

DRAFT VELCO Operating Committee MINUTES

DATE: February 20, 2020, 11:00 a.m. – 3:00 p.m.

LOCATION: Green Mountain Power Montpelier, VT

PARTICIPATING MEMBERS

- **Burlington Electric Department (BED):** James Gibbons
- **Green Mountain Power (GMP):** Brian Otley
- **Stowe Electric Department (SED):** David Kresock
- **Vermont Electric Cooperative (VEC):** Peter Rossi
- **Vermont Electric Power Company (VELCO):** Chris Root by phone, Frank Etori, Jason Pew
- **Vermont Public Power Supply Authority (VPPSA):** Stephen Fitzhugh
- **Washington Electric Cooperative (WEC):** Bill Powell

OTHER PARTICIPANTS

Jeff Disorda (VELCO), Tom Dunn (VELCO), Andrew Flynn (VELCO), Bill Jordan - partial for the cyber security discussion (VT), Emily Stebbins-Wheelock (BED), and Kris Smith (VEC)

OPENING REMARKS

Mr. Etori verified a quorum and called the meeting to order at 11:08 a.m.

SAFETY TOPIC

Mr. Smith shared an experience within his group regarding a tick borne illness. He noted that even during the winter months, ticks can be a health hazard. The shared experience included a message to following with a health care provider on any questionable issues; the experience was related to a tick borne illness and the timely appointment with health care professionals served to mitigate further issues.

CYBER SECURITY DISCUSSION

Mr. Jordan discussed VT Docket No. 7307 and the “Statement of Principles Relative to Cyber Security” that was contained within. This approved document contained provisions requiring communication protocols amongst the electric utilities and the statewide energy efficiency utility for the purpose of sharing cyber-security information. Mr. Jordan continued and requested that a group contact list with representatives for each utility be constructed, similar to the Vermont Joint Utilities and State Agencies Emergency Preparation Program developed to respond to weather and other physical threats to the reliability of electric and telecommunication services, be created.

This cyber group would be focused on the dissemination of cyber-security information and events should the need arise. Mr. Jordan asked if VPPSA should be included; the group agreed they should. Additionally, Mr. Jordan asked if subject matter experts should be included in such a group call such as the FBI; the group discussed an outside entity such as Norwich might be able to provide support. Mr. Root offered that the Electricity Information Sharing and Analysis Center (EISAC) would be a good information source and should be considered for the contact list. Additionally, Mr. Root mentioned that Mr. Jordan might be able to receive EISAC information and should look into receiving pertinent notifications.

Communication could be in-person meetings or via a teleconference, however, it was noted that a phone call might not be secure enough.

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Mr. Smith noted that information shared on any call needs to be secured, not just with regard to the call itself but with whom the information is shared. He further suggested a non-disclosure agreement might be warranted.

Also noted was the fact that state agencies and municipalities are subject to public record requests and would need to be provided if minutes or other written documentation was kept.

Mr. Otley suggested that information within a Storm Call is broad level context and specifics of any issues would take place between effected entities. This approach could be used with regard to similar cyber-security issues in that information could be shared in general context, but specific information would be reserved for direct person-person calls between affected parties.

Mr. Pew suggested that the Norwich University Applied Research Institute (NUARI) is currently working with a group of electric utilities and that this can help to address the needs for protocols. Mr. Jordan asked if having these protocols in advance of the exercise would be helpful; Mr. Pew agreed. Mr. Jordan offered that he will be prepared to deliver protocols at his prior to the planned NUARI exercise.

Mr. Root suggested that in contrast to the Storm calls, a large group call is not appropriate as attendees are not well defined and discussion of sensitive topics will not likely occur.

Mr. Jordan proposed an end this conversation for now and will get back to the communication protocol discussion in April during his next planned visit to the Operating Committee.

Mr. Jordan asked who could facilitate the Cyber-Event Contact List and who would provide oversight to such a call. Mr. Etori offered that VELCO could maintain and moderate such calls.

Mr. Jordan thanked the group and existed the meeting.

DRAFT MINUTES APPROVAL

Mr. Etori presented the meeting minutes from January 16, 2019 for approval. Mr. Pew provided a correction to the date.

Mr. Powell moved for approval with said date correction, Mr. Otley seconded, and the minutes were approved as corrected.

UTOPUS UPDATE

Mr. Etori provided that UI shut down access to the UI portal last week. At this point no one has come forward to report the portal is no longer working. The assumption is that everyone who had previously used the tool had been aware of the discontinuation of service and no surprises were revealed.

