bare Conductor Replacement Program

Project: Bare Conductor Replacement Program (8830-1846)

Objective:										Expected Date of Completion:			12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Actual	\$ (90,475)	\$ 158,583	\$ 53,407	\$ 24,693	\$ 46,930	\$ 12,418	\$ 109,998	\$ 234,123	\$ 288,550	\$ 65,978	\$ 79,293	\$ 136,131	\$ 1,119,628
Budget	\$ 71,234	\$ 62,800	\$ 62,736	\$ 108,369	\$ 71,805	\$ 98,337	\$ 95,655	\$ 137,476	\$ 153,546	\$ 147,682	\$ 174,753	\$ 265,605	\$ 1,450,000
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,119,628



Cost Element	Amount	Field Completion:	0%
Labor	\$ 47,093	Financial Completion:	77.2%
Material	\$ 197,661		
Voucher	\$ 1,150,025	Spend to Date:	\$ 1,119,628
Outside Svc		Remain. Budget	\$ 330,372
Overhead	\$ 513,474	Total Budget	\$ 1,450,000
Other	\$ (788,625)		
Total	\$ 1,119,628	Capital Recovery Begins:	

PM: J. Rivera



Update:

Liberty will make its CY2018 reconciliation filing with the Commission by March 15, 2019. Actual expenses incurred by Liberty in implementing the capital components of the 2018 REP will be reconciled to the proposed amount of \$1,600,000. In addition, the revenue requirement associated with capital expenditures incurred as part of the REP investment will be included at the same time as the REP/VMP Adjustment Provision. At that time, the rate impacts will be determined using actual spending and any over- or under-collection balance that exists at that time.

Value Engineering: Engineering / Design is currently in progress.

Timeline Risks: It is anticipated that the majority of the Actual Costs will be reflected in the 4th quarter. Liberty has included a capital investment budget of \$1,600,000 reflecting planned capital investment closed to plant as part of its CY2018 plan as approved in Docket No. DE 16-383. This amount includes \$1,500,000 of planned 2018 capital investment and

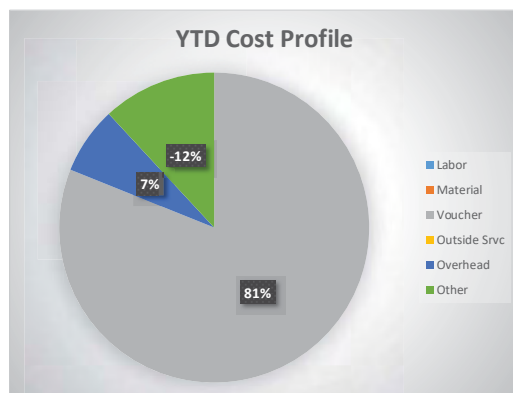
Budget Risks: \$100,000 of carryover funds for the Bare Conductor Program work from 2017.



Meter Purchases

Project: Meter Purchases (8840-1807)

Objective:													Expected Date of Completion:	12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
Actual	\$ (13,514)	\$ -	\$ (2,844)	\$ (8,287)	\$ 170,206	\$ 112,328	\$ 108,565	\$ 186,442	\$ 84,477	\$ 141,474	\$ 36,953	\$ 38,034	\$ 853,834	
Budget	\$ 21,186	\$ 11,652	\$ 28,322	\$ 58,223	\$ 77,344	\$ 65,321	\$ 87,210	\$ 105,972	\$ 157,696	\$ 143,726	\$ 93,006	\$ 200,344	\$ 1,050,000	
Forecast		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 853,834	



Cost Element	Amount	Field Completion:	0%
Labor		Financial Completion:	81.3%
Material			
Voucher	\$ 908,612	Spend to Date:	\$ 853,834
Outside Svc		Remain. Budget	\$ 196,166
Overhead	\$ 78,560	Total Budget	\$ 1,050,000
Other	\$ (133,338)		
Total	\$ 853,834	Capital Recovery Begins:	7/1/2020

PM: B. Mostone



Update: Report is based on current Main Relay and Growth Projections, will have to make adjustments according to needs. We have also experienced delays in delivery of ERT's and Meter.

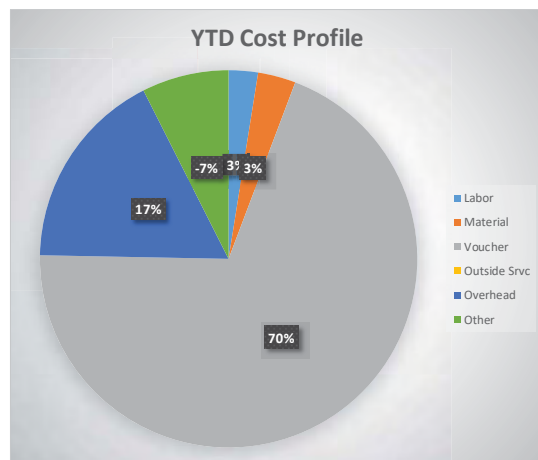
Value Engineering:

Timeline Risks: Meter and ERT's on average take 6 to 12 weeks for delivery

Budget Risks: Due to field requirement meters adjustments maybe needed



Project: LPP Main Replacement (8840-1811 & 8840-1813)

[illegible]

Cost Element	Amount	Field Completion:	15%
Labor	\$ 496,835	Financial Completion:	101.5%
Material	\$ 642,521		
Voucher	\$ 13,772,526	Spend to Date:	\$ 16,852,577
Outside Svc		Remain. Budget	\$ (252,577)
Overhead	\$ 3,415,442	Total Budget	\$ 16,600,000
Other	\$ (1,474,747)		
Total	\$ 16,852,577	Capital Recovery Begins:	

PM: Shawn Furey



Update: Target mileage is 9.0 miles and 874 services. Projecting to come in slightly over budget 2%. Concord St Nashua restoration 4,000 relay project where construction encountered concrete under asphalt. Inspector cost not originally included in estimates. Ensuring costs are baked into estimates for 2019. New estimating tool now in place for 2019 to separate main costs from restoration to better track carryover costs. Going to start 2019 CIBS project in Nashua in December.

Sending information to Engineering when abnormal costs are occurring in the field.

Value Engineering: Ensure that estimates are accounting for all scenerios

Timeline Risks: None at this time

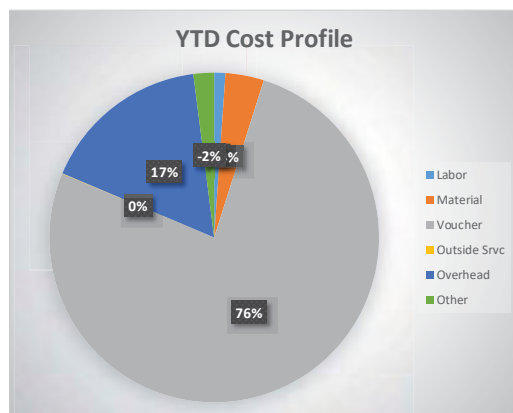
Budget Risks: None at this time



Main Replacement City/State Construction

Project: Main Replacement City/State Construction (8840-1823)

Objective:												
	Expected Date of Completion: 12/31/2018											
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Actual	\$ 78,544	\$ (87,596)	\$ (64,646)	\$ 473,974	\$ 1,859,998	\$ 702,026	\$ 498,037	\$ 662,287	\$ 477,084	\$ 717,487	\$ 308,268	\$ 175,546
Budget	\$ 102,906	\$ 56,594	\$ 137,563	\$ 282,795	\$ 375,670	\$ 317,272	\$ 423,591	\$ 514,720	\$ 765,950	\$ 698,095	\$ 451,743	\$ 973,100
Forecast												



Cost Element	Amount	Field Completion: 65%
Labor	\$ 66,461	Financial Completion: 113.7%
Material	\$ 228,086	
Voucher	\$ 4,621,755	Spend to Date: \$ 5,801,009
Outside Svc	\$ 2,203	Remain. Budget: \$ (701,009)
Overhead	\$ 1,004,679	Total Budget: \$ 5,100,000
Other	\$ (122,174)	
Total	\$ 5,801,009	Capital Recovery Begins: 7/1/2020

PM: Shawn Furey



Update: Target milage is 3.6 miles and 242 services. Projected to come in aprx 700k over budget due to rock drill in Franklin 14%. Higher amounts of ledge than anticipated on drill. Kinsley St Nashua restoration required grind on temp patch. About to start W Pearl St Nashua due to City requiring work to be completed ASAP. Other than that there are no City State projects in progress.

Sending information to Engineering when abnormal costs are occurring in the field.

Value Engineering: Ensure that estimates are accounting for all scenerios

Timeline Risks: None at this time

Budget Risks: None at this time



EnergyNorth Growth Projects

Project: EnergyNorth Growth Projects

Objective:													Expected Date of Completion:	12/31/2018
Spending	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
Actual	\$ 339,548	\$ 224,652	\$ 606,695	\$ 563,245	\$ 1,328,441	\$ 923,952	\$ 1,549,811	\$ 1,829,112	\$ 1,390,764	\$ 2,084,173	\$ 2,177,891	\$ 23,181	\$ 13,041,464	
Budget	\$ 259,407	\$ 142,663	\$ 346,773	\$ 712,877	\$ 946,998	\$ 799,788	\$ 1,067,799	\$ 1,297,519	\$ 1,930,824	\$ 1,759,775	\$ 1,138,765	\$ 2,453,013	\$ 12,856,200	
Forecast	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,041,464	

YTD Cost Profile

58% Voucher
23% Labor
9% Other
5% Material
5% Outside Svc

PM: Shawn Furey

Update: Random services shut off as of 11/23/2018. December growth projects include 102, Pelham, and misc sub division work. Projected total mileage for 2018 is 15 miles with about 2 miles currently in progress. Expected to come in at budget between growth new main, growth fitting, new service residential and commercial combined.

Value Engineering:	None at this time
Timeline Risks:	None at this time
Budget Risks:	None at this time

Cost Element	Amount	Field Completion:	15%
Labor	\$ 725,983	Financial Completion:	101.4%
Material	\$ 618,752		
Voucher	\$ 7,511,787	Spend to Date:	\$ 13,041,464
Outside Svc		Remain. Budget	\$ (185,264)
Overhead	3,061,723	Total Budget	\$ 12,856,200
Other	\$ 1,123,220		
Total	\$ 13,041,464	Capital Recovery Begins:	

Capital Spend Summary – December (Full Year)

- 2018 Full Year Capital Spend Summary**

Company	YTD December (Actual)	Budget Annual*	Year End Fct. Under/(Over)
Granite State	18,854,964	21,762,544	2,907,580
Energy North	51,120,826	47,276,509	(3,844,317)
Keene	1,567,633	1,379,000	(188,633)
Totals:	71,543,423	70,418,053	(1,125,370)

* Budget Annual represents approved annual budget amount by utility

- Total overspend on NH budget of **\$1.1m**
 - Adjustments to Electric – 2018 CWIP reclassified to expenses
 - Street Lighting: \$187k
 - Damage & Failure: \$739k
 - Storm: \$502k
 - Overspend on Growth & CIBS
 - Growth: \$185.3k **overspend**
 - CIBS: \$701k **overspend**
 - Growth and CIBS mechanism capex allow for recovery outside rate case process
- Forms & Year-end Housekeeping**
 - Close-out forms
 - Over-expenditure forms



Looking Ahead – 2019

- 2019 Capital Plan - Summary

Company	Original Capital Budget Plan	Adjustment	Updated Capital Budget	Shelf Items	Final Updated Capital Budget	Approved Budget	Remaining (Over)/Under
Granite State	23,257,000	(3,222,264)	20,034,736	-	20,034,736	20,034,736	-
Energy North	68,802,694	(16,217,494)	52,585,200	2,264,000	50,321,200	50,002,694	(318,506)
Keene	3,405,000	200,000	3,605,000	1,150,000	2,455,000	1,905,000	(550,000)
Total	95,464,694	(19,239,758)	76,224,936	3,414,000	72,810,936	71,942,430	(868,506)

- 2019 Capital Spend Forms

- All projects require Capital Project Expenditure Form
- Budget >\$100k require Business Case Form
 - Exception: Category of *Safety* or *Mandated* – Business Case not required
 - If requiring Business Case then financial info not required on CPE form
- Asking that all forms be completed and returned by **Thursday February 7th**
- Finance will coordinate management and senior leadership/executive approvals

- Reporting & Presentation for 2019

- Thoughts & discussion on reporting and presentation materials for 2019
- Monthly meetings to review and discuss YTD results and rest of year forecast
- Quarterly Capital Planning
 - Identify major changes in scope and rest of year spend forecast
 - Track capital projects put on the shelf to make budget cuts
 - Discuss need for new projects (incremental)

- Processing Capital Expenditure Activity



[illegible]

Row Labels	Sum of Labor	Sum of Material	Sum of Voucher	Sum of Outside Svc	Sum of Overhead	Sum of COR	Sum of CIAC	Sum of AFUDC	Sum of CY	Sum of PY	Sum of Grand Total
8830-1801	(76,192)	44,862	(449)		(36,528)				-		(68,306)
8830-1803	159,479	(1,350)	193,150		33,688						384,968
8830-1807			48,189		3,241						51,430
8830-1810	(23,268)	14,468	(1,336)		(63,589)		(350)		2,348		(71,728)
8830-1811	45,608	47,903	147,675	14,601	175,136		1,848	8,378	790		441,939
8830-1812	77,472	203,345	124,701	20,595	35,605		(94,814)	3,529	12,776	(19,140)	364,069
8830-1813	41,556	14,928	93,461		121,438		(2,866)		1,535	(1,370)	268,682
8830-1814	21,316	12,530	17,774	164,004	117,858		(148,819)	(541)	361		184,483
8830-1821	24,718	31,743	15,089		66,510			20,023	663	(380)	158,367
8830-1823	(231)	3,192	3,925		3,748		(10,296)	315	-	(451)	201
8830-1826			630,171		157,964						788,135
8830-1827			326,186		13,252			2,204	20,000		361,643
8830-1837	95,882	50,880	62,725	75,054	316,176		(6,951)	408	6,416	(3,017)	597,574
8830-1838	305,787	254,509	198,088	63,047	983,733		(347,759)	5,932	8,826	(107,175)	1,364,988
8830-1740	1,136		20,028								21,164
8830-1741	2,294		52,930		25,860				-	(14,487)	66,598
8830-1863	13,556	34,063	6,376		56,116				-		110,110
8830-1825	78		55,239		1,905			(22)	-	(2,215)	54,985
8830-1744	1,095		172,591	86,485	54,944				-	(5,792)	309,324
8830-1746			100,000							(63,750)	36,250
8830-1804			563,092		89,675						652,767
8830-1805	1,259	2,265			3,576						7,099
8830-1815			109,798		21,212						131,010
8830-1818	17,398	336,801	587,661	27,721	270,442			3,552	100,000		1,343,575
8830-1819	7,867	7,473	574		37,960			4	714		54,592
8830-1820	284		41,792		12,761						54,837
8830-1824	16,855	50,844	1,864		71,219		(11,118)	1,617	512		131,793
8830-1828	9,853		28,341		22,115				542		60,851
8830-1829	1,685		23,298		2,691				-		27,674
8830-1830	159		50,608		9,883						60,650
8830-1831	1,915		14,485		10,984				-		27,384
8830-1832	29,536	114,588	820,842		327,286			3,341	0		1,295,593
8830-1840	447		1,980		3,466			146	-		6,039
8830-1843	6,650	(6,131)	12,950		31,770				-		45,239
8830-1845			16,603		364			12			16,978
8830-1846	47,093	197,661	1,150,025		513,474			3,909	35,000	(827,534)	1,119,628
8830-1847	2,462	694			2,373				-		5,528
8830-1850	271		29,508		6,715						36,494
8830-1851		20,499	161,431	174,630	179,240			15,102	0	(4,504)	546,398
8830-1852			176,029								176,029
8830-1853	215				669				-		885
8830-1854	3,794				6,807			111	-		10,711
8830-1855	5,286		284,492		37,033				-		326,811
8830-1856	1,854		10,123		6,101			296	-		18,374
8830-1858	75,031	216,362	456,474	83,900	528,692		(107,987)		4,825	(43,713)	1,213,583
8830-1859	3,924	90,016	574,215		210,775			4,308	110,698		993,936
8830-1860	3,571	183,187	517,664		182,090			8,486	102,932		997,930
8830-1864	974		1,525,080	20,348	20,916			1,552	-		1,568,870
8830-1865	4,776	188,150	276,484	37,860	79,621			5,500	10,029		602,419
8830-1866	38,617	262,429	561,015		386,944			7,316	100,000		1,356,321
8830-1868			48,000								48,000
8830-1871	6,077		24,730		20,283				-		51,089
8830-1873	3,308		138,815		24,431			1,944	-		168,498
8830-9851-EO	(54)		-				-				(54)
8830-C18630	244	231,830	389,914		182,399			1,477		(451,126)	354,739
8830-C18620	4,129	(1,545)	105,918	53,517	81,604			2,940	-	(101,290)	145,273
8830-C18750			(155)								(155)
8830-C36424									-	(19,663)	(19,663)
8830-C36425			211		(2,042)					(211)	(2,042)
8830-c36427		-									-
8830-C36430	4,910	(10,050)	12,724	25,423	119,479				(0)	(237,639)	(85,153)
8830-C36431	10,650	209,216	141,947	2,880	259,047			91	-	(161,395)	462,436
8830-C36435	39,315	1,517	35,603		47,753			1,488	-		125,675
8830-C42920			7,959		1,373			712	-		10,044
8830-C42930	20,885	304,740	266,581	30,185	49,691			1,156	1,023		674,260
8830-C42933								138			138
8830-C42934	2,287	6,230	7,550		24,172				-		40,238
8830-CD0291	-			540	737						1,277
8830-UNALLOC OH	1,293,880	276,589	182	16,279	(1,702,974)				24,052	(16,338)	(108,329)
8830-AFUDC									14,862	(15,026)	(164)
8830-C36426		85,700	86,230								171,930
Grand Total	2,357,693	3,480,137	11,529,151	897,069	4,249,862		(729,112)	105,422	558,902	(2,096,215)	20,352,910

Docket No. DE 19-064
Exhibit 21
Attachment JED-3a

Project Number	Project Name	1 Labor	2 Material	4 Voucher	5 Outside Srvc	6 Overhead	7 COR	8 CIAC	9 AFUDC	CY	PY	Grand Total
8830-1801	Storm Program	(56,027.05)									-	(56,027.05)
8830-1801	Storm Program		271.84			342.36						614.20
8830-1801	Storm Program		102.54			129.15						231.69
8830-1801	Storm Program	(133.74)				(411.34)						(545.08)
8830-1801	Storm Program	(231.67)				(640.62)						(872.29)
8830-1801	Storm Program	-				0.00						0.00
8830-1801	Storm Program	(58,529.97)										(58,529.97)
8830-1803	Granite State Meter Purchases		(1,350.00)	(3,111.60)								(4,461.60)
8830-1807	Dist-Water Heater Blanket			15,323.39								15,323.39
8830-1807	Dist-Water Heater Blanket			9,681.00		626.08						10,307.08
8830-1810	Dist-Street Light Blanket	(1,120.74)	(2,123.29)			(7,456.61)						(10,700.64)
8830-1810	Dist-Street Light Blanket	(927.74)	(1,011.75)			(3,090.92)						(5,030.41)
8830-1810	Dist-Street Light Blanket	(1,516.93)	(1,550.08)	(380.00)		(5,680.29)						(9,127.30)
8830-1810	Dist-Street Light Blanket	(471.14)	(265.54)			(1,356.51)						(2,093.19)
8830-1810	Dist-Street Light Blanket	(260.93)	(1,430.62)	(712.50)		(1,826.47)						(4,230.52)
8830-1810	Dist-Street Light Blanket	(773.70)				(1,871.12)						(2,644.82)
8830-1810	Dist-Street Light Blanket	(1,847.23)	(2,859.98)			(5,415.42)						(10,122.63)
8830-1810	Dist-Street Light Blanket		2,142.20			563.59						2,705.79
8830-1810	Dist-Street Light Blanket	(824.72)	(2,489.89)			(541.45)						(3,856.06)
8830-1810	Dist-Street Light Blanket	(1,029.67)	(3,448.92)			(2,968.16)						(7,446.75)
8830-1810	Dist-Street Light Blanket	97.62	78.68			1,492.93						1,669.23
8830-1810	Dist-Street Light Blanket			(21.40)		(4.24)						(25.64)
8830-1810	Dist-Street Light Blanket					146.73						146.73
8830-1810	Dist-Street Light Blanket			(220.00)		277.08						57.08
8830-1810	Dist-Street Light Blanket					269.22						269.22
8830-1810	Dist-Street Light Blanket	(408.87)				(801.92)						(1,210.79)
8830-1810	Dist-Street Light Blanket					261.20						261.20
8830-1810	Dist-Street Light Blanket	(145.73)				(0.00)						(145.73)
8830-1810	Dist-Street Light Blanket	186.78	1,451.66			3,110.89						4,749.33
8830-1810	Dist-Street Light Blanket		863.15			3,834.83						4,697.98
8830-1810	Dist-Street Light Blanket										-	-
8830-1810	Dist-Street Light Blanket	109.07	2,794.80			4,043.12						6,946.99
8830-1810	Dist-Street Light Blanket	52.23	259.87			588.08						900.18
8830-1810	Dist-Street Light Blanket	156.21	134.62	380.00		576.23					-	1,247.06
8830-1810	Dist-Street Light Blanket	104.45	199.41			550.74						854.60
8830-1810	Dist-Street Light Blanket	48.81	142.70			354.05						545.56
8830-1810	Dist-Street Light Blanket	48.81				75.44						124.25
8830-1810	Dist-Street Light Blanket	104.45	142.70			422.96				-		670.11
8830-1810	Dist-Street Light Blanket	97.62	142.70			179.84				-		420.16
8830-1810	Dist-Street Light Blanket	89.16	142.70			168.14				-		400.00
8830-1810	Dist-Street Light Blanket	292.86				404.76				-		697.62
8830-1810	Dist-Street Light Blanket	52.23	148.27			118.86				-		319.36
8830-1810	Dist-Street Light Blanket		131.39			56.23						187.62
8830-1811	Dist-Public Requirements Blanket		906.29			361.17						1,267.46
8830-1811	Dist-Public Requirements Blanket	(778.28)	(7.60)	(104.22)		(1,982.63)						(2,872.73)
8830-1811	Dist-Public Requirements Blanket			(10.17)		(5.53)						(15.70)
8830-1811	Dist-Public Requirements Blanket	(839.36)		-		(2,205.65)			(78.05)	-		(3,123.06)
8830-1811	Dist-Public Requirements Blanket	(379.34)		(20.87)		(1,184.19)						(1,584.40)
8830-1811	Dist-Public Requirements Blanket	(44.93)		-	(55.00)	(2,050.97)				-		(2,150.90)
8830-1811	Dist-Public Requirements Blanket	5,027.18	1,535.38			3,910.12			265.10	-		10,737.78
8830-1811	Dist-Public Requirements Blanket	942.44	538.22	570.00		3,051.62				-		5,102.28
8830-1811	Dist-Public Requirements Blanket	6,572.44	866.53	110.00	165.00	12,140.55			30.42	-		19,884.94
8830-1811	Dist-Public Requirements Blanket	747.12	761.27	165.00	165.00	1,709.23			239.31	-		3,786.93
8830-1811	Dist-Public Requirements Blanket	(195.32)				(439.18)						(634.50)
8830-1811	Dist-Public Requirements Blanket		147.87	760.00		6,791.53						7,699.40
8830-1811	Dist-Public Requirements Blanket	(961.29)		(190.00)		(2,087.79)		2,482.00	(3.16)			(760.24)
8830-1812	Dist-Damage & Failure Blanket	(404.68)		(1,582.92)		(1,737.67)						(3,725.27)
8830-1812	Dist-Damage & Failure Blanket	-				-						-
8830-1812	Dist-Damage & Failure Blanket			6.00								6.00
8830-1812	Dist-Damage & Failure Blanket		133.74			58.07						191.81
8830-1812	Dist-Damage & Failure Blanket					1,236.80						1,236.80
8830-1812	Dist-Damage & Failure Blanket	(1,696.38)				(4,042.00)						(5,738.38)
8830-1812	Dist-Damage & Failure Blanket		669.21	15.00		328.13						1,012.34
8830-1812	Dist-Damage & Failure Blanket	401.04				684.39						1,085.43
8830-1812	Dist-Damage & Failure Blanket		(32.04)			(15.79)						(47.83)
8830-1812	Dist-Damage & Failure Blanket			5.00								5.00
8830-1812	Dist-Damage & Failure Blanket	(19,826.40)	(842.48)			(57,609.68)						(78,278.56)
8830-1812	Dist-Damage & Failure Blanket		(159.71)			(78.73)						(238.44)
8830-1812	Dist-Damage & Failure Blanket	(416.22)				(1,078.24)						(1,494.46)
8830-1812	Dist-Damage & Failure Blanket	(3,433.24)		(12.84)		(9,143.26)			(78.41)			(12,667.75)
8830-1812	Dist-Damage & Failure Blanket		1,866.09			491.05						2,357.14
8830-1812	Dist-Damage & Failure Blanket	336.00	596.56			1,396.68						2,329.24
8830-1812	Dist-Damage & Failure Blanket		(186.95)			(93.22)						(280.17)
8830-1812	Dist-Damage & Failure Blanket	(15,354.80)	(207.15)	(885.04)	(1,710.73)	(55,698.09)						(73,855.81)
8830-1812	Dist-Damage & Failure Blanket			330.00		136.56						466.56
8830-1812	Dist-Damage & Failure Blanket	(6,651.68)		(797.50)	(6,225.30)	(18,231.16)						(31,905.64)
8830-1812	Dist-Damage & Failure Blanket	(2,712.52)	(55.84)	(20.33)		(6,245.94)						(9,034.63)
8830-1812	Dist-Damage & Failure Blanket	(800.72)				(1,933.58)						(2,734.30)
8830-1812	Dist-Damage & Failure Blanket	(2,265.78)	-			(4,829.02)						(7,094.80)
8830-1812	Dist-Damage & Failure Blanket	(1,015.95)		(5.00)		(3,125.72)						(4,146.67)
8830-1812	Dist-Damage & Failure Blanket	(2,404.55)	(101.60)	(4,600.50)		(9,490.64)						(16,597.29)
8830-1812	Dist-Damage & Failure Blanket		551.57			271.88						823.45
8830-1812	Dist-Damage & Failure Blanket			1,370.00		566.96						1,936.96
8830-1812	Dist-Damage & Failure Blanket		5,385.57			2,349.05						7,734.62
8830-1812	Dist-Damage & Failure Blanket	-				0.00						0.00
8830-1812	Dist-Damage & Failure Blanket			5,168.55						(62.31)		5,106.24
8830-1812	Dist-Damage & Failure Blanket			628.42								628.42
8830-1812	Dist-Damage & Failure Blanket								2,136.56			2,136.56
8830-1812	Dist-Damage & Failure Blanket	(2,314.93)	(199.16)	2,314.93		(7,755.05)						(7,954.21)
8830-1812	Dist-Damage & Failure Blanket	(3.54)										(3.54)
8830-1812	Dist-Damage & Failure Blanket	(10,366.60)	(2,283.16)	(317.40)	(953.83)	(43,568.25)						(57,489.24)
8830-1812	Dist-Damage & Failure Blanket		5,832.78			2,324.39						8,157.17
8830-1812	Dist-Damage & Failure Blanket	(358.58)	(224.23)			(1,394.86)						(1,977.67)
8830-1812	Dist-Damage & Failure Blanket		609.97			254.98						864.95
8830-1812	Dist-Damage & Failure Blanket	(4,107.57)	(248.85)	(5,384.94)		(9,526.12)						(19,267.48)
8830-1812	Dist-Damage & Failure Blanket			20.00								20.00
8830-1812	Dist-Damage & Failure Blanket		585.34			14,162.27						14,747.61
8830-1812	Dist-Damage & Failure Blanket	(5,063.64)	2,078.60	(587.50)	(2,021.99)	(33,422.74)						(39,017.27)
8830-1812	Dist-Damage & Failure Blanket	(770.51)				(1,481.66)						(2,252.17)
8830-1812	Dist-Damage & Failure Blanket				0.00							0.00
8830-1812	Dist-Damage & Failure Blanket					2,963.93			-	-		2,963.93
8830-1812	Dist-Damage & Failure Blanket	(4,506.82)	(364.09)			(9,218.96)						(14,089.87)
8830-1812	Dist-Damage & Failure Blanket					67.64		(10,000.00)				(9,932.36)

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8830-1812	Dist-Damage & Failure Blanket	-			0.00				0.00
8830-1812	Dist-Damage & Failure Blanket	(3,438.18)			(7,730.92)				(11,169.10)
8830-1812	Dist-Damage & Failure Blanket	200.52		5.00	625.68	-			831.20
8830-1812	Dist-Damage & Failure Blanket	(630.38)			(1,417.44)				(2,047.82)
8830-1812	Dist-Damage & Failure Blanket				11,460.23				11,460.23
8830-1812	Dist-Damage & Failure Blanket				2,390.73				2,390.73
8830-1812	Dist-Damage & Failure Blanket	(783.73)		(2,210.67)	(1,587.56)				(4,581.96)
8830-1812	Dist-Damage & Failure Blanket				2,096.07				2,096.07
8830-1812	Dist-Damage & Failure Blanket	(6,344.38)	(823.30)		(17,889.07)				(25,910.75)
8830-1812	Dist-Damage & Failure Blanket	(236.00)			0.00				(236.00)
8830-1812	Dist-Damage & Failure Blanket		90.33		1,522.88				1,613.21
8830-1812	Dist-Damage & Failure Blanket				985.56				985.56
8830-1812	Dist-Damage & Failure Blanket		58.81		951.48				1,010.29
8830-1812	Dist-Damage & Failure Blanket				376.86				376.86
8830-1812	Dist-Damage & Failure Blanket				512.46				512.46
8830-1812	Dist-Damage & Failure Blanket		(179.62)		3,041.01				2,861.39
8830-1812	Dist-Damage & Failure Blanket			1,254.00	13,515.13				14,769.13
8830-1812	Dist-Damage & Failure Blanket			495.74	15,153.26				27,423.27
8830-1812	Dist-Damage & Failure Blanket			685.92	4,576.73				5,262.65
8830-1812	Dist-Damage & Failure Blanket			801.15	27,274.13				14,350.28
8830-1812	Dist-Damage & Failure Blanket				124.28	(16,581.03)	-	(13,725.00)	(16,456.75)
8830-1812	Dist-Damage & Failure Blanket	(585.72)	-		(0.00)				(585.72)
8830-1812	Dist-Damage & Failure Blanket		505.00						505.00
8830-1812	Dist-Damage & Failure Blanket		254.30	350.50	6,905.14	-			7,509.94
8830-1812	Dist-Damage & Failure Blanket	50.13			155.88	-			206.01
8830-1812	Dist-Damage & Failure Blanket			525.00	9,594.48				10,119.48
8830-1812	Dist-Damage & Failure Blanket	1,331.25	95.96		2,778.05			(1,230.99)	2,974.27
8830-1812	Dist-Damage & Failure Blanket	(420.26)			0.00				(420.26)
8830-1812	Dist-Damage & Failure Blanket	764.04	162.90		1,797.29			(764.04)	1,960.19
8830-1812	Dist-Damage & Failure Blanket	3,102.76	475.42		5,744.88				9,323.06
8830-1812	Dist-Damage & Failure Blanket	2,638.99			5,499.22			(2,639.00)	5,499.21
8830-1812	Dist-Damage & Failure Blanket	2,824.23	26,455.08	385.00	16,684.03	-		(780.96)	45,567.38
8830-1812	Dist-Damage & Failure Blanket	4,890.32	745.39	2,752.95	9,325.57	-			17,714.23
8830-1812	Dist-Damage & Failure Blanket	97.62	119.56		188.52				405.70
8830-1812	Dist-Damage & Failure Blanket	466.95	191.86		782.07				1,440.88
8830-1812	Dist-Damage & Failure Blanket	-	-		0.00				0.00
8830-1812	Dist-Damage & Failure Blanket	280.17	132.07		645.20				1,057.44
8830-1812	Dist-Damage & Failure Blanket	693.59	90.31		1,100.38				1,884.28
8830-1812	Dist-Damage & Failure Blanket	1,437.46	455.83	-	3,111.58				5,004.87
8830-1812	Dist-Damage & Failure Blanket	3,352.69	1,545.66	3,626.52	6,757.23	-			15,282.10
8830-1812	Dist-Damage & Failure Blanket	3,709.08	150.60	5,364.00	23,763.45	-			32,987.13
8830-1812	Dist-Damage & Failure Blanket	329.39	83.05		613.68				1,026.12
8830-1812	Dist-Damage & Failure Blanket	2,654.71	1,097.81		4,448.48	(8,201.00)			
8830-1812	Dist-Damage & Failure Blanket	97.62	101.39		166.84	-			365.85
8830-1812	Dist-Damage & Failure Blanket	283.35	75.00		415.22	-			773.57
8830-1812	Dist-Damage & Failure Blanket	455.24	38.23		641.20	-			1,134.67
8830-1812	Dist-Damage & Failure Blanket	142.61	194.89		349.65	-			687.15
8830-1812	Dist-Damage & Failure Blanket	280.17			387.22	-			667.39
8830-1812	Dist-Damage & Failure Blanket		7,730.00		2,037.41				9,767.41
8830-1812	Dist-Damage & Failure Blanket		581.52		468.67				1,050.19
8830-1812	Dist-Damage & Failure Blanket	520.25	58.06		1,383.03				1,961.34
8830-1812	Dist-Damage & Failure Blanket	(520.25)			(1,358.17)				(1,878.42)
8830-1812	Dist-Damage & Failure Blanket		94.93		40.62				135.55
8830-1812	Dist-Damage & Failure Blanket		60.81		26.02				86.83
8830-1812	Dist-Damage & Failure Blanket	137.34							137.34
8830-1812	Dist-Damage & Failure Blanket					(10,000.00)			(10,000.00)
8830-1813	Dist-Asset Replacement Blanket	37.60			108.31				145.91
8830-1813	Dist-Asset Replacement Blanket	(110.28)			(285.68)				(395.96)
8830-1813	Dist-Asset Replacement Blanket		336.11		423.30				759.41
8830-1813	Dist-Asset Replacement Blanket			467.50	927.69				1,395.19
8830-1813	Dist-Asset Replacement Blanket	97.62			135.32	-			232.94
8830-1813	Dist-Asset Replacement Blanket				419.94				419.94
8830-1813	Dist-Asset Replacement Blanket	1,380.78	813.54	760.00	4,152.36				7,106.68
8830-1813	Dist-Asset Replacement Blanket	683.34			1,090.31	-			1,773.65
8830-1813	Dist-Asset Replacement Blanket			1,032.50	12,282.15				13,314.65
8830-1813	Dist-Asset Replacement Blanket			330.00	136.56				466.56
8830-1813	Dist-Asset Replacement Blanket		(73.00)	14,358.17	3,595.07	-			17,880.24
8830-1813	Dist-Asset Replacement Blanket			340.00	108.92	-			448.92
8830-1813	Dist-Asset Replacement Blanket	627.98			13,957.35			-	14,585.33
8830-1813	Dist-Asset Replacement Blanket	1,904.80	1,203.26	880.00	3,814.39	-			7,802.45
8830-1813	Dist-Asset Replacement Blanket			220.00	91.05				311.05
8830-1813	Dist-Asset Replacement Blanket	869.14	424.21		1,567.30	-			2,860.65
8830-1813	Dist-Asset Replacement Blanket	948.24	349.86		1,893.04				3,191.14
8830-1813	Dist-Asset Replacement Blanket	122.03			188.60				310.63
8830-1813	Dist-Asset Replacement Blanket	2,153.61	1,746.07	2,109.00	5,973.53	-			11,982.21
8830-1813	Dist-Asset Replacement Blanket		1,303.22		6,867.18			(1,370.00)	6,800.40
8830-1813	Dist-Asset Replacement Blanket		333.68		142.80				476.48
8830-1813	Dist-Asset Replacement Blanket		136.75		58.52				195.27
8830-1814	Dist-3rd Party Attach Blanket	(93.39)	-		(522.16)	937.80	(1.83)	-	47.87
8830-1814	Dist-3rd Party Attach Blanket	(507.30)			(1,258.68)	843.60			(2,280.77)
8830-1814	Dist-3rd Party Attach Blanket			140.00	1,147.50				1,689.24
8830-1814	Dist-3rd Party Attach Blanket	2,949.67	561.90	502.67	2,688.27			-	14,309.50
8830-1814	Dist-3rd Party Attach Blanket	185.87			1,341.82			-	2,762.21
8830-1814	Dist-3rd Party Attach Blanket			50.00	1,124.30				4,076.79
8830-1814	Dist-3rd Party Attach Blanket				1,129.31				1,440.01
8830-1814	Dist-3rd Party Attach Blanket	4,258.39	1,182.36	5,314.00	3,532.29	(22,284.50)	-		5,373.98
8830-1814	Dist-3rd Party Attach Blanket	-		-	(0.00)	2,335.75	0.00		2,335.75
8830-1814	Dist-3rd Party Attach Blanket	1,001.06	663.75	2,535.09	3,885.00			-	8,084.90
8830-1814	Dist-3rd Party Attach Blanket			-	(0.00)	312.10			312.10
8830-1814	Dist-3rd Party Attach Blanket	2,447.13	263.17	4,303.03	6,919.99	(3,151.80)	-		10,781.52
8830-1814	Dist-3rd Party Attach Blanket			-	0.00	453.40			453.40
8830-1814	Dist-3rd Party Attach Blanket	100.26	10.50	50.00	1,556.29	811.27	(155.17)		2,373.15
8830-1821	Dist-Reliability Blanket		(621.77)		(996.19)				(1,617.96)
8830-1821	Dist-Reliability Blanket	6,284.71	26,226.00	1,242.50	16,371.79			-	50,125.00
8830-1821	Dist-Reliability Blanket			3,028.50	9,595.25				12,623.75
8830-1821	Dist-Reliability Blanket	1,347.72		380.00	2,030.88			-	3,758.60
8830-1821	Dist-Reliability Blanket	3,450.15	2,047.79	1,679.00	7,510.71			-	14,687.65
8830-1823	Distributed Generation Blanket	864.94			2,431.58				3,296.52
8830-1823	Distributed Generation Blanket	(101.50)			(322.79)				(424.29)
8830-1823	Distributed Generation Blanket	(400.09)			(322.79)				(722.88)
8830-1823	Distributed Generation Blanket	3,252.66	1,045.36	1,088.50	13,394.42				18,780.94
8830-1823	Distributed Generation Blanket	(118.40)			(306.73)				(425.13)
8830-1823	Distributed Generation Blanket	(104.45)			(281.01)				(385.46)
8830-1823	Distributed Generation Blanket	(118.40)			(308.12)	1,250.00			823.48
8830-1823	Distributed Generation Blanket	(327.50)			(735.34)				(1,062.84)

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8830-1823	Distributed Generation Blanket	(236.79)		(504.66)			(741.45)
8830-1823	Distributed Generation Blanket	(264.69)	(607.50)	(933.37)	625.00		(1,180.56)
8830-1823	Distributed Generation Blanket			490.13	49.12		539.25
8830-1823	Distributed Generation Blanket	(893.74)		(2,628.10)	625.00	(7.49)	(2,904.33)
8830-1823	Distributed Generation Blanket	(132.34)		(282.06)			(414.40)
8830-1823	Distributed Generation Blanket	(104.45)		(222.61)	650.00		322.94
8830-1823	Distributed Generation Blanket	(104.45)		(222.61)	650.00		322.94
8830-1823	Distributed Generation Blanket	(132.34)		(282.06)			(414.40)
8830-1823	Distributed Generation Blanket	(132.34)		(282.06)			(414.40)
8830-1823	Distributed Generation Blanket	(132.34)		(282.06)			(414.40)
8830-1823	Distributed Generation Blanket	(104.45)		(222.61)			(327.06)
8830-1823	Distributed Generation Blanket	(132.34)		(380.70)			(513.04)
8830-1823	Distributed Generation Blanket				29.46		29.46
8830-1823	Distributed Generation Blanket	(327.59)		(1,007.57)	1,250.00	(0.55)	(85.71)
8830-1823	Distributed Generation Blanket	(216.02)		(692.66)	1,250.00		341.32
8830-1823	Distributed Generation Blanket			196.15		-	196.15
8830-1823	Distributed Generation Blanket	(160.24)		(492.84)			(653.08)
8830-1823	Distributed Generation Blanket	(160.24)		(492.84)			(653.08)
8830-1823	Distributed Generation Blanket	(160.24)		(492.84)			(653.08)
8830-1823	Distributed Generation Blanket	(160.24)		(492.84)			(653.08)
8830-1823	Distributed Generation Blanket	(104.45)		(321.26)			(425.71)
8830-1823	Distributed Generation Blanket	(160.24)		(492.84)			(653.08)
8830-1823	Distributed Generation Blanket	(160.24)		(492.84)	250.00		(403.08)
8830-1823	Distributed Generation Blanket	(243.88)		(662.27)			(906.15)
8830-1823	Distributed Generation Blanket	(208.90)		(642.50)	625.00		(226.40)
8830-1823	Distributed Generation Blanket	(160.24)		(376.97)			(537.21)
8830-1823	Distributed Generation Blanket	(243.88)		(546.40)			(790.28)
8830-1823	Distributed Generation Blanket	(160.24)		(376.97)			(537.21)
8830-1823	Distributed Generation Blanket	(160.24)		(376.97)			(537.21)
8830-1823	Distributed Generation Blanket	(160.24)		(376.97)			(537.21)
8830-1823	Distributed Generation Blanket	(160.24)		(376.97)			(537.21)
8830-1823	Distributed Generation Blanket	(641.51)		(1,372.19)		(169.62)	(706.83)
8830-1823	Distributed Generation Blanket		850.00	272.29		-	1,122.29
8830-1823	Distributed Generation Blanket	(160.24)		(533.42)			(693.66)
8830-1823	Distributed Generation Blanket	(243.88)		(698.33)			(942.21)
8830-1823	Distributed Generation Blanket	(160.24)		(533.42)			(693.66)
8830-1823	Distributed Generation Blanket	(160.24)		(533.42)			(693.66)
8830-1823	Distributed Generation Blanket	(160.24)		(533.42)			(693.66)
8830-1823	Distributed Generation Blanket	(160.24)		(533.42)			(693.66)
8830-1823	Distributed Generation Blanket	(160.24)		(533.42)			(693.66)
8830-1823	Distributed Generation Blanket	(160.24)		(533.42)			(693.66)
8830-1823	Distributed Generation Blanket	(243.88)		(533.42)			(777.30)
8830-1823	Distributed Generation Blanket	(160.24)		(533.42)			(693.66)
8830-1823	Distributed Generation Blanket	(160.23)		(315.92)			(476.15)
8830-1823	Distributed Generation Blanket	(104.45)		(205.93)			(310.38)
8830-1823	Distributed Generation Blanket	(216.03)		(425.93)			(641.96)
8830-1823	Distributed Generation Blanket	(160.24)		(315.94)			(476.18)
8830-1823	Distributed Generation Blanket	(160.24)		(315.94)			(476.18)
8830-1823	Distributed Generation Blanket	(160.24)		(315.94)			(476.18)
8830-1823	Distributed Generation Blanket	(285.70)		(315.94)			(601.64)
8830-1823	Distributed Generation Blanket	(160.24)		(315.94)		(42.99)	(519.17)
8830-1823	Distributed Generation Blanket	(160.24)		(315.94)			(476.18)
8830-1823	Distributed Generation Blanket	(160.24)		(315.94)			(476.18)
8830-1823	Distributed Generation Blanket	(160.24)		(315.94)			(476.18)
8830-1823	Distributed Generation Blanket	(160.24)		(315.94)			(476.18)
8830-1823	Distributed Generation Blanket	(160.24)		(315.94)			(476.18)
8830-1823	Distributed Generation Blanket	(160.24)		(315.94)			(476.18)
8830-1823	Distributed Generation Blanket	(160.24)		(315.94)			(476.18)
8830-1823	Distributed Generation Blanket	(104.45)		(205.93)			(310.38)
8830-1823	Distributed Generation Blanket	(160.24)		(318.94)			(479.18)
8830-1823	Distributed Generation Blanket	(160.24)		(318.94)			(479.18)
8830-1823	Distributed Generation Blanket	(160.24)		(318.94)			(479.18)
8830-1823	Distributed Generation Blanket	(216.03)		(444.38)			(660.41)
8830-1823	Distributed Generation Blanket	(104.45)		(205.93)			(310.38)
8830-1823	Distributed Generation Blanket			98.07			98.07
8830-1823	Distributed Generation Blanket	(104.45)		(205.93)	625.00		314.62
8830-1823	Distributed Generation Blanket	(160.24)		(318.94)			(479.18)
8830-1823	Distributed Generation Blanket	(160.24)		(318.94)	1,250.00		770.82
8830-1823	Distributed Generation Blanket	(104.45)		(205.93)			(310.38)
8830-1823	Distributed Generation Blanket	(104.45)		(211.57)			(316.02)
8830-1823	Distributed Generation Blanket	(104.45)		(211.57)			(316.02)
8830-1823	Distributed Generation Blanket	(302.00)		(450.01)			(752.01)
8830-1823	Distributed Generation Blanket	(160.24)		(360.31)			(520.55)
8830-1823	Distributed Generation Blanket	(160.24)		(360.31)			(520.55)
8830-1823	Distributed Generation Blanket	(264.69)		(234.86)	1,250.00	-	750.45
8830-1823	Distributed Generation Blanket	(55.79)	-	(0.00)			(55.79)
8830-1823	Distributed Generation Blanket	(104.45)		(0.00)			(104.45)
8830-1823	Distributed Generation Blanket	(216.03)		0.00			(216.03)
8830-1823	Distributed Generation Blanket	(160.24)		0.00			(160.24)
8830-1823	Distributed Generation Blanket	(104.45)		(0.00)			(104.45)
8830-1823	Distributed Generation Blanket	(42.99)		0.00		(42.99)	(85.98)
8830-1823	Distributed Generation Blanket	-		0.00			0.00
8830-1823	Distributed Generation Blanket	4,786.02	1,330.00	10,584.30		323.12	(195.32)
8830-1826	Transportation Fleet & Equip Blanket		-				-
8830-1826	Transportation Fleet & Equip Blanket		4,151.71				4,151.71
8830-1827	IT Systems - Corporate Allocation		1,007.75			19.65	1,027.40
8830-1827	IT Systems - Corporate Allocation		79.07				79.07
8830-1827	IT Systems - Corporate Allocation		6,639.75				6,639.75
8830-1837	New Business Residential Blanket	398.54	237.50	1,048.69		-	1,684.73
8830-1837	New Business Residential Blanket	(546.42)		(1,696.78)			(2,243.20)
8830-1837	New Business Residential Blanket		760.00	314.52			1,074.52
8830-1837	New Business Residential Blanket		(101.53)	8,349.61		(760.00)	7,488.08
8830-1837	New Business Residential Blanket		105.98	264.70			1,178.68
8830-1837	New Business Residential Blanket	(1,514.74)	(6.97)	(3,498.00)			(5,019.71)
8830-1837	New Business Residential Blanket	(1,408.91)	(58.21)	(3,949.69)			(5,416.81)
8830-1837	New Business Residential Blanket	(576.46)		(1,550.91)			(2,127.37)
8830-1837	New Business Residential Blanket		8.00	9.38			17.38
8830-1837	New Business Residential Blanket		80.55	101.45			182.00
8830-1837	New Business Residential Blanket	231.93	11,276.56	11,367.51			22,876.00
8830-1837	New Business Residential Blanket	(412.55)	(19.80)	(1,172.57)			(1,604.92)
8830-1837	New Business Residential Blanket		86.29	108.68			194.97
8830-1837	New Business Residential Blanket	1,254.20	570.00	3,525.91		-	5,350.11
8830-1837	New Business Residential Blanket		78.89	99.36			178.25
8830-1837	New Business Residential Blanket	137.97		190.69		-	328.66
8830-1837	New Business Residential Blanket	2,021.85	1,333.05	8,122.34		-	12,469.42
8830-1837	New Business Residential Blanket	(559.24)	(16.59)	(1,200.93)		(195.32)	(1,776.76)

8830-1837	New Business Residential Blanket	(276.47)				(589.23)			(865.70)
8830-1837	New Business Residential Blanket	(537.90)	(66.36)			(1,468.98)			(2,073.24)
8830-1837	New Business Residential Blanket	(517.03)		(12.84)		(1,506.28)			(2,036.15)
8830-1837	New Business Residential Blanket	9,823.41	1,521.55	2,688.00	10.00	23,222.21			37,265.17
8830-1837	New Business Residential Blanket	(757.53)	(98.88)			(1,785.20)	(6.67)	-	(2,648.28)
8830-1837	New Business Residential Blanket	(665.57)	(5.71)			(1,817.59)			(2,488.87)
8830-1837	New Business Residential Blanket		119.75			150.81			270.56
8830-1837	New Business Residential Blanket		75.00			15.99			90.99
8830-1837	New Business Residential Blanket		71.80			90.42			162.22
8830-1837	New Business Residential Blanket	(852.04)	(61.76)			(2,558.28)			(3,472.08)
8830-1837	New Business Residential Blanket		439.50	1,613.44		592.06			2,645.00
8830-1837	New Business Residential Blanket	(390.64)			(382.50)	(1,102.33)	(9.08)		(1,884.55)
8830-1837	New Business Residential Blanket	(280.17)				(861.72)			(1,141.89)
8830-1837	New Business Residential Blanket	(771.24)				(1,847.15)	(16.78)		(2,635.17)
8830-1837	New Business Residential Blanket		211.94			104.47			316.41
8830-1837	New Business Residential Blanket	(453.89)	(38.11)			(1,492.00)			(1,984.00)
8830-1837	New Business Residential Blanket			(12.31)		(10.30)			(22.61)
8830-1837	New Business Residential Blanket	466.13	107.24	380.00		1,113.56	-		2,066.93
8830-1837	New Business Residential Blanket	(559.78)		(345.52)		(1,881.69)			(2,786.99)
8830-1837	New Business Residential Blanket		152.25			191.75			344.00
8830-1837	New Business Residential Blanket	(408.73)	(56.25)	(380.00)		(1,157.01)			(2,001.99)
8830-1837	New Business Residential Blanket	(348.97)				(896.83)			(1,245.80)
8830-1837	New Business Residential Blanket	(585.96)	-			(459.49)			(1,045.45)
8830-1837	New Business Residential Blanket		115.89			145.95			261.84
8830-1837	New Business Residential Blanket	(432.95)	(109.83)			(964.83)			(1,507.61)
8830-1837	New Business Residential Blanket	195.25				301.77			497.02
8830-1837	New Business Residential Blanket			299.17		256.56			555.73
8830-1837	New Business Residential Blanket	(390.64)				(918.99)			(1,309.63)
8830-1837	New Business Residential Blanket			340.00			-		340.00
8830-1837	New Business Residential Blanket	390.64				1,029.86	-		1,420.50
8830-1837	New Business Residential Blanket		124.70			61.47			186.17
8830-1837	New Business Residential Blanket	(431.24)				(1,014.50)			(1,445.74)
8830-1837	New Business Residential Blanket			220.00		91.05			311.05
8830-1837	New Business Residential Blanket	(670.81)	(10.81)			(1,722.71)			(2,404.33)
8830-1837	New Business Residential Blanket	(326.85)				(1,005.28)			(1,332.13)
8830-1837	New Business Residential Blanket		78.89			99.36			178.25
8830-1837	New Business Residential Blanket		3,099.26			6,050.84			9,150.10
8830-1837	New Business Residential Blanket		2,098.37			1,034.33			3,132.70
8830-1837	New Business Residential Blanket	(186.78)			(170.00)	(412.06)			(768.84)
8830-1837	New Business Residential Blanket	(390.64)				(459.49)			(850.13)
8830-1837	New Business Residential Blanket	(197.44)		(16.05)		(407.10)			(620.59)
8830-1837	New Business Residential Blanket	53.64				78.35			131.99
8830-1837	New Business Residential Blanket	(1,537.31)	(49.67)			(3,266.65)			(4,853.63)
8830-1837	New Business Residential Blanket	(96.28)		(17.12)		(328.12)			(441.52)
8830-1837	New Business Residential Blanket	(976.52)	(45.40)			(2,107.91)			(3,129.83)
8830-1837	New Business Residential Blanket	(382.10)				(1,081.24)			(1,463.34)
8830-1837	New Business Residential Blanket	584.16	38.65	1,410.41		2,629.96	-		4,663.18
8830-1837	New Business Residential Blanket	(586.29)	(10.81)			(1,573.65)			(2,170.75)
8830-1837	New Business Residential Blanket	104.45				161.43			265.88
8830-1837	New Business Residential Blanket	(291.52)				(446.00)			(737.52)
8830-1837	New Business Residential Blanket			425.00			-		425.00
8830-1837	New Business Residential Blanket		104.61			51.57			156.18
8830-1837	New Business Residential Blanket			165.00		470.46			635.46
8830-1837	New Business Residential Blanket	(371.21)		(472.00)		(794.18)			(1,637.39)
8830-1837	New Business Residential Blanket		86.45			108.87			195.32
8830-1837	New Business Residential Blanket	200.40		668.92	2,896.82	859.99	63.07	-	4,689.20
8830-1837	New Business Residential Blanket	(420.69)				(1,132.19)			(1,552.88)
8830-1837	New Business Residential Blanket	(226.85)				(577.94)			(804.79)
8830-1837	New Business Residential Blanket	(226.85)				(577.94)			(804.79)
8830-1837	New Business Residential Blanket		125.05			49.84			174.89
8830-1837	New Business Residential Blanket	(192.56)				(641.00)			(833.56)
8830-1837	New Business Residential Blanket	(226.85)				(577.94)			(804.79)
8830-1837	New Business Residential Blanket	(226.85)				(755.14)			(981.99)
8830-1837	New Business Residential Blanket	(228.19)				(759.60)			(987.79)
8830-1837	New Business Residential Blanket	(228.17)		(26.75)		(764.83)			(1,019.75)
8830-1837	New Business Residential Blanket		176.86			581.67			758.53
8830-1837	New Business Residential Blanket		98.07		425.00	268.65	-		791.72
8830-1837	New Business Residential Blanket		78.89			99.36			178.25
8830-1837	New Business Residential Blanket		222.41	1,530.00	2,018.75	3,213.98	-		6,985.14
8830-1837	New Business Residential Blanket	(323.13)		(13.91)		(940.80)			(1,277.84)
8830-1837	New Business Residential Blanket		96.24		425.00	1,070.70	-		1,591.94
8830-1837	New Business Residential Blanket		206.61			4,093.80			4,300.41
8830-1837	New Business Residential Blanket	(412.29)				(1,079.04)			(1,491.33)
8830-1837	New Business Residential Blanket	(130.57)		(17.09)		(272.11)			(419.77)
8830-1837	New Business Residential Blanket	(226.85)		(14.98)		(587.96)	(1.65)		(831.44)
8830-1837	New Business Residential Blanket			553.00		177.15	41.46	-	771.61
8830-1837	New Business Residential Blanket		75.87	425.00		231.71		-	732.58
8830-1837	New Business Residential Blanket			380.00	85.00	2,663.12		-	3,893.75
8830-1837	New Business Residential Blanket	765.63						-	(1,005.20)
8830-1837	New Business Residential Blanket	(290.18)	-			(715.02)			(416.78)
8830-1837	New Business Residential Blanket	(96.28)				(320.50)			(1,213.52)
8830-1837	New Business Residential Blanket	(373.56)				(839.96)			207.87
8830-1837	New Business Residential Blanket		92.00			115.87			(422.58)
8830-1837	New Business Residential Blanket	(97.62)				(324.96)			2,395.21
8830-1837	New Business Residential Blanket	502.62	12.79	680.00	170.00	1,127.83	-	(98.03)	1,362.26
8830-1837	New Business Residential Blanket	390.64				1,166.94		(195.32)	163.86
8830-1837	New Business Residential Blanket		109.76			54.10			0.00
8830-1837	New Business Residential Blanket					0.00			(364.30)
8830-1837	New Business Residential Blanket	(122.59)				(241.71)	-		970.74
8830-1837	New Business Residential Blanket	287.73	130.00			553.01			6,471.85
8830-1837	New Business Residential Blanket	1,108.07	111.02	380.00		4,872.76	(0.00)		(388.01)
8830-1837	New Business Residential Blanket	(130.57)				(257.44)			(1,376.19)
8830-1837	New Business Residential Blanket	(720.44)		(12.31)		(643.44)			(833.56)
8830-1837	New Business Residential Blanket	(192.56)				(641.00)			(980.16)
8830-1837	New Business Residential Blanket	(323.13)		(13.38)		(643.65)			10,371.87
8830-1837	New Business Residential Blanket	401.04	781.41			9,189.42			(1,160.86)
8830-1837	New Business Residential Blanket	(390.64)				(770.22)	-		(1,160.86)
8830-1837	New Business Residential Blanket	(390.64)				(770.22)	-		(580.42)
8830-1837	New Business Residential Blanket	(195.32)				(385.10)	-		2,729.36
8830-1837	New Business Residential Blanket	243.19		1,546.53		939.64	-		438.03
8830-1837	New Business Residential Blanket								148.79
8830-1837	New Business Residential Blanket		86.97	383.00		223.27			693.24
8830-1837	New Business Residential Blanket	(323.13)		(20.87)		(641.25)			(985.25)
8830-1837	New Business Residential Blanket	(244.79)				(485.47)			(730.26)
8830-1837	New Business Residential Blanket	(148.51)		(20.33)		(299.68)			(468.52)

8830-1837	New Business Residential Blanket	(226.85)			(447.27)			(674.12)
8830-1837	New Business Residential Blanket	701.40		765.00	2,138.68			3,605.08
8830-1837	New Business Residential Blanket	(268.49)			(529.37)	-		(797.86)
8830-1837	New Business Residential Blanket	(390.64)	-		(385.10)			(775.74)
8830-1837	New Business Residential Blanket	(226.85)		(16.59)	(450.56)			(694.00)
8830-1837	New Business Residential Blanket	911.88	81.66	760.00	733.25	2,866.61	-	5,353.40
8830-1837	New Business Residential Blanket	6,373.17	2,942.08	673.75	360.00	12,714.16	39.79	23,102.95
8830-1837	New Business Residential Blanket	(662.19)			-	(439.01)	-	(1,101.20)
8830-1837	New Business Residential Blanket		1.33	298.00	13.53			312.86
8830-1837	New Business Residential Blanket	179.91	81.88		346.01	(758.00)		(150.20)
8830-1837	New Business Residential Blanket	(568.88)			(1,175.71)			(1,744.59)
8830-1837	New Business Residential Blanket	(781.28)	-	-	(780.75)	755.40	-	(1,001.95)
8830-1837	New Business Residential Blanket				309.52			309.52
8830-1837	New Business Residential Blanket	(174.63)		(20.33)	(370.05)			(565.01)
8830-1837	New Business Residential Blanket	(252.96)			(518.85)			(771.81)
8830-1837	New Business Residential Blanket	130.57			180.45		-	311.02
8830-1837	New Business Residential Blanket	104.45			161.43			265.88
8830-1837	New Business Residential Blanket	(274.99)		(15.52)	(295.62)			(586.13)
8830-1837	New Business Residential Blanket	(323.13)		(21.40)	(394.31)			(738.84)
8830-1837	New Business Residential Blanket		80.47		157.11			237.58
8830-1837	New Business Residential Blanket	(97.62)			(197.74)			(295.36)
8830-1837	New Business Residential Blanket	(195.32)			(385.10)			(580.42)
8830-1837	New Business Residential Blanket	1,042.10	105.47		2,400.96	101.13	-	3,649.66
8830-1837	New Business Residential Blanket	(104.45)			(211.57)			(316.02)
8830-1837	New Business Residential Blanket		111.22	893.00	1,370.29			2,374.51
8830-1837	New Business Residential Blanket	1,999.91		1,225.00	3,705.06	5,591.38	-	12,521.35
8830-1837	New Business Residential Blanket	(1,001.18)	(141.84)		(2,252.50)			(3,395.52)
8830-1837	New Business Residential Blanket	(323.13)		(9.63)	(685.58)			(1,018.34)
8830-1837	New Business Residential Blanket	(52.23)		(9.08)	(107.61)			(168.92)
8830-1837	New Business Residential Blanket	(280.17)			(567.53)			(847.70)
8830-1837	New Business Residential Blanket	(568.88)			(1,152.35)			(1,721.23)
8830-1837	New Business Residential Blanket	(382.10)			(774.01)			(1,156.11)
8830-1837	New Business Residential Blanket	(193.90)		(8.03)	(196.62)			(398.55)
8830-1837	New Business Residential Blanket	(226.84)			(488.60)			(715.44)
8830-1837	New Business Residential Blanket	747.12	106.72	1,472.09	1,537.75		-	3,863.68
8830-1837	New Business Residential Blanket	(192.56)		(21.40)	(394.31)		-	(608.27)
8830-1837	New Business Residential Blanket	241.95	36.47		2,226.86			2,505.28
8830-1837	New Business Residential Blanket	(920.83)			(1,983.75)			(2,904.58)
8830-1837	New Business Residential Blanket	(200.73)		(16.05)	(433.07)			(649.85)
8830-1837	New Business Residential Blanket	(585.96)			(1,230.48)			(1,816.44)
8830-1837	New Business Residential Blanket			(18.19)	(3.60)			(21.79)
8830-1837	New Business Residential Blanket	(1,151.77)			(1,510.43)			(2,662.20)
8830-1837	New Business Residential Blanket	(597.12)	-	0.00	(1,311.12)			(1,908.24)
8830-1837	New Business Residential Blanket	5,275.47	2,096.93	2,173.47	945.00	12,468.13	-	22,959.00
8830-1837	New Business Residential Blanket	253.24			390.68			643.92
8830-1837	New Business Residential Blanket	672.46	207.16	-	2,567.62		-	5,331.26
8830-1837	New Business Residential Blanket		(906.73)	1,884.02	10,458.95			9,552.22
8830-1837	New Business Residential Blanket				196.15			196.15
8830-1837	New Business Residential Blanket	(676.79)			(1,370.95)			(2,047.74)
8830-1837	New Business Residential Blanket	881.22	400.94		1,899.72			3,181.88
8830-1837	New Business Residential Blanket	400.80		212.50	1,498.37		-	2,111.67
8830-1837	New Business Residential Blanket	150.39	69.42		271.45	(975.95)		(484.69)
8830-1837	New Business Residential Blanket	1,356.74	450.64	380.00	328.32	4,670.96	-	5,231.92
8830-1837	New Business Residential Blanket	-			(0.00)	(1,954.74)	-	(0.00)
8830-1837	New Business Residential Blanket		85.94		605.82			691.76
8830-1837	New Business Residential Blanket		12.97	380.00	1,752.06		(380.00)	1,765.03
8830-1837	New Business Residential Blanket	434.32	97.31	272.27	664.55	1,121.95	-	2,590.40
8830-1837	New Business Residential Blanket				253.94			253.94
8830-1837	New Business Residential Blanket	104.45	90.28		206.66		-	401.39
8830-1837	New Business Residential Blanket	524.22		3,210.71	1,865.73			5,600.66
8830-1837	New Business Residential Blanket	200.40			807.13			1,007.53
8830-1837	New Business Residential Blanket	(280.17)	(241.02)		(629.97)			(1,151.16)
8830-1837	New Business Residential Blanket			595.00	6,524.70	2,370.67	-	9,490.37
8830-1837	New Business Residential Blanket	561.31	180.90	330.00	1,177.18		-	2,249.39
8830-1837	New Business Residential Blanket	(97.62)			0.00			(97.62)
8830-1837	New Business Residential Blanket	1,403.71	629.56	996.56	3,120.67		-	6,150.50
8830-1837	New Business Residential Blanket	551.43	169.15		977.10			1,697.68
8830-1837	New Business Residential Blanket	244.05	124.40		416.35			784.80
8830-1837	New Business Residential Blanket	507.30	307.97		931.41		-	1,746.68
8830-1837	New Business Residential Blanket	195.32	102.97		389.19			687.48
8830-1837	New Business Residential Blanket	150.39			348.86			499.25
8830-1837	New Business Residential Blanket	195.24	154.58		318.49		-	668.31
8830-1837	New Business Residential Blanket	(97.62)			0.00			(97.62)
8830-1837	New Business Residential Blanket	(97.62)			0.00			(97.62)
8830-1837	New Business Residential Blanket	717.39	142.84	237.50	2,014.98			3,112.71
8830-1837	New Business Residential Blanket	-	0.00	-	(0.00)		-	(0.00)
8830-1837	New Business Residential Blanket	208.91	104.49		425.69			739.09
8830-1837	New Business Residential Blanket	0.00		0.00	(0.00)		-	0.00
8830-1837	New Business Residential Blanket	182.77	75.06		367.27			625.10
8830-1837	New Business Residential Blanket	50.13			73.22			123.35
8830-1837	New Business Residential Blanket	50.13			73.22			123.35
8830-1837	New Business Residential Blanket	50.13			73.22			123.35
8830-1837	New Business Residential Blanket	100.26			245.69			345.95
8830-1837	New Business Residential Blanket	134.10			231.64		-	365.74
8830-1837	New Business Residential Blanket	100.26			245.69			345.95
8830-1837	New Business Residential Blanket	134.10			231.64		-	365.74
8830-1837	New Business Residential Blanket	100.26			245.69			345.95
8830-1837	New Business Residential Blanket	134.10			231.64		-	365.74
8830-1837	New Business Residential Blanket	134.10			231.64		-	365.74
8830-1837	New Business Residential Blanket	168.00			411.68			579.68
8830-1837	New Business Residential Blanket	168.00			411.68			579.68
8830-1837	New Business Residential Blanket	168.00			411.68			579.68
8830-1837	New Business Residential Blanket	84.00			205.83			289.83
8830-1837	New Business Residential Blanket	84.00			205.83			289.83
8830-1837	New Business Residential Blanket	84.00			205.83			289.83
8830-1837	New Business Residential Blanket	104.45	90.28		206.66		-	401.39
8830-1837	New Business Residential Blanket	-						-
8830-1837	New Business Residential Blanket	(565.88)			(1,319.14)		(12.08)	(1,897.10)
8830-1837	New Business Residential Blanket	(314.76)			(968.09)			(1,282.85)
8830-1837	New Business Residential Blanket		34.74					34.74
8830-1838	New Business Commercial Blanket	(784.36)			(2,045.11)		(14.41)	(2,843.88)
8830-1838	New Business Commercial Blanket	1,187.16			2,597.04		-	3,784.20
8830-1838	New Business Commercial Blanket	411.97		154.83	405.00	1,464.63	-	2,436.43
8830-1838	New Business Commercial Blanket			(12.84)				(12.84)
8830-1838	New Business Commercial Blanket			256.00	105.94			361.94

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8830-1838	New Business Commercial Blanket		622.00	302.50	396.47				1,320.97
8830-1838	New Business Commercial Blanket		2,880.49		1,147.90				4,028.39
8830-1838	New Business Commercial Blanket	3,177.26	1,483.16	1,520.00	12,612.09	-			18,792.51
8830-1838	New Business Commercial Blanket	19,271.62	127,891.90	130,574.54	176,196.03	-	(105,477.27)		348,456.82
8830-1838	New Business Commercial Blanket	97.62	78.89		250.24				426.75
8830-1838	New Business Commercial Blanket	12,794.32	4,349.06	1,365.00	2,112.50	38,966.84	(13,896.70)	-	45,691.02
8830-1838	New Business Commercial Blanket	(522.88)	(112.68)			(1,363.70)			(1,999.26)
8830-1838	New Business Commercial Blanket	332.99		-		1,099.74	31.47		1,464.20
8830-1838	New Business Commercial Blanket	1,613.93				4,196.73	92.57		5,903.23
8830-1838	New Business Commercial Blanket	1,185.51				4,009.82		343.60	5,538.93
8830-1838	New Business Commercial Blanket	1,110.51				3,756.14		294.56	5,339.70
8830-1838	New Business Commercial Blanket	21,198.53	38,619.99	85.49		59,185.84	178.49	-	119,089.85
8830-1838	New Business Commercial Blanket		(135.85)			3,266.55			3,130.70
8830-1838	New Business Commercial Blanket	(130.56)		(11.24)		(282.48)	919.00		494.72
8830-1838	New Business Commercial Blanket	401.04	906.84			1,717.85		-	3,025.73
8830-1838	New Business Commercial Blanket	3,153.38	695.27	7,622.56		12,943.69		-	24,414.90
8830-1838	New Business Commercial Blanket	(984.37)				(2,264.69)			(3,249.06)
8830-1838	New Business Commercial Blanket	27,806.92	3,788.00	2,420.00		91,772.87		-	125,787.79
8830-1838	New Business Commercial Blanket					256.56			256.56
8830-1838	New Business Commercial Blanket	(527.24)	(47.94)			(1,399.86)	490.73		(1,484.31)
8830-1838	New Business Commercial Blanket	5,928.49	4,421.21		7,435.00	2,838.14		325.85	20,948.69
8830-1838	New Business Commercial Blanket					2,589.77			2,589.77
8830-1838	New Business Commercial Blanket	2,717.07	447.72	380.00	132.14	6,351.34	(3,936.28)	663.06	6,755.05
8830-1838	New Business Commercial Blanket	200.40	180.13	380.00		541.95	-	663.06	1,965.54
8830-1838	New Business Commercial Blanket		51.73			101.00			152.73
8830-1838	New Business Commercial Blanket					522.73			522.73
8830-1838	New Business Commercial Blanket	(437.28)		(36.92)		(1,486.52)			(1,960.72)
8830-1838	New Business Commercial Blanket					0.02			0.02
8830-1838	New Business Commercial Blanket		82.75			104.21			186.96
8830-1838	New Business Commercial Blanket	(387.80)	(30.32)	(5.89)		(794.19)			(1,218.20)
8830-1838	New Business Commercial Blanket			(330.00)		(146.99)			(476.99)
8830-1838	New Business Commercial Blanket	8,580.41		7,967.30	1,326.47	18,439.76	(155,255.27)	-	(118,941.33)
8830-1838	New Business Commercial Blanket	200.40	86.86			391.90		-	679.16
8830-1838	New Business Commercial Blanket	(761.36)	(77.30)	(18.73)		(1,534.94)			(2,392.33)
8830-1838	New Business Commercial Blanket	(585.96)				(1,250.79)		-	(1,836.75)
8830-1838	New Business Commercial Blanket	(283.06)		(26.22)		(677.58)			(986.86)
8830-1838	New Business Commercial Blanket				(722.50)	(143.23)			(865.73)
8830-1838	New Business Commercial Blanket		75.47		425.00	574.59		-	1,075.06
8830-1838	New Business Commercial Blanket	9,096.20	1,845.03	6,403.75	1,140.00	27,868.48		-	46,353.46
8830-1838	New Business Commercial Blanket	189.18	64.80			668.13			922.11
8830-1838	New Business Commercial Blanket		81.88		340.00	130.47		-	552.35
8830-1838	New Business Commercial Blanket	(332.63)			(85.00)	(743.87)	705.48		(456.02)
8830-1838	New Business Commercial Blanket		340.35			72.58			412.93
8830-1838	New Business Commercial Blanket	1,095.30		380.00		1,787.96		-	3,263.26
8830-1838	New Business Commercial Blanket	780.96	5,689.34	2,444.88		35,484.56		-	44,399.74
8830-1838	New Business Commercial Blanket	(563.23)	(33.69)	(16.58)	(256.00)	(1,205.45)			(2,074.95)
8830-1838	New Business Commercial Blanket			(212.00)		(42.02)			(254.02)
8830-1838	New Business Commercial Blanket			1,020.00	765.00	255.39		-	2,040.39
8830-1838	New Business Commercial Blanket	(715.39)	(178.52)			(1,035.28)			(1,929.19)
8830-1838	New Business Commercial Blanket				-	-			-
8830-1838	New Business Commercial Blanket	(186.78)				(368.27)			(555.05)
8830-1838	New Business Commercial Blanket	(542.77)				(1,167.13)	975.86		(734.04)
8830-1838	New Business Commercial Blanket		59.47			116.11			175.58
8830-1838	New Business Commercial Blanket		114.85	165.00		519.60			799.45
8830-1838	New Business Commercial Blanket	4,075.96	478.46			5,815.80	2.80	-	10,373.02
8830-1838	New Business Commercial Blanket	90.27				6,019.59	192.51		6,302.37
8830-1838	New Business Commercial Blanket	(195.32)		-	(0.00)	(385.10)			(580.42)
8830-1838	New Business Commercial Blanket	634.53	161.47	384.00		7,081.67		(634.53)	7,627.14
8830-1838	New Business Commercial Blanket	4,409.75	811.55			13,186.20		-	18,407.50
8830-1838	New Business Commercial Blanket	5,504.69		5,128.64	5,196.46	19,629.11	983.54	-	36,442.44
8830-1838	New Business Commercial Blanket	383.64	820.77			1,456.33			2,660.74
8830-1838	New Business Commercial Blanket	(195.32)	(0.84)			(439.42)		-	(635.58)
8830-1838	New Business Commercial Blanket	(647.39)			-	(1,373.84)		-	(2,021.23)
8830-1838	New Business Commercial Blanket	17,692.97	1,188.75	87.15	380.00	36,488.93	(43,201.03)	18.26	12,655.03
8830-1838	New Business Commercial Blanket			6.54		508.07			514.61
8830-1838	New Business Commercial Blanket	11,842.33				23,529.57		91.17	35,463.07
8830-1838	New Business Commercial Blanket		186.79			364.68			551.47
8830-1838	New Business Commercial Blanket	596.36	91.59	1,151.70		1,971.91			3,811.56
8830-1838	New Business Commercial Blanket	683.34	116.65	333.00		2,135.41		-	2,585.06
8830-1838	New Business Commercial Blanket		125.00	156.78		995.91			1,277.69
8830-1838	New Business Commercial Blanket			380.00		95.14			475.14
8830-1838	New Business Commercial Blanket			-	-	0.00			0.00
8830-1838	New Business Commercial Blanket	280.17	274.72			519.49			1,074.38
8830-1838	New Business Commercial Blanket	-						-	-
8830-1838	New Business Commercial Blanket	6,523.80	2,082.35						8,606.15
8830-1838	New Business Commercial Blanket	114.45							114.45
8830-1838	New Business Commercial Blanket	(209.84)				(425.07)			(634.91)
8830-1838	New Business Commercial Blanket	(231.60)				(599.96)			(831.56)
8830-1838	New Business Commercial Blanket	(1,130.28)				(2,990.01)	(22.05)		(4,142.34)
8830-1838	New Business Commercial Blanket			(382.50)		(75.83)			(458.33)
8830-1740	Londonderry Snow Canopy	1,135.83		20,027.82					21,163.65
8830-1741	Mt. Support Cap Bank PLC Replacement	2,294.07		52,930.08		25,860.14		-	66,597.71
8830-1863	Replace Lyme Rd P3 Recloser	13,555.59	34,062.95	6,375.62		56,115.57		-	110,109.73
8830-1825	New Hampshire PC Refresh			25,660.17			(367.97)	-	23,077.03
8830-1744	GOLDEN ROCK SUBSTATION	1,095.37		172,591.24	86,484.96	54,944.12		(5,791.72)	309,323.97
8830-1826	Track Star AVLS Vehicle Tracking System			604.98					604.98
8830-1746	FIRST RESPONDER MOBILE APPLICATION			100,000.00				(63,750.00)	36,250.00
8830-1801	STORM PROGRAM PROJECT	-	(0.00)			-			(0.00)
8830-1801	STORM PROGRAM PROJECT	-		0.00					0.00
8830-1801	STORM PROGRAM PROJECT	149,210.79	47,796.88						197,007.67
8830-1803	METER PURCHASES BLANKET	159,478.75		196,262.04		33,688.40			389,429.19
8830-1804	TRANSFORMER PURCHASE BLANKET			613,956.92		89,674.58			703,631.50
8830-1804	TRANSFORMER PURCHASE BLANKET			(50,865.00)					(50,865.00)
8830-1805	DISTRIBUTION SUBS BLANKET	225.58	119.40			760.32			1,105.30
8830-1805	DISTRIBUTION SUBS BLANKET	426.10	119.40			1,383.86			1,929.36
8830-1805	DISTRIBUTION SUBS BLANKET	607.05	2,026.00			1,431.78			4,064.83
8830-1807	DIST - GENERAL EQUIPMENT BLANKET			14,955.00					14,955.00
8830-1807	DIST - GENERAL EQUIPMENT BLANKET			2,119.88					2,119.88
8830-1807	DIST - GENERAL EQUIPMENT BLANKET			6,110.00		2,614.75			8,724.75
8830-1810	DIST - STREET LIGHT BLANKET	78.35	241.60			184.35		-	504.30
8830-1810	DIST - STREET LIGHT BLANKET	130.56	134.16			274.09			538.81
8830-1810	DIST - STREET LIGHT BLANKET	48.81	159.47			141.97			350.25
8830-1810	DIST - STREET LIGHT BLANKET	66.87	130.26			166.74			363.87
8830-1810	DIST - STREET LIGHT BLANKET	97.62	130.26			224.55			452.43
8830-1810	DIST - STREET LIGHT BLANKET	284.40	137.26			577.94			999.60

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8830-1810	DIST - STREET LIGHT BLANKET	284.40	130.26	575.74			990.40
8830-1810	DIST - STREET LIGHT BLANKET	93.39	134.62	217.97			445.98
8830-1810	DIST - STREET LIGHT BLANKET	93.39	134.62	217.97			445.98
8830-1810	DIST - STREET LIGHT BLANKET	274.19	159.56	518.15		-	951.90
8830-1810	DIST - STREET LIGHT BLANKET	-	-	(0.00)	-	-	(0.00)
8830-1810	DIST - STREET LIGHT BLANKET	641.30	629.83	2,219.42		-	3,490.55
8830-1810	DIST - STREET LIGHT BLANKET	130.56	141.67	267.39		-	539.62
8830-1810	DIST - STREET LIGHT BLANKET	50.13	188.85	125.82		-	364.80
8830-1810	DIST - STREET LIGHT BLANKET	160.92	306.73	516.73		-	984.38
8830-1810	DIST - STREET LIGHT BLANKET	107.28	306.73	1,234.52		-	1,648.53
8830-1810	DIST - STREET LIGHT BLANKET	107.28	147.23	749.03		-	1,003.54
8830-1810	DIST - STREET LIGHT BLANKET	160.92	161.01	941.08		-	1,263.01
8830-1810	DIST - STREET LIGHT BLANKET	160.92	291.72	1,339.28		-	1,791.92
8830-1810	DIST - STREET LIGHT BLANKET	160.92	-	529.94		-	690.86
8830-1810	DIST - STREET LIGHT BLANKET	107.28	306.73	487.07		-	901.08
8830-1810	DIST - STREET LIGHT BLANKET	134.10	145.13	516.87		-	796.10
8830-1810	DIST - STREET LIGHT BLANKET	107.28	306.67	487.05		-	901.00
8830-1810	DIST - STREET LIGHT BLANKET	107.28	192.13	437.09		-	736.50
8830-1810	DIST - STREET LIGHT BLANKET	107.28	306.73	487.07		-	901.08
8830-1810	DIST - STREET LIGHT BLANKET	150.39	5,888.23	(921.91)		-	5,116.71
8830-1810	DIST - STREET LIGHT BLANKET	107.28	153.35	420.17		-	680.80
8830-1810	DIST - STREET LIGHT BLANKET	277.61	709.61	635.47	772.91	-	2,395.60
8830-1810	DIST - STREET LIGHT BLANKET	-	1,105.85	545.10		-	1,650.95
8830-1810	DIST - STREET LIGHT BLANKET	195.32	-	333.32		-	528.64
8830-1810	DIST - STREET LIGHT BLANKET	601.56	1,061.93	2,704.26	535.67	-	4,903.42
8830-1810	DIST - STREET LIGHT BLANKET	107.28	256.21	465.04		-	828.53
8830-1810	DIST - STREET LIGHT BLANKET	134.10	874.26	381.33		-	1,389.69
8830-1810	DIST - STREET LIGHT BLANKET	107.28	512.89	112.05		-	732.22
8830-1810	DIST - STREET LIGHT BLANKET	67.05	365.32	159.35		-	591.72
8830-1810	DIST - STREET LIGHT BLANKET	80.42	157.26	-		-	237.68
8830-1810	DIST - STREET LIGHT BLANKET	160.92	149.14	-		-	310.06
8830-1810	DIST - STREET LIGHT BLANKET	50.13	147.92	146.26		-	344.31
8830-1810	DIST - STREET LIGHT BLANKET	75.19	152.51	191.75		-	419.45
8830-1810	DIST - STREET LIGHT BLANKET	217.44	307.42	500.29		-	1,025.15
8830-1810	DIST - STREET LIGHT BLANKET	281.58	269.50	1,002.53	256.00	-	1,809.61
8830-1810	DIST - STREET LIGHT BLANKET	107.28	306.06	484.46		-	897.80
8830-1810	DIST - STREET LIGHT BLANKET	-	-	-		-	-
8830-1810	DIST - STREET LIGHT BLANKET	160.91	898.28	476.70		-	1,535.89
8830-1810	DIST - STREET LIGHT BLANKET	80.46	437.41	-		-	517.87
8830-1810	DIST - STREET LIGHT BLANKET	120.69	154.07	451.24		-	726.00
8830-1810	DIST - STREET LIGHT BLANKET	160.92	158.00	578.28		-	897.20
8830-1810	DIST - STREET LIGHT BLANKET	67.05	332.57	372.44		-	772.06
8830-1810	DIST - STREET LIGHT BLANKET	300.78	177.46	704.84		-	1,183.08
8830-1810	DIST - STREET LIGHT BLANKET	191.82	191.69	709.24	380.00	-	1,472.75
8830-1810	DIST - STREET LIGHT BLANKET	53.64	130.06	113.34		-	297.04
8830-1810	DIST - STREET LIGHT BLANKET	146.04	130.74	248.49		-	525.27
8830-1810	DIST - STREET LIGHT BLANKET	50.13	122.16	106.08		-	278.37
8830-1810	DIST - STREET LIGHT BLANKET	134.10	157.18	196.79		-	488.07
8830-1810	DIST - STREET LIGHT BLANKET	100.26	159.50	189.35		-	449.11
8830-1810	DIST - STREET LIGHT BLANKET	168.00	401.92	353.53		-	923.45
8830-1810	DIST - STREET LIGHT BLANKET	-	181.00	89.22		-	270.22
8830-1810	DIST - STREET LIGHT BLANKET	67.05	130.06	190.53		-	387.64
8830-1810	DIST - STREET LIGHT BLANKET	80.46	167.09	162.48		-	410.03
8830-1810	DIST - STREET LIGHT BLANKET	-	159.48	41.95		-	201.43
8830-1810	DIST - STREET LIGHT BLANKET	67.05	169.40	160.39		-	396.84
8830-1810	DIST - STREET LIGHT BLANKET	-	56.53	14.87		-	71.40
8830-1810	DIST - STREET LIGHT BLANKET	107.28	176.49	295.28		-	579.05
8830-1810	DIST - STREET LIGHT BLANKET	200.52	130.63	380.74		-	711.89
8830-1810	DIST - STREET LIGHT BLANKET	-	128.54	33.82		-	162.36
8830-1810	DIST - STREET LIGHT BLANKET	-	130.63	34.36		-	164.99
8830-1810	DIST - STREET LIGHT BLANKET	480.90	193.18	882.18		-	1,556.26
8830-1810	DIST - STREET LIGHT BLANKET	150.39	177.05	498.18	380.00	-	1,205.62
8830-1810	DIST - STREET LIGHT BLANKET	168.00	247.88	290.20		-	706.08
8830-1810	DIST - STREET LIGHT BLANKET	200.52	209.58	346.38		-	756.48
8830-1810	DIST - STREET LIGHT BLANKET	150.39	209.58	259.79		-	619.76
8830-1810	DIST - STREET LIGHT BLANKET	120.69	337.44	352.89		-	811.02
8830-1810	DIST - STREET LIGHT BLANKET	160.92	410.60	453.69		-	1,025.21
8830-1810	DIST - STREET LIGHT BLANKET	1,042.18	-	201.90		409.08	1,653.16
8830-1810	DIST - STREET LIGHT BLANKET	663.08	-	-		221.04	884.12
8830-1810	DIST - STREET LIGHT BLANKET	(100.26)	-	-		100.26	-
8830-1810	DIST - STREET LIGHT BLANKET	(53.64)	-	-		160.92	107.28
8830-1810	DIST - STREET LIGHT BLANKET	(75.20)	168.54	-		150.39	243.73
8830-1810	DIST - STREET LIGHT BLANKET	(53.64)	158.04	-		160.92	265.32
8830-1810	DIST - STREET LIGHT BLANKET	(53.64)	163.75	-		160.92	271.03
8830-1810	DIST - STREET LIGHT BLANKET	(876.81)	-	(350.00)		876.81	(350.00)
8830-1810	DIST - STREET LIGHT BLANKET	(107.28)	-	-		107.28	-
8830-1810	DIST - STREET LIGHT BLANKET	-	859.96	368.02		-	1,227.98
8830-1810	DIST - STREET LIGHT BLANKET	-	-	5.13		-	17.12
8830-1810	DIST - STREET LIGHT BLANKET	50.13	407.55	-	11.99	-	457.68
8830-1810	DIST - STREET LIGHT BLANKET	80.46	-	-	18.53	-	98.99
8830-1810	DIST - STREET LIGHT BLANKET	160.92	-	-	-	-	160.92
8830-1810	DIST - STREET LIGHT BLANKET	257.78	-	-	-	-	257.78
8830-1810	DIST - STREET LIGHT BLANKET	395.13	-	-	-	-	395.13
8830-1811	DIST - PUBLIC REQUIREMENTS BLANKET	-	-	540.00	-	-	1,277.32
8830-1811	DIST - PUBLIC REQUIREMENTS BLANKET	2,616.88	868.36	330.00	-	-	5,685.20
8830-1811	DIST - PUBLIC REQUIREMENTS BLANKET	14,294.61	6,100.33	3,220.00	7,613.06	-	43,407.26
8830-1811	DIST - PUBLIC REQUIREMENTS BLANKET	-	-	330.00	54.13	-	384.13
8830-1811	DIST - PUBLIC REQUIREMENTS BLANKET	102.99	-	-	320.26	-	423.25
8830-1811	DIST - PUBLIC REQUIREMENTS BLANKET	487.00	-	-	1,026.11	-	1,789.48
8830-1811	DIST - PUBLIC REQUIREMENTS BLANKET	2,187.70	766.74	42.80	3,851.06	253.24	6,848.30
8830-1811	DIST - PUBLIC REQUIREMENTS BLANKET	1,626.55	1,127.44	-	3,670.15	536.39	6,960.53
8830-1811	DIST - PUBLIC REQUIREMENTS BLANKET	411.97	-	-	803.13	-	1,215.10
8830-1811	DIST - PUBLIC REQUIREMENTS BLANKET	475.20	279.95	380.00	1,057.13	-	2,192.28
8830-1811	DIST - PUBLIC REQUIREMENTS BLANKET	389.60	-	-	788.36	-	544.07
8830-1811	DIST - PUBLIC REQUIREMENTS BLANKET	411.97	-	85.50	748.23	-	1,245.70
8830-1811	DIST - PUBLIC REQUIREMENTS BLANKET	1,423.95	193.39	-	2,542.49	-	4,159.83
8830-1812	DIST - DAMAGE & FAILURE BLANKET	-	-	-	-	-	-
8830-1812	DIST - DAMAGE & FAILURE BLANKET	-	-	17.74	-	-	17.74
8830-1812	DIST - DAMAGE & FAILURE BLANKET	146.43	-	1,211.25	-	-	1,825.63
8830-1812	DIST - DAMAGE & FAILURE BLANKET	171.66	115.99	-	289.63	-	577.28
8830-1812	DIST - DAMAGE & FAILURE BLANKET	73.22	199.50	-	163.99	-	436.71
8830-1812	DIST - DAMAGE & FAILURE BLANKET	265.42	-	-	617.52	-	882.94
8830-1812	DIST - DAMAGE & FAILURE BLANKET	186.78	111.87	190.00	340.93	-	829.58
8830-1812	DIST - DAMAGE & FAILURE BLANKET	2,333.12	835.97	-	4,649.93	-	7,819.02
8830-1812	DIST - DAMAGE & FAILURE BLANKET	1,171.44	100.38	-	2,234.16	-	3,505.98

