

VERMONT SYSTEM PLANNING COMMITTEE

MEETING MINUTES SEPTEMBER 14, 2011 HOLIDAY INN, RUTLAND

A regular meeting of the Vermont System Planning Committee (VSPC) was held on September 14, 2011, at the Holiday Inn, Rutland, Vermont. Deena Frankel called the meeting to order at 9:35 a.m.

Ms. Frankel presented the minutes of the June 8, 2011, and June 15, 2011, meetings for approval. On a motion by David Mullett, seconded by Steve Litkovitz, the minutes of the June meetings were approved without objection.

Introductions

Participants introduced themselves. A list of attendees by sector appears on page 8 of these minutes.

Subcommittee reports

Energy Efficiency & Forecasting (EE&F)

T.J. Poor, subcommittee chair, reported that the August 1 Public Service Board (PSB) order on approving a demand resource plan for the Energy Efficiency Utilities (EEUs) established that the Board will, beginning in 2012, rely on the VSPC to identify and prioritize constrained areas for geographically targeted energy efficiency services. For 2012 and 2013, the Board earmarked up to 10 percent of energy efficiency funding for geographical targeting. In subsequent years, it will establish levels, targets and funding mechanisms based on the recommendations of the VSPC. In an August 8 memorandum, the Board requested an update on the status of the VSPC geotargeting territory selection process, and a proposed schedule for the remainder of the PSB's geotargeting territory-selection proceeding. Mr. Poor informed the PSB on August 23, 2011, that EE&F had met several times to develop tools to assess potential geographic targets and provided the schedule previously adopted by the VSPC. Mr. Poor added that a meeting schedule for August 30 was postponed due to Tropical Storm Irene. Therefore, the Subcommittee does not have recommendations for consideration at this meeting. The Subcommittee is developing a robust process for the identification of potential areas, and will have an action item for the VSPC to consider at the December meeting. Recommendations or an alternative schedule must be filed with the PSB by September 21, 2011. EE&F recommends that, if no areas are recommended for geotargeting, the Subcommittee be authorized to file a letter so stating with the PSB. If geotargeting areas are identified, the Subcommittee will present its recommendations to the full VSPC for consideration in December.

MOTION TO AUTHORIZE THE ENERGY EFFICIENCY & FORECASTING SUBCOMMITTEE TO INFORM THE PUBLIC SERVICE BOARD IF THE SUBCOMMITTEE RECOMMENDS NO GEOTARGETING AREAS AND TO BRING RECOMMENDATIONS TO THE FULL VSPC IF AREAS ARE RECOMMENDED FOR GEOTARGETING Mr. Mullett moved and Mr. Litkovitz seconded. The motion passed unanimously.

Generation Subcommittee

No report.

Procedures Subcommittee

No report.

Public Participation Subcommittee

No report.

Technical Coordinating Subcommittee

No report.

Transmission Subcommittee

Ms. Frankel informed members that the Transmission Subcommittee met on September 1 to discuss transmission assumptions for the Long Range Transmission Plan (LRTP). Hantz Pr sum  added that the subcommittee meeting was an opportunity to review the scope, assumptions, and some of the preliminary results from the ISO-NE analysis, and for VELCO to receive comments. Good questions and discussion arose at that meeting, and VELCO will create additional opportunities for input by distribution utilities and other stakeholders.

Old Business

Ad Hoc Process Reform Group

Ms. Frankel provided a recap of the process reform efforts to date. The VSPC approved recommendations of the Group at the June 8 meeting with direction for the ad hoc group to do additional work in two areas. The VSPC had requested reconsideration of the previously recommended proposal to reduce the planning horizon from 20 to 10 years and clarification of the proposed categories of projects. After discussion with VELCO and the ad hoc group, the revised recommendation is to retain the original language requiring a 20-year planning horizon. Next, Ms. Frankel presented amendments to the proposed language changes to paragraph 6 categorizing projects to identify those with the greatest NTA potential. With these changes, the screening tool may also need to be reevaluated. Changes to paragraph 6 of the MOU also prompt conforming changes to paragraph 51. General discussion of the proposed final changes followed. Rip Kirby identified the potential for ambiguity in the language and suggested substituting "or" for "and" in the sentence, "Projects for which need dates are imminent or have passed, ~~and~~ or for which non-transmission alternatives are clearly impracticable and/or uneconomic." Mr. Kirby's proposed amendment was accepted. Mr. Pr sum  added that NTAs are not feasible in some instances, such as the example of the shunt reactor projects where load reduction could not resolve the deficiency. The group discussed the potential necessity to revisit the NTA screening tool and the need to explain the changes and the reason for the changes to the PSB. Ms. Frankel stated that next steps must include communication with Docket 7081 parties who do not participate at the VSPC, and petitioning the PSB for approval of the amendments.

