Date: September 19, 2019, 11:00 a.m. – 3:00 p.m. **Location:** Green Mountain Power Montpelier, VT

Call-in: 1-855-260-5550, Code: 7706298

PARTICIPATING MEMBERS

- Green Mountain Power (GMP): Mike Burke, Ken Couture
- Stowe Electric Department (SED): David Kresock
- Vermont Electric Cooperative (VEC): Peter Rossi
- Vermont Electric Power Company (VELCO): Chris Root, Frank Ettori
- Vermont Public Power Supply Authority (VPPSA): Craig Myotte (by phone)
- Washington Electric Cooperative (WEC): Bill Powell (partial)

OTHER PARTICIPANTS

Lisa Adamsen (VELCO), Dawn Bugbee (GMP), Michael Bursell (VEC), Tom Dunn (VELCO), Abe Fitch (VELCO), Kerrick Johnson (VELCO), Donna Kemnitzer (VELCO), Matthew Lepage (GMP), Shana Louiselle (VELCO), Caroline Mashia (VEC), Dan Nelson (VELCO), Michael Nelson (VELCO), Brian Otley (GMP) partial, Colin Owyang (VELCO), Dan Poulin (VELCO), Jim Reardon (BED), Ed Ryan (GMP), Mark Sciarrotta (VELCO), Tina Stevens (VELCO), Trish Waugh (SED)

OPENING REMARKS

Mr. Root verified a quorum of the Operating Committee Members and called the meeting to order at 11:02 a.m. Mr. Root welcomed everyone to the joint Operating Committee and CFO Forum and asked the attendees to introduce themselves.

SAFETY TOPIC

Mr. Fitch spoke to the approach of the fall foliage season and the need for awareness of other drivers due to their unpredictability. The upcoming changing of the seasons will result in frost on the windshields and we should all take the extra time to defrost our windows for visibility and anticipate slippery road surfaces. Mr. Fitch also mentioned stinging insects are more aggressive this time of year and those with allergies should be aware of this. This is also the time of year for increased tick activity.

VELCO 2020/21 BUDGET

Ms. Nelson provided an overview of the proposed 2020 Operating and Capital Budget. The budget overview presentation is available in the meeting materials.

Mr. Root indicated compliance will be a driving factor in the future.

Mr. Rossi asked if the VT utilities should expect to see more costs as VELCO does more substation improvement projects. Mr. Dunn and Mr. Root indicated this could be the case which is why VELCO will keep the VT utilities informed of projects as they are planned and discussed.

Mr. Bursell asked if the budget could be summarized by saying: more revenue is coming from New England utilities and out-of-state utilities and less from VT utilities. Mr. Root and Mr. Dunn both indicated this is an accurate assessment.

Ms. Bugbee asked about the design for the new structures in the Transmission Line Refurbishment line item given climate change. Mr. Root indicated they are steel structures and are of a stronger design. Mr. Dunn indicated the steel cross arms in lieu of wood cross arms on the new structures require less replacement. Ms. Bugbee asked that VELCO consider future climate change impacts as the design for the new structures is developed. Mr. Root said VELCO is also conducting a climate change weather pattern study with Northview Weather to modify our design standards as necessary to incorporate changing weather patterns.

Mr. Couture asked if there are any improvements planned for the Main Control Center. Mr. Root indicated some minor improvements are planned for next year.

Mr. Lepage asked about the main driver for the budget. Mr. Root indicated it is now mostly asset management, whereas years previously it had been reliability.

Ms. Bugbee asked how many electric vehicles are part of the vehicle budget item under Tools & Test / Facilities / Equipment (vehicles). Mr. Root indicated the budget includes 3 ATV's, 10 trucks, and currently no electric vehicles in this budget item.

Ms. Nelson requested any feedback to her within the next few days as she is preparing for the VELCO Board of Directors meeting on October 3rd.

OPERATING COMMITTEE

Mr. Root reconvened the Operating Committee members following the exit of the CFO participants at 12:35 p.m.