Docket No. DE 19-064
Exhibit 21
Attachment JED-3a

8830-1812	DIST- DAMAGE & FAILURE BLANKET	439.29				825.96		1,265.25
8830-1812	DIST- DAMAGE & FAILURE BLANKET	0.00	-			(0.00)		0.00
8830-1812	DIST- DAMAGE & FAILURE BLANKET	373.56	144.20	380.00		842.91		1,740.67
8830-1812	DIST- DAMAGE & FAILURE BLANKET	4,980.53	355.69	-	-	9,476.48	(14,812.70)	-
8830-1812	DIST- DAMAGE & FAILURE BLANKET	333.62	107.25			661.05		1,101.92
8830-1812	DIST- DAMAGE & FAILURE BLANKET	439.29	179.58	1,916.41	1,916.41	3,499.15		7,950.84
8830-1812	DIST- DAMAGE & FAILURE BLANKET	609.56	155.87	380.00		1,788.40		2,933.83
8830-1812	DIST- DAMAGE & FAILURE BLANKET	186.78	97.09		380.00	544.36		1,208.23
8830-1812	DIST- DAMAGE & FAILURE BLANKET	236.00	97.46	380.00		586.25		1,299.71
8830-1812	DIST- DAMAGE & FAILURE BLANKET	186.78	97.46			371.97		656.21
8830-1812	DIST- DAMAGE & FAILURE BLANKET	3,456.75	576.09	660.00		5,963.50	(4,299.35)	6,356.99
8830-1812	DIST- DAMAGE & FAILURE BLANKET	186.78	90.31			338.00	-	615.09
8830-1812	DIST- DAMAGE & FAILURE BLANKET	577.26	270.93	979.50		1,107.74	-	2,935.43
8830-1812	DIST- DAMAGE & FAILURE BLANKET	853.20	141.15	380.00		1,607.85	-	2,982.20
8830-1812	DIST- DAMAGE & FAILURE BLANKET	702.54	481.22			1,301.53	-	2,485.29
8830-1812	DIST- DAMAGE & FAILURE BLANKET	200.52	112.50			366.19		679.21
8830-1812	DIST- DAMAGE & FAILURE BLANKET	2,101.54	570.35	385.00		4,257.58	-	7,314.47
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,726.38	157.53			2,979.74		4,863.65
8830-1812	DIST- DAMAGE & FAILURE BLANKET	2,411.19	603.21	330.00		4,243.44		7,587.84
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,569.36	28,907.60	256.00		8,842.68		39,575.64
8830-1812	DIST- DAMAGE & FAILURE BLANKET	160.92	39.98			275.91		476.81
8830-1812	DIST- DAMAGE & FAILURE BLANKET	366.24	246.78			676.82		1,289.84
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,970.40	313.86		220.00	3,429.51		5,933.77
8830-1812	DIST- DAMAGE & FAILURE BLANKET	2,963.36	952.03			5,260.13	(1,805.65)	7,369.87
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,788.23	524.92		640.00	3,586.96	-	6,540.11
8830-1812	DIST- DAMAGE & FAILURE BLANKET	332.86	150.00	256.00		600.03		1,338.89
8830-1812	DIST- DAMAGE & FAILURE BLANKET	254.79	48.39			433.68		736.86
8830-1812	DIST- DAMAGE & FAILURE BLANKET	160.92	147.44			298.82		607.18
8830-1812	DIST- DAMAGE & FAILURE BLANKET		87.85					87.85
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,807.58	573.11			6,927.86	-	9,308.55
8830-1812	DIST- DAMAGE & FAILURE BLANKET	575.46	59.12	380.00		1,912.26	-	2,926.84
8830-1812	DIST- DAMAGE & FAILURE BLANKET	2,772.48	698.79	604.00		9,417.85	-	13,493.12
8830-1812	DIST- DAMAGE & FAILURE BLANKET	231.60	38.12			519.46	-	789.18
8830-1812	DIST- DAMAGE & FAILURE BLANKET	100.26				288.80		389.06
8830-1812	DIST- DAMAGE & FAILURE BLANKET	401.04	63.48			1,315.35		1,779.87
8830-1812	DIST- DAMAGE & FAILURE BLANKET	808.32	2.84		531.00	3,064.57	-	4,406.73
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,669.07	318.14	405.00		5,850.88	-	8,243.09
8830-1812	DIST- DAMAGE & FAILURE BLANKET	175.79	75.94			825.55	-	1,077.28
8830-1812	DIST- DAMAGE & FAILURE BLANKET	3,535.60	285.95	5.00		12,083.39	-	15,909.94
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,098.85	113.25	256.00		3,766.10	-	5,234.20
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,510.59	38.32			5,126.07	-	6,674.98
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,003.73	412.69	330.00		3,578.18	-	5,324.60
8830-1812	DIST- DAMAGE & FAILURE BLANKET	708.91	301.29			2,529.20	-	3,539.40
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,855.51	411.82	380.00		5,315.38	-	7,962.71
8830-1812	DIST- DAMAGE & FAILURE BLANKET	851.31	42.40			2,897.93		3,791.64
8830-1812	DIST- DAMAGE & FAILURE BLANKET	767.28	782.67	1,935.00		2,936.59		6,421.54
8830-1812	DIST- DAMAGE & FAILURE BLANKET	764.66	1,822.04	3,380.85		3,228.22		9,195.77
8830-1812	DIST- DAMAGE & FAILURE BLANKET	200.52	78.65			712.54		991.71
8830-1812	DIST- DAMAGE & FAILURE BLANKET	538.38	388.82			1,990.59		2,917.79
8830-1812	DIST- DAMAGE & FAILURE BLANKET	307.80	134.63			893.65		1,336.08
8830-1812	DIST- DAMAGE & FAILURE BLANKET	2,759.55	51.20	329.71		9,429.63		12,570.09
8830-1812	DIST- DAMAGE & FAILURE BLANKET	268.20	110.32			826.92	-	1,205.44
8830-1812	DIST- DAMAGE & FAILURE BLANKET	100.26	108.54			386.45		595.25
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,788.45	474.00	832.00		6,108.73	(8,033.71)	1,169.47
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,244.92				2,404.39		3,649.31
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,097.38	216.18		237.50	3,640.10	-	5,191.16
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,009.63	16.62			2,995.75	-	4,022.00
8830-1812	DIST- DAMAGE & FAILURE BLANKET	283.34	121.45			833.79	-	1,238.58
8830-1812	DIST- DAMAGE & FAILURE BLANKET	953.85	271.49	25.00	380.00	3,344.69	-	4,975.03
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,706.30	122.07			3,968.33		5,796.70
8830-1812	DIST- DAMAGE & FAILURE BLANKET	882.09	20.22			8.82	-	911.13
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,256.76	80.30		380.00	35.02	-	1,752.08
8830-1812	DIST- DAMAGE & FAILURE BLANKET	701.82	109.66			47.83	-	859.31
8830-1812	DIST- DAMAGE & FAILURE BLANKET	2,588.44	353.43	7,384.00		154.16	-	10,480.03
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,758.60	409.20			178.48	-	2,346.28
8830-1812	DIST- DAMAGE & FAILURE BLANKET	100.26	90.66				-	190.92
8830-1812	DIST- DAMAGE & FAILURE BLANKET	252.00	54.16			23.63	-	329.79
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,519.65	118.86	384.00		51.85	-	2,074.36
8830-1812	DIST- DAMAGE & FAILURE BLANKET	3,026.05	110.28	32.00	440.00	142.91	-	3,751.24
8830-1812	DIST- DAMAGE & FAILURE BLANKET	254.16	94.64			41.27	-	390.07
8830-1812	DIST- DAMAGE & FAILURE BLANKET	160.92	89.79			39.17	-	289.88
8830-1812	DIST- DAMAGE & FAILURE BLANKET	2,484.96	28,962.98		357.50	7,892.34	-	39,697.78
8830-1812	DIST- DAMAGE & FAILURE BLANKET		339.84	1,522.20				1,862.04
8830-1812	DIST- DAMAGE & FAILURE BLANKET	647.39	487.05	85.47			-	1,219.91
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,424.90	731.51				-	2,156.41
8830-1812	DIST- DAMAGE & FAILURE BLANKET	2,944.37	542.16	385.00		396.83	-	4,268.36
8830-1812	DIST- DAMAGE & FAILURE BLANKET	563.21						563.21
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,137.61	111.00	380.00		123.42		1,752.03
8830-1812	DIST- DAMAGE & FAILURE BLANKET	758.58	262.70			92.36		1,113.64
8830-1812	DIST- DAMAGE & FAILURE BLANKET		177.47					177.47
8830-1812	DIST- DAMAGE & FAILURE BLANKET	3,843.21	1.20			9,723.64	-	13,568.05
8830-1812	DIST- DAMAGE & FAILURE BLANKET		5.99					5.99
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,349.87	87.15		593.75	227.56		2,258.33
8830-1812	DIST- DAMAGE & FAILURE BLANKET	5,090.91						5,090.91
8830-1812	DIST- DAMAGE & FAILURE BLANKET	335.69	68.70			29.40		433.79
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,298.08	821.61					2,119.69
8830-1812	DIST- DAMAGE & FAILURE BLANKET	95.91	90.33			23.77		210.01
8830-1812	DIST- DAMAGE & FAILURE BLANKET	3,166.89	357.80	4,190.45	3,362.25	5,008.40	150.00	16,235.79
8830-1812	DIST- DAMAGE & FAILURE BLANKET	100.26	90.33			23.77		214.36
8830-1812	DIST- DAMAGE & FAILURE BLANKET	191.82	187.32			49.29		428.43
8830-1812	DIST- DAMAGE & FAILURE BLANKET	797.79	110.58					908.37
8830-1812	DIST- DAMAGE & FAILURE BLANKET	107.28	99.32			186.88	-	393.48
8830-1812	DIST- DAMAGE & FAILURE BLANKET	200.52	103.47			373.60	-	677.59
8830-1812	DIST- DAMAGE & FAILURE BLANKET	848.74	91.60			1,517.63	-	2,457.97
8830-1812	DIST- DAMAGE & FAILURE BLANKET	671.37	160.50	380.00		1,336.06	-	2,547.93
8830-1812	DIST- DAMAGE & FAILURE BLANKET	50.13	45.96			99.41	-	195.50
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,736.71	331.62	380.00		3,280.78	-	5,729.11
8830-1812	DIST- DAMAGE & FAILURE BLANKET			(1,200.00)		0.00		-
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,400.87	317.88			2,566.86	1,200.00	4,285.61
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,677.68	47.61			2,934.90		4,660.19
8830-1812	DIST- DAMAGE & FAILURE BLANKET	389.34	84.33			711.80		1,185.47
8830-1812	DIST- DAMAGE & FAILURE BLANKET	215.28				375.00		590.28
8830-1812	DIST- DAMAGE & FAILURE BLANKET	526.34	302.38	6,049.95		3,250.43	4,750.00	14,879.10
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,002.60	89.68		2,893.05	2,724.45		6,709.78
8830-1812	DIST- DAMAGE & FAILURE BLANKET	814.62				1,419.00		2,233.62

8830-1812	DIST- DAMAGE & FAILURE BLANKET	874.73	181.00	51.33	1,603.27	100.26	2,810.59
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,439.69		1,884.25	3,119.81		6,443.75
8830-1812	DIST- DAMAGE & FAILURE BLANKET	710.12	104.25		1,278.56		2,092.93
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,311.57		824.00	2,572.99		4,708.56
8830-1812	DIST- DAMAGE & FAILURE BLANKET	810.98	440.62	4,657.34	3,298.11		9,207.05
8830-1812	DIST- DAMAGE & FAILURE BLANKET	340.61	112.93		632.60		1,086.14
8830-1812	DIST- DAMAGE & FAILURE BLANKET	604.89	95.06		1,369.50	-	2,069.45
8830-1812	DIST- DAMAGE & FAILURE BLANKET	361.44	73.00		629.59		1,064.03
8830-1812	DIST- DAMAGE & FAILURE BLANKET	2,223.54		760.00	5,063.34	-	8,046.88
8830-1812	DIST- DAMAGE & FAILURE BLANKET	50.13	339.84	3,885.17	1,106.71		5,381.85
8830-1812	DIST- DAMAGE & FAILURE BLANKET	3,679.82	637.18		6,856.23	-	11,173.23
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,599.92	760.00	6,500.98	8,786.88	-	25,964.02
8830-1812	DIST- DAMAGE & FAILURE BLANKET	2,813.47		3,554.87	9,971.22	-	16,339.56
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,608.10	550.38	405.00	5,356.97	-	7,920.45
8830-1812	DIST- DAMAGE & FAILURE BLANKET	452.52	175.06	780.00	1,671.20	-	3,078.78
8830-1812	DIST- DAMAGE & FAILURE BLANKET		90.33		35.99		126.32
8830-1812	DIST- DAMAGE & FAILURE BLANKET	401.04	250.12	380.00	1,503.34		2,534.50
8830-1812	DIST- DAMAGE & FAILURE BLANKET		182.49		89.95		272.44
8830-1812	DIST- DAMAGE & FAILURE BLANKET	107.28	118.02		380.20	-	605.50
8830-1812	DIST- DAMAGE & FAILURE BLANKET		188.19		92.76		280.95
8830-1812	DIST- DAMAGE & FAILURE BLANKET	102.99	184.19		411.06	-	698.24
8830-1812	DIST- DAMAGE & FAILURE BLANKET	524.58			1,631.24	-	2,155.82
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,182.82		1,004.00	3,958.05		6,144.87
8830-1812	DIST- DAMAGE & FAILURE BLANKET	466.40			1,450.32		1,916.72
8830-1812	DIST- DAMAGE & FAILURE BLANKET	690.52	522.31	403.75	2,545.99		4,162.57
8830-1812	DIST- DAMAGE & FAILURE BLANKET	2,946.89			9,163.68		12,110.57
8830-1812	DIST- DAMAGE & FAILURE BLANKET	387.99			1,206.50		1,594.49
8830-1812	DIST- DAMAGE & FAILURE BLANKET	672.00	61.86		2,122.35		2,856.21
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,269.87	920.50		3,948.80		6,139.17
8830-1812	DIST- DAMAGE & FAILURE BLANKET	160.92			500.40		661.32
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,108.02	118.69		3,529.49		4,996.20
8830-1812	DIST- DAMAGE & FAILURE BLANKET			330.00	54.13		384.13
8830-1812	DIST- DAMAGE & FAILURE BLANKET	714.22			2,220.95		2,935.17
8830-1812	DIST- DAMAGE & FAILURE BLANKET	206.71	90.33		666.56		963.60
8830-1812	DIST- DAMAGE & FAILURE BLANKET	408.71	165.16	380.00	1,483.22		2,437.09
8830-1812	DIST- DAMAGE & FAILURE BLANKET	971.17			3,019.96		3,991.13
8830-1812	DIST- DAMAGE & FAILURE BLANKET	973.75	267.72		3,160.02		4,401.49
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,219.50	158.30		3,870.19		5,247.99
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,075.96	898.46		3,788.70		5,763.12
8830-1812	DIST- DAMAGE & FAILURE BLANKET	578.88	5,608.34	(112.00)	3,462.48	384.00	9,921.70
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,862.51	703.00	445.81	3,140.13	-	6,151.45
8830-1812	DIST- DAMAGE & FAILURE BLANKET	702.24	349.50	3,092.75	4,846.60	1,100.00	14,707.40
8830-1812	DIST- DAMAGE & FAILURE BLANKET	102.99		712.36	476.46		1,291.81
8830-1812	DIST- DAMAGE & FAILURE BLANKET		52.60		13.84		66.44
8830-1812	DIST- DAMAGE & FAILURE BLANKET			3,730.50	817.96		4,548.46
8830-1812	DIST- DAMAGE & FAILURE BLANKET	929.03	90.33		1,380.77	-	2,400.13
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,168.48			1,706.75	-	2,875.23
8830-1812	DIST- DAMAGE & FAILURE BLANKET	3,372.44	865.00	1,514.15	5,275.58		17,294.28
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,737.39	593.28		2,697.36		5,028.03
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,040.20	57.56		1,534.86		2,632.62
8830-1812	DIST- DAMAGE & FAILURE BLANKET	421.24	168.92		684.72		1,274.88
8830-1812	DIST- DAMAGE & FAILURE BLANKET	4,199.71	879.35	21,125.44	10,025.51	-	36,230.01
8830-1812	DIST- DAMAGE & FAILURE BLANKET	2,017.62	435.51	15.00	3,130.38		5,978.51
8830-1812	DIST- DAMAGE & FAILURE BLANKET	200.52	12.56	380.00	412.01	-	1,005.09
8830-1812	DIST- DAMAGE & FAILURE BLANKET		93.01		25.02		118.03
8830-1812	DIST- DAMAGE & FAILURE BLANKET	767.87	401.47		1,334.16	-	2,503.50
8830-1812	DIST- DAMAGE & FAILURE BLANKET	402.29			587.61		989.90
8830-1812	DIST- DAMAGE & FAILURE BLANKET	100.26	116.15		177.69		394.10
8830-1812	DIST- DAMAGE & FAILURE BLANKET			821.00	180.01		1,001.01
8830-1812	DIST- DAMAGE & FAILURE BLANKET	2,772.17	145.79		4,087.53		7,005.49
8830-1812	DIST- DAMAGE & FAILURE BLANKET	405.26	63.77		956.84	-	1,425.87
8830-1812	DIST- DAMAGE & FAILURE BLANKET	150.39	135.41		384.47	-	670.27
8830-1812	DIST- DAMAGE & FAILURE BLANKET	67.05	365.58	(330.00)	212.00	330.00	644.63
8830-1812	DIST- DAMAGE & FAILURE BLANKET	100.26	136.45		268.47		505.18
8830-1812	DIST- DAMAGE & FAILURE BLANKET	977.77	56.53		2,164.21	-	3,198.51
8830-1812	DIST- DAMAGE & FAILURE BLANKET	554.69	27.30	380.00	1,377.20		2,339.19
8830-1812	DIST- DAMAGE & FAILURE BLANKET	225.59	158.74		565.06		949.39
8830-1812	DIST- DAMAGE & FAILURE BLANKET	732.79	9.10		1,702.22		2,444.11
8830-1812	DIST- DAMAGE & FAILURE BLANKET	107.28	91.15		272.83		471.26
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,076.85	76.41		2,518.03		3,671.29
8830-1812	DIST- DAMAGE & FAILURE BLANKET	4,355.74	958.11	25.00	10,395.08	-	15,733.93
8830-1812	DIST- DAMAGE & FAILURE BLANKET	339.87	117.57	380.00	1,001.31		1,838.75
8830-1812	DIST- DAMAGE & FAILURE BLANKET	834.33	73.00	(220.00)	1,926.90	220.00	2,834.23
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,814.19	1,115.97	390.00	3,838.14	-	7,158.30
8830-1812	DIST- DAMAGE & FAILURE BLANKET	3,140.24	(50.19)	(1,024.00)	7,127.52	1,024.00	10,217.57
8830-1812	DIST- DAMAGE & FAILURE BLANKET	2,405.84	87.37	385.00	2,202.55		5,080.76
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,422.07			3,298.72		4,720.79
8830-1812	DIST- DAMAGE & FAILURE BLANKET	134.10	105.09		338.71		577.90
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,025.40	135.82		2,436.69		3,597.91
8830-1812	DIST- DAMAGE & FAILURE BLANKET	983.13			1,698.25	-	2,681.38
8830-1812	DIST- DAMAGE & FAILURE BLANKET	751.96	165.38		1,342.45	-	2,259.79
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,704.96	361.67	25.00	3,051.00	-	5,142.63
8830-1812	DIST- DAMAGE & FAILURE BLANKET	2,129.43	780.31		3,883.68	-	6,793.42
8830-1812	DIST- DAMAGE & FAILURE BLANKET	784.73	92.60		1,355.54	-	2,232.87
8830-1812	DIST- DAMAGE & FAILURE BLANKET	951.92	84.58		1,680.55	-	2,717.05
8830-1812	DIST- DAMAGE & FAILURE BLANKET	802.08	85.25	3,819.46	1,422.00		6,128.79
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,515.19			2,779.96		4,675.15
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,507.27	608.29		2,748.08		4,863.64
8830-1812	DIST- DAMAGE & FAILURE BLANKET	702.24	107.58		1,213.05		2,022.87
8830-1812	DIST- DAMAGE & FAILURE BLANKET	200.52	331.00	380.00	509.00		1,420.52
8830-1812	DIST- DAMAGE & FAILURE BLANKET	398.77	198.43		688.83		1,286.03
8830-1812	DIST- DAMAGE & FAILURE BLANKET	922.06	95.55	403.75	1,806.45		3,227.81
8830-1812	DIST- DAMAGE & FAILURE BLANKET	238.12	70.42		411.33		719.87
8830-1812	DIST- DAMAGE & FAILURE BLANKET	543.79	85.54		975.95		1,605.28
8830-1812	DIST- DAMAGE & FAILURE BLANKET	561.96			502.68		1,064.64
8830-1812	DIST- DAMAGE & FAILURE BLANKET	67.05	54.75		139.26		261.06
8830-1812	DIST- DAMAGE & FAILURE BLANKET	611.82	161.36		1,125.91		1,899.09
8830-1812	DIST- DAMAGE & FAILURE BLANKET	739.43	19.02	380.00	1,342.25		2,480.70
8830-1812	DIST- DAMAGE & FAILURE BLANKET	996.18	505.76	405.00	1,731.50		3,638.44
8830-1812	DIST- DAMAGE & FAILURE BLANKET	605.63			1,046.17		1,651.80
8830-1812	DIST- DAMAGE & FAILURE BLANKET	205.65	150.33		419.57		775.55
8830-1812	DIST- DAMAGE & FAILURE BLANKET	239.77	149.98	380.00	414.18		1,183.93
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,870.98	63.48		3,231.94		5,166.40
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,441.15	128.47		2,544.42		4,114.04
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,790.07	362.77	5.00			2,157.84

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Exhibit 21
Attachment JED-3a

8830-1812	DIST- DAMAGE & FAILURE BLANKET	-		403.75	3,249.56			3,653.31
8830-1812	DIST- DAMAGE & FAILURE BLANKET	325.33						325.33
8830-1812	DIST- DAMAGE & FAILURE BLANKET		88.86		561.97			650.83
8830-1812	DIST- DAMAGE & FAILURE BLANKET	536.52						536.52
8830-1812	DIST- DAMAGE & FAILURE BLANKET		274.80		380.00	926.78		1,581.58
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,127.92				1,948.37		3,076.29
8830-1812	DIST- DAMAGE & FAILURE BLANKET	(100.26)	73.00				100.26	73.00
8830-1812	DIST- DAMAGE & FAILURE BLANKET	(0.01)					3,417.77	3,417.76
8830-1812	DIST- DAMAGE & FAILURE BLANKET		107.62	5.00		48.19		160.81
8830-1812	DIST- DAMAGE & FAILURE BLANKET		154.91			66.57		221.48
8830-1812	DIST- DAMAGE & FAILURE BLANKET	636.89	356.39					993.28
8830-1812	DIST- DAMAGE & FAILURE BLANKET	131.34	41.91					173.25
8830-1812	DIST- DAMAGE & FAILURE BLANKET	644.56	134.39					778.95
8830-1812	DIST- DAMAGE & FAILURE BLANKET	107.28	102.25					209.53
8830-1812	DIST- DAMAGE & FAILURE BLANKET	50.13	75.31					125.44
8830-1812	DIST- DAMAGE & FAILURE BLANKET	2,542.76	518.72	5,351.72				8,413.20
8830-1812	DIST- DAMAGE & FAILURE BLANKET	170.05						170.05
8830-1812	DIST- DAMAGE & FAILURE BLANKET	451.17	107.54					558.71
8830-1812	DIST- DAMAGE & FAILURE BLANKET	2,186.64	1,226.82	522.50				3,935.96
8830-1812	DIST- DAMAGE & FAILURE BLANKET	568.95						568.95
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,318.71	119.60					1,438.31
8830-1812	DIST- DAMAGE & FAILURE BLANKET	918.88						918.88
8830-1812	DIST- DAMAGE & FAILURE BLANKET	1,139.66						1,139.66
8830-1812	DIST- DAMAGE & FAILURE BLANKET	434.91						434.91
8830-1812	DIST- DAMAGE & FAILURE BLANKET	503.53						503.53
8830-1812	DIST- DAMAGE & FAILURE BLANKET			2,627.20				2,627.20
8830-1813	DIST- ASSET REPLACEMENT BLANKET	2,812.15	2,390.85	1,153.89		9,822.55	-	16,179.44
8830-1813	DIST- ASSET REPLACEMENT BLANKET	4,882.41	2,158.22	1,781.50		15,587.38	-	24,409.51
8830-1813	DIST- ASSET REPLACEMENT BLANKET	3,459.39				9,105.69		12,565.08
8830-1813	DIST- ASSET REPLACEMENT BLANKET	401.04				1,155.21		1,556.25
8830-1813	DIST- ASSET REPLACEMENT BLANKET	1,366.68	145.56	165.00		2,704.06	-	4,381.30
8830-1813	DIST- ASSET REPLACEMENT BLANKET		2,540.63	55,216.82		15,709.03		73,466.48
8830-1813	DIST- ASSET REPLACEMENT BLANKET	250.65	340.10	596.00		911.65	-	2,098.40
8830-1813	DIST- ASSET REPLACEMENT BLANKET	451.17	2,459.68	21,671.51		4,093.38	(2,459.68)	26,216.06
8830-1813	DIST- ASSET REPLACEMENT BLANKET			21.80		1.43	-	23.23
8830-1813	DIST- ASSET REPLACEMENT BLANKET	1,618.68	255.00			349.29	-	2,222.97
8830-1813	DIST- ASSET REPLACEMENT BLANKET	58.44						58.44
8830-1813	DIST- ASSET REPLACEMENT BLANKET	253.24				451.87		705.11
8830-1813	DIST- ASSET REPLACEMENT BLANKET	442.07		26.16		1,381.83	-	1,850.06
8830-1813	DIST- ASSET REPLACEMENT BLANKET	2,304.89		3,012.70		5,987.09		11,304.68
8830-1813	DIST- ASSET REPLACEMENT BLANKET	651.69	60.36	6,878.15		2,988.71	600.00	11,178.91
8830-1813	DIST- ASSET REPLACEMENT BLANKET	265.63	165.21			528.54		959.38
8830-1813	DIST- ASSET REPLACEMENT BLANKET	1,924.56	492.72	(330.00)		4,593.94	330.00	7,011.22
8830-1813	DIST- ASSET REPLACEMENT BLANKET	1,215.39	56.17			1,790.38		3,061.94
8830-1813	DIST- ASSET REPLACEMENT BLANKET	940.54	83.64				383.64	1,407.82
8830-1813	DIST- ASSET REPLACEMENT BLANKET	0.00				1,660.49		1,660.49
8830-1813	DIST- ASSET REPLACEMENT BLANKET			-		0.00		0.00
8830-1813	DIST- ASSET REPLACEMENT BLANKET			427.06		147.22	(406.30)	167.98
8830-1813	DIST- ASSET REPLACEMENT BLANKET	7,735.79				711.64		8,447.43
8830-1813	DIST- ASSET REPLACEMENT BLANKET	411.98		4,383.72		1,223.34		6,019.04
8830-1813	DIST- ASSET REPLACEMENT BLANKET	884.11				381.81	221.04	1,486.96
8830-1813	DIST- ASSET REPLACEMENT BLANKET	487.00						487.00
8830-1813	DIST- ASSET REPLACEMENT BLANKET	233.76						233.76
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET					0.00	-	0.00
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET	-		-		(0.00)	-	(0.00)
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET	1,691.80		43.33	485.19	2,449.97	(1,270.00)	3,761.39
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET	5,642.47		1,802.33	1,018.57	8,724.46	(37,304.05)	(20,116.22)
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET	1,068.06	1,200.49	201.42	1,771.25	763.96	(15,591.86)	(10,576.85)
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET				-	(0.00)	-	(0.00)
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET	210.01	5.36	98.92	2,888.42	918.53	(1,222.76)	2,898.48
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET	-			-	(0.00)	-	(0.00)
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET	595.14		370.30	376.00	1,072.57	(359.20)	2,080.68
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET			270.03	512.88	204.58	(312.10)	675.39
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET			440.31	376.00	212.81	(453.40)	583.04
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET	75.19	13.89	1,180.45	335.74	525.20	(473.90)	1,657.23
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET	100.26		2,224.69	670.11	601.17	(1,039.68)	2,564.91
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET	22.57	57.14	1,226.30	229.48	557.70	(2,520.84)	(427.65)
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET			3,128.78	211.18	344.65	(1,018.60)	2,679.08
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET			3,686.70	970.14	130.84	(992.57)	3,795.11
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET	357.80	73.44	3,231.44	135.17	1,574.95	(2,431.35)	2,944.41
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET				158.41	25.98		184.39
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET					25.98		25.98
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET	997.06		925.72	1,068.88	145.77	(1,253.13)	1,884.46
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET			508.92	795.14	145.77	(1,201.81)	249.41
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET			212.67	491.37	46.63	(2,390.93)	(1,640.26)
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET			141.42	365.17	31.01	(312.10)	225.50
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET				120.17		(736.00)	(615.83)
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET				1,030.17		(2,525.80)	(1,495.63)
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET				468.92		(924.40)	(455.48)
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET				332.51		(359.20)	(26.69)
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET						(9,072.70)	(9,072.70)
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET						(8,837.20)	(8,837.20)
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET						(312.10)	(312.10)
8830-1815	Misc. Capital Equipment			31,695.50		6,164.34		37,859.84
8830-1815	Misc. Capital Equipment			68,627.50		15,047.50		83,675.00
8830-1815	Misc. Capital Equipment			9,475.00				9,475.00
8830-1818	Rt 12 Road Widening, Walpole/Charlestown	17,397.75	336,803.07	587,661.23	27,721.26	270,441.59	3,551.50	1,343,576.40
8830-1819	IE-NN DIST TRANSFORMER UPGRADES	996.59	129.56			1,898.03	-	3,024.18
8830-1819	IE-NN DIST TRANSFORMER UPGRADES	813.55	35.65			1,735.01		2,584.21
8830-1819	IE-NN DIST TRANSFORMER UPGRADES	785.74	6.58	237.50		1,752.12		2,781.94
8830-1819	IE-NN DIST TRANSFORMER UPGRADES	370.12				642.18		1,016.36
8830-1819	IE-NN DIST TRANSFORMER UPGRADES	550.58	229.01	(330.00)		1,373.07	4.06	2,152.66
8830-1819	IE-NN DIST TRANSFORMER UPGRADES	491.31	123.55			1,243.48	330.00	1,858.34
8830-1819	IE-NN DIST TRANSFORMER UPGRADES	401.04	181.51	360.00		1,132.08		2,074.63
8830-1819	IE-NN DIST TRANSFORMER UPGRADES	691.83	181.96	360.00		1,654.06	-	2,887.85
8830-1819	IE-NN DIST TRANSFORMER UPGRADES	1,007.93	229.16			2,283.39	-	3,520.48
8830-1819	IE-NN DIST TRANSFORMER UPGRADES	180.54				263.71	-	444.25
8830-1819	IE-NN DIST TRANSFORMER UPGRADES	545.58	289.83	(384.00)		1,287.21	384.00	2,122.62
8830-1819	IE-NN DIST TRANSFORMER UPGRADES	545.44				796.70		1,342.14
8830-1819	IE-NN DIST TRANSFORMER UPGRADES	175.32				302.85		478.17
8830-1819	IE-NN DIST TRANSFORMER UPGRADES	116.88						116.88
8830-1819	IE-NN DIST TRANSFORMER UPGRADES	116.88						116.88
8830-1819	IE-NN DIST TRANSFORMER UPGRADES	77.92						77.92
8830-1820	Security Conversion GSE			35,063.24		12,269.97		47,333.21
8830-1820	Security Conversion GSE	283.98		6,728.80		490.55		7,503.33

8830-1821	DISTR- RELIABILITY BLANKET	884.16		11.99	1,289.77		442.07	2,627.99
8830-1821	DISTR- RELIABILITY BLANKET			4,860.00	1,580.37			6,440.37
8830-1821	DISTR- RELIABILITY BLANKET	3,589.89	4,091.28	800.00	9,775.18			18,256.35
8830-1821	DISTR- RELIABILITY BLANKET	350.76			610.99			961.75
8830-1821	DISTR- RELIABILITY BLANKET	663.08					221.04	884.12
8830-1823	Distributed Generation Blanket	-			0.00			0.00
8830-1823	Distributed Generation Blanket	-			0.00	-	-	0.00
8830-1823	Distributed Generation Blanket	-			(0.00)	-	-	(0.00)
8830-1823	Distributed Generation Blanket	-			(0.00)	-	-	(0.00)
8830-1823	Distributed Generation Blanket	-			(0.00)	-	-	(0.00)
8830-1823	Distributed Generation Blanket	1,124.70	8.98	427.50	3,492.66	(3,633.06)	-	1,420.78
8830-1823	Distributed Generation Blanket	-			-	-	-	-
8830-1823	Distributed Generation Blanket	-		-	0.00	-	-	0.00
8830-1823	Distributed Generation Blanket	-			0.00	-	-	0.00
8830-1823	Distributed Generation Blanket	-			0.00	-	-	0.00
8830-1823	Distributed Generation Blanket	0.00			(0.00)	-	-	(0.00)
8830-1823	Distributed Generation Blanket	-			0.00	-	-	0.00
8830-1823	Distributed Generation Blanket	-			-	-	-	-
8830-1823	Distributed Generation Blanket	180.55			418.82	(500.00)		99.37
8830-1823	Distributed Generation Blanket	-			-	-	-	-
8830-1823	Distributed Generation Blanket	4,422.77	2,137.20	836.61	7,249.13	(18,533.77)	-	(3,888.06)
8830-1823	Distributed Generation Blanket	-			(250.00)	(250.00)		(250.00)
8830-1823	Distributed Generation Blanket	482.75			(500.00)	(500.00)		816.65
8830-1823	Distributed Generation Blanket	-			(250.00)	(250.00)		(250.00)
8830-1823	Distributed Generation Blanket	-			(250.00)	(250.00)		(250.00)
8830-1823	Distributed Generation Blanket	-			(250.00)	(250.00)		(250.00)
8830-1823	Distributed Generation Blanket	-			(250.00)	(250.00)		(250.00)
8830-1823	Distributed Generation Blanket	-			(250.00)	(250.00)		(250.00)
8830-1824	LED Street Light Conversion	16,855.25	50,844.29	1,863.91	71,218.70	(11,118.20)	1,616.92	131,792.87
8830-1825	IT SYSTEMS & EQUIPMENT BLANKET 2018	77.61			107.58		-	185.19
8830-1825	IT SYSTEMS & EQUIPMENT BLANKET 2018	-		18,616.50	-	345.63	-	18,962.13
8830-1825	IT SYSTEMS & EQUIPMENT BLANKET 2018	-		10,962.38	1,797.91	-	-	12,760.29
8830-1826	TRANSPORTATION FLEET & EQUIPMENT	-		135,941.08	-	-	-	135,941.08
8830-1826	TRANSPORTATION FLEET & EQUIPMENT	-		66,658.79	25,207.39	-	-	91,866.18
8830-1826	TRANSPORTATION FLEET & EQUIPMENT	-		284,052.60	103,275.10	-	-	387,327.70
8830-1826	TRANSPORTATION FLEET & EQUIPMENT	-		7,090.00	3,034.15	-	-	10,124.15
8830-1826	TRANSPORTATION FLEET & EQUIPMENT	-		61,800.00	26,447.10	-	-	88,247.10
8830-1826	TRANSPORTATION FLEET & EQUIPMENT	-		64,974.23	-	-	-	64,974.23
8830-1826	TRANSPORTATION FLEET & EQUIPMENT	-		4,897.90	-	-	-	4,897.90
8830-1827	IT SYSTEMS CORPORATE ALLOCATIONS	-		35,033.00	13,252.21	-	960.39	69,245.60
8830-1827	IT SYSTEMS CORPORATE ALLOCATIONS	-		10,416.26	-	-	-	10,416.26
8830-1828	Misc Capital Imprvmnts GSE Facilities Salem	4,548.83		8,347.09	13,131.50	-	-	26,027.42
8830-1828	Misc Capital Imprvmnts GSE Facilities Salem	-		7,872.00	-	-	-	7,872.00
8830-1828	Misc Capital Imprvmnts GSE Facilities Salem	-		11,047.65	1,094.80	-	-	12,879.72
8830-1828	Misc Capital Imprvmnts GSE Facilities Salem	4,566.74		1,074.56	7,888.60	-	542.08	14,071.98
8830-1829	Misc Capital Imprvmnts GSE Facilities Lebanon	1,006.72		13,127.14	1,683.59	-	-	15,817.45
8830-1829	Misc Capital Imprvmnts GSE Facilities Lebanon	678.73		10,170.43	1,007.87	-	-	11,857.03
8830-1830	Misc Capital Imprvmnts GSE Facilities Londonderry	-		12,253.34	-	-	-	12,253.34
8830-1830	Misc Capital Imprvmnts GSE Facilities Londonderry	-		1,391.10	-	-	-	1,391.10
8830-1830	Misc Capital Imprvmnts GSE Facilities Londonderry	-		34,575.26	9,646.21	-	-	44,221.47
8830-1830	Misc Capital Imprvmnts GSE Facilities Londond	159.36		2,387.95	236.64	-	-	2,783.95
8830-1831	Misc Capital Imprvmnts GSE Facilities Charlesto	1,915.13		14,485.09	10,984.20	-	-	27,384.42
8830-1832	Replace 612 direct buried cables No. Main St. H	29,536.22	114,587.62	820,841.52	327,286.46	3,341.48	0.00	1,295,593.30
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	1,220.75	1,391.55	845.00	2,575.07	-	-	6,032.37
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	2,968.44	288.04	380.00	2,003.58	-	-	12,833.57
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	1,834.12	101.77		632.35	-	-	5,867.27
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	(0.00)			-	-	-	(0.00)
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	(0.00)		-	(0.00)	-	-	(0.00)
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	3,035.34	640.64	1,035.00	2,217.92	-	-	13,938.21
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	97.62	16.02		182.16	-	-	295.80
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	447.32	106.08		939.79	-	-	1,493.19
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	390.64			603.26	59.80	-	1,053.70
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	-			134.48	-	-	518.79
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	-			(0.00)	-	-	(0.00)
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	479.55		486.82	990.00	-	-	4,824.74
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	137.34	18.50		565.66	-	-	1,324.18
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	870.19	112.11		1,508.93	-	-	2,491.23
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	1,032.44		85.00	2,024.65	-	-	3,142.09
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	0.00	-		(0.00)	-	-	(0.00)
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	(0.00)	-		(0.00)	-	-	(0.00)
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	195.32			333.32	-	-	528.64
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	292.86	118.10		536.94	-	-	947.90
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	578.96	9.12		1,125.45	-	-	1,713.53
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	100.26		180.00	210.01	-	-	490.27
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	225.56	36.47	180.00	442.81	-	-	884.84
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	-	-	-	270.00	-	-	270.00
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	-		180.00	35.37	-	-	215.37
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	95.91		85.00	3,464.88	-	-	4,674.56
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	704.55	521.27	312.03	360.00	-	-	6,032.34
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	345.71	105.47		1,470.70	-	-	3,511.70
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	(0.00)	(0.00)		-	-	-	0.00
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	53.64			78.35	-	-	131.99
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	1,049.23			2,837.13	-	-	3,886.36
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	1,002.55	29.67	-	1,285.56	-	-	4,520.00
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	207.54	23.96		180.00	-	-	861.64
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	-			0.00	-	-	0.00
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	295.58			874.40	-	-	1,169.98
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	191.82		1,048.92	1,785.65	-	-	4,193.84
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	383.64	41.70		1,072.10	-	-	2,557.48
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	250.64			514.59	-	0.00	1,559.50
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	195.32			562.63	-	-	757.95
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	-		360.00	70.74	-	-	430.74
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	383.64		465.00	2,514.67	-	-	4,794.97
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	1,092.15			1,053.85	-	-	5,568.00
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	3,532.60	1,357.38	512.50	9,106.74	-	-	14,509.22
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	160.93	86.19		405.00	-	-	1,361.61
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	-	(0.00)	-	(0.00)	-	-	(0.00)
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	125.32			423.88	-	-	549.20
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	1,043.09			518.89	-	-	4,576.50
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	-		1,178.92	1,399.99	-	-	2,973.33
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	670.65	129.74	418.00	450.00	-	-	4,048.28
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	592.62			612.61	-	-	2,794.28
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	365.65	104.08		516.84	-	-	1,845.19
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	252.00	540.80	380.00	709.73	-	-	2,908.78
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	-			270.00	-	-	357.70

8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	1,279.72	67.96	465.00		3,557.41	(4,017.34)	-	1,352.75
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	383.64	-		360.00	677.30		-	1,420.94
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	-	-	-	-	0.00		-	0.00
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	937.20	28.61			2,574.22		-	3,540.03
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET				3,487.98	612.55			4,100.53
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	293.59	109.66		419.13	1,004.21			1,826.59
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	561.20	51.90		497.05	1,172.18		-	2,282.33
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET			1,221.42	918.02	579.19			2,718.63
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	572.66	83.30	760.00	829.97	1,903.48			4,149.41
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	0.00				0.00			0.00
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	438.36				835.07			1,273.43
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	150.39	33.54			228.69			412.62
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	389.34	41.44		641.43	923.08		-	1,995.29
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET				3,567.28	748.04			4,315.32
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	526.83	77.96		458.35	1,286.68		-	2,349.82
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	375.98				549.17			925.15
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	757.04				1,713.12			2,470.16
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	1,032.35				2,358.31			3,390.66
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET				225.00	73.07			298.07
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	1,304.47	163.24	380.00		2,264.93		-	4,112.64
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	2,449.41		2,820.50		1,773.86	830.46		7,874.23
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	973.27		6.54		302.31	-		1,282.12
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	77.92				190.94			268.86
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	400.80				915.89		-	1,316.69
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	1,151.25	412.07			2,843.33			4,406.65
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	4,242.90	2,137.33	581.50		8,900.26		-	15,861.99
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	100.26				311.77			412.03
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	249.42	17.16			643.20		-	909.78
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	194.80				327.23	116.88		638.91
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	441.20	136.92	260.00		997.97		-	1,836.09
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	53.64				93.43		-	147.07
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	1,027.47	282.14	(330.00)		2,255.54	330.00		3,565.15
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	1,643.52	653.36	1,040.10		3,571.10		-	6,908.08
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	155.84				378.02		-	533.86
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	150.39	87.06		223.12	279.17			739.74
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	97.40				169.67			267.07
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	243.50				424.16			667.66
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	214.28				373.25			587.53
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	261.04				509.77		-	770.81
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	322.34				949.07		-	1,271.41
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET			661.51		108.49		-	770.00
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	720.76				1,670.83		-	2,391.59
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	368.52	96.70			1,193.62		-	1,658.84
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	384.64	78.33	380.00		514.89		-	1,357.86
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	519.12			75.00	1,626.56			2,220.68
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	623.36				1,938.40		-	2,561.76
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	698.30	127.54			2,234.31		-	3,060.15
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	221.04				371.05		-	592.09
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	175.65				546.20		-	721.85
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	328.40				527.87		-	856.27
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	395.46				723.52		-	1,118.98
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	194.56				605.00		-	799.56
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	77.92				242.30		-	320.22
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET		747.38			201.16			948.54
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	1,967.00	960.62	465.50		5,464.52		-	8,857.64
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	-				0.00		-	0.00
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	-						-	-
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	202.31				629.11			831.42
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	1,102.20				3,269.11			4,371.31
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	(0.00)	351.73	85.47		169.26	1,038.24		1,644.70
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET		62.05			16.33			78.38
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	205.99				640.54			846.53
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	2,240.59	32.34			5,056.20		-	7,329.13
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	519.12	419.83	80.45		1,832.57			2,851.97
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	1,190.51	16.73	380.00		3,214.20		-	4,801.44
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET		-			-			-
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	1,309.20	688.84			2,097.62			4,095.66
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	102.99				320.26			423.25
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	102.99				320.26			423.25
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	292.20				458.93			751.13
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	974.00				1,751.96		-	2,725.96
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	200.52	21.44			470.91		-	692.87
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	136.36				295.54			431.90
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	457.78	35.75	380.00		735.59	200.52		1,809.64
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	80.46	58.47			133.26			272.19
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	292.20				426.81			719.01
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	467.52				984.08			1,451.60
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET			1,263.99		277.15			1,541.14
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	620.38	93.64			1,024.25			1,738.27
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	617.96	322.39	8.18		1,219.32	1,168.32		3,336.17
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	38.96				56.91			95.87
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	194.80		1,023.64		224.45			1,442.89
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	1,345.00				1,864.39	519.12		3,728.51
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	617.96				655.72	-		1,273.68
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	767.28		1,518.92		1,658.45			3,944.65
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	601.20				1,038.51		-	1,639.71
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	194.80				351.46			546.26
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	812.20	71.68			632.62			1,516.50
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	967.56	63.15	760.00		2,507.74		-	4,298.45
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	211.05				489.57			700.62
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	0.00				(0.00)			0.00
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	38.96				90.37			129.33
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	97.40				202.86			300.26
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	261.18				605.85			867.03
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	282.46				534.06			816.52
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	389.60				519.17		-	908.77
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	58.44				135.56			194.00
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	360.47		1,708.35		622.68		-	2,691.50
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	191.82	89.26			354.82		-	635.90
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	208.83				395.35		-	604.18
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	205.99		341.67		502.04		-	1,049.70
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	77.92				180.74			258.66
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	58.44				112.49		-	170.93
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	258.96		380.00	380.00	481.94	175.46		1,676.36
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	390.72				177.90		-	568.62

8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	313.27			355.82	-	669.09
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	642.25	170.68		1,182.47	-	1,995.40
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	38.96			67.30	-	106.26
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	103.00	73.00		468.95	350.91	995.86
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	389.60			673.00	-	1,062.60
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	53.64					53.64
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	483.90			173.19		657.09
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	1,131.00			568.18		1,699.18
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	125.99			217.63		343.62
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	487.00			841.25		1,328.25
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	136.36	51.08	760.00	257.40	300.78	1,505.62
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	102.99			177.90		280.89
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	102.99			177.90	150.39	431.28
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	3,339.46	1,279.35		6,316.08		10,934.89
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	250.50			86.54		337.04
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	406.51	73.00		733.45		1,212.96
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	603.88			67.30	19.48	690.66
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	38.96			67.30	272.72	378.98
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	128.74			222.39		351.13
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	128.74			222.39		351.13
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	875.44			978.51	154.49	2,008.44
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	411.98			355.82	205.99	973.79
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	306.25			355.82		662.07
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	300.78	48.82			102.99	452.59
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	383.64	26.43	1,650.17		200.52	2,260.76
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	-				200.52	200.52
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	300.78	54.75	240.00			595.53
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	409.08					409.08
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	1,102.86		760.00			1,862.86
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	402.71					402.71
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	287.73					287.73
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	107.28					107.28
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	383.64					383.64
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	200.52		800.17			1,000.69
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	38.96					38.96
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	343.72					343.72
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	116.88					116.88
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	205.99					205.99
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET	51.50					51.50
8830-1837	DIST- NEW BUSINESS RESIDENTIAL BLANKET			2,027.78			2,027.78
8830-1837	Replace 612 direct buried cables No. Main St. Hanover	(4.74)					(4.74)
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	3,173.56		10.00	6,116.89	(27,698.15)	(17,996.90)
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	2,398.37		380.00	4,156.93		6,935.30
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	924.67	241.95	380.00	2,712.49	(1,224.15)	3,034.96
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	699.89	114.92		1,099.25		2,296.56
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	584.16	220.04	584.17	2,507.88		4,526.69
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	1,029.93			3,202.69		4,232.62
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	538.20			1,063.52	11.49	1,613.21
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	2,945.36		465.50	7,167.37		10,578.23
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	4,853.82	1,148.45	1,035.50	11,312.38		18,350.15
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	(0.01)		85.50	315.00		130.08
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	1,702.07			2,607.98		4,310.05
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	0.00			0.00		0.00
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	4,040.67	3,362.73	5,315.34	450.00	(24,249.02)	12,783.16
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET			6.54	920.00		1,967.83
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	5,637.68		1,541.72	2,338.76		12,375.25
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	303.51		410.50	405.00		2,191.86
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	0.00		-	(0.00)		0.00
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET			900.00	2,188.83	(9,728.32)	(6,018.84)
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	515.28		-	1,979.05		4,771.80
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	411.97			601.74		1,013.71
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	400.80			982.15	41.95	1,424.90
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	(6,472.51)	5,306.10	110.21	6,774.69		16,618.06
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	1,846.43	605.69		360.00		5,789.61
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET				-		(0.00)
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	-	-		-		(0.00)
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	444.02			1,088.06		1,532.08
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET			4,309.55	842.45	80.40	5,232.40
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	2,893.52	918.47		1,157.21		4,969.20
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	6,026.68			14,689.87	(28,904.86)	(8,188.31)
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	5,193.95		3,090.00	10,123.83	(13,460.44)	5,397.34
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	618.93			1,993.14	(3,098.29)	(486.22)
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET				467.13		630.60
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	257.79			310.21		1,308.26
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	4,787.42	4,489.13	130.88	1,007.50		27,691.65
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET			487.50	5,000.86	(13,257.00)	(6,590.11)
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	2,934.32	2,250.77	465.00	2,058.57		14,968.95
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	150.39	81.08		849.22		1,848.51
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	2,292.44	751.20	380.00	1,316.55		12,656.39
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	1,418.25	367.79	85.00	3,142.08		8,501.24
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	1,978.68	402.44	877.50	4,059.25		7,317.87
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	1,338.91		85.50	3,177.44		4,601.85
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	1,128.94	362.86		2,345.77	(3,393.56)	444.01
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	252.00	75.39		469.00		796.39
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	601.20			695.25		1,296.45
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	447.37	11.16		1,117.40	(767.55)	808.38
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET			380.00	123.42		503.42
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	592.56			349.29		941.85
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	160.92		583.03	330.67	(875.18)	199.44
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	801.60			1,434.20		2,235.80
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	431.42	47.59		948.95	(791.20)	636.76
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	68.18			212.01		280.19
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	2,508.42			811.47	6.83	3,326.72
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	588.98			1,831.49		2,420.47
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	2,605.20		10.00	3,822.07	400.80	6,838.07
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET		290.58		147.12		437.70
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	353.64	210.11		742.91		1,306.66
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	1,268.40	585.26	88.77	2,564.17		4,506.60
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	2,699.61	634.82	380.00	4,932.00	(7,525.54)	1,120.89
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	370.12			1,150.93		1,521.05
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	400.80			1,246.34		1,647.14
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	3,280.22		85.50	5,670.81	400.80	9,437.33
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	3,092.86	2,604.67	56.68	1,358.67	5.72	7,118.60
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	831.68	46.56		1,966.12		2,844.36
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	2,564.04		102.00	4,541.13	136.36	7,343.53

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8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	1,210.29	46.73		757.58		801.60		2,816.20
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	1,073.28	28.56		1,751.55		-		2,853.39
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	100.26			232.57				332.83
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	2,132.57	224.68		266.87	(9,752.92)	-		(7,128.80)
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	4,008.97		2,260.00	6,389.51	(3,258.49)	1,939.34		11,339.33
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	400.80			692.35		-		1,093.15
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	377.92			90.37				468.29
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	1,534.56	441.71	380.00	2,813.42				5,169.69
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	601.20			346.17				947.37
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	514.96			889.54	(4,751.50)			(3,347.00)
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	4,148.55	1,818.14	508.14	7,162.17	(2,092.59)			11,544.41
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	350.70			605.80				956.50
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	857.61	106.91		1,527.19	(700.88)			1,790.83
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	(0.00)					535.36		535.36
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	136.36					19.48		155.84
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	200.40							200.40
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	1,202.40							1,202.40
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	400.80							400.80
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET	154.49							154.49
8830-1840	01757 NN ARP Breakers & Reclosers			653.40	892.15				1,545.55
8830-1840	01757 NN ARP Breakers & Reclosers	178.32		653.40	1,196.46	67.63	-		2,095.81
8830-1840	01757 NN ARP Breakers & Reclosers	268.45		673.20	1,377.31	78.24	-		2,397.20
8830-1843	Distribution Feeder Power Factor Correction	4,292.53		950.00	9,452.77		-		14,695.30
8830-1843	Distribution Feeder Power Factor Correction	2,357.67	2,394.44		15,793.87		-		20,545.98
8830-1843	Distribution Feeder Power Factor Correction		(11,884.00)						(11,884.00)
8830-1843	Distribution Feeder Power Factor Correction		3,358.90	12,000.00	6,523.15				21,882.05
8830-1845	Golden Rock Distribution Feeders			12,893.07	181.89	6.01			13,080.97
8830-1845	Golden Rock Distribution Feeders			3,709.54	181.89	6.01			3,897.44
8830-1846	Bare Conductor Replacement Program	13,055.86	86,612.91	104,271.60	44,551.72	1,691.31	35,000.00		285,183.40
8830-1846	Bare Conductor Replacement Program	27,077.14	96,006.75	356,836.09	173,163.25	1,045.95	0.00		654,129.18
8830-1847	IE - NN Recloser Installations	2,461.50	693.80		2,372.92		-		5,528.22
8830-1850	NEN-NH Electric Fence FY10	270.96		29,508.00	6,714.95				36,493.91
8830-1851	Enhanced Bare Conductor Replacement			11,819.91	3,386.48	386.11			15,592.50
8830-1852	Repave Parking Lot - 9 Lowell Rd Salem			61,512.47					61,512.47
8830-1852	Repave Parking Lot - 9 Lowell Rd Salem			114,517.00					114,517.00
8830-1853	Underperforming Feeder Program	215.28			669.43		-		884.71
8830-1854	Install Mt. Support 16L2-16L3 Feeder Tie	3,793.73			6,807.09	110.63	-		10,711.45
8830-1855	Fence Installation - 407 Miracle Mile Lebanon I	2,360.44		190,801.16	12,568.18		-		205,729.78
8830-1855	Fence Installation - 407 Miracle Mile Lebanon I	2,926.00		93,690.40	24,464.64		-		121,081.04
8830-1856	INSTALL 13L2-9L3 FEEDER TIE	1,853.86		10,122.57	6,101.19	295.97	-		18,373.59
8830-1858	Install Service to Tuscan Village Salem	31,602.80	50,441.08	146,597.30	8,346.67	240,115.63	(107,986.69)	495.08	369,192.19
8830-1858	Install Service to Tuscan Village Salem	100.26		256.00	389.42			(419.68)	745.68
8830-1858	Install Service to Tuscan Village Salem	43,327.89	165,920.78	309,620.39	75,552.88	288,186.69	4,330.00	(43,293.49)	843,645.14
8830-1859	Reconductor Brookdale Road	3,923.58	90,016.30	574,214.84		210,775.26	4,307.91	110,697.50	993,935.39
8830-1860	Extend Pelham 14L4 to Salem	3,571.44	183,196.49	517,664.09		182,089.61	8,486.42	102,931.50	997,939.55
8830-1864	Rockingham Sub Site Engineering	973.67		25,079.90	20,348.46	20,915.86	1,552.08	-	68,869.97
8830-1864	Rockingham Sub Site Engineering			1,500,000.00					1,500,000.00
8830-1865	Rockingham T-Line Engineering	188.54	(11,850.00)	143,979.51	7,912.50		243.41		140,473.96
8830-1865	Rockingham T-Line Engineering	823.94							823.94
8830-1866	Salem Depot Getaways	38,617.24	262,428.63	561,015.25		386,943.73	7,316.25	100,000.00	1,356,321.10
8830-1865	Rockingham Substation Transmission Supply	3,763.44	200,000.00	132,504.00	29,947.28	79,620.84	5,499.82	9,785.42	461,120.80
8830-1865	Rockingham Substation Transmission Supply			-					-
8830-1868	HENDRIX TRAILER			48,000.00					48,000.00
8830-1871	ARCOS	6,076.73		24,729.80	20,282.79		-		51,089.32
8830-1873	EAP - Cogsdale CIS System Modifications	3,307.90		138,815.28	24,431.17		1,943.75	-	168,498.10
8830-9851-EO	ELECTRIC OPERATIONS O&M	(53.64)							(53.64)
8830-9851-EO	ELECTRIC OPERATIONS O&M			-					-
8830-9851-EO	ELECTRIC OPERATIONS O&M						-		-
8830-9851-EO	ELECTRIC OPERATIONS O&M						-		-
8830-1846	Bare Conductor Replacement Program		10,678.91	151,542.47	75,335.32		1,171.40	-	(150,000.00)
8830-1846	Bare Conductor Replacement Program			220.00				-	220.00
8830-1846	Bare Conductor Replacement Program	2,293.36	413.22	530,199.82	195,799.47		(0.00)	(676,039.86)	52,666.01
8830-1846	Bare Conductor Replacement Program	4,666.89	3,948.86	6,955.50	24,624.09		-	(1,494.24)	38,701.10
8830-C18630	Charlestown 32 Dline	244.13	231,830.42	389,914.44	182,399.04		1,476.56	(451,125.89)	354,738.70
8830-C18620	Charlestown DSub	3,499.95			1,115.62		-		4,615.57
8830-C18620	Charlestown DSub	629.50	(1,545.00)	105,918.48	53,516.66	80,487.91	2,939.84	-	140,657.39
8830-C18750	Security Conversion GSE			(154.89)				-	(154.89)
8830-1819	IE - NN Recloser Installations				903.84				903.84
8830-1819	IE - NN Recloser Installations				8,378.44				8,378.44
8830-1819	IE - NN Recloser Installations				(903.84)				(903.84)
8830-1819	IE - NN Recloser Installations		3,263.42	330.00	4,861.63				8,455.05
8830-1819	IE - NN Recloser Installations		(2,883.51)		5,298.60				2,415.09
8830-1819	IE - NN Recloser Installations		2,888.20		1,860.29				4,748.49
8830-1819	IE - NN Recloser Installations		2,797.87		1,197.34				3,995.21
8830-1801	01663 GS Storm Program Proj		(3,319.18)		(9,895.81)				(13,214.99)
8830-1801	01663 GS Storm Program Proj	(7,427.50)	10.18	(449.27)	(22,324.12)				(30,190.71)
8830-1801	01663 GS Storm Program Proj	(1,151.60)			(3,727.13)				(4,878.73)
8830-1801	01663 GS Storm Program Proj	(46,778.47)							(46,778.47)
8830-1801	01663 GS Storm Program Proj	(55,122.44)							(55,122.44)
8830-C36424	Mt Support-New 16L3 Feeder						-	(19,662.50)	(19,662.50)
8830-C36425	Mt Support 16L5 Feeder			210.52	(2,042.30)			(210.52)	(2,042.30)
8830-C36427	Feeder Direct Buried Cable Replacement Program			-					-
8830-C36430	Pelham Sub-Add 2nd Xfmr and Fdr Pos	4,910.15	(10,749.84)	12,723.89	25,422.67	119,478.95	(0.00)	(237,638.63)	(85,852.81)
8830-C36430	Pelham Sub-Add 2nd Xfmr and Fdr Pos		700.00						700.00
8830-C36431	Pelham-New 14L4 Fdr								-
8830-C36431	Pelham-New 14L4 Fdr	1,412.28	5,851.84	6,716.04	111,427.69		-	(148,220.66)	(22,812.81)
8830-C36431	Pelham-New 14L4 Fdr	1,528.08		5,146.00	4,491.30				11,165.38
8830-C36431	Pelham-New 14L4 Fdr	4,054.81	73,485.81	54,461.36	41,270.00		-		173,271.98
8830-C36431	Pelham-New 14L4 Fdr		(3,899.88)	15,623.81	21,671.46		-	(13,174.55)	20,220.84
8830-C36431	Pelham-New 14L4 Fdr	3,654.93	14,794.65	60,000.00	2,880.00	7,105.83	90.82	-	88,526.23
8830-C36431	Pelham-New 14L4 Fdr		118,984.60		73,081.09				192,065.69
8830-C36435	Lebanon Area Low Voltage / Overload Mitigati	451.17		380.00	821.63		8.50		1,661.30
8830-C36435	Lebanon Area Low Voltage / Overload Mitigati	38,863.46	1,520.00	26,723.32	46,931.12		-		114,037.90
8830-C36435	Lebanon Area Low Voltage / Overload Mitigation			8,500.00					8,500.00
8830-C36435	Lebanon Area Low Voltage / Overload Mitigation						586.47		586.47
8830-C36435	Lebanon Area Low Voltage / Overload Mitigation						892.72		892.72
8830-C36435	Lebanon Area Low Voltage / Overload Mitigation		(3.20)						(3.20)
8830-1851	Enhanced Bare Conductor Replacement			(3,000.00)					(3,000.00)
8830-1851	Enhanced Bare Conductor Replacement			4,032.00					4,032.00
8830-1851	Enhanced Bare Conductor Replacement		(7,860.00)	-	(0.04)				(7,860.04)
8830-1851	Enhanced Bare Conductor Replacement		28,359.23	148,579.25	174,629.82	175,854.04	14,715.61	0.00	537,633.69
8830-C42920	Install 9L2/9L3 tie Canobie Lake			7,959.48		1,372.56	711.89	-	10,043.93
8830-C42930	Install Service to Tuscan Village South Line	4,878.10			180.00	11,750.44	855.08	-	17,663.62
8830-C42930	Install Service to Tuscan Village South Line	1,691.93	40,770.31	2,610.58	30,005.00	16,887.05	43.65	-	92,008.52
8830-C42930	Install Service to Tuscan Village South Line	11,193.06	263,970.00	263,970.00		15,661.23	257.36	1,022.58	556,074.23

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8830-C42930	Install Service to Tuscan Village South Line	3,121.56			5,392.19			8,513.75
8830-C42933	Vilas Bridge 1211 - Old Drewsville Rd Sectionalizer					138.15		138.15
8830-C42934	Airbreak Switch Upgrade Project	2,286.92	6,229.55	7,550.00	23,809.99	-		39,876.46
8830-C42934	Airbreak Switch Upgrade Project				361.88			361.88
8830-CD0291	Sky View URD - Salem, NH				540.00			1,277.32
8830-CD0291	Sky View URD - Salem, NH	-						-
8830-1837	GSE-Dist-New Bus-Resid Blanket	439.76			935.62			1,375.38
8830-1837	GSE-Dist-New Bus-Resid Blanket	(139.44)			(274.93)			(414.37)
8830-1837	GSE-Dist-New Bus-Resid Blanket	1,640.84	134.56	760.00	3,680.85	-		6,216.25
8830-1837	GSE-Dist-New Bus-Resid Blanket		1,400.82		558.23			1,959.05
8830-1837	GSE-Dist-New Bus-Resid Blanket	(2,466.51)	(129.98)		(5,831.96)			(8,428.45)
8830-1837	GSE-Dist-New Bus-Resid Blanket	3,688.08	1,004.75		9,263.26	-		13,956.09
8830-1837	GSE-Dist-New Bus-Resid Blanket	(1,000.98)			(2,255.34)			(3,256.32)
8830-1837	GSE-Dist-New Bus-Resid Blanket	864.39	70.05		1,471.72	-		2,406.16
8830-1837	GSE-Dist-New Bus-Resid Blanket	100.26			232.57			332.83
8830-1837	GSE-Dist-New Bus-Resid Blanket	(1,418.92)			(3,418.29)	-		(4,837.21)
8830-1837	GSE-Dist-New Bus-Resid Blanket				1,382.45			1,382.45
8830-1837	GSE-Dist-New Bus-Resid Blanket	906.65	5,180.03		13,716.62		(813.26)	18,990.04
8830-1837	GSE-Dist-New Bus-Resid Blanket		805.70		321.07			1,126.77
8830-1837	GSE-Dist-New Bus-Resid Blanket	(1,557.96)			(3,974.15)			(5,532.11)
8830-1837	GSE-Dist-New Bus-Resid Blanket		348.14	380.00	2,531.59		(380.00)	2,879.73
8830-1837	GSE-Dist-New Bus-Resid Blanket		27.22		7.33			34.55
8830-1837	GSE-Dist-New Bus-Resid Blanket		429.50		171.16			600.66
8830-1837	GSE-Dist-New Bus-Resid Blanket	(654.31)		(220.00)	(2,268.32)			(3,652.63)
8830-1837	GSE-Dist-New Bus-Resid Blanket				3,541.86			3,541.86
8830-1837	GSE-Dist-New Bus-Resid Blanket	(645.59)			(1,488.18)			(2,133.77)
8830-1837	GSE-Dist-New Bus-Resid Blanket				509.29			509.29
8830-1837	GSE-Dist-New Bus-Resid Blanket	(202.83)		(170.00)	(516.76)			(889.59)
8830-1837	GSE-Dist-New Bus-Resid Blanket		(52.54)		-			(52.54)
8830-1837	GSE-Dist-New Bus-Resid Blanket		206.61		44.05			250.66
8830-1837	GSE-Dist-New Bus-Resid Blanket		111.39		48.59			159.98
8830-1837	GSE-Dist-New Bus-Resid Blanket		140.60		65.45			206.05
8830-1837	GSE-Dist-New Bus-Resid Blanket	(199.04)			(474.28)			(673.32)
8830-1837	GSE-Dist-New Bus-Resid Blanket	(370.56)			(955.07)			(1,325.63)
8830-1837	GSE-Dist-New Bus-Resid Blanket				1,139.26			1,139.26
8830-1837	GSE-Dist-New Bus-Resid Blanket				37.67			37.67
8830-1837	GSE-Dist-New Bus-Resid Blanket		76.05		26.72			102.77
8830-1837	GSE-Dist-New Bus-Resid Blanket				12.91			12.91
8830-1837	GSE-Dist-New Bus-Resid Blanket	228.31		380.00	422.41		77.92	1,108.64
8830-1837	GSE-Dist-New Bus-Resid Blanket	(175.04)			(625.48)			(800.52)
8830-1837	GSE-Dist-New Bus-Resid Blanket		105.47		46.01			151.48
8830-1837	GSE-Dist-New Bus-Resid Blanket	(238.10)			(517.18)			(755.28)
8830-1837	GSE-Dist-New Bus-Resid Blanket	1,737.78	745.72		3,999.69			6,483.19
8830-1837	GSE-Dist-New Bus-Resid Blanket		125.00		151.43			276.43
8830-1837	GSE-Dist-New Bus-Resid Blanket	(966.68)			(1,027.54)			(1,994.22)
8830-1837	GSE-Dist-New Bus-Resid Blanket				68.45			68.45
8830-1837	GSE-Dist-New Bus-Resid Blanket		125.00		78.35			203.35
8830-1837	GSE-Dist-New Bus-Resid Blanket		112.50		23.99			136.49
8830-1837	GSE-Dist-New Bus-Resid Blanket		112.50		23.99			136.49
8830-1837	GSE-Dist-New Bus-Resid Blanket	(185.28)			(589.24)			(774.52)
8830-1837	GSE-Dist-New Bus-Resid Blanket	(478.15)			(1,406.01)			(1,884.16)
8830-1837	GSE-Dist-New Bus-Resid Blanket		187.50		99.08			286.58
8830-1837	GSE-Dist-New Bus-Resid Blanket				343.40			343.40
8830-1837	GSE-Dist-New Bus-Resid Blanket		75.00		89.86			164.86
8830-1837	GSE-Dist-New Bus-Resid Blanket	(553.42)			(1,073.20)			(1,626.62)
8830-1837	GSE-Dist-New Bus-Resid Blanket		131.37		57.31			188.68
8830-1837	GSE-Dist-New Bus-Resid Blanket	(931.60)		(95.00)	(2,776.51)			(3,803.11)
8830-1837	GSE-Dist-New Bus-Resid Blanket	767.28	329.05	3,615.52	5,142.64	-		9,854.49
8830-1837	GSE-Dist-New Bus-Resid Blanket	551.10			957.05			1,508.15
8830-1837	GSE-Dist-New Bus-Resid Blanket	48.81			91.77			140.58
8830-1837	GSE-Dist-New Bus-Resid Blanket	413.33		2,049.98	1,621.50			4,084.81
8830-1837	GSE-Dist-New Bus-Resid Blanket	(1,858.84)	(53.97)		(5,432.85)			(7,345.66)
8830-1837	GSE-Dist-New Bus-Resid Blanket	201.15	550.97		1,826.07	-		2,578.19
8830-1837	GSE-Dist-New Bus-Resid Blanket		75.00		88.38			163.38
8830-1837	GSE-Dist-New Bus-Resid Blanket		75.00		78.04			153.04
8830-1837	GSE-Dist-New Bus-Resid Blanket		1,056.37		460.76			1,517.13
8830-1837	GSE-Dist-New Bus-Resid Blanket	1,560.71	1,317.13		8,933.47	-		11,811.31
8830-1837	GSE-Dist-New Bus-Resid Blanket	(2,084.84)			(6,681.90)			(8,766.74)
8830-1837	GSE-Dist-New Bus-Resid Blanket	(185.28)			(477.54)			(662.82)
8830-1837	GSE-Dist-New Bus-Resid Blanket	(370.56)			(865.50)			(1,236.06)
8830-1837	GSE-Dist-New Bus-Resid Blanket	19.48			33.64			53.12
8830-1837	GSE-Dist-New Bus-Resid Blanket	(370.56)			(1,109.09)			(1,479.65)
8830-1837	GSE-Dist-New Bus-Resid Blanket	(741.12)			(1,523.49)			(2,264.61)
8830-1837	GSE-Dist-New Bus-Resid Blanket	(359.28)			(761.44)			(1,120.72)
8830-1838	GSE-Dist-New Bus-Comm Blanket	-			-	-		-
8830-1838	GSE-Dist-New Bus-Comm Blanket	341.88		380.00	1,196.10	-		1,917.98
8830-1838	GSE-Dist-New Bus-Comm Blanket			550.00	227.61			777.61
8830-1838	GSE-Dist-New Bus-Comm Blanket					-		-
8830-1838	GSE-Dist-New Bus-Comm Blanket	(1,140.04)		(313.30)	(2,277.67)		(219.61)	(3,950.62)
8830-1838	GSE-Dist-New Bus-Comm Blanket				0.86	-		0.86
8830-1838	GSE-Dist-New Bus-Comm Blanket	(3,588.55)			(8,653.08)			(12,241.63)
8830-1838	GSE-Dist-New Bus-Comm Blanket	(155.04)			(374.99)			(530.03)
8830-1838	GSE-Dist-New Bus-Comm Blanket		52.50		11.20			63.70
8830-1838	GSE-Dist-New Bus-Comm Blanket			40.50				40.50
8830-1838	GSE-Dist-New Bus-Comm Blanket	9,002.23	5,764.36	357.50	19,590.67	-		34,714.76
8830-1838	GSE-Dist-New Bus-Comm Blanket	(741.12)			(2,146.45)			(2,887.57)
8830-1838	GSE-Dist-New Bus-Comm Blanket				-			-
8830-1838	GSE-Dist-New Bus-Comm Blanket	(326.64)			(731.28)	499.00		(558.92)
8830-1838	GSE-Dist-New Bus-Comm Blanket	3,739.38		760.00	23,529.93	4,188.99	(380.00)	31,838.30
8830-1838	GSE-Dist-New Bus-Comm Blanket	2,933.52		380.00	6,090.61		1,453.14	10,857.27
8830-1838	GSE-Dist-New Bus-Comm Blanket	(2,338.72)			(5,279.23)			(7,617.95)
8830-1838	GSE-Dist-New Bus-Comm Blanket	3,630.40			5,662.80			9,293.20
8830-1838	GSE-Dist-New Bus-Comm Blanket			275.00	113.81			388.81
8830-1838	GSE-Dist-New Bus-Comm Blanket					214.12		214.12
8830-1838	GSE-Dist-New Bus-Comm Blanket					13.67		13.67
8830-1838	GSE-Dist-New Bus-Comm Blanket				1,752.09			1,752.09
8830-1838	GSE-Dist-New Bus-Comm Blanket		403.43		86.03			489.46
8830-1838	GSE-Dist-New Bus-Comm Blanket	801.60			1,670.41			2,472.01
8830-1838	GSE-Dist-New Bus-Comm Blanket		2,391.94		7,280.81			9,672.75
8830-1838	GSE-Dist-New Bus-Comm Blanket		49.97		21.80			71.77
8830-1838	GSE-Dist-New Bus-Comm Blanket	185.28		340.00	510.00		(7,474.59)	(5,924.57)
8830-1838	GSE-Dist-New Bus-Comm Blanket	(185.28)		(340.00)	(510.00)			(5,924.57)
8830-1838	GSE-Dist-New Bus-Comm Blanket				(514.74)			(5,924.57)
8830-1838	GSE-Dist-New Bus-Comm Blanket				19,469.86			19,469.86
8830-1838	GSE-Dist-New Bus-Comm Blanket	(1,318.10)		(1,140.00)	(2,717.98)			(5,176.08)

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8830-1838	GSE-Dist-New Bus-Comm Blanket				(2,094.93)			(2,094.93)
8830-1838	GSE-Dist-New Bus-Comm Blanket	(622.00)			(1,270.56)			(1,892.56)
8830-1838	GSE-Dist-New Bus-Comm Blanket		(270.96)		(118.19)			(389.15)
8830-1838	GSE-Dist-New Bus-Comm Blanket			(170.00)	(35.71)			(205.71)
8830-1838	GSE-Dist-New Bus-Comm Blanket		86.97		37.93			124.90
8830-1838	GSE-Dist-New Bus-Comm Blanket		1,240.19	380.00	6,687.46			8,307.65
8830-1838	GSE-Dist-New Bus-Comm Blanket	(883.26)			(2,033.27)	500.00		(2,416.53)
8830-1838	GSE-Dist-New Bus-Comm Blanket	5,972.50	1,799.31		25,434.21		-	33,206.02
8830-1838	GSE-Dist-New Bus-Comm Blanket		74.00		29.48			103.48
8830-1838	GSE-Dist-New Bus-Comm Blanket				122.48			122.48
8830-1838	GSE-Dist-New Bus-Comm Blanket	4,927.86	6,243.22		11,169.71	34.57	-	22,375.36
8830-1838	GSE-Dist-New Bus-Comm Blanket	(207.11)			(569.93)			(777.04)
8830-1838	GSE-Dist-New Bus-Comm Blanket	(199.04)			(653.30)			(852.34)
8830-1838	GSE-Dist-New Bus-Comm Blanket	(866.72)	(17.91)		(2,079.96)			(2,964.59)
8830-1838	GSE-Dist-New Bus-Comm Blanket		211.96		480.93			692.89
8830-1838	GSE-Dist-New Bus-Comm Blanket	21,647.37	7,928.42	2,841.00	8,746.41		-	107,057.79
8830-1838	GSE-Dist-New Bus-Comm Blanket			2,500.99				2,500.99
8830-1838	GSE-Dist-New Bus-Comm Blanket	215.28			371.87			587.15
8830-1838	GSE-Dist-New Bus-Comm Blanket	(370.56)			(919.02)	500.00		(789.58)
8830-1838	GSE-Dist-New Bus-Comm Blanket		169.77		72.65			242.42
8830-1838	GSE-Dist-New Bus-Comm Blanket			(380.00)	(235.67)			(615.67)
8830-1810	GSE-Dist-St Light Blanket		1,259.28		(5,867.42)			(4,608.14)
8830-1810	GSE-Dist-St Light Blanket	(185.28)			(424.02)			(609.30)
8830-1810	GSE-Dist-St Light Blanket	(10,469.21)	(4,565.81)	(380.00)	(35,713.89)			(51,128.91)
8830-1810	GSE-Dist-St Light Blanket	(3,308.79)	(913.11)	(528.00)	(9,574.73)			(14,324.63)
8830-1810	GSE-Dist-St Light Blanket		4,403.04		2,664.46			7,067.50
8830-1810	GSE-Dist-St Light Blanket	1,220.25	285.02	874.50	5,663.29		-	8,043.06
8830-1810	GSE-Dist-St Light Blanket	(73.22)			-			(73.22)
8830-1810	GSE-Dist-St Light Blanket				0.41			0.41
8830-1810	GSE-Dist-St Light Blanket	(582.62)	(1,627.39)		(2,291.46)			(4,501.47)
8830-1810	GSE-Dist-St Light Blanket	(182.24)	(141.22)		(462.27)			(785.73)
8830-1810	GSE-Dist-St Light Blanket	(525.42)	(556.99)		(1,522.39)			(2,604.80)
8830-1810	GSE-Dist-St Light Blanket	335.25	704.00		880.38			1,919.63
8830-1810	GSE-Dist-St Light Blanket	(1,723.38)	(1,473.87)		(5,356.92)		-	(8,554.17)
8830-1810	GSE-Dist-St Light Blanket	(1,282.11)	(528.53)		(3,556.64)			(5,367.28)
8830-1810	GSE-Dist-St Light Blanket		5,012.73		2,470.67			7,483.40
8830-1810	GSE-Dist-St Light Blanket	(4,294.68)	(435.53)		(8,839.07)			(13,569.28)
8830-1810	GSE-Dist-St Light Blanket			(2,192.00)	(548.85)			(2,740.85)
8830-1810	GSE-Dist-St Light Blanket	(2,078.74)	(3,573.95)	(256.00)	(6,165.09)			(12,073.78)
8830-1810	GSE-Dist-St Light Blanket	(2,774.93)	(1,498.06)	(256.00)	(8,127.39)			(12,656.38)
8830-1810	GSE-Dist-St Light Blanket		(92.82)		(22.86)			(115.68)
8830-1810	GSE-Dist-St Light Blanket	(890.50)	(1,148.48)		(3,436.42)			(5,475.40)
8830-1811	GSE-Dist-Public Require Blanket	231.82						231.82
8830-1811	GSE-Dist-Public Require Blanket			334.75				334.75
8830-1811	GSE-Dist-Public Require Blanket				(727.67)			(727.67)
8830-1811	GSE-Dist-Public Require Blanket	12,204.96	33,819.20	142,002.30	5,458.79	132,026.55	455.46	325,967.26
8830-1811	GSE-Dist-Public Require Blanket	(841.90)				(2,519.79)		(3,361.69)
8830-1811	GSE-Dist-Public Require Blanket				40.22			40.22
8830-1811	GSE-Dist-Public Require Blanket				185.54			185.54
8830-1811	GSE-Dist-Public Require Blanket					7,445.46		7,445.46
8830-1811	GSE-Dist-Public Require Blanket		-					-
8830-1811	GSE-Dist-Public Require Blanket	(107.59)			(353.14)			(460.73)
8830-1811	GSE-Dist-Public Require Blanket	(398.08)			(788.05)			(1,186.13)
8830-1812	Dist-Damage&Failure Blanket				(212.08)			(212.08)
8830-1812	Dist-Damage&Failure Blanket		(26,226.00)		22,419.42			(3,806.58)
8830-1812	Dist-Damage&Failure Blanket	-	55,476.00	-	27,345.37		-	82,821.37
8830-1812	Dist-Damage&Failure Blanket	(12,151.76)	(3,160.16)	(5,166.47)	(84,375.46)			(104,853.85)
8830-1812	Dist-Damage&Failure Blanket	(209.12)		808.80	(522.68)			77.00
8830-1812	Dist-Damage&Failure Blanket		584.08		1,777.87			2,361.95
8830-1812	Dist-Damage&Failure Blanket	(1,111.68)			(2,896.99)			(4,008.67)
8830-1812	Dist-Damage&Failure Blanket	(17,384.29)	724.40	(814.00)	(71,632.63)			(89,106.52)
8830-1812	Dist-Damage&Failure Blanket	(380.96)			(999.31)			(1,380.27)
8830-1812	Dist-Damage&Failure Blanket	(2,871.74)		10,150.32	(6,998.08)			280.50
8830-1812	Dist-Damage&Failure Blanket		397.09		112.43			509.52
8830-1812	Dist-Damage&Failure Blanket		157.51		74.73			232.24
8830-1812	Dist-Damage&Failure Blanket	(745.43)			(1,668.83)			(2,414.26)
8830-1812	Dist-Damage&Failure Blanket	(5,200.82)	3,985.46	(6,281.47)	(52,875.02)			(60,371.85)
8830-1812	Dist-Damage&Failure Blanket				400.03			400.03
8830-1812	Dist-Damage&Failure Blanket	(1,228.24)			(2,485.34)			(3,713.58)
8830-1812	Dist-Damage&Failure Blanket		1,066.97	25.00	270.39			1,362.36
8830-1812	Dist-Damage&Failure Blanket	(8,946.34)	3,084.69	(426.85)	(28,367.95)			(34,656.45)
8830-1812	Dist-Damage&Failure Blanket		(66.66)		(111.89)			(178.55)
8830-1812	Dist-Damage&Failure Blanket		528.30		230.43			758.73
8830-1812	Dist-Damage&Failure Blanket		660.98		832.45			1,493.43
8830-1812	Dist-Damage&Failure Blanket	48.81			67.46	1,533.65	-	1,649.92
8830-1812	Dist-Damage&Failure Blanket			6.00				6.00
8830-1812	Dist-Damage&Failure Blanket	(3,037.37)	172.61	(12.96)	(9,222.56)			(12,100.28)
8830-1812	Dist-Damage&Failure Blanket	(7,242.66)	909.15	(2,705.70)	(24,053.68)			(33,092.89)
8830-1812	Dist-Damage&Failure Blanket	(756.59)			(1,709.73)			(2,466.32)
8830-1812	Dist-Damage&Failure Blanket		187.00		569.21			756.21
8830-1812	Dist-Damage&Failure Blanket		(36.73)		24.12			(12.61)
8830-1812	Dist-Damage&Failure Blanket	2,889.96	994.34	2,735.01	9,217.83			15,837.14
8830-1812	Dist-Damage&Failure Blanket		377.60		80.52			458.12
8830-1812	Dist-Damage&Failure Blanket	(1,097.13)			(2,830.95)			(3,928.08)
8830-1812	Dist-Damage&Failure Blanket		313.09		124.77			437.86
8830-1812	Dist-Damage&Failure Blanket		281.61		60.06			341.67
8830-1812	Dist-Damage&Failure Blanket	(12,038.11)	(765.51)	(1,676.50)	(35,560.41)			(50,040.53)
8830-1812	Dist-Damage&Failure Blanket		(369.17)		(161.03)			(530.20)
8830-1812	Dist-Damage&Failure Blanket			15.00	5.25			20.25
8830-1812	Dist-Damage&Failure Blanket	(2,999.22)			(7,521.77)			(10,520.99)
8830-1812	Dist-Damage&Failure Blanket		676.91		295.24			972.15
8830-1812	Dist-Damage&Failure Blanket	(1,197.17)			(2,997.56)			(4,194.73)
8830-1812	Dist-Damage&Failure Blanket	(7,978.68)	(775.48)	(632.50)	(25,699.56)			(35,086.22)
8830-1812	Dist-Damage&Failure Blanket	(4,141.59)			(13,929.19)			(18,070.78)
8830-1812	Dist-Damage&Failure Blanket		312.82		736.64			1,049.46
8830-1812	Dist-Damage&Failure Blanket	2,342.63	(3,217.68)	(3,559.63)	(22,737.26)			(27,171.94)
8830-1812	Dist-Damage&Failure Blanket					(21,080.95)		(21,080.95)
8830-1821	GSE-Dist-Reliability Blanket	8,147.94		3,087.50	18,740.88	20,022.95	-	49,619.27
8830-1813	GSE-Dist-Asset Replace Blanket		441.57		207.39			648.96
8830-1813	GSE-Dist-Asset Replace Blanket		1,071.91		528.37			1,600.28
8830-1813	GSE-Dist-Asset Replace Blanket	(92.84)		3,000.00	(210.44)			2,696.72
8830-1813	GSE-Dist-Asset Replace Blanket		(6,129.97)		(10,289.12)			(16,419.09)
8830-1813	GSE-Dist-Asset Replace Blanket		(105.66)		(32.94)			(138.60)
8830-1813	GSE-Dist-Asset Replace Blanket		-		3,222.28			3,222.28
8830-1813	GSE-Dist-Asset Replace Blanket		848.55		330.60			1,179.15

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8830-1813	GSE-Dist-Asset Replace Blanket	(185.28)				(554.55)				(739.83)
8830-1813	GSE-Dist-Asset Replace Blanket	827.04		380.00		1,270.34			-	2,477.38
8830-1813	GSE-Dist-Asset Replace Blanket		613.87			302.58				916.45
8830-1813	GSE-Dist-Asset Replace Blanket		214.19			251.91				466.10
8830-1813	GSE-Dist-Asset Replace Blanket		157.33	(8,500.00)		(28.96)				(8,371.63)
8830-1813	GSE-Dist-Asset Replace Blanket	(281.25)				(634.06)				(915.31)
8830-1813	GSE-Dist-Asset Replace Blanket	(478.15)				(1,230.34)				(1,708.49)
8830-1813	GSE-Dist-Asset Replace Blanket		(276.02)							(276.02)
8830-1813	GSE-Dist-Asset Replace Blanket			-						-
8830-1813	GSE-Dist-Asset Replace Blanket			(16,920.21)		(10,788.54)				(27,708.75)
8830-1813	GSE-Dist-Asset Replace Blanket		370.75			158.67				529.42
8830-1814	GSE-Dist-3rd Party Attach Blanket							2,982.52		2,982.52
8830-1814	GSE-Dist-3rd Party Attach Blanket							8,350.87		8,350.87
8830-1814	GSE-Dist-3rd Party Attach Blanket					109.25				109.25
8830-1814	GSE-Dist-3rd Party Attach Blanket			(11,289.46)		(4,577.13)		8,978.50	(603.91)	(7,492.00)
8830-1814	GSE-Dist-3rd Party Attach Blanket					0.12				0.12
8830-1814	GSE-Dist-3rd Party Attach Blanket	(477.44)		(568.75)	(615.00)	(1,106.74)		2,968.05	-	200.12
8830-1814	GSE-Dist-3rd Party Attach Blanket				85.45					85.45
8830-1814	GSE-Dist-3rd Party Attach Blanket				75.00					81.26
8830-1814	GSE-Dist-3rd Party Attach Blanket				-	0.00				0.00
8830-1814	GSE-Dist-3rd Party Attach Blanket	(186.78)		(105.00)	(235.00)	(645.17)		496.32		(675.63)
8830-1814	GSE-Dist-3rd Party Attach Blanket				1,258.40	22.28				1,280.68
8830-1814	GSE-Dist-3rd Party Attach Blanket			(1,003.40)	(355.00)	(612.57)		1,159.90	(5.20)	(816.27)
8830-1814	GSE-Dist-3rd Party Attach Blanket		2,395.47			845.58				3,241.05
8830-1814	GSE-Dist-3rd Party Attach Blanket	697.78	863.20	35.00	10,128.70	4,496.17	(77,175.43)		-	(60,954.58)
8830-1814	GSE-Dist-3rd Party Attach Blanket	180.56	3,415.50	4,291.50	124,405.37	65,200.51			-	197,493.44
8830-1814	GSE-Dist-3rd Party Attach Blanket	(0.00)	-		(3,131.74)	(1,260.49)		6,348.68	-	1,956.45
8830-1814	GSE-Dist-3rd Party Attach Blanket							10,696.22		10,696.22
8830-1814	GSE-Dist-3rd Party Attach Blanket		2,486.95		375.00	1,262.73		(453.40)		3,671.28
8830-1814	GSE-Dist-3rd Party Attach Blanket				(375.00)	(198.46)		453.40		(120.06)
8830-1823	GSE Distributed Generation Blanket	(96.71)				(39.70)				(136.41)
8830-1823	GSE Distributed Generation Blanket					(1,190.10)				(1,190.10)
8830-1823	GSE Distributed Generation Blanket	(98.64)				(197.92)				(296.56)
8830-1823	GSE Distributed Generation Blanket	(101.50)				(264.50)				(366.00)
8830-1823	GSE Distributed Generation Blanket					72.39				72.39
8830-1823	GSE Distributed Generation Blanket	(101.50)				(202.75)				(304.25)
8830-1823	GSE Distributed Generation Blanket							3,992.22		3,992.22
8830-1823	GSE Distributed Generation Blanket	(101.50)				(241.86)				(343.36)
8830-1823	GSE Distributed Generation Blanket	(101.50)				(196.83)				(298.33)
8830-1823	GSE Distributed Generation Blanket							250.00		250.00
8830-1823	GSE Distributed Generation Blanket	(101.50)				(232.29)				(333.79)
8830-1801	Distribution Overhead Operations								-	-
8830-1827	IT System Oakville			75,605.05					(0.00)	75,605.05
8830-1827	IT System Oakville			125.00						125.00
8830-1827	IT System Oakville			11,510.56						11,510.56
8830-1827	IT System Oakville			6,054.79						6,054.79
8830-1827	IT System Oakville			154,925.62						154,925.62
8830-1827	IT System Oakville			7,758.90				92.17		7,851.07
8830-1827	IT System Oakville			2,367.20						2,367.20
8830-1827	IT System Oakville			14,663.19				709.73		15,372.92
8830-1827	E-TRACK - ELECTRONIC CUSTOMER INVOICING							422.53		422.53
8830-UNALLOC OH	Finance Unalloc Burden					(476,376.83)				(476,376.83)
8830-UNALLOC OH	Finance Unalloc Burden	70,324.03			7,775.73	(267,028.67)		-	(16,337.89)	(205,266.80)
8830-UNALLOC OH	Finance Unalloc Burden					(92,928.05)				(92,928.05)
8830-UNALLOC OH	Finance Unalloc Burden					(31,576.22)				(31,576.22)
8830-UNALLOC OH	Finance Unalloc Burden					352,622.82				352,622.82
8830-UNALLOC OH	Finance Unalloc Burden	1,223,556.05		181.90	8,503.71	#####		24,052.35		136,944.59
8830-UNALLOC OH	Finance Unalloc Burden					143,827.65				143,827.65
8830-UNALLOC OH	Finance Unalloc Burden	-	276,589.14			(212,165.22)				64,423.92
8830-AFUDC	AFUDC							14,861.56	(15,025.84)	(164.28)
8830-1810	DIST - STREET LIGHT BLANKET		0.02							0.02
8830-1814	DIST- 3RD PARTY ATTACHMENT BLANKET		0.72							0.72
8830-1812	DIST- DAMAGE & FAILURE BLANKET		25.56							25.56
8830-1812	DIST- DAMAGE & FAILURE BLANKET		56.20							56.20
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET		3.78							3.78
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET		0.40							0.40
8830-1838	DIST- NEW BUSINESS COMMERCIAL BLANKET		0.34							0.34
8830-1838	DIST- NEW BUSINESS RESIDENTIAL BLANKET		1.44							1.44
8830-1860	Extend Pelham 1414 to Salem		(9.78)							(9.78)
8830-1838	New Business Commercial Blanket		1.20							1.20
8830-C36431	Pelham-New 1414 Fdr		(1.30)							(1.30)
8830-1859	Reconductor Brookdale Road		0.12							0.12
8830-1818	Rt 12 Road Widening, Walpole/Charlestown		(1.78)							(1.78)
8830-C36426	SCADA and Distribution Automation		85,700.00	86,230.00						171,930.00
										20,352,909.91
										Above
									8830	20,352,909.91
									Total	20,352,909.91
									Check	-

Cost Element	Cost Element Description
--------------	--------------------------

- | | |
|---|-----------------|
| 1 | Labor |
| 2 | Material |
| 3 | Transfer to 106 |
| 4 | Voucher |
| 5 | Outside Srvc |
| 6 | Overhead |
| 7 | COR |
| 8 | CIAC |
| 9 | AFUDC |



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

PROJECT TITLE: **GSE-Dist-Subs**

PROJECT SPONSOR: **CHRIS BROUILLARD**

PROJECT LEAD: **ANTHONY STRABONE**

DATE: **09/06/2016**

PROJECT ID: **8830-1705**

BUSINESS PLAN NUMBER:

Business Case

RECOMMENDATION:

This Blanket Project is for Distribution Substations-Addressing Damaged Equipment About to Fail

BACKGROUND

Substation damaged equipment found on inspection and equipment about to fail, local repairs as occurs throughout the year.