MOTION TO ACCEPT OF THE FINAL EDITS TO THE PROPOSED MOU AMENDMENTS, PROCEED WITH COMMUNICATION WITH DOCKET 7081 PARTIES WHO HAVE NOT BEEN PARTICIPATING AT THE VSPC AND PROVIDE AN OPPORTUNITY TO COMMENT, VELCO TO CIRCULATE A COPY OF THE PROPOSED FILING TO ALL PARTIES FOR APPROVAL, VELCO TO PROCEED WITH FILING TO THE PSB AND TO REQUEST EXPEDITIOUS APPROVAL FROM THE PSB. Mr. Mullett moved and Mr. Litkovitz seconded. The motion passed unanimously.

Feedback on June 15 VSPC Meeting with Stephen Rourke, ISO-New England

Ms. Frankel requested feedback from members of the June 15 meeting with ISO-NE. Overall members thought it was a good meeting. Mr. Kirby acknowledged the quality of the presentation, but offered his concerns that ISO-NE is not considering recommendations being made by stakeholders. He was dismayed by some of the study techniques and the lack of use of hybrid NTAs. Mr. Kirby pointed out to Mr. Rourke that ISO-NE has made no attempt to combine NTAs with transmission elements for a hybrid approach that could be an optimal solution. In addition he opined that without funding NTAs will not advance as solutions. Douglas Smith encouraged future discussions with ISO-NE to provide further clarity on the planning methods. Karen O'Neill observed that ISO-NE's stakeholder process is extensive, and it is valuable for Vermont stakeholders to understand and participate in the process wherever opportunities are available. Ms. Frankel added that extensive work has been done to ensure Vermont's effective input on the VT/NH needs assessment results and NTA development in Northwestern Vermont. Ms. Frankel suggested meeting annually with ISO-NE. The group generally expressed its support of the suggestion.

Plan for 2012 Long-Range Plan Update

Mr. Pr sum  provided an overview of the long range planning process. Historically VELCO performed the analysis with the assistance of ISO-NE and neighboring transmission owners. ISO-NE used the analysis as a basis for its 10-year needs assessment. ISO-NE's 10-year needs assessment was published in February 2010. It has been under review by ISO-NE and the Planning Advisory Committee (PAC) since 2008. ISO-NE's solution assessment report was completed in November 2009, but has not been published. Before that solution assessment was finalized, ISO-NE initiated the VT/NH 10-year study in January 2010. The scope for analysis was sent out in May 2010 and stakeholders included Vermont. VELCO received permission to proceed with some needed upgrades identified in the 2008 analysis that are not affected by regional factors or future load growth. These projects include the West Rutland capacitor banks, shunt reactors in New Haven, Coolidge and Vernon, and substation reinforcements at Georgia, Ascutney and Bennington.

VELCO's Long Range Transmission Plan (LRTP) analysis is underway and a draft will be available for the VSPC by December 15, 2011. The VSPC will have 60 days from receipt of the draft to provide comments to VELCO, which will incorporate VSPC comments by March 2011, and publish a public review draft by April 1, 2012. The public comments period will end May 31, 2012. VELCO will conduct at least two geographically diverse public meetings between April 15, 2012 and April 30, 2012. VELCO will incorporate public input and submit the final LRTP to the PSB by July 1, 2012. Mr. Pr sum  added that the steps to be followed in developing the LRTP include using ISO-NE's VT/NH Needs Assessment and Solutions Assessment as the bulk system analysis for years 1-10. VELCO will analyze the sub-transmission system and the transmission system for years 11-20. VELCO has already started engagement with the distribution utilities to determine any additional analysis needed. The LRTP will be a non-CEII public document based on the underlying technical analysis conducted by ISO-NE. VELCO will update the load forecast by October 2011 as needed. Mr. Smith asked how VELCO determines when to use a different load forecast. Mr. Pr sum  stated VELCO works with Itron to determine whether there should be a modification to the load forecast. Considerable joint effort with VEIC and the Energy Efficiency and Forecasting Subcommittee has been undertaken develop the on the assumptions used by Itron to determine concerning how energy efficiency is taken into account in the forecast and to understand Itron's methodology. Mr. Smith recognized the efforts of Mr. Pr sum  and VELCO in its efforts to incorporate more current forecast information to make this LRTP more useful and up-to-date. Mr. Pr sum  added that ISO-NE has responsibility for planning in the region. If there is disagreement on the load forecast, VELCO will have to go back to ISO-NE to discuss the load forecast and the assumptions. Mr. Pr sum  went on to explain the planning criteria and assumptions used by ISO-NE.

