Final VELCO Operating Committee Final Minutes

February 19, 2015, 11 a.m. – 3 p.m. GMP Office, Montpelier

Participating members: Doug Haselton (Town of Stowe Electric Department), Ken Couture (Green Mountain Power), Frank Ettori (VELCO), Ken Mason by phone (Vermont Public Power Supply Authority), Chris Root (VELCO, Chair), Jeff Wright (Vermont Electric Cooperative).

Other participants: Tom Dunn (VELCO), Deena Frankel by phone (VELCO), Dave Haas by phone (VELCO), Kerrick Johnson (VELCO), Mike Loucy (VELCO), Dan Nelson (VELCO), Hantz Présumé (VELCO).

Next Meeting

March 19, 2015

11 a.m. to 3 p.m.

GMP Office, Montpelier

Opening

• Mr. Root called the Operating Committee (OC) meeting to order at 11:00 a.m.

Safety Topic

- Mr. Dunn presented a safety topic concerning snow build up around building vents and that it can lead to hazardous situations by impacting airflow. It's a good reminder to inspect buildings periodically to keep vents clear from any obstruction.
- Mr. Ettori discussed that when using wood or other ash generating heating systems it's a best practice to make sure the ashes are removed from the building because they can produce carbon monoxide (CO). Even if the ashes are not burning they can lead to elevated levels of CO.

Minutes Approval

• Mr. Ettori moved and Mr. Wright seconded approval of the January OC minutes as posted. The minutes were approved without objection.

Vermont Long-Range Transmission Plan

- Mr. Présumé discussed the materials and provided an update to the OC.
- Mr. Dunn asked how many public meetings are currently anticipated as part of the long range transmission plan development process. Mr. Présumé responded that at least two meetings are planned for the second quarter 2015.
- Mr. Johnson asked the OC members to consider broadening the awareness of the long range transmission plan outreach efforts to foster interest in public meeting attendance. He discussed that any future forums or other outreach programs the OC members may have could be possible venues to discuss the importance and potential impacts of the long range transmission plan. Ms. Frankel mentioned that historically attendance by the public has been a challenge so we're trying to identify other outreach opportunities. Mr. Couture agreed to take this request back to GMP and look for synergistic opportunities. He will reach out to VELCO to discuss any potential opportunities to collaborate. Mr. Wright also agreed to take this back for consideration within VEC and investigate if any opportunities may be present to publicize the meetings.
- Mr. Root discussed that the overall change in modeling requirements under the new North American
 Electric Reliability Corporation (NERC) Transmission Planning (TPL) standard is an evolution of the industry
 to improve reliability of the electrical grid. Mr. Présumé added that NERC wants to be more explicit on
 how the modeling is conducted to drive consistency across the country.

- Mr. Dunn asked how Canadian interconnections are accounted for in the modeling under the new NERC TPL standards. Mr. Présumé responded that reliability studies are concerned with the ability to serve load in Vermont. From that perspective, the studies tend to reduce generation and maximize imports. To determine the potential impacts of import projects, we would likely use a two-step approach. The first model would be set up to maximize imports from neighboring states along with Canadian interconnections. The second model would be to setup to test imports, but would minimize the Canadian interconnects. These scenarios are then analyzed to identify potential risks to the electrical grid and determine whether mitigation is necessary.
- Mr. Root discussed that the new NERC TPL standards become effective in January 2016 and will likely coincide with the start of the next transmission planning study.
- Mr. Ettori asked why various transmission solutions screened out of the full Non Transmission
 Alternatives (NTA) analysis presented. Mr. Présumé responded that the risks presented by the analyses
 are beyond the forecast window established by the NTA analysis process and developing a solution would
 be premature.
- Mr. Wright recommended that VELCO consider including within its transmission planning studies the
 potential changes the Distribution Utilities (DU) may be required to implement under the Vermont
 Renewables Portfolio Standards (RPS). Mr. Présumé agreed that investigating the potential impact is
 prudent and asked for any DU contacts he could obtain information regarding their strategies to comply
 with the RPS. Mr. Wright and Mr. Couture offered to provide Mr. Présumé with contacts at VEC and GMP
 respectively.

Pentachlorophenol Update

 Mr. Root provided an update on the Pentachlorophenol best management practices report provided to the Vermont Agency of Natural Resources (ANR). The ANR provided verbal feedback that their initial review is positive and they will formally respond to the report within one month.

Risk Assessment

- Mr. Root discussed the materials provide to the OC.
- Mr. Wright asked if VELCO could provide information regarding the physical security system they are installing. Mr. Root agreed to provide the information to the OC members.
- Mr. Couture asked if any risk management plans have been developed around the fiber system. Mr. Root
 responded that as this system is relatively new and the development a specific risk management plan is
 underway.
- Mr. Couture asked if the Supervisory Control and Data Acquisition (SCADA) Emergency Management System (EMS) project is an upgrade to the existing or a new platform. Mr. Root responded that it is an upgrade to the existing Open Systems International (OSI) platform.

