

Final VELCO Operating Committee MINUTES

DATE: September 17, 2020, 1:00 p.m. – 3:30 p.m.

LOCATION: Virtual Meeting (ZOOM)

PARTICIPATING MEMBERS

- **Burlington Electric Department (BED):** James Gibbons, Munir Kasti
- **Green Mountain Power (GMP):** Mike Burke, Brian Otley
- **Stowe Electric Department (SED):** David Kresock
- **Vermont Electric Cooperative (VEC):** Peter Rossi, Kris Smith
- **Vermont Electric Power Company (VELCO):** Frank Etori, Tina Stevens
- **Vermont Public Power Supply Authority (VPPSA):** Stephen Fitzhugh
- **Washington Electric Cooperative (WEC):** Bill Powell

OTHER PARTICIPANTS

Lisa Adamsen (VELCO), Chris Babb (VELCO), Michael Bursell (VEC), Brian Connaughton (VELCO), Tom Dunn (VELCO), Sheilah Evans (Morrisville), Kerrick Johnson (VELCO), Donna Kemnitzer (VELCO), Mathieu Lepage (GMP), Caroline Mashia (VEC), Andrea McNeil (BED), Kim Moulton (VELCO), Dan Nelson (VELCO), Michele Nelson (VELCO), Lynn Paradis (Swanton), Jason Pew (VELCO), Dan Poulin (VELCO), Hantz Pr sum  (VELCO), Mark Sciarrotta (VELCO), Doug Smith (GMP), Allen Stamp (AP Stamp, Inc.), Emily Stebbins-Wheelock (BED), Cheryl Willette (WEC), Kristen Winer (Stowe)

OPENING REMARKS

Mr. Etori verified a quorum of the Operating Committee Members and called the meeting to order at 1:03 p.m. Mr. Etori welcomed everyone to the joint Operating Committee and CFO Forum.

SAFETY TOPIC

Mr. Pew provided highlights from a documented investigation of a thermal runaway event and subsequent explosion at the McMicken Battery Energy Storage facility in Arizona. The 2 MW battery facility just outside of Phoenix was built in 2017 to the applicable standards at that time.

In April 2019, a fire occurred in the facility, and according to the owners investigation, was the result of an internal cell failure within a single battery cell. This single failure caused a thermal runaway that cascaded vertically through its rack containing 13 other batteries. Racks on each side of the impacted rack were virtually untouched, but remained at 90% charge.

When first responders arrived and opened the container door, it resulted in an explosion which injured more than one and significantly damaged the entire facility.

The contributing factors were:

- Internal failure in a battery cell initiated thermal runaway
- The fire suppression system was incapable of stopping thermal runaway
- Lack of thermal barriers between cells led to cascading thermal runaway
- Flammable off-gases concentrated without a means to ventilate

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- Emergency response plan did not have an extinguishing, ventilation and entry procedure

VELCO 2021/22 BUDGET

Mr. Dunn opened with an introduction to the 2021/22 Operating and Capital Budget. He indicated there had been some hard decisions and challenges, but the budget to be presented was a responsible budget.

Ms. Nelson provided an overview of the proposed 2021 Operating Budget.

Mr. Gibbons asked what the non-utility expenses were. Ms. Nelson indicated these are expenses related to the mats.

Ms. Nelson indicated the Operating Expenses included increases in property insurance, increases in software & hardware support, and an increase in support services due to legal costs associated with property tax grievances.

Mr. Connaughton provided an overview of the Capital Budget. Of note for next year, the budget includes construction costs for the New Haven facility. Additionally, it was noted that the Fiber Grid Reliability project is limited to fiber deployment for substations.

Mr. Connaughton also indicated refurbishment of the control center was originally planned for 2020 but due to COVID-19 will occur in 2021.

The budget overview presentation is available in the meeting materials.

BTM GENERATION RECONSTITUTION LOAD ISSUES WITH ISO-NE AND POTENTIAL IMPACTS TO VT

Mr. Etori provided an overview of transmission cost allocation issues for BTM generation. This information was previously presented to the Operating Committee at the August OC meeting. Mr. Etori was presenting this information again in order to share with the CFO members.