Includes:

- Replacement due to failure caused by age, fatigue 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:  1/12/17

FINANCE:  1-11-17

Business Case



LIBERTY UTILITIES - CAPITAL PROJECT EXPENDITURE APPLICATION

DIVISION/COMPANY: Capital / Granite State Electric Co.	HOME OFFICE REF #: 8830-1705
PROJECT TITLE: Dist-Subs Blanket	EXPECTED PROJECT TOTAL: \$10,000
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;"> <input type="checkbox"/> Growth <input type="checkbox"/> Improvement Upgrades <input checked="" type="checkbox"/> Infrastructure Replacement </div>	
PROJECT DESCRIPTION & LOCATION: Distribution Substations-replace and/or repair damaged substation equipment about to fail due to age, fatigue or deterioration.	
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. None	
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.	

<p>IF YES, PLEASE DETAIL THE SPECIFIC ASSETS THAT WILL BE REMOVED:</p> <ol style="list-style-type: none"> 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 					
<p>PROPOSED SOURCE OF FUNDS (COMPANY, DEVELOPER LXA, HUF, ETC.)</p> <p>The 2017 Approved Capital Budget.</p>					
<p>CATEGORY & STATUS OF PROJECT (tick as appropriate)</p>		<p>FINANCIAL SUMMARY</p>			
		<p>NEXT ANTICIPATED TEST YEAR</p>			
		<p>Rate Recovery (over 18 months)</p>			
Safety		<p>Will this, and other approved projects, cause a rate shock</p>		<p>No</p>	
Mandated	X				
Impending Regulatory Obligation					
Rate Recovery-Immediate Return	X	<p>Have Health & Safety implications been considered?</p>		<p>Yes</p>	
Rate Recovery (3 to 6 months)		<p>Has Environmental Compliance review been done?</p>		<p>Yes</p>	
Rate Recovery (6 to 12 months)		<p>Has Tech Services review been done?</p>		<p>Yes</p>	
Rate Recovery (12 to 18 months)					
<p>Was this Capital Expenditure included in the Annual Budget?</p>		<p>Yes</p>			
<p>ANALYSIS OF PROJECT VALUE</p>		<p>CAPITAL EXPENDITURE BUDGET UTILIZATION</p>			
Design/Engineering				<p>Authorized Amount</p>	<p>To be spent in:</p>
External contractor costs					<p>Current Year</p>
Internal costs					<p>Future Years</p>
Other costs (contingency)					
Working capital requirements					
Project Total Cost	\$10,000	<p>(A) Capital budget</p> <p>(B) Over (under) run vs. Budget</p> <p>(C) (A+B) Total Estimated Project Cost</p> <p>(D) Less Approved Spend to Date</p> <p>(E) Less Future Approval Requests</p> <p>(F) (C-D-E) Approval Amount Requested (current application)</p>			
	Name	Signature	Date		
Requesting Party	<i>Tisha Sanderson</i>	<i>Tisha Sanderson</i>	<i>1/12/17</i>		
Region Director (\$250K)					
Region Vice President (\$500K)					
Region President (\$1M)					
Corp Senior VP (\$1.5M)					
Corp President (\$3M)					
Region Director (\$250K)					

Attachment:



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

PROJECT TITLE	Rockingham Substation Transmission Supply
PROJECT SPONSOR:	Chris Brouillard
PROJECT LEAD:	Joel Rivera
DATE:	7/20/17
PROJECT ID	8830-1867
BUSINESS PLAN NUMBER:	(Assigned by Corporate Finance)

Business Case

RECOMMENDATION:

- Engineering recommends the approval of \$50,000 for legal, permitting initiation, and preliminary engineering in 2017.

OBJECTIVE(S)

- Begin preliminary engineering, ascertain permits and determine legal requirements, including reaching an agreement for ownership of transmission assets with National Grid.

BACKGROUND

- This project will install 2 new 115kV transmission supply lines from Golden Rock to Rockingham Substation.
- This entire project is estimated at \$5,500,000 and is expected to be completed in 2021.
- This project is part of the infrastructure improvements recommended per the Salem Area Study.

ALTERNATIVES/OPTIONS

- Refer to the Salem Area Study for list of options and alternatives considered.

FINANCIAL ASSESSMENT

- This project estimate is based on investment grade estimates. The estimate will be revised accordingly after preliminary engineering is completed.

RISK ASSESSMENT AND QUALITATIVE EVALUATION

- None

IMPLEMENTATION/ACTION PLAN

- The construction will take place under an individual job number between 2017 - 2021.

REVIEWED BY:

PROJECT LEADER: Joel Rivera

DIRECTOR/VP:

FINANCE:



LIBERTY UTILITIES - CAPITAL PROJECT EXPENDITURE APPLICATION

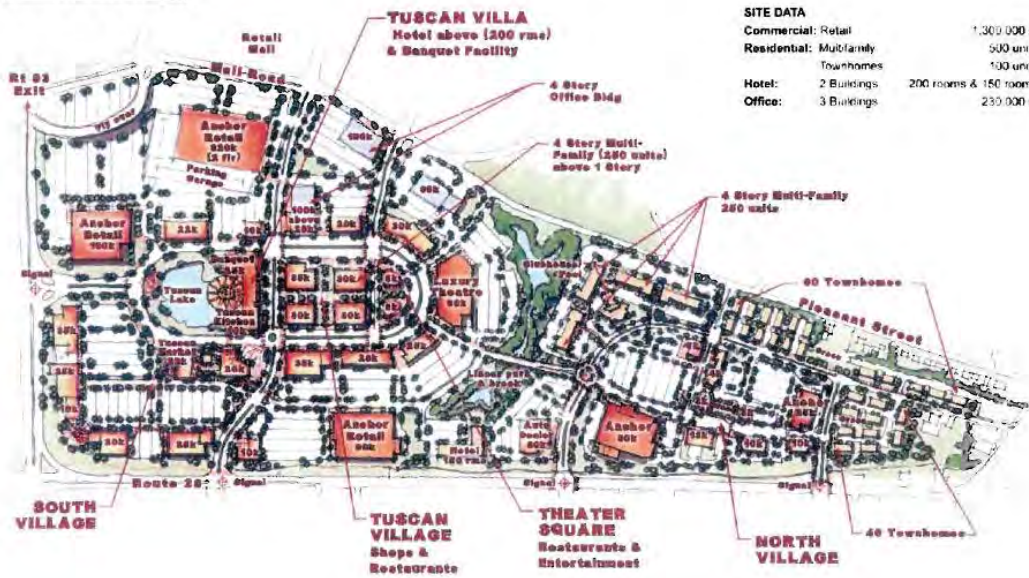
DIVISION/COMPANY: Capital / Granite State Electric Co.	HOME OFFICE REF #: 8830-1867
PROJECT TITLE: Rockingham Substation Transmission Supply	EXPECTED PROJECT TOTAL: \$50,000
PROJECT TYPE (circle one): System Maint / System Project / Growth / LXA	
PROJECT START DATE: 6/26/17	PROJECT END DATE: 12/31/21
CURRENT UTILITY EARNINGS STATUS:	JOB COST/FWO #:
Type of Capital Project: <div style="border: 1px solid black; padding: 5px;"> <input checked="" type="checkbox"/> Growth <input type="checkbox"/> Improvement Upgrades <input type="checkbox"/> Infrastructure Replacement </div>	
PROJECT DESCRIPTION & LOCATION: This project will install 2 new 115kV transmission supply lines from Golden Rock to Rockingham Substation.	
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). Yes - Tuscan Village development at the former Rockingham Park site.	
PERMITTING REQUIREMENTS, INCLUDING POTENTIAL IMPACT ON EXISTING PERMITS, AND TIMING OF AND RISKS ASSOCIATED WITH OBTAINING APPROPRIATE PERMITS FOR PROJECT. Site 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. The investment grade estimate for the entire project is \$5,500,000 – This business covers preliminary engineering, legal, and permitting only.	
WILL THERE BE ASSETS GREATER THAN \$5,000 THAT ARE CURRENTLY IN SERVICE REMOVED AS A RESULT OF THIS PROJECT? yes 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? No 5. What is the year of original installation of the plant being removed? 	

Business Case

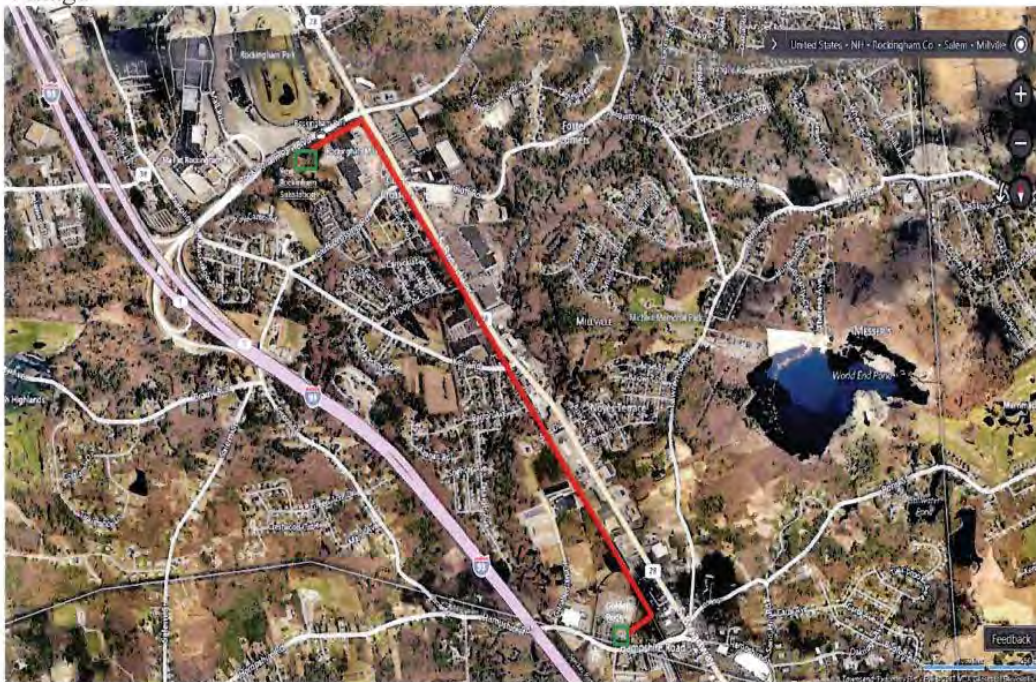
PROPOSED SOURCE OF FUNDS (COMPANY, DEVELOPER LXA, HUF, ETC.) 2017 Damage/Failure Blanket Funding					
CATEGORY & STATUS OF PROJECT (tick as appropriate)		FINANCIAL SUMMARY			
		NEXT ANTICIPATED TEST YEAR			
		Rate Recovery (over 18 months)	X		
Safety		Will this, and other approved projects, cause a rate shock	No		
Mandated		If yes, is customer affordability an issue?			
Impending Regulatory Obligation					
Rate Recovery-Immediate Return					
Rate Recovery (3 to 6 months)					
Rate Recovery (6 to 12 months)		Have Health & Safety implications been considered?	Yes		
Rate Recovery (12 to 18 months)		Has Environmental Compliance review been done?	No		
		Has Tech Services review been done?			
Was this Capital Expenditure included in the Annual Budget?	No	What amount was budgeted?			
ANALYSIS OF PROJECT VALUE (Total Ultimate Cost)		CAPITAL EXPENDITURE BUDGET UTILIZATION			
Design/Engineering		(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)	Authorized Amount	To be spent in:	
Material				Current Year	Future Years
External contractor costs			\$50,000	\$50,000	\$4,550,000
Internal costs					
Other costs (contingency)					
Working capital requirements					
Project Total Cost	\$5,500,000		\$50,000	\$50,000	
Requesting Party	Name	Signature	Date		
Director Finance	Chris Brouillard		7/24/17		
Vice President Finance	Tisha Sanderson		8/1/17		
CFO	Craig Jennings		8/1/17		
CEO					

Business Case

Tuscan Village



New 115kV Line Extensions – New Rockingham Substation to be located at Tuscan Village



6.1. \$1.6M
STER May 1/2018



Liberty UtilitiesSM
WATER · GAS · ELECTRIC

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

PROJECT TITLE	GSE-Bare Conductor Replacement Program
PROJECT SPONSOR:	Chris Brouillard
PROJECT LEAD:	Joel Rivera
DATE:	02-23-17
PROJECT ID	8830-C18603
BUSINESS PLAN NUMBER:	(Assigned by Corporate Finance)

Business Case

RECOMMENDATION:

- The program project will replace bare conductors with tree resistant wires in areas prone to tree contact to resolve and/or improve reliability performance.
- This is being recommended for approval for a budgeted item.
- The total capital project cost is estimated at \$1,625,000 in 2017.
- The expected start date is January 1, 2017 and the expected completion date is December 31, 2017.

OBJECTIVE(S)

This program project includes:

- Replacement of bare conductors to minimize tree related interruptions.
- Associated construction necessary to accommodate the installation of spacer cable or tree wire

BACKGROUND

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.

ALTERNATIVES/OPTIONS

- None

FINANCIAL ASSESSMENT

- This program project is based on the Reliability Enhancement Program for 2017. We have reviewed the proposal with PUC staff and anticipate approval by the NH PUC at the time of the reconciliation filing in the Spring of 2018. Recovery of the investments made under this project is expected to commence on May 1, 2018. It is anticipated that the overall capital investment for 2017 will result in a 1.5% revenue increase.

RISK ASSESSMENT AND QUALITATIVE EVALUATION

Business Case

- None – The program is regulatory supported and funded, subject to NH PUC review and approval.

IMPLEMENTATION/ACTION PLAN

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

REVIEWED BY:

PROJECT LEADER:

DIRECTOR/VP:

FINANCE: *Justin A. Sunderson 2/28/17*

Business Case



Liberty UtilitiesSM
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LIBERTY UTILITIES - CAPITAL PROJECT EXPENDITURE APPLICATION

DIVISION/COMPANY:	Capital / Granite State Electric Co.	HOME OFFICE REF #: 8830-C18603
PROJECT TITLE:	GSE-Bare Conductor Replacement Program	EXPECTED PROJECT TOTAL: \$1,625,000
PROJECT TYPE (circle one):	System Maint / <u>System Project</u> / Growth / LXA	
PROJECT START DATE:	1/1/2017	PROJECT END DATE: 12/31/2017
CURRENT UTILITY EARNINGS STATUS:		JOB COST/FWO #:
Type of Capital Project: <input type="checkbox"/> Growth <input checked="" type="checkbox"/> Improvement Upgrades <input type="checkbox"/> Infrastructure Replacement		
PROJECT DESCRIPTION & LOCATION: The program project will replace bare conductors to resolve and/or improve reliability performance in tree prone areas.		
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. 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. \$1,500,000		
WILL THERE BE ASSETS GREATER THAN \$5,000 THAT ARE CURRENTLY IN SERVICE REMOVED AS A RESULT OF THIS PROJECT? Asset Removal will be calculated on a job specific basis. 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): 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		FINANCIAL SUMMARY			
(tick as appropriate)		NEXT ANTICIPATED TEST YEAR			
		Rate Recovery (over 18 months)			
Safety		Will this, and other approved projects, cause a rate shock		No	If yes, is customer affordability an issue?
Mandated					
Impending Regulatory Obligation	X				
Rate Recovery-Immediate Return	X	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	What amount was budgeted? \$1,300,000			
ANALYSIS OF PROJECT VALUE		CAPITAL EXPENDITURE BUDGET UTILIZATION			
Design/Engineering		(A) Capital budget	Authorized Amount	To be spent in:	
Material		(B) Over (under) run vs. Budget	\$325,000	Current Year	Future Years
External contractor costs		(C) (A+B) Total Estimated Project Cost	\$1,625,000	\$1,300,000	
Internal costs		(D) Less Approved Spend to Date	\$325,000	\$325,000	
Other costs (contingency)		(E) Less Future Approval Requests			
Working capital requirements		(F) (C-D-E) Approval Amount Requested (current application)	\$1,625,000	\$1,625,000	
Project Total Cost	\$1,625,000				
		Name	Signature	Date	
Requesting Party	Chris Brovillard	Tisha Sanderson	3/1/17		
Region Director (\$250K)	Craig Jennings	James Sweeney	3/2/17		
Region Vice President (\$500K)	Gerald Tremblay	David Pasicka	3/9/17		
Region President (\$1M)					
Corp Senior VP (\$1.5M)					
Corp President (\$3M)					



Liberty UtilitiesSM
WATER GAS ELECTRIC

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

PROJECT TITLE	GSE-Charlestown 32 Dline
PROJECT SPONSOR:	Chris Brouillard
PROJECT LEAD:	Joel Rivera
DATE:	09-13-16
PROJECT ID	8830-C18620
BUSINESS PLAN NUMBER:	(Assigned by Corporate Finance)

Business Case

RECOMMENDATION:

- This Project will provide Distribution Line work needed for retirement of the 8L1 feeder at the Charlestown No. 32 substation in Charlestown, NH and the addition of a new feeder from Michael Ave Substation.
- Install approximately 1,300ft of 1000 MCM Cu from new 40L2 breaker to new riser at pole 7 Michael Ave on existing UG conduit system.
- Install approximately 3,500ft of 477 SPCA from Pole 7 Michael Ave to P67 Old Claremont Rd.
- Install 3-167kVA regulators on P44 Route 12. These regulators will be used under emergency to pick up load from Vilas Bridge.
- This is being recommended as approval for a budgeted item.
- The total capital project cost is estimated at \$316,992 in 2017.
- The expected start date is January 1, 2017 and the expected completion date is December 31, 2017.

OBJECTIVE(S)

This Project will provide Distribution Line work needed for modifications or retirement at the Charlestown No. 32 substation in Charlestown, NH and the addition of a new feeder from Michael Ave Substation.

BACKGROUND

Distribution line work will be required to facilitate the retirement of the Charlestown No. 32 substation and the addition of a new feeder from Michael Ave substation.

ALTERNATIVES/OPTIONS

- None

FINANCIAL ASSESSMENT

- None

RISK ASSESSMENT AND QUALITATIVE EVALUATION

- None

IMPLEMENTATION/ACTION PLAN

The construction will take place under an individual job number throughout the year.

REVIEWED BY:

PROJECT LEADER:

DIRECTOR/VP:

FINANCE:

[Signature] 1/12/17
[Signature] 1/12/17

Business Case



LIBERTY UTILITIES - CAPITAL PROJECT EXPENDITURE APPLICATION

DIVISION/COMPANY:	Capital / Granite State Electric Co.	HOME OFFICE REF #: 8830-C18620
PROJECT TITLE:	GSE-32 D Line Charlestown, NH-Specific	EXPECTED PROJECT TOTAL: \$316,992
PROJECT TYPE (circle one):	System Maint / <u>System Project</u> / Growth / LXA	
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;"> <input type="checkbox"/> Growth <input checked="" type="checkbox"/> Improvement Upgrades <input type="checkbox"/> Infrastructure Replacement </div>		
PROJECT DESCRIPTION & LOCATION: This Project will provide Distribution Line work needed for a new feeder from Michael Ave substation to be use for retirement of the Charlestown No. 32 8L1 feeder in Charlestown, NH		
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. 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. \$500,000		
WILL THERE BE ASSETS GREATER THAN \$5,000 THAT ARE CURRENTLY IN SERVICE REMOVED AS A RESULT OF THIS PROJECT? Yes 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): 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 		

Business Case

PROPOSED SOURCE OF FUNDS (COMPANY, DEVELOPER LXA, HUF, ETC.)										
The 2017 Approved Capital Budget										
CATEGORY & STATUS OF PROJECT (tick as appropriate)			FINANCIAL SUMMARY							
Safety <input type="checkbox"/> Mandated <input checked="" type="checkbox"/> Impending Regulatory Obligation <input type="checkbox"/> Rate Recovery-Immediate Return <input 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"/>			NEXT ANTICIPATED TEST YEAR		<input type="text"/>		If yes, is customer affordability an issue?			
			Rate Recovery (over 18 months)		<input checked="" type="checkbox"/>					
			Will this, and other approved projects, cause a rate shock		<input type="checkbox"/>					
			Have Health & Safety implications been considered?		<input checked="" type="checkbox"/>					
			Has Environmental Compliance review been done?		<input type="checkbox"/>					
			Has Tech Services review been done?		<input type="checkbox"/>					
Was this Capital Expenditure included in the Annual Budget?			Yes		What amount was budgeted? \$500,000					
ANALYSIS OF PROJECT VALUE			CAPITAL EXPENDITURE BUDGET UTILIZATION							
Design/Engineering			<input type="text"/>		Authorized Amount		To be spent in:			
Material			<input type="text"/>				Current Year		Future Years	
External contractor costs			<input type="text"/>		\$316,992		\$316,992			
Internal costs			<input type="text"/>							
Other costs (contingency)			<input type="text"/>							
Working capital requirements			<input type="text"/>							
Project Total Cost			\$316,992							
			<input type="text"/>							
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Liberty UtilitiesSM
WATER GAS ELECTRIC

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

PROJECT TITLE : **GSE-MT SUPPORT -NEW 16L3 FEEDER SPECIFIC**

PROJECT SPONSOR: **CHRIS BROUILLARD**

PROJECT LEAD: **ANTHONY STRABONE**

DATE: **09/15/2016**

PROJECT ID: **8830-C36424**

BUSINESS PLAN NUMBER:

Business Case

RECOMMENDATION:

Construct a new 13 kV Distribution Feeder (16L3) to be fed from Mount Support Substation. The 16L3 will exit Mount Support Substation via a manhole and duct system and continue underground along Medical Center Drive to a riser pole located on Route 120. The 16L3 will continue overhead, North along Route 120 in the Town of Hanover where it will connect to existing area circuits currently fed from Hanover Substation.

BACKGROUND

Identified in the Lebanon, NH Supply and Distribution Study published by National Grid on behalf of Liberty Utilities in 2013, the area Distribution Circuits fed from the Hanover Substation were exceeding their design criteria due to area circuit loading. This included exceeding thermal loading limits and contingency support during system abnormalities. The recommended solution to mitigate these issues is to construct the 16L3 circuit and reconfigure the area circuits.

An average annual load growth of 1.8% from 2012 through 2028, excluding spot load additions, is predicted for the Lebanon Area. Spot Load additions include larger commercial customers looking to expand their facilities such as Dartmouth College; Dartmouth Hitchcock Medical Center and Hypertherm.

To mitigate the risk beyond the equipment long term thermal ratings, the plan recommends that Liberty expand the 13 kV Bus at Mount Support Substation, including two new low profile distribution feeders. The scope of work will also include installation of additional equipment to construct the 13 kV Bus to a breaker and a half configuration.

Construction of the 16L3 is an essential component of the overall recommended Lebanon Area solution: Expansion of Mount Support #16 Substation.

ALTERNATIVES/OPTIONS

The 16L3 circuit position was central to the overall recommended solution of expanding the Mt. Support substation in Lebanon, NH with a second transmission supply line, second 115/13kV transformer, and two new 13kV feeder positions.

Other alternatives considered for the Lebanon Area can be found in the Lebanon, NH Supply and Distribution Study which is located in the appendix of this document.

Business Case

FINANCIAL ASSESSMENT

The total estimated cost for this project is \$1,200,000. The in-service target date for this project is December, 2016. 2015 is a test year for Granite State Electric and recognition of this project by the NH PUC as a Step Increase Project in the upcoming Granite State Electric Company rate case is expected. This will allow for more timely recovery of the investment.

RISK ASSESSMENT AND QUALITATIVE EVALUATION

None

IMPLEMENTATION/ACTION PLAN

Construction of the new 16L3 13 kV Distribution Feeder will take place on a schedule paralleling the construction of the substation expansion.

REVIEWED BY:

PROJECT LEADER:

DIRECTOR/VP: *C.P. Grumillo*

FINANCE: *Juska Sanderson 11/12/17*



Liberty UtilitiesSM
WATER GAS ELECTRIC

LIBERTY UTILITIES - CAPITAL PROJECT EXPENDITURE APPLICATION

DIVISION/COMPANY: Capital / Granite State Electric Co.	HOME OFFICE REF #: 8830-C36424
PROJECT TITLE: GSE-Dist-Mt.Support-New 16L3 Feeder	EXPECTED PROJECT TOTAL: \$1,200,000
PROJECT TYPE (circle one): System Maint / System Project / Growth /	
PROJECT START DATE: 5/1/2014	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; margin-top: 10px;"> <input type="checkbox"/> Growth <input checked="" type="checkbox"/> Improvement / Upgrades <input type="checkbox"/> Infrastructure Replacement </div>	
PROJECT DESCRIPTION & LOCATION: Construct a new 13 kV Distribution Feeder (16L3) to be fed from Mount Support Substation. The 16L3 will exit Mount Support Substation via a manhole and duct system and continue underground along Medical Center Drive to a riser pole located on Route 120. The 16L3 will continue overhead, North along Route 120 in the Town of Hanover where it will connect to existing area load currently feed from Hanover Substation.	
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 underground system/Environmental Permitting will be obtained 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. This project was initially approved for 2015 funding on an investment grade basis as part of the 2015-2019 approved capital budget. . 2015 is a Test year for Granite State Electric and recognition of this project by the NH PUC as a Step Increase Project in the upcoming Granite State Electric Company rate case is expected.	

Business Case

WILL THERE BE ASSETS GREATER THAN \$5,000 THAT IS CURRENTLY IN SERVICE REMOVED AS A RESULT OF THIS PROJECT? Yes					
IF YES, PLEASE DETAIL THE SPECIFIC ASSETS THAT WILL BE REMOVED: <ol style="list-style-type: none"> Original Cost of Plant to be removed (if known): Not Known What is the replacement cost of the plant being removed (if original cost not known)? Not Known Original Work Order of Plant to be removed (if known): Not Known Is the Plant being removed reusable? No What is the year of original installation of the plant being removed? Various 					
PROPOSED SOURCE OF FUNDS (COMPANY, DEVELOPER LXA, HUF, ETC.) This project is fully funded in the 2017 Capital Budget.					
CATEGORY & STATUS OF PROJECT (tick as appropriate)		FINANCIAL SUMMARY			
		NEXT ANTICIPATED TEST YEAR			
		Rate Recovery (over 18 months)			
Safety		Will this, and other approved projects, cause a rate shock	<input checked="" type="checkbox"/> No	If yes, is customer affordability an issue?	
Mandated					
Impending Regulatory Obligation					
Rate Recovery-Immediate Return		Have Health & Safety implications been considered?	<input checked="" type="checkbox"/> Yes		
Rate Recovery (3 to 6 months)		Has Environmental Compliance review been done?	<input checked="" type="checkbox"/> Yes		
Rate Recovery (6 to 12 months) (STEP Increase Project)	X	Has Tech Services review been done?	<input checked="" type="checkbox"/> Yes		
Rate Recovery (12 to 18 months)					
Was this Capital Expenditure included in the Annual Budget?		Yes			
ANALYSIS OF PROJECT VALUE		CAPITAL EXPENDITURE BUDGET UTILIZATION			
Design/Engineering		(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)	Authorized Amount	To be spent in:	
External contractor costs				Current Year (2017)	Future Years
Internal costs			\$1,200,000	\$50,000	\$50,000
Other costs (contingency)					
Working capital requirements					
Project Total Cost	\$1,200,000				
	Name	Signature	Date		
Requesting Party	Chris Brouillard	<i>Chris Brouillard</i>	4/13/17		
Region Director (\$250K)	<i>Tisha Sanderson</i>		<i>Tisha Sanderson</i>	4/12/17	
Region Vice President (\$500K)					
Region President (\$1M)					
Corp Senior VP (\$1.5M)					
Corp President (\$3M)					



BUSINESS CASE

PROJECT TITLE: **INSTALL SPLICES - 6L2 & 6L4 DISTRIBUTION CIRCUITS**

PROJECT SPONSOR: **LIBERTY UTILITIES - EAST**

PROJECT LEAD: **ANTHONY STRABONE**

DATE: **3/9/16**

PROJECT ID: **8830-C42921**

BUSINESS PLAN NUMBER:

RECOMMENDATION:

Install Splices on the 6L2 and 6L4 underground distribution circuits in the Hanover area in order to replace existing splices which are failing in service.

OBJECTIVE(S)

The objective of this project is to replace H, T and Y splices on the 6L2 and 6L4 distribution circuits due to identified issues with contractor workmanship and quality when the splices were installed.

BACKGROUND

On 2/6/16 Liberty experienced a failure of an H splice on its 6L4 Underground Distribution Circuit. Failure of this splice resulted in a lengthy outage for customers in the Hanover Area; which included Dartmouth College. Upon review of the splice failure, it has been determined this splice failed due to poor workmanship when installed. Liberty has identified 23 other splices that were installed by the same Contractor as the failed spliced. Similar splices have failed on these circuits in the past.

ALTERNATIVES/OPTIONS

Discussion of Options

Option 1: Do nothing- Replace splices as future failures occur

- Funding for this option will only be needed when a failure has occurred and therefore the financial impact is minimal when compared to Options 2 & 3. Taking into consideration that a splice failure will impact electric service to the area load, which includes Dartmouth College, electric service reliability will be negatively impacted and may result in complaints from those affected by these failures, also resulting in a negative impact to the Liberty brand name

Option 2: Closely monitor splices by increasing inspections (i.e. monthly/bi-monthly) and replace any splices that have signs of deteriorating.

- This option is a hybrid between options 1 & 3. The intent of this option is to identify failures before they occur by continuously conducting inspections; however, a splice failure between inspections is possible. This option has the potential to last many years until all splices have been replaced and thus becomes the most costly option. It also is likely to result in an increasing failure frequency over time.

Option 3: Proactively replace splices.

- Unlike options 1 & 2, this option has a definitive timeline and financial requirement to

complete replacement of all targeted splices. Funding this option will have an impact on the 2016/17 Capital Budget and may result in postponement and/or scope reduction of other 2016/17 Capital Projects. This option is the recommended option.

FINANCIAL ASSESSMENT

The total replacement cost for these splices and associated cable is estimated to cost \$150,000. However, half the splices will be replaced in 2016 and the other half in 2017. Estimate cost for each year is \$75,000.

RISK ASSESSMENT AND QUALITATIVE EVALUATION

All work will be performed in accordance with Liberty and industry approved standards; policies & procedures; and safeguards. There is no unique risk associated with this work.

IMPLEMENTATION/ACTION PLAN

We will utilize a reputable Electrical Contractor who is familiar with Liberty's Underground Standards and replace the identified underground cable splices on the 6L2 and 6L4 Distribution Circuits. The work will be closely monitored by a field construction coordinator and/or engineer. This project will occur over a two year period with splice replacements for the 6L4 circuit occurring in 2016 and splice replacements for the 6L2 circuit occurring in 2017.

REVIEWED BY:

PROJECT LEADER: ANTHONY STRABONE

DIRECTOR/VP:

FINANCE:



LIBERTY UTILITIES - CAPITAL PROJECT EXPENDITURE APPLICATION

DIVISION/COMPANY: Liberty Utilities East (NH)	HOME OFFICE REF #:Job 8830- 18002089; Project 8830-C42921
PROJECT TITLE: REPLACE SPLICES ON THE 6L2 AND 6L4 CIRCUITS	EXPECTED PROJECT TOTAL: \$150,000
PROJECT TYPE (circle one): <u>System Maint</u> / System Project / Growth / LXA	
PROJECT START DATE: 4/1/16	PROJECT END DATE: 11/1/17
CURRENT UTILITY EARNINGS STATUS:	JOB COST/FWO #:
Type of Capital Project: <input type="checkbox"/> Growth <input type="checkbox"/> Improvement Upgrades <input checked="" type="checkbox"/> Infrastructure Replacement	
PROJECT DESCRIPTION & LOCATION: Hanover, NH- Proactively replace identified suspect splices on the 6L2 and 6L4 underground distribution circuits in the Hanover area with straight splices prior to failure including necessary cable to facilitate splicing.	
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. N/A	
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. \$150,000	
WILL THERE BE ASSETS GREATER THAN \$5,000 THAT ARE CURRENTLY IN SERVICE REMOVED AS A RESULT OF THIS PROJECT? No	
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?					
PROPOSED SOURCE OF FUNDS (COMPANY, DEVELOPER LXA, HUP, ETC.) Company Capital 2015 budget					
CATEGORY & STATUS OF PROJECT (tick as appropriate)		FINANCIAL SUMMARY			
		NEXT ANTICIPATED TEST YEAR			
		Rate Recovery (over 18 months)	x		
Safety		Will this, and other approved projects, cause a rate shock	No		
Mandated					
Impending Regulatory Obligation					
Rate Recovery-Immediate Return		Have Health & Safety implications been considered?	NA		
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?		No	What amount was budgeted? None		
ANALYSIS OF PROJECT VALUE		CAPITAL EXPENDITURE BUDGET UTILIZATION			
Design/Engineering	\$3,000	(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)	Authorized Amount	To be spent in:	
Material	\$19,500			Current Year (2016)	Future Years (2017)
External contractor costs	\$127,500			\$75,000	\$75,000
Internal costs					
Other costs (contingency)					
Working capital requirements					
Project Total Cost	\$150,000			\$75,000	\$75,000
Name		Signature	Date		
Requesting Party	Anthony Strabone		4/05/16		
Director	Chris Brouillard	C. Brouillard	4/5/16		
President - I.U. East					
Vice President Finance					

Director Capital Budget & Planning: Tisha Sanderson Tisha Sanderson 5/6/2016

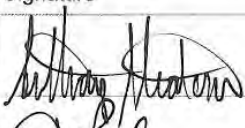


Project Close Out Report | 2017

Requesting Region or Group:	GSECo	Date of Closeout (MM/DD/YY):	12/31/2017
Project Number	8830-1705		
Project Name:	8830-CNN002 01737 GSE-Dist-Subs Blanket		
Requesting Region:	New Hampshire	Sponsor (Name):	Rodrigues; Charles
Project Champion:	Strabone; Anthony	Project Manager	Strabone; Anthony
Project Start Date:	1/1/2017	Project Completion Date:	12/31/2017
Requested Capital (\$)	\$10,000	Expenditure Included in Approved Budget?	Yes

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 Manager		2/15/18
Charles Rodrigues	Director of Engineering		2/15/18
Craig Jennings	Vice President-Operations and Engineering		2/20/18

Project Close Out Report | 2017

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
2.2	Do you agree the product and/or service has sufficiently met the stated business goals and objectives?	Yes
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
2.4	Do you agree the project should be closed? If no, please explain:	Yes
	Rate your level of satisfaction with regards to the project outcomes listed below	
2.5	Project Quality	3
2.6	Product and/or Service Performance	3
2.7	Scope	3
2.8	Cost (Budget)	3
2.9	Schedule	3

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	
3.3	Were audits (e.g., project closeout audit) completed and results documented for future reference?	Yes	
3.4	Identify the storage location for the following project documents items:	See below	
Item	Document	Location (e.g., Google Docs, Webspace)	Format
3.4a	Business Case	Local W Drive: W:\Engineering\Project Documents Electric	Electronic
3.4b	Project Charter	N/A	Electronic
3.4c	Project Plan	N/A	Electronic
3.4d	Budget Documentation and Invoices	N/A	Electronic
3.4e	Status Reports	N/A	Electronic

Project Close Out Report **2017**

3.4f	Risks and Issues Log	N/A	Electronic
3.4g	Final deliverable	N/A	Electronic
3.4h	If applicable, verify that final project deliverable for the project is attached or storage location is identified in 3.4.	N/A	Electronic

Section 4. Project Team

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

Name	Role	Type (e.g., Contractor, Employee)
N/A	N/A	N/A

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). Describe the problem and include any project documentation references (e.g., Project Plan, Issues Log) that provide additional details. Identify recommended improvements to correct a similar problem in the future.

Problem Statement	Problem Description	References	Recommendation
N/A	N/A	N/A	N/A

Section 6. Post-Implementation Support Plans

Project team to identify plans for post-implementation activities after project closeout. Refer to the Benefits Realization review gate for information about the Post-Implementation Review of Business Outcomes deliverable.

Project Close Out Report | 2017

Action	Planned Date	Assigned To	Frequency
Post-Implementation Review of Business Outcomes (actual review)	N/A	N/A	N/A
Post-Implementation Review of Business Outcomes (approval)	N/A	N/A	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
N/A	N/A

Section 8. Financials

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

Financial Descriptor	Amount
Total Actual Project Costs (including all Regional, Corporate and 3 rd party costs)	\$(92,608)
Total Budgeted amount	\$10,000
Variance	\$102,608

Reasons for Variance	Impact
Reclassification of burdens and labor	Credit to project funding

Project Close Out Report | 2017

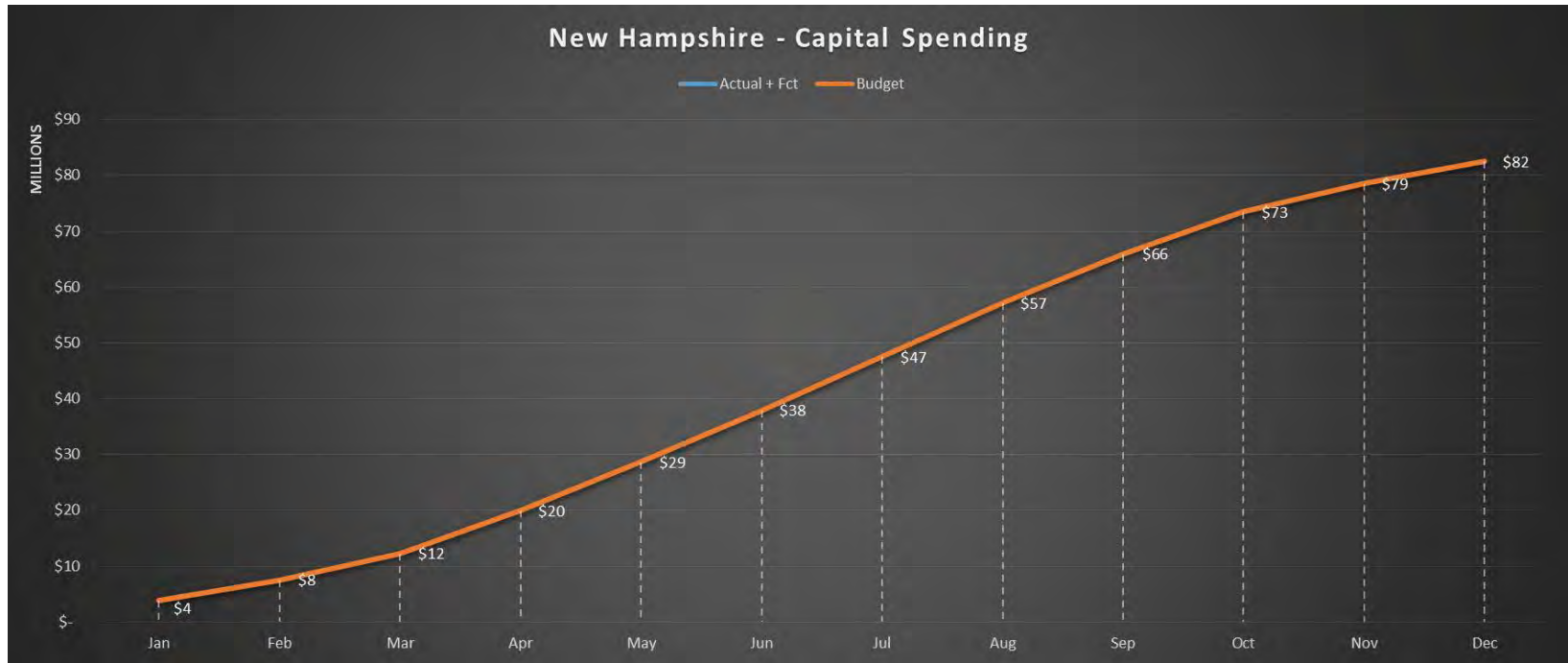
Project Manager to list of all work orders associated with project that should be closed once Close Out Report is accepted.

Registry of All Job Codes (Regional, Corporate, LABs)	
Work Order 1	8830-14532151
Work Order 2	
Work Order 3	
Work Order 4	
Work Order 5	

JANUARY 2017 CAPITAL SPENDING UPDATE – 02/21/2017

Agenda

1. Safety Moment
2. January 2017 Capital Spending Results
3. 2016 Project Closure Reports - Update
4. 2017 Capital Budget – High Profile Project Identification
5. 2017 Project Funding Levels
6. Review of Project Acceleration Proposals/Timing of spend
7. Questions?



Capital Spending YTD													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Variance
Actual + Fct	\$ 2,828,999												
Budget	\$ 3,758,981	\$ 7,542,962	\$ 12,280,018	\$ 19,942,449	\$ 28,686,425	\$ 37,928,939	\$ 47,472,105	\$ 57,140,241	\$ 65,952,221	\$ 73,429,643	\$ 78,560,969	\$ 82,499,330	\$ (82,499,330)
	January	February	March	April	May	June	Jul	August	September	October	Nov	Dec	Annual
Actual EN	\$ 1,845,125	\$ 255,823	\$ 1,536,747	\$ 2,271,035	\$ 3,092,151	\$ 2,134,506	\$ 4,823,707	\$ 4,464,523	\$ 6,357,420	\$ 5,754,287	\$ 3,331,232	\$ 11,834,556	\$ 47,701,112
Actual GSE	\$ 973,907	\$ 913,980	\$ 872,907	\$ 1,848,458	\$ 1,218,355	\$ 1,370,990	\$ 1,623,655	\$ 1,071,523	\$ 1,794,694	\$ 1,626,556	\$ 1,855,596	\$ 4,044,617	\$ 19,215,239
Actual MEP	\$ -	\$ -	\$ -	\$ -	\$ (64,881)	\$ -	\$ -	\$ (29,496)	\$ 75,904	\$ (10,373)	\$ 7,247	\$ -	\$ (21,599)
Actual Keene	\$ 9,967	\$ 18,053	\$ 11,796	\$ 13,987	\$ 16,713	\$ 47,438	\$ 17,501	\$ 180,005	\$ 17,856	\$ 20,685	\$ 36,812	\$ 192,407	\$ 583,221
	2,828,999	1,185,177	2,451,097	4,168,974	3,974,538	3,559,487	6,489,642	5,712,561	9,861,536	7,453,932	5,239,590	12,391,042	\$ 67,477,973
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Budget EN	\$ 1,043,592	\$ 1,043,592	\$ 1,975,567	\$ 4,861,639	\$ 5,793,614	\$ 6,259,602	\$ 6,732,996	\$ 6,732,996	\$ 5,801,020	\$ 4,598,057	\$ 2,439,106	\$ 1,507,131	\$ 48,788,912
Budget GSE	\$ 1,123,937	\$ 1,148,937	\$ 1,148,937	\$ 1,124,940	\$ 1,253,410	\$ 1,275,410	\$ 1,092,118	\$ 1,217,088	\$ 1,314,008	\$ 1,214,063	\$ 1,069,118	\$ 829,228	\$ 13,811,194
Budget MEP	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 18,844,224
Budget Keene	\$ 21,100	\$ 21,100	\$ 42,200	\$ 105,500	\$ 126,600	\$ 137,150	\$ 147,700	\$ 147,700	\$ 126,600	\$ 94,950	\$ 52,750	\$ 31,650	\$ 1,055,000
	\$ 3,758,981	\$ 3,783,981	\$ 4,737,056	\$ 7,662,431	\$ 8,743,976	\$ 9,242,514	\$ 9,543,166	\$ 9,668,136	\$ 8,811,980	\$ 7,477,422	\$ 5,131,326	\$ 3,938,361	\$ 82,499,330

High Profile Project Identification

1. 8830-C36430 Pelham Sub \$2.1M
2. 8830-C36431 Peljam New 14L4 Feeder \$1.0M
3. 8840-1711 Main/Service Replace LPP \$17.3M
4. Multi Transportation/Fleet \$2.3M
5. 8840-1723 City/State Construction \$5.2M
6. 8840-1761 Windham/Pelham \$4.7M
7. TBD

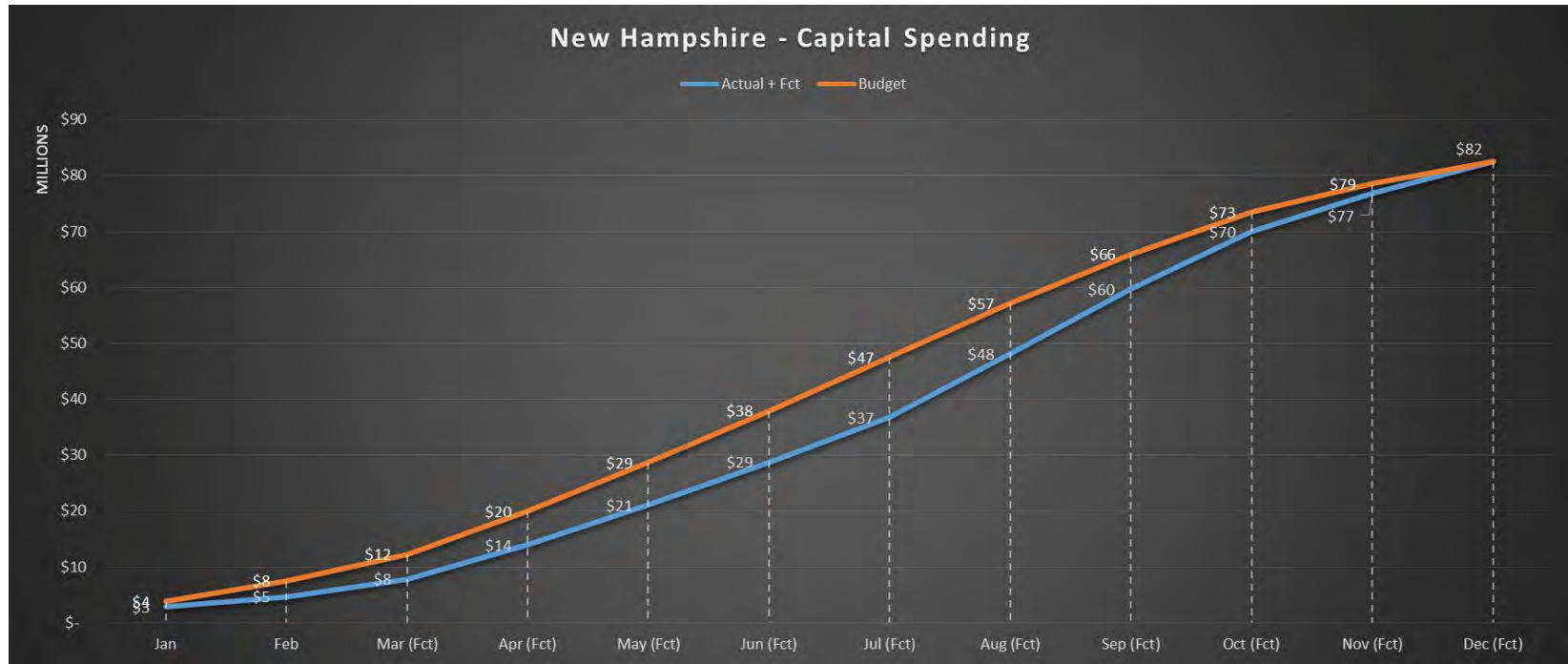
Review of Project Acceleration Proposals

Project	Company	Capital (Million)	Recovery	Lead Time	PUC Notice Needed	Comments
Parking Lot Repave - Manchester	8840	\$ 0.60	Step	45 Days		Environmental Considerations
Parking Lot - Remove Railroad Tracks	8840	\$ 0.30	Step			Environmental Considerations
Pelham Substation	8830	\$ 1.50	Step	Mar. 31	Notify about accerlation	
Feeder 14L5	8830	\$ 1.00	Step	Mar. 31	Notify about accerlation	
Charlestown Substation	8830	\$ 0.50	Step	Feb. 28	Notify about accerlation	
Bare Conductor Replacement	8830	\$ 0.50	REP	Mar. 31	Notify about accerlation	
CNG Filling Station	8840	\$ 0.80	Step	Mar. 31		
Load Break Switches (6)	8830	\$ 0.10	2020	Mar. 31		No recovery until next rate case
Snow Canopies (Londonderry)	8830/8840	\$ 0.10	Step	Mar. 31		Safety hazard, snow falling from solar panels
Daniel Webster Highway	8840	\$ 0.60	Step	Mar. 31		
Aldyl-A Replacement (200)	8840	\$ 0.50	Step	Mar. 31		
Replace T.D. Williamson Stopping Equi	8840	\$ 0.20	Step	Mar. 31		
Solar Panels	8840	\$ 0.15	Step	Mar. 31		
Vehicles - EnergyNorth	8840	\$ 0.25	Step	Mar. 31		
Londonderry Turnpike	8840	\$ 0.75	Step	Mar. 31		
Laconia Phase II	8840	\$ 1.40	Step	Mar. 31		
Merrimack Bridge/Bore	8840	\$ 0.85	Step	Mar. 31		
Keene - Non COG Capital	8843	\$ -		Mar. 31		
		\$ 10.10				

FEBRUARY 2017 CAPITAL SPENDING UPDATE – 03/20/2017

Agenda

1. Safety Moment
2. February 2017 Capital Spending Results
3. 2017 Capital Budget – High Profile Project Presentations
4. Review of Project Acceleration Proposals
5. Discussion of 2018-2022 Projects (LTM Update)
6. Questions?



Capital Spending YTD													
	Jan	Feb	Mar (Fct)	Apr (Fct)	May (Fct)	Jun (Fct)	Jul (Fct)	Aug (Fct)	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)	Variance
Actual + Fct	\$ 2,828,999	\$ 4,655,691	\$ 7,822,395	\$ 13,914,474	\$ 21,088,098	\$ 28,760,260	\$ 36,733,074	\$ 48,147,216	\$ 59,705,202	\$ 69,937,631	\$ 76,814,963	\$ 82,499,330	
Budget	\$ 3,758,981	\$ 7,542,962	\$ 12,280,018	\$ 19,942,449	\$ 28,686,425	\$ 37,928,939	\$ 47,472,105	\$ 57,140,241	\$ 65,952,221	\$ 73,429,643	\$ 78,560,969	\$ 82,499,330	\$ 0
	Jan	Feb	Mar (Fct)	Apr (Fct)	May (Fct)	Jun (Fct)	Jul (Fct)	Aug (Fct)	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)	Annual
Actual EN	\$ 1,845,125	\$ 1,063,382	\$ 1,975,567	\$ 4,861,639	\$ 5,793,614	\$ 6,259,602	\$ 6,732,996	\$ 10,049,354	\$ 9,117,378	\$ 7,914,415	\$ 5,755,464	\$ 4,823,489	\$ 66,192,026
Actual GSE	\$ 973,907	\$ 740,269	\$ 1,148,937	\$ 1,124,940	\$ 1,253,410	\$ 1,275,410	\$ 1,092,118	\$ 1,217,088	\$ 2,314,008	\$ 2,223,063	\$ 1,069,118	\$ 829,228	\$ 15,261,496
Actual MEP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Actual Keene	\$ 9,967	\$ 23,041	\$ 42,200	\$ 105,500	\$ 126,600	\$ 137,150	\$ 147,700	\$ 147,700	\$ 126,600	\$ 94,950	\$ 52,750	\$ 31,650	\$ 1,045,808
	2,828,999	1,826,692	3,166,704	6,092,079	7,173,624	7,672,162	7,972,814	11,414,142	11,557,986	10,232,428	6,877,332	5,684,367	\$ 82,499,330
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Budget EN	\$ 1,043,592	\$ 1,043,592	\$ 1,975,567	\$ 4,861,639	\$ 5,793,614	\$ 6,259,602	\$ 6,732,996	\$ 6,732,996	\$ 5,801,020	\$ 4,598,057	\$ 2,439,106	\$ 1,507,131	\$ 48,788,912
Budget GSE	\$ 1,123,937	\$ 1,148,937	\$ 1,148,937	\$ 1,124,940	\$ 1,253,410	\$ 1,275,410	\$ 1,092,118	\$ 1,217,088	\$ 1,314,008	\$ 1,214,063	\$ 1,069,118	\$ 829,228	\$ 13,811,194
Budget MEP	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 18,844,224
Budget Keene	\$ 21,100	\$ 21,100	\$ 42,200	\$ 105,500	\$ 126,600	\$ 137,150	\$ 147,700	\$ 147,700	\$ 126,600	\$ 94,950	\$ 52,750	\$ 31,650	\$ 1,055,000
	\$ 3,758,981	\$ 3,783,981	\$ 4,737,056	\$ 7,662,431	\$ 8,743,976	\$ 9,242,514	\$ 9,543,166	\$ 9,668,136	\$ 8,811,980	\$ 7,477,422	\$ 5,131,326	\$ 3,938,361	\$ 82,499,330

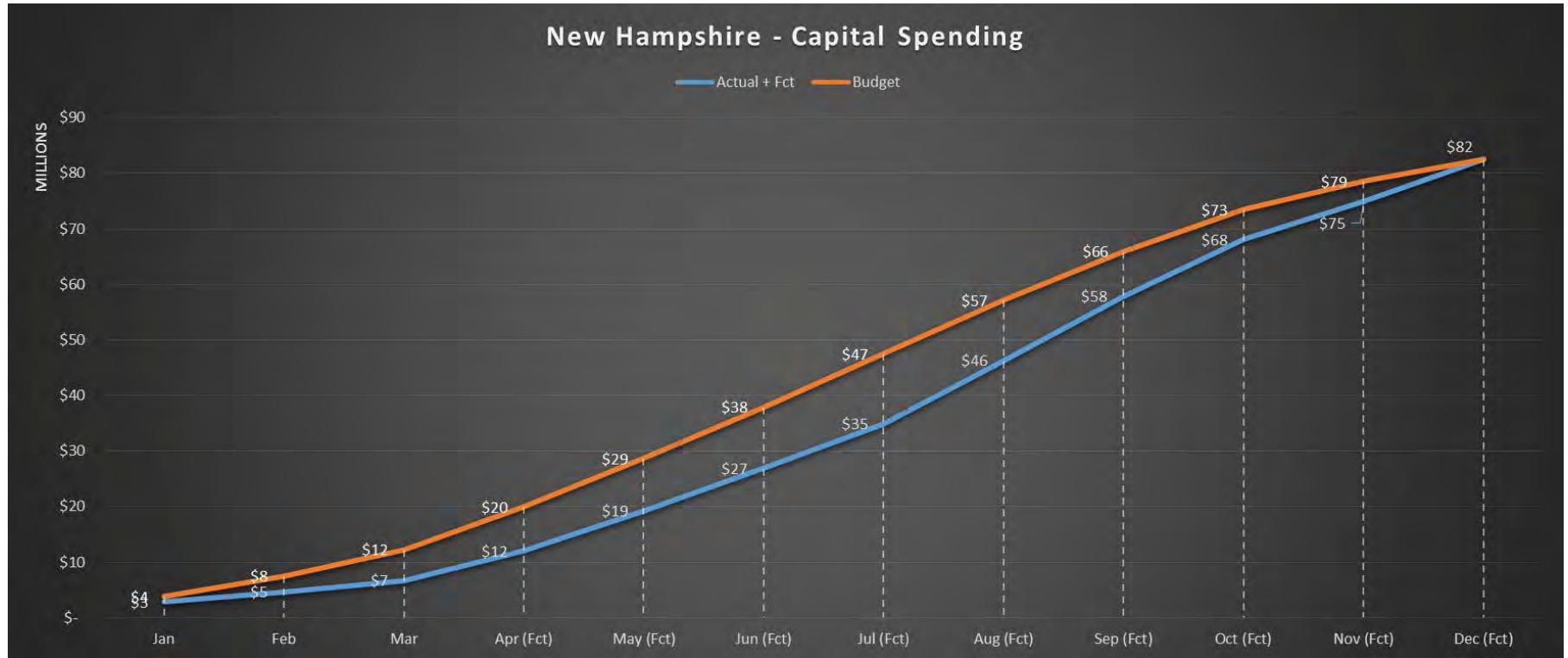
Review of Project Acceleration Proposals

Project	Company	Capital (Million)	Recovery	Lead Time	Status	Comments
Parking Lot Repave - Manchester	8840	0.9	Step	45 Days	Approved	Environmental Considerations
Pelham Substation	8830	1.5	Step	Mar. 31	Notify about accerlation	
Feeder 14L5	8830	0	Step	Mar. 31	Not approved	
Charlestown Substation	8830	0.5	Step	Feb. 28	Approved	
Bare Conductor Replacement	8830	0.2	REP	Mar. 31	Notify about accerlation	
CNG Filling Station	8840	1.9	Step	Mar. 31	Pending	
Load Break Switches (6)	8830	0.112	2020	Mar. 31	Approved	No recovery until next rate case
Snow Canopies (Londonderry)	8830/8840	0.1	Step	Mar. 31	Pending	Safety hazard, snow falling from solar panels
Install Main Daniel Webster Hwy, MMH	8840	0.65	Step	Mar. 31	Approved	
Aldyl-A Replacement (200)	8840	0.35	Step	Mar. 31	Approved	
Replace T.D. Williamson Stopping Equip	8840	0.5	Step	Mar. 31	Pending	
Manchester Solar Install	8840	0.19	Step	Mar. 31	Approved	
Nashua Meter Building Repointing	8840	0.15	Step	Mar. 31	Approved	
Vehicles - EnergyNorth	8840	0.675	Step	Mar. 31		
Londonderry Turnpike	8840	0	Step	Mar. 31	Cancelled	
Chestnut Street, Nashua Regulator	8840	0.325	Step	Mar. 31	Approved	
Tilton Yard - Replace Shelving	8840	0.008	Step	Mar. 31	Approved	
Tilton Office Refresh	8840	0.6	Step	Mar. 31	Approved	
Supplemental AC Dispatch Rm	8840	0.03	Step	Mar. 31	Approved	
Motorized Gate Concord Plant	8840	0.55	Step	Mar. 31	Approved	
Manchester Kitchen Refresh	8840	0.335	Step	Mar. 31	Approved	
Laconia Phase II	8840	0.85	Step	Mar. 31	Approved	
Manchester Gas Mixer Replacement	8840	0.24	Step		Approved	
Upgrade Main - Supply to Franklin		0.75	Step		Pending	
Upgrade West End Loop - Manchester		0.35	Step		Pending	
Purchase Robotic Camera		0.075	Step		Pending	
		11.84				

MARCH 2017 CAPITAL SPENDING UPDATE – 04/17/2017

Agenda

1. Safety Moment
2. March 2017 Capital Spending Results
3. 2017 Capital Budget – High Profile Project Presentations
4. 2018 Capital Budget Planning
5. Questions?

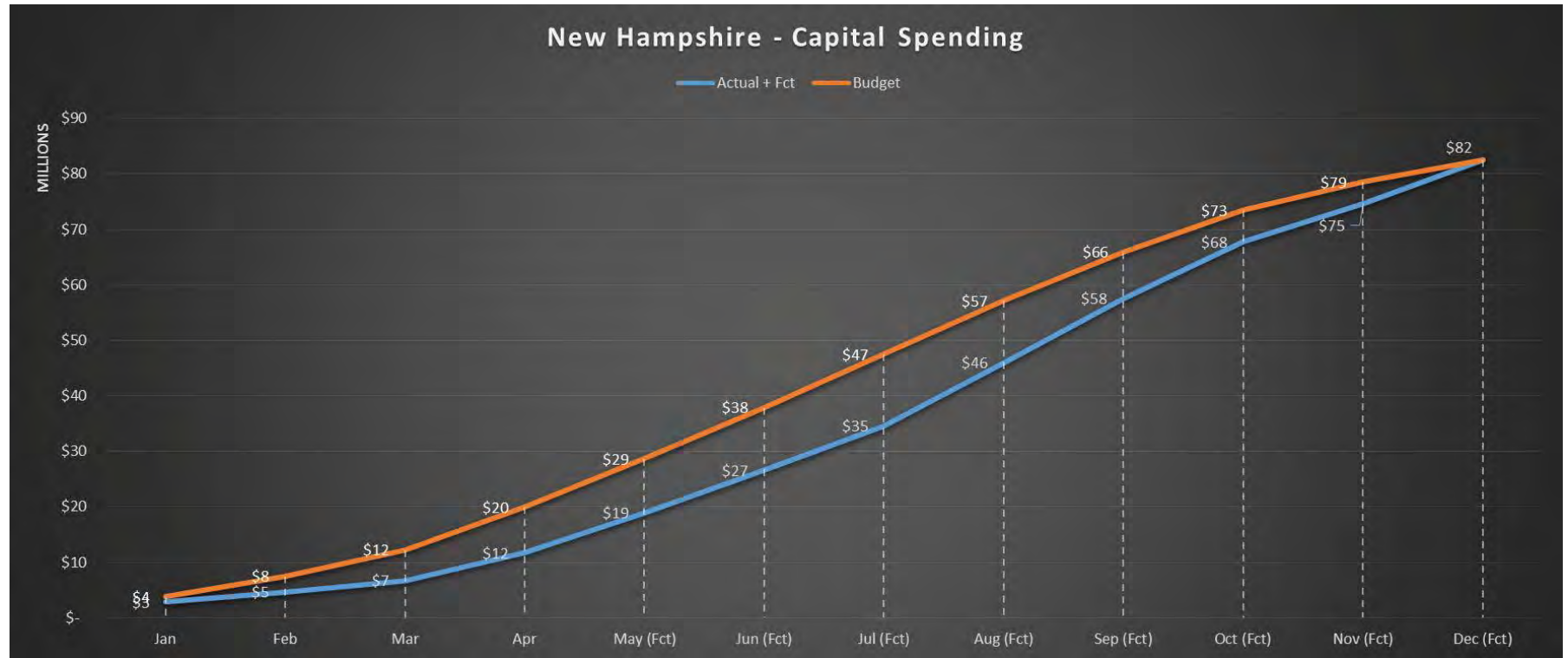


Capital Spending YTD													
	Jan	Feb	Mar	Apr (Fct)	May (Fct)	Jun (Fct)	Jul (Fct)	Aug (Fct)	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)	Variance
Actual + Fct	\$ 2,828,999	\$ 4,655,691	\$ 6,756,899	\$ 12,055,651	\$ 19,229,275	\$ 26,901,437	\$ 34,874,251	\$ 46,288,393	\$ 57,846,379	\$ 68,078,808	\$ 74,956,140	\$ 82,499,330	
Budget	\$ 3,758,981	\$ 7,542,962	\$ 12,280,018	\$ 19,942,449	\$ 28,686,425	\$ 37,928,939	\$ 47,472,105	\$ 57,140,241	\$ 65,952,221	\$ 73,429,643	\$ 78,560,969	\$ 82,499,330	\$ 0
	Jan	Feb	Mar	Apr (Fct)	May (Fct)	Jun (Fct)	Jul (Fct)	Aug (Fct)	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)	Annual
Actual EN	\$ 1,845,125	\$ 1,063,382	\$ 1,327,210	\$ 4,068,312	\$ 5,793,614	\$ 6,259,602	\$ 6,732,996	\$ 10,049,354	\$ 9,117,378	\$ 7,914,415	\$ 5,755,464	\$ 4,823,489	\$ 64,750,342
Actual GSE	\$ 973,907	\$ 740,269	\$ 776,546	\$ 1,124,940	\$ 1,253,410	\$ 1,275,410	\$ 1,092,118	\$ 1,217,088	\$ 2,314,008	\$ 2,223,063	\$ 1,069,118	\$ 2,677,116	\$ 16,736,993
Actual MEP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Actual Keene	\$ 9,967	\$ 23,041	\$ (2,548)	\$ 105,500	\$ 126,600	\$ 137,150	\$ 147,700	\$ 147,700	\$ 126,600	\$ 94,950	\$ 52,750	\$ 42,585	\$ 1,011,995
	2,828,999	1,826,692	2,101,208	5,298,752	7,173,624	7,672,162	7,972,814	11,414,142	11,557,986	10,232,428	6,877,332	7,543,190	\$ 82,499,330
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Budget EN	\$ 1,043,592	\$ 1,043,592	\$ 1,975,567	\$ 4,861,639	\$ 5,793,614	\$ 6,259,602	\$ 6,732,996	\$ 6,732,996	\$ 5,801,020	\$ 4,598,057	\$ 2,439,106	\$ 1,507,131	\$ 48,788,912
Budget GSE	\$ 1,123,937	\$ 1,148,937	\$ 1,148,937	\$ 1,124,940	\$ 1,253,410	\$ 1,275,410	\$ 1,092,118	\$ 1,217,088	\$ 1,314,008	\$ 1,214,063	\$ 1,069,118	\$ 829,228	\$ 13,811,194
Budget MEP	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 18,844,224
Budget Keene	\$ 21,100	\$ 21,100	\$ 42,200	\$ 105,500	\$ 126,600	\$ 137,150	\$ 147,700	\$ 147,700	\$ 126,600	\$ 94,950	\$ 52,750	\$ 31,650	\$ 1,055,000
	\$ 3,758,981	\$ 3,783,981	\$ 4,737,056	\$ 7,662,431	\$ 8,743,976	\$ 9,242,514	\$ 9,543,166	\$ 9,668,136	\$ 8,811,980	\$ 7,477,422	\$ 5,131,326	\$ 3,938,361	\$ 82,499,330

APRIL 2017 CAPITAL SPENDING UPDATE – 05/15/2017

Agenda

1. Safety Moment
2. April 2017 Capital Spending Results
3. 2017 Capital Budget – High Profile Project Presentations
4. 2018 Capital Budget Planning
5. Questions?

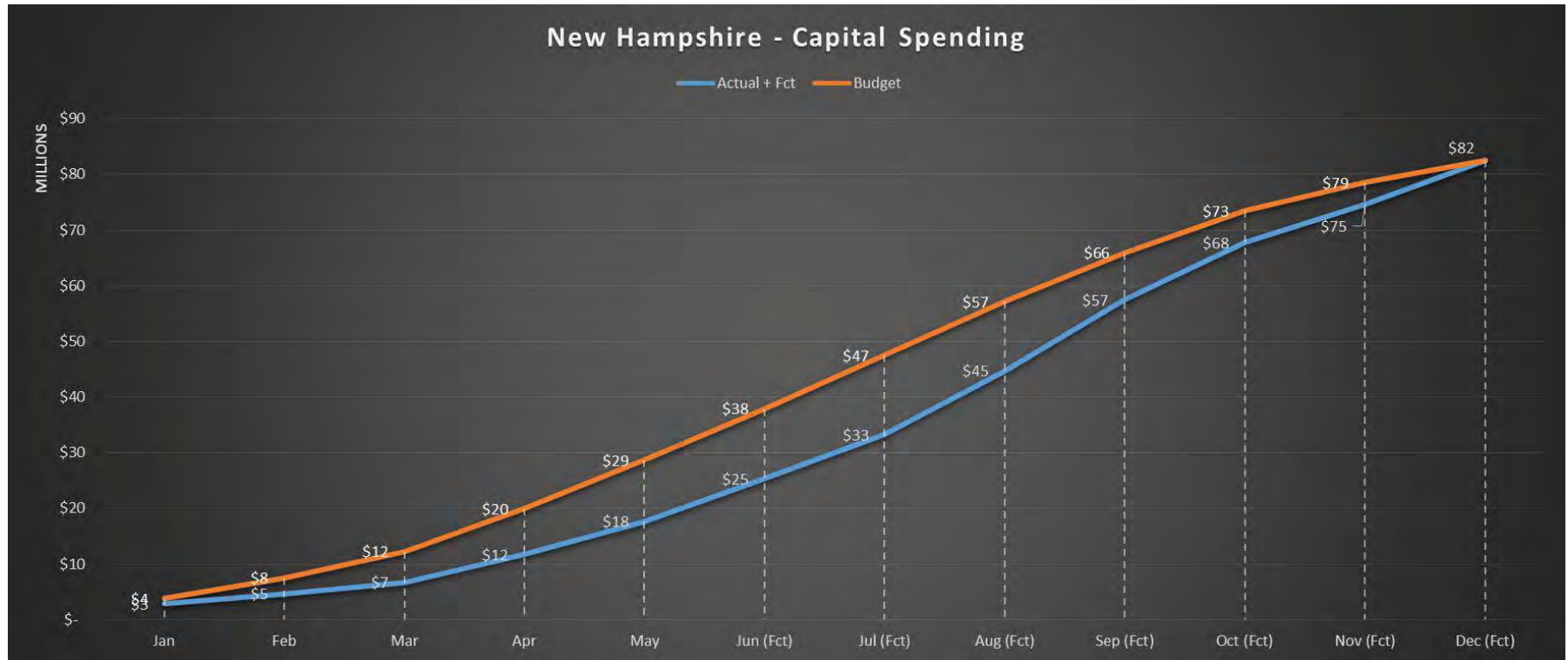


Capital Spending YTD													
	Jan	Feb	Mar	Apr	May (Fct)	Jun (Fct)	Jul (Fct)	Aug (Fct)	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)	Variance
Actual + Fct	\$ 2,828,999	\$ 4,655,691	\$ 6,756,899	\$ 11,757,719	\$ 18,931,343	\$ 26,603,505	\$ 34,576,319	\$ 45,990,461	\$ 57,548,447	\$ 67,780,876	\$ 74,658,208	\$ 82,499,330	
Budget	\$ 3,758,981	\$ 7,542,962	\$ 12,280,018	\$ 19,942,449	\$ 28,686,425	\$ 37,928,939	\$ 47,472,105	\$ 57,140,241	\$ 65,952,221	\$ 73,429,643	\$ 78,560,969	\$ 82,499,330	\$ 0
	Jan	Feb	Mar	Apr	May (Fct)	Jun (Fct)	Jul (Fct)	Aug (Fct)	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)	Annual
Actual EN	\$ 1,845,125	\$ 1,063,382	\$ 1,327,210	\$ 3,949,161	\$ 5,793,614	\$ 6,259,602	\$ 6,732,996	\$ 10,049,354	\$ 9,117,378	\$ 7,914,415	\$ 5,755,464	\$ 4,747,916	\$ 64,555,618
Actual GSE	\$ 973,907	\$ 740,269	\$ 776,546	\$ 1,027,174	\$ 1,253,410	\$ 1,275,410	\$ 1,092,118	\$ 1,217,088	\$ 2,314,008	\$ 2,223,063	\$ 1,069,118	\$ 2,965,677	\$ 16,927,788
Actual MEP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Actual Keene	\$ 9,967	\$ 23,041	\$ (2,548)	\$ 24,485	\$ 126,600	\$ 137,150	\$ 147,700	\$ 147,700	\$ 126,600	\$ 94,950	\$ 52,750	\$ 127,529	\$ 1,015,924
	2,828,999	1,826,692	2,101,208	5,000,820	7,173,624	7,672,162	7,972,814	11,414,142	11,557,986	10,232,428	6,877,332	7,841,122	\$ 82,499,330
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Budget EN	\$ 1,043,592	\$ 1,043,592	\$ 1,975,567	\$ 4,861,639	\$ 5,793,614	\$ 6,259,602	\$ 6,732,996	\$ 6,732,996	\$ 5,801,020	\$ 4,598,057	\$ 2,439,106	\$ 1,507,131	\$ 48,788,912
Budget GSE	\$ 1,123,937	\$ 1,148,937	\$ 1,148,937	\$ 1,124,940	\$ 1,253,410	\$ 1,275,410	\$ 1,092,118	\$ 1,217,088	\$ 1,314,008	\$ 1,214,063	\$ 1,069,118	\$ 829,228	\$ 13,811,194
Budget MEP	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 18,844,224
Budget Keene	\$ 21,100	\$ 21,100	\$ 42,200	\$ 105,500	\$ 126,600	\$ 137,150	\$ 147,700	\$ 147,700	\$ 126,600	\$ 94,950	\$ 52,750	\$ 31,650	\$ 1,055,000
	\$ 3,758,981	\$ 3,783,981	\$ 4,737,056	\$ 7,662,431	\$ 8,743,976	\$ 9,242,514	\$ 9,543,166	\$ 9,668,136	\$ 8,811,980	\$ 7,477,422	\$ 5,131,326	\$ 3,938,361	\$ 82,499,330

MAY 2017 CAPITAL SPENDING UPDATE – 06/22/2017

Agenda

1. Safety Moment
2. May 2017 Capital Spending Results
3. 2017 Capital Budget – High Profile Project Presentations
4. Emergent Project Prioritization Discussion
5. Questions?