SAFETY TOPIC

Mr. Fitch discussed a utility fatality which occurred in Warwick, NY. The accident happened back in August on a 69kV circuit in a rural area. The accident is currently under investigation by OSHA. Two linemen were using an UTV and performing groundwork. It is believed they were doing some manipulation on some guywires. There appeared to be no insulating devices on the guywire. The guywire apparently became loose or something failed and the guywire came in contact with the center phase. The line was not on non-reclosing and tripped 3 times before locking out. Someone called the accident in as a brush fire and when the fire department arrived on the scene, they found the two fatalities.

Mr. Fitch noted this incident has been shared with the safety managers. Mr. Fitch mentioned this accident reinforces the importance of hazard identification during the scope of work, along with proper tailboards.

Mr. Burke indicated GMP issues PVDs to their workers, but this device would not have been useful in this situation.

Mr. Fitch next presented a NERC Alert on Substation Fires and Working with First Responders. The NERC Alert involved two substation fire events. The first case involved a fire which occurred due to an arc flash on a 12kV feeder circuit breaker within an enclosed substation. The second case involved a fault which caused a 230kV C-phase bushing on a

transformer to burst into flames and ignite mineral oil within the transformer.

In the first case, there were delays in the fire department response due to firmware update issues on the alert system, confusion over who the incident commander was, failure of a card reader with a dead battery backup, and miscommunication over fire fighters not entering substation without an escort.

In the second case, bystanders made accessing the site difficult and required police presence. Additionally, the fire department was unfamiliar with the different requirements for a transformer fire and did not have a foam truck on hand, the nearest one being over an hour away. The decision was made to go with a water fog rather than a stream since time was of the essence.

Both cases highlight the importance of having an incident command structure and incident response plan. Some of the key findings included establishing a working relationship with first responders, ensuring there is a plan in place with the first responders, and using the framework of the Incident Command System.

Discussion ensued over transformer fires and the response to such. Mr. Rossi asked about, as an example, the response to a transformer fire at South Hero if it were to occur. The first person to arrive at the site would likely be a VEC employee. Would need to implement an Incident Command structure. The expectation would be to minimize damage to other equipment, let the fire burn out or put foam on it if available.

MINUTES APPROVAL

Mr. Root presented the meeting minutes from August 15, 2019 for approval.

Mr. Burke moved for approval, Mr. Kresock seconded, and the minutes were approved without objection.

GRIDEX DISCUSSION / LOAD SHEDDING PLANS DISCUSSION

Mr. Ettori reminded everyone the GridEx Exercise is coming up in November. During this exercise, there is the high probability of load shedding. Mr. Ettori indicated the VT utilities should be prepared for possible questions during the exercise by ensuring their load shedding plans are up to date, including any rolling load shedding plans. Mr. Ettori indicated VT utilities should send their latest revisions to VELCO operations.

Mr. Root indicated Mr. Fitzhugh had mentioned the possibility of doing a cyber-type table-top exercise with the VT utilities and VELCO. Mr. Rossi indicated VEC would be in support of this. Mr. Burke indicated GMP is likely lukewarm but will take it back and check. Mr. Rossi indicated communications during such events and understanding what type of information should be shared is important and beneficial to VT utilities. Mr. Burke agreed this would be beneficial in terms of communications.

Mr. Nelson agreed communications are key. At the present time, everyone knows who to call, but it is also important to solidify this information and understand who the backup is.

Mr. Rossi also spoke to needing a secure line even when bringing the system back. This is

the area of concern. Ensuring we are not exposing the next layer to the recovery.

Mr. Owyang asked if the VT utilities would be opposed if only VELCO were to take part in such an exercise if the VT utilities chose not to. There were no objections.

FIRSTNET DISCUSSION

Mr. Nelson provided a quick overview of FirstNet, being built by ATT, and its purpose to provide priority calling for first responders. AT&T is currently in year 2 of a 5-year plan, and has 13 of 30 new tower locations built.