Load Shed Planning from VPPSA, Stowe and WEC

- Mr. Mason provided an update regarding the efforts by VPPSA, Stowe and WEC to develop manual load-shed plans. He discussed that Mr. Myotte has been coordinating the evaluation to analyze the ability for these utilities to shed 50% of their load or 40 MW within 10 minutes of the ISO New England (ISO-NE) requirement. While the Swanton Village Electric Department presently participates in the manual load-shed program, the biggest challenge to work through is that none of the other VPPSA members have a 24 hours per day, 7 days per week staffed control center. Mr. Mason discussed that he will make this an agenda item at the next VPPSA Board of Directors (Board) meeting and asked if VELCO could attend to assist with explaining the requirements and possible next steps. Mr. Root agreed to have VELCO representation at the next VPPSA Board meeting.
- Mr. Haas discussed that per ISO-NE operating procedure OP-14 VPPSA members could enter into agreements with other utilities that serve them, such as GMP to meet the load-shed requirements.

- Mr. Couture recommended that VELCO participate in meetings with the affected DU's to assist with loadshed plan development given the intricacies involved. Mr. Haas agreed that VELCO could participate in discussions and asked that he be included as the point of contact.
- Mr. Mason offered to use the initial recommendations provided by Mr. Myotte as a starting point for discussion with a technical group. The purpose will be to develop a presentation for the next VPPSA Board meeting.
- Mr. Wright asked Mr. Couture if GMP load-shed plans were reconciled to ensure loads were not claimed on more than one entity's plans. Mr. Couture confirmed that this issue was addressed.

TDI Update

- Mr. Root provided an update to the OC regarding the status of Transmission Developers Incorporated's (TDI) progress towards building a transmission line in Vermont.
- Mr. Dunn discussed that one of the remaining challenges with the proposed TDI project in Vermont is the potential reliability impacts on the existing transmission system. Any proposed project will need to have transmission studies completed so that all project costs can be considered.
- Mr. Wright asked if VELCO has an opinion on what impact this project may have on Locational Marginal Pricing (LMP) generator owners. Mr. Dunn responded that since the TDI project would bring additional supply into the market it's reasonable to expect the project would lower LMP market prices.

ISO-NE Update

- Mr. Ettori presented the materials provided to the OC.
- Mr. Root discussed that unrest in countries like Yemen, a historically significant worldwide supplier of
 natural gas whose government was recently overthrown could interrupt some LNG supplies in the short
 run. Part of ISO-NE's planning strategy should be to keep abreast of such worldwide issues and their
 potential impact on fuel supplies. There is much activity around developing more gas pipeline capacity
 into New England from the shale gas areas.

Power Accounting Update

- Mr. Ettori presented the materials provided to the OC concerning the Bridge Energy Group (BEG) and ARC Consulting (ARC) transition and Power Account System (PAS) strategy.
- Mr. Couture asked if VELCO's interim external hosting needs of the PAS was the result of a physical
 constraint at VELCO. Mr. Nelson responded yes and explained that the current server space at VELCO is
 insufficient to conduct in-house hosting. He discussed that the new server room under development will
 accommodate this need when completed towards the end of 2015.

Statewide Radio Project

- Mr. Nelson presented the materials provided to the OC.
- Mr. Nelson explained that the Telecommunications Subcommittee preliminary charter has been developed, the initial members have been identified and a kick-off meeting has been established.
- Mr. Wright asked if VELCO is developing plans to bring radio programming in-house. Mr. Nelson
 responded that VELCO's initial thought is to review any radio programming completed by the DU's prior
 to implementation. The objective of this review would be to try and minimize system impacts that could
 result.
- Mr. Couture asked how VELCO obtains approval for radio system enhancements. Mr. Nelson responded
 that VELCO currently develops recommendations as part of its annual budgeting process which is
 reviewed and approved/rejected by VELCO's Board of Directors.

- Mr. Nelson discussed the VELCO continues to evaluate potential improvements and next generation radio developments to keep pace with technology innovations.
- Mr. Wright expressed that they are seeing daily improvements in the radio system operation and recently were able to speak with field personnel in Canaan. Once the congestion issue during times of heavy usage is resolved the confidence in the system will continue to grow.

State of the Grid

- Mr. Root presented the materials provided to the OC.
- Mr. Johnson asked if the calculations supporting the chart of generation vs load by state removed the
 data for all generators who have noticed their plans to shut down. Mr. Root responded that the
 calculations only account of those generators who have shut down to provide a representation of today's
 situation.

VELCO Board of Directors Update

Mr. Root provided a summary of the February VELCO Board of Directors Update to the OC.

Other Business

• No other business was discussed.

Proposed agenda items

- Load Shed Planning from VPPSA, Stowe and WEC
- DU and VELCO knowledge transfer RPS impacts update
- Interconnection standards
- Pentachlorophenol, if formal response from ANR has been received
- Statewide Radio System
- ISO-NE update
- Power Accounting System

Motion to adjourn

Mr. Ettori moved and Mr. Couture seconded adjournment, which was agreed without objection at 2:49 p.m.