VELCO Operating Committee FINAL MINUTES

October 20, 2016, 11 a.m. – 3:00 p.m. GMP Montpelier Office

Participating members: Mike Burke (Green Mountain Power), Frank Ettori (VELCO), James Gibbons (Burlington Electric Department), Bill Humphrey (Lyndonville Electric Department), Ken

Mason (Vermont Public Power Supply Authority), Craig Myotte (Morrisville Power & Light), Kevin Perry (Vermont Electric Cooperative), and Chris Root (VELCO).

Other participants: Tom Dunn (VELCO), Mike Fiske (VELCO), Kerrick Johnson (VELCO), Phil Kearney (VELCO), Mike Loucy (VELCO), Dan Nelson (VELCO) by phone, David Notte (VELCO), Colin Owyang (VELCO). Next Meeting November 17, 2016 11 a.m. to 3 p.m. GMP Montpelier 1-866-720-4556 Code: 6027065

Opening

• Mr. Root called the Operating Committee (OC) meeting to order at 11:02 a.m.

Safety Topic

 Mr. Kearney discussed that exposure to ticks remains very high this time of year and VELCO field personnel have been reporting significant activity. He offered that it's a good idea to remind anyone spending time in the outdoors to be vigilant about checking for ticks and use protective clothing and/or spray that contains 30% DEET. He also reminded the group to be prepared for winter driving by checking your vehicles emergency stash for extra clothing, flares, packable shovel, etc.

Minutes Approval

• Mr. Gibbons moved approval of the minutes as posted, Mr. Ettori seconded and the minutes were approved without objection.

Safety Public Outreach

- Mr. Kearney discussed a recent safety situation whereby a kite was entangled in VELCO's conductor while being flown near one of VELCO's lines. A local resident, who coincidentally happened to be familiar with VELCO's Stop Think Act Review (STAR) protocol, was onsite and prevented the youth from trying to extract the kite given the potentially dangerous situation. This is a good example of the importance and value of continuing to communicate the need for electrical safety awareness outreach. He asked the OC for ideas regarding programs they may have to relative to safety public outreach.
- Mr. Burke stated GMP uses bill stuffers and social media to communicate both safety concerns and procedures for the general public while near electrical infrastructure. GMP has also provided further information upon request by using a standard GMP safety brochure. He offered a suggestion to the OC to evaluate the possibility of developing an

electrical safety program that could be delivered to or become part of a standard teaching for school systems to broaden the reach and exposure to a larger population.

Mr. Johnson asked if the OC members were able to provide any safety materials they
may have to begin to evaluate how the different distribution utilities are communicating
electrical safety. All agreed this would be a good step in continuing to improve overall
knowledge and awareness across the entities. The next step is to provide the
documentation to Mr. Kearney to aggregate the information and investigate how best
to share with the distribution utilities.

Physical Security

- Mr. Notte provided a brief summary of his professional experience while serving as a Vermont State Police Officer. He then presented the materials provided to the OC summarizing that the VELCO's assets are potential targets for vandalism, theft, and terrorism. He explained that VELCO has taken steps to update its Security Operating Procedures (SOP) to improve protection and compliance with NERC and CIP requirements as well as VELCO's Operating Procedures.
- Mr. Root asked if the OC members could provide primary security contact information to Mr. Notte in the event of a security incident. VELCO will then evaluate this information against the existing emergency contact list to ensure communications are efficient for quick response.
- Mr. Burke brought up that the public concern over the perceived visual impact substations can pose to neighboring properties and the general area has at times led the Department of Public Service (DPS) to require screening measures be installed as a condition of approval. This potentially creates a challenge for utilities to efficiently visually inspect these facilities and that going forward discussing this concern should be considered as part of any application.

Schedule for Fall Radio Update

- Mr. Nelson provided an update of the Statewide Radio Project. He specifically discussed the work completed and underway in 2016: the Barnet solar panels are in construction; the Lowell site plans to locate on a KCW meteorological tower continue to progress; the West Rupert site has been postponed as a result of the Town filing non-project support paperwork with the DPS but VELCO believes its pursuit of additional spectrum in New York may offer a solution by locating a site in New York to provide the coverage back into Vermont; various upgrades are underway to improve remote monitoring and capacity; the Randolph shelter has been replaced; the Rockingham tower was replaced; several MW links have been upgraded; and fiber has been brought into several other sites improving both operational costs by reducing leased lines and backhaul performance. In summary Mr. Nelson stated that radio system covers approximately 98% of the state.
- Mr. Nelson also discussed that radio system stress testing is planned for the near future as the winter season approaches. The benefit of this testing is to identify any potential anomalies found during high system use events and will be forwarding out an email invitation to the distribution utilities to participate. By supporting this effort the radio system will continue to improve and better support the utilities in times of need.

