

**VELCO Operating Committee (OC)
FINAL MINUTES**

July 18, 2013, 11 a.m. – 3 p.m.
GMP Montpelier Office

Participating members: Ellen Burt (Stowe Electric Department), Ken Couture (Green Mountain Power), Tom Dunn (VELCO), Ken Mason (Vermont Public Power Supply Authority), Ken Nolan (Burlington Electric Department), Bill Powell by phone (Washington Electric Cooperative), Paul Renaud (VELCO) Kevin Perry by phone (VEC).

Other participants: Kerrick Johnson (VELCO), Dan Nelson by phone (VELCO), Thad Omand by phone (VELCO), Allen Stamp by phone (VELCO), Kevin Weishaar (Stowe Electric Department).

Next meeting

August 18, 2013
11 a.m. – 3 p.m.

GMP Montpelier

Meeting opening

- Mr. Dunn opened the Operating Committee (OC) meeting at approximately 11:00 am.

Safety topic

- Mr. Couture discussed Lyme disease and the importance of checking for ticks when coming in from working outdoors. Watch for signs of bites and if you have been bitten or suspect you have, seek medical treatment since early detection and treatment is important. Tom asked if others are seeing a lot of tick problems; a number of members are seeing a lot of ticks in their areas.
- Mr. Dunn mentioned that with the strong storms coming in that we all need to be watchful of downed wires, etc.
- Mr. Mason asked if there were any new or lessons yet from the incident in which the 12 year old boy entered a GMP substation and made contact with live electrical parts. Mr. Couture commented that he is not involved in the investigation but noted that although the boy climbed through a space in the gate, everything appears to be up to code. More information will be provided as it becomes available.

Minutes approval

- Ms. Burt moved and Mr. Mason seconded approval of the minutes of June 20, 2013, which were approved without dissent.

Telecommunications

- **Telecommunications Operating Committee**
 - Mr. Nelson reported that the Telecommunications Operating Committee (TOC) met in June and among other items discussed future construction and use of Telecommunication equipment. Mr. Nelson explained that the policy objectives were to ensure future deployments of fiber consistent with the initial project scope, that DUs have access to the capacity of the network, and to address the addition of radio facilities needed for specific DU purposes.
 - Mr. Nelson reported that general consensus was reached on the policy with the exception of VELCO ownership of communication equipment at switches and generators. One view is that Ethernet based edge transport technologies are well suited for locating at switches and that

switches and generators are integral to the power system therefore ownership should be with VELCO. The opposing view is that switches should be excluded application devices similar to breakers and RTUs and that all generators are treated equally and are not entitled to communication services at no cost.

- The Committee generally discussed the issue around ownership of lines, breakers, switches, and generators. Mr. Nolan asked why VELCO would own facilities on a DUs line. Mr. Nelson responded that VELCO agreed and proposed not to own switches on the line; however, there was not agreement in the subcommittee on this point.
- Mr. Nelson then summarized the Draft Outline for VELCO Policy Governing Construction and Use of Telecommunication Facilities included in the meeting material. Per the draft Policy, VELCO would own and maintain fiber installed by VELCO to sub-transmission stations 34.5 kV and higher; own and operate the backbone transport communication systems located in VELCO facilities; and own edge transport communication equipment located in the DU sub-transmission facilities, which would be maintained by the DU. In addition, for edge transport equipment the benefitting DU will pay a recurring fee outlined in the agreement, which is approximately 4% annually of the total equipment cost at the station.
- Ms. Burt asked why VELCO would not consider deployments for a single customer. Mr. Couture used IBM as an example and Mr. Nelson commented that serving a single customer is more analogous to a distribution function. Mr. Nolan asked to clarify that this means one distribution customer, not VELCO customer; Mr. Nelson agreed to make this clarification.
- Mr. Couture commented that the document seems to get into technology selection and requested that VELCO remain agnostic to what is or is not acceptable for DUs to pick for technology. In addition, more guidance should be provided on the criteria for what will receive funding. Mr. Nelson responded that VELCO is agnostic provided that the primary standard protocols are used (Ethernet, etc.). Mr. Nelson agreed to add language to clarify these points.
- Mr. Nolan discussed an example to check the understanding of the committee members commenting that by accepting this document, it means that VELCO owns all fiber down to 34 kV. It is BED's belief that original scope was for VELCO to have visibility for operations of their system only and that this supports fiber not related to VELCO operation. Mr. Dunn and Mr. Nelson disagreed on this point and explained that the original scope was always to have visibility down to 34 kV. Mr. Nolan agreed to disagree on the original scope.
- Mr. Couture asked if VELCO is confident if the capacity is sufficient to accommodate all requests and if not what happens. Mr. Nelson replied that a large change in capacity needs is not really within the intent of this document and would need to be handled outside the policy.
- Mr. Dunn asked who owns equipment in the DU station. Mr. Nelson replied that VELCO owns the equipment and that the DU provides VELCO with access.
- Ms. Burt suggested that the draft be rewritten based on the discussion. Mr. Dunn agreed that no action should be taken at the meeting and VELCO will work on a second draft.
- Mr. Nelson continued with discussion on retirement of facilities. Ms. Burt asked about cost responsibility when decommissioning a substation. Mr. Couture answered that the DU will be responsible for the costs if the equipment is not repurposed; there was general agreement that this makes sense.
- Mr. Nelson also discuss the portions of the policy related to radio highlighting that the principle and cost responsibility mirrors the fiber agreement, however the details still need to be flushed

