Approved
E&O and Corporate Services Joint Committee Meeting
Remote Zoom Meeting – October 4, 2023
9:30 a.m. – 12:00 p.m.

Committee Directors: Tom Mongeon (Chair, E&O), Ed French (Chair, Corp Services), Leo Dwyer, Bill Darcy, Jeff Morrill, Alana Albee

Absent: Harry Viens

Attendees: Mike Jennings, Josh Mazzei, Alyssa Clemsen Roberts, Autumn Doan, Kristen Taylor, Dustin Ryan, Jeremy Clark, Jonathan Nelson, Peter Glenshaw, Sharon Davis, Sonja Gonzalez, Dennis Western, Carla Munoz, Attorney Paul Phillips, Maida Lessard (recording)

Chair Mongeon convened the joint meeting with Engineering and Operations and Corporate Services at 9:32 a.m.

Agenda Review

Agenda approved as written.

Meeting Minutes – March 13, 2023

These minutes were approved previously at the Board Meeting. They are included in the packet as informational purposes only.

Proposed 2024 CCB

Overall Dollars

	2023 Budget	2023 Proj Year End	2024 Budget
Recurring	$9,798,000	$10,063,117	$10,350,000
Elective*	$12,040,129	$9,429,753	$11,750,273
*TRP dollars included	$4,950,000	$4,000,000	$4,800,000
Total CCB	**$21,838,129**	**$19,495,870**	**$22,100,273**

TRP = Transformer Replacement Program

Recurring Historical Spending

- Recurring accounts are predicted based on historical spending.
- Dollars are adjusted for known projects (2023 carryover into 2024).
- Trends are taken into account.
    - New Lines – New Consumers has seen a large growth over the years. Expecting a slight decrease for 2024 due to allowance changes.
- Other determining factors.
    - Pole replacements and DOT projects

Mr. Darcy asked what our projection for 2023 is and are we on target for New Lines – New Consumers.

Mr. Jennings replied that we continue to be above average but not as high as the previous year. He did not have the exact number available but will get back to Mr. Darcy by the end of the meeting.

Mr. Darcy asked if the bar graph is a combination of new services and the cost contribution.

Mr. Jennings replied it is after the member has paid their contribution it is the cost to NHEC. This cost is based on any allowances we give the membership.

Ordinary Replacement (0606)

- Costs are typically attributed to storm damage.
- Experienced several storms in 2023 causing a higher projected cost.
- Anticipating 2024 to be more average as long as there are not many storms causing damage.

Projected Recurring Categories

- Due to long lead times (over a year), meter and transformer figures are based on open orders and expected deliveries in 2024. Overhead transformers are lower but should not have a large impact on the membership. We should be able to keep up with our existing stock in addition to any additional maintenance that we are doing.
- DOT has higher than average roadway projects.
- Reduction in 0100 and 0602 due to member contributions.
- Pole Replacement Program (600-PR) was reduced in 2023. 2024 is based on a typical replacement cost and <1% failure rate.
- Total Spending $10,350,000

Ms. Albee asked if our pole revenue increase is at the same proportion as the pole replacement costs and how does she get an overview of that. She also asked if we are still on course to finish SCADA by 2026.

Mr. Jennings replied we are still on course to complete SCADA by 2026. Pole attachment fees are based on a cost study for those attachers. As costs have increased over the years, we also have more attachers which off sets the cost. NHEC has one of the highest attachment fees in the state, but this can be reviewed and re-calculated. The attachment fees could go up or down, but they have to be fair for the costs that are associated with it.

Mr. Dwyer asked how many poles we are replacing with the Broadband project.

Mr. Jennings replied that phase 3 has approximately 200 poles marked for replacement over an 800-mile span for Broadband. This will fluctuate as projects move to more dense attachment areas.

Elective Spending

- $11,750,273 budgeted
- Priority Order
  - Current Issues > Load Driven Projects (Capacity & Voltage) > Reliability
  - Data driven – cost per member minute saved
- Key Items
  - Transformer Replacement Plan $4.8M (41%)
  - Mobile Transformer $2.15M (18%)
  - SCADA Expansion $1.0M (8%)
  - Required Line Upgrades $1.5M (14%)

Mr. Morrill asked what factors drove the difference in the overall 2023 projected year end elective dollars and the budgeted amount for 2023.