• Mr. Burke asked for an update on any improvements in the Stafford area. Mr. Nelson responded that this is an area of interest and several solutions are being investigated to improve coverage but no specific approach has been finalized at this time.

Debt Equity Update

- Mr. Owyang presented the materials provided to the OC summarizing that, as reported at a previous OC, VELCO identified an error in the calculation it had been using to determine the revenue requirement under the ISO-NE tariff. As a result VELCO has been exploring options to make adjustments to correct this situation while minimizing any potential impacts to Vermont. As part of that effort, VELCO engaged an external consultant to conduct a study to evaluate VT Transco's capital structure. Mr. Owyang presented the slides from the consultant summarizing their study.
- Mr. Dunn explained that Ms. Nelson, VELCO's Chief Financial Officer, has been in contact and continues to work with the distribution utilities to strategize about the best approach.

Board of Directors Update

- Mr. Root summarized the highlights of the Board of Directors meeting that focused on VELCO's 2017 budget and that was subsequently approved. The two primary budget anecdotes were that the operational budget remained flat with 2016 and that headcount hasn't increased.
- Mr. Root further explained that VELCO's 2017 capital budget is approximately \$140 million and is largely driven by the Connecticut River Valley Project. VELCO also continues to stay engaged with potential third party transmission development projects VELCO will investigate potential business structures to consider participating in any project that advances. At this point there isn't a clear picture as to which, if any, of the current third party projects will advance.

K22 Line Incident

Mr. Root presented the materials provided to the OC summarizing that the line incident
was the result of a fault caused from a lighting strike associated with a severe lighting
storm event. One structure was struck tripping the circuit which reclosed back to service
but the fault was experienced as a sag in voltage at the Global Foundries facility in Essex.
This facility has the capability to evaluate such power quality challenges and manage
through some of them but certain processes are either highly sensitive to or don't have
the capability to override controls when such an event occurs and subsequently entered
into a temporary shutdown.

VWAC – Vermont Weather Analytics Center

- Mr. Ettori presented the materials provide to the OC summarizing that the Vermont Weather Analytics Center work is comprised of four subject areas and todays update is focused on the Peak Load Reduction effort.
- Mr. Gibbons explained that this is an important effort as it could drive savings in overall electrical costs by creating efficiencies in planning and storage potentially shaving peak demand. He also discussed that if the work could eventually lead to longer duration

predictions, for instance a month, vs. the current shorter period additional benefits could be achieved via improved ability to plan and manage technologies like storage.

- Mr. Ettori discussed that the coordinated effort between VELCO, the distribution utilities, and IBM has been very successful and the engagement level has been high.
- Mr. Dunn asked if this any evidence that we're impacting the regional transmission bill. Mr. Ettori responded that not at this point but that may be the result of a decreasing load forecast vs. improved management of existing resources.
- Mr. Burke asked how the output of the program will be used. Mr. Ettori responded that one of the objectives is to make the output work for all users. There will be an email alert and portal access for users who want to take action manually. We will also have an advanced program interface (API) for the utilities who want to automate their actions, thereby reducing the human factor to better capitalize on the strategy.
- Mr. Gibbons discussed that as the rest of New England progresses towards a similar capability the RNS rates will increase because the load requirements will in theory be reduced.

Other business

- Brian Otley was appointed as the Green Mountain Power OC Member Alternate
- Kevin Weishaar was appointed as the Town of Stowe Electric Department OC Member Alternate

Proposed agenda items

- Update on sharing safety literature and programs implemented by the OC members
- VWAC Module
- Third Party Transmission Project Coordination Update
- 1547 IEEE Inverter Standard Update

Motion to adjourn

• Mr. Mason moved and Mr. Ettori seconded adjournment, which was agreed without objection at 1:55 p.m.