

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

October 17, 2013, 11 a.m. – 3 p.m.
GMP Montpelier Office

Participating members: Ellen Burt by phone (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), Jeff Wright (Vermont Electric Cooperative)

Other participants: Frank Etori (VELCO), Mike Loucy (VELCO), Dan Nelson (VELCO), Allen Stamp (VELCO)

<p>Next meeting</p> <p>November 21, 2013 11:30 a.m. – 3:30 p.m.</p> <p><u>GMP Montpelier Office</u></p>

Meeting opening

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

Safety topic

- Mr. Dunn discussed that when driving around Vermont during foliage season we should pay extra attention as many visiting drivers are pulling over to take in the views. Mr. Dunn also discussed the commonplace of drivers being distracted and weaving on the roadways.
- Mr. Mason mentioned that when replacing your windshield to consider not using tinted glass as this type of windshield can create a visual challenge when driving.

Minutes approval

- Mr. Couture moved and Mr. Mason seconded approval of the minutes of September 16, 2013, which were approved without dissent.

Telecommunications

• **Fiber Project update**

- Mr. Loucy and Mr. Nelson reviewed the fiber project update materials provided to the OC.
- Mr. Couture asked how many gunshot incidents are usual on the VELCO network. Mr. Nelson responded that VELCO typically incurs 1 gunshot incident per year but averages about 4 outages from tree contacts to weather. Mr. Nelson discussed that VELCO's fiber mileage has doubled and on smaller subtransmission infrastructure so VELCO expects the average number of outages to increase to approximately 8 per year and that to date VELCO has experienced 5 in 2013.
- Mr. Dunn asked if the fiber will be installed in the VEC and GMP territories this year. Mr. Loucy responded that VEC and Stowe are on target to complete their make ready scopes of work and fiber installation will begin in October. GMP's make ready is underway in the Montpelier-Barre segment and are about 50% complete so it's likely the fiber installation will complete in the first quarter of 2014.
- Mr. Dunn asked when Network Management System will be completed. Mr. Nelson responded that it's underway and is anticipated to be operational in the first quarter of 2014.

• **Statewide Radio Project (SRP) Update**

- Mr. Nelson presented the SRP materials provided to the OC.
- Mr. Dunn asked about the plans to improve coverage in weak areas. Mr. Nelson responded that VELCO plans to deploy several microcells to improve the coverage in these areas.
- Mr. Dunn asked if any feedback has been received from Hardwick Electric after the network improvements had been made. Mr. Nelson responded that the network combiners have been installed and training has been conducted so now we're in a testing period and will begin to get feedback over the next several weeks.
- Mr. Dunn asked if the combiner installations are complete throughout the network. Mr. Nelson responded yes and we're now in a performance period.
- Mr. Couture mentioned that the early feedback on the network improvements and training have been positive from the GMP crews.
- **Review of Draft Network Access Agreement**
 - Mr. Loucy presented the draft Network Access Agreement (NAA) document.
 - Mr. Wright asked for clarification regarding how requests for fiber extensions to new substations would be treated. Mr. Couture added that GMP will likely have fiber needs in the future and wanted to make sure of GMP's understanding of how to request access or extension. Mr. Nelson responded that the OC agreed at a previous meeting to bring all such requests before the OC for discussion.
 - Mr. Couture asked how we should define where responsibilities begin and end on new fiber requests. Mr. Loucy explained that the draft NAA is set up so that the requesting Distribution Utility (DU) pays for and is responsible for O&M of any new fiber or electronics to avoid cross subsidization between DU's.
 - Mr. Dunn suggested VELCO develop a draft guideline document which establishes some common ground for DU's to request extensions to substations and bring this back to the OC for consideration.

Transformer Maintenance

- Mr. Fiske presented the materials provided to the OC.
- Mr. Dunn asked what the elevated gas levels might mean. Mr. Fiske responded that elevated gas levels indicate deterioration within the transformer and such causes as: arcing, breakdown of paper, hot metal gases, etc could be occurring.
- Mr. Dunn asked what the term shifted windings means. Mr. Fiske responded that the profile of the winding has changed from original testing and is an indication that something within the transformer has changed.
- Mr. Wright mentioned the technology of inspecting the windings is relatively new and asked if VELCO has identified, after multiple testing events, any evidence this phenomena. Mr. Fiske responded that with this relatively new inspection technology VELCO is still developing its baseline data and over time this where we hope to identify any deterioration in the windings prior to transformer failure.
- Mr. Couture asked what the percentage of tap changers VELCO has in its system. Mr. Fiske responded approximately 40 to 50%.
- Mr. Mason asked what is VELCO's policy regarding replacing aging transformers. Mr. Fiske responded that VELCO doesn't have a formal policy but treats the transformer inspections like all other inspections and completes an individual assessment using historic and current testing results. If conditions indicate the transformers condition is not reliable or cost effective to repair, a budget is developed and submitted for transformer replacement. The overall assessment takes into planning studies of transformer failure impacts.