Mr. Jennings explained that a large portion of the underspend for that category is due to the delayed payment in 2023 for the mobile substation. A project this large is spread out in stages and one of the down payments budgeted for 2023 ($1.3 million) was for the creation of drawings that was delayed by the vendor due to flooding and evacuations at their facility. The second down payment will not be due until February 2024 now. There was approximately $950K underspend in the transformer replacement program as well.

Mr. Darcy asked if we were to defer some elective items such as the mobile substation or the transformer replacement projects, which category would make sense to do so and be more controllable.

Mr. Jennings explained that the transformer replacement projects are the easiest chunk of money to be saved, but it's about reliability. Many of our existing substations are deteriorating and could cause a negative impact to our members. Many of the items needed for these projects have already been ordered and down payments paid due to the long lead times for materials. If the board decides they would like to defer some of these projects, looking at budget year 2025 and beyond would be advised.

Mr. Darcy also asked about the difference in the material costs vs labor costs to install the transformers and if it would save money to not change the delivery schedule but not actually install them right away.

Mr. Jennings explained there is a combination of costs. The transformer itself is about a quarter of what the entire substation re-build would cost but once the transformer is replaced, there is a series of events that would necessitate the replacement of other equipment in the substation. An example would be once the new transformer is replaced, a proper SPCC plan would be necessary to contain the oil in the transformer. This means digging down to build a new oil containment system and we are finding there are not any ground grids and requires excavation around the substation. This is causing some of the foundations to crumble and need to be replaced. We are finding it more cost effective over time to replace the entire substation rather than just replacing the one transformer. At least 50% of the labor costs could be deferred if the plan was not to install the transformer right after delivery.

Line Conversion (0300)

Load Driven Projects (Long Range Plan)

- Priority projects that <u>must</u> be completed.
- Carry over projects due to delayed pole replacements (CCI pole set areas)
- $1.5 million total for all projects
    - Load balancing (adding phases)
    - Overloads (reconductoring)
    - Low voltage (adding phases or reconductoring)

Reliability (1600)

WB11 Line Relocation (Andover District)

- Phase 1: Complete
- Phase 2: Pending completion
- Phase 3: 2024
- Phase 4: Remove the old line and refeed houses in difficult access areas

Transformer Replacement Program (TRP)

- Barnstead and Webster completed in 2023
    - Jackson Substation started
- Jackson, Bridgewater, & Tuftonboro Substations scheduled for 2024
    - Easement acquired for Bridgewater
    - Tuftonboro transformer failure, will carry over into 2025
- Center Harbor Substation delayed until 2025
- Control houses and transformers ordered due to lead times

Ms. Albee asked if the Tuftonboro substation failure was the reason for the 6 hour outage in July and why is it being carried over to 2025.

Mr. Jennings explained it was a bushing failure on the transformer in the substation and was the reason for the 6 hour outage in July. It is carrying over into 2025 due to the lead times of the materials.

Ms. Clemsen Roberts confirmed that Tuftonboro was not originally scheduled for 2024 but because of this failure, it has been moved up.

New Mobile (being manufactured in CA)

- Provides a second mobile substation
- Necessary for maintenance
- 2nd down payment delayed until February 2024 due to a delay in production drawings

SCADA Expansion

- 2022 Plymouth complete
- 2023 Meredith & Ossipee complete
- 2024 Raymond & Alton
- 2025 Conway & Colebrook
- 2026 Sunapee & Andover
- Other potential grid modernization plans
- Focusing on grant funding and next steps

Capital Construction Budget Summary ($M)

	Capital	Percentage	O&M Impact[1]
Recurring	$10.35	47%	$1.20
Elective[2]	$11.75	53%	$1.36
Total CCB	**$22.10**	**100%**	**$2.56**[3]

1 – Estimated annual income statement/rate impact (interest, tax, depreciation) once completed/capitalized (circa 2025)
2 – Includes Transformer Replacement Project ($4.8M)
3 – $2.56M represents 3.7% of 2023 budget distribution service revenue

Mr. Darcy asked if there are comparable numbers for the current budget, rate impact and percentage of budget.