out. If there are areas outside a core area needed for VELCO purposes, VELCO would add coverage and the benefiting DU would pay the costs.

- Mr. Dunn asked if VELCO would be adding radio sites for our use based on what we know today. Mr. Nelson replied that he does not see the need currently, although we still have 3 sites to complete and others to fine tune. In response to Mr. Dunn's question Mr. Nelson also said that moving from one location to another is a possibility but he doesn't consider that as a new site since it replaces a site in the original scope.
 - Mr. Renaud suggested that splitting the radio and fiber into two separate policies could be done to facilitate changes to either the radio or fiber policy without affecting the other. Following a brief discussion on this, the Committee agreed that keeping it together makes sense since the principle is the same for both sets of facilities.
 - Ms. Burt and Mr. Couture suggested that language in the document removing any discretion by VELCO be modified. Mr. Dunn acknowledged that it should be modified.
 - Mr. Nelson will bring back a document in August.
- **Statewide Radio Project (SRP) update**
 - Mr. Nelson continued presenting the SRP materials provided to the OC reporting the following:
 - Changes are being made to antennas including Jay Peak.
 - The noise problem at Grandpa's Knob is not resolvable and as a result the site is being abandoned and moved to Hanley Mountain.
 - Radio user training has been provided at 7 GMP offices; many of the problems experienced in the field are from combiners and radio software.
 - A solution is being tested by GMP for the Tate radio software issues and will be ready for deployment once testing is complete. Mr. Dunn asked if VEC needs the same solution. Mr. Nelson replied that VEC does not have Tate radios.
 - Work is progressing on solutions to areas with weak signal, which are a result of the lower power output requirements of the FCC; pole mounted filler sites are an option and are being explored.
 - Mr. Mason asked if legacy GMP and CV areas are all on same radio system and if there were a large storm with many crews working in the same area, would they all be on the same channel? Mr. Nelson replied that GMP has set up by operations center and that this is managed by talk groups. When a truck moves from district to district, the truck will switch from one talk group to another.
- **Fiber Project update**
 - Mr. Stamp reviewed the fiber project update materials provided to the OC.
 - Mr. Johnson asked what the nature of the Waitsfield Telecom agreement includes. Mr. Stamp replied that it is essentially an asset swap.
 - Mr. Dunn asked if the Network Management System will replace the NOC. Mr. Stamp replied yes, the intent is to bring the capability in-house at VELCO and eliminate the need for an external provider.

Power Accounting Update

- Mr. Omand presented the materials provided to the OC.

- Mr. Omand reported that VELCO reviewed ISO-NE's updated loss estimation calculation and that there is one small variance still being researched. VELCO will work with ISO-NE as system changes are completed to ensure the estimated loss calculation is updated properly until metering is installed to calculate actual losses. ISO-NE provided a post-update report, which we have analyzed and have a difference to review. Vermont will recoup approximately 2/3 of the costs resulting from the prior change to the Highgate metering.
- Mr. Dunn asked if the ISO settlement period will move to 5 minutes. Mr. Omand replied that ISO-NE would like to settle at 5 minutes to help facilitate integrating renewable into the system and automate generator incentives and penalties based on actual performance. Most Vermont meters are set for reading at 15 minute intervals and will need to be reprogrammed. Fifteen minute metering intervals is more typical for New England entities.
- Mr. Omand mentioned that there has been no further progress on the Coventry and Sheldon Springs SPEED standard offer solar project issue and that the Metering Forum will try to resolve this at its meeting in August.
- Mr. Omand mentioned that work was completed yesterday (July 17th) at the McNeil generator station so that the MV90 system can be used to interrogate the meters.
- Mr. Omand reported that VELCO is in the process of analyzing prior months to determine if any true-up billing is required following the corrected VELCO system loss allocations reported to ISO as discussed at the previous Operating Committee meeting.
- Mr. Omand reported that VEC had inquired if VELCO would act as an independent meter reader per ISO requirements to allow some of the net metering projects to receive REC credits. Mr. Couture asked how it would be billed if VELCO performed this function. Mr. Omand responded that because VELCO has the MV90 system, it is not a large effort and VELCO would bill for the hourly time spent managing the process. This was a more cost effective solution than the DU contracting to a third party.

