

**VELCO Operating Committee
Final MINUTES**

March 21, 2013, 11 a.m. – 3 p.m.
VELCO Rutland Office

Participating members: Ken Couture (Green Mountain Power), Ken Mason by phone (Lyndonville Electric), Ken Nolan (Burlington Electric Department), Bill Powell by phone (Washington Electric Cooperative), Paul Renaud (VELCO), Jeff Wright by phone (Vermont Electric Cooperative).

Other participants: Brian Connaughton (VELCO), Doug Haselton (Stowe Electric Department), Mike Loucy (VELCO), Dan Nelson (VELCO), Thad Omand (VELCO), Allen Stamp by phone (VELCO), Ronald Welch (VELCO).

Next meeting

April 18, 2013
11 a.m. – 3 p.m.

GMP Montpelier

Meeting opening

- Mr. Renaud opened the meeting at approximately 11:00 am.

Safety topic

- Mr. Renaud discussed the findings of the BP Texas City accident. The final investigation report by the Chemical Safety Board identified business cultures and practices that may have contributed to the accident. Some of causes identified include: cost cutting, failure to invest and production pressures; insufficient Board of Director's role in review of BP's safety culture; relying on personal injury rates as a good indicator safety program quality; and having a "check box mentality" where personnel completed paperwork and checked off items as complete even when requirements hadn't been met.
- Mr. Wright mentioned that safety needs to be everyone's responsibility, every day while at and away from work.

Minutes approval

- Mr. Couture moved and Mr. Wright seconded approval of the minutes of February 21, 2013, which were approved without dissent.

Telecommunications

- **Telecommunications Operating Committee**
 - Mr. Nelson reported that the Telecommunications Subcommittee of the Operating Committee (OC) will meet next in April. The charter has been distributed to the members for review and consideration.
 - Mr. Couture asked who constitutes the membership. Mr. Nelson responded that BED, Stowe, GMP North and South, Washington Electric Cooperative, and Vermont Electric Cooperative all are represented.
- **Fiber Project update**
 - Mr. Stamp and Mr. Loucy reviewed the Fiber Project update materials provided to the OC.

- Mr. Couture stated that Green Mountain Power's (GMP) policy governing future fiber deployments on distribution infrastructure will be to place the cable within the communications space.
 - Mr. Wright stated that this is the same policy for Vermont Electric Cooperative (VEC).
 - Mr. Mason asked if VELCO could provide any backup metering capabilities for Burke Mountain considering that all Lyndonville's substations are fed directly from VELCO. Mr. Nelson responded that VELCO will have a better idea once we complete a pilot test of the electronic equipment proposed to collect data from DUs without SCADA systems, and that this test should be completed by the end of April. Mr. Omand asked Mr. Mason whether Lyndonville was under any time constraints and whether VELCO can coordinate with Lyndonville in the May timeframe. Mr. Mason agreed this timeframe will work for Lyndonville.
 - Mr. Couture asked about development of a policy governing requests from DUs to provide communications infrastructure at future substations, switches, etc. GMP believes it would be beneficial to have some guidelines for requesting access or building onto the fiber network. Mr. Wright stated that the existing process could be the model for VELCO to solicit project input from the DUs prior to its budget cycle and the OC's review of the project list. If the OC approves the request then VELCO can move forward to seek budget/project approval. Mr. Couture discussed a possible approach whereby a DU can obtain directional input from VELCO outside of VELCO's existing process for identifying projects to account for different budgeting cycles. Mr. Nolan stated that BED was comfortable with this concept but that all requests must be evaluated on the criterion of whether they support bulk transmission reliability and ultimately receive approval by the OC.
- **Statewide Radio Project (SRP) update**
 - Mr. Nelson presented the SRP materials provided to the OC.
 - Mr. Haselton mentioned that Burlington Communications believes the signals are too low in the Stowe area for the radios to work. Mr. Nelson responded that a future site is planned for a mountain top at the Bolton Resort and will likely improve coverage in the Stowe area. Mr. Nelson further stated that VELCO continues to work with the tower owner to verify the available height for its antennas and that we will schedule a drive test to verify if the height provides sufficient coverage. If this site doesn't provide the necessary coverage the design likely will require two separate sites given the lack of available infrastructure and permitting challenges.
 - Mr. Haselton asked if he could be present during the drive testing. Mr. Nelson responded that Stowe or any other DU could attend the drive test.
 - Mr. Couture mentioned that GMP is very interested in improving coverage in downtown Waterbury. Mr. Nelson responded that the drive test at the Bolton site will provide the information necessary to determine how robust the coverage will be in Waterbury.
 - Mr. Renaud asked if the Bolton tower owner is reserving the top height. Mr. Nelson responded that the tower owner operates a radio business and they are reserving the top spot on the tower for future needs.