Mr. Pr sum  then compared the 2009 LRTP analysis with the 2012 analysis, including changed assumptions about system conditions and load. The group discussed possible generation solutions and the potential to use a hybrid combination of solutions to create a preferred solution. Mr. Kirby reiterated the value of using of hybrid NTAs. He opined that NTAs and transmission alternatives are currently evaluated in isolation of each other. CVPS would like to see transmission and generation solutions combined. Mr. Kirby added that one advantage of transmission is that it is always available. Generation can be tailored to the situation you are trying to plan for. Mr. Kirby recommends using transmission to solve N-1 problems and using generation and demand side management to solve N-1-1 problems. Just enough transmission could be built to solve the problem without overbuilding. The drawback of generation is the expense to run it. If generation is run just for N-1-1, it is running only 1-2% of the time in anticipation of the second contingency and it would only need to be dispatchable within 30 minutes. CVPS is strongly considering this strategy and recommends VELCO bring it to ISO-NE for consideration in the ISO-NE VT/NH Solutions Assessment.

Mr. Pr sum  indicated that VELCO will review VSPC comments. It will perform the analysis and will continue to consult with the distribution utilities. A draft report will be distributed at the December quarterly meeting.

Regional Update

FERC Order 1000 – Implications for Transmission Planning

Ms. O'Neill provided an overview of Order 1000, explaining that, among other things, the order requires an open, transparent regional planning processes. Order 1000 requires public utility transmission providers to: develop and participate in a regional planning process that produces a regional transmission plan; consider state and federal public policy requirements in transmission planning processes; eliminate, with certain exceptions, rights of first

refusal contained in FERC approved tariffs or contracts that entitle an incumbent utility to build transmission facilities identified in the regional transmission planning processes; develop regional cost allocation methods for transmission projects selection in regional transmission plans; and coordinate with each neighboring planning region to develop procedures for coordination of planning and methods of cost allocation for interregional transmission projects. The Order does not require integrated resource planning or construction of facilities. Non-transmission alternatives (NTAs) are addressed in the Order and required to be considered on a comparable basis with transmission options. However, FERC makes a point to say the process is not a forum for integrated resource planning. When discussing comparability the order refers to Order 890. FERC found at that time that the ISO-NE process does provide comparability for NTAs. ISO-NE is comfortable that it meets FERC requirements and that nothing additional is needed. VELCO hopes that, as transmission costs rise, other utilities will look to NTAs to reduce those costs. This Order addresses the whole country and many areas do not have the level of integrated planning currently found New England. ISO-NE believes it already complies with the many of the Order's requirements related to the regional planning process. ISO-NE's has been focused on competitive energy markets, and does not want to disrupt those markets. It will, therefore, seek alternative mechanisms like the Forward Capacity Market to make NTAs more economically viable. ISO-NE claims that it considers NTAs in the planning process, but Vermont's view has been NTAs do not enjoy a level playing field. VELCO and other Vermont stakeholders will continue to advocate for NTA parity in the further implementation of the Order and the ISO-NE strategic plan.

Another significant requirement addressed in the Order is cost allocation. A regional cost allocation method for new interregional transmission facilities is required where those projects are selected in the regional planning process. Participant funding is permissible, but cannot be the only cost allocation mechanism. The cost allocation method must satisfy six cost allocation principles: (1) costs allocated "roughly commensurate" with estimated benefits; (2) those who don't benefit don't have to pay; (3) benefit-to-cost thresholds must not exclude projects with significant benefits; (4) no allocation of costs outside the region unless the region agrees; (5) cost allocation methods and identification of beneficiaries must be transparent; and (6) different allocation methods could apply to different types of transmission facilities. Neighboring transmission planning regions must have a common interregional cost allocation method for new interregional transmission facilities that must also satisfy six similar principles. The Order does not mandate a specific cost allocation method, but mandates regions to adopt cost allocation methods, although not necessarily a single method. For example, one method could apply to reliability, one to congestion and one for public policy projects. Regions have flexibility for regions to make proposals. If parties in a region cannot decide on a cost allocation methodology, FERC will decide for them.