- Mr. Dunn asked about the condition of the St Johnsbury spare transformer given its age. Mr. Fiske responded it is satisfactory if we needed to deploy it today but it is not a good long term solution given its size and age. This transformer would only be deployed if no long term spare was available.
- Mr. Mason mentioned for the St Johnsbury area VELCO could also switch to Lyndonville system as a backup. Mr. Dunn responded that VELCO would likely not operate using the Lyndonville system long term as this is not a good solution.
- Mr. Dunn asked about the condition of the Bennington spare transformer. Mr. Fiske responded it is satisfactory but doesn't have a tap changer.
- Mr. Couture asked what VELCO has been paying for its spare transformers. Mr. Fiske responded that several factors impact the price but the 3 recently bundled transformer purchases were approximately \$1.3 to \$1.4M.
- Mr. Wright asked how often the 115 to 12.5 mobile substation gets put into service. Mr. Fiske responded that VELCO has deployed this mobile twice in 2013 and plans to use it again in December.
- Mr. Nolan asked if Burlington Electric Department can be involved in the decision process when purchasing new transformers that may impact impedance characteristics. He discussed high short circuit levels in the Burlington area and that the VELCO transformer deliveries may contribute to this. Mr. Dunn responded that all potentially impacted members will be invited to participate in selection of transformers to improve knowledge of overall system impacts.

Power Accounting Update

- Mr. Etori presented the power accounting materials provided to the OC.

Case Study for the New Normal: Transmission Deferral in Vermont

- Mr. Dunn presented the materials provided to the OC.
- Mr. Couture asked Mr. Etori if any other states have similar NTA requirements. Mr. Etori responded that states do have statutory NTA requirements but they are typically less rigorous.
- Mr. Couture asked if the \$157M deferred transmission project was the upgrade of the K31 and K35 lines Mr. Dunn responded the \$157M is VELCO's estimate of deferring the project which also included necessary upgrades at various substations along the lines.

Other business

- Mr. Etori discussed the New England plans for compliance with FERC Order 1000.
 - Mr. Etori reported there are 3 basic aspects to FERC Order 1000: Interregional planning, competitive process for transmission projects, and transmission plans for state public policy projects.
 - He noted that the interregional planning compliance filing is completed and November 15th is the compliance filing deadline for competitive process for transmission and public policy projects.
 - New projects that are greater than three years in the future will be opened up to a competitive bid process.
 - On the Public policy front the states and NESCOE have provided a cost allocation of 70/30 whereby 70% of the costs for transmission would be allocated to all New England load and 30% would be allocated to the states needing the renewable generation.

- Mr. Wright asked who would own the asset. Mr. Etori responded that the successful bidder would own the asset but it's possible they might ask the incumbent transmission company to operate and maintain.
- Mr. Mason asked if VELCO was positioned to bid projects outside of Vermont. Mr. Dunn responded that VELCO has no plans to for projects outside of Vermont.
- Mr. Dunn discussed with VELCO's focus on trying to control transmission costs this FERC Order directly poses a negative impact on this focus with all the new potential players in the market. Socializing the costs associated with bringing renewables to the market are a potential added cost if they are treated like reliability projects and the costs are shared across ISO-NE TO's.
- Mr. Nolan asked if a state would have to request a specific renewable project to assist with their renewable goals for the transmission costs to be socialized. Mr. Etori responded that it's possible as under the FERC Order the ISO would then be provided the request to determine the costs associated with bringing the renewable to the requesting state. This may then qualify for socialized transmission costs even though they may receive no benefit.
- ISO continues to be focused on natural gas availability for dual fuel plants and they've placed an out of market cost of almost \$80M.
- Mr. Dunn discussed VELCO has discussed increasing the OC membership with its Board which was well received and the VTAM is under revision to address this approved modification.

Proposed agenda topics

- Fiber Project Status
 - VELCO Draft Document on Guidelines for Accessing Telecommunications Network
- FERC Order 1000 Update
- Vermont Gas Update
- Roger Hill Weather Emergency Preparation Presentation (1 Hr Limit)

Adjournment

- Mr. Couture moved and Mr. Nolan seconded adjournment, which was agreed to without objection at approximately 1:55 am.