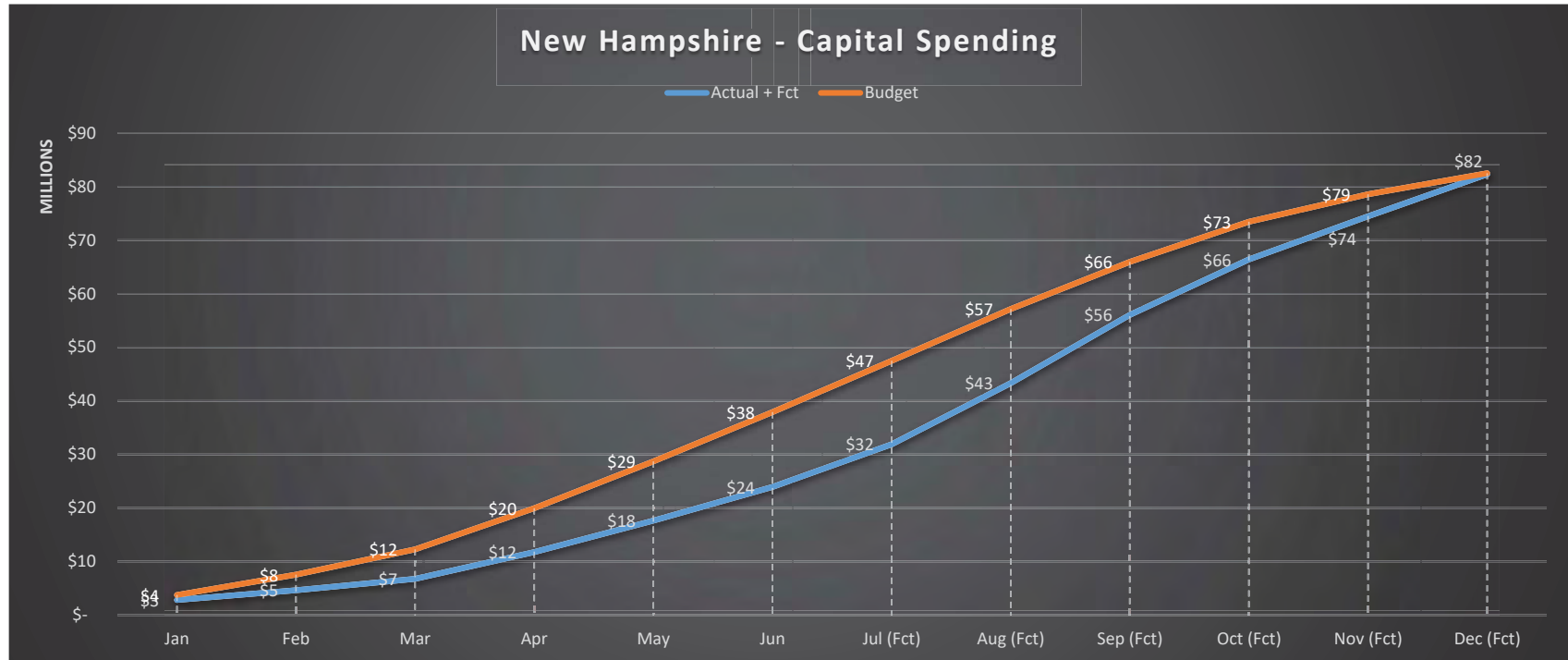


Capital Spending YTD													
	Jan	Feb	Mar	Apr	May	Jun (Fct)	Jul (Fct)	Aug (Fct)	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)	Variance
Actual + Fct	\$ 2,828,999	\$ 4,655,691	\$ 6,756,899	\$ 11,757,719	\$ 17,644,006	\$ 25,316,168	\$ 33,288,982	\$ 44,703,124	\$ 57,458,219	\$ 67,780,875	\$ 74,658,208	\$ 82,499,330	
Budget	\$ 3,758,981	\$ 7,542,962	\$ 12,280,018	\$ 19,942,449	\$ 28,686,425	\$ 37,928,939	\$ 47,472,105	\$ 57,140,241	\$ 65,952,221	\$ 73,429,643	\$ 78,560,969	\$ 82,499,330	\$ (0)
	Jan	Feb	Mar	Apr	May	Jun (Fct)	Jul (Fct)	Aug (Fct)	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)	Annual
Actual EN	\$ 1,845,125	\$ 1,063,382	\$ 1,327,210	\$ 3,949,161	\$ 5,142,670	\$ 6,259,602	\$ 6,732,996	\$ 10,049,354	\$ 10,412,673	\$ 7,914,415	\$ 5,755,464	\$ 4,747,916	\$ 65,199,969
Actual GSE	\$ 973,907	\$ 740,269	\$ 776,546	\$ 1,027,174	\$ 686,524	\$ 1,275,410	\$ 1,092,118	\$ 1,217,088	\$ 2,215,822	\$ 2,223,063	\$ 1,069,118	\$ 2,965,677	\$ 16,262,716
Actual MEP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Actual Keene	\$ 9,967	\$ 23,041	\$ (2,548)	\$ 24,485	\$ 57,093	\$ 137,150	\$ 147,700	\$ 147,700	\$ 126,600	\$ 185,178	\$ 52,750	\$ 127,529	\$ 1,036,645
	2,828,999	1,826,692	2,101,208	5,000,820	5,886,287	7,672,162	7,972,814	11,414,142	12,755,095	10,322,656	6,877,332	7,841,122	\$ 82,499,330
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Budget EN	\$ 1,043,592	\$ 1,043,592	\$ 1,975,567	\$ 4,861,639	\$ 5,793,614	\$ 6,259,602	\$ 6,732,996	\$ 6,732,996	\$ 5,801,020	\$ 4,598,057	\$ 2,439,106	\$ 1,507,131	\$ 48,788,912
Budget GSE	\$ 1,123,937	\$ 1,148,937	\$ 1,148,937	\$ 1,124,940	\$ 1,253,410	\$ 1,275,410	\$ 1,092,118	\$ 1,217,088	\$ 1,314,008	\$ 1,214,063	\$ 1,069,118	\$ 829,228	\$ 13,811,194
Budget MEP	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 18,844,224
Budget Keene	\$ 21,100	\$ 21,100	\$ 42,200	\$ 105,500	\$ 126,600	\$ 137,150	\$ 147,700	\$ 147,700	\$ 126,600	\$ 94,950	\$ 52,750	\$ 31,650	\$ 1,055,000
	\$ 3,758,981	\$ 3,783,981	\$ 4,737,056	\$ 7,662,431	\$ 8,743,976	\$ 9,242,514	\$ 9,543,166	\$ 9,668,136	\$ 8,811,980	\$ 7,477,422	\$ 5,131,326	\$ 3,938,361	\$ 82,499,330

JUNE 2017 CAPITAL SPENDING UPDATE – 07/17/2017

Agenda

1. Safety Moment
2. June 2017 Capital Spending Results
3. High Profile Project Presentations
4. June Project Status Review
5. Draft 2018 Capital Budget
6. Questions?

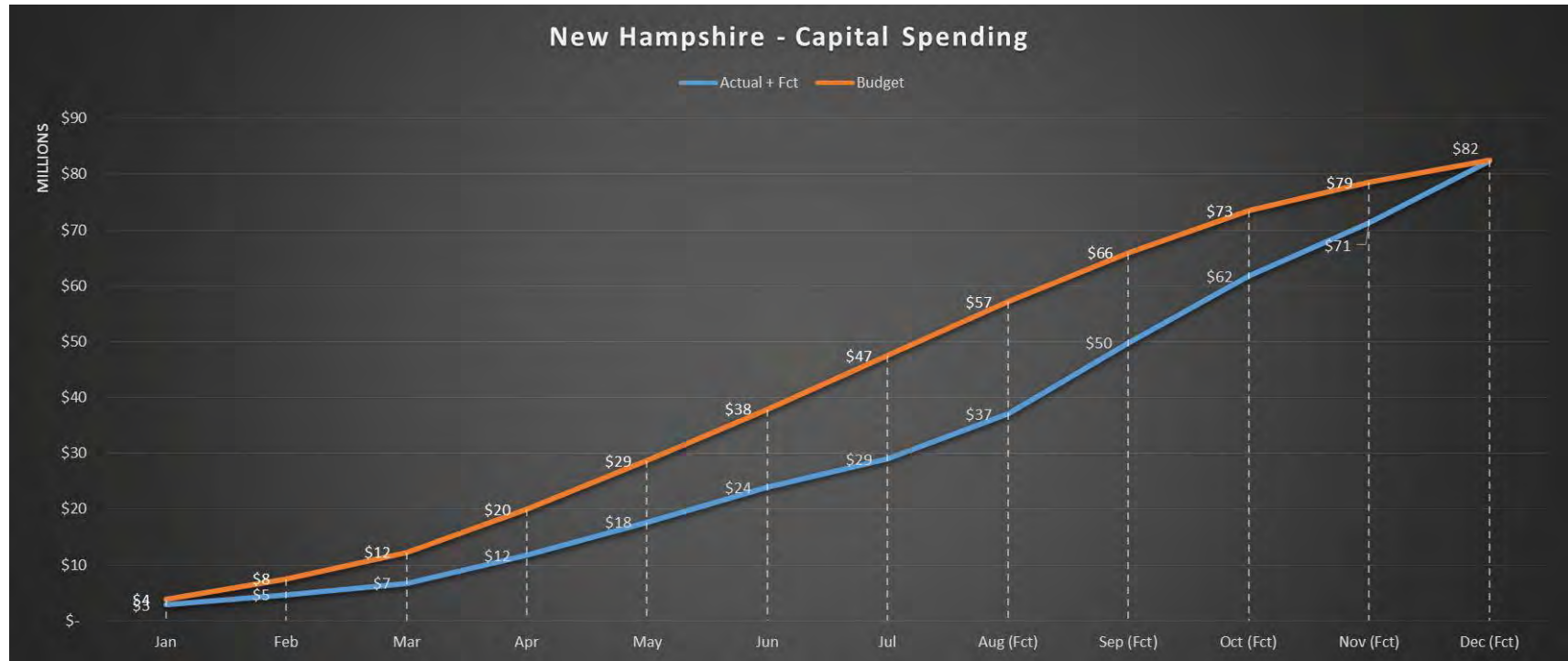


Capital Spending YTD													
	Jan	Feb	Mar	Apr	May	Jun	Jul (Fct)	Aug (Fct)	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)	Variance
Actual + Fct	\$ 2,828,999	\$ 4,655,691	\$ 6,756,899	\$ 11,757,719	\$ 17,644,006	\$ 23,921,812	\$ 31,894,626	\$ 43,308,768	\$ 56,063,863	\$ 66,386,519	\$ 74,454,860	\$ 82,295,982	
Budget	\$ 3,758,981	\$ 7,542,962	\$ 12,280,018	\$ 19,942,449	\$ 28,686,425	\$ 37,928,939	\$ 47,472,105	\$ 57,140,241	\$ 65,952,221	\$ 73,429,643	\$ 78,560,969	\$ 82,499,330	\$ (203,348)
	Jan	Feb	Mar	Apr	May	Jun	Jul (Fct)	Aug (Fct)	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)	Annual
Actual EN	\$ 1,845,125	\$ 1,063,382	\$ 1,327,210	\$ 3,949,161	\$ 5,142,670	\$ 4,998,853	\$ 6,732,996	\$ 10,049,354	\$ 10,412,673	\$ 7,914,415	\$ 6,716,109	\$ 4,747,916	\$ 64,899,865
Actual GSE	\$ 973,907	\$ 740,269	\$ 776,546	\$ 1,027,174	\$ 686,524	\$ 1,214,691	\$ 1,092,118	\$ 1,217,088	\$ 2,215,822	\$ 2,223,063	\$ 1,226,092	\$ 2,965,677	\$ 16,358,971
Actual MEP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Actual Keene	\$ 9,967	\$ 23,041	\$ (2,548)	\$ 24,485	\$ 57,093	\$ 64,262	\$ 147,700	\$ 147,700	\$ 126,600	\$ 185,178	\$ 126,139	\$ 127,529	\$ 1,037,146
	2,828,999	1,826,692	2,101,208	5,000,820	5,886,287	6,277,806	7,972,814	11,414,142	12,755,095	10,322,656	8,068,340	7,841,122	\$ 82,295,982
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Budget EN	\$ 1,043,592	\$ 1,043,592	\$ 1,975,567	\$ 4,861,639	\$ 5,793,614	\$ 6,259,602	\$ 6,732,996	\$ 6,732,996	\$ 5,801,020	\$ 4,598,057	\$ 2,439,106	\$ 1,507,131	\$ 48,788,912
Budget GSE	\$ 1,123,937	\$ 1,148,937	\$ 1,148,937	\$ 1,124,940	\$ 1,253,410	\$ 1,275,410	\$ 1,092,118	\$ 1,217,088	\$ 1,314,008	\$ 1,214,063	\$ 1,069,118	\$ 829,228	\$ 13,811,194
Budget MEP	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 18,844,224
Budget Keene	\$ 21,100	\$ 21,100	\$ 42,200	\$ 105,500	\$ 126,600	\$ 137,150	\$ 147,700	\$ 147,700	\$ 126,600	\$ 94,950	\$ 52,750	\$ 31,650	\$ 1,055,000
	\$ 3,758,981	\$ 3,783,981	\$ 4,737,056	\$ 7,662,431	\$ 8,743,976	\$ 9,242,514	\$ 9,543,166	\$ 9,668,136	\$ 8,811,980	\$ 7,477,422	\$ 5,131,326	\$ 3,938,361	\$ 82,499,330

JULY 2017 CAPITAL SPENDING UPDATE – 08/21/2017

Agenda

1. Safety Moment
2. July 2017 Capital Spending Results
3. High Profile Project Presentations
4. Project Close Out Variance Reporting
5. 2018-2022 Capital Budget
6. Questions?

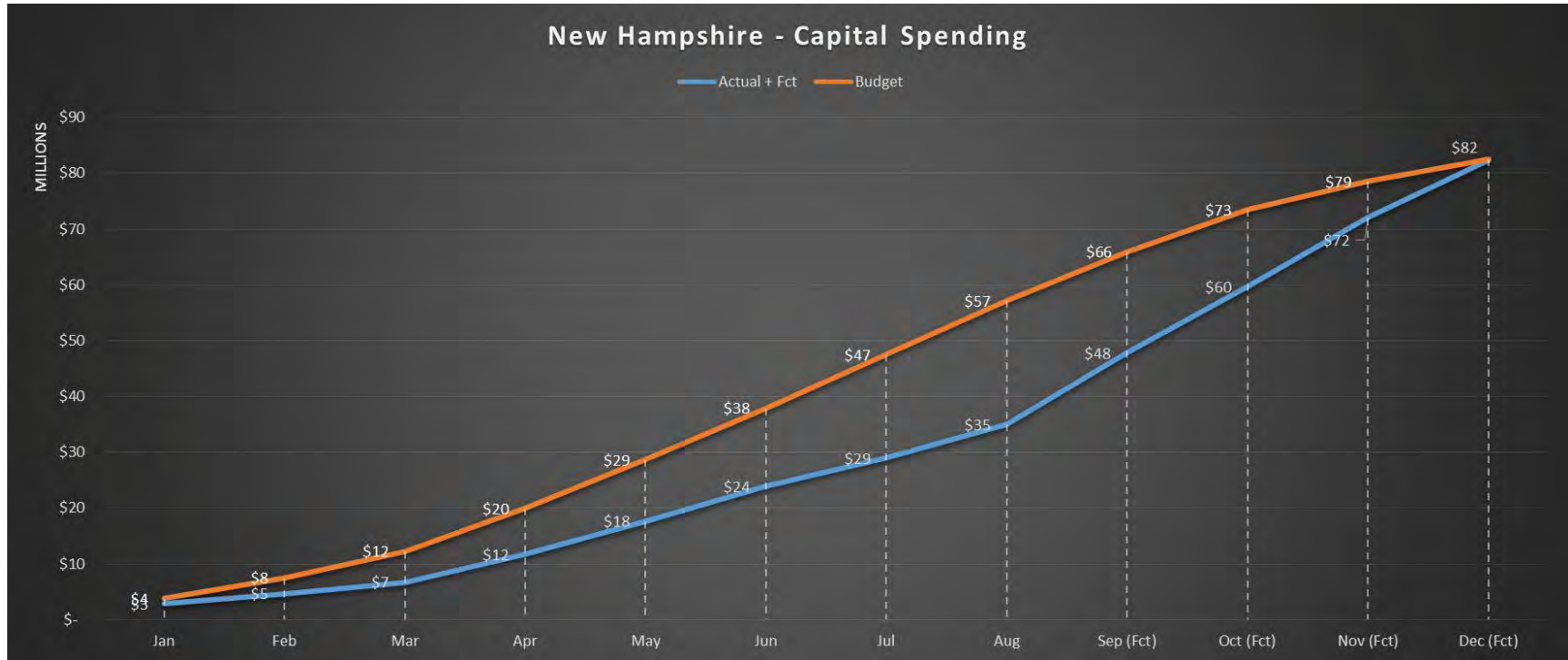


Capital Spending YTD													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug (Fct)	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)	Variance
Actual + Fct	\$ 2,828,999	\$ 4,655,691	\$ 6,756,899	\$ 11,757,719	\$ 17,644,006	\$ 23,921,812	\$ 28,947,462	\$ 37,045,246	\$ 49,800,341	\$ 61,735,301	\$ 71,271,870	\$ 82,428,708	
Budget	\$ 3,758,981	\$ 7,542,962	\$ 12,280,018	\$ 19,942,449	\$ 28,686,425	\$ 37,928,939	\$ 47,472,105	\$ 57,140,241	\$ 65,952,221	\$ 73,429,643	\$ 78,560,969	\$ 82,499,330	\$ (70,622)
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug (Fct)	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)	Annual
Actual EN	\$ 1,845,125	\$ 1,063,382	\$ 1,327,210	\$ 3,949,161	\$ 5,142,670	\$ 4,998,853	\$ 3,960,796	\$ 6,732,996	\$ 10,412,673	\$ 9,545,129	\$ 6,716,109	\$ 8,063,631	\$ 63,757,736
Actual GSE	\$ 973,907	\$ 740,269	\$ 776,546	\$ 1,027,174	\$ 686,524	\$ 1,214,691	\$ 913,984	\$ 1,217,088	\$ 2,215,822	\$ 2,223,063	\$ 2,694,321	\$ 2,965,677	\$ 17,649,066
Actual MEP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Actual Keene	\$ 9,967	\$ 23,041	\$ (2,548)	\$ 24,485	\$ 57,093	\$ 64,262	\$ 150,870	\$ 147,700	\$ 126,600	\$ 166,768	\$ 126,139	\$ 127,529	\$ 1,021,906
	2,828,999	1,826,692	2,101,208	5,000,820	5,886,287	6,277,806	5,025,650	8,097,784	12,755,095	11,934,960	9,536,569	11,156,837	\$ 82,428,708
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Budget EN	\$ 1,043,592	\$ 1,043,592	\$ 1,975,567	\$ 4,861,639	\$ 5,793,614	\$ 6,259,602	\$ 6,732,996	\$ 6,732,996	\$ 5,801,020	\$ 4,598,057	\$ 2,439,106	\$ 1,507,131	\$ 48,788,912
Budget GSE	\$ 1,123,937	\$ 1,148,937	\$ 1,148,937	\$ 1,124,940	\$ 1,253,410	\$ 1,275,410	\$ 1,092,118	\$ 1,217,088	\$ 1,314,008	\$ 1,214,063	\$ 1,069,118	\$ 829,228	\$ 13,811,194
Budget MEP	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 18,844,224
Budget Keene	\$ 21,100	\$ 21,100	\$ 42,200	\$ 105,500	\$ 126,600	\$ 137,150	\$ 147,700	\$ 147,700	\$ 126,600	\$ 94,950	\$ 52,750	\$ 31,650	\$ 1,055,000
	\$ 3,758,981	\$ 3,783,981	\$ 4,737,056	\$ 7,662,431	\$ 8,743,976	\$ 9,242,514	\$ 9,543,166	\$ 9,668,136	\$ 8,811,980	\$ 7,477,422	\$ 5,131,326	\$ 3,938,361	\$ 82,499,330

AUGUST 2017 CAPITAL SPENDING UPDATE – 09/18/2017

Agenda

1. Safety Moment
2. August 2017 Capital Spending Results
 - a. New Hampshire Overview
 - b. Entity Overview
3. High Profile Project Presentations
 - a. Fleet
 - b. CNG Fast Fill Stations
 - c. Windham/Pelham
 - d. Pelham Substation
 - e. Pelham Feeder
 - f. City/State Construction
 - g. CIBS
4. Project Delays & Concerns - Roundtable
5. Project Close Out Variance Reporting – Example
6. Questions?



Capital Spending YTD													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)	Variance
Actual + Fct	\$ 2,828,999	\$ 4,655,691	\$ 6,756,899	\$ 11,757,719	\$ 17,644,006	\$ 23,921,812	\$ 28,947,462	\$ 35,008,487	\$ 47,763,582	\$ 59,698,542	\$ 72,002,869	\$ 82,428,708	
Budget	\$ 3,758,981	\$ 7,542,962	\$ 12,280,018	\$ 19,942,449	\$ 28,686,425	\$ 37,928,939	\$ 47,472,105	\$ 57,140,241	\$ 65,952,221	\$ 73,429,643	\$ 78,560,969	\$ 82,499,330	\$ (70,622)
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep (Fct)	Oct (Fct)	Nov (Fct)	Dec (Fct)	Annual
Actual EN	\$ 1,845,125	\$ 1,063,382	\$ 1,327,210	\$ 3,949,161	\$ 5,142,670	\$ 4,998,853	\$ 3,960,796	\$ 3,965,238	\$ 10,412,673	\$ 9,545,129	\$ 9,483,867	\$ 8,063,631	\$ 63,757,736
Actual GSE	\$ 973,907	\$ 740,269	\$ 776,546	\$ 1,027,174	\$ 686,524	\$ 1,214,691	\$ 913,984	\$ 1,898,965	\$ 2,215,822	\$ 2,223,063	\$ 2,694,321	\$ 2,283,800	\$ 17,649,066
Actual MEP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Actual Keene	\$ 9,967	\$ 23,041	\$ (2,548)	\$ 24,485	\$ 57,093	\$ 64,262	\$ 150,870	\$ 196,822	\$ 126,600	\$ 166,768	\$ 126,139	\$ 78,407	\$ 1,021,906
	2,828,999	1,826,692	2,101,208	5,000,820	5,886,287	6,277,806	5,025,650	6,061,025	12,755,095	11,934,960	12,304,327	10,425,838	\$ 82,428,708
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Budget EN	\$ 1,043,592	\$ 1,043,592	\$ 1,975,567	\$ 4,861,639	\$ 5,793,614	\$ 6,259,602	\$ 6,732,996	\$ 6,732,996	\$ 5,801,020	\$ 4,598,057	\$ 2,439,106	\$ 1,507,131	\$ 48,788,912
Budget GSE	\$ 1,123,937	\$ 1,148,937	\$ 1,148,937	\$ 1,124,940	\$ 1,253,410	\$ 1,275,410	\$ 1,092,118	\$ 1,217,088	\$ 1,314,008	\$ 1,214,063	\$ 1,069,118	\$ 829,228	\$ 13,811,194
Budget MEP	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 1,570,352	\$ 18,844,224
Budget Keene	\$ 21,100	\$ 21,100	\$ 42,200	\$ 105,500	\$ 126,600	\$ 137,150	\$ 147,700	\$ 147,700	\$ 126,600	\$ 94,950	\$ 52,750	\$ 31,650	\$ 1,055,000
	\$ 3,758,981	\$ 3,783,981	\$ 4,737,056	\$ 7,662,431	\$ 8,743,976	\$ 9,242,514	\$ 9,543,166	\$ 9,668,136	\$ 8,811,980	\$ 7,477,422	\$ 5,131,326	\$ 3,938,361	\$ 82,499,330

SEPTEMBER 2017 CAPITAL SPENDING UPDATE – 10/17/2017

Agenda

1. Safety Moment
2. September 2017 Capital Spending Results
 - a. New Hampshire Overview
 - b. Entity Overview
3. High Profile Project Presentations
 - a. Fleet
 - b. CNG Fast Fill Stations
 - c. Windham/Pelham
 - d. Pelham Substation
 - e. Pelham Feeder
 - f. City/State Construction
 - g. CIBS
4. Project Delays & Concerns - Roundtable
5. Project Close Out Variance Reporting
6. Emergent Projects
7. Questions?

OCTOBER 2017 CAPITAL SPENDING UPDATE – 11/20/2017

Agenda

1. Safety Moment
2. October 2017 Capital Spending Results
 - a. New Hampshire Overview
 - b. Entity Overview
3. High Profile Project Presentations
 - a. Fleet
 - b. CNG Fast Fill Stations
 - c. Windham/Pelham
 - d. Pelham Substation
 - e. Pelham Feeder
 - f. City/State Construction
 - g. CIBS
4. Project Delays & Concerns - Roundtable
5. Project Close Out Variance Reporting
6. Emergent Projects
7. Questions?

NOVEMBER 2017 CAPITAL SPENDING UPDATE – 12/19/2017

Agenda

1. Safety Moment
2. November 2017 Capital Spending Results
 - a. New Hampshire Overview
 - b. Entity Overview
3. High Profile Project Presentations
 - a. Fleet
 - b. CNG Fast Fill Stations
 - c. Windham/Pelham
 - d. Pelham Substation
 - e. Pelham Feeder
 - f. City/State Construction
 - g. CIBS
4. Project Accruals due 12/22/2017
5. Over-Expenditure Forms due ASAP
6. Project Close Out Variance Reporting
7. Questions?

DECEMBER 2017 CAPITAL SPENDING UPDATE – 01/23/2018

Agenda

1. Safety Moment
2. December 2017 Capital Spending Results
 - a. New Hampshire Overview
 - b. Entity Overview
3. High Profile Project Presentations
 - a. Fleet
 - b. CNG Fast Fill Stations
 - c. Windham/Pelham
 - d. Pelham Substation
 - e. Pelham Feeder
 - f. City/State Construction
 - g. CIBS
4. Project Closure Forms
5. 2018 Budget Overview
6. Questions?

Project	Budget Class	Priority	December (YTD)	Direct Cost	Overhead	2017 Original Budget	2017 Revisions	2017 Revised Budget	Variance	Remaining Budget	Project Manager	Comments
8830-1701	LU CapEx - Replenishment	Mandated	\$ 324,376	\$ 106,090	\$ 218,287	\$ 50,000.00	\$ -	\$ 50,000	(\$274,376.45)	(\$274,376)	Strabone, Anthony	
8830-1702	LU CapEx - Replenishment	Mandated	\$ 84,283	\$ 58,435	\$ 5,868	\$ 25,000.00	\$ -	\$ 25,000	(\$39,282.84)	(\$39,283)	Strabone, Anthony	
8830-1703	LU CapEx - Replenishment	Mandated	\$ 81,497	\$ 81,497	\$ -	\$ 195,000.00	\$ -	\$ 195,000	\$113,502.93	\$113,503	Foley, Rich	(11-16-15) We expect to spend about \$84,000 through year end (43% of budget)
8830-1704	LU CapEx - Replenishment	Mandated	\$ 410,576	\$ 410,576	\$ -	\$ 390,000.00	\$ -	\$ 390,000	(\$20,576.58)	(\$20,576)	Foley, Rich	(11-16-15) \$35,000 in Commitments - Project to spend \$435,000 thru ye (111% of budget)
8830-1705	LU CapEx - Replenishment	Mandated	\$ (92,608)	\$ 43,830	\$ (48,778)	\$ 10,000.00	\$ -	\$ 10,000	\$102,608.12	\$102,608	Strabone, Anthony	
8830-1706	LU CapEx - Replenishment	Mandated	\$ -	\$ -	\$ -	\$ 15,000.00	\$ -	\$ 15,000	\$15,000.00	\$15,000	Foley, Rich	
8830-1707	LU CapEx - Replenishment	Mandated	\$ 30,192	\$ 39,165	\$ (8,973)	\$ 40,000.00	\$ -	\$ 40,000	\$9,808.02	\$9,808	Strabone, Anthony	
8830-1708	LU CapEx - Replenishment	Mandated	\$ 22,943	\$ 22,943	\$ -	\$ 75,000.00	\$ -	\$ 75,000	\$52,057.24	\$52,057	Strabone, Anthony	
8830-1709	LU CapEx - Replenishment	Mandated	\$ -	\$ -	\$ -	\$ 4,271.00	\$ -	\$ 4,271	\$2,275.00	\$2,275	Strabone, Anthony	
8830-1710	LU CapEx - Replenishment	Mandated	\$ 150,052	\$ 67,475	\$ 82,577	\$ 250,000.00	\$ -	\$ 250,000	\$99,947.89	\$99,948	Strabone, Anthony	
8830-1711	LU CapEx - Replenishment	Mandated	\$ 414,432	\$ 165,339	\$ 249,093	\$ 387,000.00	\$ -	\$ 387,000	(\$27,431.77)	(\$27,431)	Strabone, Anthony	
8830-1712	LU CapEx - Replenishment	Mandated	\$ 1,111,529	\$ 244,466	\$ 867,062	\$ 800,000.00	\$ -	\$ 800,000	(\$311,528.66)	(\$311,529)	Strabone, Anthony	
8830-1713	LU CapEx - Replenishment	Mandated	\$ 530,609	\$ 267,719	\$ 262,890	\$ 400,000.00	\$ -	\$ 400,000	(\$130,609.00)	(\$130,609)	Strabone, Anthony	
8830-1714	LU CapEx - Replenishment	Mandated	\$ 115,647	\$ 118,513	\$ 34,560	\$ 125,000.00	\$ -	\$ 125,000	\$9,352.68	\$9,353	Strabone, Anthony	
8830-1715	LU CapEx - Replenishment	Discretionary	\$ -	\$ -	\$ -	\$ 5,000.00	\$ 100,000.00	\$ 105,000	\$105,000.00	\$105,000	Strabone, Anthony	Increase for Golden Rock Substation (Tuscan Village Drive)
8830-1716	LU CapEx - Replenishment	Discretionary	\$ -	\$ -	\$ -	\$ 25,000.00	\$ -	\$ 25,000	\$25,000.00	\$25,000	Strabone, Anthony	
8830-1717	LU CapEx - Replenishment	Discretionary	\$ -	\$ -	\$ -	\$ 10,000.00	\$ -	\$ 10,000	\$10,000.00	\$10,000	Strabone, Anthony	
8830-1718	LU CapEx - Replenishment	Discretionary	\$ -	\$ -	\$ -	\$ 24,996.00	\$ -	\$ 24,996	\$24,996.00	\$24,996	Strabone, Anthony	
8830-1719	LU CapEx - Replenishment	Discretionary	\$ (3,083)	\$ (1,506)	\$ (1,578)	\$ 9,996.00	\$ -	\$ 9,996	\$13,079.44	\$13,079	Strabone, Anthony	
8830-1720	LU CapEx - Improvement	Mandated	\$ -	\$ -	\$ -	\$ 25,000.00	\$ -	\$ 25,000	\$25,000.00	\$25,000	Dom, Doug	
8830-1721	LU CapEx - Improvement	Mandated	\$ 314,042	\$ 144,445	\$ 169,597	\$ 500,000.00	\$ -	\$ 500,000	\$169,597.45	\$169,598	Strabone, Anthony	
8830-1722	LU CapEx - Improvement	Mandated	\$ 15,641	\$ 5,133	\$ 10,508	\$ 25,000.00	\$ -	\$ 25,000	\$9,359.24	\$9,359	Strabone, Anthony	
8830-1723	LU CapEx - Improvement	Mandated	\$ 152	\$ (36,244)	\$ 36,396	\$ 75,000.00	\$ -	\$ 75,000	\$74,848.39	\$74,848	Strabone, Anthony	
8830-1724	LU CapEx - Improvement	Mandated	\$ 70,994	\$ 70,994	\$ -	\$ 50,000.00	\$ -	\$ 50,000	(\$20,994.00)	(\$20,994)	Dom, Doug	
8830-1725	LU CapEx - Improvement	Discretionary	\$ 41,976	\$ 41,976	\$ -	\$ 50,000.00	\$ -	\$ 50,000	\$8,024.29	\$8,024	Romano, Don	
8830-1726	LU CapEx - Improvement	Discretionary	\$ 283,406	\$ 283,406	\$ -	\$ 250,000.00	\$ -	\$ 250,000	(\$33,405.96)	(\$33,406)	Foley, Rich	(11-16-15) with add of Rwd for Metering total projected ~280,000 (112% of budget)
8830-1727	LU CapEx - Improvement	Discretionary	\$ 69,149	\$ 64,994	\$ 4,155	\$ 250,000.00	\$ -	\$ 250,000	\$180,851.41	\$180,851	Watson, Jennifer	
8830-1728	LU CapEx - Improvement	Discretionary	\$ (3,585)	\$ (2,930)	\$ (655)	\$ 20,999.00	\$ -	\$ 20,996	\$43,580.97	\$43,581	Dom, Doug	
8830-1729	LU CapEx - Improvement	Discretionary	\$ 9,960	\$ 9,960	\$ -	\$ 84,996.00	\$ -	\$ 84,996	\$75,036.00	\$75,036	Dom, Doug	
8830-1730	LU CapEx - Improvement	Discretionary	\$ 1,401	\$ 7,666	\$ (6,264)	\$ 25,000.00	\$ -	\$ 25,000	\$23,598.81	\$23,599	Dom, Doug	
8830-1731	LU CapEx - Improvement	Discretionary	\$ -	\$ -	\$ -	\$ 15,000.00	\$ -	\$ 15,000	\$15,000.00	\$15,000	Dom, Doug	
8830-1732	LU CapEx - Improvement	Discretionary	\$ -	\$ -	\$ -	\$ 291,360.73	\$ (291,360.73)	\$ -	\$0.00	\$0	Watson, Jennifer	Anticipating delay in receipt of project charges
8830-1733	LU CapEx - Improvement	Discretionary	\$ -	\$ -	\$ -	\$ 291,360.73	\$ (291,360.73)	\$ -	\$0.00	\$0	Watson, Jennifer	Anticipating delay in receipt of project charges
8830-1734	LU CapEx - Improvement	Discretionary	\$ -	\$ -	\$ -	\$ 322,828.34	\$ (322,828.34)	\$ -	\$0.00	\$0	Watson, Jennifer	deferred, because of Project One and the GIS Roadmap
8830-1735	LU CapEx - Improvement	Discretionary	\$ -	\$ -	\$ -	\$ 8,991.85	\$ (8,991.85)	\$ -	\$0.00	\$0	Watson, Jennifer	deferred, because of Project One and the GIS Roadmap
8830-1736	LU CapEx - Improvement	Discretionary	\$ -	\$ -	\$ -	\$ 50,000.00	\$ (500,000.00)	\$ (450,000)	(\$450,000.00)	\$0	Watson, Jennifer	deferred, because of Project One and the GIS Roadmap
8830-1737	LU CapEx - Growth	Growth	\$ 550,399	\$ 172,767	\$ 377,633	\$ 1,000,000.00	\$ -	\$ 1,000,000	\$449,600.59	\$449,601	Strabone, Anthony	
8830-1738	LU CapEx - Growth	Growth	\$ 1,174,477	\$ 350,149	\$ 1,024,328	\$ 1,200,000.00	\$ -	\$ 1,200,000	(\$174,477.22)	(\$174,477)	Strabone, Anthony	
8830-1739	LU CapEx - Improvement	Discretionary	\$ 20,901	\$ 11,072	\$ 9,829	\$ -	\$ 12,030	\$ 12,030	(\$8,020.70)	(\$8,021)	Dom, Doug	
8830-1740	LU CapEx - Improvement	Discretionary	\$ -	\$ -	\$ -	\$ -	\$ 17,631.00	\$ 17,631	\$17,631.00	\$17,631	Dom, Doug	Emergent Project
8830-1741	LU CapEx - Improvement	Discretionary	\$ 49,824	\$ 42,080	\$ 7,744	\$ -	\$ 35,000.00	\$ 35,000	(\$14,823.60)	(\$14,824)	Strabone, Anthony	Emergent Project
8830-1742	LU CapEx - Improvement	Discretionary	\$ 1,487	\$ 1,880	\$ 607	\$ -	\$ 65,000.00	\$ 65,000	\$62,513.35	\$62,513	Strabone, Anthony	Recluse will not be replaced before year end
8830-1743	LU CapEx - Improvement	Discretionary	\$ 116,368	\$ 116,368	\$ -	\$ -	\$ 116,586.00	\$ 116,586	\$217.97	\$218	Romano, Don	Emergent Project
8830-1744	LU CapEx - Improvement	Discretionary	\$ 27,169	\$ 23,701	\$ 3,467	\$ -	\$ 100,000.00	\$ 100,000	\$72,831.07	\$72,831	Strabone, Anthony	
8830-1745	LU CapEx - Improvement	Discretionary	\$ 12,450	\$ 12,450	\$ -	\$ -	\$ 19,745.00	\$ 19,745	\$7,295.00	\$7,295	MacDonald, Rich	
8830-1746	LU CapEx - Improvement	Discretionary	\$ 113,750	\$ 113,750	\$ -	\$ -	\$ 50,000.00	\$ 50,000	(\$63,750.00)	(\$63,750)	MacDonald, Rich	
8830-1867	LU CapEx - Improvement	Discretionary	\$ -	\$ -	\$ -	\$ -	\$ 50,000.00	\$ 50,000	\$50,000.00	\$50,000	Strabone, Anthony	
8830-C18603	LU CapEx - Improvement	Regulatory	\$ 1,784,038	\$ 1,501,456	\$ 282,582	\$ 1,300,000.00	\$ -	\$ 1,300,000	(\$484,038.04)	(\$484,038)	Strabone, Anthony	
8830-C18620	LU CapEx - Replenishment	Regulatory	\$ 494,008	\$ 484,011	\$ 15,997	\$ 316,992.00	\$ -	\$ 316,992	(\$182,027.27)	(\$182,027)	Strabone, Anthony	
8830-C18630	LU CapEx - Replenishment	Regulatory	\$ 283,009	\$ 225,997	\$ 57,012	\$ 25,000.00	\$ 500,000.00	\$ 525,000	\$241,931.21	\$241,931	Strabone, Anthony	
8830-C20473	LU CapEx - Improvement	Regulatory	\$ -	\$ -	\$ -	\$ 200,000.00	\$ -	\$ 200,000	\$200,000.00	\$200,000	Strabone, Anthony	
8830-C22214	LU CapEx - Improvement	Discretionary	\$ 234,236	\$ 101,340	\$ 132,896	\$ 75,000.00	\$ 138,618.00	\$ 213,618	(\$20,617.73)	(\$20,618)	Strabone, Anthony	
8830-C1402	LU CapEx - Replenishment	Discretionary	\$ (8,293)	\$ (6,843)	\$ (1,451)	\$ 100,000.00	\$ -	\$ 100,000	\$108,293.43	\$108,293	Strabone, Anthony	
8830-C32279	LU CapEx - Replenishment	Discretionary	\$ (38)	\$ (38)	\$ -	\$ -	\$ -	\$ -	\$38.22	\$0	Strabone, Anthony	
8830-C36423	LU CapEx - Improvement	Regulatory	\$ 253,472	\$ (2,460)	\$ 255,933	\$ 300,000.00	\$ -	\$ 300,000	\$46,527.64	\$46,528	Strabone, Anthony	
8830-C36424	LU CapEx - Improvement	Regulatory	\$ 467,937	\$ 224,224	\$ 243,712	\$ 50,000.00	\$ 225,000.00	\$ 275,000	(\$102,486.86)	(\$102,487)	Strabone, Anthony	
8830-C36425	LU CapEx - Improvement	Regulatory	\$ 555,143	\$ 188,271	\$ 366,872	\$ 50,000.00	\$ 400,999.00	\$ 450,999	(\$104,333.86)	(\$104,334)	Strabone, Anthony	
8830-C36427	LU CapEx - Replenishment	Discretionary	\$ (18,399)	\$ (50)	\$ (18,309)	\$ -	\$ -	\$ -	\$18,399.16	\$0	Strabone, Anthony	
8830-C36430	LU CapEx - Improvement	Regulatory	\$ 3,925,242	\$ 2,788,561	\$ 1,136,681	\$ 2,100,000.00	\$ 1,420,000.00	\$ 3,520,000	(\$405,242.48)	(\$405,242)	Strabone, Anthony	
8830-C36431	LU CapEx - Improvement	Regulatory	\$ 1,203,589	\$ 892,358	\$ 311,231	\$ 1,000,000.00	\$ -	\$ 1,000,000	(\$203,589.00)	(\$203,589)	Strabone, Anthony	
8830-C36433	LU CapEx - Improvement	Mandated	\$ 99,322	\$ 28,720	\$ 70,602	\$ 25,000.00	\$ -	\$ 25,000	(\$74,321.53)	(\$74,322)	Strabone, Anthony	
8830-C36435	LU CapEx - Replenishment	Discretionary	\$ 39,611	\$ 14,328	\$ 25,282	\$ -	\$ 32,993.00	\$ 32,993	(\$6,617.70)	(\$6,618)	Strabone, Anthony	
8830-C42851	LU CapEx - Improvement	Discretionary	\$ 217,522	\$ 88,567	\$ 128,955	\$ 500,000.00	\$ -	\$ 500,000	\$282,477.92	\$282,478	Strabone, Anthony	
8830-C42901	LU CapEx - Improvement	Discretionary	\$ 172,156	\$ 39,534	\$ 132,621	\$ -	\$ 150,000.00	\$ 150,000	(\$22,155.88)	(\$22,156)	Strabone, Anthony	
8830-C42912	LU CapEx - Growth	Growth	\$ -	\$ -	\$ -	\$ 25,000.00	\$ -	\$ 25,000	\$25,000.00	\$25,000	Strabone, Anthony	
8830-C42920	LU CapEx - Improvement	Discretionary	\$ 8,463	\$ 6,804	\$ 1,659	\$ -	\$ -	\$ -	\$0.00	\$0	Strabone, Anthony	
8830-C42921	LU CapEx - Improvement	Discretionary	\$ 203,306	\$ 126,761	\$ 76,544	\$ -	\$ 111,562.00	\$ 111,562	(\$91,743.61)	(\$91,744)	Strabone, Anthony	
8830-C42926	LU CapEx - Replenishment	Discretionary	\$ 110,870	\$ 31,250	\$ 79,621	\$ -	\$ 107,302.00	\$ 107,302	(\$3,568.12)	(\$3,568)	Strabone, Anthony	
8830-C42930	LU CapEx - Growth	Growth	\$ 6,923	\$ 1,750	\$ 5,172	\$ 200,000.00	\$ -	\$ 200,000	\$193,077.15	\$193,077	Strabone, Anthony	
8830-C42933	LU CapEx - Improvement	Discretionary	\$ 1,109	\$ 400	\$ 709	\$ -	\$ -	\$ -	(\$1,109.26)	\$0	Strabone, Anthony	Carryover Cost
8830-C42934	LU CapEx - Replenishment	Emergent	\$ 82,731	\$ 41,957	\$ 40,774	\$ 112,000.00	\$ -	\$ 112,000	\$29,268.63	\$29,269	Strabone, Anthony	
8830-C00291	LU CapEx - Replenishment	Mandated	\$ 70,683	\$ 46,244	\$ 24,439	\$ -	\$ 21,286.00	\$ 21,286	(\$49,396.81)	(\$49,397)	Strabone, Anthony	
8830-C00376	LU CapEx - Improvement	Discretionary	\$ 59,261	\$ 59,261	\$ -	\$ -	\$ -	\$ -	(\$59,261.36)	\$0	Strabone, Anthony	
8830-0711-009	LU CapEx - Improvement	Discretionary	\$ 2,878	\$ 2,878	\$ -	\$ -	\$ -	\$ -	(\$2,877.83)	\$0	Foley, Rich	Carryover Cost
8830-UNALOC BRDN	LU CapEx - Improvement	Discretionary	\$ (166,933)	\$ 1,645,513	\$ (1,812,446)	\$ -	\$ -	\$ -	\$166,933.12	\$0	Trotter, Cynthia	
			\$ 16,318,409	\$ 11,464,048	\$ 4,854,361	\$ 13,923,193	\$ 2,109,020	\$ 16,032,213	(\$286,195.54)	(\$286,196)		

Highlighted Items: Attachment Staff 1-2 provided different numbers. They were copied over to the response incorrectly.

Project Name (All)

Row Labels	Sum of Labor	Sum of Material	Sum of Voucher	Sum of Outside Svc	Sum of Overhead	Sum of COR	Sum of CIAC	Sum of AFUDC	Sum of CY	Sum of PY	Sum of Grand Total
8830-1701	\$ 72,449	\$ 12,911	\$ 12,620		\$ 218,287		\$ 8,169	\$ (60)			\$ 324,376
8830-1702	\$ 3,079	\$ 59,813	\$ (2,160)	\$ (2,468)	\$ 5,868			\$ 150			\$ 64,283
8830-1703	\$ (105)		\$ 81,602								\$ 81,497
8830-1704		\$ -	\$ 410,576								\$ 410,576
8830-1705	\$ (7,673)		\$ (30,651)		\$ (48,778)			\$ (5,506)			\$ (92,608)
8830-1707			\$ 39,165		\$ (8,973)						\$ 30,192
8830-1708			\$ 22,943								\$ 22,943
8830-1710	\$ 16,319	\$ 33,324	\$ 13,646		\$ 82,577		\$ 4,186				\$ 150,052
8830-1711	\$ 76,274	\$ 42,810	\$ 8,925	\$ 18,175	\$ 249,093		\$ 16,878	\$ 2,277			\$ 414,432
8830-1712	\$ 301,135	\$ 87,854	\$ (159,497)	\$ 49,328	\$ 867,062		\$ (37,298)	\$ 2,944			\$ 1,111,529
8830-1713	\$ 79,941	\$ 141,148	\$ 44,601		\$ 262,890		\$ 2,457	\$ (428)			\$ 530,609
8830-1714	\$ 40,673	\$ 22,817	\$ 58,473	\$ 15,658	\$ 134,560		\$ (155,789)	\$ (744)			\$ 115,647
8830-1719	\$ (1,820)	\$ -	\$ (45)		\$ (1,578)		\$ 359				\$ (3,083)
8830-1721	\$ 42,461	\$ 41,450	\$ 101,351	\$ 1,420	\$ 169,597			\$ 6,763		\$ (49,000)	\$ 314,042
8830-1722	\$ 10	\$ 4,440	\$ 683		\$ 10,508						\$ 15,641
8830-1723	\$ 23,748	\$ 8,758	\$ (39,271)	\$ 5,075	\$ 36,396		\$ (31,035)	\$ (3,518)			\$ 152
8830-1724			\$ 70,994								\$ 70,994
8830-1725			\$ 41,976								\$ 41,976
8830-1726			\$ 283,406								\$ 283,406
8830-1727	\$ -		\$ 64,173		\$ 4,155			\$ 821			\$ 69,149
8830-1728		\$ 968	\$ (3,898)		\$ (655)						\$ (3,585)
8830-1729			\$ 9,960								\$ 9,960
8830-1730			\$ 8,645		\$ (6,264)			\$ (980)			\$ 1,401
8830-1737	\$ 101,835	\$ 77,767	\$ 36,039	\$ (2,762)	\$ 377,633		\$ (40,703)	\$ 581			\$ 550,399
8830-1738	\$ 336,346	\$ 279,390	\$ 590,400	\$ 63,548	\$ 1,024,128		\$ (919,791)	\$ 456			\$ 1,374,477
8830-1739	\$ 1,047		\$ 10,025		\$ 9,829						\$ 20,901
8830-1741			\$ 42,080		\$ 7,744						\$ 49,824
8830-1742			\$ 1,880		\$ 607						\$ 2,487
8830-1743			\$ 116,000					\$ 368			\$ 116,368
8830-1744			\$ 23,701		\$ 3,467						\$ 27,169
8830-1745			\$ 12,450								\$ 12,450
8830-1746			\$ 113,750								\$ 113,750
8830-C18603	\$ 63,733	\$ 66,446	\$ 1,502,036	\$ (50,000)	\$ 282,582		\$ (11,554)	\$ 12,375		\$ (81,580)	\$ 1,784,038
8830-C18620	\$ 6,957	\$ 638	\$ 475,842		\$ 15,058			\$ 574			\$ 499,069
8830-C18630	\$ 19,728		\$ 200,656	\$ 12,767	\$ 57,072			\$ 2,846		\$ (10,000)	\$ 283,069
8830-C22214	\$ 31,275	\$ 44,175	\$ 27,147		\$ 132,896			\$ (1,258)			\$ 234,236
8830-C31402	\$ (173)		\$ (6,578)		\$ (1,451)			\$ (92)			\$ (8,293)
8830-C32279	\$ (38)										\$ (38)
8830-C36423	\$ 6,604	\$ (3,446)	\$ 13,759	\$ 96,023	\$ 255,933					\$ (115,400)	\$ 253,472
8830-C36424	\$ 8,418	\$ 246,848	\$ 17,655	\$ 91,304	\$ 243,712					\$ (140,000)	\$ 467,937
8830-C36425	\$ 16,887	\$ 137,790	\$ 223,452	\$ 30,143	\$ 366,872					\$ (220,000)	\$ 555,143
8830-c36427	\$ (210)	\$ 160		\$	\$ (18,309)						\$ (18,359)
8830-C36430	\$ 84,611	\$ 84,021	\$ 2,292,052	\$ 247,063	\$ 1,136,681			\$ 113,215		\$ (32,400)	\$ 3,925,242
8830-C36431	\$ 26,857	\$ 129,235	\$ 802,536	\$ 25,076	\$ 211,231			\$ 8,654			\$ 1,203,589
8830-C36433	\$ 21,314	\$ 5,031	\$ 1,488	\$ 888	\$ 70,601						\$ 99,322
8830-C36435	\$ 4,594	\$ 5,594	\$ 2,184		\$ 25,282			\$ 1,957			\$ 39,611
8830-C42851	\$ 18,284	\$ 26,663	\$ 117,158	\$ 3,379	\$ 128,955			\$ 6,782		\$ (83,700)	\$ 217,522
8830-C42901	\$ 13,517	\$ 13,763	\$ 30,735	\$ (1,192)	\$ 132,621			\$ (289)		\$ (17,000)	\$ 172,156
8830-C42920			\$ 6,705		\$ 1,659			\$ 99			\$ 8,463
8830-C42921	\$ 3,183	\$ 75,538	\$ 48,040		\$ 76,544						\$ 203,306
8830-C42926	\$ 6,300	\$ 16,462	\$ 5,150	\$ 3,141	\$ 79,621			\$ 202		\$ (5)	\$ 110,870
8830-C42930	\$ 1,639				\$ 5,172			\$ 111			\$ 6,923
8830-C42933	\$ 274				\$ 709			\$ 127			\$ 1,109
8830-C42934	\$ 18,526	\$ 20,851	\$ 2,580		\$ 40,774						\$ 82,731
8830-CD0291	\$ 7,533	\$ 12,669	\$	\$ 4,446	\$ 24,439		\$ 21,595				\$ 70,683
8830-CD0376			\$ 59,261								\$ 59,261
8830-OTH-009			\$ 2,700					\$ 178			\$ 2,878
8830-UNALLOC BRDN	\$ 1,351,118	\$ 227,723	\$ 313,697	\$ 79,966	\$ (1,812,446)				\$ 7,074	\$ (36,154)	\$ (166,933)
Grand Total	\$ 2,796,650	\$ 1,923,611	\$ 8,122,797	\$ 690,976	\$ 4,854,361		\$ (1,142,526)	\$ 148,605	\$ 7,074	\$ (785,239)	\$ 16,318,409

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

DE 19-064
Distribution Service Rate Case

Staff Data Requests - Set 5

Date Request Received: 7/25/19
Request No. Staff 5-14

Date of Response: 8/8/19
Respondent: Joel Rivera
Anthony Strabone
Heather M. Tebbetts

REQUEST:

Reference the Company's responses to Staff 3-29:

- a. Given the growth provided by the Tuscan Village project is the primary justification for the Golden Rock and Rockingham projects, how much in terms of financial contributions or CIAC (Contributions in Aid of Construction) will Tuscan Village contribute to Liberty's total planned capital spending for these projects?
- b. Are "other commercial growth" projects in the Salem area providing CIAC to Liberty? If yes, please provide those CIAC amounts by project.
- c. If neither Tuscan Village nor other commercial projects are supporting the Golden Rock and Rockingham capital projects through CIAC, then provide the financial justification as to why those capital expenditures should be borne by all of Liberty's ratepayers.
- d. Please provide:
 - i. the distribution planning study for all work relating to the Goldenrock and Rockingham projects
 - ii. the Company's request for service (RSI) load calculations for proposed loads including calculations for loads that have been placed into service at the Tuscan Village
 - iii. actual loads for those services that have been energized
 - iv. the engineering business case for the Goldenrock/Barron Ave/Salem Depot/New Rockingham transmission and distribution work
 - v. other applicable capital expenditure approval documentation required for this capital expenditure.

RESPONSE:

- a. As of the time of this response, the total CIAC received is \$752,982. Only 25% of the design is completed for Tuscan Village. Once further design of the area is completed, the load information will be calculated which will allow Liberty to request any additional CIAC as necessary.
- b. There are many projects that make up “other commercial growth” projects, and all projects follow Line Extension Policies 3 and 4 in the Company’s tariff. If the revenue calculation provided for in the tariff requires the customer to provide CIAC, then the Company will request the contribution. The Gateway Project, noted in Staff 3-29, is the largest commercial project outside of the Tuscan Village project. That project provided for \$155,255 in CIAC as of the date of this response. There are other buildings that have not yet been designed at this time, thus the Company does not know the loads or if any CIAC will be necessary related to those buildings.
- c. Please see the response to subpart a.
- d. See the responses below:
 - i. Please see Attachment Staff 5-14.d.i. for the Salem Area Planning Study that explains the necessity of the Golden Rock and Rockingham projects.
 - ii. Load calculations are based on industry standards for the type of businesses and housing being built. The developer provided the types of buildings and then the Company estimated the loads based on those standards. Please see Attachment Staff 5-14.d.ii.1.xlsx through Attachment Staff 5-14.d.ii.5.xlsx for CIAC calculations by customer. Please note the customer names have been replaced with numerical values for confidentiality reasons.
 - iii. The actual load for the services energized as of the date of this response is 2094 kW, with approximately 7,155,205 annual kWh.
 - iv. The business cases and other related project documentation for Golden Rock and the Rockingham Supply line and substation are provided in Attachment Staff 5-14.d.iv. The Baron Ave and Salem Depot projects do not have business cases associated with them as they are not planned to be retired until in or about 2023.
 - v. There is no other documentation required for these capital expenditures other than what has been provided in this response.

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

DE 19-064
Distribution Service Rate Case

Staff Technical Session Data Requests - Set 1

Date Request Received: 10/18/19
Request No. Staff TS 1-13

Date of Response: 11/1/19
Respondent: Joel Rivera
Anthony Strabone
Heather M. Tebbetts

REQUEST:

Re: Staff 9-3; Projects 8830-1864 & 8830-PE, \$1.5 million land purchase. Please provide the following information involving the purchase of the Rockingham substation site:

- a. Copy of signed Purchase and Sale Agreement.
- b. Complete copy of the property appraisal including all attachments.
- c. Copies of all Change Orders or Over Expenditure Applications related to the projects.
- d. Any and all documentation and analysis associated with Liberty's research of alternative sites (other than Salem Depot) within the Salem service area.
- e. Any and all documentation (including e-mails, memos, spreadsheet analysis and presentations) between Liberty and the corporate parent associated with proposing and approving the purchase of the Rockingham site
- f. Verification that the \$1.5 million land purchase, including all carrying costs, have not been included in the 2018 test year and the 2019 Step Increase.
- g. Site Plan of the Salem Depot substation location and a detailed explanation, including any written analysis, as to why it was not considered as a viable alternate site.
- h. Copies of work orders/spreadsheets associated with #'s 301864-03001 and 301864-03002, showing costs spent and dates.
- i. Amount of CIAC associated with the purchase and amount of projected CIAC associated with construction of the substation.

RESPONSE:

- a. Please see Attachment Staff TS 1-13.a.
- b. Please see Attachment Staff TS 1-13.b.
- c. Please see Attachment Staff TS 1-13.c.
- d. Please see the response to part g.

- e. Approval of the business case and the related change order is the approval of the Rockingham substation site.
- f. Please see Attachment Staff TS 1-13.h.xlsx.
- g. Please see Attachment Staff TS 1-13.g. In order to accommodate Rockingham substation, the parcel needs to be a minimum of one acre. The Company purchased 1.5 acres because it needs additional undeveloped land around the substation to accommodate vehicles or large equipment necessary to perform any future maintenance or replacement of equipment at the substation. The fence line will be placed near the property line to alleviate the need for traffic control and road closures for the large equipment previously mentioned, as this is currently a concern at the Salem Depot substation. Parcel #1099 is only 0.14 acres and parcel #10115, where Salem Depot substation is currently located is only 0.44 acres, as provided by the City's assessment data.
- h. Please see Attachment Staff TS 1-13.h.xlsx.
- i. The line extension policy is the only policy approved in the tariff that provides for CIAC. This project is not a line extension, thus CIAC is not associated.

PURCHASE AND SALE AGREEMENT

This Agreement is dated this ____ day of December, 2017 (the "Effective Date"), between Rock Acquisition, LLC, a New Hampshire limited liability company, having an address of 2352 Main St., Suite 201, Concord, MA 01742 (the "Seller"), and Liberty Utilities (Granite State Electric) Corp., a New Hampshire corporation having a mailing address of 15 Buttrick Road, Londonderry, NH 03053 (the "Buyer").

Reference is made to the following facts:

A. Seller owns approximately 120 acres of land on Route 28 in Salem, New Hampshire, being developed as a retail and residential mixed-use project under the name of "Tuscan Village" (the "Tuscan Village Project").

B. Buyer desires to purchase approximately 1.4 acres of land (the "Real Estate"), which is part of the Tuscan Village Project, as shown on the plan attached hereto as Exhibit A, together with an easement over Tuscan Village Project for the right to access the Real Estate. The Real Estate, together with (i) all rights, privileges and easements appurtenant to the Real Estate and owned by Seller; and (ii) all improvements, on or within the Real Estate shall be collectively referred to herein as the "Property".

C. Buyer intends to seek subdivision approval from the Town of Salem to subdivide the Real Estate from the remainder of the Tuscan Village Project, to purchase the Property from Seller, and to construct an electrical substation thereon (the "Substation"), subject to the terms and conditions herein.

NOW, THEREFORE, for and in consideration of good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Seller agrees to sell and Buyer agrees to buy the Property for the sum and upon the terms and conditions as follows:

1. Sale and Purchase. Seller shall sell and Buyer shall purchase, in fee simple absolute and subject to the terms and conditions herein, the Property.

2. Purchase Price. The purchase price (the "Purchase Price") for the Property shall be One Million Five Hundred Thousand and 00/100 Dollars (\$1,500,000.00) ("Purchase Price"), payable as follows:

(a) Buyer has paid a deposit of One Hundred Fifty Thousand Dollars (\$150,000.00) (the "Deposit"). The Deposit shall be held in escrow by Hinckley, Allen & Snyder LLP (the "Escrow Agent") in an interest-bearing account and shall be applied or disbursed in accordance with the terms of this Agreement.

(b) Subject to the adjustments and prorations provided elsewhere in this Agreement, the balance of One Million Three Hundred Fifty Thousand 00/100 Dollars (\$1,350,000.00) shall be paid by the Buyer to the Seller on the date of the closing of this sale (the "Closing") in immediately available funds by certified check or federal wire transfer.

3. Time of Closing. The parties agree to close on the date which is thirty (30) days after the expiration of the Permit Period, unless otherwise mutually agreed upon by the parties. The Closing shall occur at the offices of Seller's counsel in New Hampshire, or at such other place mutually agreed upon by the parties, at a time mutually convenient to the parties.

4. Warranties and Representations.

(a) Seller represents to the Buyer that: (i) Seller has marketable and insurable title to the Property; (ii) Seller is not a "foreign person" within the meaning of Section 1455, et. seq. of the Internal Revenue Code of 1986 as amended, or any regulations promulgated thereunder; (iii) Seller has the power and authority to enter into and perform its obligations under this Agreement and the execution, delivery and performance of this Agreement have been duly authorized by all necessary limited liability company actions, and (iv) there is no suit, action (legal or administrative), arbitration or other proceeding or any nature pending or to the best of Seller's knowledge, threatened against the Property, or against the Seller and relating to the Property.

(b) Buyer represents to the Seller that (i) the Buyer has the power and authority to enter into and perform its obligations under this Agreement; and (ii) the execution, delivery and performance of this Agreement have been duly authorized by all necessary actions.

5. Condition of Property. Buyer understands and agrees that, other than with respect to Seller's obligations hereunder to be satisfied prior to Closing, and Seller's post-closing construction obligations pursuant to Paragraph 20(b) hereof, Seller has not made and does not make any representations or warranties as to the physical condition, title, or any other matter or thing affecting or relating to the Property and Buyer hereby expressly acknowledges that no such representations or warranties have been made or are implied. Buyer agrees to take the Property "AS IS, WHERE IS" on the Closing Date with all faults in its then physical condition and Seller expressly disclaims any representations or warranties of title, merchantability, usage or fitness for any particular purpose.

6. Title and Deed. At the Closing, Seller shall convey to Buyer or its nominee by Warranty Deed (the "Deed") fee simple good and clear record, marketable and insurable title to the Property, free of all liens, agreements, leases, restrictions, parties in possession, mortgages and encumbrances except: (i) provisions of building and zoning laws in effect on the Closing Date; (ii) real property taxes for the then current year which are not yet due and payable on the Closing Date; (iii) any matters of record existing as of the date of this Agreement provided that the same do not materially interfere with the use

of the Property for the Substation in the reasonable discretion of Buyer (collectively, the "Permitted Exceptions").

Notwithstanding the foregoing, unless Buyer notifies Seller in writing prior to the expiration of Buyer's "Due Diligence Period" (defined in Section 7, below) of any respect in which title to the Property does not conform with the requirements of this Agreement, then Buyer shall be treated as having waived any right thereafter to assert that title to the Property is not of the quality required hereby, but such waiver shall apply only with respect to defects existing as of the date of the expiration of Buyer's Inspection Period.

If Buyer notifies Seller in writing as aforesaid of any manner in which Seller's title does not conform with the requirements of this Agreement (the "Buyer's Title Objections"), then Seller shall notify Buyer within five (5) business days thereafter, whether Seller will attempt to cure such Title Objections. Seller's failure to give notice within said five (5) business day period shall be deemed an election not to cure said Title Objections. If Seller elects to cure said Title Objections as aforesaid, Seller shall, for a period of time (not to exceed 30 days), to use diligent and good faith efforts to remove and remedy same. If, at the expiration of such thirty (30) day period, Seller despite such diligent and good faith efforts shall have failed to remove and remedy same, then, at Buyer's option, the Deposit shall be forthwith returned to Buyer, this Agreement shall become null and void, and the parties hereto shall have no further rights and obligations hereunder. Notwithstanding the foregoing, Seller shall be obligated to remove, at Seller's sole cost and expense (i) any mortgage affecting the Real Estate; (ii) any monetary lien affecting the Real Estate; and (iii) any real estate taxes or assessments affecting the Real Estate (collectively the "Monetary Liens"), provided that Seller shall be entitled to use the sale proceeds to remove the Monetary Liens.

7. Due Diligence/Investigations.

(a) For a period commencing on the Effective Date and expiring at 5:00 p.m. Eastern Standard Time forty five (45) days thereafter ("the Due Diligence Period"), Buyer shall have the right to perform its due diligence review, in such a manner as Buyer determines, of the condition of the Property, including without limitation, title, environmental condition, planning and zoning laws, and physical characteristics relating to the Property, at Buyer's sole expense, to determine the suitability of the Property for the Substation. If Buyer determines during such time, within its reasonable discretion, that the condition of the Property or any other matter related to the Property or Buyer's intended use thereof is not acceptable, then Buyer shall have the right to terminate this Agreement, by giving written notice of termination to Seller, upon which (i) the Buyer shall deliver to Seller all other reports, engineering data, plans, studies and other similar materials related to the Property prepared for or generated by Buyer in connection with its due diligence review of the Property; (ii) the Deposit shall be refunded to the Buyer; (iii) this Agreement shall become null and void; and (iv) the parties shall have no further rights or obligations hereunder. If this Agreement is not terminated as aforesaid, the Deposit shall become nonrefundable, except in the event Buyer does not obtain the Permits as set forth in Section 8.

(b) During the Due Diligence Period, Seller shall provide Buyer or its authorized representatives reasonable access to the Property, as Buyer may from time to time reasonably request to conduct, at Buyer's sole expense, all such reviews, studies, tests and the like which are reasonably appropriate in connection with the inspections authorized by Subsection (a) above. Seller agrees to reasonably cooperate with Buyer in its due diligence and, within five (5) business days after the Effective Date, will provide to Buyer copies of all reports, permits, approvals and other information and materials related to the condition of the Property, including but not limited to, site assessments, environmental assessments, surveys, existing or draft subdivision or site plans, soil studies and all other data pertaining to the physical condition or physical nature of the Property, to the extent such materials are in Seller's possession (the "Seller's Due Diligence Materials"). Seller's Due Diligence Materials will be provided by Seller without representation or warranty as to accuracy or completeness. If Seller's Due Diligence Materials are not timely delivered to Buyer within this five (5) business day deadline, the Due Diligence Period shall be extended one (1) day for each day such materials are delivered late.

(c) Buyer shall be responsible for ensuring that any part of Property affected by such investigation is restored to as near as possible its original condition. Buyer's investigation shall be conducted in a manner so as to minimize interference or disruption of any on-going business activities at the Property and on the Tuscan Village Project. Furthermore, Buyer shall also notify Seller at least two (2) days in advance of any proposed investigations requiring entry upon the Property. Seller may impose such reasonable requirements on Buyer as it may reasonably elect in order to assure that the Property is not damaged. As a condition to allowing Buyer or any of its representatives access to the Property, Buyer or its representatives shall provide Seller with evidence of comprehensive general liability insurance in an amount not less than Two Million Dollars (\$2,000,000.00) naming Seller as an additional insured on such policy. Without limiting the foregoing, Buyer hereby agrees to indemnify, defend and hold Seller harmless from and against any and all claims, suits, obligations, liabilities, damages, costs and expenses (including without limitation reasonable attorney's fees) for physical injury to the Property or for injury to persons or property arising out of any of the provisions of this Section 7 or any acts or omissions of Buyer or any of its representatives in performing Buyer's due diligence review hereunder. This Section 7(c) shall survive the expiration or termination of this Agreement.

(d) Hazardous Materials, Environmental Laws. Buyer's inspection during the Due Diligence Period shall include, but shall not be limited to, investigations of the physical condition thereof and to determine the status of the Property with respect to geotechnical matters and Hazardous Materials (as hereinafter defined) and compliance with applicable Environmental Laws (hereinafter defined). Notwithstanding anything to the contrary contained herein, Buyer's right to conduct such inspections and tests shall not include the right to conduct any invasive environmental testing, and neither Buyer nor any of its agents, consultants or contractors shall perform any borings, well drilling, cut samples or similar procedures without the prior written approval of Seller. "Hazardous Materials" means asbestos, urea formaldehyde,

polychlorinated biphenyls, nuclear fuel or materials, radioactive materials, explosives, known carcinogens, petroleum products and by products (including crude oil or any fraction thereof), and any pollutant, contaminant, chemical, material or substance defined as hazardous or as a pollutant or a contaminant in, or the use, manufacture, generation, storage, treatment, transportation, release or disposal of which is regulated by, any Environmental Law. "Environmental Law" means any federal, state, county, municipal, local or other statute, ordinance or regulation that relates to or deals with the protection of the environment or wildlife and/or human health and safety, including all regulations promulgated by a regulatory body pursuant to any such statute, ordinance, or regulation, including the Comprehensive Environmental Response and Liability Act of 1980, as amended, 42 U.S.C. Section 9601 et seq., the Resource Conservation and Recovery Act, as amended, 42 U.S.C. Section 6901, et seq., the Federal Water Pollution Control Act, as amended, 33 U.S.C. Section 1251 et seq., the Clean Air Act, as amended, 42 U.S.C. Section 7401 et seq. and any applicable local law or the laws of the State of New Hampshire and any regulations promulgated thereunder (collectively, the "Environmental Laws").

8. Approvals. The Buyer shall have a period of one hundred twenty (120) days after the expiration of the Due Diligence Period (the "Permit Period") to obtain, at Buyer's sole cost and expense, all necessary final and unappealable governmental licenses, permits, and approvals to construct the Substation on the Property (the "Permits"). Buyer shall be responsible to obtain any and all necessary permits and approvals, including subdivision approval, at Buyer's sole cost and expense, except that if such permits and approvals are conditioned upon construction or installation of improvements as part of Seller's Tuscan Village Project, the cost of such improvements shall be Seller's responsibility, as further set forth in Section 20(c). Buyer shall use diligent and good faith efforts to obtain all required Permits. Seller agrees to cooperate with Buyer in seeking said Permits, provided that Seller shall not be required to incur any costs or expenses in connection therewith. Seller hereby authorizes Buyer during the term of this Agreement to apply for and sign applications for any Permits and shall execute the authorization letter attached hereto as Exhibit B simultaneously with the execution of this Agreement.

In the event the Buyer, despite its diligent and good faith efforts, is not able to secure the Permits within the Permit Period, with all appeal periods expired with no appeals filed or with any appeals dismissed or determined with finality in favor of Buyer, either party may, if it so elects, terminate this Agreement, upon which the Deposit shall be refunded to Buyer.

9. Condemnation. If, prior to the Closing, all or any part of the Property shall be condemned by governmental or other lawful authority such that, in Buyer's reasonable judgment, its contemplated use of the Property is materially, adversely affected, Buyer shall have the option of (a) completing the purchase in accordance with the terms of this Agreement, in which event all condemnation proceeds or claims thereof relating to the Property, if any, shall be assigned to Buyer or (b) canceling this Agreement, in which event any Deposit paid by Buyer shall be forthwith returned to Buyer and this Agreement shall be terminated with neither party having any rights or obligations hereunder.

10. Taxes and Assessments. Real property taxes, water and sewer charges, utility costs, if any, shall be prorated and adjusted on a per diem basis as of the date of Closing using the most recently available assessment, invoice, meter reading or billing. Taxes due and payable for all prior years shall be paid, by Seller, on or before the Closing. If the Closing shall occur before the tax rate is fixed for the then-current year, the apportionment of taxes shall be upon the basis of the tax rate for the preceding year applied to the latest assessed valuation, with the proration to be adjusted between the parties based on actual taxes for the year in which Closing occurs at the time such actual taxes are determined. If as of the date of Closing no separate assessment has been assigned to the Property then, for purposes of prorating, the assessed value for the Property will be that percentage of the overall assessment of the land valuation component of the property from which the Property has been subdivided as the acreage of the Property bears to the total acreage of the unsubdivided property prior to subdivision.

11. Transfer Tax. The expense and cost of all state and local documentary, revenue stamps, or other transfer taxes, if any, relating to the sale of the Property shall be divided evenly between the parties on the date of Closing consistent with New Hampshire conveyancing practice. Both parties agree to execute any tax returns required to be filed in connection with any such taxes.

12. Default by Buyer. If the Buyer shall fail to close the transaction contemplated hereby, or shall default in any other obligation of Buyer hereunder for a period of more than ten (10) days after written notice of such default by Seller, the Deposit made hereunder shall be paid by the Escrow Agent to the Seller as liquidated damages as Seller's sole remedy, either in equity or law. The parties acknowledge that such liquidated damages are a fair and reasonable measure of Seller's potential damages from Buyer's failure to fulfill Buyer's agreements herein, and that such liquidated damages do not and will not constitute a penalty. The parties acknowledge and agree that Seller has no adequate measure of damages in the event of Buyer's breach of or default under this Agreement because it is impossible to compute exactly the damages or losses which would accrue to Seller in such event. Therefore, the parties have taken these facts into account in setting the amount of the deposits made hereunder, and hereby agree that: (i) such Deposit is a reasonable forecast and approximation of such actual damages and losses which would accrue to Seller in the event of Buyer's default hereunder, and which could result from Seller's inability to resell the Property for the same agreed purchase price due to any number of presently undeterminable factors, including, but not by way of limitation, compensation to Seller for removing the Property from the market and reimbursement for costs and expenses (including attorney's fees) incurred by Seller; and (ii) the Deposit represents a reasonable amount for such damages and losses and not a penalty against the Buyer. In such an event this Agreement shall become null and void and the parties shall have no further rights or obligations hereunder.

13. Default by Seller. If, Seller shall default in the performance of any of its obligations hereunder, Buyer shall, have the right either (i) to terminate this Agreement without further liability hereunder, in which event the Deposit shall be forthwith returned to

Buyer and the parties shall have no further rights of obligations hereunder or (ii) to pursue a suit for specific performance.

14. Brokerage Fees. Seller and Buyer represent and warrant to each other that no brokerage fees or real estate commissions are or shall be due or owing in connection with this transaction or in any way with respect to the Property. Seller agrees to defend, indemnify, and hold Buyer harmless from any claims, costs, judgments, or liabilities of any kind advanced by persons claiming real estate brokerage fees through Seller. Buyer agrees to defend, indemnify and hold Seller harmless from any claims, costs, judgments, or liabilities of any kind advanced by persons claiming real estate brokerage fees through Buyer. The indemnities set forth in this Paragraph 14 shall survive Closing

15. Conditions Precedent to Buyer's Obligation to Purchase the Real Estate. The obligation of the Buyer to purchase the Property under this Agreement is expressly conditional and contingent upon all of the following:

- (a) receipt of marketable and insurable title to and possession of the Property simultaneously with the Closing in the condition required by this Agreement, subject to the Permitted Exceptions;
- (b) all of Seller's warranties and representations set forth in Paragraph 4 hereof being true as of the Closing, and Seller shall have fully satisfied all covenants hereunder required to be satisfied before the Closing;
- (c) no eminent domain proceeding pending against the Property or any portion thereof;
- (d) there being no material adverse change in the condition of the Property from its condition as of the date of the expiration of the Due Diligence Period; and
- (e) receipt or waiver of the Permits.

These conditions and Seller obligations are for the benefit of Buyer and any one or more of such conditions or obligations (collectively, the "Buyer Conditions Precedent to Closing") may be waived by Buyer in its sole discretion. If any one of the Buyer Conditions Precedent to Closing are not met, Buyer may terminate this Agreement by giving written notice to Seller and receive a refund of the Deposit.

16. Conditions Precedent to Seller's Obligation to Sell the Property. The obligation of the Seller to sell the Property under this Agreement is expressly conditional and contingent upon receipt of the full Purchase Price from the Buyer for the Property at the Closing.

17. Notices. All notices and other communications required or permitted to be given hereunder shall be in writing and shall be (i) mailed by certified or registered mail,

postage prepaid, or (ii) sent overnight mail by a recognized national delivery service, or (iii) faxed or emailed (with confirming hard copy mailed by first class mail) addressed as follows or to such other addresses as the parties may designate in writing from time to time:

If to Seller:	Rock Acquisition, LLC 2352 Main St., Suite 201 Concord, MA 01742 Tel: (603) 912-5467 Email: tbean@tuscanbrands.com
With a copy to:	Hinckley, Allen & Snyder LLP 650 Elm St., Suite 500 Manchester, NH 03101 Attn: John H. Sokul, Jr. Tel: (603) 225-4334 Email: jsokul@hinckleyallen.com
If to Buyer:	Liberty Utilities 15 Buttrick Road Londonderry, NH 03053 Attn: Jill Fitzpatrick Tel: (603) 216-952-2999 Email: Jill.Fitzpatrick@libertyutilities.com
With a copy to:	Liberty Utilities 15 Buttrick Road Londonderry, NH 03053 Attn: Michael J. Sheehan Tel: (603) 216-335 Email: Michael.Sheehan@libertyutilities.com

18. Closing Costs. Notwithstanding anything to the contrary contained herein, the Closing costs shall be paid as follows:

By Buyer:

- (a) title examination and title insurance premium
- (b) one-half of the State real estate transfer tax
- (c) recording fees
- (d) its own legal fees

By Seller:

- (a) cost of preparing the Deed
- (b) one-half of the State real estate transfer tax

- (c) cost of obtaining and recording all title clearing documents, if any
- (d) its own legal fees

19. Documents to be Delivered at Closing. At the Closing, the Seller and Buyer shall execute, acknowledge and deliver all documents required to effectuate the transaction contemplated by this Agreement.

20. Construction Obligations. The following special obligations shall apply to the transaction and shall survive the Closing:

- (a) Buyer shall construct, at Buyer's sole cost and expense, the Substation which will provide adequate electrical service to the Tuscan Village Project as generally shown on the conceptual master plan, a copy of which is attached hereto as Exhibit C, and according to the service requirements timetable attached hereto as Exhibit D. Buyer represents and warrants that the electrical system supplying electricity to the Tuscan Village Project, including the Substation, will be sufficient to serve the Seller's proposed development as and when needed per Exhibit D.
- (b) Within thirty days following execution of this Agreement, Seller shall provide, at Seller's sole cost and expense, gravel, unpaved (but reasonable) access to the Real Estate in the general location shown on Exhibit E. The access will be paved by Seller following the Closing as and when Seller's Tuscan Village project is fully built out.
- (c) Seller shall reserve in the deed to Buyer a slope/grading easement in the area labeled "Proposed 15' 0" grading easement" on Exhibit F. Seller shall be responsible, at its sole cost and expense, for any grading and related improvements within the slope/grading easement. Buyer shall be responsible, at its sole cost and expense, to construct a screening fence around the substation and for all other improvements on the Property.

21. Time of Essence. Time is expressly declared to be of the essence of this Agreement.

22. Headings. The headings to the Sections hereof have been inserted for convenience of reference only and shall in no way modify or restrict any provisions hereof or be used to construe any such provisions.

23. Modifications. The terms of this Agreement may not be amended, waived or terminated orally, but only by an instrument in writing signed by both Seller and Buyer.

24. Successors. This Agreement may not be assigned by the Buyer without Seller's prior written consent, which shall not be unreasonably withheld.

25. Deposit and Escrow Funds.

(a) The Deposits made hereunder shall be held in escrow by Hinckley, Allen & Snyder LLP as escrow agent, subject to the terms of this Agreement and shall be duly accounted for at the Closing. The Deposit shall be held in a federally insured, interest-bearing, money market escrow account. In the event that Buyer or Seller sends notice to Escrow Agent certifying to Escrow Agent that it is entitled to receive the Deposit pursuant to the terms of this Agreement (other than at the Closing), Escrow Agent shall forward a copy of such certification to the other party (pursuant to the notice provisions of Paragraph 17 hereof). If Escrow Agent does not receive an objection from such party to such certification within fifteen (15) days after the date of such notice, Escrow Agent may disburse all such amounts to the certifying party. If Escrow Agent receives an objection or receives conflicting demands, Escrow Agent shall have the right to do either of the following: (i) interplead the Deposit into a court of competent jurisdiction in Hillsborough County, New Hampshire (the cost of doing so, up to a maximum of \$1,000, to be deducted from the Deposit) and the parties shall thereafter be free to pursue their rights at law or in equity with respect to the disbursement of the Deposit and the Escrow Agent shall be fully released and discharged from its duties and obligations under this Agreement; or (ii) resign and transfer the Deposit to a replacement escrow agent reasonably satisfactory to Buyer and Seller. Upon the transfer of Deposit to such replacement escrow agent, the Escrow Agent shall thereupon be fully released and discharged from all obligations to further perform any and all duties or obligations imposed upon it by this Agreement.

(b) The Escrow Agent shall incur no liability hereunder whatsoever, except in the event of its willful misconduct or gross negligence. The other parties hereto, jointly and severally, agree to defend and indemnify the Escrow Agent against all reasonable costs, obligations and liabilities suffered by it for which it may be claimed to be liable hereunder, except for that occasioned by its willful misconduct or gross negligence. The indemnity provided in the preceding sentence shall survive any termination of this Agreement. The fees of the Escrow Agent and costs incurred by it in performing its duties hereunder shall be shared equally by the parties.

(c) The Buyer acknowledges and understands that the Escrow Agent is Seller's attorney in this transaction. In the event of any dispute between the Buyer and the Seller arising out of this Agreement, the Buyer agrees that the Escrow Agent may represent the Seller in connection with that dispute provided that Escrow Agent also proceeds in accordance with (i) or (ii) of Paragraph (a), above. The Buyer agrees that in the event of any such dispute and provided that the Escrow Agent proceeds in accordance with (i) or (ii) of Paragraph (a) above, it will not object to the Escrow Agent's representation of the Seller in such dispute because of any potential or actual conflict of interest arising due to the Escrow Agent's role as Escrow Agent under the terms of this Agreement.

26. Counterparts. The Agreement may be signed by the parties in counterparts.

27. Cooperation. The parties agree to cooperate with each other in good faith

and in all reasonable respects to cause the transactions contemplated by this Agreement to be consummated in accordance with the terms of this Agreement and in allowing each party to fulfill its obligations and covenants contained in this Agreement, including, without limitation, each parties' permitting and construction activities.

28. Entire Agreement. This Agreement contains the entire agreement between Seller and Buyer, and there are no other terms, conditions, undertakings, promises, statements, or representations, express or implied, concerning the sale and other undertakings contemplated by this Agreement.

29. Title Standards. With respect to the conveyance of the property contemplated by this Agreement, any title matter which is the subject of a title standard of the New Hampshire Bar Association Title Examination Standards at the time for delivery of the deed shall be governed by said title standard to the extent applicable and not inconsistent with any provision of this Agreement.

30. Drafting Party. Buyer and Seller acknowledge that each of them and their counsel have had an opportunity to review this Agreement and that this Agreement will not be construed against either party merely because its counsel has prepared it.

31. Force Majeure. Notwithstanding anything to the contrary contained in this Agreement the parties' respective construction obligations shall be extended by one day for each day that completion is delayed due to wars, acts of God, fire, insurrection, and riots, winter conditions or strikes that prevent normal progress of construction, provided that written notice of such delay is delivered to the other party within fifteen days after the delay.

[Signature blocks on next page]

IN WITNESS WHEREOF, the parties have executed this Agreement in duplicate as of the day and year first above written.

SELLER:

ROCK ACQUISITION, LLC

By: 

Name: Joseph P. Fara

Its: managing member

BUYER:

LIBERTY UTILITIES (GRANITE STATE
ELECTRIC) CORP.

By: _____

Name: Susan L. Fleck

Its: President

ESCROW AGENT:

HINCKLEY, ALLEN & SNYDER LLP

By: _____

Name: John H. Sokul

Its: Partner

EXHIBIT B – Authorization Letter

To Whom It May Concern:

Rock Acquisition, LLC (the "Owner") is the owner of the property located at 71 Rockingham Park Blvd., Salem, New Hampshire (the "Property"). The Owner hereby authorizes Liberty Utilities and/or its agents to execute, submit and prosecute applications and any applicable materials to the Town of Salem boards, commissions, agencies and the like (including, without limitation, zoning boards, planning boards and the Selectmen) on behalf of the Owner, for the purpose of obtaining municipal permits and approvals for the construction of an electrical substation on the Property.

Rock Acquisition, LLC

By: 

Name: Joseph R. Faro

Title: Managing Member

Duly authorized

IN WITNESS WHEREOF, the parties have executed this Agreement in duplicate as of the day and year first above written.

SELLER:

ROCK ACQUISTION, LLC

By: _____
Name:
Its:

BUYER:

LIBERTY UTILITIES (GRANITE STATE
ELECTRIC) CORP.