The non-incumbent developer requirements promote competition and support the involvement of others who may have cost effective solutions to offer by requiring a not unduly discriminatory regional process for transmission project submission, evaluation and selection. Each region must establish reasonable qualifications for an entity that can propose a transmission project including reasonable timelines for completion of projects. Rights of first refusal must be removed from Commission-approved tariffs and agreements with respect to new transmission facilities selected in a regional transmission plan for purposes of cost allocation with four limitations: (1) doesn't apply to facilities not selected in the regional plan for cost allocation; (2) doesn't apply to facility upgrades like reconductoring or tower change outs; (3) allows but doesn't require competitive bidding to solicit projects or developers; and (4) doesn't affect state or local laws or regulations, including authority over siting or permitting of transmission facilities. It does apply to new transmission facilities selected within the regional transmission process with regional cost allocation. The group discussed the implications of the Order for Vermont.

Each transmission provider is required to make a compliance filing within 12 months of the effective date of the final rule. Compliance filings for interregional transmission coordination and cost allocation must be made within 18 months of the effective date. VELCO will be involved in stakeholder input regarding all aspects of the required compliance filings. Mr. Smith inquired whether the compliance filing was the forum to address the treatment of NTAs. Ms. O'Neill said yes, and that there are also other avenues such as the ISO-NE strategic planning process, all of which Vermont should pursue. VELCO will participate in the process and look for opportunities to provide input. Mr. Pr sum  added that modifying a tariff is a complicated process, and ISO-NE is considering market measures to address the issues instead of changing tariff provisions. Mr. Smith said that this approach will add additional cost to load which doesn't seem like the best solution. The incentives will be oriented to transmission solving the

problem, rather than favoring the least cost solution. Market mechanisms could fail to create effective incentives but only add costs for the customer. Ms. Frankel observed that Vermont is making progress on cost allocation, but support varies greatly among the states. The Vermont Public Service Board and the Department of Public Service continue to advocate for NTAs and reasonable cost allocation.

Status of Solutions – VT/NH Solutions Assessment

Mr. Pr sum  provided an over view of the scope definition and general assumptions used. Proposed solutions included consideration of operations and maintenance factors. A scorecard was established using criteria such as permitting, constructability, system performance, longevity, loss saving, operational flexibility and estimated capital investment. Mr. Pr sum  presented proposed solutions for each of Northern Vermont, Central Vermont and Connecticut River reliability issue. Included in the considerations are potential NTA solutions in Northwestern Vermont. Mr. Pr sum  reported that implementation of 2008 solutions has been delayed by the regional study process. These reliability deficiencies are not new and the timing has advanced in part due to restricted load flow assumptions on the PV-20 in ISO-NE’s study. Mr. Pr sum  indicated that distribution utilities are looking at opportunities for flow over the PV-20. Ms. Frankel added that there are also on-going discussions with NYPA. Many parties have an interest in this issue and the solution will require collaborative effort. Flow over the PV-20 provides significant benefit to the transmission system. The group discussed how to organize efforts to advocate Vermont’s position and VELCO’s role.

ISO-NE should have the Solutions study complete by the end of September 2011 with the Solutions Assessments report to be compiled by the end of 2011. At the same time VELCO is performing its LRTP analysis. VELCO will perform NTA screening as part of the LRTP and will document effects of PV-20 imports and generation. VELCO will begin detailed NTA analysis for those projects where an NTA is a viable option by first quarter of 2012. VELCO will seek ISO-NE I.3.9 approval for the upgrades after the completion of the ISO-NE solutions study and the LRTP. It will file for Section 248 approval (a certificate of public good) for any needed transmission reinforcements by the end of 2012. This schedule is aggressive, but these deficiencies have been known since 2008 and the solutions need to be implemented.

Project Updates

Kingdom Community Wind (KCW)

Mr. Litkovitz reported that construction has begun. An appeal has been filed with the Vermont Supreme Court. The final System Impact Study is due to the PSB by October 1.

