

VELCO Operating Committee FINAL MINUTES

September 15, 2016, 11 a.m. – 3 p.m.
VELCO Rutland, VT

Participating members: Ellen Burt (Town of Stowe Electric Department), Ken Couture (Green Mountain Power), Frank Ettori (VELCO), Kevin Perry (Vermont Electric Cooperative), Bill Powell (Washington Electric Cooperative – via telephone), Ken Mason (Lyndonville Electric Department – via telephone), James Gibbons (Burlington Electric Department).

Other participants: Dawn Bugbee (Green Mountain Power), Mike Bursell (Vermont Electric Cooperative), Katie Orost (Vermont Electric Cooperative) Brian Connaughton (VELCO –via telephone), Crystal Currier (Vermont Public Power Supply Authority), Thomas Dunn (VELCO – via telephone), Kerrick Johnson (VELCO), Michele Nelson (VELCO), Colin Owyang (VELCO), Dan Nelson (VELCO via telephone), Chris Root (VELCO – via telephone), Chris Babb (VELCO – via telephone), Eddie Ryan (Green Mountain Power –via telephone), Kevin Weishaar (Town of Stowe Electric Department), Donna Trombley (VELCO) Jim Reardon (Burlington Electric Department), Mary Coombs (VELCO), Hantz Presume (VELCO), Carol Robertson (Village of Hyde Park), Butch Goulette (VELCO).

<p style="text-align: center;">Next Meeting October 20, 2016—11 a.m. GMP Office, Montpelier</p>
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Meeting opening

- Mr. Ettori opened the VELCO Operating Committee meeting at 11:05 a.m. and conducted a roll call to identify all participants in person and on the conference bridge.

Budget Review

- Mr. Dunn initiated the budget discussion with comments via phone while en route to ISO-NE. He emphasized that for the fourth year in a row VELCO has submitted a flat budget. He noted his level of satisfaction with the budget proposal for 2017, but cautioned that going forward issues related to the cost of transmission will make the continuance of that practice an increasingly difficult challenge.
- Ms. Nelson followed with more specific information pertaining to the amount of the budget. She added that VELCO employee head count has remained flat.
- Ms. Nelson then explained that the Statewide Radio System includes site costs similar to those required of electrical substations in the area of plowing and maintenance that will be increasingly reflected in the budget for the years to come. She then highlighted a comparison of the budget proposed for 2017 and the budget submitted in 2016.
- Mr. Ryan questioned the changes to the AFUDC. Ms. Nelson explained that the \$5M variance was largely due to an increase in capital expenditures.
- Ms. Nelson then elaborated further on the 2017 operating expense. She referenced that \$2M was classified as an operational expense in the 2016 budget will be capitalized in the 2017 budget.
- Mr. Ryan questioned the increases in the area of compensation increases. Mrs. Nelson responded that the values in that area assume a certain merit increase. That figure is combined with an expected performance increase due to progress toward the 2017 key performance indicators.
- Mr. Bursell expanded upon the question raised by Mr. Ryan and inquired about the size of the increase as compared to the submittal for 2016. Ms. Nelson took an action item to discuss the matter in more detail with Gina Kelley and then respond to the group via e-mail.
- Mr. Dunn amplified that previous years did not include projected progress toward the KPI performance and it resulted in a big miss that required a subsequent expense in 2016. The solution was to estimate and budget the expectation.
- Mr. Reardon reiterated the importance of the level-funded component.
- Mr. Reardon then asked about the funding ratio. Ms. Nelson replied that she suspected it was in the area of 80%, but would follow up with specific numbers.

- Mr. Reardon then asked what VELCO uses for its amortization period of 'catch up' payments. Ms. Nelson responded that the VELCO process does not include such payments and therefore does not require an associated amortization schedule.
- Ms. Trombley then spoke to the capital portion of the budget. She referenced the following capital projects: CRV project, PV20, and the SCI project.
- Mr. Ryan asked what drove such a substantial reduction in the budgetary values for the Connecticut River Valley Project. Mr. Johnson, Mr. Etori, and Mr. Connaughton responded that the early budgetary estimate was conservative. As the project evolved and actual values became clearer, the overall cost estimate was reduced.
- Mr. Couture asked if there were any projects with estimates that were increasing. Mr. Connaughton replied that there are not.
- Mr. Ryan asked why the VWAC has increased so substantially from \$14M to \$27M.
- Mr. Johnson responded that it is the value that the Board of Directors approved and that it actually represents a reduction in cost over the previous two years.
- Mr. Nelson spoke in more detail about the data center and explained those numbers to Mr. Ryan's satisfaction. Ms. Nelson added that the facility will be located at the VELCO headquarters on Pinnacle Ridge.
- Ms. Burt inquired about the increases to the substation assessment project. Ms. Trombley explained the increase is due to the addition of four stations to the SCAP.
- Mr. Connaughton elaborated to say that the older substations in the VELCO system have been prioritized. He cited St. Albans and Berlin among the additions. He offered to follow up with more detailed information pertaining to the other affected substations. Ms. Burt requested that he do so.
- Ms. Nelson concluded with reference to equity issuances that assume an actual debt to equity ratio that is consistent with the VELCO prediction.
- She adds that the error in the RNS (Regional Network Service) revenue requirement is in the 2017 budget from July through December, though no retroactive adjustments were made. Ms. Nelson also cautioned that the estimates provided assume that the average coincident peak values remain the same. She expanded that the actual values have lowered and there is a level of confidence that the estimates are conservative.
- Mr. Etori supported that claim by informing that New England has seen lower peak values than have been experienced in more than fifteen years.
- Mr. Bursell asked about the status of VELCO's audit fees. Ms. Nelson responded to affirm that the fees are slightly higher. She explained that VELCO is obligated to remain with KPMG for another year after which time VELCO may pursue competitive bids. Mr. Reardon offered that those fees can be expected to rise.
- Ms. Bugbee asked what the Board felt about increasing the equity component? Mr. Owyang and Ms. Nelson responded that the matter was for the Board to take up at its October meeting.
- Mr. Etori adjourned for lunch at 11:55 and requested the Operating Committee personnel resume at 12:30.

