



**Draft Meeting Minutes
April 29, 2026
Middlebury, Vermont**

The Vermont System Planning Committee held a quarterly meeting on April 29, 2026. 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 Quarterly Meeting and February Special meeting minutes. Kamran Hassan made a motion to approve and George Gross seconded. The minutes were approved without objection.

Introductions

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

Geographic Targeting Subcommittee Report

Ms. Louiselle reported the Geographic Targeting Subcommittee met on April 8 to review the draft reliability plan for the northern and northwestern areas, continuing the work presented through the project-specific action plan. The Subcommittee agreed that the underlying technical analysis was sound, including the treatment of EV load flexibility and storage contributions, and provided feedback to GMP. The Subcommittee's next meeting is expected to be held in late May or early June for the annual project review and NTA screening. If any constraints screen in, the Subcommittee will continue its work over the summer to develop geographic targeting recommendations for the Public Utility Commission in October.

Northern and Northwestern Vermont Reliability Plan

Kamran Hassan and Cam Twarog provided an update on GMP's draft reliability plan for the northern and northwestern areas. They explained that the draft had been revised based on feedback from the Geographic Targeting Subcommittee, with new analysis added to clarify the impact of the revised load forecast, the continued use of storage peak shaving, the alignment between statewide peak dispatch and zonal reliability needs, potential EV managed charging program modifications, and zonal EV adoption assumptions. The most significant change is that the updated load forecast shows materially lower projected EV and heat pump load contributions, which may reduce projected loads below the critical load threshold and defer the need for additional reliability solutions. Mr. Twarog also explained that statewide peak-targeting strategies appear to align closely with northern and northwestern zone needs, suggesting that existing storage dispatch practices may continue to support both economic and reliability objectives. Additional analysis showed that EV charging impacts could be shaped through a combination of

staggered time-of-use periods and event-based managed charging, and that preliminary EV enrollment data appears generally consistent with statewide assumptions.

GMP will circulate the revised draft reliability plan to the GT Subcommittee for review, followed by broader circulation to the VSPC. Members will have an opportunity to provide comments or raise any substantive concerns before GMP finalizes the document and files it with the Public Utility Commission. The results of this work will also help inform the 2027 long-range transmission planning process.

Coordinating Subcommittee

Ms. Louiselle reported the next VSPC quarterly meeting will be held on July 15 at the Trapp Family Lodge in Stowe. She also acknowledged the early resignation of George Gross, the alternate regional planning public member, due to his relocation. The Public Utility Commission is expected to conduct outreach to identify candidates to fill the remainder of the term, and VSPC members were encouraged to share the opportunity with potential candidates once more information is available.

2026 Vermont Long-Term Forecast

Mike Russo of Itron presented the 2026 Vermont Long-Term Forecast, which was developed in coordination with VELCO and the VSPC Load Forecasting Subcommittee over the last 10 months. He explained that the forecast uses reconstituted hourly system and zonal load data to model true demand, then builds customer-class energy forecasts and converts them into hourly system and zonal forecasts through 2046. The baseline forecast is relatively flat and reflects current technology levels, economic conditions, codes and standards, energy intensity trends, electric prices, and trended weather assumptions. The final forecast layers in electric vehicles, heat pumps, and solar, which are the primary drivers of changes to future load.

Mr. Russo presented both a medium forecast and a high/policy forecast. The annual system peak is projected to occur in winter, with the high/policy case above the medium case due largely to higher assumed EV adoption. For 2036, the forecast shows a winter annual peak of 1,239 MW under the medium forecast and 1,303 MW under the high/policy forecast. For 2046, the forecast shows a winter annual peak of 1,416 MW under the medium forecast and 1,540 MW under the high/policy forecast. Mr. Russo noted that the updated forecast is materially lower than the prior forecast, primarily because of significantly lower EV and heat pump assumptions.

It was also noted that, based on discussions during the Load Forecasting Subcommittee meetings, reliability planning for the 2027 Long-Range Transmission Plan will be based on the medium forecast. The high/policy forecast will continue to be considered qualitatively, but the use of the medium forecast for reliability planning represents a change from the 2024 analysis and planning approach, which focused on the high/policy forecast.

2026 Vermont Long-Term Forecast

Marc Allen, VELCO Transmission Planning Engineer, presented the proposed study scope for the 2027 Vermont Long-Range Transmission Plan. The scope was introduced as an initial draft for stakeholder review, with feedback to be gathered over the coming months and a final study scope

expected to be presented at the July VSPC meeting. The analysis will evaluate study years 2036 and 2046 and will include summer peak, winter peak, and daytime minimum load with high distributed energy resource conditions.