By: _____
Name: Susan L. Fleck
Its: President

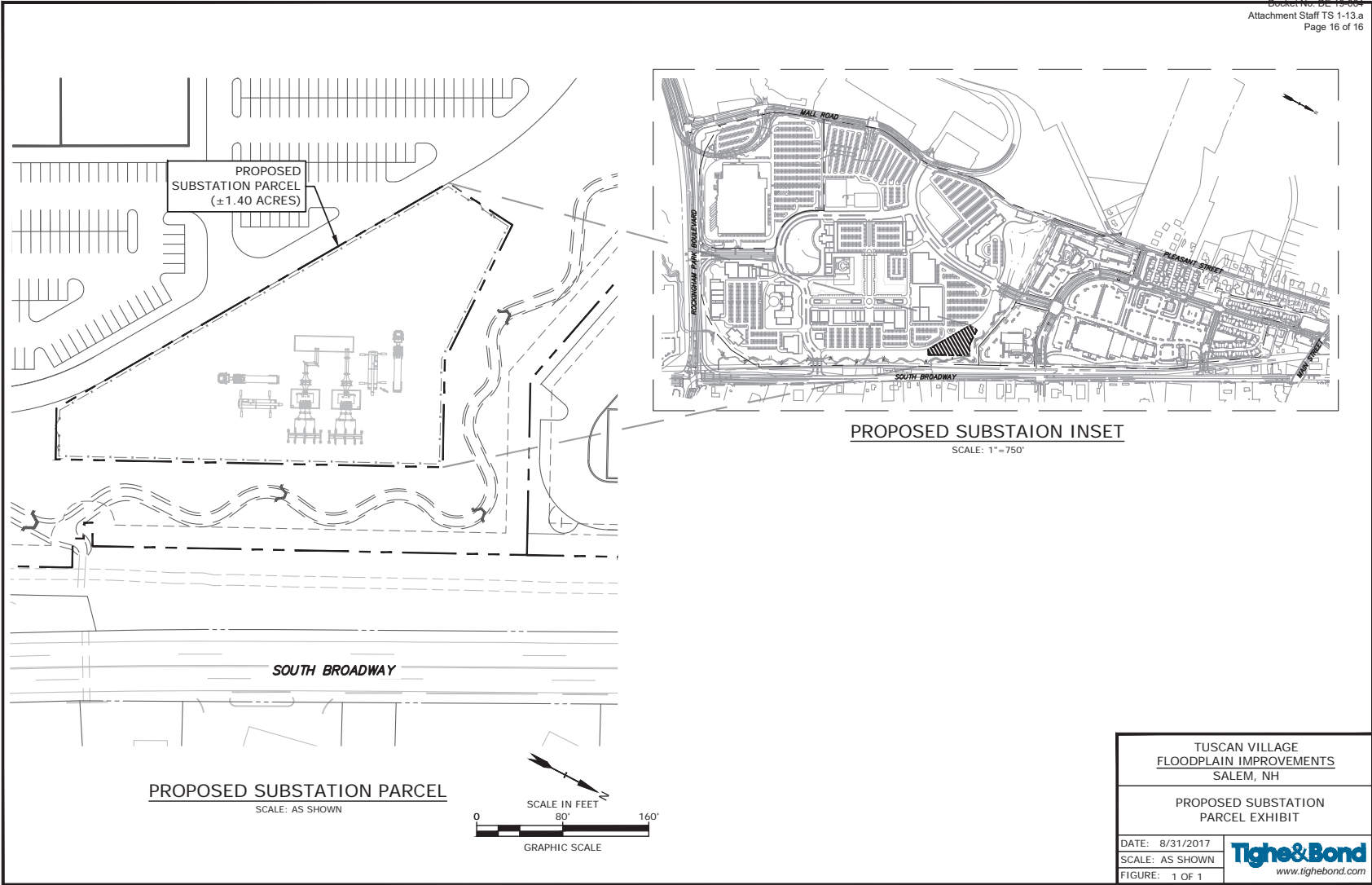
ESCROW AGENT:

HINCKLEY, ALLEN & SNYDER LLP

By _____
Name: John H. Sokul
Its: Partner

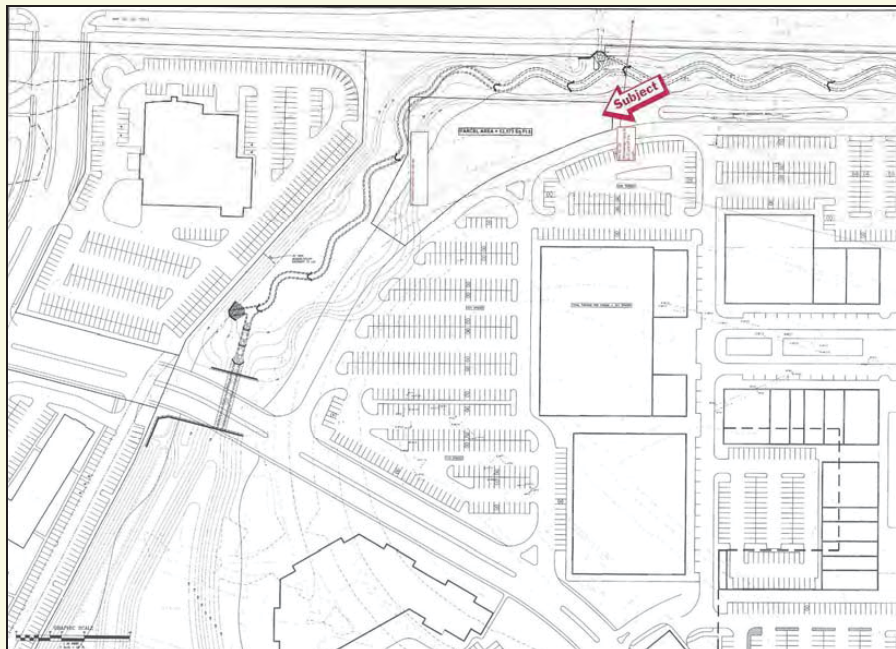
EXHIBIT A – Plan Showing Real Estate

Docket No. DE 19-064
Direct Testimony of Jay E. Dudley
Attachment JED-3c
Page 20 of 94



Aug 31, 2017 4:26pm (0117) JED: JED
Tighe & Bond Inc. 1000 Main Street, Suite 100, Salem, NH 03079
Design Consultants 508.775.0033 Tuscan Village Drawings - Figures/Attachments/MT 775-0033 C-DSGN.dwg

REAL ESTATE APPRAISAL REPORT



1.23± ACRES TUSCAN VILLAGE SALEM, NEW HAMPSHIRE

OWNED BY
ROCK ACQUISITION, LLC

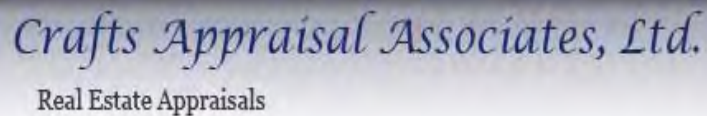
CAA FILE NO. 60.0491

PREPARED FOR
ATTORNEY MICHAEL SHEEHAN
SENIOR COUNCIL
LIBERTY UTILITIES

AS OF
JULY 13, 2017

Crafts Appraisal Associates, Ltd.

4 Bell Hill Road • Bedford, NH 03110 • 603 472-2444 • fax 603 472-9856 •
Email admin@craftsappraisal.com



July 27, 2017

Attorney Michael Sheehan
Senior Council
Liberty Utilities
15 Buttrick Road
Londonderry, NH 03053

Re: **REAL ESTATE APPRAISAL REPORT OF
1.23± ACRE PARCEL
TUSCAN VILLAGE
SALEM, NEW HAMPSHIRE
OWNED BY ROCK ACQUISITION, LLC
CAA PROJECT FILE NUMBER 60.0491**

Dear Attorney Sheehan,

I have inspected the above-captioned property in order to report my opinion of the Market Value of the fee simple estate as of July 13, 2017. The subject of this report consists of a hypothetical 1.23± acres that will be dedicated to Liberty Utilities' installation of a substation to service the larger Tuscan Village Development on the former Rockingham Park. Exhibits provided by Liberty Utilities indicate this parcel to be on the eastern portion of the larger site near North Broadway. It shows it being on the perimeter of a parking area that will service a commercial portion of the development that is yet to be developed.

The purpose of this appraisal is to assist the intended user, Attorney Michael Sheehan and other involved in the loan decision process at Liberty Utilities in establishing a market value of the fee simple estate on which to make future financial decisions.

This appraisal report was prepared for the exclusive use of Liberty Utilities. This report is not intended for any other use. Any use of this appraisal by any other person or entity, or any reliance or decisions based on this appraisal, are the sole risk of the third party. Crafts Appraisal Associates, Ltd. accepts no responsibility for damages suffered by any third party as a result of reliance on, decisions made, or actions taken based on this report.

4 Bell Hill Road, Bedford, NH 03110 • 603-472-2444 • <http://www.craftsappraisal.com>

Attorney Michael Sheehan
July 27, 2017
Page 2

The appraisal research and analysis are summarized in the following report. As such, it might not include full discussions of the data, reasoning, and analyses that were used in the appraisal process to develop the opinion of value. Supporting documentation concerning the data, reasoning, and analyses is retained in our files. The information contained in this report is specific to the needs of the client and for the intended use stated in this report.

I hereby certify that I have inspected the subject property, that I have considered all factors that were pertinent to the value estimate, and that I have not knowingly or intentionally omitted any important data. I further certify that I have no present or contemplated future interest in the property, and that my professional fee is not dependent upon the value estimate.

On the basis of my inspection, investigation, study and analysis, I am of the opinion that the subject's value is:

MARKET VALUE OF THE FEE SIMPLE ESTATE AS OF JULY 13, 2017. \$925,000

Respectfully submitted,

A handwritten signature in black ink that reads "Donald E. Watson". The signature is written in a cursive, flowing style.

Donald E. Watson
Certified General Appraiser
No. NHCG-191

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SUMMARY OF IMPORTANT FACTS & CONCLUSIONS

Owner of Record:	Rock Acquisition, LLC
Location:	Tuscan Village Development 71 Rockingham Park Boulevard Salem, New Hampshire
Map/Lot:	98/7887
Deed Reference:	Book 5763, Page 52, Rockingham County Registry of Deeds.
Land Area:	A hypothetical 1.23± acre parcel within the larger 120.64± acre parcel that comprises the former Rockingham Park slated to be developed in a mixed-use fashion known as Tuscan Village.
Improvements:	Vacant land
Zoning:	Commercial Industrial (CIC)
Flood Zone:	According to the National Flood Insurance Program Map for Rockingham County, Community Panel No. 33015C0563E, with an effective date of May 17, 2005, the subject appears to be in an area designated as Zone X, an area outside of any known flood zone. There are some flood zone areas associated with the larger parcel and the exact placement of the subject within that is not quite defined. However, based on exhibits provided it appears it is not in the flood zone.
Assessment:	There is no meaningful assessment for the subject as appraised here.
Highest & Best Use:	Commercial development
Intended Use/User:	The purpose of this appraisal is to assist the intended user, Attorney Michael Sheehan, Senior Council, and others

involved in decisions at Liberty Utilities to establish the market value to assist in making future financial decisions.

This appraisal report was prepared for the exclusive use of Liberty Utilities. This report is not intended for any other use. Any use of this appraisal by any other person or entity, or any reliance or decisions based on this appraisal, are the sole risk of the third party. Crafts Appraisal Associates, Ltd. accepts no responsibility for damages suffered by any third party as a result of reliance on, decisions made, or actions taken based on this report.

Extraordinary Assumptions: No hazardous materials or conditions were observed during the property inspection, nor were any disclosed. This report has not been prepared in an environmental-risk capacity and should not be construed as such. This report assumes that the subject property is free and clear of hazardous materials. If this is found to be untrue, the value in this appraisal could be affected.

This appraisal is based upon the assumption that a 1.23± acre parcel as represented by the client will be subdivided from the larger parcel for use as a utility substation. This is to service the proposed developed which is assumed to be completed.

The above are considered to be an *Extraordinary Assumptions*. USPAP 2014-2015 Edition, defines extraordinary assumption as: “an assumption directly related to a specific assignment as of the effective date of the assignment results, which, if found to be false, could alter the appraiser’s opinions or conclusions.”

Hypothetical Condition: This appraisal values a 1.23± acre parcel that has yet to exist but is assumed to have been subdivided from the larger parcel for the sake of this appraisal.

USPAP 2014-2015 Edition, defines *Hypothetical Condition* as: “a condition directly related to a specific assignment, which is

contrary to what is known by the appraiser to exist on the effective date of the assignment result, but is used for the purpose of analysis."

Estimated Exposure Time: 6-12 months

Valuations: Sales Comparison Approach\$925,000

Valuation Date: July 13, 2017

Report Date: July 27, 2017

Appraiser: Donald E. Watson
Certified General Appraiser No. NHCG-203

Crafts Appraisal Associates, Ltd.

SCOPE OF WORK

INTRODUCTION

The purpose of this assignment is to estimate the Market Value of the fee simple estate of 1.23± acres proposed to be subdivided from a larger parcel to be developed and known as Tuscan Village in Salem, New Hampshire as of July 13, 2017. Inspected on July 13, 2017, the subject of this report consists of a hypothetical 1.23± acres that will be dedicated to Liberty Utilities' installation of a substation to service the larger Tuscan Village Development on the former Rockingham Park. Exhibits provided by Liberty Utilities indicate this parcel to be on the eastern portion of the larger site near North Broadway. It shows it being on the perimeter of a parking area that will service a commercial portion of the development that is yet to be developed.

The appraisal research and analysis are summarized in the following report. As such, it might not include full discussions of the data, reasoning, and analyses that were used in the appraisal process to develop the opinion of value. Supporting documentation concerning the data, reasoning, and analyses is retained in our files. The information contained in this report is specific to the needs of the client and for the intended use stated in this report.

In preparing this appraisal my work included the following:

- Personal inspection of the subject on July 13, 2017;
- Review of available information from the Town of Salem's assessor's office;
- Review of various exhibits provided by the client;
- Inspection of the subject neighborhood to establish uses and trends within the neighborhood;
- Discussions with real estate professionals including other appraisers, brokers, and property owners to compile a pool of data to assist in the valuation section of this report;
- Research of databases including Crafts Appraisal, Paragon, and the Warren Group.

More information on the Scope of Work, such as the type and extent of the data researched and analysis applied, is discussed in the valuation section(s) of the report.

DEFINITION OF MARKET VALUE

Market Value is the major focus of most real property appraisal assignments. Both economic and legal definitions of Market Value have been developed and refined. A current economic definition agreed upon by federal financial institutions in the United States of America is:

The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

- 1. buyer and seller are typically motivated;*
- 2. both parties are well informed or well advised, and acting in what they consider their own best interests;*
- 3. a reasonable time is allowed for exposure in the open market;*
- 4. payment is made in terms of cash in United States dollars or in terms of financial arrangements comparable thereto; and*
- 5. the price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.*

This definition is from regulations published by federal regulatory agencies pursuant to Title XI of the Financial Institutions Reform, Recovery, and Enforcement Act (FIRREA) of 1989 between July 5, 1990, and August 24, 1990 by the Federal Reserve System (FRS), National Credit Union Administration (NCUA), Federal Deposit Insurance Corporation (FDIC), the Office of Thrift Supervision (OTS), and the Office of Comptroller of the Currency (OCC). This definition is also referenced in regulations jointly published by the OCC, OTS, FRS, and FDIC on June 7, 1994, and in the *Interagency Appraisal and Evaluation Guidelines*, dated December 10, 2010, Federal Register/Volume 75 No. 237, Page 77471.

PROPERTY RIGHTS APPRAISED

This report is concerned with the value of the subject's fee simple estate. The Dictionary of Real Estate Appraisal, Fifth Edition, defines fee simple estate as: "The absolute ownership unencumbered by any other interest or estate, subject only to the limitations imposed by the governmental powers of taxation, eminent domain, police power, and escheat."

EXTRAORDINARY ASSUMPTIONS

No hazardous materials or conditions were observed during the property inspection, nor were any disclosed. This report has not been prepared in an environmental-risk capacity and should not be construed as such. This report assumes that the subject property is free and clear of hazardous materials. If this is found to be untrue, the value in this appraisal could be affected.

This appraisal is based upon the assumption that a 1.23± acre parcel as represented by the client will be subdivided from the larger parcel for use as a utility substation. This is to service the proposed developed which is assumed to be completed.

HYPOTHETICAL CONDITION

This appraisal values a 1.23± acre parcel that has yet to exist but is assumed to have been subdivided from the larger parcel for the sake of this appraisal.

VALUATION METHODOLOGIES

In appraising real estate the following methods may be used:

- The Cost Approach, which adds the estimated value of the underlying land and the depreciated improvement cost to derive a value indication.
- The Sales Comparison Approach, which compares the subject to sales of similar properties to derive a value indication.
- The Income Approach, which has two potential methodologies; Direct Capitalization and Discounted Cash Flow Analysis. The first methodology uses capitalization techniques to convert anticipated benefits into an indication of value, while the second applies a discount rate to a set of projected income streams and a reversion to determine value.
- The Development Procedure, which values undeveloped acreage by discounting the cost of development and the probable proceeds from the sale of developed sites. This method incorporates components from each of the other three approaches.

In appraising the subject, I used the Sales Comparison Approach, which is explained in the valuation section of this report. I did not utilize the Cost or Income Approaches given in this market they are utilized to value improved properties and since the subject, as described here, is vacant land they would not result in an appropriate value. For this reason the Cost and Income Approaches were not developed. The Development Procedure can sometimes be utilized in valuing vacant land but to do so requires engineering, approvals, etc. Since the subject does have these the Development Procedure would not be appropriate and was also not developed. The Sales Comparison Approach will result in a credible opinion of value for the subject property.

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MUNICIPAL CONSIDERATIONS

INTRODUCTION

This section will address specific issues that impact the subject such as community and neighborhood considerations and trends.

MUNICIPAL DESCRIPTION

The subject is in Salem, which is in Rockingham County in the southern part of the state midway between Boston, MA and Concord, NH. The major highways servicing the local area are north/south state Route 28 and east/west Routes 97 and 111. Major links to the regions are provided by Interstates 93 and 495, running north/south and east/west, respectively. Salem is easily accessible via I-93, and is 30 miles north of Boston, 6 miles north of Lawrence, MA, 12 miles east of Nashua, NH and 19 miles southeast of Manchester, the state's largest city.

The population change for Salem totaled 19,643 over 55 years, the sixth largest numeric change was from 9,210 in 1960 to 28,853 in 2015. The largest decennial percent change was an increase of 119% between 1960 and 1970. The next largest percent increase, of 20%, occurred between 1970 and 1980. The 2015 Census estimate for Salem was 28,853 residents, which ranked 7th among New Hampshire's incorporated cities and towns.

The following chart demonstrates the community's growth over the past five decades as compared with that of Rockingham County.

YEAR	SALEM	ROCKINGHAM COUNTY
2015	28,853	299,006
2010	28,776	295,223
2000	28,219	278,748
1990	25,841	246,744
1980	24,124	190,345
1970	20,142	138,951

As of 2015 there are a total of 11,733 housing units in the community. Of that total 8,496 are single-family with 687 two to four units, 1,765 five or more units, and 523 mobile homes or other housing units.

The 2015 Census indicates that Salem's per capita income is \$37,325 with a median household income of \$79,755.

Salem's major employers are summarized below:

Northeast Rehabilitation Hospital	300
J.C.Penney Co.	200
Reliable Security Guard	135
Salem Haven	120
Home Depot.....	100

Salem's most distinguishing characteristic is its proximity both to the major highway system and the state of Massachusetts. Much of Salem's economy is affected both positively and negatively, by its location. The most recently published unemployment rates are as follows:

AREA	5/17	5/16
New Hampshire	2.7%	2.7%
Rockingham County	2.9%	2.9%
Salem-Town NH Portion Lawrence, Mass.-NH NECTA	3.6%	3.4%
Salem	3.6%	3.4%

Salem falls within the Lawrence, Massachusetts PMSA and has a higher unemployment rate compared with the remainder of the state of New Hampshire due to the Massachusetts influence. As such, this figure is a weak indicator of the true conditions in Salem, New Hampshire.

The retail sector has always been a bright spot for Salem. The lack of sales tax in New Hampshire, along with the easy access from Massachusetts, are a driving force of this retail activity. There are many retail businesses along North and South Broadway, aka Route 28, which have benefited from their proximity to Massachusetts. Over 300 retail businesses offer a wide variety of consumer merchandise.

Salem is governed by a five-member board with members elected for three-year terms and a full-time town manager. The selectmen and town warrants are voted on in the annual town meeting in March of each year. The community's planning and zoning functions are handled by a planning department, and are administered by a full-time

director and a five-person planning board, who implement the town's land use and zoning ordinances.

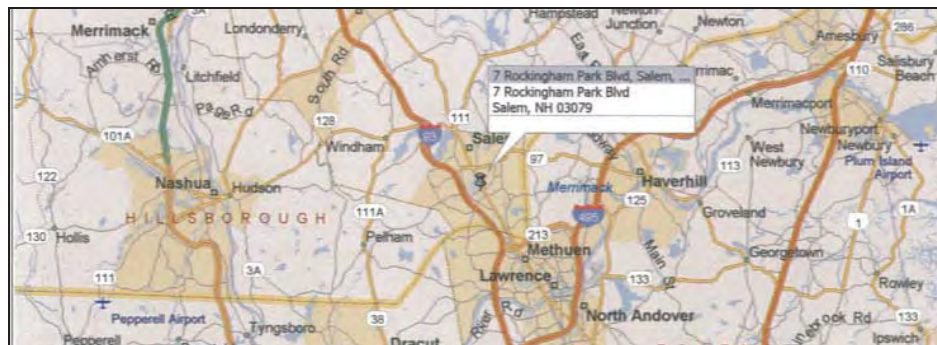
In summary, Salem has traditionally benefited from its location along the New Hampshire/Massachusetts border and its proximity to Route 93. Salem's population has grown over the last ten years, but at a rate slower than many of the surrounding communities. From an employment standpoint, almost a full 50% of the town's labor force works in Massachusetts, which currently contributes to a higher unemployment rate in the town, than in the state overall.

Historically, Salem has had a strong economic base, especially in the retail and industrial sectors. Again, this trend is partly due to the favorable tax structure in New Hampshire and the exceptional access via Interstate 93. The Mall at Rockingham Park, due to its size and location attracts new businesses, employees and shoppers.

The factors that have contributed to Salem's strength in the past are still present. Although the overall economies of both New Hampshire and Massachusetts have impacted the town, its non-manufacturing segment, including retailing, has remained strong.

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MARKET ANALYSIS

NEW HAMPSHIRE HEADING INTO 2017 WITH STRONG ECONOMY

New Hampshire is closing out 2016 with the nation's lowest unemployment rate, wages that are on the rise and strong real estate sales.

Combined, these factors show the state's economy is strong heading into 2017. The state's gross domestic product growth rate of 2.9 percent is among the highest in the nation, according to the most recently available federal data.

"Right now the state is in very good shape, probably the best shape it's been in economically in 10 years," said Russ Thibeault, president of Applied Economic Research in Laconia.

Still, there are challenges. Businesses say the low unemployment rate is making it hard to find skilled workers for open jobs. The state's modest in-migration also may make it hard for the state to sustain its growth.

"Without more people, the economy just can't grow anymore," said Steve Norton, executive director of the New Hampshire Center for Public Policy Studies.

UNEMPLOYMENT

New Hampshire's unemployment rate sat at 2.7 percent in November, tying with South Dakota for the lowest in the nation. That compares to 4.6 percent unemployment nationally.

A low unemployment rate increases competition for workers, which can in turn raise wages, Thibeault said. It also makes it easier for people seeking jobs to find one, because there is less competition.

On the flip side, New Hampshire businesses say it's hard to find skilled workers, particularly in fields such as advanced manufacturing. The state doesn't keep data on job vacancies, so it's hard to know how many positions are unfilled. But a lack of available workers could stop businesses from expanding.

"Almost anywhere you turn in the economy they are dealing with a shortage of skilled workers," said David Juvet, senior vice president of the Business and Industry Association.

HOUSING

New Hampshire's housing market is seeing an uptick in sales and home prices, according to recent data from the New Hampshire Association of Realtors.

November data show closed sales on single family homes went up 18.4 percent over the past year. The median sale prices for single family homes went up 5.9 percent, to \$248,750, in the same period. Inventory of available homes has fallen quickly, making it more of a sellers' than a buyers' market.

Mortgage interest rates remain low but have finally started to rise, which adds uncertainty to the housing market heading into 2017, Thibeault said.

JOBS AND WAGES

Wages in New Hampshire also are climbing, offering another indicator of economic strength. On average, they're up 4 to 5 percent, according to data from the federal Bureau of Labor Statistics.

The median wage in New Hampshire is roughly \$24 an hour, but that can vary sharply based on where someone lives. In the Lebanon-Hanover area, for example, the median wage hits almost \$28 an hour. But over in Conway and Wolfeboro, an area dominated more by tourism and retail jobs, the median wage is closer to \$19, according to a November report by the New Hampshire Department of Employment Security.

Roughly 734,000 workers were employed in New Hampshire as of November.

Leisure and hospitality jobs increased by 6 percent since last year, the highest increase, according to federal data.

Source: Kathleen Ronayne *Associated Press*

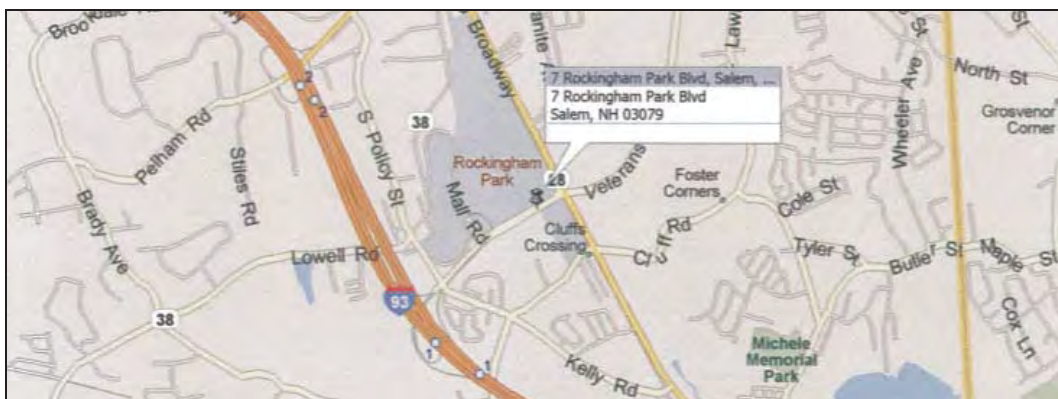
NEIGHBORHOOD DESCRIPTION

The subject is located on the west side of Route 28, South Broadway. It is sandwiched between Route 28 and Interstate 93. The neighborhood boundaries are roughly defined as Route 28, South Broadway, to the east, Route 97, Main Street, to the north, Interstate 93 to the west, and Rockingham Boulevard to the south.

The subject neighborhood has excellent access to the major highway system of the region by virtue of its proximity to Interstate 93. I-93 is the major north/south travel corridor running through central New Hampshire. Southerly it leads into Massachusetts and the greater Boston area. To the north it heads into the Manchester/Bedford market area and on into the White Mountains and Lake Regions of the state. The neighborhood has immediate access at either Exit 1, which is from Rockingham Park Boulevard or Exit 2 from Route 97, Main Street. Route 28 is a heavily traveled and commercially developed secondary state highway bisecting the community in a north/south direction. Prior to the construction of I-93, it fulfilled a similar role accessing the central portion of the state. It continues to be heavily traveled due to the retail development along the street.

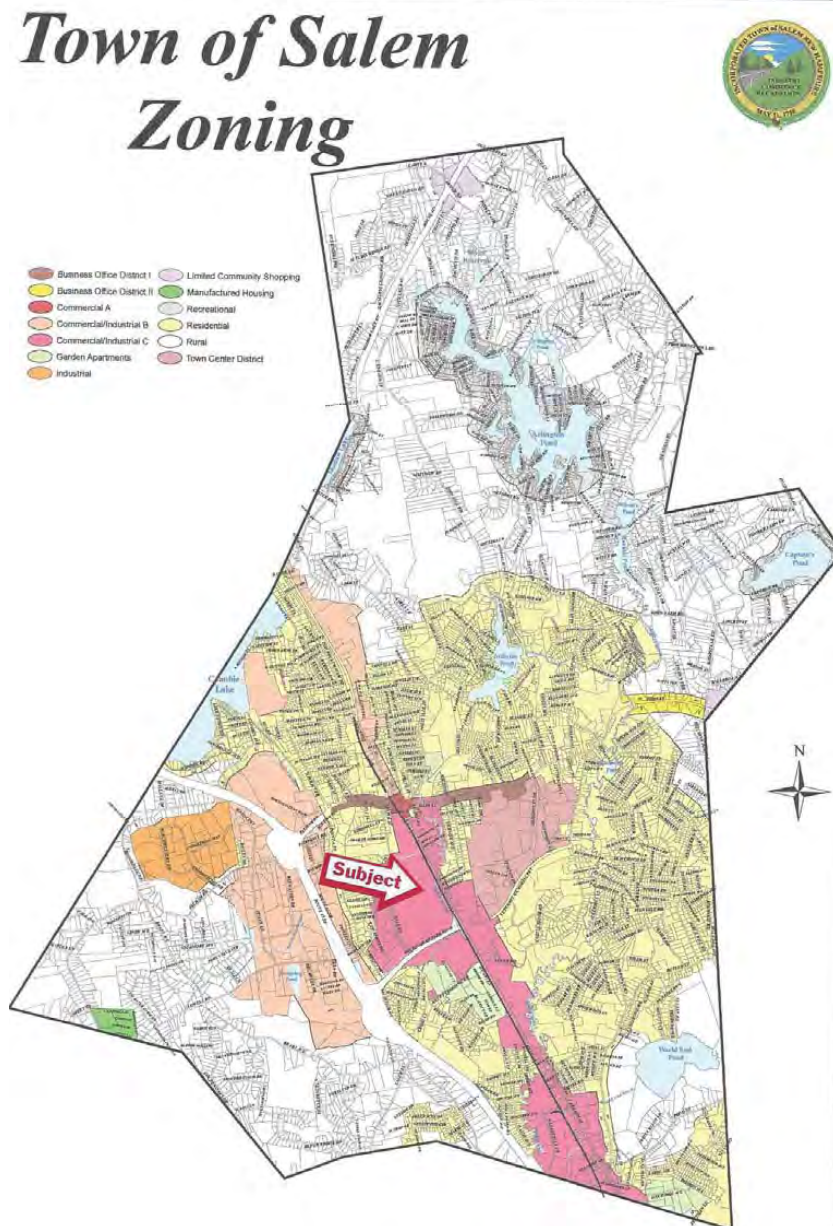
Route 28 is known as South Broadway from the intersection of Route 97, Main Street, to the north, southerly to the Massachusetts border. Due to the fact that Massachusetts has a sales tax, while New Hampshire does not, the locations in close proximity to the border have been heavily developed with commercial properties, more specifically retail. As a result South Broadway is one of the premier locations in the southern part of New Hampshire. Virtually all national retail franchises, including fast food restaurants, are located on this street. These are situated in freestanding buildings as well as anchored plazas. There are a number of automobile related uses on the street including dealerships.

In the subject's immediate area, in addition to the subject itself, the dominant feature is the Mall of Rockingham Park. This is a 1,000,000± SF Mall constructed during the early 90's. The streets in the western section of the subject's immediate neighborhood are primarily older retail.



ZONING

The subject is located in the Commercial A (CA) Zone. This zone permits a wide range of commercial uses with minimal dimensional requirements.



ASSESSMENT

The subject is a hypothetical 1.23± acre lot proposed to be subdivided from the larger 120± acre parcel and as such does not have an assessment as of the date of this appraisal.

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SUBJECT PROPERTY DESCRIPTION

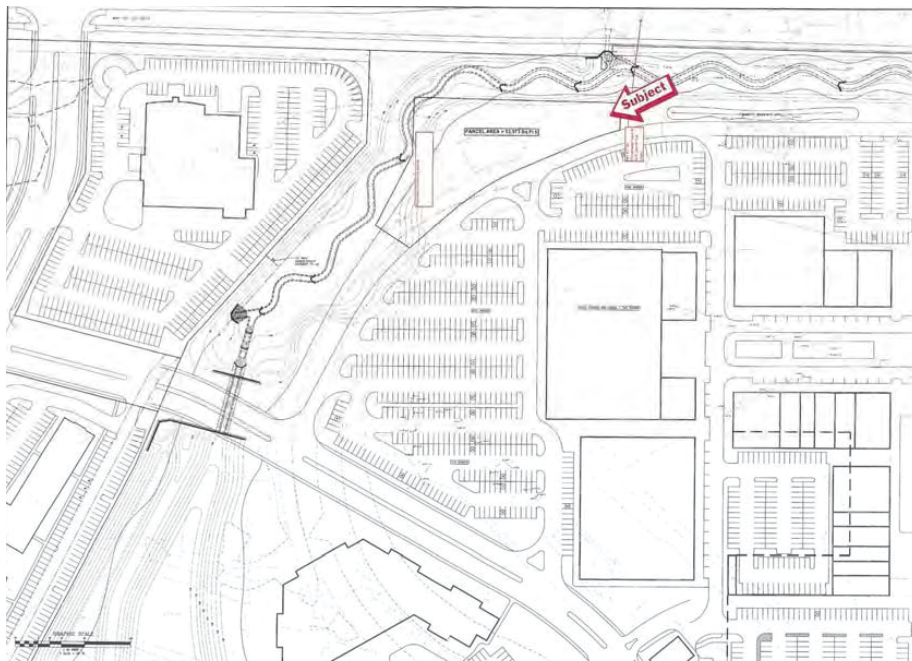
INTRODUCTION

This property description is more based on plans provided by the client on site inspection the specific property was difficult to locate within the larger parcel.

The following property description is presented for appraisal purposes only and is not intended to be exhaustive in nature.

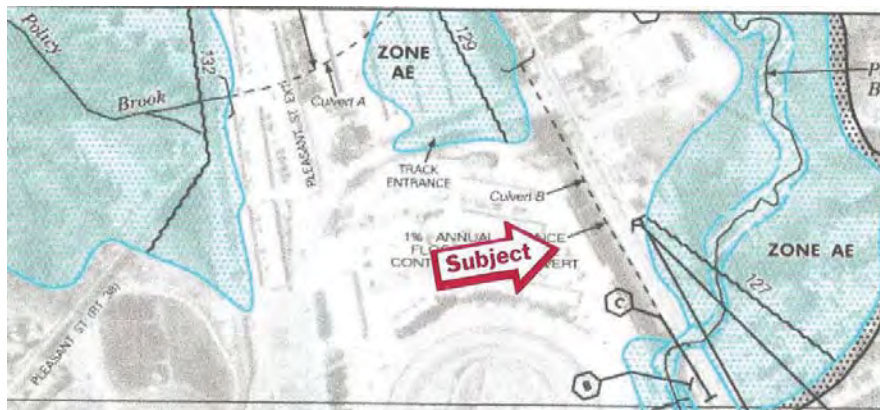
SITE DESCRIPTION

The subject is an irregularly shaped parcel consisting of 1.23± acres. It is proposed to be located in the eastern portion of the larger parcel adjacent to what is proposed for a retail development closest to the area that is proposed for a cinema. The site has some topographic issues but it would more than likely be improved to generally level as part of the site preparation of the larger development. Its frontage and access would come from a to-be-built private road servicing the aforementioned retail development.



UTILITIES: The area is serviced by municipal water, sewer, electric, telephone, and natural gas.

FLOOD ZONE: According to the National Flood Insurance Program Map for Rockingham County, Community Panel No. 33015C0563E, with an effective date of May 17, 2005, the subject appears to be in an area designated as Zone X, an area outside of any known flood zone. There are some flood zone areas associated with the larger parcel and the exact placement of the subject within that is not quite defined. However, based on exhibits provided it appears it is not in the flood zone.



EASEMENTS: The appraiser is not aware of any easements or adverse conditions that would negatively impact the subject property.

HISTORY OF CONVEYANCE

According to the Rockingham County Registry of Deeds, there has not been a transfer of the subject as described here. The larger parcel transferred as follows:

SALE DATE	10/14/2016
SALE PRICE	\$40,000,000
BOOK/PAGE	5763/52
GRANTOR	Rockingham Venture
GRANTEE	Rock Acquisition, LLC
COMMENTS	This was the sale of a larger parcel of what was known as Rockingham Racetrack. The purchaser in this transaction is proposing to develop it in a life style type center with a variety of uses including retail, hospitality, residential. The subject parcel which would be subdivided from this larger parcel would be to provide area for a utility substation by Liberty Utilities because of the increased demand to service the proposed development.

EXPOSURE TIME

Reasonable exposure time is one of a series of conditions in most market-value definitions. Exposure time is always presumed to proceed the effective date of the appraisal. USPAP, 2014-2015 Edition, defines exposure time as follows:

"The estimate length of time the property interest being appraised would have been offered on the market prior to the hypothetical consummation of a sale at market value on the effective date of the appraisal;"

The subject represents a small parcel of what is a larger development. Given the exhibits provided to me it would make for a nice outparcel to the larger retail development which it abuts. As that development comes to fruition there would be good demand for this parcel. Therefore, I feel that the exposure would be dictated by the pace of development of the larger development. As that development moves forward I feel that the exposure would be a relatively short period of time however, as of the date of this appraisal there would be little demand for the parcel as it sits today. Therefore in summary, the exposure time associated with the subject is directly related to the development timeline of the larger development.

HIGHEST AND BEST USE

The Dictionary of Real Estate Appraisal, Fourth Edition, defines Highest and Best Use as:

"The reasonably probable and legal use of vacant land or an improved property, which is physically possible, appropriately supported, financially feasible, and that results in the highest value. The four criteria the highest and best use must meet are legal permissibility, physical possibility, financial feasibility, and maximum productivity."

The subject is a hypothetical 1.23± acre parcel that is irregular in shape and is located on the eastern side of the larger 120± acre parcel. It is directly adjacent to what is proposed to be a larger retail development. Its access would come from a road that would be developed along with that development.

The development which is to be known as Tuscan Village is a lifestyle center which will have a variety of uses including the adjacent retail development but will also have other components such as hospitality and residential. It is the site of the former Rockingham Racetrack. The area around the larger parcel is heavily developed in a commercial fashion. Directly adjacent to the larger parcel is the large Mall at Rockingham Park. The larger parcel is surrounded by heavily developed roads known as Rockingham Park Boulevard, South Broadway Street, and Main Street. Access is very good and my feeling is that the subject parcel would represent a good outparcel to be developed in concert with the larger retail parcel. Given its size it would most likely support a restaurant use although a small standalone retail use would also be appropriate.

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SALES COMPARISON APPROACH

INTRODUCTION

The Sales Comparison Approach compares the subject to similar properties that have sold in the same market or in similar markets to derive an indication of its market value.

RESEARCH

I surveyed the subject's market area for information regarding sales and listings of properties similar to the subject. Research was conducted around the Southern and Seacoast part of the State for well located commercial parcels. Particular attention was paid to those in close proximity to larger commercial developments such as that of the subject. That research resulted in a relatively large pool of comparable sales from which the four that were considered to be the most comparable to the subject were chosen for analysis here. They consist of one each in the communities of Dover, Manchester, Hooksett, and Salem.

I gathered information regarding comparable properties from the Real Data Research Service, INNOVIA - the Northern New England Network MLS, CIBOR NH – the Commercial MLS, Crafts Appraisal Database, local and county municipal offices, brokers and appraisers. All of these sources are believed to be reliable. Parties familiar with the transactions confirmed the transactions whenever possible.

UNIT OF COMPARISON

In reviewing the comparable sales, it was necessary to determine a meaningful unit of comparison. A definite relationship was found to exist among the comparable sales in the form of sale price per acre. As such, I have determined that the sale price per acre is the most meaningful unit of comparison in analyzing the subject and the comparables.

SUMMARY OF COMPARABLE PROPERTIES

The comparables used in this approach are discussed briefly below. Please refer to the Comparable Sale Forms that follow this section for more information regarding these properties.

COMP 1: This represents the March 2017 sale of a four parcel property located at 817, 819, and 825 Central Ave and 3 Ridge Street in Dover, New Hampshire. The total size of the property was 1.14± acres and it sold for \$950,000 or \$673,759/acre. The parcel had 347.92±' of frontage on Central Ave and an additional 170±' of frontage on Ridge Street. The parcels were improved with a number of older residential or multi unit residential all of which were in below average condition and were felt to not add any contributory value to the sale. The buyer purchasing the property planned to develop it with a 15,000± SF owner-occupied retail center. This property is a corner parcel located in direct proximity to the Hannaford and Shaw's development and is considered to be a good to very good commercial location.

COMP 2: This represents the October 2014 sale of property located at 5 Driving Park Drive in Manchester, New Hampshire. This 2.58± acre parcel sold for \$1,700,000 or \$656,878/acre. The property was purchased by the owner of a furniture store who subsequently improved it with a 64,000± SF two story building. The property is located one parcel removed from South Willow Street at a signalized intersection. It has some visibility from South Willow Street and is adjacent to a large commercial development from which it has access through a number of the parking lots just east of South Willow Street as the City has prevailed on owners to make this available from one parcel to another to relieve some of the shopping traffic along South Willow Street.

COMP 3: This represents the April 2016 sale of property located at 1293 Hooksett Road, Hooksett, New Hampshire. This 1.05± acre parcel sold for \$795,000 or \$757,143/acre. The property is located at a signalized intersection in close proximity to a dense retail development. It represents a corner parcel with access from two roads and has subsequently been improved with a branch bank.

COMP 4: This represents the December 2015 sale of property located at 417 South Broadway in Salem, New Hampshire. This 4.898± acre parcel sold for \$3,900,000. However, there was an existing building on the site which was going to be reused by the purchaser who is an abutting property owner, owning a car dealership across South Broadway from the subject. They intended to use it as a used car dealership. The depreciated contributory value of the building and the site improvements was \$700,000 making the

effective price for the land \$3,200,000 or \$653,328/acre. Some of the total acreage was felt to be impacted by wetlands and would not support building however it may have been able to contribute to the density on the parcel.

SALE CONSIDERATIONS

In real estate transactions, property rights transferred, terms of sale (financing), conditions of sale (buyer/seller motivation), and expenses incurred immediately after purchase are factors that can influence sale price. In this analysis Comps 1, 2, and 3 involved fee simple estate, had conventional financing or were cash transactions, and appear to have been typically motivated, arm's length transactions. Since the Market Value of the subject's fee simple estate is being appraised here, and the other sale considerations are typical, adjustments have not been applied for these factors.

Comp 4 was sold to what would be considered an abutting property owner given that they had a car dealership directly across the street. They were going to use this parcel for expansion of the used car operation of that dealership. As such, I have adjusted it down by 10%.

MARKET CONDITIONS

Market conditions may change over time due to inflation, deflation, fluctuations in supply and demand, or other factors. As a result, the comparable sales may require adjustments to reflect changes in market conditions between the sale dates and the date of this report. In a market in which prices are increasing, these adjustments take the form of positive appreciation adjustments.

In considering changes in market conditions since the comparables sold, I consulted business publications for an overview of general economic conditions, industry-specific publications including the New England Real Estate Journal, The Appraisal Journal, and local brokers and appraisers familiar with the subject's market area.

The market for well located commercial properties has improved commensurate with the improvement in the overall commercial marketplace. While the broader recovery has been led by industrial and multi-family residential, commercial properties, as noted, have begun to improve. After an initial period of stabilization where vacancies and credit losses began to decrease the market is now to the point where landlords can write multi-year leases some with escalations. As the financial performance of these properties has

improved investors have become more interested in the property type and therefore improved commercial properties have shown appreciation.

It is felt that the demand for improved properties has improved the demand for well located commercial land and has also led to some appreciation in that market. As such, I have adjusted each of the comparables upward by 0.25% per month from January 2015 to the date of appraisal.

OTHER POTENTIAL ADJUSTMENTS

Relevant differences that may influence sale price can include size, location, and a variety of physical characteristics. In the case of the subject and the comparables it is felt that there are two areas that require formal adjustment. Those are location and physical features and are made as follows:

LOCATION: This appraisal assumes that the subject will be adjacent to a larger retail establishment and will benefit from the synergy of the overall development. As such, it is felt that it will be a very good commercial location within that commercial development however, it will not benefit necessarily from the broader traffic flow as if it was located along a main artery.

Comp 1 is located on Central Ave, which is Dover's primary commercial thoroughfare. It is an area that is heavily developed with commercial development. This parcel is located in direct proximity to two large grocery store anchored centers and is a corner location. As such, I feel this is a superior location and have adjusted it downward by 10%.

Comp 4, which is located directly on South Broadway in Salem, was felt to be in the same market as the subject, does benefit from a closer proximity to the Massachusetts boarder which drives much of the retail development in Salem and also is a heavily developed area. Therefore, I feel this comparable is superior from a locational standpoint of view and have adjusted it downward by 10%.

Comps 2 and 3 were felt to be similar. Comp 2 is located in Manchester and is one parcel removed from South Willow Street although it has access at a signalized intersection. It is in close proximity to other retail development at the northern end of South Willow Street where development has begun to

decline. Given its greater proximity to South Willow Street, some of which is offset by its location on South Willow Street, I feel that it is similar to the subject even though it does have some benefits from a visibility standpoint of view. Comp 3 was also felt to be similar. It was at a signalized intersection in proximity to some large development. The subject property upon completion will have a greater density in supportive type uses however I feel that is offset by the signalized intersection and therefore no adjustment has been made to this comparable.

PHYSICAL FEATURES: The subject property will be a flat site serviced by all municipal utilities upon completion of the larger development. Comps 1, 2, and 3 were all felt to be similar in that they were ready to develop sites and as such no adjustment has been made to those.

Comp 4, as noted, has a certain amount of wetlands on the larger parcel. The impact of those wetlands is such that perhaps they would not support building however it does have contributory value as far as density and parking. Therefore, I feel that it is inferior and have adjusted it upward by 20%.

VALUE CONCLUSION

The comparable properties and their adjustments are summarized in the table that follows this section. The analysis indicates the following adjusted per acre values:

Comp 1.....	\$612,446
Comp 2.....	\$707,786
Comp 3.....	\$785,536
Comp 4.....	\$677,517

The adjusted per acre values range from \$612,446 to \$785,536. Each of the sales provides a meaningful indication of value for the subject after adjustments. Of the four comparables Comp 4 was accorded the least weight. While it is the only comparable in Salem it was bought by an abutter and was also impacted by wetlands. While both of these things were adjusted for I feel for those reasons it is a slightly less reliable comparable and have accorded it the least weight.

The other three comparables were felt to be better indicators of value. Comp 2 which is the oldest comparable is similar in the fact that it is a parcel that derives much of

its value because of its proximity to other commercial development and is not located directly on the main artery. For that reason I feel that it should be given consideration.

Based on this investigation and analysis, as well as personal experience and judgment, I have formed the opinion that the subject warrants a value estimate of \$750,000 per acre, as shown:

\$750,000/acre x 1.23± acres = \$922,500
ROUNDED TO \$925,000

Crafts Appraisal Associates, Ltd.

COMPARATIVE VALUE ANALYSIS CHART

FACTORS	SUBJECT	COMP 1	COMP 2	COMP 3	COMP 4
Location	71 Rockingham Park Boulevard Salem, NH	825 Central Ave Dover, NH	5 Driving Park Dr. Manchester, NH	1293 Hooksett Rd. Hooksett, NH	417 South Broadway Salem, NH
CAA Ref. No.	N/A	7991	7801	7892	7844
Sale price	N/A	\$950,000	\$1,700,000	\$795,000	\$3,200,000 ¹
Sale date	N/A	3/17	10/14	4/16	12/15
Rights transferred	N/A	Fee simple	Fee simple	Fee simple	Fee simple
Financing	N/A	Cash to Seller	Conventional	Cash	Conventional
Motivation	N/A	Arm's length	Arm's length	Arm's length	Abutter -10%
Expenses immediately after purchase	--	--	--	--	--
Market Conditions	N/A	+1%	+7.75%	+3.75%	+4.75%
Adjusted price	N/A	\$959,500	\$1,831,750	\$824,813	\$3,016,800
No. of Acres	1.23± acre	1.41± acres	2.588±	1.05±	4.898±
Adjusted Price per Acre	N/A	\$680,496	\$707,786	\$785,536	\$615,925
Location	N/A	Superior -10%	Similar	Similar	Superior -10%
Physical Features	N/A	Similar	Similar	Similar	Inferior +20%
INDICATED VALUE/ACRE	N/A	\$612,446	\$707,786	\$785,536	\$677,517

¹Effective Price

COMPARABLE LAND SALE 1

SALE DATA

Location: 817, 819, & 825 Central Ave and 3 Ridge Street, Dover, NH
Grantor: Dean A. Fournier Charitable Trust 2005
Grantee: Jeanette Gestapo, LLC
Sale Date: 3/1/2017
Sale Price: \$950,000
Sale Price Per Acre: \$673,759
Date Recorded: 3/22/2017
County/Deed Type: Rockingham/Fiduciary
Book/Page: 4464/111
Rights Transferred: Fee simple
Conditions of Sale: Arm's length
Financing: Cash to Seller
Confirmed By: DEW
Date: 7/1/2017
Source: Broker

PHYSICAL DESCRIPTION

Size: 1.41± acres
Frontage: 347.92±' on Central Ave/170±' on Ridge St.
Shape/Road Grade: Slightly irregular/At grade
Topography: Level

MUNICIPAL DATA

Water/Sewer/Gas: Municipal/Municipal/Natural
Zoning: Business - 3
Improvements/Land Use: Older residential structures to be razed
Highest & Best Use: Commercial development

REMARKS

These are four adjacent parcels of land that were purchased together for \$950,000. The parcels were each improved with an older wood-frame residence or multi-unit residences that were in average to below average overall condition at the time of sale. They had no contributory value to the sale. The buyer purchased the property planning to develop it with a 15,000± SF owner-occupied retail building. This is located at a corner and less than one-quarter mile east of the Hannaford and Shaw's development.

7991

COMPARABLE LAND SALE 2

SALE DATA

Location: 5 Driving Park Drive, Manchester, NH
Grantor: Five Driving Park, LLC
Grantee: Leclerc Plaza, LLC
Sale Date: 10/1/2014
Sale Price: \$1,700,000
Sale Price Per Acre: \$656,878
Date Recorded: 10/30/2014
County/Deed Type: Hillsborough/Warranty
Book/Page: 8704/509
Rights Transferred: Fee simple
Conditions of Sale: Arm's length
Financing: Conventional
Confirmed By: DEW
Date: 10/1/2014
Source: Grantee & Documentation

PHYSICAL DESCRIPTION

Size: 2.588± acres
Frontage: On Driving Park Drive
Shape/Road Grade: Irregular/Generally at grade
Topography: Level

MUNICIPAL DATA

Water/Sewer/Gas: Municipal/Municipal/Natural
Zoning: General Business (B-1)
Improvements/Land Use: 9,600± SF building to be razed
Highest & Best Use: Commercial development

REMARKS

This property subsequent to the sale was improved with a 64,000± SF two story furniture sales building. In addition to its access from Driving Park Drive, which places it one parcel removed from South Willow Street, there is generally a pass through among these properties located on the west side of South Willow Street that allows free passage without having to access South Willow Street directly. This property is located below the grade of South Willow Street and behind a Wendy's restaurant, but does have some visibility from South Willow Street. The purchaser built a furniture store which is his third furniture store in the southern New Hampshire area.
7801

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COMPARABLE LAND SALE 3

SALE DATA

Location: 1293 Hooksett Road, Hooksett, NH
Grantor: John M. Kelly Revocable Trust of 1993
Grantee: Merrimack County Savings Bank
Sale Date: 4/1/2016
Sale Price: \$795,000
Sale Price Per Acre: \$757,143
Date Recorded: 4/1/2016
County/Deed Type: Merrimack/Warranty
Book/Page: 3510/1370
Rights Transferred: Fee simple
Conditions of Sale: Arm's length
Financing: Cash
Confirmed By: DEW
Date: 8/1/2016
Source: Grantee/Public Records

PHYSICAL DESCRIPTION

Size: 1.05± acres
Frontage: Hooksett Road
Shape/Road Grade: Irregular/Slightly above grade
Topography: Generally level

MUNICIPAL DATA

Water/Sewer/Gas: Municipal/Municipal/Natural
Zoning: Commercial
Improvements/Land Use: Small auto service building to be razed
Highest & Best Use: Commercial development

REMARKS

This parcel had a couple of older auto service buildings on it that were owned by a used car entity located across Hooksett Road from these. They never really utilized these properties and subsequently sold it to be developed with a branch bank for Merrimack County Savings Bank.

7892

COMPARABLE LAND SALE 4

SALE DATA

Location: 417 South Broadway, Salem, NH
Grantor: State of New Hampshire
Grantee: South Broadway Development, LLC
Sale Date: 12/24/2015
Sale Price: \$3,900,000
Sale Price Per Acre: \$1,387,000
Date Recorded: 12/30/2015
County/Deed Type: Rockingham/Quitclaim
Book/Page: 5681/1714
Rights Transferred: Fee simple
Conditions of Sale: Abutter
Financing: Conventional
Confirmed By: AJC
Date: 5/1/2016
Source: Public Records/Appraisal

PHYSICAL DESCRIPTION

Size: 4.898± ac (2.998± usable)
Frontage: 400±' on South Broadway
Shape/Road Grade: Irregular/At grade
Topography: Level

MUNICIPAL DATA

Water/Sewer/Gas: Municipal/Municipal/Natural
Zoning: Commercial/Industrial C
Improvements/Land Use: See remarks
Highest & Best Use: Commercial

REMARKS

Reportedly the improvement was constructed in 1965 as a state police barracks. Since the date of construction the building has been expanded and upgraded numerous times over the years. More recently it has been utilized as a liquor store. It is situated on a 4.89± acre lot. There are areas of wetlands. The property was purchased by Rockingham Toyota which is located directly across the street. The grantee intends on utilizing the site and the building for the sale of used cars. It is their intent to utilize the existing improvement in some manner. In order to estimate the contributory value of the building I utilized Marshall Valuation Service Section 13. This indicated a depreciated

value of the improvements of \$630,000. To that I added \$70,000 for contributory value of existing site improvements. This would indicate a price paid for the land of \$3,200,000.

7844

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CERTIFICATION

The Appraiser certifies and agrees that:

1. the statements of fact contained in this report are true and correct.
2. the reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions.
3. the Appraiser(s) have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved.
4. the Appraiser(s) have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
5. the Appraiser(s) engagement in this assignment was not contingent upon developing or reporting predetermined results.
6. the Appraiser(s) compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
7. the Appraiser(s) have made a personal inspection of the property that is the subject of this report.
8. no one provided significant real property appraisal assistance to the person(s) signing this certification.
9. the Appraiser(s) have not performed a previous appraisal of the subject property or provided any other service involving the subject property within the three years prior to this assignment.

10. the reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute and the Uniform Standards of Professional Appraisal Practice (USPAP).
11. the use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
12. Crafts Appraisal Associates, Ltd. concentrates its practice in the appraisal of residential, commercial, industrial, special-purpose and development properties throughout New England. As such, the appraisers are competent to undertake this appraisal assignment, and copies of the qualifications of the appraisers who participated in preparing this appraisal are included in the Addendum of this report.

MARKET VALUE OF THE FEE SIMPLE ESTATE AS OF JULY 13, 2017. \$925,000



Donald E. Watson
Certified General Appraiser
No. NHCG-191

Crafts Appraisal Associates, Ltd.

STATEMENT OF LIMITING CONDITIONS

1. All facts and data set forth in this report are true and accurate to the best of the appraiser's knowledge and belief.
2. Sketches and maps included in the report are for the purpose of aiding the reader in visualizing the property and are not necessarily drawn to exact scale.
3. No land survey has been made by the appraiser and land dimensions given in the report are taken from available public records and the appraiser assumes no responsibility for the accuracy of such land dimensions.
4. No investigation of legal fee or title to the property has been made. No consideration has been given to liens or encumbrances against the property except as specifically stated in the report.
5. The appraiser assumes that there are no hidden or unapparent conditions of the property, subsoil or structures that would render the property more or less valuable. The appraiser assumes no responsibility for any engineering necessary to uncover such things.
6. Possession of this report, or a copy thereof does not carry with it the rights of publication, nor may it be used for any public purpose without the prior written consent of Crafts Appraisal Associates, Ltd.
7. The Americans with Disabilities Act (ADA) became effective January 26, 1992. The appraiser has not made a specific compliance survey and analysis of this property to determine whether or not it is in conformity with the various detailed requirements of the ADA. It is possible that a compliance survey of the property together with a detailed analysis of the requirements of the ADA could reveal that the property is not in compliance with one or more of the requirements of the act. If so, this fact could have a negative effect upon the value of the property. Since I have no direct evidence relating to this issue, I did not consider possible noncompliance with the requirements of the ADA in estimating the value of the property.
8. The party for whom this report was prepared may distribute copies of this report, in its entirety, to such third parties as may be selected by the party for whom this report was prepared; however, selected portions of this report shall not be given to third parties without prior written consent of the signatories of this report. Further, neither all nor any part of this report shall be disseminated to the general public by the use of advertising media, public relations media, news media, sales media or other media for public communication without the prior written consent of the signatories of this report.
9. This report is based on market conditions existing as of the date of the assignment and the appraiser's estimate of future market conditions. The appraiser is not responsible for unforeseeable events that alter market conditions subsequent to the effective date of the opinion.
10. The use of this report is subject to the requirements of the Appraisal Institute relating to the Code of Professional Ethics and the Uniform Standards of Professional Appraisal Practice.

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**APPRAISER QUALIFICATIONS
DONALD E. WATSON
CERTIFIED GENERAL APPRAISER NO. NHCG-191**

BACKGROUND SUMMARY

With over twenty-nine years in real estate and twenty-two years in the appraisal industry, I have served a wide variety of clients, including municipal and state governments, major universities, lending institutions, nonprofit organizations and investors. I have extensive experience with all property types ranging from unimproved land to subdivisions to improved commercial, industrial and residential properties including complexes and condominiums throughout New Hampshire. My appraisals have been widely used in eminent domain proceedings, estate-planning, financing, divorces, etc.

EDUCATION

NEW HAMPSHIRE COLLEGE, MANCHESTER, NH: Economic & Finance Program

OHIO STATE UNIVERSITY: A.S. Animal Science

HARVARD UNIVERSITY GRADUATE SCHOOL OF DESIGN:
Commercial Real Estate Development & Financing

SOCIETY OF REAL ESTATE APPRAISERS: Course 101, An Introduction to Appraising Real Property

APPRAISAL INSTITUTE:

- Course 1A-1, Real Estate Appraisal Principles
- Course 1A-2, Basic Valuation Procedures
- Course 1B-A, Capitalization Theory & Techniques, Part A
- Course 1B-B, Capitalization Theory & Techniques, Part B
- Course 2-1, Case Studies in Real Estate Valuation
- Course SPP, Standards of Professional Practice, Parts A & B
- Course 530, Advanced Sales Comparison & Cost Approaches
- Report Writing
- Over twenty (20) one and two day seminars

REALTORS' NATIONAL MARKETING INSTITUTE:

- Course CI - 101, Fundamentals of R.E. Investment & Taxation
- Course CI - 102, Fundamentals of Location & Market Analysis
- Course CI- 103, Advanced R.E. Taxation & Marketing Tools for Investment Real Estate

PROFESSIONAL DESIGNATIONS AND AFFILIATIONS

EXPERT WITNESS:	New Hampshire Land and Tax Court Federal Bankruptcy Court Federal District Court New Hampshire Superior Court
CERTIFIED GENERAL APPRAISER:	State of New Hampshire

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**PARTIAL LIST OF CLIENTS SERVED AND PROPERTIES
APPRAISED BY CRAFTS APPRAISAL ASSOCIATES, LTD.** 36

NATIONAL & LOCAL CORPORATIONS

Anagnost Companies
Anheuser Busch Company
Audley Construction Company
Autodesk, Inc.
B&M Railroad
Bentley Pharmaceutical
Brookstone Company
Burger King Corp.
Cabinet Press
Cendant Mobility
Circuit City Stores, Inc.
Cities Services, Inc.
CLD Consulting Engineers
Coca Cola Bottling Company
Coldwell Banker Relocation Corp.
Creative Capital Leasing
Crotched Mountain Properties
Dexter Shoes
Dunkin' Donuts
Eastpoint Properties
ECCO USA, Inc.
Executive Relocation
Freudenberg – North America
GMAC Relocation Services
Gulf Oil Corp.
H&R Block
Henry Hanger Company
Honey Dew Donuts
Howe, Riley & Howe, PC
Hubbard, LLC
Hunneman Real Estate
Infantline Insurance Corp.
Ingersol-Rand Co.
International Automotive Management
J.A. Wright & Company
John B. Sullivan Corp.
John G. Burk & Associates, CPA
JP Chemical Company, Inc.
LaCrosse Footwear, Inc.
Lahey Hitchcock Clinic
Landa & Altsher, PC
Long & Foster Relocation
Mast Road Grain & Lumber
McDonald's Corp.
Midas Muffler
Mobil Oil Corp.
National Gypsum Corp.
New England Circuits, Inc.
Northern Telecom
Old Dutch Mustard Company, Inc.
OSRM Sylvania
Patsy's

Peterbilt Corp.
Pizza Hut
Primacy Relocation
Prudential Relocation
Public Service Company of NH
Rite-Aid
St. Johnsbury Trucking Company, Inc.
Saint-Gobain Performance Plastics
STARS Relocation
State Street Development Corp.
Stewart Title Insurance Co.
Stoneyfield Farm Yogurt, Inc.
Tamposi Company
Texaco
Two Guys Smoke Shop
TransUnion Settlement Solution
Union Leader Corp.
UPS Commercial Underwriters
Velcro USA, Inc.
Verizon
Waterford Development
Weichert Relocation Services
Worldwide Relocation Management, Inc.

**SPECIAL PURPOSE PROPERTIES &
NONPROFIT ORGANIZATIONS**

Abenaki Country Club
American Red Cross
Assumption Greek Orthodox Church
Boston Minuteman Council
Boys & Girls Club of America
Bretton Woods Resort
Calvary Bible Church
Concord Indoor Tennis & Racquetball Club
Concord Lincoln-Mercury
Consumers Water Company
Dartmouth College
Ear Nose & Throat Physicians & Surgery PA
Easter Seals Society
Executive Health Club
Faith Christian Center
First Church of the Nazarene
Girl Scouts of Swift Water Council
Girl Scouts of Spar and Spindle Council
Good Shepherd School, Inc.
Green Meadow Golf Course, Inc.
Hampshire Hills Racquet & Health Club
Hickory Hill Golf Course, Inc.
Hillsboro Ford
International Brotherhood of Teamsters
Jack O'Lantern Resort

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PARTIAL LIST OF CLIENTS SERVED continued

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**SPECIAL PURPOSE PROPERTIES & NON-
PROFIT ORGANIZATIONS – CONTINUED**

Manchester Children's Home
Manchester Community Health Center
Manchester Mental Health Center
Mount St. Mary's College
Mountain Club on Loon, The
New Hampshire Children's Aid Society
Portsmouth Regional Hospital
Rockefeller Estate
Serenity Place
Shriner's Hospitals for Children
Sky Meadow Development
Southern NH University
Summit at Four Seasons – Time Share
Talarico Automobile Dealerships
University of New Hampshire (UNH)
Visiting Nurses Association
Wentworth-Douglas Hospital
YMCA Camp Belknap

**FEDERAL, STATE & LOCAL
MUNICIPALITIES**

City of Concord, NH
City of Berlin, NH
City of Dover, NH
City of Franklin, NH
City of Manchester, NH
City of Nashua, NH
Federal Aviation Administration
Greater Nashua Housing & Dev. Corp.
Keene Housing Authority
Laconia Airport Authority
Manchester Airport Authority
Manchester Highway Department
Manchester Housing Authority
Manchester Water Works
NH Housing Finance Authority
NH Dept. of Transportation
Salem Housing Authority
State of New Hampshire
State of Vermont
Town of Bedford, NH
Town of Brattleboro, VT
Town of Candia, NH
Town of Hampton, NH
Town of Hollis, NH
Town of Londonderry, NH
Town of Merrimack, NH
Town of Newmarket, NH
Town of North Andover, MA
Town of Pelham, NH
Town of Salem, NH

Town of Seabrook, NH
Town of Stratham, NH
U.S. Dept. of Transportation
U.S. Environmental Protection Agency
U.S. Postal Service
Veterans' Administration

CONSERVATION ORGANIZATIONS

Bedford Conservation Commission
Bedford Land Trust
Derry Conservation Commission
Derry Preservation Initiative
Dover Conservation Commission
Hollis Conservation Commission
Land Conservation Investment Program
Moose Mountain Regional Greenways
Mount Vernon Conservation Commission
Nature Conservancy
New Hampshire Audubon Society
North Hampton Forever
Society for the Protection of NH Forests
Stratham Conservation Commission
Temple Conservation Commission

LENDING & RELATED INSTITUTIONS

Bank of America
TD BankNorth
Beacon Federal
Berkshire Mortgage Finance
Berlin City Bank
Boston Federal Savings Bank
Cambridge Savings Bank
Centrix Bank & Trust Co.
Chittenden Bank
Citicorp Mortgage, Inc.
Community Bank & Trust Co.
Danversbank
Digital Federal Credit Union
E-Bid Mortgage
EastWest Mortgage
Eastern Bank
Enterprise Bank & Trust Co.
Federal Home Loan Mortgage Corp.
Federal National Mtg. Association
First Colebrook Bank
First Commercial Bank of Chicago
Flagship Bank
Ford Motor Credit Corp
GMAC Mortgage Corp.

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PARTIAL LIST OF CLIENTS SERVED continued

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**Lending & Related Institutions -
continued**

H&R Block Mortgage Corp.
Haverhill Cooperative Bank
John Hancock Mutual Ins. Company
Laconia Savings Bank
Lake Sunapee Bank
Ledyard National Bank
Marco Community Bank
Mercantile Bank & Trust Co.
Merrimack County Savings Bank
Money Tree Mortgage
New England Federal Credit Union
Ocean National Bank
Passumptic Savings Bank
Salem Five Cents Savings Bank
St. Mary's Bank
Savings Bank of Walpole
Southern NH Bank & Trust Co.
Sovereign Bank
Telephone Credit Union of NH
Toyota Motor Credit Corp.
Traveler's Insurance Co.
Triangle Credit Union
Wachovia Mortgage
Western Federal Credit Union
Winchester Cooperative Bank

Hamblett & Kerrigan
Hebert & Uchida, PLLC
Hodes, Buckley, McGrath & LeFevre, PA
Lotter & Bailin, PC
Mazerolle & Frasca, PA
McDonald & Kanyuk, PLLC
McLane, Graf, Raulerson & Middleton, PA
McNeil & Taylor, PA
Nadeau Law Offices
Orr & Reno, PA
Ransmeier & Spellman, P.C.
Riley & Fay, PLLC
Routhier, Donald Law Offices
Sarrouf, Tarricone & Flemming
Sheehan Phinney Bass & Green, PA
Stark, Rodney L., PA
Sullivan & Gregg, PA
Sulloway & Hollis, PA
Tardif, Shapiro & Cassidy, PA
Upton & Hatfield, LLP
Vitteck Law Offices
Wadleigh, Starr & Peters, PLLC
Wiggin & Nourie, PA
Winer & Bennett, LLP
Wrigley, Weeks & Martin, PC

LEGAL REPRESENTATIVES

Abramson, Baillinson & O'Leary
Backus, Meyer & Solomon & Rood
Barradale, O'Connell, Newkirk & Dwyer, PA
Beaumont & Campbell, PA
Bernstein, Shur, Sawyer & Nelson, PA
Borofsky, Lewis & Amodeo-Vickery, PA
Bouchard Kleinman & Wright, PA
Boutin & Associates, PLLC
Boynton, Waldron, Doleac, Woodman & Scott, PA
Bradley, Burnett & Kinyon, PA
Bragdon, Berson, Davis & Klein
Cassassa & Ryan Attorneys at Law
Cleveland, Waters & Bass, PA
Cocheco Elder Law Associates
Cronin & Bisson, PC
Curtin Law Office
D'Amante, Couser, Steiner, Pellerin, PA
Devine, Millimet & Branch, PA
DiMento & Sullivan, PA
Duddy Law Offices
Finis E. Williams, III Law Firm
Greene & Perlow, PA
Hall, Morse, Anderson, Miller & Spinelli

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

PROJECT TITLE	Rockingham Substation
PROJECT SPONSOR:	Charles Rodrigues
PROJECT MANAGER:	Anthony Strabone
DATE:	02-16-18
PROJECT ID	8830-1864
BUSINESS PLAN NUMBER:	(Assigned by Corporate Finance)

Business Case

RECOMMENDATION:

- Construct a new 115-13.2 kV Substation with eight (8) feeder positions at Tuscan Village.

OBJECTIVE(S)

- Perform site and civil detailed design engineering for a new 115-13.2kV Substation (Rockingham Substation) at Tuscan Village.

BACKGROUND

- Construction of the a new 115-13.2 kV Substation is part of the recommended plan in the Salem Area Study perform by Control Point Technologies in 2017, with input and acceptance by Liberty Utilities.
- The Salem Area will experience more than expected load growth over the next few years due to the recent purchase of the Rockingham Race Track. The developer, known as Tuscan Village, plans to redevelop this land which will result in an increase of Liberty's Salem Area Load by 13 MW.
- The supply and distribution system serving the Salem service territory is expected to be loaded beyond the capability of the equipment to reliably serve the load under LU planning and loading criteria during contingent system configurations.
- To mitigate these risks, along with other capital invests in the Salem Area, the plan recommends that Liberty Constructs a new 115 -13.2 KV Substation. This new substation will be served by two (2) new 115 kV Transmission lines originating at Liberty's Golden Rock Substation.

ALTERNATIVES/OPTIONS

- Other alternatives were considered and can be reviewed in Salem Area Study Report.

FINANCIAL ASSESSMENT

- Initial estimate is \$1,000,000 to perform detailed civil and site engineering/design work for the installation of this station. Once detailed engineering is complete, the estimated cost of this project will be revised.

RISK ASSESSMENT AND QUALITATIVE EVALUATION

- None

Business Case

IMPLEMENTATION/ACTION PLAN

Engineering to be performed in 2018. Construction will take place under an individual job number in future years.

REVIEWED BY:

PROJECT MANAGER: Anthony Strabone
DIRECTOR/VP: CHARLES A. RODRIGUES
FINANCE:



LIBERTY UTILITIES - CAPITAL PROJECT EXPENDITURE APPLICATION

DIVISION/COMPANY:	Capital / Granite State Electric Co.	HOME OFFICE REF #: 8830-1864
PROJECT TITLE:	Electric Vehicle Charging Stations	EXPECTED PROJECT TOTAL: \$ 100,000
PROJECT TYPE (circle one):	System Maint / <u>System Project</u> / Growth / LXA	
PROJECT START DATE:	1/1/2018	PROJECT END DATE: 12/31/2018
CURRENT UTILITY EARNINGS STATUS:		JOB COST/FWO #:
Type of Capital Project: <input type="checkbox"/> Growth <input type="checkbox"/> Improvement Upgrades <input checked="" type="checkbox"/> Infrastructure Replacement		
PROJECT DESCRIPTION & LOCATION: Construct a new 115-13.2 kV Substation with eight (8) feeder positions at Tuscan Village.		
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). Yes. Due to the recent purchase of the Rockingham Race Track, the develop plans to repurpose this land (Tuscan Village) which is expected to increase the Salem Area load by 13 MW		
PERMITTING REQUIREMENTS, INCLUDING POTENTIAL IMPACT ON EXISTING PERMITS, AND TIMING OF AND RISKS ASSOCIATED WITH OBTAINING APPROPRIATE PERMITS FOR PROJECT. Yes. Permitting with the Town of Salem will be 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. \$40,000 to perform detail civil and site engineering. Once engineering is complete, the estimate cost of this project will be revised.		
WILL THERE BE ASSETS GREATER THAN \$5,000 THAT ARE CURRENTLY IN SERVICE REMOVED AS A RESULT OF THIS PROJECT? Asset Removal will be calculated on a job specific basis.		
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): 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 		

Business Case

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
Safety		Will this, and other approved projects, cause a rate shock	No
Mandated		Have Health & Safety implications been considered? Has Environmental Compliance review been done? Has Tech Services review been done?	Yes
Impending Regulatory Obligation			
Rate Recovery-Immediate Return			
Rate Recovery (3 to 6 months)			
Rate Recovery (6 to 12 months)			
Rate Recovery (12 to 18 months)			
Was this Capital Expenditure included in the Annual Budget?	No	What amount was budgeted? \$0	
ANALYSIS OF PROJECT VALUE		CAPITAL EXPENDITURE BUDGET UTILIZATION	
Design/Engineering		Authorized Amount	To be spent in:
Material			Current Year
External contractor costs			Future Years
Internal costs		(A) Capital budget	\$100,000
Other costs (contingency)		(B) Over (under) run vs. Budget	
Working capital requirements		(C) (A+B) Total Estimated Project Cost	
		(D) Less Approved Spend to Date	
		(E) Less Future Approval Requests	
Project Total Cost	\$100,000	(F) (C-D-E) Approval Amount Requested (current application)	\$100,000
	Name	Signature	Date
Requesting Party	Anthony Strabone		2/27/18
Director of Engineering	Charles Rodrigues		3/12/18
VP of Operations	Craig Jennings		3/16/18
President - LU East	Susan Fleck		
V			
CFO			
CEO			
Director of Finance	Anthony Tiller		7/13/18



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

PROJECT TITLE	Rockingham Substation- Transmission Lines
PROJECT SPONSOR:	Charles Rodrigues
PROJECT MANAGER:	Anthony Strabone
DATE:	02-16-18
PROJECT ID	8830-1865
BUSINESS PLAN NUMBER:	(Assigned by Corporate Finance)

Business Case

RECOMMENDATION:

- Construct two (2) 115 kV Transmission lines from Golden Rock Substation to Rockingham Substation.

OBJECTIVE(S)

- Perform Site, Environmental and line design of two (2) 115 kV Transmission Lines from Golden Rock Substation to Rockingham Substation.

BACKGROUND

- Construction of the Transmission lines are part of the recommended plan in the Salem Area Study perform by Control Point Technologies 2017, with input and acceptance by Liberty Utilities.
- The Salem Area will experience more than expected load growth over the next few years due to the recent purchase of the Rockingham Race Track. The developer, known as Tuscan Village, plans to redevelop this land which will result in an increase of Liberty's Salem Area Load by 13 MW.
- The supply and distribution system serving the Salem service territory is expected to be loaded beyond the capability of the equipment to reliably serve the load under LU planning and loading criteria during contingent system configurations.
- To mitigate these risks, along with other capital invests in the Salem Area, the plan recommends that Liberty Constructs a new 115 -13.2 KV Substation. This new substation will be served by two (2) new 115 kV Transmission lines originating at Liberty's Golden Rock Substation.

ALTERNATIVES/OPTIONS

- Other alternatives were considered and can be reviewed in Salem Area Study Report.

FINANCIAL ASSESSMENT

- Initial estimate is \$ 2,000,000 to perform detailed engineering/design for the installation of the Transmission Lines. Once detailed engineering is complete, the estimated cost of this project will be revised.

RISK ASSESSMENT AND QUALITATIVE EVALUATION

- None

Business Case

IMPLEMENTATION/ACTION PLAN

Engineering to be performed in 2018. Construction will take place under an individual job number in future years.

REVIEWED BY:

PROJECT MANAGER: Anthony Strabone

DIRECTOR/VP: CHARLES A. RODRIGUES

FINANCE:

Business Case



LIBERTY UTILITIES - CAPITAL PROJECT EXPENDITURE APPLICATION

DIVISION/COMPANY:	Capital / Granite State Electric Co.	HOME OFFICE REF #: 8830-1865
PROJECT TITLE:	Electric Vehicle Charging Stations	EXPECTED PROJECT TOTAL: \$ 803,000
PROJECT TYPE (circle one):	System Maint / <u>System Project</u> / Growth / LXA	
PROJECT START DATE:	1/1/2018	PROJECT END DATE: 12/31/2018
CURRENT UTILITY EARNINGS STATUS:		JOB COST/FWO #:
Type of Capital Project: <input type="checkbox"/> Growth <input type="checkbox"/> Improvement Upgrades <input checked="" type="checkbox"/> Infrastructure Replacement		
PROJECT DESCRIPTION & LOCATION: Construct two (2) 115 kV Transmission lines from Golden Rock Substation to Rockingham Substation..		
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). Yes. Due to the recent purchase of the Rockingham Race Track, the develop plans to repurpose this land (Tuscan Village) which is expected to increase the Salem Area load by 13 MW		
PERMITTING REQUIREMENTS, INCLUDING POTENTIAL IMPACT ON EXISTING PERMITS, AND TIMING OF AND RISKS ASSOCIATED WITH OBTAINING APPROPRIATE PERMITS FOR PROJECT. Permitting will be needed from the Town of Salem NH and NHDOT		
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. \$100,000 to perform detail engineering. Once engineering is complete, the estimate cost of this project will be revised.		
WILL THERE BE ASSETS GREATER THAN \$5,000 THAT ARE CURRENTLY IN SERVICE REMOVED AS A RESULT OF THIS PROJECT? Asset Removal will be calculated on a job specific basis.		
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		

Page 5 of 6



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

PROJECT TITLE	Replace Lyme Rd P3 Recloser
PROJECT SPONSOR:	Charles Rodrigues
PROJECT LEAD:	Anthony Strabone
DATE:	2/14/18
PROJECT ID	8830-1863
BUSINESS PLAN NUMBER:	(Assigned by Corporate Finance)

Business Case

RECOMMENDATION:

- Replace existing Cooper oil filled recloser at P3 Lyme Rd with new Viper-S recloser due to damage. Install new bypass disconnect.
- This project is estimated at \$100,000 which includes contingency and appropriate round off.

OBJECTIVE(S)

Replace existing damaged recloser at P3 Lyme Rd Hanover due to damage.

BACKGROUND

- Costs associated with this project are to resolve damage to existing breaker unit.
- Existing recloser has experienced a flash which was identified as part of the inspection and maintenance program.

ALTERNATIVES/OPTIONS

- None

FINANCIAL ASSESSMENT

- This project estimate is based on design and estimate for previous similar projects.

RISK ASSESSMENT AND QUALITATIVE EVALUATION

- None

IMPLEMENTATION/ACTION PLAN

- The construction will take place under an individual job number throughout 2018.

REVIEWED BY:

PROJECT MANAGER: Anthony Strabone
DIRECTOR/VP: CHARLES A. RODRIGUES
FINANCE:

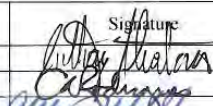
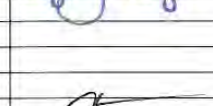

Business Case



LIBERTY UTILITIES - CAPITAL PROJECT EXPENDITURE APPLICATION

DIVISION/COMPANY: Capital / Granite State Electric Co.		HOME OFFICE REF # 8830-1863
PROJECT TITLE: Replace Lyme Rd P3 Recloser		EXPECTED PROJECT TOTAL: \$ 100,000
PROJECT TYPE (circle one):	System Maint / <u>System Project</u> / Growth / LXA	
PROJECT START DATE:	2/1/18	PROJECT END DATE: 12/31/18
CURRENT UTILITY EARNINGS STATUS:	JOB COST/FWO #:	
Type of Capital Project: <input type="checkbox"/> Growth <input checked="" type="checkbox"/> Improvement Upgrades <input type="checkbox"/> Infrastructure Replacement		
PROJECT DESCRIPTION & LOCATION: Replace existing recloser at P3 Lyme Rd due to damage.		
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). N/A		
PERMITTING REQUIREMENTS, INCLUDING POTENTIAL IMPACT ON EXISTING PERMITS, AND TIMING OF AND RISKS ASSOCIATED WITH OBTAINING APPROPRIATE PERMITS FOR PROJECT. N/A		
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. \$75,000		
WILL THERE BE ASSETS GREATER THAN \$5,000 THAT ARE CURRENTLY IN SERVICE REMOVED AS A RESULT OF THIS PROJECT? yes IF YES, PLEASE DETAIL THE SPECIFIC ASSETS THAT WILL BE REMOVED: <ol style="list-style-type: none"> 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? No What is the year of original installation of the plant being removed? 		

Business Case

PROPOSED SOURCE OF FUNDS (COMPANY, DEVELOPER LXA, HUF, ETC.) 2018 Capital Budget			
CATEGORY & STATUS OF PROJECT (tick as appropriate)		FINANCIAL SUMMARY	
		NEXT ANTICIPATED TEST YEAR	2018
		Rate Recovery (over 18 months)	X
Safety		Will this, and other approved projects, cause a rate shock	No
Mandated		If yes, is customer affordability an issue?	
Impending Regulatory Obligation			
Rate Recovery-Immediate Return			
Rate Recovery (3 to 6 months)			
Rate Recovery (6 to 12 months)		Have Health & Safety implications been considered?	Yes
Rate Recovery (12 to 18 months)		Has Environmental Compliance review been done?	No
		Has Tech Services review been done?	
Was this Capital Expenditure included in the Annual Budget?		No	What amount was budgeted? 0
ANALYSIS OF PROJECT VALUE		CAPITAL EXPENDITURE BUDGET UTILIZATION	
Design/Engineering		Authorized Amount	To be spent in:
Material			Current Year
External contractor costs			Future Years
Internal costs		(A) Capital budget	\$100,000
Other costs (contingency)		(B) Over (under) run vs. Budget	
Working capital requirements		(C) (A+B) Total Estimated Project Cost	
		(D) Less Approved Spend to Date	
		(E) Less Future Approval Requests	
Project Total Cost	\$100,000	(F) (C-D-E) Approval Amount Requested (current application)	\$100,000
	Name	Signature	Date
Requesting Party	Anthony Strabone		2/27/18
Director of Engineering	Charles Rodrigues		3/2/19
VP of Operations	Craig Jennings		8/6/19
President - LU East	Susan Fleck		
CFO			
CEO			
Director of Finance	Matthew Trotter		7/13/18

Business Case





Change Order Form

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2018

Project Overview			
Reason for Change:			
Project ID:	8830-1864	Project Name:	Rockingham Substation
Change Order Name:	Rockingham Substation	Date Prepared:	03/19/19
Change Order #:	1	Financial Work Order (FWO):ⁱ	301864-03001
Project Sponsor:	Charles Rodrigues	Revised Start Date:	01/01/18
Project Lead:	Anthony Strabone	Revised End Date:ⁱⁱ	12/31/18
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}	
Financial Assessment/Cost Estimates			
(Double click embedded excel file to update; include contingency allowance in excel file)			
Category	Original Project Value	Previous Approved Changes	Current Change Order Amount
Internal Labor (including labor and travel)			
Materials (including consumables)			
Equipment (rental equipment)			
Contractor/Subcontractor (including consultants)			
Total	100,000.00		1,468,869.97
Updated Unlevered Internal Rate of Return:			
Basis of Current Change Order Amount:	<i>Actual project costs for 2018 were under budget. However, the costs of the substation parcel, \$1.5M, was transferred to this project in 2018 and is the sole reason for this over expenditure.</i>		
Schedule Impacts			
(As a result of the Change Order, where applicable, List the Impacts to schedule)			
Baseline Schedule (BL)	New Forecast (NF)	Variance (BL – NF)	
N/A	N/A	N/A	



Change Order Form

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2018

Approvals and Signatures^{*}

Approved By:				
Role	Approval Authority Limit	Name	Signature	Date
Manager / Staff (requisitioner/buyer):	Up to \$25,000	Anthony Strabone		3/28/19
Senior Manager: :	Up to \$50,000			
Senior Director/Director:	Up to \$250,000	Charles Rodrigues Director, Engineering		3/31/19
State President / Senior VP / VP:	Up to \$500,000			
State President / Senior VP / VP:	Up to \$500,000	Susan Fleck President - LU NH		3/31/19
Regional President:	Up to \$3,000,000	James Sweeney President - East Region		3/31/19
Corporate - Sr VP Operations:	Up to \$5,000,000			
Corporate - Exec Team Member (CEO, CFO, COO, Vice Chair):	Over \$5,000,000			

¹ The Financial Work Order Section captures the work order this change falls under when the job was initially set-up

² The Revised project end date is dependent on changes in scope that may deviate the schedule from the original plan

³ 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.

⁴ 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)

^{*} 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.

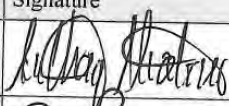



Project Close Out Report **2018**

Requesting Region or Group:	Granite State Electric Co.	Date of Closeout (MM/DD/YY):	03/19/19
Project Name:	Rockingham Substation		
Project ID #:	8830-1864	Requesting Region:	East Region
Project Lead:	Anthony Strabone	Project Sponsor:	Charles Rodrigues
Project Status:	<input type="checkbox"/> In Service <input type="checkbox"/> Complete <input checked="" type="checkbox"/> Closed		
Project Start Date:	01/01/18	Project Completion Date:	12/31/18
Requested Capital (\$)	\$1,568,869.97	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
Anthony Strabone	Manager, Electric Engineering		3/27/19
Charles Rodrigues	Director, Engineering		3/31/19
Richard MacDonald	Vice President, Operations		3/29/19
Peter Dawes	Vice President, Finance & Administration		3/29/19

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 **2018**

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"/>
	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 ¹	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:\Public\Engineering\2018 Preliminary Business Cases Electric	<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		<input type="checkbox"/> Electronic <input type="checkbox"/> Manual
3.4d	Status Reports		<input 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.		

Project Close Out Report **2018**

Section 4. Project Team ⁱⁱ

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

Name	Role	Type (e.g., Contractor, Employee)
Anthony Strabone	Manager, Engineering	Employee
VHB	Engineering	Contractor
TRC	Engineering	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
N/A	N/A	N/A	N/A

Section 7. Open Issues

Issue	Planned Resolution
N/A	N/A

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.

