VERMONT SYSTEM PLANNING COMMITTEE

Meeting Minutes
January 22, 2025
Rutland, Vermont

The Vermont System Planning Committee held a quarterly meeting on January 22, 2025. Shana Louiselle, VSPC facilitator, called the meeting to order at 9:30 a.m. Ms. Louiselle reviewed the agenda for the meeting.

Ms. Louiselle asked if there were any corrections or objections to the January meeting minutes and not hearing any the minutes were approved without objection.

Introductions

A list of attendees by sector appears at the end of these minutes.

Annual Report

Shana Louiselle reported that the draft VSPC annual report has been sent to the full committee for review. Jonathan Dowds moved, and Taylor Newton seconded approval of the draft annual report. The motion was adopted without objection.

[Note: the report was filed with the Vermont Public Utility Commission on 1/31/2025.]

Flexible Load Management Working Group Report

Philip Picotte, Utilities Economic Analyst at the Vermont Public Service Department (PSD), reported that the working group completed an inventory and initial analysis of flexible load programs statewide, categorizing them by customer-owned versus distribution utility assets. This work led to questions posed to distribution utilities and Efficiency Vermont regarding Efficiency Vermont's future role in flexible load management, beyond traditional energy efficiency. The PSD is reviewing the responses and will report findings back to the working group. The working group is on track to conclude its work by October of this year, and the next meeting is anticipated in mid-February.

Coordinating Subcommittee

Ms. Louiselle reminded the Committee that the next meeting is scheduled for April 30, 2025 at the Middlebury College Kirk Alumni Hall.

2024 VT Long-Range Transmission Plan – Frequency and Duration Analysis Update

Zakia El Omari provided an update on the refinement of the long-range transmission planning analysis,

focusing on reliability exposure—how frequently issues arise over the course of the year and the duration of each event. To improve efficiency, the team has shifted from examining individual system constraints to analyzing broader geographic areas, such as the Northern region, to evaluate how often and how long overloads occur. Additionally, critical load thresholds are being established to identify the load level at which system issues emerge. This helps to inform whether a combination of load reduction and strategic switching on the sub-transmission system can mitigate constraints.

The VELCO Planning team is also analyzing peak daily loads to understand the frequency of overloads, particularly whether issues like the Queen City transformer overload persist beyond a single peak hour. Simulations revealed that overloads on some days last well beyond the peak, indicating that NTAs may need to operate for extended durations. Case development has expanded from a single-day analysis to include the top ten highest-load days of the winter, with each hour of the day modeled and tested against contingency scenarios. This work, aided by scripting and automation, is time-intensive but crucial for understanding problem persistence and solution requirements.

Ms. El Omari also shared that distributed energy resource considerations are being factored into summer scenarios, recognizing their greater availability compared to winter. Data from the long-range plan's DER hosting capacity analysis is being used to model expected DER contributions. The ultimate goal is to compile a comprehensive dataset that documents when and how often NTAs will be needed, providing the basis for selecting appropriate technologies and implementation strategies.

VELCO expects to have a complete analysis by the end of March.

ISO-New England Update

Sarah Adams, Vermont External Affairs Representatives for ISO-NE, provided updates on several key areas. Announcements included the 2025 Consumer Liaison Group meeting schedule and the 2025 market participant training schedule. Recent public webinars were highlighted, including one in partnership with FERC's Office of Public Participation and another on the economic planning for the clean energy transition study; materials for both are available online.

An overview of market conditions for November 2024 showed an increase in real-time electricity prices and natural gas prices compared to the prior month, with mixed trends compared to the previous year. The November 2024 generation mix was presented, showing natural gas as the primary source, followed by nuclear and renewables/hydro.

The 2024-25 winter operations outlook detailed preparations, including generator fuel procurement and pre-winter trainings. A new probabilistic energy adequacy tool (PEAT) was used for a 21-day shortfall risk analysis, indicating a well-positioned system for expected average to above-average winter conditions, with sufficient resources to meet projected demand.

Updates on Long-Term Transmission Planning (LTTP) included the publication of a supplemental offshore wind analysis report and the release of a tentative RFP schedule aimed at renewable resource integration and addressing the north-to-south interface.

The implications of FERC Order 881, requiring ambient adjusted ratings (AARs) for transmission lines, were discussed in the context of a thermal violation identified in the Vermont 2033 needs assessment, leading to a proposed pause in the competitive solution process. The ISO is working on implementing Order 881 and anticipates requesting an extension to the implementation timeline.

Planning Procedure 12 (PP12), a new mandatory annual data collection process for distributed energy resources (DERs), was discussed, outlining its benefits for improved data accuracy and forecasting. The initial data collection deadline was January 21st, with ongoing coordination planned.

Finally, an overview of the interconnection request queue showed a majority of battery storage proposals, with 344 MW originating from Vermont. Notably, a significant portion of the queued capacity (nearly 11,000 MW) has signed interconnection agreements but is not yet operational.

The full presentation is available here.

New England transmission owner asset management process update

Frank Ettori, Director of ISO-New England Relations at VELCO, provided an update on the asset condition management process currently under review at the region. In response to a rise in asset condition projects and concerns over cost transparency, the New England States Committee on Electricity (NESCOE) issued a letter calling for standardized evaluation processes and clearer justifications. Transmission owners have since developed an asset condition guidance document, implemented a unified structure grading system (A–D scale), standardized presentation templates, and established a database for infrastructure age tracking. A new ISO-New England webpage consolidates all relevant asset condition project information. Discussions continue on instituting a "prudence review" process, potentially through an Asset Condition Reviewer (ACR), to validate the necessity and scale of proposed projects. A draft outline of the ACR criteria is expected shortly, aiming to enhance stakeholder trust, ensure consistent oversight, and support future right-sizing opportunities in regional transmission planning.