Mr. Jennings replied that he did not have that information prepared but he will get those figures together and pass the information along.

Ms. Albee expressed her gratitude for all the information so far and encouraged folks to read about grid modernization that has been completed for the strategic plan.

Mr. Dwyer asked what kind of interest rate we are modeling and when completing transformer replacements are they fully depreciated.

Ms. Taylor replied that our cost of borrowing is estimated at 6%.

Mr. Jennings replied that sometimes materials are re-utilized if newer but everything is fully depreciated otherwise.

Chair Mongeon made a motion to recommend the $22.1 million CCB to the Corporate Services Committee and the Board for approval.

Mr. Morrill moved the motion and Mr. Dwyer seconded the motion.

> **VOTED:** Unanimously by E&O committee directors to recommend to the Corporate Services Committee and the Board to approve the $22.1 million CCB budget.

Mr. Glenshaw mentioned that this recommendation to have the full Board approve this $22.1 million CCB will be voted on at the upcoming Corporate Services Committee meeting.

IEEE 1366 Reliability Standards Change

Beginning January 1, 2024, Engineering will be changing from current practice to using the following IEEE Standard to determine a major event day (MED) for reliability analysis.

- IEEE Standard 1366-2022
- IEEE Guide for Electric Power
- Distribution Reliability Indices

Major Event Day (MED)

- A major event day determination is a day in which a daily system criterion exceeds a threshold value.
- Major event days are system events such as severe weather that are beyond the design and/or operational limits of a utility.
- Its purpose of a determination is to allow major events to be studied separately from daily operation, and in the process, to better reveal trends in daily operation that would be hidden by the large statistical effect of major events.
- Major event days are excluded from monthly and yearly balanced score card metric calculations.

Why is Engineering Making This Change?

- To use an industry recognized standard for determining a Major Event Day.
- To use the same standard and threshold calculation used by other NH utilities such as Eversource, Unitil and Liberty.
- To improve reliability metric comparisons with other utilities.

Current Practice for Determining a Major Event Day

- A major event day is declared when the percentage of members out equals or exceeds 5% and the number of concurrent troubles equals or exceeds 75.
- Concurrent troubles are primary and secondary individual events.

Mr. Dwyer asked if an “event” was a line broken in 75 different locations.

Mr. Western replied that was correct. It could mean outages called in, 75 individual and separate primary and secondary outages.

Mr. Darcy asked if the standard would exclude more outage events than previously or fewer.

Mr. Western explained he has some comparable slides to show at the end that would address this question.

IEEE Standard 1366 Method

- A Major Event Day is determined when the daily system SAIDI exceeds a threshold value, TMED.
- The System Average Interruption Duration Index (SAIDI) indicates the total duration of interruption for the average member during a predefined period of time.

- Daily SAIDI values for five sequential years are used in the calculation.
- The standard uses a Beta method process to determine a major event day.

SAIDI Comparison

Mr. Western shared the comparison chart for the annual SAIDI hours to the existing method and the TMED method.

Mr. Darcy commented that the difference in the existing vs the TMED methods are very minimal and that more importantly, using the industry standard makes sense.

Ms. Albee asked how this new method will impact the reporting of major events to the CEO and Directors. She referenced the 6 hour Tuftonboro outage in July that was not reported to the Directors.

Ms. Clemsen Roberts replied this topic was discussed at the last Board meeting and if the Board would like her to report more outage information, she would be happy to. The Coop considers a major outage to be 5,000 members with 75 individual outages. There was one outage at the Tuftonboro substation affecting 2,000 customers. Operations and Engineering gives information to her and she escalates accordingly.

Mr. Jennings further commented that this does not change how outages are reported to the PUC and CEO, but rather for comparison and benchmarking with other utilities.

Grant Discussion Updates

Grid Modernization and 40101(D) Program – the State of NH was just issued a $6.6 million dollar grant. We will be working with the State to obtain some of those funds. Will be focusing on existing programs we are doing. SCADA expansion will be one of them. This will be dependent on the language in the RFP.