System Voltage Control

- Mr. Renaud reported on the status of the Northern area voltage discussion from the previous meeting. GMP, VEC, and VELCO met and agreed that VELCO will control the area voltage subject to the following actions being completed:
 - VELCO and the appropriate DUs agree on voltage schedules and LTC settings by substation.
 - VELCO and DU develop operating agreements that specify the schedules and how changes are made to those schedules.
- Mr. Renaud explained that voltage coordination studies will be completed leveraging recent system study work including the Highgate area system change from 48 kV to 46 kV, the VEC northern reliability study, and the voltage coordination study associated with the KCW synchronous condenser installation.

VELCO Organizational Changes

- Mr. Dunn presented the new VELCO organization chart and highlighted the following changes:
 - Telecommunications and Power Accounting moving under Mr. Johnson with Mr. Etori having direct oversight of the Power Accounting function.
 - Compliance and IT moving under Ms. O'Neil
 - Procurement, Inventory, and Contract Administration moving under Ms. Nelson.

- Mr. Nolan asked if Mr. Ettori's ISO role is going to change. Mr. Johnson discussed the vision for advocacy at the ISO. In addition to Mr. Ettori, VELCO will have others involved in the ISO effort, such as Ms. Frankel, which will allow Mr. Ettori to also focus on other important needs within VELCO. The overall goal is to increase our presence and effectiveness at ISO to advance the priorities of Vermont.
- Mr. Dunn stated that VELCO will continue to look at its cost and organization structure as it looks to reduce its costs. Mr. Dunn mentioned that preliminary Floyd Associates work has been completed, which identified a potential savings of \$7-10 million over all cost categories, capital, expense, contracting, etc. The next step is for a 20-24 week engagement with Floyd in which they will look deeper to understand how VELCO does its work and to look for efficiencies. Mr. Dunn reported that VELCO's current head count is approximately 153/154 and that we are looking to reduce this number in the current budget process prior to the Floyd exercise.

Other Business

- Mr. Renaud reviewed load data from the most current week when we experience very high demands in Vermont. The load curve shows two very distinct needle peaks at approximately 5:30 and 6:00 in the evening. Mr. Renaud explained that after investigating the data it was discovered that a GMP water heater program was leading to these peaks. Under the smart meter program, two groups of water heaters were turned off in the afternoon, one block being switched on at 5:30 pm and one at 6:00 pm. Mr. Renaud explained that the peaks were approximately 17 MW and that only about 1/3 of the GMP program has been deployed; if the program is left as is, this could introduce a 51 MW peak when the full program is implemented. Mr. Renaud noted that VELCO has been working with GMP on this and will continue so we have a full understanding of the data and the potential impacts. The Committee discussed the implications of this and that the data highlights that system demand can be adjusted by these programs. The Committee also agreed that while the needle peak is a GMP issue, overall demand peak reduction is a statewide effort that needs continued discussion.
- Mr. Johnson asked the Committee members about the ongoing legislative discussions related to net metering caps and what are the next steps in these discussions. Mr. Powell said that there is an ongoing discussion sponsored by the DPS for all entities, DU and non-DUs, to offer their respective concerns and opinions on changing or not changing the programs. Mr. Powell explained that WEC has exceeded the cap and that their interest is in language related to the crediting of service charge for net excess generation. Mr. Nolan commented that the recent meetings will help the department get in front of the issue, which will likely be in front of the regulators.

Proposed future agenda topics

- Telecommunication Facilities
- VELCO OpComm website training

Adjournment

- Mr. Perry moved and Mr. Powell seconded adjournment, which was agreed to without objection at approximately 1:50 pm.