The study cases will use ISO New England seed cases, including regional topology and generation updates, and will incorporate Vermont projects that have received Section 248 approval at the time the study begins. The cases will be developed with a reasonably stressed system bias. Peak cases will assume zero imports over PV20, while light-load cases will consider approximately 70 MW of PV20 imports. The Coolidge TDI project will not be included due to lack of progression.

The 2027 plan will use the updated long-term load forecast, which is lower than the forecast used in the 2024 reliability plan. Compared with the prior forecast, the updated forecast reflects an approximately 50 MW lower summer system peak at the 10-year point, roughly similar summer peak levels at 20 years, and an approximately 150 MW lower winter system peak at both the 10-year and 20-year points.

DER assumptions will also be updated. For system peak scenarios, the study will assume no solar contribution. For the daytime minimum load with high DER scenario, the study will hold gross Vermont load at approximately 600 MW and increase solar PV from 600 MW to 1,300 MW in 100 MW increments, reaching and exceeding the Tier 2 requirement under Vermont's Renewable Energy Standard. The plan will not repeat the solar PV optimization analysis included in recent prior plans and will instead reference those earlier analyses. Energy storage will not be modeled in the base scenarios; storage impacts have been removed from the forecast and will be reserved for frequency and duration analysis if constraints are identified.

The study will evaluate Highgate Converter contributions of both 0 MW and 225 MW across all scenarios. Contributions above 225 MW will not be studied in this plan because the associated upgrade needs and appropriate sizing have not yet been fully developed. The resource mix assumptions will generally follow ISO New England's Transmission Planning Technical Guide, with thermal generation assumptions still under development. VELCO will also seek distribution utility feedback on utility resource plans to inform the analysis.

The contingency analysis will be based on applicable transmission planning requirements, including NERC TPL-1, ISO New England Planning Procedure No. 3, and NPCC Directory 1. The study will include required N-1 and N-1-1 contingency analysis, as well as certain contingencies studied on behalf of distribution utilities that are not required for regional planning. Reliability constraints identified in the plan will be based on long-term emergency ratings or normal ratings, as applicable.

VELCO will request additional information and feedback from distribution utilities and other stakeholders, including updated resource planning information and, if available within the study timeline, updated sub-transmission ratings. Following the finalization of the scope, VELCO will complete the transmission analysis, identify any issues and constraints, perform preliminary upgrade and cost analysis, and develop a draft report. A VSPC draft plan is expected in early 2027, followed by formal stakeholder review, public meetings, additional revisions, ISO New England review, and publication of the final plan in July 2027.

Highgate Converter Replacement Project

Dan Poulin, VELCO Director of Transmission Services and Asset Maintenance, provided an overview of the Highgate Converter project, including the need to address aging infrastructure and evaluate long-term replacement options. The existing Highgate Converter, built in 1985, is a critical back-to-back converter that connects the Canadian and U.S. electric systems. The facility is nearing end of life, with obsolete components and limited manufacturer support creating reliability and timing concerns.

VELCO is evaluating several alternatives, including a like-for-like 250 MW replacement, larger converter options at Highgate ranging from 350 MW to 650 MW, and potential relocation or point-to-point HVDC options closer to Vermont load centers, including Williston and New Haven. The larger alternatives may require significant transmission upgrades, which are being evaluated as part of the project.

The alternatives will be assessed using the PROMETHEE model, a multi-criteria ranking tool that considers factors such as cost, environmental impact, permitting, aesthetics, renewable integration, and system benefits. VELCO will also conduct additional cost-benefit analysis before selecting a preferred solution. A Highgate Advisory Team, comprised of distribution utility representatives, is supporting the process by reviewing assumptions, alternatives, and potential impacts to Vermont utilities.

Mr. Poulin also described the potential benefits of voltage source converter technology, which could provide additional grid support features not available from the existing converter, including real and reactive power control, dynamic voltage support, possible black start capability, and potential reduction of the need for other dynamic control devices. VELCO is evaluating five major HVDC original equipment manufacturers using a technical and commercial scorecard that considers cost, schedule, manufacturing capabilities, reliability, protection and control systems, redundancy, and VELCO-specific requirements.

VELCO is continuing its alternatives analysis, OEM evaluation, and stakeholder coordination with the Advisory Team, and regional partners. More details on the alternatives analysis will be available later in 2027.

