



**Draft Meeting Minutes
October 25, 2023
Killington, Vermont**

The Vermont System Planning Committee held a quarterly meeting on October 25, 2023. Shana Louiselle called the meeting to order at 9:30 a.m.

Taylor Newton moved to approve the July 12, 2023 minutes, and Tim Duggan seconded. The minutes were approved without objection.

Introductions

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

Geographic Targeting Subcommittee

Shana Louiselle reported that the Geographic Targeting Subcommittee reviewed the geotargeting recommendation letter to the Vermont Public Utility Commission (PUC), and is seeking approval from the full Committee. Ms. Louiselle asked for questions and comments before moving to approval of the draft as distributed.

Bill Powell moved and Taylor Newton seconded approval of the GT recommendations, which were approved without objection.

The recommendations will be filed with the PUC by January 15, 2023. [Note: the letter was filed on November 30, 2023.]

Load Forecasting Subcommittee

Hantz Pr sum , Director of Transmission Planning at VELCO, provided an update on the ongoing analysis for the 2024 Long-Range Transmission Plan. The forthcoming plan will build on the work from past plans, addressing system condition needs and exploring load management measures. Mr. Pr sum  outlined new requirements to the Plan, per an August PUC memorandum, related to the impact of beneficial electrification on the transmission to include the following: right sizing of transmission infrastructure, benefits of microgrids, new technologies to increase the capacity of the existing transmission system, extreme weather trends, visibility of asset condition projects, and alignment with the Environmental Justice Act's broader objectives. VELCO plans to deliver a draft to the VSPC in early 2024, initiating a 60-day review period, before finalizing the 2024 Vermont Long-Range Transmission Plan – Public Review Draft.

Technical Working Group

Lou Cecere, Electrical and Planning Engineer at the Vermont Public Service Department, reported that

the working group convened in August and reviewed current communication protocols and interoperability standards for DER. The discussion centered on the current state of DER communications and controls among utilities, exploring available technologies and infrastructure, addressing challenges within existing frameworks, and outlining future plans for communication and control of DERs. The group found the discussion to be a valuable level-setting exercise and plans to reconvene for further exploration of best practices applied to DER communications and control.

Coordinating Subcommittee

Ms. Louiselle reviewed the 2024 VSPC quarterly meeting dates. The next meeting is scheduled on January 24, 2024 at the Delta Hotel in South Burlington, VT.

The 2024 VSPC meeting dates are as follows:

- January 24, 2024 – Delta Hotel, South Burlington
- April 17, 2024 – Middlebury (TBD)
- July 17, 2024 – Trapp Family Lodge, Stowe
- October 23, 2024 – Killington Grand Hotel, Killington

Ms. Louiselle shared the Public Utility Commission appointed Susan Paruch to public member alternate seat representing residential interests. The Commercial Representative alternate seat is still vacant. Letters of interest should be sent to the Public Utility Business Manager, puc.businessmanager@vermont.gov. More information is available [here](#).

Regional Update

Sarah Adams, Vermont External Affairs Representatives for ISO-NE, provided an overview of initiatives underway at the ISO-NE including ISO New England's proposed 2024 operating and capital budgets, operational impact of extreme weather events, the 2024 annual work plan, ISO generator interconnection queue snapshot, and ISO-New England publication and upcoming events. The full presentation is available [here](#).

Presentations on DER Cluster Studies

- **Vermont's Cluster Study Potential:** Hantz Pr sum  provided insights into the potential impact of aggregated Distributed Energy Resources (DER) on Vermont's transmission system. Projections indicate negative net loads in Vermont at specific times over the next five years, with various transformers exhibiting reverse power. Mr. Pr sum  emphasized the need for enhanced visibility into the distributed generation on the system for more accurate modeling. He discussed the 20 MW threshold for cluster studies at a substation and highlighted ISO-NE's monitoring of DG saturation, requiring notification forms for projects exceeding 1 MW. VELCO recommended that VT interconnection guidelines mandate installers to submit inverter settings post-commissioning. Additionally, utilities are advised to share inverter data with VELCO in preparation for future level 3 studies.
- **Lesson Learned from DER Cluster Studies in New England:** Andrew Isaacs, Vice President at Electranix, presented an overview of Electranix's work on DER cluster studies in New England. He discussed model construction, common testing issues, and lessons learned. Highlighting the

significant time and cost of PSCAD studies, Isaacs emphasized the need for a robust basic design before conducting the study. He recommended early DER model acquisition and quality testing to prevent delays. Isaacs stressed the importance of engaging with ISO-NE early in the scoping process and maintaining communication throughout the study. He acknowledged complications arising from FERC queued projects, emphasizing the need for an ongoing information and communication plan to manage stakeholder expectations amid changing circumstances.