Project Close Out Report **2018**

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 (\$)			
External Costs (\$)			
Internal Costs (\$)			
Other (\$)			
AFUDC (\$)			
Total Project Costs (\$)	\$1,568,869.97	\$1,568,869.97	\$ 0.00

Reasons for Variance	Impact
No variance between actual costs and budget	\$ 0
Cause 2	\$
Cause 3	\$

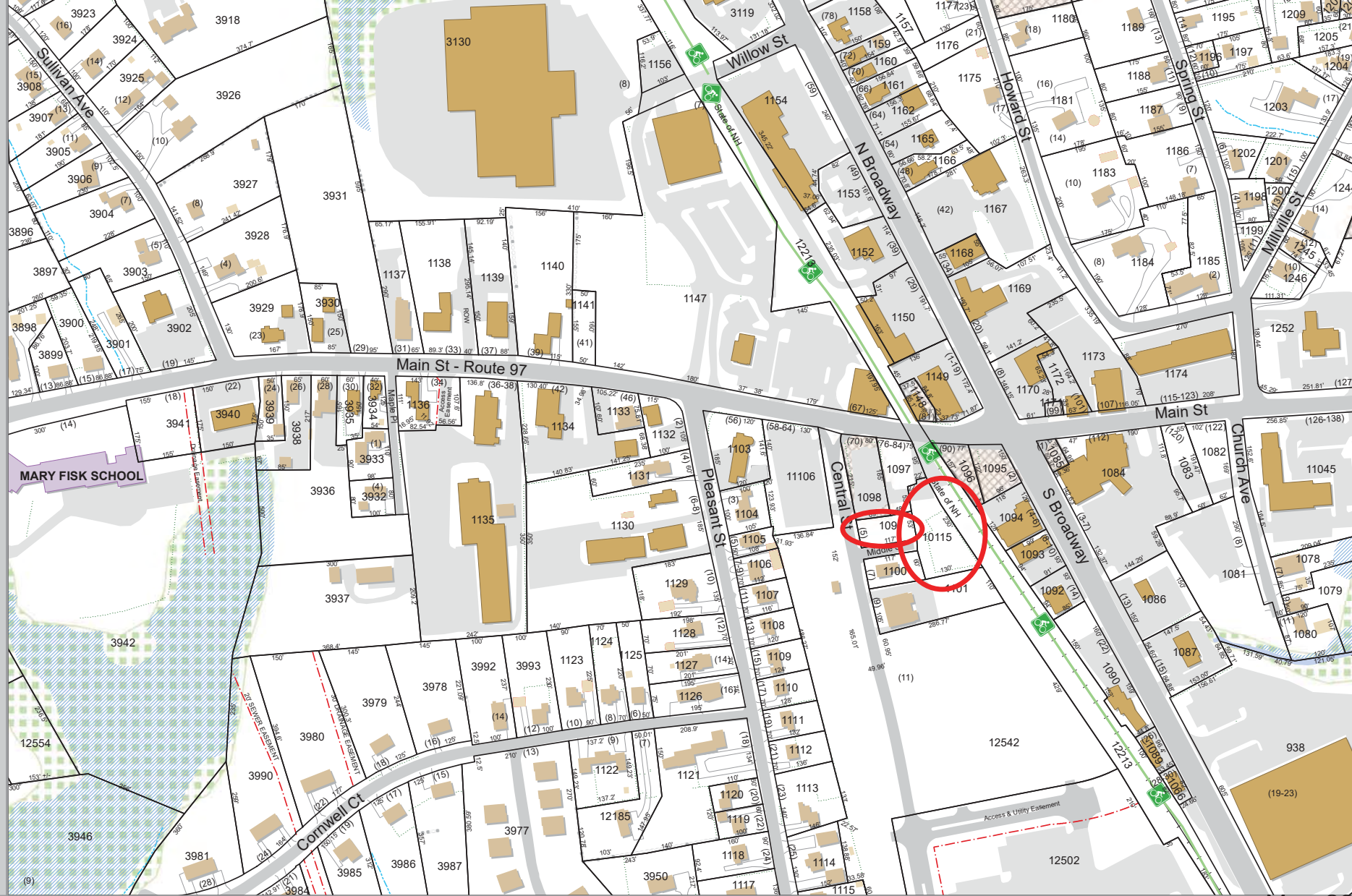
Project Manager to list of all work orders associated with project that should be closed once Close Out Report is accepted.

Registry of All Job Codes (Regional, Corporate, LABs)
301864-03001
301864-03002

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.

Map 81



FOR ASSESSING PURPOSES ONLY - NOT FIELD VERIFIED

Map 90

Map 90

Map 98

Map 89

3 MIDDLE ST

Location 3 MIDDLE ST

Mblu 89/ / 10115/ /

Acct#

Owner GRANITE STATE ELECTRIC
CO

Assessment \$107,300

Appraisal \$107,300

PID 6515

Building Count 1

Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2019	\$0	\$107,300	\$107,300
Assessment			
Valuation Year	Improvements	Land	Total
2019	\$0	\$107,300	\$107,300

Owner of Record

Owner GRANITE STATE ELECTRIC CO
Co-Owner LIBERTY UTILITIES
Address ATTN ACCOUNTS PAYABLE DEPT
15 BUTTRICK RD
LONDONDERRY, NH 03053-3305

Sale Price \$0
Certificate
Book & Page
Sale Date

Ownership History

Ownership History				
Owner	Sale Price	Certificate	Book & Page	Sale Date
GRANITE STATE ELECTRIC CO	\$0			

Building Information

Building 1 : Section 1

Year Built:

Living Area: 0

Replacement Cost: \$0

Replacement Cost

Less Depreciation: \$0

Building Attributes	
Field	Description
Style	Vacant Land

Model	
Stories:	
Occupancy	
Exterior Wall 1	
Exterior Wall 2	
Roof Structure:	
Roof Cover	
Interior Wall 1	
Interior Wall 2	
Interior Flr 1	
Interior Flr 2	
Heat Fuel	
Heat Type:	
AC Type:	
Total Bedrooms:	
Total Bthrms:	
Total Half Baths:	
Total Xtra Fixtrs:	
Total Rooms:	
Bath Style:	
Kitchen Style:	
Loc_Adj	

Building Photo



(<http://images.vgsi.com/photos/SalemNHPhotos//default.jpg>)

Building Layout

(<http://images.vgsi.com/photos/SalemNHPhotos//Sketches/6515>)

Building Sub-Areas (sq ft)	Legend
No Data for Building Sub-Areas	

Extra Features

Extra Features	Legend
No Data for Extra Features	

Land

Land Use

Use Code 4240
Description ELECSUBSTA
Zone RUR
Neighborhood 300
Alt Land Appr Category No

Land Line Valuation

Size (Acres) 0.44
Frontage 0
Depth 0
Assessed Value \$107,300
Appraised Value \$107,300

Outbuildings

Outbuildings	Legend
--------------	--------

No Data for Outbuildings

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Valuation History

Appraisal			
Valuation Year	Improvements	Land	Total
2018	\$0	\$107,300	\$107,300
2017	\$0	\$107,300	\$107,300
2016	\$0	\$107,300	\$107,300

Assessment			
Valuation Year	Improvements	Land	Total
2018	\$0	\$107,300	\$107,300
2017	\$0	\$107,300	\$107,300
2016	\$0	\$107,300	\$107,300

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5 CENTRAL ST

Location 5 CENTRAL ST

Mblu 89/ / 1099/ /

Acct#

Owner GRANITE STATE ELECTRIC
COMPANY

Assessment \$82,700

Appraisal \$82,700

PID 6369

Building Count 1

Current Value

Appraisal			
Valuation Year	Improvements	Land	Total
2019	\$0	\$82,700	\$82,700
Assessment			
Valuation Year	Improvements	Land	Total
2019	\$0	\$82,700	\$82,700

Owner of Record

Owner	GRANITE STATE ELECTRIC COMPANY	Sale Price	\$117,500
Co-Owner	LIBERTY UTILITIES	Certificate	
Address	ATTN ACCOUNTS PAYABLE DEPT 15 BUTTRICK RD LONDONDERRY, NH 03053-3305	Book & Page	3180/1296
		Sale Date	09/24/1996
		Instrument	00

Ownership History

Ownership History					
Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
GRANITE STATE ELECTRIC COMPANY	\$117,500		3180/1296	00	09/24/1996
	\$0		2856/0254		03/28/1990

Building Information

Building 1 : Section 1

Year Built:
Living Area: 0
Replacement Cost: \$0
Replacement Cost
Less Depreciation: \$0

Building Attributes

Field	Description
Style	Vacant Land
Model	
Stories:	
Occupancy	
Exterior Wall 1	
Exterior Wall 2	
Roof Structure:	
Roof Cover	
Interior Wall 1	
Interior Wall 2	
Interior Flr 1	
Interior Flr 2	
Heat Fuel	
Heat Type:	
AC Type:	
Total Bedrooms:	
Total Bthrms:	
Total Half Baths:	
Total Xtra Fixtrs:	
Total Rooms:	
Bath Style:	
Kitchen Style:	
Loc_Adj	

Building Photo



(<http://images.vgsi.com/photos/SalemNHPhotos//default.jpg>)

Building Layout

(<http://images.vgsi.com/photos/SalemNHPhotos//Sketches/6369>)

Building Sub-Areas (sq ft)	Legend
No Data for Building Sub-Areas	

Extra Features

Extra Features	Legend
No Data for Extra Features	

Land

Land Use

Use Code 3910
Description COM VAC PB
Zone CA
Neighborhood 45
Alt Land Appr No
Category

Land Line Valuation

Size (Acres) 0.14
Frontage 0
Depth 0
Assessed Value \$82,700
Appraised Value \$82,700

Outbuildings

Outbuildings

No Data for Outbuildings

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Valuation History

Appraisal			
Valuation Year	Improvements	Land	Total
2018	\$0	\$82,700	\$82,700
2017	\$0	\$82,700	\$82,700
2016	\$0	\$82,700	\$82,700

Assessment			
Valuation Year	Improvements	Land	Total
2018	\$0	\$82,700	\$82,700
2017	\$0	\$82,700	\$82,700
2016	\$0	\$82,700	\$82,700

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Row Labels	Sum of Transaction Amount	
AFUDC Clearing	\$	1,552.08
Labor Burden	\$	2,152.82
Labor-Install	\$	973.67
LU Corporate Burden	\$	3,347.12
NH Management Burden	\$	15,415.92
Out-Station Equipment	\$	20,348.46
Vou-Station Equipment	\$	25,079.90
Grand Total	\$	68,869.97

WS Job Number	Cost Code Description	Cost Element	Transaction Description	Transaction Amount	Document Date	GL Posting Date	Vendor ID	Item Number	Transaction Date	Purchase Order Number	Account Description	WS Project Number	WS Job Name	Divisions	Vendor Name	WS Description
301864-03001	Out Station Equipment	5		2,830.00	4/17/2018	5/14/2018	8810-AMFDES		1/1/1900		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL	AMF DESIGN CONSULTANTS, INC	Rockingham Sub Site Engineering
301864-03001	Vou-Station Equipment	4		1,450.00	1/23/2018	5/29/2018	8810-AMFDES		1/1/1900		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL	AMF DESIGN CONSULTANTS, INC	Rockingham Sub Site Engineering
301864-03001	Vou-Station Equipment	4		2,152.50	2/28/2018	6/4/2018	8810-HALDES		1/1/1900		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL	HALVORSON DESIGN PARTNERSHIP, INC	Rockingham Sub Site Engineering
301864-03001	Vou-Station Equipment	4		6,161.70	3/15/2018	6/4/2018	8810-HALDES		1/1/1900		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL	HALVORSON DESIGN PARTNERSHIP, INC	Rockingham Sub Site Engineering
301864-03001	NH Management Burden			1,488.62	4/30/2018	6/4/2018	8810-HALDES		1/1/1900		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL	HALVORSON DESIGN PARTNERSHIP, INC	Rockingham Sub Site Engineering
301864-03001	NH Management Burden			386.49	6/12/2018	6/12/2018			6/12/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	LI Corporate Burden	6	Alloc 3018-LI - MAY18	452.05	4/12/2018	6/12/2018			6/12/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	Out Station Equipment	5		4,544.48	5/14/2018	6/12/2018	8810-AMFDES		1/1/1900		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL	AMF DESIGN CONSULTANTS, INC	Rockingham Sub Site Engineering
301864-03001	Out Station Equipment	5		1,393.48	5/11/2018	6/12/2018	8810-HALDES		1/1/1900		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL	HALVORSON DESIGN PARTNERSHIP, INC	Rockingham Sub Site Engineering
301864-03001	Vou-Station Equipment	4		230	6/12/2018	6/12/2018	8810-VANASSE		1/1/1900		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL	VANASSE HANGEN BRISTLIN INC	Rockingham Sub Site Engineering
301864-03001	Out Station Equipment	5		437.5	6/16/2018	7/12/2018	8810-HALDES		1/1/1900		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL	HALVORSON DESIGN PARTNERSHIP, INC	Rockingham Sub Site Engineering
301864-03001	NH Management Burden			10,238.51	7/16/2018	7/16/2018			7/16/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	LI Corporate Burden	6	Alloc 3018-LI - JUNE18	1,717.85	7/16/2018	7/16/2018			7/16/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	AFUDC Clearing	9	8810 AFUDC JUNE 18	87.35	7/17/2018	7/17/2018			7/17/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	Laber-Install	1	ACCRUAL - PAYROLL	488.83	7/15/2018	7/15/2018			7/15/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	Laber-Install	1	ACCRUAL - PAYROLL	488.83	8/7/2018	8/7/2018			8/7/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	Out Station Equipment	5		1,239.83	7/15/2018	8/10/2018	8810-HALDES		1/1/1900		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL	HALVORSON DESIGN PARTNERSHIP, INC	Rockingham Sub Site Engineering
301864-03001	NH Management Burden			121.63	8/10/2018	8/10/2018			8/10/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	LI Corporate Burden	6	Alloc 3018-LI - JULY18	20.46	8/10/2018	8/10/2018			8/10/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	Laber-Install	1	07/22/2018 to 08/04/2018	488.83	8/10/2018	8/10/2018			8/10/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	Out Station Equipment	5		4,454.24	7/17/2018	8/13/2018	8810-AMFDES		1/1/1900		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL	AMF DESIGN CONSULTANTS, INC	Rockingham Sub Site Engineering
301864-03001	AFUDC Clearing	9	8810 AFUDC JULY 18	189.67	8/13/2018	8/13/2018			8/13/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	Vou-Station Equipment	4	DISTRIBUTION SUBSTATION SITE E	1,520.00	7/25/2018	8/17/2018	8810-VHENGINEER	SITE ENGINEERING	8/17/2018	PO000012128	Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL	VHB ENGINEERING SURVEYING & LANDSCAPE ARCHITECTURE	Rockingham Sub Site Engineering
301864-03001	Laber-Install	1	08/05/2018 to 08/24/2018	121.71	8/24/2018	8/24/2018			8/24/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	Laber-Install	1	ACCRUAL - PAYROLL	241.42	8/11/2018	8/11/2018			8/11/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	Laber-Install	1	ACCRUAL - PAYROLL	241.42	9/12/2018	9/12/2018			9/12/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	Laber-Install	1	08/19/2018 to 09/01/2018	241.42	9/7/2018	9/7/2018			9/7/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	Laber Burden			1,679.37	9/11/2018	9/11/2018			9/11/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	NH Management Burden			2,781.18	9/14/2018	9/14/2018			9/14/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	LI Corporate Burden	6	Alloc 3018-LI - AUG18	337.87	9/14/2018	9/14/2018			9/14/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	AFUDC Clearing	9	8810 AFUDC AUG 18	790.42	9/14/2018	9/14/2018			9/14/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	Out Station Equipment	5		1,564.84	9/12/2018	9/18/2018	8810-AMFDES		1/1/1900		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL	AMF DESIGN CONSULTANTS, INC	Rockingham Sub Site Engineering
301864-03001	Laber-Install	1	09/02/2018 to 09/15/2018	121.71	9/15/2018	9/15/2018			9/15/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	Vou-Station Equipment	4	DISTRIBUTION SUBSTATION SITE E	1,711.08	9/16/2018	9/17/2018	8810-VHENGINEER	SITE ENGINEERING	1/1/1900	PO000012128	Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL	VHB ENGINEERING SURVEYING & LANDSCAPE ARCHITECTURE	Rockingham Sub Site Engineering
301864-03001	AFUDC Clearing	9	8810 AFUDC SEPT 18	111.67	10/11/2018	10/11/2018			10/11/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	Laber Burden	6	Alloc 3018-BRD - SEPT18	475.45	10/12/2018	10/12/2018			10/12/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	NH Management Burden			744.5	10/12/2018	10/12/2018			10/12/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	LI Corporate Burden	6	Alloc 3018-LI - SEPT18	111.67	10/12/2018	10/12/2018			10/12/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	Vou-Station Equipment	4		540	8/21/2018	10/16/2018	8810-VANASSE		1/1/1900		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL	VANASSE HANGEN BRISTLIN INC	Rockingham Sub Site Engineering
301864-03001	Vou-Station Equipment	4		1,540.00	10/15/2018	11/15/2018	8810-VANASSE		1/1/1900		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL	VANASSE HANGEN BRISTLIN INC	Rockingham Sub Site Engineering
301864-03001	NH Management Burden			107.28	11/27/2018	11/27/2018			11/27/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	LI Corporate Burden	6	Alloc 3018-LI - OCT18	11.13	12/17/2018	12/17/2018			12/17/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	AFUDC Clearing	9	8810 AFUDC - OCT18	351.55	11/28/2018	11/28/2018			11/28/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL	AMF DESIGN CONSULTANTS, INC	Rockingham Sub Site Engineering
301864-03001	Out Station Equipment	5		225	12/4/2018	12/6/2018	8810-AMFDES		1/1/1900		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL	AMF DESIGN CONSULTANTS, INC	Rockingham Sub Site Engineering
301864-03001	AFUDC Clearing	9	8810 AFUDC NOV 18	369.61	12/11/2018	12/11/2018			12/11/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	NH Management Burden			838.33	12/17/2018	12/17/2018			12/17/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	LI Corporate Burden	6	Alloc 3018-LI - NOV18	888.6	12/17/2018	12/17/2018			12/17/2018		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	Vou-Station Equipment	4	ACCRUAL - ENGINEERING	5,000.00	12/11/2018	12/11/2018			1/1/1900		Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL		Rockingham Sub Site Engineering
301864-03001	Vou-Station Equipment	4	DISTRIBUTION SUBSTATION SITE E	2,180.00	1/1/2018	1/1/2018	8810-VHENGINEER	SITE ENGINEERING	1/1/1900	PO000012128	Construction Work In Progress	8830-1864	Rockingham 55 125-13.2kv	BEED-CAPITAL	VHB ENGINEERING SURVEYING & LANDSCAPE ARCHITECTURE	Rockingham Sub Site Engineering

Cost Code String	WS Job Number	Cost Code Description	Cost Element	Transaction Description	Transaction Amount	Document Date	GL Posting Date	Vendor ID	Item Number	Account Description	WS Project Number	WS Job Name	Divisions	Vendor Name	WS Description	ITEMDESC
10500-0001-0004-0000	301864-03002	You-Plant Held for Future Use	4	Rec'd for project 301864-03002	1,500,000.00	8/14/2018	8/14/2018			Construction Work in Progress	8830-1864	Rockingham SS - Land	8830-CAPITAL		Rockingham Sub Site Engineering	
10600-0000-0003-3001	10601864-03002	Transfer from 107	3	Unitize GSE 107-106 AUG18	1,500,000.00	8/27/2018	8/27/2018			Plant in Service-not classified	8830-1864	Rockingham SS - Land	8830-CAPITAL		Rockingham Sub Site Engineering	
10600-0000-0003-3001	10601864-03002	Transfer from 207	3	Unitize 8830 1060-FA AUG18	-1,500,000.00	8/28/2018	8/28/2018			Plant in Service-not classified	8830-1864	Rockingham SS - Land	8830-CAPITAL		Rockingham Sub Site Engineering	
10700-0000-0003-3001	301864-03002	Transfer to 106	3	Unitize GSE 107-106 AUG18	-1,500,000.00	8/27/2018	8/27/2018			Construction Work in Progress	8830-1864	Rockingham SS - Land	8830-CAPITAL		Rockingham Sub Site Engineering	

The transfer to 106 is provided here, because you don't see it in the line items

Asset ID: 8830-1864
Book ID: 8830-UP
Place in Service Date: 8/14/2018
Depreciated in Date: 1/4/2019
Original Value Cost: 1,500,000.00
Current Depreciation: 1,500,000.00
Net Book Value: 0.00
Depreciation Method: Straight Line
Accumulating Convention: Full Month

Group

Asset

Actions	File	Tools	Help
Search Definition 1			
Column Name:	Filter:	Value:	
WS Project Number	is equal to	8830-1864	
<input type="checkbox"/> Field Comparison	<input type="checkbox"/> Match Case		
Search Definition 2			
Column Name:	Filter:	Value:	
	is equal to		
<input type="checkbox"/> Field Comparison	<input type="checkbox"/> Match Case		
Search Definition 3			
Column Name:	Filter:	Value:	
	is equal to		
<input type="checkbox"/> Field Comparison	<input type="checkbox"/> Match Case		
Search Definition 4			
Column Name:	Filter:	Value:	
	is equal to		
<input type="checkbox"/> Field Comparison	<input type="checkbox"/> Match Case		
Search Options			
Maximum Records:	1,000,000,000	Search Type:	Match All
Clear All	Columns	Order By	
10700-0000-0003-3... 301864-03002 Transfer to 106			
125 JC Transactions Completed First 1000000000 records where WS Project Number is equal to 8830-1864.			



Liberty UtilitiesSM
WATER GAS ELECTRIC

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

PROJECT TITLE	Replace 6L2 direct buried cables No Main St Hanover
PROJECT SPONSOR:	Charles Rodrigues
PROJECT MANAGER:	Anthony Strabone
DATE:	10/8/17
PROJECT ID	8830-1832
BUSINESS PLAN NUMBER:	(Assigned by Corporate Finance)

Business Case

RECOMMENDATION:

- It is recommended to replace approximately 1600ft of 500 XLPE AL cables along North Main St in Hanover NH. The direct buried cables will be replaced with a duct lay cable system.
- This project is estimated at \$225,000 and will take place in 2018.

OBJECTIVE(S)

Replace approximately 1600ft of direct buried cables along No Main St.

BACKGROUND

The Costs associated with this project is to improve cable reliability and address the forward risk of a cable outage.

The Hanover 6L2 feeder supplies Dartmouth College West Campus and provides backup supply to the Dartmouth College North Campus.

The existing underground cable is 500 kCMIL Al XLPE of 1970's vintage and is installed in a direct buried arrangement. The cross linked polyethylene (XLPE) insulated cables of this vintage have a high failure rate. Voids and contamination in the insulation and shields as well as other design and manufacturing deficiencies, leads to voltage stress concentrations within the cable. These voltage stresses, combined with moisture creates water trees. These water trees degrade insulation over time, ultimately causing the cables to fail.

ALTERNATIVES/OPTIONS

None

FINANCIAL ASSESSMENT

None

RISK ASSESSMENT AND QUALITATIVE EVALUATION

None

IMPLEMENTATION/ACTION PLAN

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

REVIEWED BY:

PROJECT MANAGER:

Anthony Strabone

DIRECTOR/VP:

CHARLES RODRIGUES

FINANCE:

Jisha Sanderson



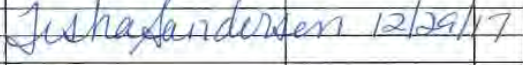
12/29/17

Business Case



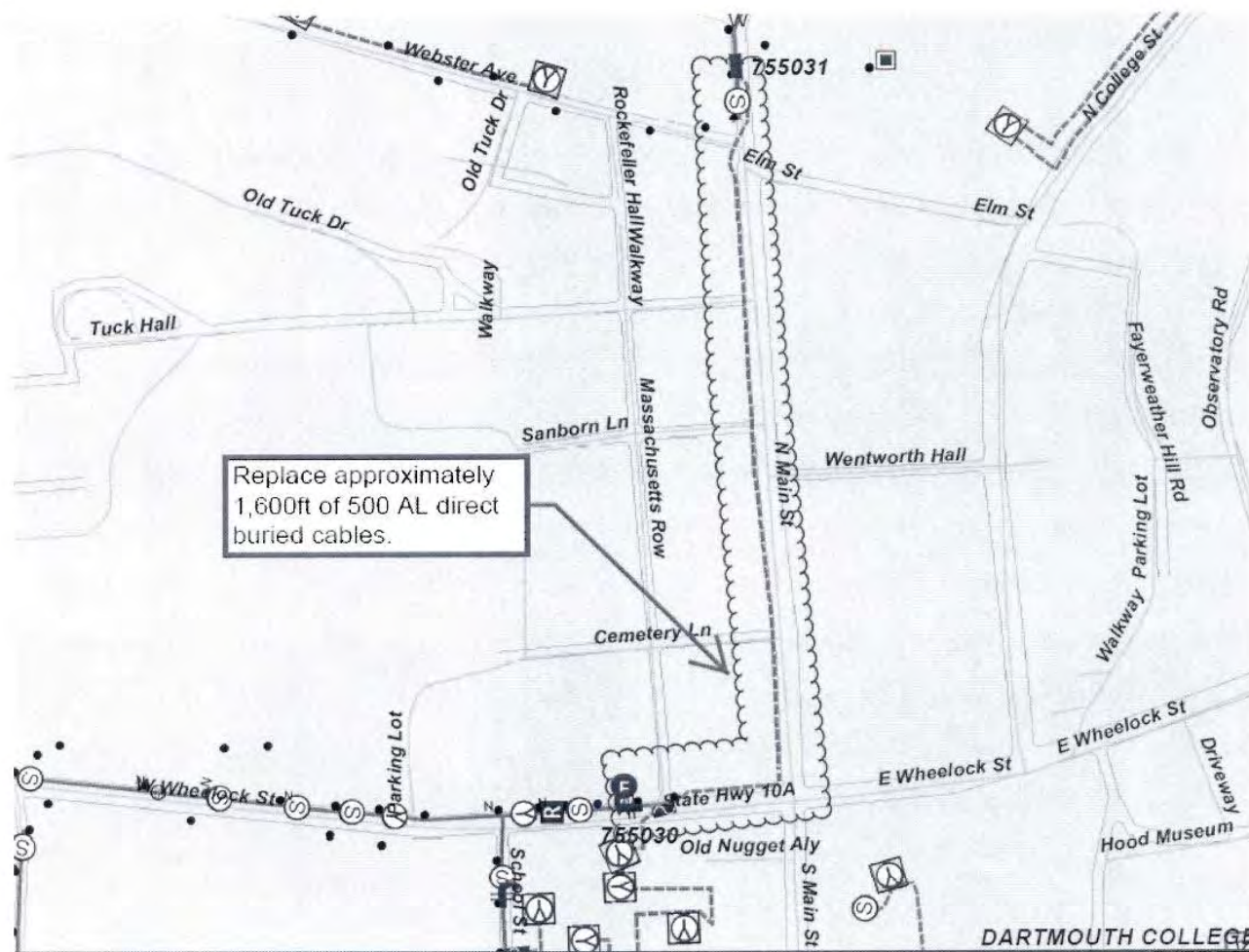
LIBERTY UTILITIES - CAPITAL PROJECT EXPENDITURE APPLICATION

DIVISION/COMPANY: Capital / Granite State Electric Co.		HOME OFFICE REF #: 8830-1832	
PROJECT TITLE: Replace 6L2 direct buried cables No Main St Hanover		EXPECTED PROJECT TOTAL: \$225,000	
PROJECT TYPE (circle one): System Maint / <u>System Project</u> / Growth / LXA			
PROJECT START DATE: 1/1/18		PROJECT END DATE: 12/1/18	
CURRENT UTILITY EARNINGS STATUS:		JOB COST/FWO #:	
Type of Capital Project: <div style="border: 1px solid black; padding: 5px;"> <input type="checkbox"/> Growth <input type="checkbox"/> Improvement Upgrades <input checked="" type="checkbox"/> Infrastructure Replacement </div>			
PROJECT DESCRIPTION & LOCATION: Replace the direct buried cables along No Main St due to concerns with asset condition.			
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. Underground equipment 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. \$225,000			
WILL THERE BE ASSETS GREATER THAN \$5,000 THAT ARE CURRENTLY IN SERVICE REMOVED AS A RESULT OF THIS PROJECT? yes 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? Not known			

PROPOSED SOURCE OF FUNDS (COMPANY, DEVELOPER LXA, HUF, ETC.)			
2018 Approved Capital Budget			
CATEGORY & STATUS OF PROJECT (tick as appropriate)		FINANCIAL SUMMARY	
		NEXT ANTICIPATED TEST YEAR	2018
		Rate Recovery (over 18 months)	X
Safety		Will this, and other approved projects, cause a rate shock	No
Mandated	X		
Impending Regulatory Obligation			
Rate Recovery-Immediate Return		Have Health & Safety implications been considered?	
Rate Recovery (3 to 6 months)		Has Environmental Compliance review been done?	
Rate Recovery (6 to 12 months)		Has Tech Services review been done?	
Rate Recovery (12 to 18 months)			
Was this Capital Expenditure included in the Annual Budget?		Yes	What amount was budgeted? \$225,000
ANALYSIS OF PROJECT VALUE		CAPITAL EXPENDITURE BUDGET UTILIZATION	
Design/Engineering		Authorized Amount	To be spent in:
Material			Current Year
External contractor costs			Future Years
Internal costs		(A) Capital budget	\$225,000
Other costs (contingency)		(B) Over (under) run vs. Budget	
Working capital requirements		(C) (A+B) Total Estimated Project Cost	
		(D) Less Approved Spend to Date	
		(E) Less Future Approval Requests	
Project Total Cost	\$225,000	(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 of Operations	Craig Jennings		
President - LU East			
Director Finance	Tisha Sanderson		12/29/17
CFO			
CEO			

Business Case

Attachment





Change Order Form

2018

Project Overview

Reason for Change:

Project ID:	8830-1832	Project Name:	Replace 6L2 Circuit No Main St Hanover
Change Order Name:	Replace 6L2 Circuit No Main St Hanover	Date Prepared:	03/19/19
Change Order #:	1	Financial Work Order (FWO): ⁱ	301832-01001
Project Sponsor:	Charles Rodrigues	Revised Start Date:	01/01/18
Project Lead:	Anthony Strabone	Revised End Date: ⁱⁱ	12/31/18
Prepared By:	Anthony Strabone	Change Type ⁱⁱⁱ	<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 Changes	Current Change Order Amount	Total
Internal Labor (including labor and travel)				
Materials (including consumables)				
Equipment (rental equipment)				
Contractor/Subcontractor (including consultants)				
Total	225,000.00		1,070,593.30	1,295,593.30

Updated Unlevered Internal Rate of Return:

Basis of Current Change Order Amount:

Additional funding was requested to accommodate expected construction costs. Additional funding requested increased the 2018 Budget for this project to \$1,100,000. Actual construction costs for this project were greater than the revised budget due to additional construction oversight needed at the request from the Town of Hanover.

Schedule Impacts

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

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



Change Order Form

2018

Approvals and Signaturesⁱ

Approved By:				
Role	Approval Authority Limit	Name	Signature	Date
Manager / Staff (requisitioner/buyer):	Up to \$25,000	Anthony Strabone		3/28/19
Senior Manager: :	Up to \$50,000			
Senior Director/Director:	Up to \$250,000	Charles Rodrigues Director, Engineering		3/31/19
State President / Senior VP / VP:	Up to \$500,000			
State President / Senior VP / VP:	Up to \$500,000	Susan Fleck President - LU NH		3/31/19
Regional President:	Up to \$3,000,000	James Sweeney President - East Region		3/31/19
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.

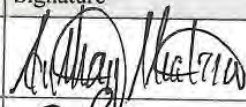

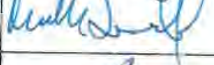

Project Close Out Report **2018**

Requesting Region or Group:	Granite State Electric Co.	Date of Closeout (MM/DD/YY):	03/19/19
Project Name:	Replace 6L2 Circuit No Main St Hanover		
Project ID #:	8830-1832	Requesting Region:	East Region
Project Lead:	Anthony Strabone	Project Sponsor:	Charles Rodrigues
Project Status:	<input checked="" type="checkbox"/> In Service <input type="checkbox"/> Complete <input type="checkbox"/> Closed		
Project Start Date:	01/01/18	Project Completion Date:	12/31/18
Requested Capital (\$)	\$1,295,593.30	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
Anthony Strabone	Manager, Electric Engineering		3/27/19
Charles Rodrigues	Director, Engineering		3/31/19
Richard MacDonald	Vice President, Operations		3/29/19
Peter Dawes	Vice President, Finance & Administration		3/29/19

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 **2018**

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"/>
	Rate your level of satisfaction with regards to the project outcomes listed below	
2.5	Project Quality	3/5
2.6	Product and/or Service Performance	3/5
2.7	Scope	3/5
2.8	Cost (Budget)	3/5
2.9	Schedule	3/5

Section 3. Project Documentation Checklist

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

Item	Question	Response	
3.1	Have project documentation and other items (e.g., Business Case, Project Plan, Charter, Budget Documents, Status Reports) been prepared, collected, filed, and/or disposed?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
3.3 ⁱ	Were audits (e.g., project closeout audit) completed and results documented for future reference?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
3.4	Identify the storage location for the following project documents items:		
Item	Document	Location (e.g., Google Docs, Webspace)	Format
3.4a	Business Case	W:\Public\Engineering\2018 Preliminary Business Cases Electric	<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		<input type="checkbox"/> Electronic <input type="checkbox"/> Manual
3.4d	Status Reports		<input 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.		

Project Close Out Report **2018**

Section 4. Project Team ⁱⁱ

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

Name	Role	Type (e.g., Contractor, Employee)
Anthony Strabone	Manager, Engineering	Employee
Mel Emerson	Engineering	Employee
L&M Services	Underground Civil Construction	Contractor
ElecComm	Underground Electrical 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
N/A	N/A	N/A	N/A

Section 7. Open Issues

Issue	Planned Resolution
N/A	N/A

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.

Project Close Out Report **2018**

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 (\$)			
External Costs (\$)			
Internal Costs (\$)			
Other (\$)			
AFUDC (\$)			
Total Project Costs (\$)	\$1,295,593.30	\$1,295,593.30	\$ 0.00

Reasons for Variance	Impact
No variance between actual and budget	\$ 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)
301832-01001


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.


Row Labels	Sum of Transaction Amount	
AFUDC Clearing	\$	3,341.48
Labor Burden	\$	54,516.75
Labor Burden - COR	\$	8,666.07
Labor-Install	\$	29,536.22
Labor-Removal	\$	4,437.76
LU Corporate Burden	\$	29,060.61
LU Corporate Burden - COR	\$	127.17
Mat-UG Cond & Devices	\$	114,595.77
NH Management Burden	\$	231,712.33
NH Management Burden - COR	\$	970.71
Stores Burden	\$	11,996.77
Vou-Poles/Tow/Equip	\$	275.50
Vou-UG Cond & Devices	\$	793,052.02
Vou-UG Conduit	\$	27,514.00
Grand Total	\$	1,309,803.16

000507

Search Definition 1		
Column Name:	Filter:	Value:
WS Project Number 	is equal to ▼	8830-1832
<input type="checkbox"/> Field Comparison	<input type="checkbox"/> Match Case	

Search Definition 2		
Column Name:	Filter:	Value:
<input type="text"/> 	is equal to ▼	<input type="text"/>
<input type="checkbox"/> Field Comparison	<input type="checkbox"/> Match Case	

Search Definition 3		
Column Name:	Filter:	Value:
<input type="text"/> 	is equal to ▼	<input type="text"/>
<input type="checkbox"/> Field Comparison	<input type="checkbox"/> Match Case	

Search Definition 4		
Column Name:	Filter:	Value:
<input type="text"/> 	is equal to ▼	<input type="text"/>
<input type="checkbox"/> Field Comparison	<input type="checkbox"/> Match Case	

Search Options	
Maximum Records: <input type="text" value="1,000,000,000"/>	Search Type: <input type="text" value="Match All"/> ▼

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210 JC Transactions

Completed

First 1000000000 records where WS Project Number is equal to 8830-1832.

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

DE 19-064
Distribution Service Rate Case

Staff Technical Session Data Requests - Set 1

Date Request Received: 10/18/19
Request No. Staff TS 1-15

Date of Response: 11/1/19
Respondent: Joel Rivera
Anthony Strabone
Heather M. Tebbetts

REQUEST:

Re: Staff 9-3; Project 8830-1832 Replace 6L2 Direct Buried Cables No. Main St. Hanover.
Please provide the following for this project:

- a. Failure reports and inspection reports for this XLPE AL cable and others deployed in Liberty's service territory.
- b. Change Order/Over Expenditure forms.
- c. Work Orders/spreadsheet #'s 301832-0100, showing costs spent and dates...
- d. Explain why Section 3 of the Project Close Out Report is not filled out as required by the Policy and Procedures.
- e. CIAC for the project provided by Dartmouth College.
- f. Explain the difference between this project and 8830-1867 done in 2017.

RESPONSE:

- a. The cable is direct buried underground, thus failure reports and inspection reports do not apply because the only way to conduct these inspections is to dig up the cable. The only other option is to perform cable injection inspection, but the Company has not undertaken this type of inspection due to the cost.
- b. Please see Attachment Staff TS 1-15.b.
- c. Please see Attachment Staff TS 1-15.c.xlsx.
- d. Given that the business cases and other project documentation are readily available, and that the status of projects is discussed in the monthly review of capital projects that takes place in the capital budget meetings, the portion of Section 3 indicating the location of certain documents has not been viewed as critical to the overall project documentation. It is viewed as more important that the necessary documentation has been prepared and the approvals received.

- e. This project was not the result of a request by Dartmouth College. Dartmouth was completing work in the area and the Company took advantage of the area construction to complete our work at the same time. The Company similarly takes advantage of opportunities to work with municipalities for gas line upgrades when the municipalities will be paving, which avoids the need to do underground work after paving has occurred.
- f. Project 8830-1867 (Rockingham supply line to be located in Salem) and 8830-1832 (replacement of direct buried cables located in Hanover) are not related.

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

DE 19-064
Distribution Service Rate Case

Staff Technical Session Data Requests - Set 1

Date Request Received: 10/18/19
Request No. Staff TS 1-16

Date of Response: 11/1/19
Respondent: Joel Rivera
Anthony Strabone
Heather M. Tebbetts

REQUEST:

Re: Staff 9-3; Project 8830-1865 Rockingham Station – Transmission Lines. Please provide the following for this project:

- a. Change Order/Over Expenditure forms.
- b. Work Orders/spreadsheet #'s 301767-01001, 301867-03002, and 301865-01001, showing costs spent and dates...
- c. Explanation of key design changes and engineering that caused the reason for the budget variance.

RESPONSE:

- a. Please see Attachment Staff TS 1-16.a.
- b. Please see Attachment Staff TS 1-16.b.1.xlsx and Attachment Staff TS 1-16.b.2.xlsx.
- c. The explanation for the cause of the budget variance can be found on the Change Order form in the section called Financial Assessment/Cost Estimates.



Change Order Form

2018

Project Overview

Reason for Change:

Project ID:	8830-1865	Project Name:	Rockingham Substation - Transmission Lines
Change Order Name:	Rockingham Substation - Transmission Lines	Date Prepared:	03/19/19
Change Order #:	1	Financial Work Order (FWO):ⁱ	301767-01001
Project Sponsor:	Charles Rodrigues	Revised Start Date:	01/01/18
Project Lead:	Anthony Strabone	Revised End Date:ⁱⁱ	12/31/18
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}	

Financial Assessment/Cost Estimates

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

Category	Original Project Value	Previous Approved Changes	Current Change Order Amount	Total
Internal Labor (including labor and travel)				
Materials (including consumables)				
Equipment (rental equipment)				
Contractor/Subcontractor (including consultants)				
Total	200,000.00		402,418.70	602,418.70

Updated Unlevered Internal Rate of Return:

Basis of Current Change Order Amount:

Additional costs occurred in 2018 were due to the completion of additional tasks such as LiDAR; Staking of structures in ROW; Borings in ROW for proposed structures; Preparation of Construction Cost Estimate and Preparation and submittal of necessary forms to obtain ISO-NE Approval.

Schedule Impacts

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

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



Change Order Form

2018

Approvals and Signatures

Approved By:				
Role	Approval Authority Limit	Name	Signature	Date
Manager / Staff (requisitioner/buyer):	Up to \$25,000	Anthony Strabone		3/28/19
Senior Manager: :	Up to \$50,000			
Senior Director/Director:	Up to \$250,000	Charles Rodrigues Director, Engineering		3/31/19
State President / Senior VP / VP:	Up to \$500,000			
State President / Senior VP / VP:	Up to \$500,000	Susan Fleck President - LU NH		3/31/19
Regional President:	Up to \$3,000,000	James Sweeney President - East Region		3/31/19
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.

Docket No. DE 19-064
Exhibit 21
Attachment JED-3e

Cost Code String	WS Job Number	Cost Code Description	Cost Element	Transaction Description	Transaction Amount	Document Date	GL Posting Date	Vendor ID	Item Num1	Transaction Date	Posting Stz	Account Description	WS Job Name	Divisions	Vendor Na	WS Description	ITEMDESC
00000-0001-0001-0000	301865-01001	Labor-Install	1	12/09/2018 to 12/22/2018	411.97	12/28/2018	12/28/2018			12/28/2018	1	Construction Work in Progress	23KV ROW - Relocate 13kv	8830-CAPITAL		Rockingham T-Line Engineering	
00000-0001-0001-0000	301865-01001	Labor-Install	1	ACCRUAL - PAYROLL	411.97	12/31/2018	12/31/2018			12/31/2018	1	Construction Work in Progress	23KV ROW - Relocate 13kv	8830-CAPITAL		Rockingham T-Line Engineering	

Actions	File	Tools	Help
Search Definition 1			
Column Name:	Filter:	Value:	
WS Project Number	is equal to	8830-1865	
<input type="checkbox"/> Field Comparison	<input type="checkbox"/> Match Case		
Search Definition 2			
Column Name:	Filter:	Value:	
	is equal to		
<input type="checkbox"/> Field Comparison	<input type="checkbox"/> Match Case		
Search Definition 3			
Column Name:	Filter:	Value:	
	is equal to		
<input type="checkbox"/> Field Comparison	<input type="checkbox"/> Match Case		
Search Definition 4			
Column Name:	Filter:	Value:	
	is equal to		
<input type="checkbox"/> Field Comparison	<input type="checkbox"/> Match Case		
Search Options			
Maximum Records:	1,000,000,000	Search Type:	Match All
<input type="button" value="Clear All"/>	<input type="button" value="Columns"/>	<input type="button" value="Order By"/>	
<div>41 JC Transactions Completed First 1000000000 records where WS Project Number is equal to 8830-1865.</div>			

Sum of Transaction Amount	Column Labels						
Row Labels	1	2	4	5	6	9	Grand Total
AFUDC Clearing					\$ 5,499.82	\$	5,499.82
Labor Burden				\$ 6,176.45		\$	6,176.45
Labor-Install	\$ 4,018.81					\$	4,018.81
LU Corporate Burden				\$ 10,689.82		\$	10,689.82
Mat-OH Cond & Devices		\$ 188,150.00				\$	188,150.00
NH Management Burden				\$ 64,448.93		\$	64,448.93
Out-OH Cond & Devices			\$ 37,859.78			\$	37,859.78
Stores Burden				\$ (1,694.36)		\$	(1,694.36)
Vou -Prelim Survey & Investig		\$ (1,526,241.00)				\$	(1,526,241.00)
Vou-OH Cond & Devices		\$ 215,875.31				\$	215,875.31
Vou-Poles/Tow/Equip		\$ 70,570.20				\$	70,570.20
Grand Total	\$ 4,018.81	\$ 188,150.00	\$ (1,239,795.49)	\$ 37,859.78	\$ 79,620.84	\$ 5,499.82	\$ (924,646.24)





\$ (1,526,241) includes land purchase and accrual

\$ (26,241) when lines 2, 3 and 129 on tab 301767-01001 are made zero, under cost element 4

Sum of Transaction Amount	Column Labels						
Row Labels	1	2	4	5	6	9	Grand Total
AFUDC Clearing					\$ 5,499.82	\$	5,499.82
Labor Burden				\$ 6,176.45		\$	6,176.45
Labor-Install	\$ 4,018.81					\$	4,018.81
LU Corporate Burden				\$ 10,689.82		\$	10,689.82
Mat-OH Cond & Devices	\$ 188,150.00					\$	188,150.00
NH Management Burden				\$ 64,448.93		\$	64,448.93
Out-OH Cond & Devices			\$ 37,859.78			\$	37,859.78
Stores Burden				\$ (1,694.36)		\$	(1,694.36)
Vou -Prelim Survey & Investig		\$ (26,241.00)				\$	(26,241.00)
Vou-OH Cond & Devices		\$ 215,875.31				\$	215,875.31
Vou-Poles/Tow/Equip		\$ 70,570.20				\$	70,570.20
Grand Total	\$ 4,018.81	\$ 188,150.00	\$ 260,204.51	\$ 37,859.78	\$ 79,620.84	\$ 5,499.82	\$ 575,353.76

000519

Grid Code String	WS Account Number	Grid Code Description	Grid Name	Sub TRK ID	Document	TRK Name	Account ID	Document	Transaction Description	Transaction Amount	Document Date	WS Posting Date	Vendor ID	Item Name	UOM	Batch Number	LPN TRK ID	TRK Name	Rate For	Transaction Position	Purchase	Actual Number String	Account Description	WS Project Number	WS Job Name	Decision	WS Manager ID	Actual Completion Date	Cancelled Code	WS Inactive	Vendor ID	WS Description	ITEMUSE
2000-001-0000-0000	000001-0000	WS Plant used for Future use	0	2000010	00	000000	0	0	Not Used from 000001-0000	1,000,000.00	8/16/2008	8/16/2008	0000-0000	0		00	Normal	0	0	0	0	0000-0000-00-0000-0000	Construction Work in Progress	0000-0000	Rackings 10 - Lead	0000-CAPTR1	0001	2/1/2008	0	Yes		Rackings Substitution Transmission Supply	
2000-001-0000-0000	000001-0000	WS Plant used for Future use	0	000000	00	000000	0	0	Not Used from 000001-0000	1,000,000.00	8/16/2008	8/16/2008	0000-0000	0		00	Normal	0	0	0	0	0000-0000-00-0000-0000	Construction Work in Progress	0000-0000	Rackings 10 - Lead	0000-CAPTR1	0001	1/1/2008	0	Yes		Rackings Substitution Transmission Supply	

Search Definition 1		
Column Name:	Filter:	Value:
WS Project Number 	is equal to ▼	8830-1867
<input type="checkbox"/> Field Comparison	<input type="checkbox"/> Match Case	
Search Definition 2		
Column Name:	Filter:	Value:
<input type="text"/> 	is equal to ▼	
<input type="checkbox"/> Field Comparison	<input type="checkbox"/> Match Case	
Search Definition 3		
Column Name:	Filter:	Value:
<input type="text"/> 	is equal to ▼	
<input type="checkbox"/> Field Comparison	<input type="checkbox"/> Match Case	
Search Definition 4		
Column Name:	Filter:	Value:
<input type="text"/> 	is equal to ▼	
<input type="checkbox"/> Field Comparison	<input type="checkbox"/> Match Case	
Search Options		
Maximum Records:	1,000,000,000	Search Type: Match All ▼
Clear All Columns Order By		
<div>◀ ▶ 🔍</div>		
261 JC Transactions	Completed	First 1000000000 records where WS Project Number is equal to 8830-1867.

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

DE 19-064
Distribution Service Rate Case

Staff Technical Session Data Requests - Set 1

Date Request Received: 10/18/19
Request No. Staff TS 1-17

Date of Response: 11/1/19
Respondent: Joel Rivera
Anthony Strabone
Heather M. Tebbetts

REQUEST:

Re: Staff 9-3; Project 8830-C36426 SCADA Distribution Automation. Please provide the following for this project:

- a. Change Order/Over Expenditure forms.
- b. Work Orders/spreadsheet #'s 3018XX-01005, showing costs spent and dates...
- c. Failure reports for this and other B switches deployed in Liberty's service territory.
- d. Explanation as to how the failure experienced at Rockingham Mall is related to the B switch.

RESPONSE:

- a. Please see Attachment Staff TS 1-17.a.
- b. Please see Attachment Staff TS 1-17.b.xlsx. As discussed in the technical session, the material was charged twice to the job. The correcting entry was completed in 2019. The charge for \$86,230.00 is the correct charge to the job.
- c. There are no failure reports for this and other B switches deployed in Liberty's service territory. The SCADA Distribution Automation program is not driven by asset replacement, but rather aims to add automatic restoration schemes to the Company's distribution system. Since 2011 there have been five feeder outages on the 18L1 feeder affecting the Rockingham Mall. These outages have resulted in 729 customers interrupted and 67,326 customer minutes interrupted. To reduce the impact of a feeder lockout to the Mall and increase reliability, the Company will replace switchgear B with an automated S&C PME-9 switchgear. There are two sources to the switchgear, a primary source and a backup source. This switchgear has the capability to automatically transfer between sources when one source is lost. This will allow half of the customers in the Mall to remain energized during a feeder lockout. In addition, feeder 18L2 is currently loaded to 80% of its summer normal rating which is over the allowable per the distribution planning criteria. As a secondary benefit, this project will transfer switchgear

B to the 18L1 feeder and provide load relief to the 18L2 feeder, thus resolving the criteria violation.

- d. See the response to part c.



Change Order Form

2018

Project Overview

Reason for Change:

Project ID:	8830-C36426	Project Name:	SCADA Distribution & Automation Specific
Change Order Name:	SCADA Distribution & Automation Specific	Date Prepared:	03/19/19
Change Order #:	1	Financial Work Order (FWO): ⁱ	3018XX-01005
Project Sponsor:	Charles Rodrigues	Revised Start Date:	01/01/18
Project Lead:	Anthony Strabone	Revised End Date: ⁱⁱ	12/31/18
Prepared By:	Anthony Strabone	Change Type ⁱⁱⁱ	<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 Changes	Current Change Order Amount	Total
Internal Labor (including labor and travel)				
Materials (including consumables)				
Equipment (rental equipment)				
Contractor/Subcontractor (including consultants)				
Total	75,000.00		96,930.00	171,930.00

Updated Unlevered Internal Rate of Return:

Basis of Current Change Order Amount:

2018 costs were for material purchases only. Review of charges indicates the cost of the material was charged twice. Once corrected, the over expenditure will be reduced by \$85,700.

Schedule Impacts

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

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



Change Order Form

Approvals and Signatures^v

Approved By:				
Role	Approval Authority Limit	Name	Signature	Date
Manager / Staff (requisitioner/buyer):	Up to \$25,000	Anthony Strabone		3/28/19
Senior Manager: :	Up to \$50,000			
Senior Director/Director:	Up to \$250,000	Charles Rodrigues Director, Engineering		3/31/19
State President / Senior VP / VP:	Up to \$500,000			
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			

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.

Docket No. DE 19-064
Exhibit 21
Attachment JED-3f

Cost Code String	WS Job Number	Cost Code Description	Cost Element	Transaction Description	Transaction Amount	Document Date	GL Posting Date	Vendor ID	Item Number	Account Description	WS Job Name	Vendor Name	WS Description	ITEMDESC
36700-0001-0004-0000	30188X-01000	West-US Control & Dispatch	2		65,700.00	12/16/2018	12/16/2018		8850-2402100	Construction Work in Progress	Engl Sarg "E" Dockingham Mall		SCADA and Distribution Automation	SWITCHING-48 VACUUMCUNT 3PH 14.4KV 800A 2 SWITCH GASFRONT PWS-9 W/FLUOL SHOS AUTO TRANSFER W/SLIP/CONTR
36700-0001-0004-0000	30188X-01000	West-US Control & Dispatch	4		86,200.00	10/17/2018	12/16/2018	8850-58C11ECT		Construction Work in Progress	Engl Sarg "E" Dockingham Mall	S&C ELECTRIC COMPANY	SCADA and Distribution Automation	

Search Definition 1		
Column Name:	Filter:	Value:
<input type="text" value="WS Project Number"/> 	<input type="text" value="is equal to"/> ▼	<input type="text" value="8830-C36426"/>
<input type="checkbox"/> Field Comparison	<input type="checkbox"/> Match Case	
Search Definition 2		
Column Name:	Filter:	Value:
<input type="text"/>	<input type="text" value="is equal to"/> ▼	<input type="text"/>
<input type="checkbox"/> Field Comparison	<input type="checkbox"/> Match Case	
Search Definition 3		
Column Name:	Filter:	Value:
<input type="text"/>	<input type="text" value="is equal to"/> ▼	<input type="text"/>
<input type="checkbox"/> Field Comparison	<input type="checkbox"/> Match Case	
Search Definition 4		
Column Name:	Filter:	Value:
<input type="text"/>	<input type="text" value="is equal to"/> ▼	<input type="text"/>
<input type="checkbox"/> Field Comparison	<input type="checkbox"/> Match Case	
Search Options		
Maximum Records:	<input type="text" value="1,000,000,000"/>	Search Type: <input type="text" value="Match All"/> ▼
<input type="button" value="Clear All"/> <input type="button" value="Columns"/> <input type="button" value="Order By"/>		

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146 JC Transactions

Completed

First 1000000000 records where WS Project Number is equal to 8830-C36426.

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

DE 19-064
Distribution Service Rate Case

Staff Technical Session Data Requests - Set 1

Date Request Received: 10/18/19
Request No. Staff TS 1-18

Date of Response: 11/1/19
Respondent: Joel Rivera
Anthony Strabone
Heather M. Tebbetts

REQUEST:

Re: Staff 9-3; Project 8830-C42930 Service to Tuscan Village. Please provide the following for this project:

- a. Change Order/Over Expenditure forms.
- b. Work Orders/spreadsheet #'s 301738-01199, 3017XX-01012, 3018XX-01001, 3018XX-01008, showing costs spent and dates.
- c. Amount of CIAC provided.

RESPONSE:

- a. This project does not have an associated change order because it was under budget. The revised budget amount of \$400,000 was incorrect as the budget for this project was never reduced to \$400,000. The business case amount of \$900,000 was the correct budget amount.
- b. Please see Attachment TS Staff 1-18.b.xlsx.
- c. Please see Attachment TS Staff 1-18.c for CIAC associated with the work orders:
 - CIAC calculation for Tuscan North
 - Line extension Policy 4 agreement
 - CIAC calculation for Tuscan South Hanover
 - Line extension Policy 3 agreement

301738-01199	\$ 17,663.62	North
3017XX-01012	\$ 92,008.52	North
3018XX-01001	\$ 556,074.23	South
3018XX-01088	\$ 8,513.75	Hanover (South)
Total	\$ 674,260.12	
<hr/>		
reversal of materials in 2019	\$ (263,970.00)	
updated total	\$ 410,290.12	




Docket No. DE 19-064
Exhibit 21
Attachment JED-3g

Cost Code String	WS Job Number	Cost Code Description	Cost Element	Transaction Description	Transaction Amount	Document Date	GL Posting Date	Vendor ID	Item Number	U Of M	Account Description	WS Job Name	Vendor Name	ITEMDESC
00000-0001-0001-0000	301738-01199	Labor-Install	1	01/07/2018 to 01/13/2018	118.04	1/19/2018	1/19/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0001-0001-0000	301738-01199	Labor-Install	1	01/07/2018 to 01/13/2018	1,154.12	1/19/2018	1/19/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0001-0001-0000	301738-01199	Labor-Install	1	06/10/2018 to 06/16/2018	430.56	6/22/2018	6/22/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0001-0001-0000	301738-01199	Labor-Install	1	06/17/2018 to 06/23/2018	242.19	6/29/2018	6/29/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0001-0001-0000	301738-01199	Labor-Install	1	ACCRUAL - PAYROLL	215.28	6/30/2018	6/30/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0001-0001-0000	301738-01199	Labor-Install	1	ACCRUAL - PAYROLL	-215.28	7/1/2018	7/1/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0001-0001-0000	301738-01199	Labor-Install	1	06/24/2018 to 06/30/2018	215.28	7/6/2018	7/6/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0001-0001-0000	301738-01199	Labor-Install	1	07/08/2018 to 07/14/2018	242.19	7/20/2018	7/20/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0001-0001-0000	301738-01199	Labor-Install	1	07/08/2018 to 07/14/2018	430.56	7/20/2018	7/20/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0001-0001-0000	301738-01199	Labor-Install	1	08/05/2018 to 08/11/2018	215.28	8/17/2018	8/17/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0001-0001-0000	301738-01199	Labor-Install	1	08/19/2018 to 08/25/2018	215.28	8/31/2018	8/31/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0001-0001-0000	301738-01199	Labor-Install	1	09/16/2018 to 09/22/2018	322.92	9/28/2018	9/28/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0001-0001-0000	301738-01199	Labor-Install	1	09/16/2018 to 09/22/2018	861.12	9/28/2018	9/28/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0001-0001-0000	301738-01199	Labor-Install	1	09/30/2018 to 10/06/2018	430.56	10/12/2018	10/12/2018				Construction Work in Progress	Tuscan VII South, Markert St		
36500-0001-0004-0000	301738-01199	Vou-Oh Cond & Devices	4	ACCRUAL- AP PDF	2,625.00	2/28/2018	2/28/2018				Construction Work in Progress	Tuscan VII South, Markert St		
36500-0001-0004-0000	301738-01199	Vou-Oh Cond & Devices	4	ACCRUAL- AP PDF	2,875.00	2/28/2018	2/28/2018				Construction Work in Progress	Tuscan VII South, Markert St		
36500-0001-0004-0000	301738-01199	Vou-Oh Cond & Devices	4	ACCRUAL- AP PDF	-2,875.00	3/1/2018	3/1/2018				Construction Work in Progress	Tuscan VII South, Markert St		
36500-0001-0004-0000	301738-01199	Vou-Oh Cond & Devices	4	ACCRUAL- AP PDF	-2,625.00	3/1/2018	3/1/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0000-0006-0001	301738-01199	Labor Burden	5		180	2/22/2018	4/17/2018	8810-CONTROLPOI			Construction Work in Progress	Tuscan VII South, Markert St	CONTROLPOINT TECHNOLOGIES INC	
00000-0000-0006-0001	301738-01199	Labor Burden	6	Alloc 3017-BRD - DEC17	1,620.74	1/23/2018	1/23/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0000-0006-0006	301738-01199	NH Management Burden	6	Alloc 3017-LAB - DEC17	522.19	1/23/2018	1/23/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0000-0006-0007	301738-01199	LU Corporate Burden	6	Alloc 3017-LU - DEC17	133.05	1/23/2018	1/23/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0000-0006-0001	301738-01199	Labor Burden	6	Alloc 3018-BRD - JAN18	1,439.69	2/12/2018	2/12/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0000-0006-0006	301738-01199	NH Management Burden	6	Alloc 3018-LAB - JAN18	445.12	2/12/2018	2/12/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0000-0006-0007	301738-01199	LU Corporate Burden	6	Alloc 3018-LU - JAN18	81.35	2/12/2018	2/12/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0000-0006-0006	301738-01199	NH Management Burden	6	Alloc 3018-LAB - LAB18	196.24	5/9/2018	5/9/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0000-0006-0007	301738-01199	LU Corporate Burden	6	Alloc 3018-LU - APR18	49.53	5/9/2018	5/9/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0000-0006-0001	301738-01199	Labor Burden	6	Alloc 3018-BRD - JUN18	1,114.47	7/16/2018	7/16/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0000-0006-0006	301738-01199	NH Management Burden	6	Alloc 3018-LAB - JUNE18	457.33	7/16/2018	7/16/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0000-0006-0007	301738-01199	LU Corporate Burden	6	Alloc 3018-LU - JUNE18	76.76	7/16/2018	7/16/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0000-0006-0001	301738-01199	Labor Burden	6	Alloc 3018-BRD - JUL18	1,258.45	8/10/2018	8/10/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0000-0006-0006	301738-01199	NH Management Burden	6	Alloc 3018-LAB - JULY18	246.89	8/10/2018	8/10/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0000-0006-0007	301738-01199	LU Corporate Burden	6	Alloc 3018-LU - JULY18	41.53	8/10/2018	8/10/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0000-0006-0001	301738-01199	Labor Burden	6	Alloc 3018-BRD - AUG18	1,188.20	9/13/2018	9/13/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0000-0006-0006	301738-01199	NH Management Burden	6	Alloc 3018-LAB - AUG18	134.78	9/14/2018	9/14/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0000-0006-0007	301738-01199	LU Corporate Burden	6	Alloc 3018-LU - AUG18	15.89	9/14/2018	9/14/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0000-0006-0001	301738-01199	Labor Burden	6	Alloc 3018-BRD - SEPT18	1,535.28	10/12/2018	10/12/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0000-0006-0006	301738-01199	NH Management Burden	6	Alloc 3018-LAB - SEPT18	168.2	10/12/2018	10/12/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0000-0006-0007	301738-01199	LU Corporate Burden	6	Alloc 3018-LU - SEPT18	26	10/12/2018	10/12/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0000-0006-0001	301738-01199	Labor Burden	6	Alloc 3018-BRD - OCT18	904.34	11/26/2018	11/26/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0000-0006-0006	301738-01199	NH Management Burden	6	Alloc 3018-LAB - OCT18	85.54	11/27/2018	11/27/2018				Construction Work in Progress	Tuscan VII South, Markert St		
00000-0000-0006-0007	301738-01199	LU Corporate Burden	6	Alloc 3018-LU - OCT18	8.87	11/27/2018	11/27/2018				Construction Work in Progress	Tuscan VII South, Markert St		
42700-0000-0009-0000	301738-01199	AFUDC Clearing	9	8830 AFUDC DEC 17	13.47	1/29/2018	1/29/2018				Construction Work in Progress	Tuscan VII South, Markert St		
42700-0000-0009-0000	301738-01199	AFUDC Clearing	9	8830 AFUDC JAN 18	32.9	2/12/2018	2/12/2018				Construction Work in Progress	Tuscan VII South, Markert St		
42700-0000-0009-0000	301738-01199	AFUDC Clearing	9	REV JES1743 AFUDC JAN18	-32.9	2/23/2018	2/23/2018				Construction Work in Progress	Tuscan VII South, Markert St		
42700-0000-0009-0000	301738-01199	AFUDC Clearing	9	8830 AFUDC JAN 18 - REV	34.06	2/23/2018	2/23/2018				Construction Work in Progress	Tuscan VII South, Markert St		
42700-0000-0009-0000	301738-01199	AFUDC Clearing	9	8830 AFUDC FEB 18	52.08	3/21/2018	3/21/2018				Construction Work in Progress	Tuscan VII South, Markert St		
42700-0000-0009-0000	301738-01199	AFUDC Clearing	9	8830 AFUDC MAR 18	58.49	4/11/2018	4/11/2018				Construction Work in Progress	Tuscan VII South, Markert St		
42700-0000-0009-0000	301738-01199	AFUDC Clearing	9	8830 AFUDC APR 18	59.09	5/10/2018	5/10/2018				Construction Work in Progress	Tuscan VII South, Markert St		
42700-0000-0009-0000	301738-01199	AFUDC Clearing	9	8830 AFUDC MAY 18	60.47	6/12/2018	6/12/2018				Construction Work in Progress	Tuscan VII South, Markert St		
42700-0000-0009-0000	301738-01199	AFUDC Clearing	9	8830 AFUDC JUNE 18	63.48	7/17/2018	7/17/2018				Construction Work in Progress	Tuscan VII South, Markert St		
42700-0000-0009-0000	301738-01199	AFUDC Clearing	9	8830 AFUDC JULY 18	74.16	8/13/2018	8/13/2018				Construction Work in Progress	Tuscan VII South, Markert St		
42700-0000-0009-0000	301738-01199	AFUDC Clearing	9	8830 AFUDC AUG 18	88.7	9/14/2018	9/14/2018				Construction Work in Progress	Tuscan VII South, Markert St		
42700-0000-0009-0000	301738-01199	AFUDC Clearing	9	8830 AFUDC SEPT 18	103.39	10/11/2018	10/11/2018				Construction Work in Progress	Tuscan VII South, Markert St		
42700-0000-0009-0000	301738-01199	AFUDC Clearing	9	Alloc AFUDC - OCT18	118.69	11/28/2018	11/28/2018				Construction Work in Progress	Tuscan VII South, Markert St		
42700-0000-0009-0000	301738-01199	AFUDC Clearing	9	8830 AFUDC NOV 18	139	12/21/2018	12/21/2018				Construction Work in Progress	Tuscan VII South, Markert St		
					17663.62									

000531

Cost Code String	WS Job Number	Cost Code Description	Cost Element	Transaction Description	Transaction Amount	Document Date	GL Posting Date	Item Number	Account Description	WS Job Name	Vendor Name	ITEMDESC
00000-0001-0001-0000	3018XX-01001	Labor-install	1	ACORNAL - PAIRWELL	-577.06	2/21/2018	2/21/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0001-0001-0000	3018XX-01001	Labor-install	1	ACORNAL - PAIRWELL	-577.06	2/21/2018	2/21/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0001-0001-0000	3018XX-01001	Labor-install	1	01/28/2018 to 01/29/2018	157.38	2/9/2018	2/9/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0001-0001-0000	3018XX-01001	Labor-install	1	01/29/2018 to 01/30/2018	423.68	2/9/2018	2/9/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0001-0001-0000	3018XX-01001	Labor-install	1	07/06/2018 to 07/14/2018	322.92	7/20/2018	7/20/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0001-0001-0000	3018XX-01001	Labor-install	1	08/01/2018 to 08/17/2018	444.02	8/17/2018	8/17/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0001-0001-0000	3018XX-01001	Labor-install	1	08/01/2018 to 08/17/2018	1,130.22	8/17/2018	8/17/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0001-0001-0000	3018XX-01001	Labor-install	1	ACORNAL - PAIRWELL	-430.36	9/1/2018	9/1/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0001-0001-0000	3018XX-01001	Labor-install	1	08/24/2018 to 09/01/2018	430.36	9/7/2018	9/7/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0001-0001-0000	3018XX-01001	Labor-install	1	09/01/2018 to 09/08/2018	322.92	9/14/2018	9/14/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0001-0001-0000	3018XX-01001	Labor-install	1	09/01/2018 to 09/08/2018	968.76	9/14/2018	9/14/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0001-0001-0000	3018XX-01001	Labor-install	1	10/07/2018 to 10/17/2018	430.36	10/19/2018	10/19/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0001-0001-0000	3018XX-01001	Labor-install	1	ACORNAL - PAIRWELL	2,475.72	10/1/2018	10/1/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0001-0001-0000	3018XX-01001	Labor-install	1	ACORNAL - PAIRWELL	-2,475.72	11/1/2018	11/1/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0001-0001-0000	3018XX-01001	Labor-install	1	10/01/2018 to 10/17/2018	1,012.58	11/1/2018	11/1/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0001-0001-0000	3018XX-01001	Labor-install	1	10/28/2018 to 11/03/2018	161.46	11/9/2018	11/9/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0001-0001-0000	3018XX-01001	Labor-install	1	10/28/2018 to 11/03/2018	2,937.52	11/9/2018	11/9/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0001-0001-0000	3018XX-01001	Labor-install	1	ACORNAL - PAIRWELL	-1,022.58	11/30/2018	11/30/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0001-0001-0000	3018XX-01001	Labor-install	1	ACORNAL - PAIRWELL	-1,022.58	12/1/2018	12/1/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0001-0001-0000	3018XX-01001	Labor-install	1	11/27/2018 to 12/01/2018	807.1	12/7/2018	12/7/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0001-0001-0000	3018XX-01001	Labor-install	1	11/25/2018 to 12/01/2018	861.12	12/7/2018	12/7/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0001-0001-0000	3018XX-01001	Labor-install	1	12/01/2018 to 12/06/2018	430.36	12/14/2018	12/14/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0001-0001-0000	3018XX-01001	Labor-install	1	12/06/2018 to 12/13/2018	430.36	12/14/2018	12/14/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0001-0001-0000	3018XX-01001	Labor-install	1	12/14/2018 to 12/12/2018	2,276.68	12/20/2018	12/20/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0001-0001-0000	3018XX-01001	Labor-install	1	ACORNAL - PAIRWELL	430.36	12/13/2018	12/13/2018		Construction Work in Progress	TUSCAN VILLAGE US		
3018XX-0001-0002-0000	3018XX-01001	New LCL Court & Truckee	2		263,970.00	12/12/2018	12/12/2018	8830 82023802	Construction Work in Progress	TUSCAN VILLAGE US		SWITCHGEAR RADIANT? BPH 14 AWG RED 2 SWITCH DEADFRONT PAIR 8 W/OUTS SAGS AUTO TRANSFER W/ZIP/CNTR
3018XX-0001-0004-0000	3018XX-01001	New LCL Court & Truckee	4		363,970.00	12/12/2018	12/12/2018		Construction Work in Progress	TUSCAN VILLAGE US	SBC ELECTRIC COMPANY	
00000-0000-0006-0001	3018XX-01001	Labor-Burden	6	Aliso 3018 BRD - JAN18	653.05	2/12/2018	2/12/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0000-0006-0007	3018XX-01001	Labor-Burden	6	Aliso 3018 LUL - FEB18	20.78	3/14/2018	3/14/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0000-0006-0006	3018XX-01001	NH Management Burden	6	Aliso 3018 LAB - FEB18	123.71	3/14/2018	3/14/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0000-0006-0007	3018XX-01001	Labor-Burden	6	Aliso 3018 LUL - JUL18	15.1	8/10/2018	8/10/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0000-0006-0006	3018XX-01001	NH Management Burden	6	Aliso 3018 LAB - JUL18	89.78	8/10/2018	8/10/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0000-0006-0001	3018XX-01001	Labor-Burden	6	Aliso 3018 BRD - JUL18	401.62	8/10/2018	8/10/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0000-0006-0001	3018XX-01001	Labor-Burden	6	Aliso 3018 BRD - AUG18	4,344.38	9/13/2018	9/13/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0000-0006-0007	3018XX-01001	Labor-Burden	6	Aliso 3018 LUL - AUG18	58.09	9/14/2018	9/14/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0000-0006-0006	3018XX-01001	NH Management Burden	6	Aliso 3018 LAB - AUG18	402.8	9/14/2018	9/14/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0000-0006-0007	3018XX-01001	Labor-Burden	6	Aliso 3018 LUL - SEPT18	37.81	10/12/2018	10/12/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0000-0006-0006	3018XX-01001	NH Management Burden	6	Aliso 3018 LAB - SEPT18	244.65	10/12/2018	10/12/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0000-0006-0001	3018XX-01001	Labor-Burden	6	Aliso 3018 BRD - SEPT18	2,333.14	10/12/2018	10/12/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0000-0006-0001	3018XX-01001	Labor-Burden	6	Aliso 3018 BRD - OCT18	1,236.13	11/26/2018	11/26/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0000-0006-0007	3018XX-01001	Labor-Burden	6	Aliso 3018 LUL - OCT18	13.3	11/27/2018	11/27/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0000-0006-0006	3018XX-01001	NH Management Burden	6	Aliso 3018 LAB - OCT18	228.31	12/7/2018	12/7/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0000-0006-0007	3018XX-01001	Labor-Burden	6	Aliso 3018 LUL - NOV18	616.02	12/7/2018	12/7/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0000-0006-0006	3018XX-01001	NH Management Burden	6	Aliso 3018 LAB - NOV18	730.84	12/7/2018	12/7/2018		Construction Work in Progress	TUSCAN VILLAGE US		
00000-0000-0006-0001	3018XX-01001	Labor-Burden	6	Aliso 3018 BRD - NOV18	4,056.13	12/7/2018	12/7/2018		Construction Work in Progress	TUSCAN VILLAGE US		
42700-0000-0009-0000	3018XX-01001	AFUDC Clearing	9	8830 AFUDC JAX1 18	30.04	8/13/2018	8/13/2018		Construction Work in Progress	TUSCAN VILLAGE US		
42700-0000-0009-0000	3018XX-01001	AFUDC Clearing	9	8830 AFUDC AXIS 18	18.07	9/14/2018	9/14/2018		Construction Work in Progress	TUSCAN VILLAGE US		
42700-0000-0009-0000	3018XX-01001	AFUDC Clearing	9	8830 AFUDC SPT1 18	46.66	10/11/2018	10/11/2018		Construction Work in Progress	TUSCAN VILLAGE US		
42700-0000-0009-0000	3018XX-01001	AFUDC Clearing	9	8830 AFUDC - OCT18	78.59	11/26/2018	11/26/2018		Construction Work in Progress	TUSCAN VILLAGE US		
42700-0000-0009-0000	3018XX-01001	AFUDC Clearing	9	8830 AFUDC NOV 18	104	12/12/2018	12/12/2018		Construction Work in Progress	TUSCAN VILLAGE US		
charged twice to job, removed in 2019, cause of project looking over budget					5	504,679.23						

Cost Code String	WS Job Number	Cost Code Description	Cost Element	Transaction Description	Transaction Amount	Document Date	GL Posting Date	Vendor ID	Item Number	Account Description	WS Job Name	Vendor Name	ITEMDESC
00000-0001-0001-00000	30180X-01000	Labor-Install	1	11/04/2018 to 11/10/2018	430.56	11/04/2018	11/04/2018			Construction Work in Progress	Hamover Cn. 72 Rockingham Park		
00000-0001-0001-00000	30180X-01000	Labor-Install	1	11/04/2018 to 11/10/2018	161.46	11/04/2018	11/04/2018			Construction Work in Progress	Hamover Cn. 72 Rockingham Park		
00000-0001-0001-00000	30180X-01000	Labor-Install	1	11/11/2018 to 11/17/2018	80.79	11/22/2018	11/23/2018			Construction Work in Progress	Hamover Cn. 72 Rockingham Park		
00000-0001-0001-00000	30180X-01000	Labor-Install	1	11/17/2018 to 11/17/2018	1,345.50	11/19/2018	11/20/2018			Construction Work in Progress	Hamover Cn. 72 Rockingham Park		
00000-0001-0001-00000	30180X-01000	Labor-Install	1	11/18/2018 to 11/24/2018	242.19	11/30/2018	11/30/2018			Construction Work in Progress	Hamover Cn. 72 Rockingham Park		
00000-0001-0001-00000	30180X-01000	Labor-Install	1	11/26/2018 to 11/24/2018	861.12	11/30/2018	11/30/2018			Construction Work in Progress	Hamover Cn. 72 Rockingham Park		
00000-0000-0006-6001	30180X-01000	Labor Burden	6	Altus 3018-BRD - NOV18	4,056.33	12/27/2018	12/27/2018			Construction Work in Progress	Hamover Cn. 72 Rockingham Park		
00000-0000-0006-6006	30180X-01000	Inv Management Burden	6	Altus 3018-LAB - NOV18	719.84	12/27/2018	12/27/2018			Construction Work in Progress	Hamover Cn. 72 Rockingham Park		
00000-0000-0006-6007	30180X-01000	LIJ Corporate Burden	6	Altus 3018-LIJ - NOV18	616.02	12/27/2018	12/27/2018			Construction Work in Progress	Hamover Cn. 72 Rockingham Park		
					8513.75								

Search Definition 1		
Column Name:	Filter:	Value:
<input type="text" value="WS Project Number"/> 	<input type="text" value="is equal to"/> ▼	<input type="text" value="8830-C42930"/>
<input type="checkbox"/> Field Comparison	<input type="checkbox"/> Match Case	
Search Definition 2		
Column Name:	Filter:	Value:
<input type="text"/>	<input type="text" value="is equal to"/> ▼	<input type="text"/>
<input type="checkbox"/> Field Comparison	<input type="checkbox"/> Match Case	
Search Definition 3		
Column Name:	Filter:	Value:
<input type="text"/> 	<input type="text" value="is equal to"/> ▼	<input type="text"/>
<input type="checkbox"/> Field Comparison	<input type="checkbox"/> Match Case	
Search Definition 4		
Column Name:	Filter:	Value:
<input type="text"/> 	<input type="text" value="is equal to"/> ▼	<input type="text"/>
<input type="checkbox"/> Field Comparison	<input type="checkbox"/> Match Case	
Search Options		
Maximum Records:	<input type="text" value="1,000,000,000"/>	Search Type: <input type="text" value="Match All"/> ▼
<input type="button" value="Clear All"/> <input type="button" value="Columns"/> <input type="button" value="Order By"/>		

649 JC Transactions

Completed

First 1000000000 records where WS Project Number is equal to 8830-C42930.

Construction Advance for:

Date: 3-Aug-17

Policy # **4**
Name: Tuscan Village UCD Service/Development Name Tuscan Vilalge North
Mailing: OMJ Realty & Address _____
Address: 33 Main St, Salem NH _____
Cust. Rate: G-3 _____
Service Type: New _____
No. of meters at this rate: 0 Rep.: _____
Work Request # = 18001946 Work Order # = _____

INCREMENTAL LOAD & REVENUE SECTION -- For policies 1 & 2, Information can be entered here for information purposes only

1. Will this construction result in the customer having a brand new account? (Y or N) Y <== If this is a second service, enter "N" here!
2. What % of the load you entered will, in your opinion, be **off peak**? 0.00%
3. What % of the load you entered will, in your opinion, materialize in the first 12 months 100.00%
Minimum Billing Demand:

0
0.0
0.0

 R = Total Annual
12 Months Est. Billing Demand

0.0

 Distribution Co. Revenue -----> \$0.00 To see Revenue, fill in 1-3 above
Total Est. Annual kWh

0.0

CONSTRUCTION COSTS

	Standard Construction Costs	Misc or Temp Service Costs	Added Service or Non-Standard Costs (4)	System System Improvements Costs	Total Costs	
Capital Costs	\$623,975.85	\$0.00	\$0.00	\$96,895.32	\$720,871.17	Service Method: <u>Overhead</u>
Removal Costs	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Center Line Footage: <u>1</u>
	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Number of Houses: <u>1</u>
	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Number of Buildable Lots: <u>1</u>
	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Total	\$623,975.85	\$0.00	\$0.00	\$96,895.32	\$720,871.17	

POLICY 4 FOR COMMERCIAL AND INDUSTRIAL DEVELOPMENTS

Where
C = Construction costs subject to revenue justification (1) A = C - [B * N]
B = Allowed Credit per buildable lot = \$623,975.85
N = Number of buildable lots = \$4,500.00
Credit for Revenue = = 5
A = Construction Advance = \$22,500.00
= \$601,475.85

POLICY 3 FOR INDIVIDUAL COMMERCIAL AND INDUSTRIAL CUSTOMERS

Where
C = Construction costs subject to revenue justification (1) A = C - [R / k]
R = Total Estimated Annual Distribution Revenue within one year = \$623,975.85
k = Annual Carrying Charge = \$0.00 Cust. Chg.\$ + Dist.kw\$ + Dist.kwh\$
Credit for Revenue = = 24.11%
A = Construction Advance = \$0.00
= \$0.00

POLICY 2 - RESIDENTIAL DEVELOPMENT CONSTRUCTION ADVANCE CALCULATION SECTION

Overhead				Underground Residential Development only			
No of Ft. needed to serve the cust:	1			Centerline Footage:	1		
Number of Ft/Home allowed by policy:	100			Number of Ft/Home allowed by policy:	100		
Number of Homes being built:	1			Number of Homes being built:	1		
Total number of Feet allowed:	100			Total number of Feet allowed:	100		
Number of feet over allowance	0			Number of feet over allowance	0		
Cost/ft for feet in excess of the Allowance	\$0.00			Cost/ft for feet in excess of the Allowance	\$0.00		
Additional costs to reach the development	\$0.00			Additional costs to reach the development	\$0.00		
Total for Overhead development	\$0.00			Total for Underground development	\$0.00		

POLICY 1 - SINGLE RESIDENTIAL HOME CONSTRUCTION ADVANCE CALCULATION SECTION

Overhead Single Home, only if beyond 1 pole and span		Underground Single Home only	
Length of overhead line extension	1	Cost of providing underground service:	\$1.00
One overhead span length (Minimum of 300 feet)	300	Policy-1 Allowance:	\$3 420 00
Billed Center Line Footage	0	Cost to Customer::	\$0.00
Cost to Customer:	\$0.00		

AMOUNT DUE: \$601,475.85

Split into 2 payments 291,405.62 and 310,070.23

**Policy 4 - Electric Commercial & Industrial
Development Service Agreement**

<u>Property Information:</u>		<u>Project Information:</u>	
Development Name <u>North Village Phase II</u>		Work Request No. <u>8830-18001946</u>	
Premises Address <u>Tuscan Village, Off South Broadway</u>		No. of Buildable Lots <u>5</u>	
City, State, Zip <u>Salem, NH 03079</u>		Total Estimated Cost <u>\$623,975.85</u>	
<u>Developer Information:</u>		Customer Advance Payment <u>(\$291,405.62 Phase I)</u> Collected in Phase I	
Contact name <u>Joseph Faro, OMJ Realty, LLC</u>		Additional Cost to get to Development <u>\$310,070.23 Phase II</u> Amount Due with this Agreement	
Phone <u>617-312-6500 Mark Hebert</u>			
Mailing Address <u>63 Main Street, Salem, NH 03079</u>			
Approved Subdivision Plan Name: <u>North Village</u>			
Plan Number: <u>Tuscan Village</u>			
<u>Contractor Information:</u>			
Name <u>Grossman Development Corp</u>			
Phone <u>617-312-6500</u>		Email <u>mark@grossanre.com</u>	

Liberty Utilities (Granite State) Corp. d/b/a Liberty Utilities agrees to install electric distribution facilities to the above location (Premises). This agreement is subject to Liberty Utilities' Terms and Conditions, copy attached. I understand that I may cancel this agreement, without obligation, prior to the installation of the electric service. I hereby authorize Liberty Utilities to install electric distribution facilities to the address noted above and to apply funds represented on the attached check to pay my customer contribution.

The Developer shall, to the fullest extent permitted by law, indemnify, defend, hold harmless and release Liberty Utilities, its parent company, affiliates and subsidiaries and their respective directors, officers, employees, agents, servants, representatives, successors and assigns from and against all claims, demands, liabilities or expenses related to environmental contamination at or in the vicinity of the Premises. This indemnity and release provision survives the expiration or termination of this Agreement and extends to the respective successors and assigns of Liberty Utilities and Applicant.

Developer Signature Joseph Faro Date 8-16-17

Liberty Utilities Rep Signature Joe Fitzpatrick Date 9/5/17



Policy 3 - Electric Individual Commercial & Industrial Customer Service Agreement

Contact Information:	Project Information:
Business Name <u>The Hanover Company</u>	Work Request No. <u>3018xx-01008</u>
Tax ID No. <u>38-4115692</u>	Service Method (OH/UG) <u>UG</u>
Premise Address <u>3 Artisan Drive</u>	Rate <u>House Mtr G3; Resi Units D</u>
City, State, Zip <u>Salem, NH 03079</u>	Voltage <u>120/208</u>
Mailing Address <u>2 Seaport Lane, 11th Floor</u>	Metering <u>secondary</u>
<u>Boston, MA 02210</u>	Discounts (HVM, HVD, Both, None) <u>none</u>
Business Phone <u>857-400-8913</u>	Customer Advance Payment <u>\$21,019.83</u>
Business Contact Name <u>Michael King</u>	Costs outside of Policy 3, Non-standard Construction <u>0</u>
Business Contact Phone <u>857-400-8913</u>	
Contractor Name <u>The Hanover Company</u>	
Contractor Address _____	

Liberty Utilities (Granite State) Corp. d/b/a Liberty Utilities agrees to install electric distribution facilities to the above location (Premises). This agreement is subject to Liberty Utilities' Terms and Conditions, copy attached. I understand that I may cancel this agreement, without obligation, prior to the installation of the electric service. I hereby authorize Liberty Utilities to install electric distribution facilities to the address noted above and to apply funds represented on the attached check to pay my customer contribution.

The Developer shall, to the fullest extent permitted by law, indemnify, defend, hold harmless and release Liberty Utilities, its parent company, affiliates and subsidiaries and their respective directors, officers, employees, agents, servants, representatives, successors and assigns from and against all claims, demands, liabilities or expenses related to environmental contamination at or in the vicinity of the Premises. This indemnity and release provision survives the expiration or termination of this Agreement and extends to the respective successors and assigns of Liberty Utilities and Applicant.

Customer Signature Michael R King - Project Executive

Date 7-15-2019

Liberty Utilities Rep Signature Jill Fitzpatrick

Digitally signed by Jill Fitzpatrick
DN: cn=Jill Fitzpatrick, o=Liberty Utilities, ou=Business and Community
Development, email=jill.fitzpatrick@libertyutilities.com, c=US
Date: 2019.07.15 10:49:06 -04'00'

Date

Construction Advance for:

Date: 24-Oct-19

Policy # 3
Name: The Hanover Co
Mailing: 2 Seaport Lane, Fl 11
Address: Boston, MA 02210
Cust. Rate: D
Service Type: New
Service/Development Name: The Hanover
& Address: 1 Rockingham Park Blvd
Salem, NH 03079

No. of meters at this rate: 283
Work Request # = 3018xx-01008
Rep.: Jill Fitzpatrick
Work Order # =

INCREMENTAL LOAD & REVENUE SECTION -- For policies 1 & 2, Information can be entered here for information purposes only

- Will this construction result in the customer having a brand new account? (Y or N)

Y

 <== If this is a second service, enter "N" here!
 - What % of the load you entered will, in your opinion, be off peak?

35.00%

 - What % of the load you entered will, in your opinion, materialize in the first 12 months?