ISO-New England Regional Update

Sarah Adam, Senior External Affairs and Vermont Representative at ISO-New England, provided updates on market reforms, winter operations, and system planning. ISO-NE testified on Vermont's portable solar legislation to emphasize reliability considerations, particularly the need for portable solar devices to follow established technical standards so they can ride through routine voltage and frequency disturbances rather than suddenly disconnecting and creating abrupt demand spikes. ISO-NE also highlighted FERC's acceptance of the first phase of Capacity Auction Reforms, including the transition from a three-year forward capacity auction to a prompt auction beginning with the 2028 capacity commitment period.

Ms. Adams reviewed several market and operational developments. ISO-NE is proposing targeted revisions to the Pay-for-Performance balancing ratio after a June 2024 scarcity event exposed concerns about resources being penalized beyond their capacity supply obligations. She also summarized early experience with the Day-Ahead Ancillary Services Initiative, noting that it has

supported reserve reliability but produced higher-than-expected costs, leading to ongoing discussions about cost-effectiveness reforms. On winter operations, ISO-NE reported that New England experienced its coldest winter in 20 years, including a 19-day cold snap, but maintained reliability without capacity deficiency events. Market costs were elevated, largely due to fuel constraints and high natural gas prices, and DOE issued a temporary emergency order allowing certain resources to operate beyond permit limits to support reliability.

On system planning, ISO-NE continues to evaluate proposals from the first longer-term transmission planning RFP, focused on moving power from Northern Maine to Southern New England, with a preferred solution expected later this year. ISO-NE also announced that beginning with the 2026 CELT report, it will include a dedicated large-load forecast for data centers and other energy-intensive facilities. Near-term large-load impacts remain minimal in New England, with no large loads under construction included for the 2026 and 2027 seasonal peak periods. Ms. Adams also noted that ISO-NE is continuing work on the asset condition reviewer role, with larger projects prioritized during the interim review process.

Projects and policies

PUC investigation – 2024 Vermont Long-Range Transmission Plan PUC update: Mary Jo Krolewski, PUC Hearing Officer, provided an update on the PUC staff’s ongoing fact-finding investigation related to the 2024 Vermont Long-Range Transmission Plan. The investigation focused on two areas: keeping the Commission informed on the NTA process resulting from constraints identified in the 2024 plan, and better understanding whether distributed generation growth could exceed existing transmission or sub-transmission capacity, including whether generation location could be optimized to avoid future system constraints. Commission staff reviewed filings, issued information requests, held a workshop, and participated in VSPC meetings, and has not identified any significant need to recommend changes to the Docket 7081 process or the long-range planning process at this time. Staff expects to issue an order summarizing its conclusions and providing parties an opportunity to comment before the Commission considers closing the proceeding. Separately, the Geographic Targeting Subcommittee expects to review and refresh its internal NTA screening tools and process materials, which may be filed with the PUC, but participants noted that this would not require reopening or revising the Docket 7081 MOU.

Attendance

* Indicates voting member

** Indicates alternate

Public Sector

- *Taylor Newton, Regional Planning Rep
- *Michael Kirick, Commercial representative
- *Tim Duggan, Residential representative
- **Susan Paruch, Residential representative

Transmission Utility (VELCO)

- *Marc Allen, VELCO

Distribution Utilities Providing Transmission (GMP, VEC)

- *Kamran Hassan, GMP
- **Michael Beaulieu, VEC

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

- *JJ Vandette, WEC
- **James Gibbons, BED

Transmission Dependent Distribution Utilities (Municipals)

- *Chris Recchia, Village of Ludlow
- **Michael Gadway, Village of Ludlow
- *John Dasaro, Enosburg Falls
- *Jackie Pratt, Stowe Electric
- **John Abbott, VPPSA
- *Chris Cole, GF Power

Supply & Demand Resources

- *Tom Lyle, BED
- *Dave Westman

Non-Voting Members

Lou Cecere, PSD
TJ Poor, PSD

Staff

Shana Louiselle, VELCO

Guests

Anil Adhikari, National Grid
Barry Ahern, National Grid
Brian Callnan, WEC
Bradley Williams, BED
Cam Twarog, GMP
Dave Carpenter, DRM
David Mullett, All Earth Renewables
Franziska Foerg (PSD)
Heather D'Arcy, VPPSA
Jay Pilliod, EVT
Khalid Osman, VELCO
Lucas Looman, VELCO
Marc Allen, VELCO
Mary Jo Krolewski, PUC
Michael Gadway
Michael Russo, Itron
Morgan Casella, DO
Paul Nadeau, BED
Paul Pikna, BED
Peter Fitzgerald, INS Engineering
Philip Picotte, PSD
Sarah Adams, ISO-NE
Tom Knauer, PUC