Mr. Rossi mentioned VEC has 75% of their accounts with FirstNet.

Mr. Nelson and Mr. Rossi discussed their operational understandings of the network and identified discrepancies. They agreed to follow up after the meeting to include the ATT representatives for clarification. They both agreed transitioning to the FirstNet network appears less expensive than traditional business lines with ATT.

Mr. Nelson indicated VELCO has not transitioned onto the FirstNet system and is in the process with ATT. Mr. Rossi indicated VEC has been working on the transition since last December. All accounts are in the process of moving over and they have signed a contract. Mr. Rossi sees no downside from his perspective. Mr. Rossi expects VEC to be done with the transition in a month or so.

Mr. Nelson indicated, under the FirstNet Contract, AT&T pools all of the data minutes amongst all users which is beneficial.

Mr. Powell asked how many states have signed up. Mr. Rossi verified online that all states have signed up.

VELCO RADIO NETWORK DISCUSSION

Mr. Nelson provided an overview of the development and history for the radio system. He explained the age, technology, and limitations of the current system are driving the need for change. The first step is to develop a project plan which will include collaborating with stakeholders to evaluate and complete a needs assessment for the development of an RFP. This process will begin in 2020.

Mr. Rossi commented about repurposing the old radios and giving consideration to the benefits of having all utilities use the same radios.

Mr. Burke expressed hesitancy in having to go through the replacement of all GMP radios. Mr. Nelson indicated the lifecycle is shorter on software driven equipment than old style hardware.

Mr. Otley asked for order of magnitude on cost. Mr. Nelson indicated a rough estimate, with radios at \$500 each, would be 10 to 15 million for the entire project including the distribution utility radios.

Mr. Rossi asked about the timing for the costs to hit the VT utilities. Mr. Nelson indicated VELCO would have costs beginning in 2021 and 2022, with cutover in 2023.

Mr. Dunn asked about the expected lifespan of the new radios. Mr. Nelson expects the lifespan to be about 10 years.

Mr. Otley asked if there has been any thought on partnering with AT&T or someone else and spending money on a partnership rather than self-build. Mr. Nelson indicated that is one topic for the stakeholder engagement team to discuss when the team is pulled together in 2020.

Mr. Burke asked if all of the VT utilities are on the radio network. Mr. Nelson indicated not all of them are.

Mr. Rossi indicated he would like a talk group and for everyone to be more integrated as a state. Mr. Rossi mentioned possibly having someone from the State EOC on board with discussions.

Mr. Nelson indicated Utilities should consider whom they would want on the committees that will begin in 2020.

OTHER BUSINESS

Open discussion

Mr. Root provided an overview of a presentation he will be providing to the
Department of Public Service later today. The presentation included a slide on
generation within the state, behind the meter and in front of the meter. Mr. Root
estimates approximately 350MW of solar between both. The slide spoke to capacity,
renewable, weather dependence, and inverter based. Approximately half of
renewables in the state are inverter based, which presents challenges.

The presentation also included a slide on the Barker Solar Generator. The day shown was a blue-sky day with white puffy clouds. The slide showed the impact on generation as the clouds passed over the sun. The fluctuation in the generation highlights the need for storage with these types of resources.

Mr. Johnson asked if Vermont is behind Massachusetts in terms of storage. Mr. Root indicated that is the case.

Next meeting

Date: October 17, 2019, 11:00 a.m. – 3:00 p.m. **Location:** Green Mountain Power Montpelier, VT

Possible topics for discussion

- Mr. Poulin to provide highlights on the proposed Backup Control Center
- Mr. Rossi to follow up on the FirstNet discussion
- Mr. Ettori to provide an overview of the queue on upcoming solar projects
- Distribution Utilities to provide a discussion on storage

MOTION TO ADJOURN

Mr. Rossi moved to adjourn, Mr. Burke seconded, and the meeting was adjourned at 02:16 p.m.

Respectfully submitted,

Tina Stevens