LIGHT DETECTION AND RANGING

Mr. Flynn provided a presentation of VELCO's vegetation management program and its use of Light Detection and Ranging (LIDAR). A digital inventory of Rights of Way were initially completed in 2008. Over the past 12 years, the system has been using ruggedized laptops and recently a few iPads have been deployed in the field to determine their effectiveness.

The vegetation management cycle includes inventorying, budgeting, work execution, monitoring, verification, and prediction of the next cycle of management.

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LIDAR is captured via helicopters, as they are slow enough and lower than fixed wing aircraft, supplying higher level of detail. Additionally, LIDAR data was historically captured during leaf-off conditions, providing for better representation of ground contours.

Data collected provides vegetation canopy mapping, ROW features, and a Point Cloud (3D model) of the imaged area. The point cloud is then transformed into a 2D map that is provided to Foresters from which they can evaluate the ROW prior to going into the field.

Mr. Flynn provided an online demonstration of the final product used by foresters. The foresters use this information to evaluate the specific locations identified to prescribe, or not prescribe, a ROW treatment.

Mr. Flynn has developed a model for use on the VELCO data set and is currently testing its effectiveness in determining what vegetation management can be gleaned directly from the data. This model is still under development.

Next steps include developing tree growth rates, the use of Sonic Tomography to determine wood decay in trees and possibly wooden structures, development of partnership opportunities.

PI COMMUNITY AGREEMENT

Mr. Nelson provided an overview of the PI Community Agreement. The Agreement allows the VT Electric Utilities to archive data in a central location for use at a later time. This data can be used to determine maintenance activities, to display near real-time data, fault analysis and/or event investigation.

Mr. Nelson reviewed a test display with WEC that allows them to view WEC assets, where monitoring exists, as well as associated sub-transmission circuits supplying those assets.

Mr. Root reported that increased monitoring is being deployed throughout electric utilities that provides a significant amount of data. This data can be archived and at VELCO, allowed by the Community Agreement, and mined at a later date.

Mr. Nelson reported that the mountaintop radio sites are currently being monitored (generator, battery, fuel supplies, etc.) and displayed for VELCO Telecom's situational awareness.

Mr. Rossi took the opportunity to discuss the Statewide Radio System. Specifically the "Storm Channels" and how they are deployed. These Storm Channels can be used to support a cross section of radio groups during joint efforts, such as restoration. Additionally, Mr. Rossi requested training on the use storm channels and general radio functions is also desired.

VEGETATION MANAGEMENT SERVICES

Mr. Disorda discussed a VELCO project that assisted the Littleton Water and Light Company (LWL) in developing a vegetation management practice document and execution of some of the tasks identified. This assistance was done through in support of product and services offerings that supports VELCO's goal to increase revenue and reduces revenue requirements for all VT Utilities.

The project was proposed in four phases:

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1. Develop a vegetation management program for the LWL 34.5 kV sub-transmission system (7.75 miles) to include a complete inventory and scope of work to complete the proposed plan.
2. Execute the vegetation management plan to include procurement and management of contractors, landowner engagements by VELCO, and use of VELCO's vegetation management tracking software.
3. Develop a ROW herbicide program that could provide savings over flat-cutting
4. Construct access roads within the ROW

Phase 1 has already occurred and phase 2 is expected in 2020. Phases 3 and 4 are potential future engagements that have yet to be finalized.

Next steps include maximizing VELCO staff utilization, brainstorm options with other distribution foresters, enhance tool sets, be responsive to distribution needs, quantify and deliver value.

VELCO BOARD OF DIRECTORS UPDATE

Mr. Dunn provided an update from the past VELCO BOD meeting. Most noteworthy was a review of the VELCO Key Performance Indicators (KPIs) that included safety, compliance, finance, and reliability.

OTHER BUSINESS

Open discussion

- Mr. Otley discussed an event in Shrewsbury where the majority of residents had no access to emergency services (911). The event occurred over approximately three days. The VT PUC is likely to provide an order soon that would require a data set of power outages lasting 1-24 hours or >24 hours in aggregate for 2017, 2018, and 2019 by town. The loss of electric service to communications equipment was attributed to the loss of telephone access. Mr. Otley anticipates having data to DPS by mid-March.

Next meeting

Date: March 19, 2020, 11:00 a.m. – 3:00 p.m.

Location: Green Mountain Power Montpelier, VT

Possible topics for discussion

- Mr. Presume report on status of the K42 study
- Mr. Shafer, Northview Weather, report on status of long range weather study

MOTION TO ADJOURN

Mr. Powell moved to adjourn, Mr. Otley seconded, and the meeting was adjourned at 1:47 pm.

Respectfully submitted,

Jason Pew
VELCO OC Secretary