100.00%

- Minimum Billing Demand:

0

12 Months Est. Billing Demand:

15 653.3

Total Est. Annual kWh:

2,906,224.0

R = Total Annual
Distribution Co. Revenue ----->

\$202,620.00

 To see Revenue, fill in 1-3 above

CONSTRUCTION COSTS

	Standard Construction Costs	Misc or Temp Service Costs	Added Service or Non-Standard Costs (4)	System Improvements Costs	Total Costs	
Capital Costs	\$861,418.01	\$0.00	\$0.00	\$0.00	\$861,418.01	Service Method: Underground
Removal Costs	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Center Line Footage: 1
	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Number of Houses: 1
	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Number of Buildable Lots: 1
	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Total	\$861,418.01	\$0.00	\$0.00	\$0.00	\$861,418.01	

POLICY 4 FOR COMMERCIAL AND INDUSTRIAL DEVELOPMENTS

Where
C = Construction costs subject to revenue justification (1)
B = Allowed Credit per buildable lot
N = Number of buildable lots
Credit for Revenue =
A = Construction Advance

A = C - [B * N]
=

\$861,418.01

=

\$4,500.00

=

1

=

\$4 500.00

=

\$856,918.01

POLICY 3 FOR INDIVIDUAL COMMERCIAL AND INDUSTRIAL CUSTOMERS

Where
C = Construction costs subject to revenue justification (1)
R = Total Estimated Annual Distribution Revenue within one year
k = Annual Carrying Charge
Credit for Revenue =
A = Construction Advance

A = C - [R / k]
=

\$861,418.01

=

\$202,620.00

 Cust. Chg.\$ + Dist.kw\$ + Dist.kwh\$
=

24.11%

=

\$840,398.18

=

\$21,019.83

POLICY 2 - RESIDENTIAL DEVELOPMENT CONSTRUCTION ADVANCE CALCULATION SECTION

Underground			
Overhead		Underground Residential Development only	
No of Ft. needed to serve the cust:	1	Centerline Footage:	1
Number of Ft/Home allowed by policy:	100	Number of Ft/Home allowed by policy:	100
Number of Homes being built:	1	Number of Homes being built:	1
Total number of Feet allowed:	100	Total number of Feet allowed:	100
Number of feet over allowance	0	Number of feet over allowance	0
Cost/ft for feet in excess of the Allowance	\$0.00	Cost/ft for feet in excess of the Allowance	\$0.00
Additional costs to reach the development	\$0.00	Additional costs to reach the development	\$0.00
Total for Overhead development	\$0.00	Total for Underground development	\$0.00

POLICY 1 - SINGLE RESIDENTIAL HOME CONSTRUCTION ADVANCE CALCULATION SECTION

Overhead Single Home, only if beyond 1 pole and span		Underground Single Home only	
Length of overhead line extension	0	Cost of providing underground service:	\$1.00
One overhead span length (Minimum of 300 feet)	300	Policy-1 Allowance:	\$3 420.00
Billed Center Line Footage	0	Cost to Customer:	\$0.00
Cost to Customer:	\$0.00		

AMOUNT DUE: \$21,019.83

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

DE 19-064
Distribution Service Rate Case

Staff Technical Session Data Requests - Set 2

Date Request Received: 10/22/19
Request No. Staff TS 2-4

Date of Response: 11/5/19
Respondent: Joel Rivera
Anthony Strabone
Heather M. Tebbetts

REQUEST:

Re: Staff 9-3; Project 8830-1867 Rockingham Substation Trans Supply. Please provide the following information for this project:

- a. An itemized break-out of the legal, permitting, and engineering costs, AFUC, and any additional costs leading up to the variance of -\$125,505.
- b. Change Order/Over Expenditure forms.
- c. Project Close Out Report
- d. Work orders/spreadsheets associated with the project.
- e. Copies of all correspondence with FERC granting Liberty an E-1 exemption.

RESPONSE:

- a. Please see Attachment Staff TS 2-4.a.xlsx.
- b. Project 8830-1867 does not have a close-out for 2017 and 2018. There was nothing charged against this project in account 107 (CWIP) in 2017, therefore, a project close-out was not completed (the capital spend would be \$0 for the year) and all charges went to 8830-PE. In 2017, we charged the \$1.5 million land purchase to 8830-1867, which was then corrected and charged to 8830-1864, the project for the Rockingham substation.
- c. See response to part b.
- d. Please see part a.
- e. Please see Attachment Staff TS 2-4.e.

[illegible]

Heather Tebbetts

From: Anthony Strabone
Sent: Tuesday, October 29, 2019 10:37 AM
To: Heather Tebbetts
Subject: FW: Granite State E1 Exclusion Proposal

Anthony Strabone | [Liberty Utilities \(New Hampshire\)](#) | Manager, Electric Engineering
P: 603-952-2915 | C: 603-327-9367 | E: Anthony.Strabone@libertyutilities.com

From: Fred Meyer
Sent: Wednesday, August 28, 2019 4:50 PM
To: Anthony Strabone <Anthony.Strabone@libertyutilities.com>; Joel Rivera <Joel.Rivera@libertyutilities.com>; Anthony Strabone <Anthony.Strabone@libertyutilities.com>; Charles Rodrigues <Charles.Rodrigues@libertyutilities.com>
Cc: Mary Ellen Paravalos <MaryEllen.Paravalos@LibertyUtilities.com>; Johnny Johnston <Johnny.Johnston@APUCorp.com>; James Sweeney <James.Sweeney@libertyutilities.com>; David Swain <David.Swain@libertyutilities.com>
Subject: FW: Granite State E1 Exclusion Proposal

Great News!!

This ruling prevents Granite State from having to comply with approximately 1,500 NERC requirements due to the construction of the 115kV line . This is a huge win for Granite State! Great Job everyone for being responsive and patient while NPCC dealt with our exclusion request and worked through the NERC process !! It took several months of waiting, but we achieved the results we wanted.

If you have any questions, please feel free to contact me.

Thank you!

Fred Meyer | [Liberty Algonquin Business Services \(USA\)](#) | Director, Nerc Compliance
P: 417-625-4289 | C: 417-291-6603 | E: Fred.Meyer@libertyutilities.com

From: Scott A. Nied [<mailto:snied@npcc.org>]
Sent: Wednesday, August 28, 2019 3:42 PM
To: Fred Meyer
Cc: Marie Kozub; Joel Rivera; Anthony Strabone; Charles Rodrigues
Subject: Re: Granite State E1 Exclusion Proposal

Yes, the facilities meet the E1 excursion afforded by the approved BES Definition.
Scott Nied.

Thank you,

Scott Nied
NPCC
Acting Assistant Vice President - Compliance
212-205-7056 Office
917-693-1127 Cell

From: Fred Meyer <Fred.Meyer@libertyutilities.com>
Sent: Wednesday, August 28, 2019 4:19:40 PM
To: Scott A. Nied <snied@npcc.org>
Cc: Marie Kozub <mkozub@npcc.org>; Joel Rivera <Joel.Rivera@libertyutilities.com>; Anthony Strabone <Anthony.Strabone@libertyutilities.com>; Charles Rodrigues <Charles.Rodrigues@libertyutilities.com>
Subject: RE: Granite State E1 Exclusion Proposal

Thanks Scott,
Does this mean we can take your email as approval of the E1 exclusion for Granite State, and no further work is required on our part to have the exclusion approved?

Fred Meyer | [Liberty Algonquin Business Services \(USA\)](#) | Director, Nerc Compliance
P: 417-625-4289 | C: 417-291-6603 | E: Fred.Meyer@libertyutilities.com

From: Scott A. Nied [<mailto:snied@npcc.org>]
Sent: Wednesday, August 28, 2019 3:04 PM
To: Fred Meyer
Cc: Marie Kozub; Joel Rivera; Anthony Strabone; Charles Rodrigues
Subject: Re: Granite State E1 Exclusion Proposal

Fred,

You do not have to enter your self determined E1 exclusion into the BESnet portal.
NPCC agrees with your E1 determination for Granite State for the capital work that has been explained to us via the one-lines.

The portal is only being used for Exception Requests by the entity for something that otherwise does meet any E's...that is not the case here.

Thank you,

Scott Nied
NPCC
Acting Assistant Vice President - Compliance
212-205-7056 Office
917-693-1127 Cell

From: Fred Meyer <Fred.Meyer@libertyutilities.com>
Sent: Wednesday, August 28, 2019 1:11:08 PM
To: Scott A. Nied <snied@npcc.org>
Cc: Marie Kozub <mkozub@npcc.org>; Joel Rivera <Joel.Rivera@libertyutilities.com>; Anthony Strabone <Anthony.Strabone@libertyutilities.com>; Charles Rodrigues <Charles.Rodrigues@libertyutilities.com>
Subject: RE: Granite State E1 Exclusion Proposal

Hello Scott,
Just checking in with you to see if NERC has had any decision on the E1 for Granite State? I know NERC has their hands full with the Align project, I don't know if that has any bearing on their use of the portal?
Thanks
Fred

Fred Meyer | [Liberty Algonquin Business Services \(USA\)](#) | Director, Nerc Compliance
P: 417-625-4289 | C: 417-291-6603 | E: Fred.Meyer@libertyutilities.com

From: Scott A. Nied [<mailto:snied@npcc.org>]
Sent: Saturday, July 27, 2019 8:06 AM
To: Fred Meyer
Cc: Marie Kozub; Joel Rivera; Anthony Strabone; Charles Rodrigues
Subject: RE: Granite State E1 Exclusion Proposal

Hi Fred,
Sorry for the delay. I am awaiting a response from NERC on if Liberty/Granite State needs to enter it's claim for the E1 exclusion into the NERC portal.

Thanks,
Scott Nied
NPCC
212-205-7056 Office
917-693-1127 Cell

From: Fred Meyer <Fred.Meyer@libertyutilities.com>
Sent: Tuesday, July 9, 2019 10:26
To: Scott A. Nied <snied@npcc.org>
Cc: Marie Kozub <mkozub@npcc.org>; Joel Rivera <Joel.Rivera@libertyutilities.com>; Anthony Strabone <Anthony.Strabone@libertyutilities.com>; Charles Rodrigues <Charles.Rodrigues@libertyutilities.com>; Fred Meyer <Fred.Meyer@libertyutilities.com>
Subject: RE: Granite State E1 Exclusion Proposal

Hi Scott,
I left you a voice mail this morning regarding the status of our E1 exclusion proposal to NPCC for Granite State Electric. The staff at Granite State was curious if we needed to do anything further on our request for exclusion from the BES? Also wondering what the next steps may be in the request for exclusion with an estimated timeframe on a decision so our planning people can coordinate properly? Thanks for your help with this. Please feel free to call me at 417-625-4289.

Thank you,
Fred Meyer

Fred Meyer | [Liberty Algonquin Business Services \(USA\)](#) | Director, Nerc Compliance
P: 417-625-4289 | C: 417-291-6603 | E: Fred.Meyer@libertyutilities.com

From: Fred Meyer
Sent: Wednesday, May 22, 2019 11:41 AM
To: Scott A. Nied (snied@npcc.org)
Cc: Marie Kozub (mkozub@npcc.org); Joel Rivera; Anthony Strabone; Charles Rodrigues; fmeyer@empiredistrict.com
Subject: RE: Granite State E1 Exclusion Proposal

Hello Scott,
Just a follow up to see if you need anything from us further on the proposed exclusion from the BES for the Granite State 115kv line build?
Thank you,

Fred Meyer | [Liberty Algonquin Business Services \(USA\)](#) | Director, NERC Compliance
P: 417-625-4289 | C: 417-291-6603 | E: Fred.Meyer@libertyutilities.com

From: Fred Meyer
Sent: Friday, April 26, 2019 3:38 PM
To: Scott A. Nied (snied@npcc.org)
Cc: Marie Kozub (mkozub@npcc.org); Joel Rivera; Anthony Strabone; Charles Rodrigues; fmeyer@empiredistrict.com
Subject: Granite State E1 Exclusion Proposal

Scott,

I wanted to let you know that based on our previous phone conference that this afternoon, I have uploaded to the NPCC site, a ZIP file with the following documents that you requested in order to determine an E1 exclusion from the BES for Granite State.

1. A previous email to you regarding the nature of the project for background purposes
2. Approval letter from ISO-New England for your reference
3. A MS Word document with a diagram depicting the Granite State Proposed build in relationship to the NERC guidance document of the BES exclusion. We have noted in that document that we feel that the exclusion shown in the NERC guidance document that best matches the Granite State proposed build is the E1.2 Exclusion shown on page 28 of the NERC Bulk Electric System Definition Reference Document.
4. Provided and email from National Grid signifying they are aware of their portion of ownership of their line where we interconnect with them for this proposed build.

Please let me know if anything else is needed at this point.

Thank you,

Fred Meyer | [Liberty Algonquin Business Services \(USA\)](#) | Director, NERC Compliance
P: 417-625-4289 | C: 417-291-6603 | E: Fred.Meyer@libertyutilities.com
720 Schifferdecker, Joplin, MO 64801

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You have no reasonable expectation of personal privacy regarding email communication with NPCC. At any time and for any lawful purpose, NPCC may monitor, intercept, record, and search any communication.

At NPCC's sole discretion, NPCC may disclose pertinent information to the U.S. Government and its authorized representatives to protect the security of critical infrastructure and key resources, ensure information security, or to comply with any applicable law, regulation, legal process, or enforceable governmental request.

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

DE 19-064
Distribution Service Rate Case

Staff Technical Session Data Requests - Set 2

Date Request Received: 10/22/19
Request No. Staff TS 2-6

Date of Response: 11/5/19
Respondent: Joel Rivera
Anthony Strabone
Heather M. Tebbetts

REQUEST:

Re: Staff 9-3; Project 8830-C18620 Charlestown 32 D Line. Please provide the following information for this project:

- a. Describe the bidding process with contractors. When does the process start? How often are system generated estimates updated?
- b. An itemized breakout of burdens, materials costs, and AFUDC leading up to the variance of -\$183,289.
- c. All Work Orders/spreadsheets including #'s 8830-18002961 and 8830-SUBS005.
- d. Why was a Project Close Out Report issued when this project was not 100% complete in 2017?
- e. A Change Order Form was issued in 2018 (See Data Request OCA 2.14.d.4 at 3).
 - i. Explain why no related Business Case was created given that an additional \$354,738 was spent on this project in 2018?
 - ii. Explain why the Change Order Form was completed, approved, and signed in March 2019 instead of during the course of the project year in 2018.
 - iii. Why does the Change Order show an increase of \$145,272 when the actual variance was \$104,750?
 - iv. Explain why the addition of the 40L3 Feeder at Michael Avenue was unforeseen during the preliminary engineering for this project.

RESPONSE:

- a. The Company puts out an RFP and selects the bidder based on price, safety, understanding of scope, quality, and past performance. The process starts once the Company has completed final engineering. The system generated estimates are updated yearly.
- b. Please see Attachment Staff TS 2-6.b.xlsx.

- c. Please see the response to part b.
- d. The Company does not understand the question as the project was completed by December 31, 2017.
- e. Please see the responses below:
 - i. A business case was not created because the project had been completed; the charges in 2018 were for materials charged in 2018.
 - ii. The change order form was for the year 2018 for the materials charged as those materials were not charged to the project in 2017. Change order forms are signed in the following year to accommodate any charges during the previous year for the project. There is only one change order form filled out per project.
 - iii. The change order showing \$145,272 is actually for project 8830-C18630, Charlestown D Sub, as shown in the change order name line. Attachment Staff TS 2-6.b.xlsx provides the total for the project at \$354,751. The variance of \$104,750 is for 8830-C18630.
 - iv. The Company does not understand the question. The 40L3 Feeder at Michael Avenue is this project.

Cost Code	Serial	WS Job Number	Cost Code Description	Cost Element	Transaction Description	Transaction Amount	Document Date	GL Postdate Date	Vendor ID	Item Number	Vendor Name	ITEMDESC
00000-0000-0004-0000	8830-18002661		Accrual Vouchers	4	ACCRUAL- EMPLOYEE	-75,500.00	1/1/2018	1/1/2018				
00000-0000-0004-0000	8830-18002661		Accrual Vouchers	4	ACCRUAL- AP	-1,217.00	1/1/2018	1/1/2018				
00000-0000-0006-6007	8830-18002661		Stores Burden	6	ALICE 3018 STD- MAR18	-10,429.16	4/10/2018	4/10/2018				
00000-0000-0004-0000	8830-18002661		Accrual Vouchers	4	ACCRUAL- AP	-1,588.04	1/1/2018	1/1/2018				
00000-0000-0004-0000	8830-18002661		Accrual Vouchers	4	ACCRUAL- AP	-1,666.00	1/1/2018	1/1/2018				
00000-0000-0004-0000	8830-18002661		Accrual Vouchers	4	ACCRUAL- AP	-1,588.72	1/1/2018	1/1/2018				
00000-0000-0004-0000	8830-18002661		Accrual Vouchers	4	ACCRUAL- AP	-1,484.38	1/1/2018	1/1/2018				
47700-0000-0009-0000	8830-18002661		AFUDC Clearing	9	REV #815743 AFUDC JAN18	-892.53	2/23/2018	2/23/2018				
00000-0000-0004-0000	8830-18002661		Accrual Vouchers	4	ACCRUAL- AP	-688.75	1/1/2018	1/1/2018				
00000-0001-0001-0000	8830-18002661		Labor Removal	1	ACCRUAL- PAYROLL	143.87	8/1/2018	8/1/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000021851	-2.37	10/16/2018	10/26/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000021873	-0.4	10/17/2018	10/17/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000021873	-0.26	10/17/2018	10/17/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000021873	-0.15	10/17/2018	10/17/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000021851	-1.13	10/16/2018	10/16/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000021864	-0.13	10/17/2018	10/17/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000021851	-0.16	10/16/2018	10/16/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000021873	-0.11	10/17/2018	10/17/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000021873	-0.1	10/17/2018	10/17/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000021887	-0.09	10/16/2018	10/16/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000021884	-0.09	10/16/2018	10/16/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000021873	-0.08	10/17/2018	10/17/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000021887	-0.06	10/16/2018	10/16/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000021884	-0.06	10/16/2018	10/16/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000021873	-0.06	10/17/2018	10/17/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000021884	-0.03	10/16/2018	10/16/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000021873	-0.02	10/17/2018	10/17/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000021873	-0.02	10/17/2018	10/17/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000021852	-0.01	10/16/2018	10/16/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000021873	-0.01	10/17/2018	10/17/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000000096	0.03	10/11/2018	10/31/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000022112	0.03	11/15/2018	11/15/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000022112	0.09	11/15/2018	11/15/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000021852	0.2	10/16/2018	10/16/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000021851	0.6	10/16/2018	10/16/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000021852	0.76	10/16/2018	10/16/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000021851	0.64	10/16/2018	10/16/2018				
00000-0000-0006-6007	8830-18002661		LI Corporate Burden	6	ALICE 3018-LU- NOV18	-1.66	12/27/2018	12/27/2018				
00000-0000-0006-6006	8830-18002661		Net Management Burden	6	ALICE 3018-LAB- NOV18	-1.77	12/27/2018	12/27/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2		2.08	10/4/2018	10/4/2018	8830-15604411			CONNECTOR, ELEC. COPR. 1/0-2 AWG WIRE CONDUCTOR
36000-0001-0002-0000	8830-18002661		Man Services	2		1.13	10/4/2018	10/4/2018	8830-2000715			FUSE, LINK, UNV, 25A, 4 TYP, OUTDOOR
36000-0001-0002-0000	8830-18002661		Man Services	2		2.46	10/4/2018	10/4/2018	8830-0001196			CONNECTOR, COMPR, THD, AL, FOR #2 AWG
36000-0001-0002-0000	8830-18002661		Man Services	2		2.48	10/4/2018	10/4/2018	8830-0410322			FUSE, LINK, UNV, 30A, 4 TYP, OUTDOOR
36000-0001-0002-0000	8830-18002661		Man Services	2		1.11	10/4/2018	10/4/2018	8830-1560250			CONNECTOR, PARALLEL GROOVE, AL, CU 3/2
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000000095	3.21	11/15/2018	11/15/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2		4.76	10/4/2018	10/4/2018	8830-1503053			MOLDING, WIRE, GROUND, HOPE, 1/2IN, 10 X 8 FT, 1 X 80
00000-0000-0006-6007	8830-18002661		LI Corporate Burden	6	ALICE 3018-LU- AUG18	5.31	9/14/2018	9/14/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2		5.32	10/4/2018	10/4/2018	8830-1560412			CONNECTOR, ELEC. SPLICE 1/0- AWG WIRE CONDUCTOR
36000-0001-0002-0000	8830-18002661		Man Services	2		4.96	10/4/2018	10/4/2018	8830-1560413			FUSE, LINK, UNV, 25A, 4 TYP, OUTDOOR
36000-0001-0002-0000	8830-18002661		Man Services	2		7.02	10/4/2018	10/4/2018	8830-4015201			TIEWIRE, BARE, NO. 4, ALUM, 565, COND
36000-0001-0002-0000	8830-18002661		Man Services	2		7.74	10/4/2018	10/4/2018	8830-0410322			WIRE, BARE, #2 AWG CU, 1/2 IN, CONCENTRIC, 145, 8 SOLB, CU
36000-0001-0002-0000	8830-18002661		Man Services	2		8	10/4/2018	10/4/2018	8830-0410322			TIEWIRE COVERED #A, 1/2 IN, CONCENTRIC, 145, 8 SOLB, CU
36000-0001-0002-0000	8830-18002661		Man Services	2		8.18	10/4/2018	10/4/2018	8830-0410322			PLATE, POLY, EYE, DI, 28K, GAUL, 10-90 DEG
36000-0001-0002-0000	8830-18002661		Man Services	2		11.96	10/4/2018	10/4/2018	8830-1560564			CONNECTOR, COPPER, CTY, NO.3/0 STRN, 40-18, STRN, 1/0
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000000096	13.07	10/13/2018	10/31/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2		13.12	10/4/2018	10/4/2018	8830-0811154			PROTECTOR, WILDFIRE, 4.88 IN DIA, 9.00 IN HIGH
36400-0001-0004-0000	8830-18002661		View-Permit/Travel Equip	4	ACCRUAL- AP	17.15	12/15/2017	1/18/2018	8830-1560412		JOHNSON ROBERT J	
36000-0001-0002-0000	8830-18002661		Man Services	2	ACCRUAL- AP	16.77	10/4/2018	10/4/2018	8830-0001251			LUG, TERM, 4/0 AWG, TNC, CU, 2 MOLE NEMA PAD
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000021873	14.32	10/4/2018	10/4/2018	8830-1560337			GRP, GUY, AUTO, W/STAY EYE BAR, 1/3 IN DIA, EXT, 100 FT
36000-0001-0002-0000	8830-18002661		Man Services	2	FAV0000021873	1.74	10/4/2018	10/4/2018	8830-0001272			WIRE, BARE, 2/0 AWG CU, 19 STR, 50 LB, COND
36000-0001-0002-0000	8830-18002661		Man Services	2		17.43	10/4/2018	10/4/2018	8830-2000915			FUSE, LINK, UNV, 300A, 4 TYP, OUTDOOR, WHITTONHEAD
36000-0001-0002-0000	8830-18002661		Man Services	2		1.18	10/4/2018	10/4/2018	8830-1560640			CLAMP, STRAIN, DEADEND, STRAIGHT, IN, NO. 6-2, 2-1/2 IN, 2A
36000-0001-0002-0000	8830-18002661		Man Services	2		28.59	10/4/2018	10/4/2018	8830-1560623			INSULATOR, GUY, STRAIN, FIBERGLASS, 30MM, 3/4 IN, 1/4 IN
36000-0001-0002-0000	8830-18002661		Man Services	2		32.84	10/4/2018	10/4/2018	8830-1560569			GRP, GUY, PREFORMED, NO.1, ALUM, 2/5 STR, COOL BLUE
36000-0001-0002-0000	8830-18002661		Man Services	2		31.15	10/4/2018	10/4/2018	8830-1560515			CLAMP, SUSPENSION, RT, ANGLE, CU, 1/2 IN, 250 MCM, 3/4 IN, 0-75 IN
36000-0001-0002-0000	8830-18002661		Man Services	2		36.51	10/4/2018	10/4/2018	8830-1560288			PN, INSULATOR, ANGLE, 1 IN LEAD, THRU, GALVANIZED
36000-0001-0002-0000	8830-18002661		Man Services	2		37.59	10/4/2018	10/4/2018	8830-1560277			GUARD, GUY, HOPE FULL IN, BPT, 1/2 YELLOW
36000-0001-0002-0000	8830-18002661		Man Services	2		38.79	10/4/2018	10/4/2018	8830-2001253			LUG, TERM, 500 MCM, TNC, CU, 2 MOLE NEMA PAD
36000-0001-0002-0000	8830-18002661		Man Services	2		42	10/4/2018	10/4/2018	8830-2001256			INSULATOR, PN, PORCELAIN, 15KV, GRAY, 1 IN, PN, THREAD
36000-0001-0002-0000	8830-18002661		Man Services	2		42	10/4/2018	10/4/2018	8830-0001080			GUARD, RISER, 3 IN, 1 EFT, HIGH DENSITY POLYETHYLENE
36000-0001-0002-0000	8830-18002661		Man Services	2		49.1	10/4/2018	10/4/2018	8830-0002021			MOUNT, EFT, FIBERGLASS, 1 PH, 18 IN, 4 LBS
00000-0000-0006-6006	8830-18002661		Net Management Burden	6	ALICE 3018-LAB- AUG18	-45.36	9/14/2018	10/4/2018	8830-1562841			CONNECTOR, ELEC, PARALLEL GRV, 477-795 KCM ALUM/COPIER
00000-0000-0006-6006	8830-18002661		Net Management Burden	6	ALICE 3018-LAB- OCT18	-45.36	10/4/2018	10/4/2018	8830-1562841			CLAMP, MESSENGER SUPPORT, /F/ARIAL, CABLE, 3/8 - 1/2 IN
00000-0000-0006-6002	8830-18002661		Stores Burden	6	ALICE 3017-STD- DEC17	-49.5	1/13/2018	4/9/2018				
36000-0001-0002-0000	8830-18002661		Man Services	2		49.83	10/4/2018	10/4/2018	8830-0001263			LUG, TERMINAL, 500 MCM TINNED ALUMINUM WITH SEALED END 2 HOLE PAD
36000-0001-0002-0000	8830-18002661		Man Services	2		50.16	10/4/2018	10/4/2018	8830-1562243			LUG, CROSSARM, 3 IN, 4 IN, GALVANIZED MALLEABLE IRON
36000-0001-0002-0000	8830-18002661		Man Services	2		54.42	10/4/2018	10/4/2018	8830-1564411			INSUL, CABLE, POSTERION
36000-0001-0002-0000	8830-18002661		Man Services	2		55.44	10/4/2018	10/4/2018	8830-0001082			GUARD, RISER, 3 IN, 1 EFT, HIGH DENSITY POLYETHYLENE
36000-0001-0002-0000	8830-18002661		Man Services	2		56.32	10/4/2018	10/4/2018	8830-1560671			LINK, FISHER & GAVIS, FIBERGLASS, 4-1/2 IN, 3/4 IN
36000-0001-0002-0000	8830-18002661		Man Services	2		58.32	10/4/2018	10/4/2018	8830-1560450			PLATE, POLY, EYE, DI, 28K, GAUL, 10-90 DEG
36000-0001-0002-0000	8830-18002661		Man Services	2		59.88	10/4/2018	10/4/2018	8830-0001719			BRACE, ALLEY ARM, WOOD, 7 FT, CTR TO CTR
36000-0001-0002-0000	8830-18002661		Man Services	2		59.88	10/4/2018	10/4/2018	8830-1560375			CLAMP, GROOVE, COND, 1/2 IN, 2 IN, 2 IN, NO. 2, NO. 2
36000-0001-0002-0000	8830-18002661		Man Services	2		63.55	10/					

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

DE 19-064
Distribution Service Rate Case

Staff Technical Session Data Requests - Set 2

Date Request Received: 10/22/19
Request No. Staff TS 2-7

Date of Response: 11/5/19
Respondent: Joel Rivera
Anthony Strabone
Heather M. Tebbetts

REQUEST:

Re: Staff 9-3; Project 8830-C36424 Mt. Support – New 16L3 Feeder. Please provide the following information for this project:

- a. The area study performed by National Grid in 2013 forecasted average annual load growth of 1.8% between 2012 and 2028. To date, has that average load growth materialized as predicted? Please indicate the average annual load growth rate from 2013 through 2018 for this area.
- b. What were the load limits of the distribution circuits prior to construction?
- c. An itemized breakout of burdens, AFUDC, and other costs leading to the variance of - \$192,136.
- d. Did Liberty continue to bill labor to this project when it was delayed due to a delay in the shipment of the Viper Reclosers? If yes, please explain why. Also, please explain why the shipment of the Viper Reclosers was delayed.
- e. Work Orders/spreadsheet listed in Section 8 of Project Close Out Report.

RESPONSE:

- a. Liberty is currently reviewing calculations with our consultant and will supplement the response when the results are available.
- b. The load limits of the Mt Support distributions circuits prior to construction are provided in the table below:

Substation	Feeder	Normal Limiting Element	Normal Element Specifics	SN Rating (Amps)	Emergency Limiting Element	Emergency Element Specifics	SE Rating (Amps)
MOUNT SUPPORT 16	16L1	UG Cable	1000 Al	503	Relay/Fuse	Relay- 612 A Safe Carry	612
MOUNT SUPPORT 16	16L2	UG Cable	1000 Al	531	Relay/Fuse	Relay- 612 A Safe Carry	612
MOUNT SUPPORT 16	16L4	UG Cable	1000 CU EPR	592	Relay/Fuse	Relay- 612 A Safe Carry	612

- c. Please see Attachment Staff TS 2-8.b.xlsx.
- d. This project was not delayed due to the delay in shipment of the Viper Reclosers. This project was completed and placed in-service as planned. The delay in shipment of the Viper Reclosers was due to an increase in lead time of delivery as a result of the manufacturer. At the time the order was placed for the Viper Reclosers, the lead time of these units was such that the Vipers would be shipped and arrive on Liberty's property with sufficient time to be installed prior to year-end. Unfortunately, during the time of placing the order and approving manufacturer drawings, lead times increased.
- e. Please see Attachment Staff 2-8.b.xlsx.

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

DE 19-064
Distribution Service Rate Case

Staff Technical Session Data Requests - Set 2

Date Request Received: 10/22/19
Request No. Staff TS 2-8

Date of Response: 11/5/19
Respondent: Joel Rivera
Anthony Strabone
Heather M. Tebbetts

REQUEST:

Re: OCA 2-14.d.3 at 23; Project 8830-C36425 Mt. Support – New 16L5 Feeder. Please provide the following information for this project:

- a. Why was the original cost estimate set at \$50,000 and not \$450,909?
- b. An itemized breakout of burdens, AFUDC, and other costs leading to the variance of - \$104,233.
- c. Did Liberty continue to bill labor to this project when it was delayed due to a delay in the shipment of the Viper Reclosers? If yes, please explain why. Also, please explain why the shipment of the Viper Reclosers was delayed.
- d. Business Case and Capital Project Expenditure Application for 2017.
- e. Project Close Out Report for 2017.
- f. Work Orders/spreadsheet listed in Section 8 of Project Close Out Report.

RESPONSE:

- a. As demonstrated in the business case that is provided in part d., the project was budgeted for \$1.4 million at its inception in 2016. The final spend was \$1,273,855. The Company is providing both the 2016 and 2017 business cases and project close out forms to show the full picture of the project. At the time of ordering the reclosers, the Company assumed the lead time would not change and the reclosers would have been received and installed in 2016. By the end of 2016, the reclosers still had not been delivered and the 2017 budget was already approved.
- b. Please see Attachment Staff TS 2-8.b.xlsx.
- c. This project was not delayed due to the delay in shipment of the Viper Reclosers. This project was completed and placed in-service as planned. The delay in shipment of the Viper Reclosers was due to an increase in lead time of delivery as a result of the manufacturer. At the time the order was placed for the Viper Reclosers, the lead time of

these units was such that the Vipers would have been shipped and arrived on Liberty's property with sufficient time to be installed prior to year-end. Unfortunately, during the time of placing the order and approving manufacturer drawings, lead times increased.

- d. Please see Attachment Staff TS 2-8.d.
- e. Please see Attachment Staff TS 2-8.e.
- f. Please see Attachment Staff TS 2-8.b.xlsx.

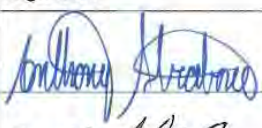
Project Close Out Report **2016**

Requesting Region or Group:	GSECo	Date of Closeout (MM/DD/YY):	12/31/2016
Project Number	8830-C36425		
Project Name:	Mt Support-New 16L5 Feeder		
Requesting Region:	New Hampshire	Sponsor (Name):	Brouillard; Chris
Project Champion:	Strabone; Anthony	Project Manager	Strabone; Anthony
Project Start Date:	1/1/2016	Project Completion Date:	12/31/2016
Requested Capital (\$)	\$100,000	Expenditure Included in Approved Budget?	YES

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 Manager		3/14/17
Brouillard; Chris	Director of Engineering		3/17/17
Craig Jennings	Vice President-Operations and Engineering		3/17/17

Section 2. Final Deliverable/Deployment Checklist

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

Project Close Out Report **2016**

Item	Question	Response
2.1	Do you agree that the product and/or service is ready to be deployed?	Yes
2.2	Do you agree the product and/or service has sufficiently met the stated business goals and objectives?	Yes
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
2.4	Do you agree the project should be closed? If no, please explain:	Yes
	Rate your level of satisfaction with regards to the project outcomes listed below	
2.5	Project Quality	3
2.6	Product and/or Service Performance	3
2.7	Scope	3
2.8	Cost (Budget)	3
2.9	Schedule	3

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	
3.3	Were audits (e.g., project closeout audit) completed and results documented for future reference?	Yes	
3.4	Identify the storage location for the following project documents items:	See below	
Item	Document	Location (e.g., Google Docs, Webspace)	Format
3.4a	Business Case	Local W Drive	Electronic
3.4b	Project Charter	Local W Drive	Electronic
3.4c	Project Plan	Local W Drive	Electronic
3.4d	Budget Documentation and Invoices	Local W Drive	Electronic
3.4e	Status Reports	Local W Drive	Electronic
3.4f	Risks and Issues Log	Local W Drive	Electronic
3.4g	Final deliverable	Local W Drive	Electronic

Project Close Out Report **2016**

3.4h	If applicable, verify that final project deliverable for the project is attached or storage location is identified in 3.4.	Local W Drive	Electronic
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Section 4. Project Team

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

Name	Role	Type (e.g., Contractor, Employee)
Travis Singer	OH Line Supervisor	Employee
Dick Holmes	FCC	Contractor
Jeremy Davia	Engineering	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). Describe the problem and include any project documentation references (e.g., Project Plan, Issues Log) that provide additional details. Identify recommended improvements to correct a similar problem in the future.

Problem Statement	Problem Description	References	Recommendation
Permitting With NHDOT	Permits Required for installation of Manholes-permitting took 14 months		Schedule 16 months for NHDOT permit process in project schedule

Section 6. Post-Implementation Support Plans

Project team to identify plans for post-implementation activities after project closeout. Refer to the Benefits Realization review gate for information about the Post-Implementation Review of Business Outcomes deliverable.

Project Close Out Report **2016**

Action	Planned Date	Assigned To	Frequency
Post-Implementation Review of Business Outcomes (actual review)	N/A	N/A	N/A
Post-Implementation Review of Business Outcomes (approval)	N/A	N/A	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
N/A	N/A
N/A	N/A
N/A	N/A

Section 8. Financials

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

Financial Descriptor	Amount
Total Actual Project Costs (including all Regional, Corporate and 3 rd party costs)	\$443,824
Total Budgeted amount	\$100,000
Variance	\$-343,824

Reasons for Variance	Impact
Project moved to 2016 as Step Increase as part of rate case proceeding.	Revised project Year End spending and managed to budget and recovery of costs with Finance.

Project Close Out Report **2016**

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)	
Work Order 1	8830-18000912
Work Order 2	
Work Order 3	
Work Order 4	
Work Order 5	

Over Expenditure Application 2017

Requesting Region or Group:	New Hampshire	Date of Request (MM/DD/YY):	5/1/2017
Project Name:	Mt Support- New 16L5 Feeder		
Requesting Region:	East	Sponsor (Name):	Craig Jennings
Project Start Date:	1/2/2017	Project Completion Date:	12/31/2017
Original Project Budget (\$):	\$50,000	Requested Over Expenditure (\$):	\$250,000
Project Type: (Click appropriate box)	<input type="checkbox"/> Safety <input checked="" type="checkbox"/> Mandated <input type="checkbox"/> Growth <input type="checkbox"/> Regulatory Supported <input type="checkbox"/> Discretionary	Nature of Estimate: (Click appropriate box)	<input type="checkbox"/> Fixed or Firm Price <input checked="" type="checkbox"/> Estimate – Internal <input type="checkbox"/> Estimate - External <input type="checkbox"/> Other (specify details)

Details of Request

Project description

Construct a new 13 kV Distribution Feeder (16L5) to be fed from the Mount Support Substation. The 16L5 will exit Mount Support Substation via a manhole and duct system and continue underground along Medical Center Drive to a riser pole located on Route 120. The 16L5 will continue overhead, South along Route 120 in the Town of Lebanon where it will connect to existing area circuits currently fed from Lebanon Substation.

What caused (or is causing) the expected Over Expenditure?

There are two contributing factors causing over expenditure of this project and they are 2016 carryover of burdens and delay in delivery of Viper Reclosers. Viper Reclosers were ordered in August 2016 and due to delay in equipment specification approvals and manufacturer production time, lead time of these Vipers was increased to 6 months. The Vipers were received in March 2017 and were installed by internal Liberty crews. The overall project final cost is expected to be within the \$1.4 million estimate.

What will this Over Expenditure achieve? Why is the Over Expenditure necessary?

The additional expenditure will allow for completion of the remaining work associated with the 16L5 Feeder Addition Project.

What are the revised project financials as a result of this Over Expenditure? (IRR, NPV, etc.)

The overall project financials are not impacted as part of this over expenditure as the cost of the material and install labor was already accounted for in the project total. However, the level of funding for 2017 is impacted as only \$50,000 was allocated for this project in 2017. Due to the delay in receipt of this material an additional \$250,000 for 2017 is requested.

What are the risks and consequences of not approving an Over Expenditure?


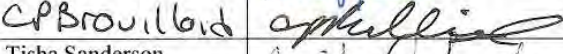
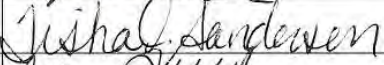
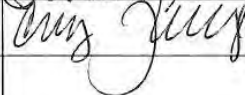
These Reclosers are needed to provide circuit protection and isolation points that help reduce the time associated with outage restoration and both SAIDI and SAIFI. Without installation of these Reclosers outage restoration times and the number of customers impacted during circuit outages will be increased which will have a negative impact on Liberty's SAIDI and SAIFI goals.

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

Over Expenditure Application **2017**

No.

Approvals and Signatures

	Name	Signature	Date
Requestor	Anthony Strabone		5/01/17
	CP Brouillard		5/24/17
Director Finance	Tisha Sanderson		6/7/17
VP Operations	Craig Jennings		6/7/17
Corporate, VP Finance			
Corporate, President			

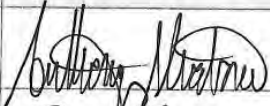
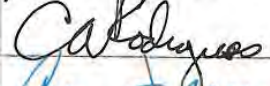

Project Close Out Report **2017**

Requesting Region or Group:	GSECo	Date of Closeout (MM/DD/YY):	12/31/2017
Project Number	8830-C36425		
Project Name:	8830-C36425 Mt Support-New 16L5 Feeder		
Requesting Region:	New Hampshire	Sponsor (Name):	Rodrigues; Charles
Project Champion:	Strabone; Anthony	Project Manager	Strabone; Anthony
Project Start Date:	1/1/2017	Project Completion Date:	12/31/2017
Requested Capital (\$)	\$450,909	Expenditure Included in Approved Budget?	Yes

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 Manager		2/15/18
Charles Rodrigues	Director of Engineering		2/15/18
Craig Jennings	Vice President-Operations and Engineering		2/23/18

Project Close Out Report | 2017

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
2.2	Do you agree the product and/or service has sufficiently met the stated business goals and objectives?	Yes
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
2.4	Do you agree the project should be closed? If no, please explain:	Yes
Rate your level of satisfaction with regards to the project outcomes listed below		
2.5	Project Quality	3
2.6	Product and/or Service Performance	3
2.7	Scope	3
2.8	Cost (Budget)	3
2.9	Schedule	3

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	
3.3	Were audits (e.g., project closeout audit) completed and results documented for future reference?	Yes	
3.4	Identify the storage location for the following project documents items:	See below	
Item	Document	Location (e.g., Google Docs, Webspace)	Format
3.4a	Business Case	Local W Drive: W:\Engineering\Project Documents Electric	Electronic
3.4b	Project Charter	N/A	Electronic
3.4c	Project Plan	N/A	Electronic
3.4d	Budget Documentation and Invoices	N/A	Electronic
3.4e	Status Reports	N/A	Electronic

Project Close Out Report **2017**

3.4f	Risks and Issues Log	N/A	Electronic
3.4g	Final deliverable	N/A	Electronic
3.4h	If applicable, verify that final project deliverable for the project is attached or storage location is identified in 3.4.	N/A	Electronic

Section 4. Project Team

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

Name	Role	Type (e.g., Contractor, Employee)
Anthony Strabone	Lead Engineer/PM	Employee
Travis Singer	OH Line Supervisor	Employee
Mario Barone	Substation Supervisor	Employee
Control Pont Technologies	Engineering	Contractor
UPG	Test & Commissioning	Contractor
Hi-Volt	Line 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). Describe the problem and include any project documentation references (e.g., Project Plan, Issues Log) that provide additional details. Identify recommended improvements to correct a similar problem in the future.

Problem Statement	Problem Description	References	Recommendation
N/A	N/A	N/A	N/A

Section 6. Post-Implementation Support Plans

Project team to identify plans for post-implementation activities after project closeout. Refer to the Benefits Realization review gate for information about the Post-Implementation Review of Business Outcomes deliverable.

Project Close Out Report | 2017

Action	Planned Date	Assigned To	Frequency
Post-Implementation Review of Business Outcomes (actual review)	N/A	N/A	N/A
Post-Implementation Review of Business Outcomes (approval)	N/A	N/A	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
N/A	N/A

Section 8. Financials

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

Financial Descriptor	Amount
Total Actual Project Costs (including all Regional, Corporate and 3 rd party costs)	\$555,143
Total Budgeted amount	\$450,909
Variance	\$(104,234)

Reasons for Variance	Impact
Delay in receipt of Viper Reclosers- work order remained open and active for majority of 2017 incurring burdens & AFUDC	Project is over-budget

Project Close Out Report **2017**

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)	
Work Order 1	8830-18000912
Work Order 2	8830-MT SUPP 16L5
Work Order 3	8830-ACCMTSUP16L5
Work Order 4	1060-18000912
Work Order 5	



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

PROJECT TITLE : **GSE-MT SUPPORT -NEW 16L5 FEEDER SPECIFIC**

PROJECT SPONSOR: **CHRIS BROUILLARD**

PROJECT LEAD: **ANTHONY STRABONE**

DATE: **09/15/2016**

PROJECT ID: **8830-C36425**

BUSINESS PLAN NUMBER:

Business Case

RECOMMENDATION:

Construct a new 13 kV Distribution Feeder (16L5) to be fed from the Mount Support Substation. The 16L5 will exit Mount Support Substation via a manhole and duct system and continue underground along Medical Center Drive to a riser pole located on Route 120. The 16L5 will continue overhead, South along Route 120 in the Town of Lebanon where it will connect to existing area circuits currently fed from Lebanon Substation.

BACKGROUND

Identified in the Lebanon, NH Supply and Distribution Study published by National Grid on behalf of Liberty Utilities in 2013, the area Distribution Circuits fed from the Lebanon Substation were exceeding their design criteria due to area loading, including exceeding normal thermal loading limits and contingency support during system abnormalities. The recommended solution to mitigate these issues is to construct the 16L5 circuit and reconfigure the area circuits.

An average annual load growth of 1.8% from 2012 through 2028, excluding spot load additions, is predicted for the Lebanon Area. Spot Load additions include larger commercial customers looking to expand their facilities such as Dartmouth College; Dartmouth Hitchcock Medical Center and Hypertherm.

To mitigate the risk beyond the equipment long term thermal ratings, the plan recommends that Liberty expand the 13 kV Bus at Mount Support Substation, including two new low profile distribution feeders. The scope of work will also include installation of additional equipment to construct the 13 kV Bus to a breaker and a half configuration.

Construction of the 16L5 is an essential component of the overall recommended Lebanon Area solution: Expansion of Mount Support #16 Substation.

ALTERNATIVES/OPTIONS

The 16L5 circuit position was central to the overall recommended solution of expanding the Mt. Support substation in Lebanon, NH with a second transmission supply line, second 115/13kV transformer, and two new 13kV feeder positions.

Other alternatives considered for the Lebanon Area can be found in the Lebanon, NH Supply and Distribution Study which is located in the appendix of this document.

Business Case

FINANCIAL ASSESSMENT

The total estimated cost for this project is \$1,400,000. The in-service target date for this project is December, 2016. 2015 is a test year for Granite State Electric and recognition of this project by the NH PUC as a Step Increase Project in the upcoming Granite State Electric Company rate case is expected. This will allow for more timely recovery of the investment.

RISK ASSESSMENT AND QUALITATIVE EVALUATION

None

IMPLEMENTATION/ACTION PLAN

Construction of the new 16L5 13 kV Distribution Feeder will take place on a schedule paralleling the construction of the substation expansion.

REVIEWED BY:

PROJECT LEADER:

DIRECTOR/VP: *C.P. Grunilla*

FINANCE: *Justin Anderson 11/2/17*



Liberty UtilitiesSM
WATER GAS ELECTRIC

LIBERTY UTILITIES - CAPITAL PROJECT EXPENDITURE APPLICATION

DIVISION/COMPANY: Capital / Granite State Electric Co.	HOME OFFICE REF #: 8830-C36425
PROJECT TITLE: GSE-Dist-Mt.Support-New 16L5 Feeder	EXPECTED PROJECT TOTAL: \$1,400,000
PROJECT TYPE (circle one): System Maint / System Project / Growth /	
PROJECT START DATE: 5/1/2016	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; margin-top: 10px;"> <input type="checkbox"/> Growth <input checked="" type="checkbox"/> Improvement Upgrades <input type="checkbox"/> Infrastructure Replacement </div>	
PROJECT DESCRIPTION & LOCATION: Construct a new 13 kV Distribution Feeder (16L5) to be fed from the Mount Support Substation. The 16L5 will exit Mount Support Substation via a manhole and duct system and continue underground along Medical Center Drive to a riser pole located on Route 120. The 16L5 will continue overhead, South along Route 120 in the Town of Lebanon where it will connect to existing area circuits currently fed from Lebanon Substation.	
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. Licensing and Underground/Environmental Permitting will be obtained 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. This project was approved for 2015 funding on an investment grade basis as part of the 2015-2019 approved capital budget. . 2015 is a Test year for Granite State Electric and recognition of this project by the NH PUC as a Step Increase Project in the upcoming Granite State Electric Company rate case is expected.	

WILL THERE BE ASSETS GREATER THAN \$5,000 THAT IS CURRENTLY IN SERVICE REMOVED AS A RESULT OF THIS PROJECT? **Yes**

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

Rate Recovery (over 18 months)

Safety

Mandated

Impending Regulatory Obligation

Rate Recovery-Immediate Return

Rate Recovery (3 to 6 months)

Rate Recovery (6 to 12 months)

Rate Recovery (12 to 18 months)
(Partial recognition as STEP Increase Project)

X

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

No

If yes, is customer affordability an issue?

Have Health & Safety implications been considered?

Yes

Has Environmental Compliance review been done?

Yes

Has Tech Services review been done?

Yes

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

\$1,400,000

CAPITAL EXPENDITURE BUDGET UTILIZATION

Authorized Amount

To be spent in:

Current Year
(2017)

Future Years

\$1,400,000

\$50,000

(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	Chris Brouillard	<i>Chris Brouillard</i>	1/13/17		
Region Director (\$250K)	Tisha Sanderson	<i>Tisha Sanderson</i>	1/13/17		
Region Vice President (\$500K)					
Region President (\$1M)					
Corp Senior VP (\$1.5M)					
Corp President (\$3M)					



Liberty UtilitiesSM
WATER | GAS | ELECTRIC

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

PROJECT TITLE : **GSE-MT SUPPORT -NEW 16L5 FEEDER SPECIFIC**

PROJECT SPONSOR: **CHRIS BROUILLARD**

PROJECT LEAD: **ANTHONY STRABONE**

DATE: **10/16/2015**

PROJECT ID: **8830-C36425**

BUSINESS PLAN NUMBER:

RECOMMENDATION:

Construct a new 13 kV Distribution Feeder (16L5) to be fed from the Mount Support Substation. The 16L5 will exit Mount Support Substation via a manhole and duct system and continue underground along Medical Center Drive to a riser pole located on Route 120. The 16L5 will continue overhead, South along Route 120 in the Town of Lebanon where it will connect to existing area circuits currently fed from Lebanon Substation.

BACKGROUND

Identified in the Lebanon, NH Supply and Distribution Study published by National Grid on behalf of Liberty Utilities in 2013, the area Distribution Circuits fed from the Lebanon Substation were exceeding their design criteria due to area loading, including exceeding normal thermal loading limits and contingency support during system abnormalities. The recommended solution to mitigate these issues is to construct the 16L5 circuit and reconfigure the area circuits.

ALTERNATIVES/OPTIONS

The 16L5 circuit position was central to the overall recommended solution of expanding the Mt. Support substation in Lebanon, NH with a second transmission supply line, second 115/13kV transformer, and two new 13kV feeder positions.

FINANCIAL ASSESSMENT

The total estimated cost for this project is \$1,400,000. The in-service target date for this entire project is June, 2017, with partial facilities targeted for 2016 in-service, which would qualify that portion for a STEP increase along with other Mt. Support facilities being installed.

RISK ASSESSMENT AND QUALITATIVE EVALUATION

None

IMPLEMENTATION/ACTION PLAN

Construction of the new 16L5 13 kV Distribution Feeder will take place on a schedule paralleling the construction of the substation expansion.

REVIEWED BY:

DIRECTOR/VP:



FINANCE:



LIBERTY UTILITIES - CAPITAL PROJECT EXPENDITURE APPLICATION

DIVISION/COMPANY: Capital / Granite State Electric Co.	HOME OFFICE REF #: 8830-C36425
PROJECT TITLE: GSE-Dist-Mt.Support-New 16L5 Feeder	EXPECTED PROJECT TOTAL: \$1,400,000
PROJECT TYPE (circle one): System Maint / System Project / Growth /	
PROJECT START DATE: 5/1/2016	PROJECT END DATE: 12/31/2016
CURRENT UTILITY EARNINGS STATUS:	JOB COST/FWO #:
Type of Capital Project: <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <input type="checkbox"/> Growth <input checked="" type="checkbox"/> Improvement Upgrades <input type="checkbox"/> Infrastructure Replacement </div>	
PROJECT DESCRIPTION & LOCATION: Construct a new 13 kV Distribution Feeder (16L5) to be fed from the Mount Support Substation. The 16L5 will exit Mount Support Substation via a manhole and duct system and continue underground along Medical Center Drive to a riser pole located on Route 120. The 16L5 will continue overhead, South along Route 120 in the Town of Lebanon where it will connect to existing area circuits currently fed from Lebanon Substation.	
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. Licensing and Underground/Environmental Permitting will be obtained 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 IS CURRENTLY IN SERVICE REMOVED AS A RESULT OF THIS PROJECT? Yes	

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 2016 Approved Capital Budget.			
CATEGORY & STATUS OF PROJECT (tick as appropriate)		FINANCIAL SUMMARY	
		NEXT ANTICIPATED TEST YEAR	
		Rate Recovery (over 18 months)	X
Safety		Will this, and other approved projects, cause a rate shock	No
Mandated			
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) (Partial recognition as STEP Increase Project)	X		
Was this Capital Expenditure included in the Annual Budget?		Yes	
ANALYSIS OF PROJECT VALUE		CAPITAL EXPENDITURE BUDGET UTILIZATION	
Design/Engineering		Authorized Amount	To be spent in:
External contractor costs			Current Year (2015-)
Internal costs			Future Years (2016+)
Other costs (contingency)		(A) Capital budget	\$1,400,000
Working capital requirements		(B) Over (under) run vs. Budget	\$150,000
		(C) (A+B) Total Estimated Project Cost	\$1,250,000
		(D) Less Approved Spend to Date	
		(E) Less Future Approval Requests	
		(F) (C-D-E) Approval Amount Requested (current application)	
Project Total Cost	\$1,400,000		
	Name	Signature	Date
Requesting Party	Chris Brouillard	<i>Chris Brouillard</i>	10/19/15
President - LU Central	DAVID SWAN	<i>David Swan</i>	10/29/15
Vice President Finance			
CFO			
CEO			

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

DE 19-064
Distribution Service Rate Case

Staff Technical Session Data Requests - Set 2

Date Request Received: 10/22/19
Request No. Staff TS 2-9

Date of Response: 11/5/19
Respondent: Joel Rivera
Anthony Strabone
Heather M. Tebbetts

REQUEST:

Re: Staff 9-3; Project 8830-C42921 Install Splices – 6L2 & 6L4. Please provide the following information for this project:

- a. An itemized breakout of burdens, AFUDC, and other costs leading to the variance of - \$91,743.
- b. Why was the original cost estimate set at \$75,000 (Staff 9-3.2 at 27) and not \$111,552?
- c. Why was the potential for costs involving contractors, corrosion inside manholes, traffic control, pumping and cleaning manholes, not taken into consideration during the preliminary engineering and budgeting for this project?
- d. Why was the Over Expenditure Form (See OCA Data Request 2-14.d.2 at 97) approved and signed in February 2018 instead of during the project year in 2017?
- e. Work Orders/spreadsheets including #'s 8830-18002089, 8830-18002322, and 8830-18002089.
- f. Please indicate if splices are a minor plant?
 1. If so, why is the labor costs capitalized?
 2. Please provide documentation that indicates the change from expense to capital and the associated company policy that is utilized for that determination.

RESPONSE:

- a. Please see Attachment Staff 2-9.a.xlsx.
- b. At the time of the estimate, this is what the Company projected the cost to be.
- c. As noted during the technical session, the manholes were inspected prior to construction and found no issues. Once construction started, the manholes needed pumping and cleaning and thus the Company needed to complete this work prior to starting construction. Once the cables were moved during construction, corrosion was seen and needed to be remedied. Also, discussed at the tech session was the need for police detail

when originally the town allowed for the use of flaggers during construction, but due to the location and the equipment encroaching on the road, police detail was later required by the town.

- d. Over expenditure forms are completed on an annual basis and would be completed during the year and signed after the year ends.
- e. Please see the response to part a.
- f. When a splice extends the life of the cable, it can be capitalized. The Company relies on Attachment Staff TS 2-9.f.1 to provide guidance on this issue. The following Attachments are provided for this project:
 - Attachment Staff TS 2-9.f.1: Plant Investment Procedure 613 for plant account 367.26.06 Disconnecting Device - URD/UCD – The reasoning behind this was replacement of the failing H disconnectable joints will extend the actual useful life of the 6L2/6L4 underground distribution system installed in 2010.
 - Attachment Staff TS 2-9.f.2: Manhole records of the work completed.
 - Attachment Staff TS 2-9.f.3: Drawing providing where the failing H joints were replaced.

NEW ENGLAND POWER SERVICE COMPANY
PLANT INVESTMENT PROCEDURE - 613
ELECTRIC PLANT UNITS

Account: UNDERGROUND CONDUCTORS AND DEVICES
DISTRIBUTION PLANT

367.01

		UNIT	
NUMBER	TITLE	DESCRIPTION	MEASURE
367.24.01	CUTOUT	Oil Filled	Each
367.25.01	CUTOUT	Expulsion Type	Each
367.26.01	OIL SWITCH		Each
367.26.03	SWITCH	Automatic Throwover Type	Each
367.26.04	SWITCH, DISCONNECT		Each
367.26.05	LOAD BREAK SWITCH OR VACUUM SWITCH		Each
367.26.06	DISCONNECTING DEVICE - URD/UCD ✓		Each
367.27.01	RELAY		Each
367.27.02	LINE FAULT INDICATOR, SUBMERSIBLE - URD		Each
367.27.03	LINE FAULT INDICATOR	(Consisting of: Control Cable, Sensors and Cabinet)	System
367.28.01	INSTRUMENT TRANSFORMER		Each
367.29.01	GROUND		Each
367.30.01	BUS SUPPORTING STRUCTURE		Each
367.31.01	ENCLOSED SWITCHING CENTER	Group 1, 0-1,000 C.F. - Include, Pad-mounted metal-clad Switchgear Assembly Units	Assembly
367.31.02	ENCLOSED SWITCHING CENTER	Group 2, 1001 - 2000 C.F.	Assembly
367.31.03	TRANCLOSURE	For Housing Only	Each
367.32.01	FOUNDATION	Equipment	Each
367.33.01	TERMINAL JUNCTION BOX		Each
367.34.01	INSTRUMENT CABINET		Each

Date 5-23-83

Sheet 9 of 10

FORM: 131-Q		Liberty Utilities		HOLE NO: M/1	
MANHOLE RECORD					
LOCATION: <i>South Main</i>				AT: <i>Circle K Gas Station</i>	
PERMIT NO: <i>N/A</i>	PLAN NO: <i>N/A</i>	DATE BUILT:	BY: <i>contractor</i>	ORDER NO:	
WALLS: <i>N/A</i>	FLOOR: <i>N/A</i>	ROOF: <i>N/A</i>		FRAME: <i>N/A</i>	
HT. CHAMBER: <i>N/A</i>	HT. NECK: <i>N/A</i>	DIA. HOLE: <i>N/A</i>		DRAIN: <i>N/A</i>	
THIS SPACE FOR EXPLODE VIEW OF HOLE					
<p style="text-align: center; margin-top: 20px;"> <i>↑ Replace ³ y - Joints to ³ Straight COLD Shrink Straights 5/17/17 MAP</i> </p>					

FORM: 131-Q

Liberty Utilities

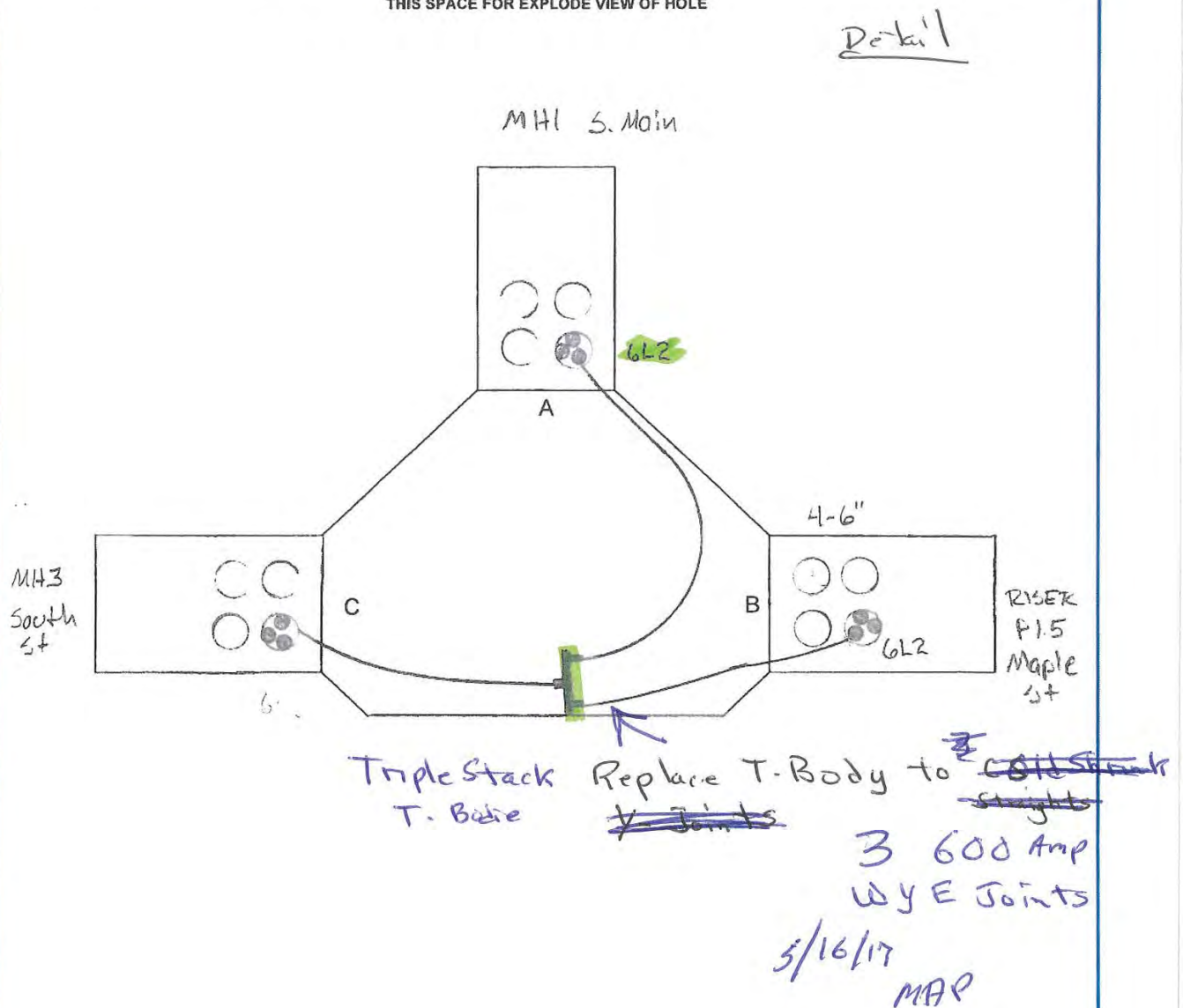
HOLE NO: MH2

MANHOLE RECORD

LOCATION: S Main Maple AT:

PERMIT NO: <u>N/A</u>	PLAN NO: <u>N/A</u>	DATE BUILT:	BY: <u>Contractor</u>	ORDER NO:
WALLS: <u>N/A</u>	FLOOR: <u>N/A</u>	ROOF: <u>N/A</u>	FRAME: <u>N/A</u>	
HT. CHAMBER: <u>N/A</u>	HT. NECK: <u>N/A</u>	DIA. HOLE: <u>N/A</u>	DRAIN: <u>N/A</u>	

THIS SPACE FOR EXPLODE VIEW OF HOLE



FORM: 131-Q		Liberty Utilities		HOLE NO: <u>MH3</u>	
MANHOLE RECORD					
LOCATION: <u>South St</u>				AT:	
PERMIT NO: N/A	PLAN NO: N/A	DATE BUILT:	BY: Contractor	ORDER NO:	
WALLS: N/A	FLOOR: N/A	ROOF: N/A	FRAME: N/A		
HT. CHAMBER: N/A	HT. NECK: N/A	DIA. HOLE: N/A	DRAIN: N/A		

THIS SPACE FOR EXPLODE VIEW OF HOLE

Detail

USPO switchgear MH3-1

4-6"

2-4" #2A1

Replace 3-T Bodies to CS Straights 3/23/17 MAP

3-3m to CS Straights

GL2

GL2

GL4

4-6" 2-4"

Replace 3-T Bodies to 3-3m Cold Shrink Straights 5/30/17 MAP

MH2 Maple/S. Main

4-6"

B

MH4 South St

6L4 #2A1

FORM: 131-Q

Liberty Utilities

HOLE NO: MH4

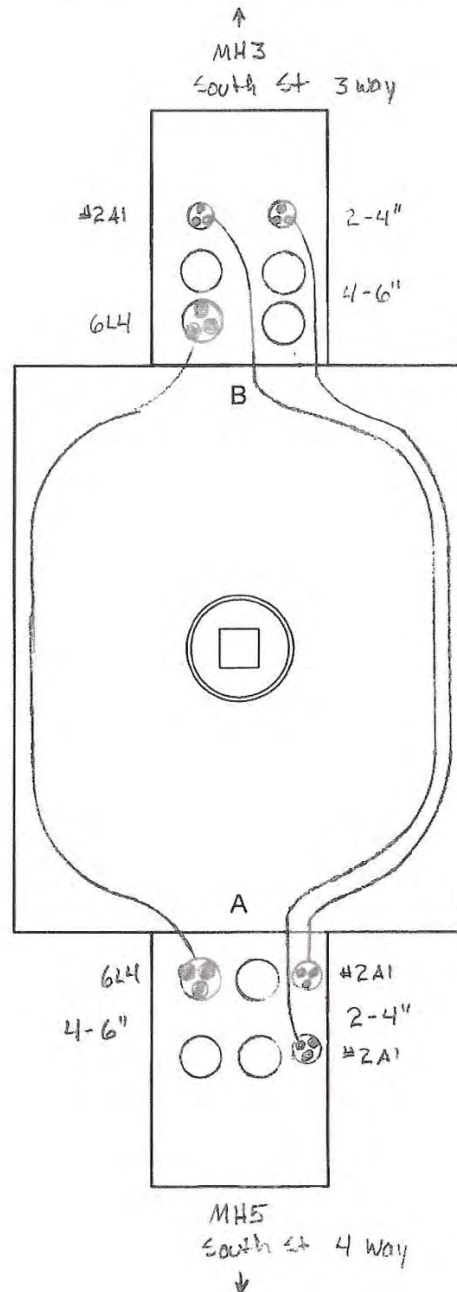
MANHOLE RECORD

LOCATION: South St

AT:

PERMIT NO: <u>N/A</u>	PLAN NO: <u>N/A</u>	DATE BUILT:	BY: <u>contractor</u>	ORDER NO:
WALLS: <u>N/A</u>	FLOOR: <u>N/A</u>	ROOF: <u>N/A</u>	FRAME: <u>N/A</u>	
HT. CHAMBER: <u>N/A</u>	HT. NECK: <u>N/A</u>	DIA. HOLE: <u>N/A</u>	DRAIN: <u>N/A</u>	

THIS SPACE FOR EXPLODE VIEW OF HOLE



*No
Changes
Pull thru's
MAP*

*Not sure
of work*

FORM: 131-Q		Liberty Utilities		HOLE NO: <u>MH6</u>	
MANHOLE RECORD					
LOCATION: <u>Corner 1 South</u> AT:					
PERMIT NO: <u>N/A</u>	PLAN NO: <u>N/A</u>	DATE BUILT:	BY: <u>contractor</u>	ORDER NO:	
WALLS: <u>N/A</u>	FLOOR: <u>N/A</u>	ROOF: <u>N/A</u>	FRAME: <u>N/A</u>		
HT. CHAMBER: <u>N/A</u>	HT. NECK: <u>N/A</u>	DIA. HOLE: <u>N/A</u>	DRAIN: <u>N/A</u>		

THIS SPACE FOR EXPLODE VIEW OF HOLE

↑
CURNER
RISER F4

completed 2016

2-6" GL4

2-4" 4-6"

#2A1

GL4 to MH6

GL4 to RISER P4 1/2

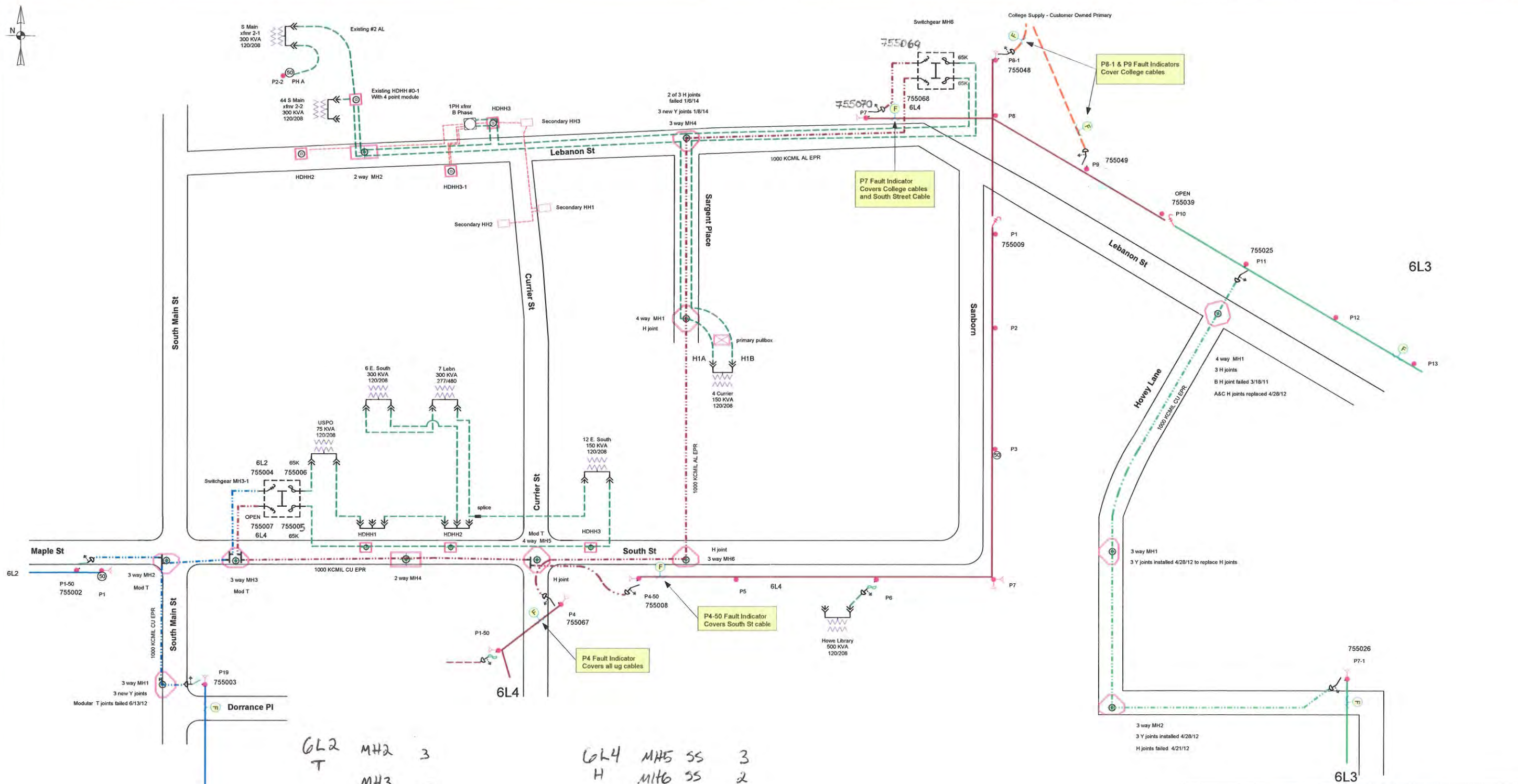
GL4

3 CS Straights

Replace T-Bodies To CS

Removed 3 Stack T-Bodies Replaced with 3-3M Cold Shrink Straights 5/31/17 m AP

(Turn 180)



6L2
T
MH2 3
MH3 6
MH5 3
12/15

6L4
H
MH5 SS 3
MH6 SS 2
MH1 SP 3
MH4 LS 3
11/12
22 straight

Σ 18 straight
Σ 3 Y + 3 straight

In-service Dates	
6L2 South Block Project	March 2006
6L3 Hovey Lane	Summer 2007
6L4 Lebanon Street	May 2012

Liberty Utilities

6L4 Feeder Tie Points HANOVER - NH Mainline & Sub Loops

Scale: NONE	Actrix Drawing Number
Date: 7 January 2014	
Drawn By: M. Emerson	Approved By: M. Emerson
	WR 16322821

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

DE 19-064
Distribution Service Rate Case

Staff Technical Session Data Requests - Set 2

Date Request Received: 10/22/19
Request No. Staff TS 2-10

Date of Response: 11/5/19
Respondent: Joel Rivera
Anthony Strabone
Heather M. Tebbetts

REQUEST:

Re: OCA 2-14.d.2 at 115-116; Project 8830-CD0291 Sky View URD. Please provide the following information for this project:

- a. An itemized breakout of the costs and also CIAC received leading to the variance of - \$49,396.
- b. Work Orders/spreadsheets including #'s 8830-10850702, 8830-16730232, 1060-16730232, 8830-18002752, and 1060-10850702.

RESPONSE:

Please see Attachment Staff TS 2-10.xlsx.

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

DE 19-064
Distribution Service Rate Case

Staff Data Requests - Set 1

Date Request Received: 5/23/19
Request No. Staff 1-2

Date of Response: 6/7/19
Respondent: Heather M. Tebbetts
Anthony Strabone

REQUEST:

Reference attached Excel spreadsheet AttStaff 1-002 CAPEX Budget-Actual 2016, 2017, & 2018. Please fill in all information for the project categories of Safety, Mandated, Growth, Regulatory, Discretionary, for all capital projects undertaken by Granite State Electric in 2016, 2017, and 2018. Provide an explanation in the last column only for projects where the variance of actual expenditures equaled or exceeded 2x the budgeted amounts.

RESPONSE:

Attachment Staff 1-2.xlsx contains all information for project categories, budget and actual, for 2017 and 2018. For 2016, the tab "2016 Budget and Final" in Attachment Staff 1-2.xlsx provides the actual spending for projects listed in Attachment 1 to the Settlement Agreement filed March 15, 2017, in Docket No. DE 16-383, at Bates 023, titled "Step Adjustment - 2016 Capital Investments." As discussed during the course of that docket, the 2016 budget and actual spending were updated as the year progressed. The final actual costs of the 2016 projects were included in the 2017 step adjustment and were approved in Order No. 26,005 (Apr. 12, 2017).