Transmission Subcommittee Charter

- Mr. Renaud summarized the February OC meeting discussions regarding the OC establishing a Transmission Subcommittee (TS). In response to this proposal, VELCO developed a draft TS charter for the OC to review.

- Mr. Wright and Mr. Couture stated that their respective organizations were in support of the proposal.
- Mr. Couture asked if the Vermont System Planning Committee (VSPC) has decided to abolish the existing TS. Mr. Nolan responded that the VSPC held over their decision until their next meeting to allow for the OC to consider the proposal. The current plan is that if the OC establishes a TS then VSPC will eliminate this subcommittee from their organizational structure.
- Mr. Renaud stated that he has spoken with Ms. O'Neill, VELCO General Counsel regarding process and concluded that the OC can create the TS without a formal vote. The OC agreed to establish a TS.

Lyndonville and St. Johnsbury transmission losses

- Mr. Omand discussed the materials provided to the OC.
- Mr. Mason asked if the second analysis presented in the materials is current. Mr. Omand responded that the analysis is complete through February 28, 2013. Mr. Omand further explained that VELCO initially thought the losses would be greater than the results indicate, but based on the actual flows across the system and the reconductoring of Lyndonville's 34kV line towards pole 142, the losses were reduced.
- Mr. Omand stated that VELCO is prepared to generate an invoice for GMP by April, 2013, and inquired if this was acceptable to GMP. Mr. Couture responded that GMP would like the opportunity to discuss the history with Mr. White and would report back to VELCO.
- Mr. Couture said that in order to open the switch over this line Lyndonville must first install lightning arresters. Mr. Mason responded that Lyndonville has this scope of work planned for the middle of 2013 and that they would agree to the February loss analysis figure without seeking to recapture any losses from March 1 through the date the switch is opened.
- Mr. Nolan asked if VELCO has heard of any metering challenges associated with the McNeil Generation Plant. Mr. Omand responded that VELCO is aware that the McNeil substation SCADA points are read manually each day to verify the accuracy of the results received by VELCO. Any improvement in the metering at the McNeil plant would be beneficial for load analyses. Mr. Nolan responded that BED has recently received requests to consider MV90 metering to provide visibility into the McNeil substations and BED plans to install during the April generator shutdown revenue quality metering that can be remotely interrogated.

ISO Pool Transmission Facility (PTF) loss calculation

- Mr. Omand discussed the materials provided to the OC on the topic.
- ISO-NE traveled to VELCO to discuss the daily system loss report. ISO-NE would like to eliminate the OI loss report process and VELCO is the first Transmission Operator (TO) with which they are discussing its elimination. ISO-NE requested VELCO review the current estimation process for inaccuracies, which review will be completed prior to the next operating committee meeting. ISO also requested that actual metering be used rather than the estimation process. VELCO is researching how to meet this request and will work with ISO-NE to develop a transition plan.
- Mr. Omand discussed a change that ISO-NE plans for the fall of 2013. Currently, generation is priced in Vermont at the sub-transmission interconnection rather than at the PTF interconnection. ISO-NE plans to move the price to the PTF boundary by setting the sub-transmission system resistance to zero. Based on the way ISO-NE currently maps generation in Vermont, the change will increase the cost of state-wide hourly locational marginal prices (LMPs) by approximately \$.02 which is about \$115,000 annually. This increase cost will be offset by instate generation.

