

VELCO Operating Committee

Final Minutes

July 21, 2016

GMP Montpelier

Members present: Ellen Burt (Stowe Electric Department), Ken Couture (Green Mountain Power), Frank Etori (chairing, VELCO), Ken Mason (Lyndonville Electric Department), Ken Nolan (Burlington Electric Department), Bill Powell (Washington Electric Cooperative), Jeff Wright (Vermont Electric Cooperative).

Guests: Mary Coombs (VELCO), Deena Frankel (VELCO), Kerrick Johnson (VELCO).

Frank Etori convened the meeting at 11:10 a.m. He asked to add to the agenda a discussion of a recent incident in St. Albans which was agreed without objection.

Safety topic

Beware of wild parsnip and hogweed. Many people are unaware of the proliferation of these species, which have plant oils that interact with the human skin causing severe sunburn upon sun exposure. It is very important to be able to identify the plants and avoid contact or wash off the oils before sun exposure.

Approval of the minutes of the May 19 meeting

Ellen Burt moved and Bill Powell seconded approval of the May 19, 2016, minutes, which were approved without objection.

Vermont Weather Analytics Center

Mary Coombs reviewed the Vermont Weather Analytics Center (VWAC) update provided in the meeting materials. Ken Couture asked if additional work would be done on renewables, to which Mary responded in the affirmative.

Draft performance metrics were discussed. Kerrick stated that a team is being formalized for managing development of the metrics, with distribution utilities to be included for each area. Some have been identified and others will be named soon, with Ken Couture and Cyril Brunner as DU leads for weather.

Mary and Kerrick pointed out the relative level of development of the technical measures versus the performance results, and economic and societal benefit. In the case of the technical measures, these are set in the contract, but the benefits need further development as this is an enhancement being made as part of the second Joint Development Agreement (JDA). Ken Couture has committed to developing some savings scenarios for the renewables measures. Kerrick reported that NY ISO is now interested in VWAC and a meeting has been set up with them.

Kerrick highlighted the importance of the peak management aspect of the second JDA work. VEIC is entering its next Demand Resource Plan (DRP) through a formal process at the Public Service Board (PSB). VELCO is seeking to ensure alignment and synergy between the DRP and VELCO's and Vermont's interests in peak management. VELCO has begun talking with VEIC about a DRP scenario focused on peak management. One exchange has taken place with Vermont Energy Investment Corporation (VEIC) so far, and we indicated the need to discuss the concept with the Operating Committee at this meeting.

Bill asked Ken Nolan whether there was alignment between VEIC and BED, as both are Energy Efficiency Utilities. Ken expressed that the working relationship presents some frustrations, but he is open to continuing the conversation concerning the peak management scenario.

Kerrick provided some additional detail on improved short-term forecasting. He then asked how VWAC could be used as a tool for providing information to regional planning commissions (RPCs) in the work they need to do under Act 174 (An act relating to improving the siting of energy projects). The group discussed communications between utilities and RPCs. Some RPCs are starting from a very basic point in developing their regional energy plans and will need a lot of support from the utilities. Solar Pathways info is being fed into the process. Ken Nolan noted the potential political issues with some towns opting out and others not. The Public Service Department (PSD) is conducting meetings by sector as part of Act 174 implementation.

Bill asked about the Citizen Science program. Kerrick and Mary explained that it was focused on increasing the amount of weather data flowing into VWAC, but will include provision of information out to participants. Mary further explained that the integration of more data into VWAC will provide a more accurate picture for operators of what each day's load will look like.

Ken Nolan noted that BED has a new logo it will provide to VELCO. (This follow-up occurred immediately after the meeting.)

ISO New England Update

Frank presented the ISO-NE update included in the meeting materials. He described the Integration of Markets and Public Policy (IMAPP) initiative that has just begun. The strategies may include a shadow market, or a change in the Regional Greenhouse Gas (RGGI), or some other model. The end result is likely to produce an increase in wholesale prices. He was asked where the extra money would go and stated that, if any new program is similar to the RGGI approach, the states would get to decide. The group discussed the relationship between this issue and a carbon tax.