Operating Committee

- Mr. Etori reconvened the meeting at 12:30 with only the Operating Committee participants.
- Ms. Burt moved to approve the minutes from the previous meeting. Mr. Perry seconded the motion and those minutes were approved without objection or abstention.

Rule 5.500

- Mr. Presume provided an update on the requirements for low voltage ride-through and low frequency ride-through. He opined that the language the State of Vermont provided was weaker than VELCO had hoped it would be.
- He explained that the recent FERC Order 828 mandating ride-through capability only applies to FERC jurisdictional projects. The initial language proposed by the DPS sought to mandate similar ride-through capability upon state jurisdictional renewable energy sources, but in light of stakeholder concerns, the

final language adopted the approach from the IEEE 1547a standard that does not mandate such functionality, but does encourage it as good utility practice.

- Mr. Etori clarified that the measure for all generators on compared to the ISO-NE minimum interconnection standard is more onerous and may not pass FERC scrutiny.
- Mr. Presume added that a point is reached at which the expansion of the transmission system to allow all units to run at all levels at all times is not cost effective. He stated that there is a point at which generation curtailments must simply be accepted.
- Mr. Presume welcomed the participants of the meeting to ask questions, but none were posed.

Emergency Preparedness Drill

- Mr. Etori then referenced the VT state Emergency Preparedness drill for September 20th and the VELCO tabletop drill planned for November 1st, 2016.
- Mr. Couture addressed the upcoming Emergency Preparedness annual meeting that will be conducted jointly in Waterbury. Lt. Governor Phil Scott will be the keynote speaker at the event.

VWAC Phase II

- Ms. Coombs addressed the group to provide an update on the status of the VWAC project.
- Ms. Coombs discussed the formation of various sub-committees that have been formed for specific areas of the weather analytics tool that have participation from VELCO, VDU's, IBM, and State agencies.
- Ms. Coombs also addressed the progress made toward improving the process of forecasting ice accretion. Ms. Coombs states that the parameter has been a challenge, but there are steps in place to improve the process and enhance its accuracy.
- Mr. Gibbons asks if these matters are designed more for power lines or the blades of wind turbines which may constrain the output of those units. Ms. Coombs responded that the goal is for improvements to both areas.
- Ms. Coombs expanded upon the VWAC progress toward predicting the peak load.
- Mr. Gibbons added that the ability to do so early in the month, though more difficult, is much more beneficial.
- Mr. Etori welcomed suggestions or proposals for measureable benchmarks that can be used to assess the effectiveness of the analytics tool.
- Ms. Coombs then provided details regarding the short and long term planning developments and the next steps to be taken in that direction.
- Ms. Coombs then spoke to the security of the portal. She detailed an effort by which users were audited to ensure that each entity could only view those items that they were authorized to view.
- Mr. Johnson thanked Mr. Gibbons for his contributions toward security. Mr. Gibbons then promptly deferred the praise to his associate.
- Mr. Johnson encouraged the participants to consider the use of the tool to better gauge an ideal location for the installation of a renewable energy source.
- Mr. Gibbons cautioned that measures must be taken to ensure that the beneficiaries of the tool are limited to those who are financially supporting the tool.
- Ms. Coombs continued her segment with a review of the VWAC platform and information systems and the overall goal for it to be a 'one-stop shop' for the data needs. Ultimately she adds that the plan is to procure another HPCC and provide full redundancy for that data collected.
- Ms. Coombs cited the VWAC metrics that are presently in effect. They are Weather/Renewable Forecasting/Peak Load Management/Grid Ops-Asset Planning. Regarding metrics, Ms. Coombs cautioned the group to ensure that the metrics selected are clear and known by all participants.
- Mr. Gibbons wondered if we may eventually see the VWAC forecast producing a more accurate forecast than the NWS in Burlington. Mr. Johnson affirmed that is indeed a goal.
- Ms. Coombs addressed the extent to which the ISO-NE seeks to use the tool. Ms. Coombs adds that the VWAC tool is prepared to provide a level of detail that is down to the rooftop level. The ISO-NE has stated that their intent is not to achieve that fine a level of granularity.

