

Final VELCO Operating Committee MINUTES

Date: March 21, 2019, 11:00 a.m. – 3:00 p.m.

Location: Green Mountain Power Montpelier, VT

Call-in: 1-866-720-4556, Code: 6027065

PARTICIPATING MEMBERS

- **Burlington Electric Department (BED):** James Gibbons
- **Green Mountain Power (GMP):** Mike Burke, Ken Couture
- **Stowe Electric Department (SED):** David Kresock
- **Vermont Electric Cooperative (VEC):** Peter Rossi, Ken Tripp
- **Vermont Electric Power Company (VELCO):** Chris Root, Jason Pew
- **Vermont Public Power Supply Authority (VPPSA):** Stephen Fitzhugh
- **Washington Electric Cooperative (WEC):** Bill Powell

OTHER PARTICIPANTS

Jeff Disorda partial by phone (VELCO), John Flynn (VELCO), Rebecca Foster partial (Efficiency Vermont), Kerrick Johnson partial (Efficiency Vermont), Shana Louiselle (VELCO), Colin Owyang (VELCO), Hantz Presume (VELCO), Jay Shaffer (Northview Weather), Kris Smith (VEC), David Siuta (Northview Weather), Barry Hulce partial (Efficiency Vermont), Allen Stamp partial by phone, and Mark Sciarrotta (VELCO)

OPENING REMARKS

Mr. Root reviewed the agenda which includes a presentation from Efficiency Vermont (EVT) that will take place prior to the normal business, introductions were made around the room, and the meeting was called to order at 11:05 a.m.

EFFICIENCY VERMONT

Ms. Foster provided a presentation and discussed the changes to EVT's focus and its continued evolution under the leadership of Mr. Jim Madej (CEO, Vermont Energy Investment Corporation). The evolution of the company began with a "Listening Tour" in 2017 in which the company engaged in discussions with each of the VT Distribution Utilities' (VDU) management.

The focus of EVT was summarized as a change to EVT's culture (additional customer and partner focused), operational efficiency (2018 was \$2.3M under budget), and embracing innovation and collaboration (EVT cannot achieve goals for efficiency within VT without strong relationships with the VDUs). One goal within VT is not just to reduce load, it also involves making electrification work by embracing technology such as battery storage and these types of projects must be integrated with the VDUs to be successful.

Mr. Hulce discussed the common values shared between EVT and the VDUs. Those shared values included affordable and reliable electric with less carbon dependent fuels. He continued to discuss some of the successful projects they have implemented in partnership with the VDUS. One project discussed included a brewery that wished to electrify its hot water from carbon based fuel but the cost would have been prohibitive. EVT worked with the utility to develop "allowable hours of operation" and an associated rate for those hours. This resulted in a cost savings for the customer as well as promoted the electrification of the

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brewing process.

A specific discussion on the constrained northern VT area (Sheffield Highgate Export Interface – SHEI) took place.

Mr. Gibbons discussed Tier 3 obligations are DU responsibilities and that EVT could be a partnership in meeting those. A specific example of knowing where loads are added (successful electrification) would help the VDUs in preparing the infrastructure to accept such increased loads; load reduction by efficiency measures has less of an impact.

Mr. Hulce continued with the challenges of siloed efforts between the VDUs and EVT. He reported that in the end everyone shares the same goals regardless of who gets the credit.

EVT DEPARTURE, RESUMED STANDARD OPERATING COMMITTEE BUSINESS

SAFETY TOPIC

Mr. Rossi provided a safety event that involved a VEC contracted tree crew. The crew was felling a large tree and a worker was struck by the tree as it hit the ground. The crew did not have sufficient rope length to comply with standard safety practices and had to rope the tree and pull from within the fall zone.

The worker was struck in the head by the trunk and received a concussion and additional non-life threatening injuries. It appears that the snow depth in the area likely saved his life as he was pushed into the snowpack following the impact and the bulk of the tree remained on the surface.

Several positive observations were made. They included accurate information on the tailboard that included the E911 address, a fully stocked first-aid kit and excellent response by non-professional first responders, and good communication once emergency services were identified as necessary. Areas of improvement were also noted. These included that 911 should have been called first (initial call was to the contracted company management), had they had sufficient rope length they would have been able to rope correctly and not been put in danger, the tree could have been taken down using a bucket as it was adjacent to a road, the tree was not measured for height (only estimated).

The event triggered a 3-day stand down by the crew per VEC policy. Additionally, following the event a second, unrelated, close call occurred with a different tree crew. These two events combined resulted in a full safety stand down of all VEC tree crews.

MINUTES APPROVAL

Mr. Root presented the meeting minutes from February 21, 2019 for approval.

Mr. Fitzhugh moved for approval, Mr. Rossi seconded, and the minutes were approved without objection.

EMERALD ASH BORER (EAB) UPDATE

Mr. Disorda provided an overview of the EAB Committee. He reported that they initially met a few weeks ago with the individuals involved. The desire is to have a collaborative effort to reach landowners and municipalities on the potential dangers of ash trees if they become

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infected. He further reported that this winter's cold weather will not impact the EAB population as temperatures needed for a population decline are approximately -20°F for a longer duration that we have seen.