Summary of the ISO-NE Internal Market Monitor (IMM) key takeaways:

- Regional Network Load (RNL) is the allocator of transmission costs among network customers and is required to be grossed up (or reconstituted) to account for BTM generation.
- BTM generation is not a tariff defined term but is a well understood concept in the industry.
- There is potential widespread non-compliance with this requirement and/or inconsistent application.
- Under-reporting of RNL results in lower allocation of transmission costs to the under-reporting network customer, and consequently an over-allocation to others.
- BTM generation can have positive impacts in terms of reducing peak load levels and potentially reduction of transmission investment, but under the current tariff provisions the benefits should not be monetized through under-reporting load.
- A number of recommendations are included to address issues raised in the assessment, including:
 - a) Non-compliant PTOs/network customers should change current practices and

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reconstitute monthly RNL values

- b) Review tariff for potential helpful specificity and clarification (e.g. definitions, determination of peak load hours)
- c) Undertake a wider review of the transmission rate structure for consistency with transmission planning process and benefits due to BTM generation

Mr. Etori indicated the VT load is the sum of the tie-lines plus generation. If you exclude generation, your load will be understated. Currently, behind-the-meter generation is being excluded and therefore reduces transmission cost allocation. There is presently approximately 360 MW of behind-the-meter generation.

Mr. Etori indicated the preliminary thinking of the New England Transmission Owners (NETOs) is that generators in front of the load meter would require reconstitution. This would mean standard offer generators (approximately 70 MW) would be at risk, up to 2.2 MW solar installations. Generators located behind the meter would not require reconstitution, which amounts to approximately 290 MW.

Mr. Etori indicated the next steps are as follows:

- Work with NETOs and RUG to develop a more complete proposal.
- Find like minded stakeholders to help champion our proposal.
- Bring draft proposal to ISO staff.
- Present and discuss at Transmission committee meetings.

Mr. Smith asked if there had been any thought as to timing for states to change how they reconstitute loads. The thought is that the states would make this change at the same time.

Mr. Burke indicated he had walked away from last month's meeting with the thought that Vermont had more of an issue than other states. Mr. Etori indicated this is true. All states are impacted, but Vermont will be impacted by a higher percentage.

Mr. Rossi indicated this issue has a direct impact on the fiber build out project since VT Utilities will need to supply more data to VELCO to support RNL. Mr. Gibbons disagrees fiber is necessary since meter data can be obtained via other means. Questions remain as to what level the build out should consider, 150 kW or lower.

NPCC/NERC POTENTIAL VIOLATION DISCUSSION

Ms. Moulton provided an update on the June 6, 2020 tree contact review and the status of the NPCC non-compliance filing for R2 FAC-003. Mitigation plans are ongoing internally at VELCO. Additionally, VELCO met with NPCC last Friday for an initial meet and greet. VELCO is now going into the settlement phase and is working with NPCC through this process. There is the potential for a substantial fine. Fines for this type of violation typically begin around \$200,000. The best case would be to have it considered moderate impact and not severe impact.

Mr. Johnson noted VELCO will likely be fined. VELCO's rough estimate is \$100,000. Ms. Nelson has included the rough estimate of \$100,000 compliance cost in the 2020 budget, which will hit in September. The operating costs are still under budget even with the \$100,000 factored in.

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OPERATING COMMITTEE

Mr. Etori reconvened the Operating Committee members following the exit of the CFO participants at 2:03 p.m.

DRAFT MINUTES APPROVAL

Mr. Etori presented the meeting minutes from August 20, 2020 for approval.

Mr. Powell moved for approval, Mr. Fitzhugh seconded, and the minutes were approved as presented without objection.

TELECOM WORKING GROUP

Mr. Stamp provided an update on the reliability based project driven by VELCO, improving VELCO's fiber system. The Telecom Sub-Committee Charter has been sent to the Operating Committee for review. Mr. Stamp asked members to contact him if they had any questions. Mr. Stamp outlined the stages of development work: design and development phase which is the current phase; the next phase will be ownership in details; the last phase is governance. A high level scope of the project is to run fiber to all of the distribution utility substations and then to go to 150 kW data points is being evaluated as a starting point. Presently the WEC and VEC routing reviews are complete, GMP's review is 50% complete, a first pass for VPPSA will be complete by the end of the week, BED and Stowe are under assessment. Mr. Stamp expects to wrap up with a formal report to the Operating Committee which will include status and recommendations from the Telecom Sub-Committee.