Jay Area Reliability Project (VEC)

Harry Abendroth reported the first element of this project is the construction of a 115 kV substation. The CPG was issued in July and site preparation is underway. Commissioning is planned for next summer.

St. Albans

Mr. Kirby reported that the preferred solution is a new interconnection between VELCO’s Georgia & CVPS’s Georgia substations. No additional progress has occurred since the last meeting.

Rutland area

Mr. Kirby reported that the NTA analysis has been completed and it appears that NTAs are not a preferred option. CVPS is waiting for cost estimates from VELCO. Construction is anticipated for 2014.

Queen City, Blissville & Ascutney Capacitor Banks

Mr. Pr sum  reported that there is no need for the Queen City capacitor banks for the first 10 years. The Ascutney cap banks will be studied as part of the LRTP. The current plan calls for a parallel line from Ascutney to Coolidge

removing the need for cap banks. VELCO will continue to study the need and a solution has not yet been decided. There could be a hybrid solution.

West Rutland Capacitor Bank

Mr. Pr sum  reported that this project has received its CPG and installation is expected in November 2011.

Georgia, Ascutney, & Bennington Substation

Mr. Pr sum  reported that hearings are scheduled at the end of September for the Georgia Substation upgrade. The Ascutney and Bennington Substation upgrades both have been filed with the PSB, and the projects are in the permitting state. The Ascutney transformer is being studied as part of the LRTP.

Reactors

Mr. Pr sum  also reported that the Company expects to have a final order by the end of the year. The Company wants the reactors in place before next spring.

K41 Line

Mr. Pr sum  reported that NERC issued an alert requiring utilities to verify transmission line clearances. Transmission owners are surveying lines to make sure minimum clearance requirements are met. VELCO's K41 line had unacceptable clearances. This line was previously owned by Citizens. The clearances were so low that VELCO had to disconnect and remove the line from service. There are 30 structures involved in this project. VELCO made an emergency 248 filing and did enough work to re-energize the line. VELCO is required under the filing to evaluate whether more capacity is needed and to fully assess the situation including impacts on the line due to Sheffield and Kingdom Community Wind (KCW). VELCO will complete any necessary work prior to KCW going into service. KCW and Sheffield are counting on a certain capacity on this line. VELCO does not want to negatively affect the sub-transmission system or the operation of these two projects.

Highgate Converter

Next, Mr. Pr sum  reported that the project is on schedule, and should be completed by the end of 2012. Everything is proceeding as planned. The project upgrades the control and cooling systems of the Highgate Converter. The Converter was originally installed in 1985.

OTHER BUSINESS

Ms. Frankel presented future meeting dates noting that the March 14, 2012, quarterly meeting will be held at the Double Tree in South Burlington, Vermont, instead of Randolph.

Adjournment

The meeting was adjourned at approximately 2:30 p.m.

Next Meeting: Quarterly Meeting to be held on December 14, 2011, at the Double Tree Inn, Burlington, Vermont at 9:30 a.m.

ATTENDANCE

*Indicates voting member at this meeting

**Indicates Alternate

Public Sector

*Jenny Cole – Residential

Transmission Utility (VELCO)

*Hantz Pr sum , VELCO

Scott Harding, VELCO

Distribution Utilities Providing Transmission (CVPS, GMP, VEC)

*Steve Litkovitz, GMP

**Doug Smith, GMP

Rip Kirby, CVPS

Morris L. Silver, CVPS

*Harry Abendroth, VEC

Large Transmission-Dependent Distribution Utilities (BED, Vermont Marble, WEC)

*Munir Kasti, BED (via phone)

Transmission Dependent Distribution Utilities (Municipals)

*David Mullett, VPPSA

Proxy for Village of Hyde Park

Proxy for Village of Johnson

Proxy for Village of Ludlow

Proxy for Town of Hardwick

Proxy for Swanton Village

Proxy for Village of Northfield

Proxy for Village of Morrisville.

Proxy for Village of Enosburg Falls

Non-Voting Members

Walter Poor, DPS (via phone)

Al St. Peter, DPS

George Nagle, DPS

Staff

Deena Frankel, VELCO

Kimberly Pritchard, VELCO

Guests

Shana Duval, VELCO

Karen O'Neill, VELCO