Presentation: Potential Economic Costs to Controlled Outages

Mishal Thadani, CEO of Rhizome, presented research on economic losses due to outages across VELCO's service territory. The focus included quantifying the value of lost load, the value calculation for each customer and the methodology surrounding this data. VEC contributed data for hourly load predictions per zip code, offering insights into the value of lost load across the different service territories during winter peak. Mr. Thadani highlighted Rhizome's software platform, designed to assess economic and social impacts of potential power grid failures caused by climate change to help inform utilities and regulators on the optimal investment plans that mitigate the most risk per dollar.

Presentation: ISO-New England 2050 Transmission Study update

Dan Schwarting, Manager of Transmission Planning at ISO-New England, provided an update to the ISO-New England's 2050 Transmission Study and highlighted the Vermont upgrades and estimated costs. Key takeaways from the study include: 1) reducing peak loads significantly reduces transmission cost; 2) high-likelihood concerns can be prioritized; 3) incremental upgrades can be made as opportunities arise; 4) generator location matters; and, 5) a significant number of transformers need to be added. Mr. Schwarting outlined four geographical locations that had a high likelihood for future transmission upgrades, one of them being northwestern Vermont import area. The draft report will be available on November 1. Next steps will include discussions on "Longer Term Transmission Planning Phase 2" which will create a Tariff process for advancing transmission projects from longer-term transmission studies. The full presentation is available [here](#).

Policy and Project Updates

- **Franklin County Line Upgrade Project:** Brian Connaughton, Vice President of Transmission Services and Asset Maintenance at VELCO, provided a brief overview on the Franklin County Line Upgrade Project and reported an increase in the cost estimate due higher costs for materials and labor. VELCO shared the update NEPOOL Participant Advisory Committee (PAC) and received support for the project. VELCO plans to file its petition for a Certificate of Public Good by the end of October.
- **PUC Energy Storage Webinar Series:** The Public Utility Commission is holding a five-part webinar series in conjunction with the US Department of Energy Office of Electricity Energy Storage Program and Sandia National Labs covering a variety of energy storage topics to assist in the development of Vermont's energy storage rules. The series begins on November 2, 2023. More information is available on the ePUC under Case No. 21-3883.
- **Renewable Energy Standard Working Group:** Shana Louiselle reported that a Legislative Working Group on Renewable Energy Standard Reform was created as part of Act 33 in 2023 to draft legislation to be considered by the General Assembly during the 2024 Legislative session. The group is comprised of four legislators and 16 non legislative members with the assistance of

two independent consultants: a facilitation and mediation specialist and the Brattle Group who will conduct macroeconomic analysis for the working group based on the analysis conducted the Department of Public Service by Sustainable Energy Advantage (SEA).

- **Grid Resilience and Innovation Partnership Program:** Lou Cecere reported that the PSD's GRIP application and the Transmission Facilitation Program application were not selected by the DOE. The Department anticipates receiving a timeline for the next round of federal funding submissions, along with feedback on strengths and weaknesses to guide future applications.

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Attendance

* Indicates voting member

** Indicates alternate

Public Sector

- *Tim Duggan, Residential representative
- **Susan Paruch, Residential representative
- *Taylor Newton, Regional Planning rep
- **George Gross, Regional Planning rep
- *Johanna Miller, Environmental representative
- **Steve Crowley, Environmental representative

Transmission Utility (VELCO)

- *Hantz Pr sum , VELCO
- **Frank Etori, VELCO

Distribution Utilities Providing Transmission (GMP, VEC)

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

Large Transmission-Dependent Distribution Utilities (BED, WEC)

- *Bill Powell, WEC

Transmission Dependent Distribution Utilities (Municipals)

- Sarah Braese, VPPSA
- Brian Evans-Mungeon, Hyde Park
- Scott Johnstone, Morrisville Water and Light

Supply & Demand Resources

- *Dave Westman, EVT
- *Nathaniel Vandal, Green Peak Solar

Non-Voting Members

- Philip Picotte, PSD
- Lou Cecere, PSD

Staff

Shana Louiselle, VELCO

Guests

- Betsy Bloomer, VELCO
- Brian Hall, VEC
- Cam Tworang, GMP
- Cyril Brunner, VEC
- Dan Kopin, VELCO
- Daniel Woodhouse, VEC
- David Carpenter, Green Lantern Solar
- Jay Pilliod, EVT
- John Dasaro, Village of Enosburg
- Kerrick Johnson, VELCO
- Khalid Osman, VELCO
- Kyle Landis-Marinello, VELCO
- Luke Looman, VELCO
- Marc Allen, VELCO
- Morgan Casella, DO
- Paul Lambert
- Robert Ide, National Grid
- Ryan Darlow, Norwich Solar
- Sarah Adams, ISO-NE