NEW ENGLAND LOADS FOR SUMMER DISCUSSION

Mr. Etori presented an overview of ISO-NE forecasted loads versus actual loads for the first part of 2020. The delta for January, February, and March was larger with the ISO-NE actual loads coming in under the forecasts. The ISO-NE actual loads for April and May were still lower than the forecasted loads, but with less of a delta. June ISO-NE actual loads and forecasted loads were relatively close with a delta of only 149 MW. The ISO-NE actual load for July was higher than the forecasted load by approximately 1,154 MW. August data was not yet available.

Mr. Etori next shared a slide which showed the loads for the week of April 21st. April 25, 2020 was the all-time lowest load day with a billing load of only 179.46 MW

JOINT VERMONT ELECTRIC UTILITIES EXERCISE (JVEUE)

Ms. Stevens provided an overview of the Joint Vermont Electric Utilities Exercise which occurred on September 1, 2020 and was conducted by NUARI using their DECIDE Platform. There were over 35 participants and observers. VELCO and VEC were full participants with observation by BED, GMP, VPPSA, WEC, Department of Homeland Security, and Public Service Department. The scenario consisted of a coordinated cyber and physical attack on VT Electric Utilities resulting in the activation of individual response plans and information sharing. The agreed upon objectives were:

- Exercise Individual Response Plans

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- Exercise State-wide Response Playbook
- Exercise Authorities, Escalation, and Information Flow

There was overall consensus from the participants that the exercise successfully achieved the objectives. One common theme identified as an area for improvement was the development of a shared, secure communication platform for non-weather events.

UTILITY POLE LOCATION DATA SUPPORT

Mr. Nelson indicated VELCO has been asked to explore the establishment of a statewide pole database, consolidating pole location data. Presently there is no one location to find pole location data and each utility handles it differently. This database would consist of an integrated interface across all utilities, ingesting data utilities already have. VELCO is proposing to do this in a sustainable way with an exchange with utilities that already have this data. For utilities without this data, VELCO could provide GIS data. Currently, the Department of Public Service (DPS) gathers this data periodically and posts this information on their site.

Mr. Otley asked if there is an accurate inventory as to who can produce digitally produced data versus those who can't. Mr. Nelson indicated as we gain understanding of the capabilities and options, we will be able to describe how this could work. The majority of the effort would likely be in the area of the VPPSA members. Mr. Gibbons indicated he is fine with exploring this topic, but doesn't really see the statewide benefit. The three biggest utilities already have this information and having this database does not lessen the need for these utilities to maintain this information. Mr. Gibbons questions who benefits from this database.

Mr. Rossi indicated the DPS is looking for the VT utilities to provide this data. Once the data is supplied to the DPS, this data becomes publicly available and there is no control over the data any longer. Mr. Rossi indicated with VELCO in control of this statewide database, there would be more control over who is using this data and how the data is used.

Mr. Gibbons expressed concern with an added requirement to maintain data at VELCO. Mr. Nelson indicated VELCO would not support a manual update process, meaning if a VT Utility updates their data, this update flows automatically to update the data at VELCO. Mr. Gibbons indicated his concern relates more to the fact that with more people involved in a state-wide database, more people will be providing their input and opinions on what data should be supplied and maintained. This creates more of a burden for the VT Utilities. Mr. Rossi indicated VELCO would not be dictating the data to be supplied. VELCO would only house the data.

Mr. Johnson indicated there is more to come on this topic. Will need to look at what is tracked currently and what additional data sets will be required. All of this will need to be resolved. Mr. Gibbons indicated he is open to more discussion on this topic. He would just like VELCO to provide more details and to bring back the value proposition.

Mr. Nelson indicated VELCO will proceed with the assessments and will bring information back to the committee.

OTHER BUSINESS

Open discussion

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- None

Next meeting

Date: October 15, 2020, 1:00 p.m. – 3:30 p.m.

Location: Virtual Meeting (ZOOM)

Possible topics for discussion

- Telecom Working Group – standing agenda item
- Update on progress of RNL and Behind-the-meter generation discussion
- Cyber update - Bill Jordan
- Irasburg update

MOTION TO ADJOURN

Mr. Powell moved to adjourn, Mr. Gibbons seconded, and the meeting was adjourned at 3:00 pm.

Respectfully submitted,

Tina Stevens
VELCO OC Secretary