Policy and Project Updates

PUC Investigation into 2024 Vermont Long-Range Transmission Plan: Mary Jo Krolewski of the Public Utility Commission (PUC) announced the opening of an uncontested, fact-finding investigation to monitor the Non-Transmission Alternatives (NTA) analysis identified in the 2024 Vermont Long-Range Transmission Plan. The investigation aims to enable the PUC to follow the analysis closely, ask clarifying questions, and rely on presentations delivered through the Vermont System Planning Committee (VSPC). A secondary focus of the investigation is to examine the growth of distributed energy resources (DERs) in Vermont and explore potential actions the Commission could take. The PUC issued a scheduling order on December 27, requesting stakeholder recommendations by January 31.2024

Vermont Long-Range Transmission Plan Areas of Concern: Kamran Hassan of Green Mountain Power reported on next steps in the non-transmission alternative (NTA) analysis process. GMP will lead the NTA study group in coordination with all affected utilities and examine the specific areas of grid concern as identified in the 2024 VT Long-Range Transmission Plan. Before exploring potential solutions, the study group will need to understand the scope of each issue, including its operational impact, duration, and frequency. VELCO is currently performing additional analysis that will produce an 8760 curve to better characterize the problem by the end of the year. Mr. Hassan also noted that the analysis should consider the impact of existing and planned flexible load management programs, particularly for EV charging.

Resilience Proceeding Petition to PUC: Anne Margolis, Deputy Planning Director at the Department of Public Service, announced a forthcoming Public Utility Commission (PUC) proceeding focused on

defining and planning for resilience within Vermont's electric distribution system. The initiative was spurred by questions raised during the 2023 Green Mountain Power Zero Outages Initiative and seeks to distinguish resilience from reliability, determine how it should be measured, valued, and funded, and explore appropriate metrics and planning tools. The Department has engaged partners from Lawrence Berkeley National Lab and the University of Texas through a Department of Energy technical assistance grant to help develop a Vermont-specific resilience planning framework, benefit-cost analysis tool, and set of resilience metrics. The proposed 18-month process will include workshops and working groups covering planning, evaluation, and regulatory dimensions, with participation sought from all distribution utilities, VELCO, emergency management agencies, and municipalities. Feedback on the draft scope is welcome, and the Department plans to submit a petition to the PUC by mid-February, with the option to file a status update if additional input time is needed.

FERC Order 2023: Point of Interconnection Heat Map: Khalid Osman presented the newly developed VELCO's interactive heat map in response to FERC Order 2023, which mandates transmission providers maintain a publicly available visualization of available transmission capacity. While VELCO isn't directly audited like regional transmission operators (RTOs), this map provides a Vermont-specific view, incorporating the state's energy landscape. The map, built using PowerGEM's solution integrated with VELCO internal data, allows users to assess the megawatt impact of potential generation additions under various N-1 contingency scenarios. The demonstration highlighted the map's capabilities, including displaying line capacities, monitoring facilities, and potential overloads based on user-input megawatt injections, while acknowledging its limitations such as representing only summer conditions and serving as an informational starting point before formal interconnection studies.

Attendance

* Indicates voting member
** Indicates alternate

Public Sector

*Tim Duggan, Residential representative
*Taylor Newton, Regional Planning Rep
**George Gross, Regional Planning rep
*Johanna Miller, Environmental representative
**Steve Crowley, Environmental representative
*Michael Kirick, Commercial representative
**Molly Mahar, Commercial representative

Transmission Utility (VELCO)

*Hantz Présumé, VELCO
**Frank Ettori, VELCO

Distribution Utilities Providing Transmission (GMP, VEC)

*Kamran Hassan, GMP
**Doug Smith, GMP
**Michael Beaulieu, VEC

Large Transmission-Dependent Distribution Utilities (BED, WEC, GF)

*JJ Vandette, WEC
*Munir Kasti, BED
**James Gibbons, BED
*Jeff Cram, GFPower

Transmission Dependent Distribution Utilities (Municipals)

Heather D'Arcy, VPPSA
John Dasaro, Enosburg Falls Water & Light
Michael Gadway, Village of Ludlow
Michael Lazorchak, Stowe Electric
Sarah Braese, Hardwick Electric
Scott Johnstone, Morrisville Water & Electric
Steve Fitzhugh, Northfield Electric

Supply & Demand Resources

*Dave Westman, EVT
*Jonathan Dowds, Supply Representative
*Tom Lyle, BED

Non-Voting Members

Lou Cecere, PSD

Staff

Shana Louiselle, VELCO

Guests

Alan Sanstad, LBNL
Anne Margolis, PSD
Anil Adhikari, National Grid
Betsy Bloomer, VELCO
Bill Barnes, Encore
Brian Hall, VEC
Cam Twarog, GMP
Craig Kieny, VEC
Cyril Brunner, VEC
David Mullet, All Earth Renewables
Elly Carl, VELCO
Emily Stebbins-Wheelock, BED
Garth Dunkel, VPPSA
Henry Mauck, PSD
Jay Pilliod, VEIC
JP Carvallo, LBNL
Josh Castonguay, GMP
Khalid Osman, VELCO
Kyle Landis-Marinello, VELCO
Lucas Looman, VELCO
Marc Allen, VELCO
Mary Jo Krolewski, PUC
Mike Fiske, VELCO

Nina Hebel, UT-Austin
Paul Pickna, VEC
Philip Picotte, PSD
Salam Baniahmed, VELCO
Sarah Adams, ISO-NE
Tom Knauer, PUC
Tom Lyle, BED
Zakia El Omari, VELCO