- Mr. Renaud asked if incorrect calculation of the loads was yielding a benefit to Vermont and accounting for the increase in Vermont's load share. Mr. Omand reported that ISO-NE has found inaccuracy at the point of metering. Correction of this inaccuracy will impact all of New England (NE), with the greatest impact on Vermont and Maine because these states have significant subtransmission. Most other New England states will see minimal impact because generation is so close to the PTF system.

Distribution utility synergies

- Mr. Connaughton discussed the materials provided to the OC.
- Mr. Nolan stated that BED is sensitive to VELCO working on synergies and developing plans without this topic being vetted at the OC. BED's interest is to ensure no proposed projects and costs are being shifted to other DUs resulting in cross subsidy. Mr. Renaud responded that the discussions with GMP originated out of a budgeting exercise and it was identified that other DUs may benefit from a more aggressive approach to finding cost savings through synergies. Mr. Nolan stated that BED recognized this effort as positive, but that early communications with other DUs, preferably at the OC, need to be incorporated if the potential programs may result in costs to other DUs.
- Mr. Couture mentioned that GMP and VELCO were discussing other issues surrounding Kingdom Community Wind (KCW) and budgeting items. This led into the concept of looking possible synergies among all utilities.
- Mr. Wright stated that the DU community will want to make sure the accounting practices are stringent to ensure the correct DU is invoiced for any project or synergistic efforts so that no cross subsidy among DUs occurs
- Mr. Nelson said that the new telecommunications infrastructure is another area where synergies may be available to several DUs without adding costs. Mr. Renaud mentioned that these concerns are on forefront of VELCO's planning and we are focused on being transparent. All efforts that could lead to potential cross subsidy or otherwise result in costs to other DUs will be brought to the OC for consideration
- Mr. Wright stated the operating agreements between VELCO and DUs have historically been vetted through the OC and that future opportunities should follow this same process. Mr. Connaughton agreed.
- Mr. Loucy said that the VELCO fiber network may offer reliability benefits to several DUs by providing route diversity at little to no additional costs. A second potential cross benefit is if one DU is completing call-out or other operational tasks for another DU. The service providing DU could more efficiently obtain system data, thereby improving overall electrical system reliability.

Vermont System Operating Committee (VSCO) update

- Mr. Welch discussed the materials presented to the OC.
- Mr. Couture asked if there is a way to consolidate messaging regarding Geomagnetic Induced Current (GIC) phenomena to address requests from customers. Mr. Welch responded that ISO-NE has GIC alerts and internal procedures. VELCO also receives GIC monitoring from Maine (Chester SVC) and follows the VELCO procedure known as Operating Procedure (OP)-41, which specifies the process used to manage GIC episodes in Vermont. This protocol could be summarized to a simple response. A specific response would a bit more difficult as the actions are dependent upon the size of the GIC episode.

- Mr. Renaud stated that the B20 circuit associated with the northern tier interface is assumed to be open and has an impact on the interface with KCW. VELCO has established a meeting with ISO-NE to discuss this issue with the goal of reducing the impacts.
- Mr. Wright asked if the new Bulk Electric System (BES) definition will result in impacts to non-PTF facilities and whether the Newport Substation will be granted exclusion or not. Mr. Welch responded that he has not been directly involved with analyzing this situation, but the majority of all VELCO facilities would be impacted. Mr. Renaud said that radial facilities could apply for an exclusion to minimize the impacts.

Proposed agenda topics

- Processes surrounding joint projects and the concern for cross subsidy— how to increase transparency.
- Future DU requests for access to fiber network—policy.

Adjournment

- Mr. Couture moved and Mr. Nolan seconded adjournment, which was agreed to without objection. The meeting adjourned at approximately 2:55 pm.