			GSE CY2016
Priority	Project #	Project Description	Actual Capital
Attachment 1 Step Adjustment 2016 Capex			
Discretionary	8830-C13968	PS&I Activity - New Hampshire	\$0
Discretionary	8830-C18620	Charlestown 32 Dline	\$0
Discretionary	8830-C18630	Charlestown DSub	\$0
Discretionary	8830-C18710	RTU Installations - LU/NG Substations	\$5,683
Discretionary	8830-C18720	Refreshing Existing Buildings GSE(Capital	(\$18,065)
Discretionary	8830-C18740	Customer Walk In Centers (Salem & Lebanon)	\$5,197
Discretionary	8830-C18780	Upfit Londonderry - GSE Allocation	\$490
Discretionary	8830-C21093	IE-NH Dist Transformer upgrades	\$2,160
Discretionary	8830-C22214	NN ERR/Pockets of Poor Perf	\$107,612
Discretionary	8830-C26061	NH ARP Relay & related	\$0
Discretionary	8830-C31402	IE-NN URD Cable Replacement	\$7,079
Discretionary	8830-C33766	NEN-NH Electric Fence FY10	\$44,730
Discretionary	8830-C36427	Feeder Getaway Cable Replacement	\$195,036
Discretionary	8830-C36430	Pelham Sub-Add 2nd Xfmr and Fdr Pos	\$447,126
Discretionary	8830-C36431	Pelham-New 14L4 Fdr	\$143,195
Discretionary	8830-C42851	Enhanced Bare Conductor Replacement	\$972,680
Discretionary	8830-C42852	Pelham-New 14L5 Fdr	\$0
Discretionary	8830-C42901	Underperforming Feeder Program	\$209,597
Discretionary	8830-C42910	Cogsdale Modification - Crystal Report Bill Template Elec	\$19,729
Discretionary	8830-C42911	Install CSC Cubicles and Furniture - GSE - Londonderry	(\$342)
Discretionary	8830-C42913	Golden Rock Damage Failure	\$52,366
Discretionary	8830-C42915	Install CNG Dispenser in Salem Lowell Rd. Facility	\$650
Discretionary	8830-C42917	Install AC Unit - 15 Buttrick Road	\$75,902
Discretionary	8830-C42919	Install Server Room AC Units Londonderry	\$32,073
Discretionary	8830-C42926	Slayton Hill Rd, Lebanon Pole Relocation	\$50,548
Discretionary	8830-C42933	Vilas Bridge 12L1	\$2,047
Discretionary	8830-CD0376	ENFIELD SUPPLY	(\$4,560)
Discretionary	8830-CD0785	Whelen Engineering Charlestown, NH	\$145
Discretionary	8830-CNN006	GSE-Dist-Genl Equip Blanket	\$20,732
Discretionary	8830-CNN015	IT Systems & Equipment Blanket	\$914,660
Discretionary	8830-CNN026	Misc Capital Improvnmts GSE Facilities Blanket	\$22,369
Discretionary	8830-CNN027	Transportation Fleet & Equip. Blanket	\$232,760
Discretionary	8830-CRSRVARS_017	Reserve for Sub Asset Repl Specifics	\$0
Discretionary	8830-CRSRVDF_014	Reserve for Damage/Failure Unidentified Specifics &	\$0
Discretionary	8830-CRSRVLRL_016	Reserve for Load Relief Unidentified Specifics	\$0
Discretionary	8830-CRSRVPR_013	Reserve for Public Requirements Unidentified Specifics	\$0
Discretionary	8830-CRSRVRL_015	Reserve for Reliability Unidentified Specifics	\$0
Discretionary	8830-IT	IT System Oakville	\$87,585
Discretionary	8830-MISC EQUIPMT	Misc Discretionary Purch Equipment	(\$454)
Discretionary	8830-OTH-002	Salem WIC Security Upgrade	\$82,197
Discretionary	8830-OTH-003	Lebanon WIC Security Upgrade	\$71,815
Discretionary	8830-OTH-004	Londonderry WIC Security Upgrade	\$24,473
Discretionary	8830-OTH-005	SHELVING IN SALEM WAREHOUSE	\$11,277
Discretionary	8830-OTH-006	SALEM MAIN GATE	\$4,529
Discretionary	8830-OTH-007	Salem Server Room AC Replacement	\$9,676
Discretionary	8830-OTH-008	Salem Security Cameras	\$0
Discretionary	8830-OTH-009	ETRACK Electronic Vendor Invoicing	\$4,500
Discretionary	8830-OTH-110	Londonderry Office Renovation	\$32,560
Discretionary	8830-OTH-111	Install Customer Drop Boxes	\$0
Discretionary	8830-OTH-112	Salem NH Pole Pile	\$68,422
Discretionary	8830-OTH-113	Replacement Windows for Lebanon Warehouse	\$48,760
Discretionary	8830-OTH-114	Salem Electric Fleet	\$502,191
Discretionary	8830-OTH-120	EH&S Facility Vehicle	\$14,171
Growth	8830-CD0291	Sky View URD - Salem, NH	(\$1,676)
Growth	8830-CNN010	GSE-Dist-New Bus-Resid Blanket	\$855,368
Growth	8830-CNN011	GSE-Dist-New Bus-Comm Blanket	\$1,513,315
Growth	8830-CRSRVNBC_010	Reserve for New Business Residential	\$0
Growth	8830-CRSRVNBC_011	Reserve for New Business Commercial Unident specific & SC	\$0
Mandated	8830-C14646	IE-NH UG Structures and Equipment	\$0
Mandated	8830-C18750	Security Conversion GSE	\$22,611
Mandated	8830-C21595	01663 GS Storm Program Proj	\$179,791
Mandated	8830-C26263	NN D-Line Work Found by Insp.	\$40,161
Mandated	8830-C36433	Distribution Feeder Power Factor Correction	\$80,556
Mandated	8830-C36435	Lebanon Area Low Voltage Mitigation	\$57,381
Mandated	8830-C42850	Relocate Distribution Dulak St Lebanon	(\$848)
Mandated	8830-CN4104	01659 Granite St. Meter Purchases	\$158,990
Mandated	8830-CN4120	01660 Granite St. Transformer Purchases	\$224,994
Mandated	8830-CNN002	01737 GSE-Dist-Subs Blanket	\$8,295
Mandated	8830-CNN004	GSE-Dist-Meter Blanket	(\$188)
Mandated	8830-CNN007	GSE-Dist-Water Heater Blanket	(\$57,638)
Mandated	8830-CNN009	GSE-Dist-Land/Land Rights Blanket	\$0
Mandated	8830-CNN012	GSE-Dist-St Light Blanket	\$181,024
Mandated	8830-CNN013	GSE-Dist-Public Require Blanket	\$521,946
Mandated	8830-CNN014	Dist-Damage&Failure Blanket	\$1,940,363
Mandated	8830-CNN015	GSE-Dist-Reliability Blanket	\$1,124,162
Mandated	8830-CNN016	GSE-Dist-Load Relief Blanket	\$70,264
Mandated	8830-CNN017	GSE-Dist-Asset Replace Blanket	\$948,224
Mandated	8830-CNN020	Dist-Transf/Capac Install Blanket	\$0
Mandated	8830-CNN021	GSE-Dist-Telecomm Blanket	(\$947)
Mandated	8830-CNN022	GSE-Dist-3rd Party Attach Blanket	\$52,606
Mandated	8830-CNN023	GSE Distributed Generation Blanket	\$30,159
Regulatory Programs	8830-C18603	Bare Conductor Replacement Program	\$621,964
Regulatory Programs	8830-C20473	IE - NN Recloser Installations	\$177,857
Regulatory Programs	8830-C32279	01757 NN ARP Breakers & Reclosers	\$709
Regulatory Programs	8830-C36423	Mt Support Sub- New LP Fdr Pos	\$3,059,868
Regulatory Programs	8830-C36424	Mt Support-New 16L3 Feeder	\$1,647,572
Regulatory Programs	8830-C36425	Mt Support-New 16L5 Feeder	\$443,824
Regulatory Programs	8830-C42921	INSTALL SPICES - 6L2 & 6L4 DISTRIBUTION CIRCUITS	\$82,207
Regulatory Programs	8830-CD0272	11255 Michael Ave Getaway	\$1,184
			<u>\$18,487,402</u>

Priority	Project #	Project_Description	GSE CY2017 Budgeted Capital	GSE CY2017 Actual Capital	GSE CY2017 Variance (Over)/Under	Explanation
1 - Safety						
1 - Safety						
Safety Total			\$0.00	\$0.00	\$0.00	
2 - Mandated	8830-1701	8830-C21595 01663 GS Storm Program Proj	\$50,000.00	\$141,507.08	(\$91,507.08)	Blanket project # for restoration efforts involving capital - varies according to storms
2 - Mandated	8830-1702	8830-C26263 NN D-Line Work Found by Insp.	\$25,000.00	\$7,613.31	\$17,386.69	
2 - Mandated	8830-1703	8830-CN4104 01659 Granite St Meter Purchases	\$195,000.00	\$81,497.07	\$113,502.93	
2 - Mandated	8830-1704	8830-CN4120 01660 Granite St Transformer Purchases	\$390,000.00	\$410,575.58	(\$20,575.58)	
2 - Mandated	8830-1705	8830-CNN002 01737 GSE-Dist-Subs Blanket	\$10,000.00	(\$92,608.12)	\$102,608.12	
2 - Mandated	8830-1706	8830-CNN004 GSE-Dist-Meter Blanket	\$15,000.00	\$0.00	\$15,000.00	
2 - Mandated	8830-1707	8830-CNN006 GSE-Dist-Genl Equip Blanket	\$40,000.00	\$30,191.98	\$9,808.02	
2 - Mandated	8830-1708	8830-CNN007 GSE-Dist-Water Heater Blanket	\$75,000.00	\$22,942.76	\$52,057.24	
2 - Mandated	8830-1709	8830-CNN009 GSE-Dist-Land/Light Rights Blanket	\$2,575.00	\$0.00	\$2,575.00	
2 - Mandated	8830-1710	8830-CNN012 GSE-Dist-St Light Blanket	\$250,000.00	\$150,052.11	\$99,947.89	
2 - Mandated	8830-1711	8830-CNN013 GSE-Dist-Public Require Blanket	\$387,000.00	\$414,431.77	(\$27,431.77)	
2 - Mandated	8830-1712	8830-CNN014 Dist-Damage&Failure Blanket	\$800,000.00	\$1,111,528.66	(\$311,528.66)	
2 - Mandated	8830-1713	8830-CNN017 GSE-Dist-Asset Replace Blanket	\$400,000.00	\$530,609.02	(\$130,609.02)	
2 - Mandated	8830-1714	8830-CNN022 GSE-Dist-3rd Party Attach Blanket	\$125,000.00	\$115,647.32	\$9,352.68	
2 - Mandated	8830-1720	8830-C18750 Security Conversion GSE	\$25,000.00	\$0.00	\$25,000.00	
2 - Mandated	8830-1721	8830-CNN015 GSE-Dist-Reliability Blanket	\$500,000.00	\$314,041.55	\$185,958.45	
2 - Mandated	8830-1722	8830-CNN016 GSE-Dist-Load Relief Blanket	\$25,000.00	\$15,640.76	\$9,359.24	
2 - Mandated	8830-1723	8830-CNN023 GSE Distributed Generation Blanket	\$75,000.00	\$151.61	\$74,848.39	
2 - Mandated	8830-1724	8830-CNN026 Misc Capital Imprvmnts GSE Facilities Blanket	\$50,000.00	\$70,993.62	(\$20,993.62)	
2 - Mandated	8830-C36433	8830-C36433 Distribution Feeder Power Factor Correction	\$25,000.00	\$82,929.42	(\$57,929.42)	
2 - Mandated	8830-C00291	Sky View URD - Salem, NH	\$21,286.00	\$70,682.81	(\$49,396.81)	
Mandated Total			\$3,485,861.00	\$3,478,428.31	\$7,432.69	
3-Growth	8830-1737	8830-CNN010 GSE-Dist-New Bus-Resid Blanket	\$1,000,000.00	\$550,399.41	\$449,600.59	
3-Growth	8830-1738	8830-CNN011 GSE-Dist-New Bus-Comm Blanket	\$1,200,000.00	\$1,374,477.27	(\$174,477.27)	
3-Growth	8830-C42912	8830-C42912 Install 9L2 Feeder Tie	\$25,000.00	\$0.00	\$25,000.00	
3-Growth	8830-C42930	8830-C42930 Install Service to Tuscan Village Salem	\$200,000.00	\$6,922.85	\$193,077.15	
Growth Total			\$2,425,000.00	\$1,931,799.53	\$493,200.47	
4 - Regulatory Obligations	8830-C18603	8830-C18603 Bare Conductor Replacement Program	\$1,300,000.00	\$1,784,038.04	(\$484,038.04)	
4 - Regulatory Obligations	8830-C18620	Charlestown 32 Dline	\$316,992.00	\$500,281.24	(\$183,289.24)	
4 - Regulatory Obligations	8830-C18630	Charlestown Dsub	\$525,000.00	\$287,279.57	\$237,720.43	
4 - Regulatory Obligations	8830-C20473	8830-C20473 IE - NN Recloser Installations	\$200,000.00	\$0.00	\$200,000.00	
4 - Regulatory Obligations	8830-C36423	8830-C36423 Mt Support Sub- New LP Fdr Pos	\$300,000.00	\$253,472.36	\$46,527.64	
4 - Regulatory Obligations	8830-C36424	8830-C36424 Mt Support-New 16L3 Feeder	\$275,000.00	\$467,936.60	(\$192,936.60)	
4 - Regulatory Obligations	8830-C36425	8830-C36425 Mt Support-New 16L5 Feeder	\$450,909.00	\$555,142.96	(\$104,233.96)	
4 - Regulatory Obligations	8830-C36430	8830-C36430 Pelham Sub-Add 2nd Xfmr and Fdr Pos	\$3,520,000.00	\$3,925,242.48	(\$405,242.48)	
4 - Regulatory Obligations	8830-C36431	8830-C36431 Pelham-New 14L4 Fdr	\$1,000,000.00	\$1,203,589.00	(\$203,589.00)	
Regulatory Obligations Total			\$7,887,901.00	\$8,976,982.25	(\$1,089,081.25)	
5-Discretionary	8830-1715	8830-C13968 PS&I Activity - New Hampshire	\$105,000.00	\$0.00	\$105,000.00	
5-Discretionary	8830-1716	8830-C26047 NH ARP Batts/Chargers Repl Prog	\$25,000.00	\$0.00	\$25,000.00	
5-Discretionary	8830-1717	8830-C26061 NH ARP Relay & related	\$10,000.00	\$0.00	\$10,000.00	
5-Discretionary	8830-1718	8830-CRSRVARS_017 Reserve for Sub Asset Repl Specifics	\$24,996.00	\$0.00	\$24,996.00	
5-Discretionary	8830-1719	8830-C21093 IE-NN Dist Transformer upgrades	\$9,996.00	(\$3,083.44)	\$13,079.44	
5-Discretionary	8830-1725	8830-CNN025 IT Systems & Equipment Blanket	\$50,000.00	\$41,975.71	\$8,024.29	
5-Discretionary	8830-1726	8830-CNN027 Transportation Fleet & Equip. Blanket	\$250,000.00	\$283,405.96	(\$33,405.96)	
5-Discretionary	8830-1727	8830-IT IT Systems Allocations - Corporate	\$250,000.00	\$69,148.59	\$180,851.41	
5-Discretionary	8830-1728	8830-FACSAI Misc Capital Imprvmnts GSE Facilities Salem	\$39,996.00	(\$3,584.97)	\$43,580.97	
5-Discretionary	8830-1729	8830-FACLEB Misc Capital Imprvmnts GSE Facilities Lebanon	\$84,996.00	\$9,960.00	\$75,036.00	
5-Discretionary	8830-1730	8830-FACLON Misc Capital Imprvmnts GSE Facilities Londonderry	\$25,000.00	\$1,401.19	\$23,598.81	
5-Discretionary	8830-1731	8830-FACCHA Misc Capital Imprvmnts GSE Facilities Charlestown	\$15,000.00	\$0.00	\$15,000.00	
5-Discretionary	8830-1732	ERP Foundation Year	\$0.00	\$0.00	\$0.00	
5-Discretionary	8830-1733	EAM Foundation Year	\$0.00	\$0.00	\$0.00	
5-Discretionary	8830-1734	GIS & OMS Electric Upgrade	\$0.00	\$0.00	\$0.00	
5-Discretionary	8830-1735	GIS - One Graphic Card	\$0.00	\$0.00	\$0.00	
5-Discretionary	8830-1736	NHE Mobiletech Roll Out (Lineworks)	\$50,000.00	\$0.00	\$50,000.00	
5-Discretionary	8830-1739	Supplemental AC for Londonderry (Dispatch/Training Rms)	\$12,030.00	\$20,900.73	(\$8,870.73)	
5-Discretionary	8830-1740	Londonderry Snow Canopy	\$17,631.00	\$0.00	\$17,631.00	
5-Discretionary	8830-1741	Mt. Support Cap Bank PLC Replacement	\$35,000.00	\$49,823.60	(\$14,823.60)	
5-Discretionary	8830-1742	Replace Lyme Rd P3 Recloser	\$65,000.00	\$2,486.65	\$62,513.35	
5-Discretionary	8830-1743	New Hampshire PC Refresh	\$116,586.00	\$116,368.03	\$217.97	
5-Discretionary	8830-1744	Golden Rock Substation PE	\$100,000.00	\$27,168.93	\$72,831.07	
5-Discretionary	8830-1745	Track Star AVLS Vehicle Tracking System	\$19,745.00	\$12,450.00	\$7,295.00	
5-Discretionary	8830-1746	First Responder Mobile Application	\$50,000.00	\$113,750.00	(\$63,750.00)	
5-Discretionary	8830-1867	Rockingham Substation Transmission Supply PE	\$50,000.00	\$175,504.00	(\$125,504.00)	Business Case requested \$150,000 for total project, budget did not reflect total request
5-Discretionary	8830-C22214	8830-C22214 NN ERR/Pockets of Poor Perf	\$213,618.00	\$234,235.73	(\$20,617.73)	preliminary engineering
5-Discretionary	8830-C31402	8830-C31402 IE-NN URD Cable Replacement	\$100,000.00	(\$8,293.43)	\$108,293.43	
5-Discretionary	8830-C32279	01757 NN ARP Breakers & Reclosers (8830-C32279)	\$0.00	(\$38.22)	\$38.22	
5-Discretionary	8830-C36427	Feeder Direct Buried Cable Replacement Program	\$0.00	(\$18,359.16)	\$18,359.16	
5-Discretionary	8830-C36435	Lebanon Area Low Voltage / Overload Mitigation (8830-C36435)	\$32,993.00	\$39,610.70	(\$6,617.70)	
5-Discretionary	8830-C42851	8830-C42851 Enhanced Bare Conductor Replacement	\$500,000.00	\$217,522.08	\$282,477.92	
5-Discretionary	8830-C42901	8830-C42901 Underperforming Feeder Program	\$150,000.00	\$172,155.89	(\$22,155.89)	
5-Discretionary	8830-C42920	Install 9L2/9L3 tie Canobie Lake		\$8,463.10	(\$8,463.10)	preliminary engineering for 2018 project to address load growth/reliability for Exit 3
5-Discretionary	8830-C42921	Install Splices 6L2 & 6L4	\$111,562.00	\$203,305.61	(\$91,743.61)	
5-Discretionary	8830-C42926	18L3 FAIRMONT RD RECONDUCTORING (8830-C42926)		\$107,302.00	(\$107,302.00)	
5-Discretionary	8830-C42933	Vilas Bridge 12L1 - Old Drewsville Rd Sectionalizer	\$0.00	\$1,109.35	(\$1,109.35)	Carryover from 2016 project in service Nov 2016
5-Discretionary	8830-C00376	ENFIELD SUPPLY	\$0.00	\$59,261.36	(\$59,261.36)	Materials from prior year project charged in 2017
5-Discretionary	8830-OTH-009	E-TRACK - ELECTRONIC CUSTOMER INVOICING	\$0.00	\$2,877.83	(\$2,877.83)	Carryover from 2016 project
5-Discretionary	8830-UNALLOC BRDN	Finance Unalloc Burden	\$0.00	(\$166,933.12)	\$166,933.12	
Discretionary Total			\$2,621,451.00	\$1,773,462.82	\$847,988.18	
Grand Total			\$16,420,213.00	\$16,160,672.91	\$259,540.09	

Priority	Project #	Project Description	GSE CY 2018 Budget	GSE CY 2018 Actual	GSE CY2018 Variance (Over)/Under	Explanation
1 - Safety						
Safety Total			\$0	\$0	\$0	
2. Mandated	8830-1741	Mt. Support Cap Bank PLC Replacement	\$ 75,000	\$ 66,598	\$8,402.29	
2. Mandated	8830-1801	GSE Storm Program Proj	\$ 600,000	\$ (68,306)	\$668,306.17	
2. Mandated	8830-1802	NN D-Line Work Found by Insp.	\$ 50,000	\$ -	\$50,000.00	
2. Mandated	8830-1803	01659 Granite St Meter Purchases	\$ 305,000	\$ 384,968	(\$79,967.59)	
2. Mandated	8830-1804	01660 Granite St Transformer Purchases	\$ 575,000	\$ 652,767	(\$77,766.50)	
2. Mandated	8830-1805	01737 GSE-Dist-Subs Blanket	\$ 50,000	\$ 7,099	\$42,900.51	
2. Mandated	8830-1806	GSE-Dist-Meter Blanket	\$ 5,000	\$ -	\$5,000.00	
2. Mandated	8830-1807	GSE-Dist-Genl Equip Blanket	\$ 50,000	\$ 51,430	(\$1,430.10)	
2. Mandated	8830-1809	GSE-Dist-Land/Land Rights Blanket	\$ 2,000	\$ -	\$2,000.00	
2. Mandated	8830-1810	GSE-Dist-St Light Blanket	\$ 140,000	\$ (71,728)	\$211,727.90	
2. Mandated	8830-1811	GSE-Dist-Public Require Blanket	\$ 725,000	\$ 441,939	\$283,061.46	
2. Mandated	8830-1812	Dist-Damage&Failure Blanket	\$ 800,000	\$ 364,069	\$435,930.93	
2. Mandated	8830-1813	GSE-Dist-Asset Replace Blanket	\$ 500,000	\$ 268,682	\$231,318.30	
2. Mandated	8830-1814	GSE-Dist-3rd Party Attach Blanket	\$ 250,000	\$ 184,483	\$65,516.61	
2. Mandated	8830-1818	Rt 12 Road Widening, Walpole/Charlestown	\$ 1,500,000	\$ 1,343,575	\$156,425.38	
2. Mandated	8830-1820	Security Conversion GSE	\$ 50,000	\$ 54,837	(\$4,836.54)	
2. Mandated	8830-1821	GSE-Dist-Reliability Blanket	\$ 275,000	\$ 158,367	\$116,633.11	
2. Mandated	8830-1822	GSE-Dist-Load Relief Blanket	\$ 50,000	\$ -	\$50,000.00	
2. Mandated	8830-1823	GSE Distributed Generation Blanket	\$ 100,000	\$ 201	\$99,798.89	
2. Mandated	8830-1824	LED Street Light Conversion	\$ 300,000	\$ 131,793	\$168,207.13	
2. Mandated	8830-1832	Replace 6L2 Circuit No Main St Hanover	\$ 1,100,000	\$ 1,295,593	(\$195,593.30)	
2. Mandated	8830-1833	Install Poles Millville St Salem	\$ -	\$ -	\$0.00	
2. Mandated	8830-1834	IE-NN UG Structures and Equipment	\$ 10,000	\$ -	\$10,000.00	
2. Mandated	8830-1835	Dist-Trans/Capac Install Blanket	\$ 5,000	\$ -	\$5,000.00	
2. Mandated	8830-1836	GSE-Dist-Telecomm Blanket	\$ 2,500	\$ -	\$2,500.00	
2. Mandated	8830-1843	Distribution Feeder Power Factor Correction	\$ 100,000	\$ 45,239	\$54,760.67	
2. Mandated	8830-1873	EAP - Cogsdale CIS System Modifications	\$ 269,541	\$ 168,498	\$101,042.90	
2. Mandated	8830-C36435	Lebanon Area Low Voltage Mitigation	\$ 400,000	\$ 125,675	\$274,324.81	
Mandated Total			\$8,289,041	\$5,605,778	\$2,683,263	
3. Growth	8830-1744	Golden Rock Substation	\$ 400,000	\$ 309,324	\$90,676.03	
3. Growth	8830-1837	GSE-Dist-New Bus-Resid Blanket	\$ 600,000	\$ 597,574	\$2,426.46	
3. Growth	8830-1838	GSE-Dist-New Bus-Comm Blanket	\$ 1,600,000	\$ 1,364,988	\$235,011.60	
3. Growth	8830-1845	Golden Rock Distribution Feeders	\$ 60,000	\$ 16,978	\$43,021.59	
3. Growth	8830-1856	Install 13L2-9L3 Feeder Tie	\$ -	\$ 18,374	(\$18,373.59)	Preliminary engineering and design completed in 2018. Project subsequently removed from revised budget.
3. Growth	8830-1858	Install Service to Tuscan Village Salem	\$ 1,400,000	\$ 1,213,583	\$186,416.99	
3. Growth	8830-1859	Reconductor Brookdale Road	\$ 1,000,000	\$ 993,936	\$6,064.49	
3. Growth	8830-1860	Extend Pelham 14L4 to Salem	\$ 1,000,000	\$ 997,930	\$2,070.23	
3. Growth	8830-C42912	Install 9L2-9L3 Feeder Tie	\$ 20,000	\$ -	\$20,000.00	
3. Growth	8830-C42930	Install Service to Tuscan Village South Line	\$ 400,000	\$ 674,260	(\$274,260.12)	
3. Growth	8830-CD0291	Sky View URD - Salem, NH	\$ 5,000	\$ 1,277	\$3,722.68	
Growth Total			\$6,485,000	\$6,188,224	\$296,776	
4. Regulatory Programs	8830-1846	Bare Conductor Replacement Program	\$ 1,450,000	\$ 1,119,628	\$330,372.21	
4. Regulatory Programs	8830-1847	IE - NN Recloser Installations	\$ 50,000	\$ 5,528	\$44,471.78	
4. Regulatory Programs	8830-C18620	Charlestown 32 Dline	\$ 250,000	\$ 354,751	(\$104,750.63)	
4. Regulatory Programs	8830-C18630	Charlestown Dsub	\$ -	\$ 145,410	(\$145,410.30)	Project in service in 2017. Materials were charged in 2018
4. Regulatory Programs	8830-C36430	Pelham Sub-Add 2nd Xfmr and Fdr Pos	\$ 100,000	\$ (85,153)	\$185,152.81	
4. Regulatory Programs	8830-C36431	Pelham-New 14L4 Fdr	\$ 450,000	\$ 462,436	(\$12,436.01)	
Regulatory Programs Total			\$2,300,000	\$2,002,600	\$297,400	
5. Discretionary	8830-1740	Snow Canopy - Londonderry SH	\$ -	\$ 21,164	(\$21,163.65)	Originally in 2017 budget, see 2017 Budget and Final tab
5. Discretionary	8830-1746	First Responder Mobile Application	\$ -	\$ 36,250	(\$36,250.00)	Business Case requested \$150,000 for total project, budget did not reflect total request
5. Discretionary	8830-1815	Misc. Capital Equipment	\$ 130,000	\$ 131,010	(\$1,009.84)	
5. Discretionary	8830-1816	NH ARP Batts/Chargers Repl Prog	\$ -	\$ -	\$0.00	
5. Discretionary	8830-1817	NH ARP Relay & related	\$ -	\$ -	\$0.00	
5. Discretionary	8830-1819	IE-NN Dist Transformer upgrades	\$ 50,000	\$ 54,592	(\$4,591.79)	
5. Discretionary	8830-1825	IT Systems & Equipment Blanket	\$ 50,000	\$ 54,985	(\$4,984.64)	
5. Discretionary	8830-1826	Transportation Fleet & Equipment	\$ 700,000	\$ 788,135	(\$88,135.03)	
5. Discretionary	8830-1827	IT Systems Allocations - Corporate	\$ 270,500	\$ 361,643	(\$91,142.82)	
5. Discretionary	8830-1828	Misc Capital Imprvmnts GSE Facilities Salem	\$ 60,000	\$ 60,851	(\$851.12)	
5. Discretionary	8830-1829	Misc Capital Imprvmnts GSE Facilities Lebanon	\$ 45,000	\$ 27,674	\$17,325.52	
5. Discretionary	8830-1830	Misc Capital Imprvmnts GSE Facilities Londonderry	\$ 35,000	\$ 60,650	(\$25,649.86)	
5. Discretionary	8830-1831	Misc Capital Imprvmnts GSE Facilities Charlestown	\$ 25,000	\$ 27,384	(\$2,384.42)	
5. Discretionary	8830-1839	IE-NN URD Cable Replacement	\$ 5,000	\$ -	\$5,000.00	
5. Discretionary	8830-1840	01757 NN ARP Breakers & Reclosers	\$ 10,000	\$ 6,039	\$3,961.44	
5. Discretionary	8830-1841	Feeder Getaway Cable Replacement	\$ 10,000	\$ -	\$10,000.00	
5. Discretionary	8830-1842	Amerductor replacement program	\$ 10,000	\$ -	\$10,000.00	
5. Discretionary	8830-1848	Replace 6L2 Circuit Manyard St Hanover	\$ -	\$ -	\$0.00	
5. Discretionary	8830-1849	NN ERR/Pockets of Poor Perf	\$ 10,000	\$ -	\$10,000.00	
5. Discretionary	8830-1850	NEN-NH Electric Fence FY10	\$ 45,000	\$ 36,494	\$8,506.09	
5. Discretionary	8830-1851	Enhanced Bare Conductor Replacement	\$ 600,000	\$ 546,398	\$53,601.85	
5. Discretionary	8830-1852	Regoave Parking Lot - 9 Lowell Rd Salem	\$ 350,000	\$ 176,029	\$173,970.53	
5. Discretionary	8830-1853	Underperforming Feeder Program	\$ 10,000	\$ 885	\$9,115.29	
5. Discretionary	8830-1854	Install Mt. Support 16L2-16L3 Feeder Tie	\$ 10,000	\$ 10,711	(\$711.45)	
5. Discretionary	8830-1855	Fence Installation - 407 Miracle Mile Lebanon NH	\$ 550,000	\$ 326,811	\$223,189.18	
5. Discretionary	8830-1863	Replace Lyme Rd P3 Recloser	\$ 100,000	\$ 110,110	(\$10,109.73)	
5. Discretionary	8830-1864	Rockingham Substation	\$ 200,000	\$ 1,568,870	(\$1,368,869.97)	2018 purchase of the land for \$1.5m (see below)
5. Discretionary	8830-1865	Rockingham Substation - Transmission Lines	\$ 300,000	\$ 575,354	(\$275,354.00)	
5. Discretionary	8830-1868	Hendrix Trialer	\$ 48,000	\$ 48,000	\$0.00	
5. Discretionary	8830-1871	ARCOS	\$ 41,100	\$ 51,089	(\$9,989.82)	
5. Discretionary	8830-1872	Pave Salem Yard	\$ -	\$ -	\$0.00	
5. Discretionary	8830-C36426	SCADA Distribution & Automation Specific	\$ 90,000	\$ 171,930	(\$81,930.00)	
5. Discretionary	8830-PE	Preliminary Engineering	\$ -	\$ (1,497,946)	\$1,497,945.77	Reclass of land purchase and CWIP to 8830-1864
5. Discretionary	8830-UNALLOC OH	Unallocated Overhead (1 Month Lag)	\$ -	\$ (108,329)	\$108,328.92	
Grand Total			\$20,828,641	\$17,443,385	\$3,385,256	



Salem Depot – Front View



Salem Depot – Side Yard North



Salem Depot – Side Yard North (View 2)



Salem Depot – Facing South



Salem Depot – Front View (North Side)



Salem Depot – Abutting Restaurant Site



Salem Depot – Facing South From Restaurant Site

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

DE 19-064
Distribution Service Rate Case

Staff Data Requests - Set 3

Date Request Received: 6/21/19
Request No. Staff 3-28

Date of Response: 7/1/19
Respondent: Heather M. Tebbetts

REVISED REQUEST:

2019 Capital budget: Reference Revenue Requirement Model 2018 Test Year, Tab
2019_Cap_Bud

- a. Do any of the project budgets include a contingency factor? If so, which projects, and what is the contingency factor?
- b. Project 8830-1924, LED Street Light Conversion, \$300,000.
 - i) Why is this project budgeted to FERC 364 (Poles, Towers and Fixtures) rather than FERC 373 (Street Lighting and Signal Systems)?
- c. Project 8830-1947, OE-NH Recloser Installations, \$50,000.
 - i) What does REP in the FERC (Column D) stand for?
 - ii) Please explain the notation on row 70 that is highlighted in yellow and tagged as Remove REP.
 - iii) What FERC account(s) will this project be assigned when completed?
- d. Project 8830-1940, 01757 NH ARP Breakers & Reclosers, \$225,000.
 - i) What does REP in the FERC (Column D) stand for?
 - ii) What FERC account(s) will this project be assigned when completed?
- e. Project 8830-1920, Placeholder for Electric Training and Development. \$23,000.
 - i) Why is this project budgeted to FERC 390 Structures and improvements?
 - ii) Please identify the FERC accounting or instructions (CFR 18) that allows this project to be considered capital rather than expense.
- f. Project 8830-1926 Reserve for Unidentified Discretionary Projects, \$100,000.
 - i) Why is a reserve included in the capital budget?
- g. Project 8830-1907, GSE-Dist-Genl Equip Blanket, \$50,000.
 - i) Why is this project budgeted to FERC 390 (Structure and Improvements)?
- h. Project 8830-1923, GSE – Distributed Generation Blanket, \$100,000.

- i) What type of projects are budgeted under this description?
 - ii) How is Distributed Generation considered Distribution?
- i. Project 8830-1990, Transportation Fleet & Equip – Blanket, \$900,000.
 - i) Explain why this project is budgeted to FERC 390 (Structures and Improvements) and not FERC 392 (Transportation Equipment).
- j. Project 8830-1991, 01659 Granite St. Meter Purchases, \$230,000.
 - i) How does the Company account for the purchase of meters?
- k. Project 8830-1906, GSF- Dist. Meter Blanket, \$5,000:
 - i) Explain why this project is budgeted to FERC 364 (Poles, towers, & Fixtures) rather than FERC 370 (Meters).
- l. Project 8830-1933 GSE Backup Battery Program, \$1,000,000.
 - i) How does the Company account for battery purchases?
 - ii) Please explain why the budget category is #N/A.

RESPONSE:

Please note the above request was reformatted on June 21, 2019, after consultation and concurrence with Staff.

- a. Yes. Please see the list of projects below and the contingency they carry. Blanket projects do not carry a contingency factor because we use historical spending for budgeting purposes.
 - 8830-1961: 20%
 - 8830-1964: 25%
 - 8830-1965: 25%
 - 8830-1960: 20%
 - 8830-1944: 20%
 - 8830-1959: 20%
 - 8830-1945: 20%
- b. Please see Attachment Staff 3-28 for the updated FERC accounts for each project. The budget as filed did not have updated FERC accounts, although prior to a project being put in service Plant Accounting reviews the jobs to ensure they are booked to the correct plant account and does not rely on the budget document to determine the appropriate FERC accounting. In addition, the Company received data request OCA 2-10 and found that its 2019 Step Increase Budget and the 2019 Filing Requirements Budget did not match. Three projects were omitted from the 2019 Step Increase Budget. All changes to the budget are italicized for easy viewing.

- i. The FERC accounting has been updated in Attachment Staff 3-28 to reflect account 373. The changes to what FERC accounts were originally in the budget affects the total revenue requirement in the step adjustment. Page 2 of the attachment provides the update to the step adjustment, which is \$10,159 less than what was originally filed. The changes include updating the FERC accounts from the budget, which affected depreciation rates, along with removing projects 8830-1964 and 8830-1965 from the step adjustment revenue requirement as these projects will not be in service in 2019. This update will be made in the update filing later in the proceeding.
- c. Please see the response below.
 - i. REP stands for Reliability Enhancement Program. For purposes of identifying the items that are removed from the step adjustment calculation, REP is used under the FERC account column.
 - ii. REP projects are removed from the step adjustment revenue requirement as the revenue requirement is separately accounted for in the annual REP filing, and not in the distribution rate case.
 - iii. The FERC account will be determined once the project is reviewed by the plant accountant when it is ready to be placed into service.
- d. Please see the response below:
 - i. See the response to part c.i. above.
 - ii. See the response to part c.iii. above.
- e. Please see the response below.
 - i. Please see the response to b.i. above.
 - ii. The capital project is not for training time of employees, it is for the plant to be purchased and put in place for training exercises such as crossarms and poles, whereby the employees learn different standards associated with the plant. The training time of employees is not included in the capital project.
- f. Please see the response below.
 - i. There are times during the year that projects materialize that were not budgeted for in the previous year. An example is the Town of Salem requesting pole relocations because they are improving a road. This type of request would fall under the Public Requirement Blanket, but if we don't have enough funds under that project, we will use this project number to provide the additional funding.
- g. Please see the response below:
 - i. Please see the response b.i. above.
- h. Please see the response below:
 - i. Customers looking to install distributed generation (DG) are required to provide an application. Once the application is received, engineering reviews the location at which the DG is being installed and determines if there are any

necessary system upgrades needed to serve the customer, such as a larger transformer. We must provide the upgrade before the DG is installed to provide safe and reliable service. The cost associated with that upgrade is funded through this project.

- ii. The DG installation is not considered distribution; the upgraded equipment, such as the transformer noted in part l. is what is included in distribution.
- i. Please see the response below:
 - i. Please see the response to b.i. above.
- j. Please see the response below:
 - i. Meters are pre-capitalized materials. Upon purchase and receipt of the equipment, the charges in the meter project number are booked to plant. We also pre-capitalize a retirement unit for an estimated installation cost per unit. Because the labor and material are pre-capitalized, any movement of the meter in the field is recorded as expense. When a meter is ready for disposal, it is retired from plant and an associated install cost retirement unit is retired. An entry is also booked to record an estimated cost of removal per unit retired.
- k. Please see the response below:
 - i. Please see the response to b.i. above.
- l. Please see the response below:
 - i. The Company is in the process of ramping up the battery storage pilot that was approved in Docket No. DE 17-189, and at this time has not purchased any batteries.
 - ii. The battery program is a pilot and does not fit in any of the regularly used budgeting categories.

Project #	Project_Description	Discipline	FERC	Blanket/ Specific /Program	Budget Class	Spending Rationale	Priority	LU FY2019 Capital Budget
8830-1909	GSE-Dist-Land/Land Rights Blanket	E - Overhead/Underground	360	Blanket	E- Land & Land Rights	LU CapEx - Replenishment	2. Mandated	\$ 2,000
8830-1936	GSE-Dist-Telecomm Blanket	E - Telecommunications	397	Blanket	E- Telecommunications	LU CapEx - Replenishment	2. Mandated	\$ 2,500
8830-1906	GSE-Dist-Meter Blanket	E - Overhead/Underground	364	Blanket	E- Meter Installations	LU CapEx - Replenishment	2. Mandated	\$ 5,000
8830-1935	Dist-Transf/Capac Install Blanket	E - Transformers	368	Blanket	E- Transformer Installations	LU CapEx - Replenishment	2. Mandated	\$ 5,000
8830-1931	Install 39L4 Distribution Slayton Hill	E - Overhead/Underground	364	Specific	E - Reliability	LU CapEx - Improvement	4. Regulatory Programs	\$ 5,000
8830-1957	Install Lebanon 1L2-1L3 Feeder Tie	E - Overhead/Underground	364	Specific	E - Load Related	LU CapEx - Improvement	5. Discretionary	\$ 5,000
8830-1920	Placeholder for Electric Training & Development	E - Non-Delivery	398	Blanket	Facilities	LU CapEx - Improvement	5. Discretionary	\$ 23,000
8830-1919	IE-NN Dist Transformer upgrades	E - Overhead/Underground	368	Blanket	E - Load Related	LU CapEx - Replenishment	5. Discretionary	\$ 25,000
8830-1943	Distribution Feeder Power Factor Correction	E - Overhead	364	Blanket	E - Reliability	LU CapEx - Improvement	2. Mandated	\$ 25,000
8830-1994	Security Conversion GSE	E - Non-Delivery	390	Blanket	Facilities	LU CapEx - Improvement	2. Mandated	\$ 25,000
8830-1968	Electric SCADA - Pi	E - Non-Delivery	397	Specific	E - Telecommunications	LU CapEx - Improvement	5. Discretionary	\$ 30,000
8830-1932	Install 39L4 Feeder Position Slayton Hill	E - Overhead/Underground	364	Specific	E - Reliability	LU CapEx - Improvement	4. Regulatory Programs	\$ 45,000
8830-1947	IE - NN Recloser Installations	E - Overhead	REP	Blanket	E - Reliability	LU CapEx - Improvement	4. Regulatory Programs	\$ 50,000
8830-1902	NN D-Line Work Found by Insp.	E - Overhead	364	Blanket	E - Asset Replacement	LU CapEx - Replenishment	2. Mandated	\$ 50,000
8830-1905	01737 GSE-Dist-Subs Blanket	E - Substation	362	Blanket	E - Damage/Failure	LU CapEx - Replenishment	2. Mandated	\$ 50,000
8830-1907	GSE-Dist-Genl Equip Blanket	E - Overhead/Underground	390	Blanket	E - Distribution General	LU CapEx - Replenishment	2. Mandated	\$ 50,000
8830-1927	IT Systems Allocations - Corporate	E - Non-Delivery	391	Blanket	IT	LU CapEx - Improvement	5. Discretionary	\$ 50,000
8830-1922	GSE-Dist-Load Relief Blanket	E - Overhead	364	Blanket	E - Load Related	LU CapEx - Improvement	2. Mandated	\$ 80,000
8830-1918	Charlestown DSub	E - Substation	362	Specific	E - Asset Replacement	LU CapEx - Replenishment	4. Regulatory Programs	\$ 100,000
8830-1949	NN ERR/Pockets of Poor Perf	E - Overhead	364	Blanket	E - Reliability	LU CapEx - Improvement	5. Discretionary	\$ 100,000
8830-1901	01663 GS Storm Program Proj	E - Overhead	364	Blanket	E - Damage/Failure	LU CapEx - Replenishment	2. Mandated	\$ 100,000
8830-1923	GSE Distributed Generation Blanket	E - Overhead	364	Blanket	E - Load Related	LU CapEx - Improvement	2. Mandated	\$ 100,000
8830-1926	Reserve for Unidenfied Discretionary Projects	E - Overhead/Underground	364	Blanket	E - Reliability	LU CapEx - Improvement	5. Discretionary	\$ 100,000
8830-1910	GSE-Dist-St Light Blanket	E - Overhead	373	Blanket	E - Outdoor Lightning	LU CapEx - Replenishment	2. Mandated	\$ 125,000
8830-1914	GSE-Dist-3rd Party Attach Blanket	E - Overhead	364	Blanket	E - 3rd Party Attachments	LU CapEx - Replenishment	2. Mandated	\$ 125,000
8830-1925	IT Systems & Equipment Blanket	E - Non-Delivery	391	Blanket	IT	LU CapEx - Improvement	5. Discretionary	\$ 125,000
8830-1934	IE-NN UG Structures and Equipment	E - Overhead	366	Blanket	E - Asset Replacement	LU CapEx - Replenishment	2. Mandated	\$ 125,000
8830-1961	Golden Rock 23kV Relocation	E - Overhead/Underground	364	Specific	E - Reliability	LU CapEx - Improvement	3. Growth	\$ 150,000
8830-1977	Regulator Repl- NE North NH	E - Overhead/Underground	364	Specific	E - Reliability	LU CapEx - Replenishment	5. Discretionary	\$ 156,036
8830-1956	Install 13L2-9L3 Feeder Tie	E - Overhead/Underground	364	Specific	E - Load Related	LU CapEx - Improvement	3. Growth	\$ 200,000
8830-1964	Rockingham Substation	E - Substation	362	Specific	E - Load Related	LU CapEx - Improvement	4. Regulatory Programs	\$ 200,000
8830-1965	Rockingham Substation Transmission Supply	E - Substation	362	Specific	E - Load Related	LU CapEx - Improvement	3. Growth	\$ 200,000
8830-1966	Install 9L2/9L3 Tie Canobie Lake	E - Overhead/Underground	364	Specific	E - Load Related	LU CapEx - Improvement	5. Discretionary	\$ 200,000
8830-1940	01757 NN ARP Breakers & Reclosers	E - Overhead	REP	Blanket	E - Reliability	LU CapEx - Replenishment	5. Discretionary	\$ 225,000
8830-1991	01659 Granite St Meter Purchases	E - Meters	370	Blanket	E - Meter Installations	LU CapEx - Replenishment	2. Mandated	\$ 230,000
8830-1908	SCADA and Distribution Automation	E - Non-Delivery	397	Blanket	E - Telecommunications	LU CapEx - Improvement	5. Discretionary	\$ 279,200
8830-1924	LED Street Light Conversion	E - Overhead	373	Blanket	E - Outdoor Lighting	LU CapEx - Improvement	2. Mandated	\$ 300,000
8830-1929	Walk in Center Relocation Salem	E - Non-Delivery	390	Specific	Facilities	LU CapEx - Improvement	5. Discretionary	\$ 300,000
8830-1953	Underperforming Feeder Program	E - Overhead/Underground	364	Blanket	E - Reliability	LU CapEx - Improvement	5. Discretionary	\$ 300,000
8830-1904	SCADA Data center upgrades	E - Non-Delivery	397	Blanket	E - Telecommunications	LU CapEx - Improvement	5. Discretionary	\$ 350,000
8830-1959	Golden Rock Distribution Feeder 19L4	E - Overhead/Underground	364	Specific	E - Load Related	LU CapEx - Improvement	3. Growth	\$ 400,000
8830-1913	GSE-Dist-Asset Replace Blanket	E - Overhead	364	Blanket	E - Asset Replacement	LU CapEx - Replenishment	2. Mandated	\$ 400,000
8830-1992	01660 Granite St Transformer Purchases	E - Transformers	368	Blanket	E - Transformer Installations	LU CapEx - Replenishment	2. Mandated	\$ 420,000
8830-1939	IE-NN URD Cable Replacement	E - Underground	366	Blanket	E - Reliability	LU CapEx - Replenishment	5. Discretionary	\$ 500,000
8830-1960	Golden Rock Underground	E - Underground	366	Specific	E - Reliability	LU CapEx - Improvement	4. Regulatory Programs	\$ 500,000
8830-1911	GSE-Dist-Public Require Blanket	E - Overhead	364	Blanket	E - Public Requirements	LU CapEx - Replenishment	2. Mandated	\$ 520,000
8830-1993	GSE Facilities Capital Improvements	E - Non-Delivery	390	Blanket	Facilities	LU CapEx - Improvement	5. Discretionary	\$ 550,000
8830-1945	Golden Rock Distribution Feeder 19L2	E - Overhead/Underground	364	Blanket	E - Load Related	LU CapEx - Improvement	3. Growth	\$ 600,000
8830-1921	GSE-Dist-Reliability Blanket	E - Overhead	364	Blanket	E - Reliability	LU CapEx - Improvement	2. Mandated	\$ 600,000
8830-1948	Londonderry Reconfiguration	E - Non-Delivery	390	Specific	Facilities	LU CapEx - Improvement	5. Discretionary	\$ 660,000
8830-1912	Dist-Damage&Failure Blanket	E - Overhead	364	Blanket	E - Damage/Failure	LU CapEx - Replenishment	2. Mandated	\$ 700,000
8830-1951	Enhanced Bare Conductor Replacement	E - Overhead	365	Blanket	E - Reliability	LU CapEx - Improvement	5. Discretionary	\$ 875,000
8830-1990	Transportation Fleet & Equip. Blanket	E - Non-Delivery	392	Blanket	Vehicles	LU CapEx - Improvement	5. Discretionary	\$ 900,000
8830-1933	GSE Backup Battery Program	E - Non-Delivery	371	Specific	#N/A	LU CapEx - Improvement	5. Discretionary	\$ 1,000,000
8830-1946	Bare Conductor Replacement Program	E - Overhead	REP	Blanket	E - Reliability	LU CapEx - Improvement	4. Regulatory Programs	\$ 1,450,000
8830-1958	Install Service to Tuscan Village South Line	E - Overhead/Underground	364	Specific	E - New Business Commercial	LU CapEx - Improvement	3. Growth	\$ 900,000
8830-1937	GSE-Dist-New Bus-Resid Blanket	E - Overhead	364	Blanket	E - New Business Residential	LU CapEx - Improvement	3. Growth	\$ 1,000,000
8830-1938	GSE-Dist-New Bus-Comm Blanket	E - Overhead	364	Blanket	E - New Business Commercial	LU CapEx - Improvement	3. Growth	\$ 1,442,000
8830-1944	Golden Rock Substation	E - Substation	362	Specific	E - Load Related	LU CapEx - Improvement	3. Growth	\$ 2,000,000
								\$ 20,034,736

Step
Final
RR

Liberty Utilities (Granite State Electric) Corp.
Step Adjustment- 2019 Capital Budget

Schedule Step																
Line	Description	Substation	Backup Batteries	Distribution Land	Misc Equipment	Underground Conduit	Office Furniture	Street Lights	Transportation	OH Conductors	UG Conductors	Transformers	Meters	General	Telecom Equipment	Total
	<u>FERC Account</u>	362	371	360	398	365	391	373	392	364	366	368	370	390	397	
1	Deferred Tax Calculation															
2	Capital Spending	2,550,000	1,000,000	2,000	23,000	875,000	175,000	425,000	900,000	8,308,036	1,125,000	450,000	230,000	1,585,000	661,700	18,309,736
3																
4	Tax method	MACRS20	MACRS5	N/A	MACRS20	MACRS20	MACRS7	MACRS20	MACRS5	MACRS20	MACRS20	MACRS20	MACRS20	MACRS20	MACRS5	
5	Tax Depr. Rate, 20-year MACRS	3.75%	14.29%	0.00%	3.75%	3.75%	14.29%	3.75%	20.00%	3.75%	3.75%	3.75%	3.75%	3.75%	20.00%	
6																
7	Annual Tax Depreciation- Year 1	95,625	142,900	0	863	32,813	25,008	15,938	180,000	311,551	42,188	16,875	8,625	59,438	132,340	1,064,161
8																
9	Book Depreciation Rate- Year 1	3.00%	10.00%	10.00%	10.00%	3.26%	4.00%	3.67%	7.50%	3.64%	1.96%	3.51%	5.00%	1.62%	4.17%	
10	Annual Book Depreciation	76,500	100,000	200	2,300	28,525	7,000	15,598	67,500	302,413	22,050	15,795	11,500	25,677	27,593	702,650
11																
12	Tax over (under) Book	19,125	42,900	(200)	(1,438)	4,288	18,008	340	112,500	9,139	20,138	1,080	(2,875)	33,761	104,747	361,511
13	Deferred Tax Balance @ 27.08%	5,179	11,617		(389)	1,161	4,876	92	30,465	2,475	5,453	292	(779)	9,142	28,366	97,951
14																
15	<u>Rate Base Calculation</u>															
16	Plant in Service	2,550,000	1,000,000	2,000	23,000	875,000	175,000	425,000	900,000	8,308,036	1,125,000	450,000	230,000	1,585,000	661,700	18,309,736
17	Accumulated Depreciation	(76,500)	(100,000)	(200)	(2,300)	(28,525)	(7,000)	(15,598)	(67,500)	(302,413)	(22,050)	(15,795)	(11,500)	(25,677)	(27,593)	(702,650)
18	Deferred Tax Balance	(5,179)	(11,617)	0	389	(1,161)	(4,876)	(92)	(30,465)	(2,475)	(5,453)	(292)	779	(9,142)	(28,366)	(97,951)
19	Rate Base	2,468,321	888,383	1,800	21,089	845,314	163,124	409,310	802,035	8,003,149	1,097,497	433,913	219,279	1,550,181	605,742	17,509,135
20																
21	<u>Revenue Requirement Calculation</u>															
22	Return on Rate Base @ 10.23%	252,571	90,904	184	2,158	86,497	16,692	41,883	82,068	818,923	112,301	44,400	22,438	158,622	61,983	1,791,624
23	Depreciation Expense	76,500	100,000	200	2,300	28,525	7,000	15,598	67,500	302,413	22,050	15,795	11,500	25,677	27,593	702,650
24	Property Tax, Insurance @ 2.00%	51,058	20,023	40	461	17,520	3,504	8,510	18,020	166,350	22,526	9,010	4,605	31,736	13,249	366,611
25	Annual Revenue Requirement	380,129	210,927	424	4,918	132,542	27,196	65,990	167,589	1,287,685	156,877	69,205	38,543	216,035	102,825	2,860,886
26		380,129	210,927	424	4,918	132,542	27,196	65,990	167,589	1,287,685	156,877	69,205	38,543	216,035	102,825	2,860,886
27																
28	<u>Rate of Return Calculation</u>	Portion								After-Tax Cost	WACC			Pre-Tax		
29	Equity	55.0%								10.00%	5.50%			7.54%		
30	Debt	45.0%								5.97%	2.69%			2.69%		
31		100.0%									8.19%			10.23%		
32	Bad Debt adder															
33																
34	Municipal taxes															4,842,312
35	Injuries and Damage (Insurance expense)															1,494,365
36	Less: Storm Fund															(1,500,000)
37	Maintenance of General Plant															0
38																4,836,677
39	Plant at Cost															241,559,000
40	As % of Plant Cost															2.00%
41																
42	Total Distribution with Step															8,543,988
43	% of distribution															21.13%
44	% total revenue															8.46%

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

DE 19-064
Distribution Service Rate Case

Staff Data Requests - Set 9

Date Request Received: 9/26/19
Request No. Staff 9-1

Date of Response: 10/10/19
Respondent: Philip E. Greene
David B. Simek

REQUEST:

Re: OCA 2-10 b., Attachment Staff 3-28, Testimony of Greene/Simek at Bates II-093 and Attachment PEG/DBS-2, testimony of Rivera/Strabone/Tebbetts at Bates II-187 to II-191, and testimony of Steven E. Mullen at Bates II-207. Given that the testimony of Liberty's witnesses indicate additional step adjustments beyond 2019 and a process for reviewing those adjustments, please provide the following:

- a. The Company's forecast in the format used in Attachment Staff 3-28 that identifies each of the projects and estimated costs that will comprise any proposed step adjustments for 2020, 2021, 2022, and 2023.
- b. A complete copy of Liberty's most recent 5-year capital plan.

RESPONSE:

- a. See Attachment Staff 9-1.a, which contains planned capital projects for years 2020 through 2023, excluding REP and projects for growth. Please note that this is based on the current 5-year plan and is subject to review and approval during the budget process for these future years as well as under the company's Capital Expenditure Planning and Management Policy.
- b. See Attachment Staff 9-1.b, which contains all planned capital projects under the current 5-year plan. Please note this capital plan remains subject to review and approval during the budget process for these future years as well as under the company's Capital Expenditure Planning and Management Policy.

Project #	Project_Description	Discipline	FERC	Priority	2020 Capital Plan	2021 Capital Plan	2022 Capital Plan	2023 Capital Plan
Not yet assigned	GSE-Dist-Land/Land Rights Blanket	E - Overhead/Underground	360	2. Mandated	2,000	2,000	2,000	2,060
Not yet assigned	GSE-Dist-Telecomm Blanket	E - Telecommunications	391	2. Mandated	2,500	2,500	2,500	2,575
Not yet assigned	GSE-Dist-Meter Blanket	E - Overhead/Underground	364	2. Mandated	5,000	5,000	5,000	5,150
Not yet assigned	Dist-Transf/Capac Install Blanket	E - Transformers	368	2. Mandated	5,000	5,000	5,000	5,150
Not yet assigned	NEN-NH Electric Fence FY10	E - Overhead/Underground	364	5. Discretionary	-	-	-	50,000
Not yet assigned	Remove 1303 Line - Wilder Junction to Sachem Jct.	E-Overhead	362	5. Discretionary	-	100,000	-	-
Not yet assigned	Salem Depot#9 Retirement	E - Substation	362	5. Discretionary	-	-	-	100,000
Not yet assigned	Barron Ave#10 Retirement	E - Overhead/Underground	364	5. Discretionary	-	-	50,000	50,000
Not yet assigned	LED Street Light Conversion	E - Overhead	373	2. Mandated	100,000	-	-	-
Not yet assigned	Security Conversion GSE	E - Non-Delivery	390	2. Mandated	25,000	25,000	25,000	25,000
Not yet assigned	NH ARP Batts/Chargers Repl Prog	E - Overhead	362	5. Discretionary	-	-	25,750	26,523
Not yet assigned	Reserve for Sub Asset Repl Specifics	E - Substation	362	5. Discretionary	-	-	-	51,500
Not yet assigned	NH ARP Relay & related	E - Substation	362	5. Discretionary	-	50,000	20,000	20,000
Not yet assigned	IE-NN Dist Transformer upgrades	E - Overhead/Underground	368	5. Discretionary	25,000	25,000	25,000	25,750
Not yet assigned	01737 GSE-Dist-Subs Blanket	E - Substation	362	2. Mandated	25,000	25,000	25,750	26,523
Not yet assigned	Distribution Feeder Power Factor Correction	E - Overhead	364	2. Mandated	10,000	10,000	25,000	50,000
Not yet assigned	23kV Cable Inspection and Replacement Program	E - Underground	366	5. Discretionary	50,000	-	-	50,000
Not yet assigned	GSE-Dist-Water Heater Blanket	E - Non-Delivery	390	2. Mandated	-	-	-	82,400
Not yet assigned	Install 9L2/9L3 Tie Canobie Lake	E - Overhead	364	5. Discretionary	-	200,000	-	-
Not yet assigned	NN D-Line Work Found by Insp.	E - Overhead	364	2. Mandated	-	50,000	50,000	50,000
Not yet assigned	Repave Parking Lot - 9 Lowell Rd Salem	E - Non-Delivery	390	5. Discretionary	-	200,000	-	-
Not yet assigned	Regulator Repl- NE North NH	E - Substation	364	2. Mandated	50,000	-	-	-
Not yet assigned	Reserve for Reliability Unidentified Specifics	E - Overhead/Underground	364	5. Discretionary	-	-	-	103,000
Not yet assigned	Reserve for Load Relief Unidentified Specifics	E - Overhead/Underground	364	5. Discretionary	-	-	-	106,090
Not yet assigned	Reserve for Public Requirements Unidentified Specifics	E - Overhead/Underground	364	5. Discretionary	-	-	-	106,090
Not yet assigned	Spaulding Hill Line Extension	E - Overhead	364	5. Discretionary	-	250,000	-	-
Not yet assigned	IT Systems Allocations - Corporate	E - Non-Delivery	391	5. Discretionary	50,000	50,000	50,000	50,000
Not yet assigned	GSE Distributed Generation Blanket	E - Overhead	364	2. Mandated	50,000	50,000	50,000	50,000
Not yet assigned	GSE-Dist-Genl Equip Blanket	E - Non-Delivery	390	2. Mandated	50,000	50,000	50,000	51,500
Not yet assigned	Install 39L4 Distribution Slayton Hill	E - Overhead/Underground	364	4. Regulatory Programs	-	290,000	-	-
Not yet assigned	MT Support- 16L7 Distribution Feeder	E - Overhead/Underground	364	4. Regulatory Programs	-	290,000	-	-
Not yet assigned	PS&I Activity - New Hampshire	E - Overhead	364	5. Discretionary	-	-	100,000	100,000
Not yet assigned	Install Solar Panels - GSE Buildings	E - Non-Delivery	390	5. Discretionary	-	300,000	-	-
Not yet assigned	Install Lebanon 1L2-1L3 Feeder Tie	E - Overhead	364	5. Discretionary	-	345,000	-	-
Not yet assigned	IE-NN UG Structures and Equipment	E - Overhead	366	5. Discretionary	50,000	50,000	50,000	50,000
Not yet assigned	Reserve for Unidenfied Discretionary Projects	E - Non-Delivery	364	5. Discretionary	50,000	50,000	50,000	100,000
Not yet assigned	Reserve for Damage/Failure Unidentified Specifics &	E - Overhead/Underground	364	5. Discretionary	-	100,000	103,000	106,090
Not yet assigned	Install 39L4 Feeder Position Slayton Hill	E - Substation	364	4. Regulatory Programs	-	450,000	-	-
Not yet assigned	MT Support- 16L7 Distribution Feeder (Substation)	E - Substation	364	4. Regulatory Programs	-	450,000	-	-
Not yet assigned	Air Break Switch Upgrade Program	E - Overhead	364	5. Discretionary	-	150,000	100,000	100,000
Not yet assigned	Charlestown DSub	E - Substation	362	4. Regulatory Programs	-	-	-	450,000
Not yet assigned	GSE-Dist-Load Relief Blanket	E - Overhead/Underground	364	2. Mandated	80,000	100,000	100,000	103,000
Not yet assigned	NN ERR/Pockets of Poor Perf	E - Overhead	364	5. Discretionary	-	50,000	100,000	100,000
Not yet assigned	SCADA Data center upgrades	E - Overhead	397	5. Discretionary	100,000	100,000	100,000	100,000
Not yet assigned	SAP-Ariba GSE Portion Procure to Pay Software	E - Non-Delivery	397	5. Discretionary	523,080	-	-	-

Project #	Project_Description	Discipline	FERC	Priority	2020 Capital Plan	2021 Capital Plan	2022 Capital Plan	2023 Capital Plan
Not yet assigned	Lebanon Area Low Voltage Mitigation	E - Overhead	364	2. Mandated	-	50,000	50,000	50,000
Not yet assigned	Amerductor replacement program	E - Overhead	365	5. Discretionary	-	100,000	100,000	100,000
Not yet assigned	IT Systems & Equipment Blanket	E - Non-Delivery	391	5. Discretionary	125,000	125,000	125,000	125,000
Not yet assigned	GSE-Dist-St Light Blanket	E - Overhead	373	2. Mandated	125,000	125,000	125,000	125,000
Not yet assigned	GSE-Dist-3rd Party Attach Blanket	E - Overhead	364	2. Mandated	125,000	125,000	128,750	132,613
Not yet assigned	Pelham-New 14L5 Fdr Breaker Position	E - Substation	364	4. Regulatory Programs	-	700,000	-	-
Not yet assigned	Pelham-New 14L5 Fdr Distribution Line	E - Substation	364	4. Regulatory Programs	-	700,000	-	-
Not yet assigned	Feeder Getaway Cable Replacement	E - Underground	364	5. Discretionary	-	-	250,000	250,000
Not yet assigned	Golden Rock Underground	E - Overhead/Underground	366	4. Regulatory Programs	100,000	-	-	700,000
Not yet assigned	Underperforming Feeder Program	E - Overhead/Underground	364	5. Discretionary	-	300,000	103,000	106,090
Not yet assigned	Golden Rock Substation	E - Substation	362	2. Mandated	650,000	-	-	350,000
Not yet assigned	GSE Facilities Capital Improvements	E - Non-Delivery	390	5. Discretionary	600,000	180,000	130,000	178,714
Not yet assigned	Rebuild Lockhaven Rd Enfield Phase 1	E - Overhead	364	5. Discretionary	-	-	10,000	1,000,000
Not yet assigned	Rebuild Lockhaven Rd Enfield Phase 2	E - Overhead	364	5. Discretionary	-	-	-	10,000
Not yet assigned	Main St Salem - Overhead Line Relocation	E - Overhead/Underground	364	2. Mandated	1,200,000	-	-	-
Not yet assigned	Golden Rock Distribution Feeder 19L6	E - Overhead/Underground	364	4. Regulatory Programs	1,300,000	-	-	-
Not yet assigned	01663 GS Storm Program Proj	E - Overhead	364	2. Mandated	300,000	300,000	300,000	300,000
Not yet assigned	Purchase and Rennovate New Building - Walpole	E - Non-Delivery	390	5. Discretionary	-	500,000	500,000	515,000
Not yet assigned	Install Lebanon 1L2 Feeder Tie - Plainfield	E - Overhead	364	5. Discretionary	-	-	300,000	1,000,000
Not yet assigned	Rockingham Distribution Feeders	E - Overhead/Underground	364	4. Regulatory Programs	500,000	1,000,000	100,000	-
Not yet assigned	01659 Granite St Meter Purchases	E - Meters	370	2. Mandated	840,000	250,000	257,500	265,225
Not yet assigned	Transportation Fleet & Equip. Blanket	E - Non-Delivery	392	5. Discretionary	1,129,000	100,000	100,000	550,000
Not yet assigned	GSE-Dist-Asset Replace Blanket	E - Overhead/Underground	364	2. Mandated	400,000	400,000	412,000	424,360
Not yet assigned	Install Vilas Bridge 12L1-12L2 Feeder Tie	E - Overhead	364	5. Discretionary	-	-	300,000	1,000,000
Not yet assigned	01660 Granite St Transformer Purchases	E - Transformers	368	2. Mandated	600,000	420,000	432,600	445,578
Not yet assigned	GSE-Dist-Public Require Blanket	E - Overhead	364	2. Mandated	520,000	520,000	535,600	551,668
Not yet assigned	Golden Rock Distribution Feeder 19L8	E - Overhead/Underground	364	4. Regulatory Programs	-	-	-	2,700,000
Not yet assigned	GSE Backup Battery Program	E - Overhead/Underground	371	4. Regulatory Programs	1,500,000	1,500,000	-	-
Not yet assigned	GSE-Dist-Reliability Blanket	E - Overhead	364	2. Mandated	618,000	636,540	655,636	675,305
Not yet assigned	Enhanced Bare Conductor Replacement	E - Overhead	365	5. Discretionary	875,000	875,000	875,000	875,000
Not yet assigned	SCADA and Distribution Automation	E - Overhead	397	5. Discretionary	-	1,000,000	1,000,000	1,000,000
Not yet assigned	Dist-Damage&Failure Blanket	E - Overhead	364	2. Mandated	1,000,000	1,000,000	1,000,000	1,000,000
Not yet assigned	Rockingham Substation	E - Substation	362	4. Regulatory Programs	500,000	5,000,000	500,000	-
Not yet assigned	IE-NN URD Cable Replacement	E - Underground	366	5. Discretionary	-	1,500,000	1,500,000	1,500,000
Not yet assigned	Customer First Project *	E - Non-Delivery	391	5. Discretionary	3,175,286	15,476,633	3,167,603	-
Not yet assigned	Rockingham Substation Transmission Supply	E - Overhead/Underground	362	3. Growth	500,000	6,000,000	6,000,000	-
					17,934,866	42,707,673	20,071,690	18,227,952

* Customer First project includes upgrade to SAP system and all related integration/applications (SAP Foundation, ERP/EAM, CIS, GIS and AMI)

Project #	Project_Description	Discipline	Priority	2020 Capital Plan	2021 Capital Plan	2022 Capital Plan	2023 Capital Plan	2024 Capital Plan
Not yet assigned	GSE-Dist-Land/Land Rights Blanket	E - Overhead/Underground	2. Mandated	2,000	2,000	2,000	2,060	2,060
Not yet assigned	GSE-Dist-Telecomm Blanket	E - Telecommunications	2. Mandated	2,500	2,500	2,500	2,575	2,575
Not yet assigned	GSE-Dist-Meter Blanket	E - Overhead/Underground	2. Mandated	5,000	5,000	5,000	5,150	5,150
Not yet assigned	Dist-Transf/Capac Install Blanket	E - Transformers	2. Mandated	5,000	5,000	5,000	5,150	5,150
Not yet assigned	NEN-NH Electric Fence FY10	E - Overhead/Underground	5. Discretionary	-	-	-	50,000	-
Not yet assigned	Remove 1303 Line - Wilder Junction to Sachem Jct.	E-Overhead	5. Discretionary	-	100,000	-	-	-
Not yet assigned	Salem Depot#9 Retirement	E - Substation	5. Discretionary	-	-	-	100,000	-
Not yet assigned	Barron Ave#10 Retirement	E - Overhead/Underground	5. Discretionary	-	-	50,000	50,000	-
Not yet assigned	LED Street Light Conversion	E - Overhead	2. Mandated	100,000	-	-	-	-
Not yet assigned	Security Conversion GSE	E - Non-Delivery	2. Mandated	25,000	25,000	25,000	25,000	-
Not yet assigned	NH ARP Batts/Chargers Repl Prog	E - Overhead	5. Discretionary	-	-	25,750	26,523	50,000
Not yet assigned	Reserve for Sub Asset Repl Specifics	E - Substation	5. Discretionary	-	-	-	51,500	51,500
Not yet assigned	NH ARP Relay & related	E - Substation	5. Discretionary	-	50,000	20,000	20,000	20,000
Not yet assigned	IE-NN Dist Transformer upgrades	E - Overhead/Underground	5. Discretionary	25,000	25,000	25,000	25,750	25,750
Not yet assigned	01737 GSE-Dist-Subs Blanket	E - Substatio n	2. Mandated	25,000	25,000	25,750	26,523	26,523
Not yet assigned	Distribution Feeder Power Factor Correction	E - Overhead	2. Mandated	10,000	10,000	25,000	50,000	50,000
Not yet assigned	23kV Cable Inspection and Replacement Program	E - Underground	5. Discretionary	50,000	-	-	50,000	50,000
Not yet assigned	GSE-Dist-Water Heater Blanket	E - Non-Delivery	2. Mandated	-	-	-	82,400	82,400
Not yet assigned	Install 9L2/9L3 Tie Canobie Lake	E - Overhead	5. Discretionary	-	200,000	-	-	-
Not yet assigned	NN D-Line Work Found by Insp.	E - Overhead	2. Mandated	-	50,000	50,000	50,000	50,000
Not yet assigned	Repave Parking Lot - 9 Lowell Rd Salem	E - Non-Delivery	5. Discretionary	-	200,000	-	-	-
Not yet assigned	Regulator Repl- NE North NH	E - Substatio n	2. Mandated	50,000	-	-	-	150,000
Not yet assigned	Reserve for Reliability Unidentified Specifics	E - Overhead/Underground	5. Discretionary	-	-	-	103,000	103,000
Not yet assigned	Reserve for Load Relief Unidentified Specifics	E - Overhead/Underground	5. Discretionary	-	-	-	106,090	106,090
Not yet assigned	Reserve for Public Requirements Unidentified Specifics	E - Overhead/Underground	5. Discretionary	-	-	-	106,090	106,090
Not yet assigned	Spaulding Hill Line Extension	E - Overhead	5. Discretionary	-	250,000	-	-	-
Not yet assigned	IT Systems Allocations - Corporate	E - Non-Delivery	5. Discretionary	50,000	50,000	50,000	50,000	50,000
Not yet assigned	IE - NN Recloser Installations	E - Overhead	4. Regulatory Programs	50,000	50,000	50,000	50,000	50,000
Not yet assigned	GSE Distributed Generation Blanket	E - Overhead	2. Mandated	50,000	50,000	50,000	50,000	50,000
Not yet assigned	GSE-Dist-Genl Equip Blanket	E - Non-Delivery	2. Mandated	50,000	50,000	50,000	51,500	51,500
Not yet assigned	Install 39L4 Distribution Slayton Hill	E - Overhead/Underground	4. Regulatory Programs	-	290,000	-	-	-
Not yet assigned	MT Support- 16L7 Distribution Feeder	E - Overhead/Underground	4. Regulatory Programs	-	290,000	-	-	-
Not yet assigned	PS&I Activity - New Hampshire	E - Overhead	5. Discretionary	-	-	100,000	100,000	100,000
Not yet assigned	Install Solar Panels - GSE Buildings	E - Non-Delivery	5. Discretionary	-	300,000	-	-	-
Not yet assigned	Reserve for New Business Residential	E - Overhead/Underground	3. Growth	-	-	-	159,135	159,135
Not yet assigned	Reserve for New Business Commercial Unident specific & SC	E - Overhead/Underground	3. Growth	-	-	-	159,135	159,135
Not yet assigned	Install Lebanon 1L2-1L3 Feeder Tie	E - Overhead	5. Discretionary	-	345,000	-	-	-
Not yet assigned	IE-NN UG Structures and Equipment	E - Overhead	5. Discretionary	50,000	50,000	50,000	50,000	150,000
Not yet assigned	Reserve for Unidenfied Discretionary Projects	E - Non-Delivery	5. Discretionary	50,000	50,000	50,000	100,000	100,000
Not yet assigned	Reserve for Damage/Failure Unidentified Specifics &	E - Overhead/Underground	5. Discretionary	-	100,000	103,000	106,090	106,090
Not yet assigned	Install 39L4 Feeder Position Slayton Hill	E - Substatio n	4. Regulatory Programs	-	450,000	-	-	-
Not yet assigned	MT Support- 16L7 Distribution Feeder (Substation)	E - Substatio n	4. Regulatory Programs	-	450,000	-	-	-
Not yet assigned	Air Break Switch Upgrade Program	E - Overhead	5. Discretionary	-	150,000	100,000	100,000	100,000
Not yet assigned	Charlestown DSub	E - Substatio n	4. Regulatory Programs	-	-	-	450,000	-
Not yet assigned	GSE-Dist-Load Relief Blanket	E - Overhead/Underground	2. Mandated	80,000	100,000	100,000	103,000	103,000
Not yet assigned	NN ERR/Pockets of Poor Perf	E - Overhead	5. Discretionary	-	50,000	100,000	100,000	250,000
Not yet assigned	SCADA Data center upgrades	E - Overhead	5. Discretionary	100,000	100,000	100,000	100,000	100,000
Not yet assigned	SAP-Ariba GSE Portion Procure to Pay Software	E - Non-Delivery	5. Discretionary	523,080	-	-	-	-

Project #	Project_Description	Discipline	Priority	2020 Capital Plan	2021 Capital Plan	2022 Capital Plan	2023 Capital Plan	2024 Capital Plan
Not yet assigned	Lebanon Area Low Voltage Mitigation	E - Overhead	2. Mandated	-	50,000	50,000	50,000	400,000
Not yet assigned	Amerductor replacement program	E - Overhead	5. Discretionary	-	100,000	100,000	100,000	300,000
Not yet assigned	IT Systems & Equipment Blanket	E - Non-Delivery	5. Discretionary	125,000	125,000	125,000	125,000	125,000
Not yet assigned	GSE-Dist-St Light Blanket	E - Overhead	2. Mandated	125,000	125,000	125,000	125,000	125,000
Not yet assigned	GSE-Dist-3rd Party Attach Blanket	E - Overhead	2. Mandated	125,000	125,000	128,750	132,613	132,613
Not yet assigned	Pelham-New 14L5 Fdr Breaker Position	E - Substation	4. Regulatory Programs	-	700,000	-	-	-
Not yet assigned	Pelham-New 14L5 Fdr Distribution Line	E - Substation	4. Regulatory Programs	-	700,000	-	-	-
Not yet assigned	Feeder Getaway Cable Replacement	E - Underground	5. Discretionary	-	-	250,000	250,000	250,000
Not yet assigned	Golden Rock Underground	E - Overhead/Underground	4. Regulatory Programs	100,000	-	-	700,000	-
Not yet assigned	Underperforming Feeder Program	E - Overhead/Underground	5. Discretionary	-	300,000	103,000	106,090	400,000
Not yet assigned	01757 NN ARP Breakers & Reclosers	E - Substation	5. Discretionary	100,000	-	100,000	375,000	375,000
Not yet assigned	Golden Rock Substation	E - Substation	2. Mandated	650,000	-	-	350,000	-
Not yet assigned	Install Service to Tuscan Village South Line	E - Overhead/Underground	3. Growth	900,000	100,000	-	-	-
Not yet assigned	GSE Facilities Capital Improvements	E - Non-Delivery	5. Discretionary	600,000	180,000	130,000	178,714	-
Not yet assigned	Rebuild Lockhaven Rd Enfield Phase 1	E - Overhead	5. Discretionary	-	-	10,000	1,000,000	100,000
Not yet assigned	Rebuild Lockhaven Rd Enfield Phase 2	E - Overhead	5. Discretionary	-	-	-	10,000	1,100,000
Not yet assigned	Main St Salem - Overhead Line Relocation	E - Overhead/Underground	2. Mandated	1,200,000	-	-	-	-
Not yet assigned	Golden Rock Distribution Feeder 19L6	E - Overhead/Underground	4. Regulatory Programs	1,300,000	-	-	-	-
Not yet assigned	01663 GS Storm Program Proj	E - Overhead	2. Mandated	300,000	300,000	300,000	300,000	300,000
Not yet assigned	Purchase and Renovate New Building - Walpole	E - Non-Delivery	5. Discretionary	-	500,000	500,000	515,000	-
Not yet assigned	Install Lebanon 1L2 Feeder Tie - Plainfield	E - Overhead	5. Discretionary	-	-	300,000	1,000,000	300,000
Not yet assigned	Rockingham Distribution Feeders	E - Overhead/Underground	4. Regulatory Programs	500,000	1,000,000	100,000	-	-
Not yet assigned	01659 Granite St Meter Purchases	E - Meters	2. Mandated	840,000	250,000	257,500	265,225	265,225
Not yet assigned	Transportation Fleet & Equip. Blanket	E - Non-Delivery	5. Discretionary	1,129,000	100,000	100,000	550,000	-
Not yet assigned	GSE-Dist-Asset Replace Blanket	E - Overhead/Underground	2. Mandated	400,000	400,000	412,000	424,360	424,360
Not yet assigned	Install Vilas Bridge 12L1-12L2 Feeder Tie	E - Overhead	5. Discretionary	-	-	300,000	1,000,000	1,000,000
Not yet assigned	01660 Granite St Transformer Purchases	E - Transformers	2. Mandated	600,000	420,000	432,600	445,578	445,578
Not yet assigned	GSE-Dist-Public Require Blanket	E - Overhead	2. Mandated	520,000	520,000	535,600	551,668	551,668
Not yet assigned	Golden Rock Distribution Feeder 19L8	E - Overhead/Underground	4. Regulatory Programs	-	-	-	2,700,000	-
Not yet assigned	GSE Backup Battery Program	E - Overhead/Underground	4. Regulatory Programs	1,500,000	1,500,000	-	-	-
Not yet assigned	GSE-Dist-Reliability Blanket	E - Overhead	2. Mandated	618,000	636,540	655,636	675,305	675,305
Not yet assigned	Enhanced Bare Conductor Replacement	E - Overhead	5. Discretionary	875,000	875,000	875,000	875,000	875,000
Not yet assigned	SCADA and Distribution Automation	E - Overhead	5. Discretionary	-	1,000,000	1,000,000	1,000,000	2,000,000
Not yet assigned	Dist-Damage&Failure Blanket	E - Overhead	2. Mandated	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Not yet assigned	Rockingham Substation	E - Substation	4. Regulatory Programs	500,000	5,000,000	500,000	-	-
Not yet assigned	IE-NN URD Cable Replacement	E - Underground	5. Discretionary	-	1,500,000	1,500,000	1,500,000	2,000,000
Not yet assigned	Bare Conductor Replacement Program	E - Overhead	4. Regulatory Programs	1,450,000	1,450,000	1,450,000	1,450,000	1,450,000
Not yet assigned	Customer First Project *	E - Non-Delivery	5. Discretionary	3,175,286	15,476,633	3,167,603	-	-
Not yet assigned	GSE-Dist-New Bus-Comm Blanket	E - Overhead	3. Growth	1,485,260	1,529,818	1,575,712	1,622,984	1,622,984
Not yet assigned	GSE-Dist-New Bus-Resid Blanket	E - Overhead	3. Growth	1,856,575	1,912,272	1,969,640	2,028,730	2,028,730
Not yet assigned	Rockingham Substation Transmission Supply	E - Overhead/Underground	3. Growth	500,000	6,000,000	6,000,000	-	-
				23,776,701	47,749,763	25,217,042	24,072,936	20,661,610

* Customer First project includes upgrade to SAP system and all related integration/applications (SAP Foundation, ERP/EAM, CIS, GIS and AMI)

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

DE 19-064
Distribution Service Rate Case

Staff Technical Session Data Requests - Set 1

Date Request Received: 10/18/19
Request No. Staff TS 1-20

Date of Response: 11/1/19
Respondent: Joel Rivera
Anthony Strabone
Heather M. Tebbetts

REQUEST:

Re: Staff 9-3, please explain why Sections 3, 5, and 7 are not filled out on the Project Close Out Reports provided.

RESPONSE:

For Section 3, given that the business cases and other project documentation are readily available, and that the status of projects is discussed in the monthly review of capital projects that takes place in the capital budget meetings, the portion of Section 3 indicating the location of certain documents has not been viewed as critical to the overall project documentation. It is viewed as more important that the necessary documentation has been prepared and the approvals received. Blanket projects will not have this information filled out due to the nature of the project. Blanket projects have numerous work orders within them and are usually short duration, such as installation of a residential overhead service. For non-blanket projects, not all of the items in Section 3 may apply, such as the risks and issues log. Sections 5 (Lessons Learned) and 7 (Open Issues) are job specific. If there are no identified issues, these sections will be blank or indicate "N/A." An example of when these sections were not blank was the Project Close Out form provided for 8830-C36430.

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

DE 19-064
Distribution Service Rate Case

Staff Data Requests - Set 9

Date Request Received: 9/26/19
Request No. Staff 9-17

Date of Response: 10/10/19
Respondent: Melissa F. Bartos

REQUEST:

Reference Bartos Testimony. Please provide Liberty's expected increase in primary distribution plant additions over the next 2 to 5 years. Please identify the amount of the primary distribution plant additions that are due to increases in peak demand. For anticipated investments related to increases in peak demand, please provide the total cost, nameplate capacity increase, and anticipated increase in system capacity as evaluated under standard planning conditions.

RESPONSE:

Table 1 on the following pages contains Company information regarding plant additions over the next five years.

Table 1

Project Name 2020 - 2024 Total Cost	Increase in Nameplate Capacity (Increase in System Capacity)	Description of Primary Plant Additions	Description of Secondary Plant Additions	Description of Transformer Plant Additions
Golden Rock Project \$5,800,000	55 MVA (79 MVA non firm)	Add one new 55 MVA 115/13 kV transformer and three distribution feeder positions at the Golden Rock substation. One power transformer and two distribution feeders are added in 2019 and one distribution feeder will be added in 2020. The 2020 feeder installation will require approximately 700ft of 3-1000 kCMIL Cu cables and 2.75 miles of 477 spacer cable. Approximately 55 poles will be replaced as part of this new feeder install.	It is not anticipated that the Golden Rock will add considerable secondary plant. It is assumed that the existing secondary wires will be transferred.	Approximately 24 transformers will be replaced along the 2.75 mile reconductoring project.
Rockingham Project \$20,100,000	110 MVA nameplate from transformer (92 MVA firm)	Add two new 55 MVA 115/13 kV transformers and six distribution feeder positions in a metalclad switchgear configuration. Approximately 2 miles of 3-1000 kCMIL Cu cables and 2 miles of 477 spacer cable will be added as part of this project.	It is not anticipated that the Rockingham project will add considerable secondary plant. It is assumed that the existing secondary wires will be transferred.	The number of distribution transformers that will be replaced as part of this project has not been determined.
Slayton Hill 39L4 Project \$740,000	Not Applicable (One distribution feeder will add approximately 12MVA of capacity.)	The new Slayton Hill 39L4 feeder position will be installed at the Slayton Hill substation to provide load relief to the West Lebanon area from a new customer expansion. Approximately 850 feet of 3-1000 kCMIL Cu cables and one load break will be installed as part of this project.	This project will not add considerable secondary plant.	There will be no distribution transformers replaced as part of this project.

Project Name 2020 - 2024 Total Cost	Increase in Nameplate Capacity (Increase in System Capacity)	Description of Primary Plant Additions	Description of Secondary Plant Additions	Description of Transformer Plant Additions
Mt Support 16L7 Project \$740,000	Not Applicable (One distribution feeder will add approximately 12MVA of capacity.)	The new Mt Support 16L7 feeder position will be installed at the Mt Support substation to provide load relief to the North Lebanon area from a new customer expansion .Approximately 900 feet of 3-1000 kCMIL Cu cables will be installed as part of this project.	This project will not add considerable secondary plant.	There will be no distribution transformers replaced as part of this project.
Distribution Transformer Upgrades \$375,000	Average increase in nameplate capacity is 25kVA. Assuming 50 replacements / year for the next five years gives 6.25 MVA of increased nameplate capacity. (Not Applicable)	This program aims to reduce excess loading conditions on distribution transformers over a 15 year period. Based on a 15 year program, 50 installations need to be replaced annually. This project will not add considerable distribution plant.	This project will reconfigure existing secondary to balance loading and will not add considerable secondary plant.	In the next five years it is anticipated that 250 transformers will be replaced due to capacity issues.

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

DE 19-064
Distribution Service Rate Case

Staff Data Requests - Set 6

Date Request Received: 8/23/19
Request No. Staff 6-23

Date of Response: 9/11/19
Respondent: Joel Rivera
Anthony Strabone
Heather M. Tebbetts

REQUEST:

Re: Staff 3-29 and Staff 5-14 a.:

- a. Confirm that the 2019 growth projects represented in the table in Staff 3-29 totaling \$3.5 million are related to the Tuscan Village project? What other growth projects are related to Tuscan Village but not listed in the table?
- b. To date how much capital has been invested by Liberty in all projects related to Tuscan Village? Please provide an itemization by project number and amount.
- c. Tuscan Village has contributed \$752,989 in CIAC: What is the current estimate for additional CIAC yet to be provided?
- d. What is the estimated dollar amount of the growth projects that will be placed in rate base upon completion?
- e. What is the current completion date for the Tuscan Village project?
- f. If not for the Tuscan Village project, i.e. the project, associated load (14 – 17 MW) and projected revenue (\$2.9 million) do not exist, which of the proposed growth projects would still be included the capital budget and scheduled for construction? Please itemize according to project number and provide the financial and engineering justification for each.

RESPONSE:

- a. As stated in response to Staff 3-29, of the projects listed in the table in Staff 3-29, all are related to the Tuscan build-out except 8830-1956. This project, budgeted at \$200,000, is related to increased load on Interstate 93, Exit 3, and to a recent expansion project at Canobie Lake Park. The following projects are also related to the Tuscan Village expansion but were not categorized as growth projects:
 - 8830-1964 – Rockingham Substation – Asset condition: retire Salem Depot substation

- Rockingham Distribution Feeders – Asset condition: retire Salem Depot substation, new feeders are required serve from the Rockingham substation. The project is expected to commence in 2020 so project numbers are not available at this time.
- b. As of the date of this response, the total capital invested on Tuscan Village-related projects between 2018 and 2019 is \$6.8 million, which includes the \$3.3 million shown in the table in Staff 3-29. Please see the response to Staff 6-24 for the civil and electrical layout of what has been installed to date.
- c. Until the final design for the services at each of the individual parcels is completed, the Company will not know how much more CIAC will be required. The final designs for each service will be provided by the developers on an ongoing basis. Please refer to the response to Staff 6-24 for additional information.
- d. The estimated dollar amount is \$29.95 million, as provided in the testimony of Rivera, Strabone, and Tebbetts on Bates II-197.

Although these projects were categorized as growth, they also look to address other existing system issues, are part of a multi-phased construction approach, and support the construction of the Rockingham projects, as provided in Staff 3-29.a. Other non-growth benefits include:

- Golden Rock 23kV relocation – This project makes room for the addition of a new 115kV line to Golden Rock, (Phase 1 of the Salem Area Study), which will also be routed to supply the new 115kV Rockingham substation and Tuscan Village (Phase 2 of the Salem Area Study).
 - The Golden Rock Substation and associated distribution feeders will support Tuscan Village growth until the new Rockingham substation can be built. They will also support the construction of the Rockingham Transmission Supply by reducing the loading on the 23kV system and facilitate planned outages. In addition, these projects will allow for the retirement of the Barron Ave substation, which needs to be replaced due to asset condition as previously discussed in Docket No. DE 16-383, Response to Staff 4-51, and will reduce the load at risk from the Spicket River substation as previously discussed in Docket No. DE 16-383, Response to Staff 4-50. This is part of Phase 1 of the Salem Area Study.
 - The 13L2-9L3 feeder tie provides additional flexibility to restore load given the additions of the Gateway Project, which consists of an office building, a nursing home, a day care center, and a small business park off Exit 3 on Interstate 93. This project is not related to the Tuscan Village expansion.
 - Rockingham Transmission Supply will install two new 115kV lines to supply the new Rockingham substation. Each Transmission pole line will include a 23kV underbuilt circuit, which will initially serve as the supply to the Olde Trolley substation and, in the future, will serve as new Golden Rock 13kV circuits (Phase 3 of the Salem Area Study).
- e. The estimated completion date for all of Tuscan North and South is 2022. Please refer to the response in Staff 6-24 for the breakdown of the project between the north and south.

This response will be hypothetical in nature given that Liberty does not analyze the system as if certain events that are taking place never occurred. Liberty has a responsibility to serve new load and support customer expansions in its service areas. For example, in 2013 Granite State Electric constructed the 115kV/13kV Michael Ave Substation in response to planned expansion by the Whelen Engineering Company. A new 115kV transmission line, 115kV/13kV transformer, and new 13kV feeder were installed to support the customer's expansion plans. There were no project costs assessed to the customer for the construction of these facilities because the construction of the 115kV/13kV Michael Ave substation also addressed asset conditions with the Charlestown Substation and provided for its ultimate retirement. The Michael Ave project has similarities to the Salem Area projects in that these projects were developed to support specific large customer expansions, address other substation asset conditions in the area, and provide a general benefit to all customers in the area.

If the Tuscan Village project was never planned, the Salem Area Study scope would have had different objectives, leading to potentially different options to serve the growing load in the area and to address asset conditions in the area. This impact cannot be determined without a detailed analysis. However, for the purpose of answering the question as posed, we can summarize that without the planned expansion of the Tuscan Village development we would have been left with the present concerns of the existing distribution system. The major present concerns of the distribution system are as follows:

- Currently, the loss of the existing 115kV supply line to Golden Rock or a failure of the 115kV transformer at Golden Rock will result in approximately 10MVA of load at risk for Liberty's 23kV system. Liberty Utilities depends on National Grid to expedite repairs should an outage-related problem occur anywhere along the National Grid-owned transmission corridor for the G-133 115kV transmission line, or should the Golden Rock substation transformer fail. The contingency for this scenario is to re-supply the load from National Grid's 23kV supply lines 2353 and 2376. These National Grid 23kV lines have limited capacity and cannot supply Liberty's load during contingency. For a transformer outage, the assumed time to install a mobile transformer is 24 hours which could result in 240 MWHs of load at risk and is above the allowable limit per the Liberty and National Grid Planning Criteria.
- The other major capacity issue involves load at risk from the Spicket River No. 13 Substation. The Spicket River No.13 Substation is currently supplied with 23 kV by the 2376 circuit from the National Grid Ward Hill Substation in Methuen, MA. The 2376 circuit ties with the 2353 circuit, which also originates from Ward Hill, via a pole-mounted recloser loop scheme. The tie is located in the Spicket River Massachusetts Right of Way. Downstream of the 2376/2353 tie, the 2376 circuit continues for 4.3 miles in National Grid territory crossing into New Hampshire and traveling 0.9 miles to the Spicket River No. 13 Substation. Approximately 5.2 miles of the 2376 circuit are exposed to outages without any backup, with 4.3 miles in National Grid's maintenance territory and 0.9 miles in Liberty Utilities' territory. An outage on this 23kV supply line occurred during a recent major storm event and resulted in customer outages for customers supplied from the Spicket River Substation. The loss of the 23 kV source for an outage on the 5.2

mile section requires the Spicket River circuits to be backed up by existing distribution circuit ties and there is currently a lack of capacity in the area.

- The last major present concern of the existing distribution system relates to the condition of Salem Depot and Barron Ave Substations. Barron Ave Substation was initially constructed in the early 1960s. There are a substantial number of asset condition and operability issues of concern at Barron Avenue. Its capacity is limited by modular transformers supplied via a 23kV sub-transmission system. The Salem Depot substation is somewhat older, initially constructed in the mid-1950s, with similar or worse asset condition concerns, and with similar transformation and supply constraints.

To varying degrees, there are asset condition, maintenance, and operating issues with most groupings of equipment at both Barron Avenue and Salem Depot. Simply replacing discrete pieces or groupings of equipment would not be feasible due to the multiple equipment deficiencies at the substations. Maintaining, repairing, or replacing the assets in their existing location and configuration, while possible, would be costly and would not be expected to yield a significant improvement in the overall reliability or operability of the substation. Due to the design and overall condition of the steel, foundations, bus, switches, and control houses, both substations would require significant rebuild in situ. Prior experience retrofitting vintage modular or box structure substations supports the notion that retrofit costs can quickly escalate.

Typically, such projects do not result in improved reliability or additional capacity due to the supply system and/or space constraints. In the case of Barron Ave, the substation is located in a residential neighborhood and Granite State has dealt with abutter concerns for decades. Salem Depot is located in a dense commercial/residential area making maintenance access and equipment replacement a significant challenge.

The most apparent solution is to replace, over time, the functionality of both the Barron Ave and Salem Depot assets with modern distribution facilities from a 115kV transmission system supplied substation as close to the Salem load center as possible. Given the loading limitations of the 23kV supply system and the concerns with asset condition, the Company's strategy is to move the distribution system from a 23kV/13.2kV configuration to a more robust and reliable 115kV/13.2kV substation transformer based system. This strategy would still require the Company to undertake the projects listed in Staff 3-29.

A new 115kV transmission line and 115kV/13.2kV transformer and associated distribution feeders would still be required at Golden Rock to retire Barron Ave Substation and reduce the load at risk at Spicket River. The relocation of the 23kV supply line at Golden Rock would still be required to make room for the new 115kV transmission line.

A new 115kV/13.2kV substation, 115kV supply and associated distribution feeders would still be required in the Salem area to retire the Salem Depot Substation, reduce the load at risk at Spicket River and resolve other planning criteria violation. Given the reduced loading projections and capacity requirements, it could be assumed that these projects would be of smaller scale. Itemization according to project number and financial

and engineering justification cannot be determined without performing a detailed analysis and, as such, are not available.

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

DE 19-064
Distribution Service Rate Case

Staff Technical Session Data Requests - Set 1

Date Request Received: 10/18/19
Request No. Staff TS 1-33

Date of Response: 11/14/19
Respondent: Joel Rivera
Anthony Strabone
Heather M. Tebbetts

REQUEST:

Responses to 6-24 and 6-36.

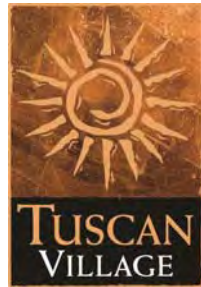
- a. Please provide an updated development project similar to what is shown in 6-24 b.1 and b.2 with the buildings depicted on the drawing that have permanent electric service as of 8-31-19.
- b. Please provide the narrative on the above buildings listed in 8a. above as it relates to the schedule legend on the drawings.
- c. The loading on the park as depicted in 6-36 attachment (excel spreadsheet) does not align with the Company's earlier response of 2.094 MW, please explain the discrepancy.

RESPONSE:

- a. Please reference Attachment TS 1-33.a. Please note the following comments regarding the attachment:
 - The buildings identified in Box 1 are located on the Southern Parcel. They are currently under construction with an expected Spring 2020 Completion Date.
 - The building identified in Box 2 is located on the Southern Parcel. This building is also under construction with an expected Fall 2020 Completion Date.
 - The building identified in Box 3 is located on the Southern Parcel. This building is also under construction with an expected Winter 2020 Completion Date.
 - The building identified in Box 4 is located on the North Parcel and is known as Salem Ford. This building was energized on 3/28/2018.
 - The buildings identified in Box 5 are located on the North Parcel and are known as the Dolben Property. There are five buildings located on this parcel. Each building was energized at different times in accordance with the Developer's Construction Schedule. Energization dates are as follows: 3/1/2018; 8/31/2018;

10/09/2018; 11/29/2018; and 1/25/2019. It should be noted that these buildings are not yet fully occupied with residents.

- The building identified in Box 6 is located on the North Parcel and consists of five Commercial Units. Two of these units are currently occupied while the remaining three are empty. The first commercial unit is occupied by Market Basket. Construction power for Market Basket was energized on 12/10/2018, but Market Basket did not open until 7/1/2019. The second unit is occupied by HomeSense. Construction power was energized on 5/20/2019, but HomeSense did not open until 7/1/2019.
 - The buildings identified in Box 7 are located on the North Parcel and are known as Black Brook Properties. There are twelve buildings located on this parcel. Nine buildings have been constructed and three buildings are still under construction. There are various energization dates associated with this parcel between 5/22/2018 and 9/12/2019.
 - The buildings identified in Box 8 have not yet been constructed. The Developer has not indicated when construction will begin.
 - The buildings identified in Box 9 are not built. The Developer has indicated this portion of North Parcel is currently being redesigned.
- b. Please see the response to part a.
- c. The Company's earlier response of 2.094 MW was based on an estimate that relied on the anticipated annual kWh sales using industry load estimates. The Excel spreadsheet provided as Attachment Staff 6-36.xlsx gives actual load readings from two of the Company's pole mounted reclosers that supply the Tuscan development. Due to construction delays as a result of the developer's redesigning portions of the North parcel, the northern portion of the Tuscan development has yet to reach its maximum demand. The Company will continue to monitor this peak load.



170 ACRE TUSCAN VILLAGE MASTERPLAN