Discussion is underway concerning the descending clock auction and the alternative of a fixed or sealed bid. ISO-NE has no stated preference as to the best solution. Frank expressed concern about the cost of making a change if it doesn't make a significant difference. Ken Nolan opined that capacity market has become too complicated and should be simplified.

Frank reported that subsequent to the Reliability Committee failing to support the Northern Pass Proposed Plan Application (PPA), ISO-NE approved it.

The group discussed whether the exemption from competition for local project Pool Transmission Facility (PTF) components was likely to be approved by FERC and whether it would be vocally opposed by any party. The Transmission Owners (TOs) will meet next week to discuss. VELCO intends to support the proposal for an exemption from competition unless it hears objections from the Operating Committee. No objections were raised.

Frank explained that ISO-NE has asked for Transmission Cost Allocations (TCAs) on cyber and physical security costs of the TOs. Ken Couture asked for more clarity on why physical and cyber security costs are not transmission asset costs. Frank explained the various classifications of different components, and whether they are PTF or allocated. The reason for this request by ISO is to get greater vision into the

costs that are coming with the increased focus on security. For VELCO, physical security costs about \$10 million. Frank explained that the security costs have been recovered through TOs revenue requirements, but haven't required a TCA. The group asked whether ISO-NE would be using this information to more closely scrutinize or establish best practices for these costs. ISO-NE's request for these TCAs seeks greater transparency to these costs, and to understand what they include; not so much to control the costs.

Ken Mason asked for more information about how the Belmont, MA, project would be paid for and what Vermont would pay. Frank explained the process by which utilities recover the costs of a project like Belmont — how the costs of the project go into the cost recovery. The group discussed about the lack of clarity regarding the relationship between the load shedding criteria and the funding of local project PTF components.

Vermont System Planning Committee Charter

Deena Frankel gave an overview of the VSPC charter and explained that it had been approved at the July 20, 2016, quarterly VSPC meeting. A minor wording change to the version of the charter included in the Operating Committee packet was made by the VSPC subsequent to distribution. The final version will be posted on the VSPC website at <http://www.vermontspc.com>.

VELCO Board Meeting

Frank gave an overview of the last VELCO Board meeting. Colin explained the issue of how the ISO-NE rate formula development identified an error in the way taxes have been calculated since Vermont Transco was formed. He explained how the issue was being addressed going forward and that VELCO is commissioning a study on the debt-to-equity ratio.

BED Solar Development

Ken Nolan gave a presentation on BED's solar development. (Slides from the presentation were posted on the Operating Committee website subsequent to the meeting.) He demonstrated BED's solar map and stated that currently the solar map gets updated manually, but BED is looking into automation of the process.

He reported that customers are being inundated with offers to install solar and customers' challenge is to evaluate the offers/proposals. Kerrick asked if this phenomenon is specific to Vermont or national. Ken answered that national companies say this is happening everywhere.

BED sees a very large increase in net metered solar coming along. Currently, BED is at around 2% of load, so they are one of the places solar companies are targeting with much headroom remaining below the 15% cap. He pointed out the example of a peak day being the day of lowest solar output (high humidity, cloud cover), and stated that BED would have complemented with demand response if it were available.

BED's peak hour is still around 4 p.m. Solar is not yet affecting BED's load shape in the way it is for GMP and therefore for VELCO.

An observed trend for new construction is to put in cold climate heat pumps with electric baseboard heat as back-up.

Ellen volunteered to do Stowe's PV presentation at the next meeting.

St. Albans outage

Frank gave a report on an incident at St. Albans and proposed a full presentation at the August Operating Committee meeting of the whole incident and outage. GMP will talk about the impacts on its system and the load shedding required. VELCO will also present the plan going forward.

Recent thefts

Equipment was stolen from a contractor. Cameras didn't catch the activity because it was out at the road, but cameras caught the perpetrator at Shelburne. VELCO has cameras, fence detection, plus the system provides an alert based on the fence detection, so it doesn't rely on the security guard to notice the activity.

Miscellaneous items

Budget requests are due July 1. If there is something DUs want from VELCO, please let us know sooner rather than later.

VELCO received CPGs for CRP and PV-20.

The group discussed the Docket 8550 (Renewable Energy Standard) order.

Adjournment

The meeting was adjourned at 2:11 p.m.