Mr. Darcy asked if there are other small utilities in NH that might qualify for this grant as well.

Mr. Jennings replied that there is but doesn't believe they will be interested in this program due to resource reasons. We will be pursuing more money than the set aside amount on the application we submit.

FEMA Mitigation Project

These funds are given to utilities to correct problems and prevent storm damage in the future.

Some projects that NHEC has identified for this grant:

- Removal of large section of RA11 circuit from the ROW and rebuilding it roadside.
    - 1,200 members

- Estimated cost $1.6 million.
- Estimated mitigation funds $2.3 million.
- Josh Mazzei has a meeting with Dr. Downer (FEMA) this month.

ERA Grant

No update or information at this time.

Mr. Darcy asked about the cost share of this grant.

Mr. Jennings replied that we proposed a $9.3 million dollar budget, including staff time, capital construction, O&M costs for the battery operations and maintenance, etc. The NHEC cost share was proposed at $1.875 million, approximately 20%.

Ms. Clemsen Roberts commented that if the Colebrook substation rebuild was not a part of the ERA grant, we probably would not have pursued it due to the staff time and expenses it would take.

Ms. Albee asked if the energy storage report on Center Ossipee that PNNL completed for the Energy Storage for Social Equity grant will be shared with the committee.

Mr. Jennings replied he was not briefed on this and asked if he could come back to this.

Strategic Topic – PUC/DOE Rules

PUC 300

- Quality of service rules for utilities
  - Voltage, frequency, reliability, metering, etc.
  - We follow the majority of the rules regardless
- Not applicable to NHEC except for uniform systems of accounts & record keeping

PUC 1200

- Rules for customer and utility interaction
  - New service, deposits, penalties, disconnects, winter/medical rules
- Not applicable to NHEC except for payment arrangements and collections/disconnects

PUC 800

- “DigSafe”
- Underground marking for safety
- All rules apply

PUC 900

- Net Metering
- Applies to NHEC up to the cap of 3.16 MW
- HB1116 exempts NHEC

PUC 1300

- Utility pole attachments
- "One touch" and timeframes
- Applies to NHEC but Municipals not regulated

PUC 2500

- Renewable portfolio standard
- Certificate for 1 MWh
- Class I-IV up to 2025
- Applies to NHEC

Statutes

- PUC/DOE rules reference the statutes that govern them
- Dozens pertain to "public utilities"
- Some key statutes
    - RSA 231:172 (vegetation management standards)
        - Right to timber, 45-day letter, doesn't apply to easements
    - RSA 301:57 (certificate of deregulation)
        - 60% of members vote
    - RSA 363:37-38 (sharing information)
        - Conexon information sharing, "primary purpose"

MOU with PUC-2014

- Signed agreement that NHEC will "voluntarily" participate in the following:
    - Storm notifications and after-action review
    - Annual informational filings
    - Vegetation management report
    - Safety incidents
    - Quarterly reliability reports
    - Standards for construction
    - Mapping information (GIS)
    - Underground damage prevention (DigSafe)
    - General cooperation – "mutually responsive" to "reasonable requests"

Mr. Darcy commented that in the regulatory world, rate regulation is the most important as a utilities operational and financial decisions are up for scrutiny. The PUC can demand any information in relation to those items, reverse decisions, etc. We are de-regulated on the things that matter the most.

General Updates

2023 Direct Buried Replacement Program

- 7 major projects
    - 6 completed
    - 1 in progress to be completed 2023
- 3.4 miles of cable replaced
- Spend of $2.5 million

Supply Chain Update

- Changes daily
- Unstable –improvements in lead times with the exception of transformers
    - Many transformer suppliers/manufacturers have ramped up production but will likely continue to have challenges.
- The new DOE rule for efficiency would change the existing requirements for core steel to a more efficient core steel which will likely cause significant delays to transformer manufacturers. This is still undecided at this time.

E&O Committee Charter Review

Chair Mongeon made a motion to re-affirm the current charter with no changes.

Mr. Dwyer moved the motion, and Mr. Morrill seconded the motion.

Adjournment

Chair Mongeon adjourned the meeting at 10:54 a.m.