- Mr. Johnson expands on that concept with comments that the ISO-NE, with prompting from VELCO, is considering a change to their existing philosophy and rules of procedure to such a level that they will welcome the additional amounts of detailed information.
- Ms. Coombs concludes that the overall next steps in this area are a discussion to finalize metrics, to further refine the cases under subgroup development, work to improve visualization as the Opus platform is developed, and to secure new opportunities to add relevant data streams (such as synchro-phasor data).
- Mr. Couture asked about ways that he as a user can better use the tool. Ms. Coombs noted that HELP buttons have been added to every screen.

Statewide Radio System Update

- Mr. Nelson began with a notice that the Barnard radio site had recently received permitting approval.
- Mr. Nelson reports that sixteen sites have been completed. Mr. Johnson amplifies that the VELCO Telecom team has installed fiber optic system monitoring that enables us to identify and repair telecom issues prior to recognition by end users. Such diagnostics for the SRS do not yet exist and are more challenging to create, but VELCO will have such functionality. Mr. Couture affirmed the value in that endeavor.
- Mr. Nelson spoke to the progress being made on Montgomery and Lowell tower sites that will enhance coverage and improve performance for the radio users in that area.
- Mr. Nelson requested the assistance of the users...then he broke up as he ended.

Solar – A Combined Effort

- Ms. Robertson introduced the term CREBS (Clean Renewable Energy Bonds – twenty-five year notes with a zero interest rate).
- Ms. Burt then expanded that Stowe and The Village of Hyde Park then decided to embark upon a partnership to obtain low interest bonds for the construction of solar projects. Both entities operate 1MW arrays. HP will obtain approximately 13% of its native load with this project. Though the MW amounts are identical, Stowe supplies only 2.2% of its native load.
- Ms. Robertson says that Hyde Park's excess production will enable the creation of REC sales estimated to be \$32,000.00.
- Mr. Gibbons noted that the variance in the end kWh costs are attributable to the higher cost of real estate in the Stowe area.
- Mr. Robertson responds to Mr. Johnson's inquiry as to their legal counsel by answering Mr. Edward French.
- Ms. Burt states that Encore Renewable Energy was the turnkey organization and most all resources for each project were shared amongst the two utilities to maximize efficiencies with the available economies of scale. Mr. Weishaar offers that such advantages were primarily in the area of legal and consulting costs.
- Ms. Burt and Ms. Robertson acknowledged that it was their first interaction with VEDA and both viewed it positively.
- Mr. Gibbons suggested that the rate at which they progressed through their projects is a testament to their ability to put a cost on the decision to delay.
- Mrs. Robertson emphasized that the challenges they faced were met and resolved with an increased level of communication. Ms. Burt agreed. Both utilities lauded the support they received from the Department of Public Service. Chris Recchia and Bill Jordan were referenced specifically.
- Mr. Weishaar accented the importance of acquiring community support.
- Ms. Robertson spoke to the lessons they learned and chief among them was that both would have attempted a larger scale project. Ms. Burt says that Stowe would have sought to satisfy its entire renewable percentage obligation. Ms. Robertson expressed her surprise at the amount of power the local planning commissions wield. Both utilities stated that they encountered support within their communities at a rate of approximately 4:1 in favor. The area that produced the greatest amount of surprised was the abundance of residents who wanted to locate the project on their property. Mr. Ettori suggested that such desire equated to the receipt of lease payments.

- Mr. Etori asks whether either entity would consider a second phase to the project. Both replied affirmatively.

Other business

- Mr. Gibbons appointed as the representative from BED.
- Mr. Etori requested that Ms. Burt supply a letter informing the committee of the alternative representative from Stowe Electric.
- Mr. Couture suggests that a Deep Thunder update occur every other month. Mr. Etori asks the group if it saw merit in the process to conduct a deeper dive into each of the four areas of focus for the VWAC tool. Mr. Couture confirmed that he did and Mr. Gibbons concurred. Mr. Etori took an action item to work with members of that team to coordinate such a review at each of the four upcoming Operating Committee meetings.

Proposed agenda items

- New Solar Plants – WEC
- Debt Equity Update
- Board Update
- K22 line incident
- VWAC detail on one of the four primary functions of the tool. (Weather/Renewable Forecasting/Peak Load Management/Grid Operations-Asset Planning)

Motion to adjourn

- Mr. Etori moved for adjournment at 2:11 PM, Mr. Gibbons seconded the motion. It carried without objection or abstention and the meeting ended at 2:12 PM.