Mr. Root inquired about any collaboration with neighboring states. Mr. Disorda reported that the VT Forest and Parks had a presentation that included a representatives from Syracuse, NY as well as the VT League of Cities and Towns. Having all the interested parties in one place assists with efficiently distributing the group's message. An example of the need to engage VTRANS surrounding possible danger trees was cited. Specifically, the utilities may remove trees that are within the ROW, however, many roadside lines can be impacted by trees from the opposite side of the road but the utilities have no rights to remove them.

Mr. Flynn reported that Mr. Disorda and his team have been using the VELCO communication team to keep landowners informed.

It was suggested that all utilities collaborate to develop a unified message. Mr. Powell reported that WEC is in the process of developing information; he will follow up with WEC personnel for inclusion in the group.

Mr. Gibbons requested future communications include BED.

CYBER SECURITY DISCUSSION

Mr. Root discussed the NERC Reliability Leadership Summit he attended in Washington, DC last week. The discussion included inverters used in distributed generation (DG). The exposure for a widespread event effecting DG has the potential to disrupt normal system operations. Continuing, he discussed NERC Standard CIP-013, supply chain, and its requirement that assurances from Bulk Electric System cyber asset vendors that they are safe and contain no hidden or unknown software.

Mr. Root proposed that an Operating Committee round-table on cyber issues be established. He reported that Brian Evas-Mongeon, CEO of Utility Services in Waterbury, VT, is the Chair of the NERC Planning Committee and might be interested in attending such a round-table discussion. In addition, Mr. Bill Jordan, Director of the VT Department of Public Service, and potentially representatives from the State Emergency Operations Center (SEOC), FBI, and others were discussed that might have interest in attending.

Mr. Fitzhugh suggested that the Norwich Cyber War Room could be a potential location for the discussion.

Mr. Rossi requested a schedule for any regular cyber discussions to provide to pertinent VEC personnel so they could attend.

WORKPLACE DIVERSITY

Mr. Root discussed an initiative called Lineworker Diversity to increase the presence of women line workers. A proposal to fund the initiative has been discussed as well as looking to VLITE as an additional funding source. Funds could be used for scholarships to send women to Lineworker School. A goal of the initiative is to get female lineworkers employed

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within VT.

SHEI DAIRY AIR WIND DISCUSSION

Mr. Presume began the discussion by referencing an agreement between Dairy Air Wind (DAW) and VEC. The agreement has not been accepted by the VT Public Utility Commission (PUC) and the proposed project remains open with no CPG.

NORTHVIEW WEATHER

Mr. Rossi introduced Mr. Shafer of Northview Weather. Mr. Shafer and Mr. Siuta provided a presentation that summarized a proposed research project relating to current and future risks to the VT electric grid from a weather perspective.

The presentation referenced historical data provided by VEC that indicated the quantity and duration of outages over the past five years is trending upward. Additional historical data was reviewed with an emphasis on tree or severe weather as the root cause of outages; those too were on the rise.

The proposed research project includes two distinct steps. Step-1 is to develop information to understand system baseline performance around extreme weather related outages. Step-2 is to develop prediction of future weather risks resulting from climate change.

The project results could be used to make more informed decisions on where to harden assets, make changes to current vegetation management decisions, and other process modifications not yet identified. These types of informed decisions will lead to a more resilient VT electric infrastructure.

The project would provide specific deliverables:

- Comprehensive public-release report discussing current and future weather risks to the VT grid
- Comprehensive documents detailing utility-specific risks
- Scientific presentations (Conferences, peer-reviewed literature)
- Educational benefit to Northern Vermont University (NVU)

The project budget was reviewed with two distinct management options: NVU or Northview. Each option included the use of NVU students and additional hardware and storage necessities among other items.

Mr. Root requested that each member consider the proposal further and proposed a vote at a future meeting.

OTHER BUSINESS

Open discussion

- Additional Northview Weather products were discussed. Currently VEC has access to Northview Weather related products that include a short-term event prediction model. The prediction includes both the location and number of weather related events. There was a desire expressed by some members to have VELCO perform an administration function if additional members were to enter into an agreement with Northview Weather. This administration function would facilitate the overall project

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and be a medium for billing to be distributed to other parties.

- Mr. Owyang discussed potential agreement scenarios. Mr. Rossi discussed providing the VEC agreement to Mr. Owyang with the intention of it being adopted for a new agreement should others want to join.

Next meeting

Date: April 18, 2019, 11:00 a.m. – 3:00 p.m.

Location: Green Mountain Power Montpelier, VT

Possible topics for discussion

- Schedule for Cyber working group report out
- Schedule for EAB working group report out
- Agreement for “short-term forecasting” between participating members and Northview where VELCO would perform a project manager role
- Agreement for “long-term trending” and potential outage trending caused by climate change for VT where VELCO would be a participant in any agreement
- St. Johnsbury event report out

MOTION TO ADJOURN

Mr. Rossi moved to adjourn, Mr. Root seconded, and the meeting was adjourned at 03:20pm.

Respectfully submitted,

Jason Pew
VELCO OC Secretary