



**Final Meeting Minutes  
April 17, 2024  
Middlebury, Vermont**

The Vermont System Planning Committee held a quarterly meeting on April 17, 2024. Shana Louiselle called the meeting to order at 9:30 a.m. Ms. Louiselle reviewed the agenda for the meeting.

**Kamran Hassan moved to approve the January 25, 2024 minutes, and Dave Westman seconded. The minutes were approved without objection.**

## **Introductions**

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

## **Flexible Load Management Working Group Report**

Phillip Picotte, Utilities Economic Analyst at the Vermont Public Service Department (DPS), provided an update on the newly formed working group and described the focus of the group for the next 18 months. The Vermont Public Utility Commission instructed the DPS to perform the following three elements of flexible loads:

- 1) Estimate flexible load potential;
- 2) Identify a methodology for quantifying flexible load management (FLM) benefits; and,
- 3) Articulate the roles and responsibilities for DUs and EEU's for deploying FLM programs.

The first meeting was held on March 7 and the next meeting will be scheduled in mid-May.

## **Technical Working Group Report**

Lou Cecere, Electrical & Planning Engineer at the Vermont Public Service Department, reported that the Technical Working Group will reconvene in June to carry forward the discussion on communication protocols, including current and future communication strategies and technologies with the distribution utilities.

## **Geographic Targeting Subcommittee Report**

Shana Louiselle reported that the subcommittee will meet in June to perform the annual project review. More regular meetings are anticipated due to reliability deficiencies identified in the 2024 Vermont Long Range Transmission Plan.

## **Coordinating Subcommittee**

Shana Louiselle reviewed the 2024 VSPC meeting calendar:

- July 17, 2024 – Trapp Family Lodge, Stowe
- October 23, 2024 – TBD

Additionally, Ms. Louisele announced that the draft Long Range Transmission Plan, with VSPC comments incorporated, will be published by April 19, 2024. Public meetings will be held in May 1 in Burlington, May 2 via Zoom, May 14 in Rutland, and May 15 in St. Albans.

## **2024 Vermont Long-Range Transmission Planning and Non-Transmission Alternative Processes Overview**

Hantz Pr sum , Senior Director of Transmission Planning at VELCO, provided a refresher on the VSPC’s objectives and the process outlined in Docket 7081, including the requirements for preparing the long-range plan, conducting NTA studies, and selecting cost-effective solutions. The long-range plan identifies transmission constraints and reliability deficiencies related to load growth and evaluates transmission solutions. The plan also includes an NTA screening to identify if NTAs are possible solutions and provide equivalence criteria.

After publishing the plan, the affected utilities have one year to conduct an NTA study to evaluate the cost impacts and ability to design and implement NTA solutions in a timely manner. The solution selection and cost allocation process takes another year, with the VSPC having advisory and binding votes on affected utilities and cost allocation. The process also involves coordination with ISO New England, as they are not bound by the Docket 7081 MOU but play a critical role in determining if NTAs sufficiently address the need. The full presentation is available [here](#).

## **Maximizing Grid Efficiency: Harnessing the Potential of Grid Enhancing Technologies (GETs)**

Julia Selker from the WATT Coalition and Katie Seigner from Rocky Mountain Institute presented on grid-enhancing technologies (GETs) such as advanced power flow control devices, dynamic line ratings, and topology optimization. GETs can increase transmission capacity, reduce congestion, facilitate renewable energy integration, and provide better understanding of the grid's capabilities. However, barriers to wider adoption include inertia, lack of familiarity, and misaligned incentives for transmission owners. Policy efforts are underway at the federal, regional, and state levels to promote GETs, including incentives, funding, and requirements for their consideration in planning and interconnection studies. The presentations highlighted the potential benefits of GETs, such as unlocking additional capacity on existing lines, reducing curtailment, and providing cost-effective alternatives to new transmission builds. RMI conducted a large study in the PJM territory that concluded that utilizing all three of these technologies would cost \$100 million and could lead to \$1 billion in annual savings. Ms. Selker’s presentation is available [here](#), and Ms. Seigner’s presentation is available [here](#).

## **Advanced Power Flow Technologies for Grid Reliability**

Ted Bloch Rubin from SmartWires and John Fiske from VELCO presented together on how VELCO is currently working to deploy GETs technology in the form of power electronics on a 115 kV line between Vermont and New York. Mr. Bloch-Rubin presented on the SmartValve technology, a modular and scalable advanced power flow control device. SmartWires manufactures a transformerless, modular Static Synchronous Series Compensator that would be installed in series with the phase shifting

transformer (PST) that currently controls power flow between these states. This SmartValve would assume control of the power flow across this tie line instead of the PST's mechanical tap changer that caused a transformer failure in 2021. SmartValves can increase or decrease impedance on transmission lines, allowing better utilization of latent capacity and reducing congestion. Mr. Bloch-Rubin discussed various SmartValve installations worldwide and highlighted the proposed project at the Sandbar substation in Vermont.

Mr. Fiske provided an overview on the VELCO project explaining the project aims to extend the life of the existing phase-shifting transformer (PST) by reducing tap changes caused by variable power flows from renewable generation in New York. The SmartValve installation, estimated at \$47.7 million with a \$13.8 million DOE grant, is expected to reduce tap changes to near zero and provide redundancy if the PST fails. The project timeline includes regulatory approvals in 2024, construction in 2026, and commissioning in 2027. The SmartWires presentation is available [here](#) and the SmartValve Project presentation is available [here](#).

## ISO-New England Update

Sarah Adams, Vermont External Affairs Representatives for ISO-NE, provided updates on operations, markets, and regional planning studies. Topics covered included 2023 Net Energy for Load Report, monthly wholesale electric prices, fuel sources, demand, and the Forward Capacity Auction (FCA 18). Sarah also gave updates on the Interconnection Queue, FERC Order 2023, and how ISO-NE is transitioning to a "first-ready, first-served" cluster study process. There will be a virtual public webinar on May 1 that will present the ISO-NE Final 2050 Transmission Study and Ms. Adams highly recommended attending that webinar for interested parties. The Boston and Vermont study area Needs Assessments are expected to be completed by Q2 of 2024. The full presentation is available [here](#).

## Policy and Project Updates

### DOE federal funding status updates

- **PSD GRIP Application:** Mr. Cecere shared that the DPS submitted the GRIP application for federal funding on April 17, 2024. The DOE will select award recipients later this year.
- **Alliance Transmission Application:** Ms. Louiselle shared that VELCO is working on an application seeking \$100 million in federal funding, due in May, with an update expected at the July VSPC meeting.

### Regional Long-Term Transmission Planning Update

Frank Etori, Director of ISO-NE Relations at VELCO, discussed the regional long-term transmission planning efforts and the potential for regionally funded transmission solutions under a new paradigm. The ISO New England 2050 transmission study revealed significant deficiencies if load doubles and significant offshore wind, hydropower imports, and other renewable generation are added by 2050. The states have identified the need to move forward with solutions to address these deficiencies. A proposed change to the ISO tariff, expected to be filed with FERC in May, would allow for the solicitation of transmission solutions through a competitive process. The cost allocation would be based on the ratio of benefits (e.g., congestion savings, production cost savings, avoided costs) to the project cost. If the benefits outweigh the costs, the project would be regionally funded; otherwise, a separate cost allocation agreement would be required for the requesting states.

## 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
- \*Michael Kirick, Commercial representative

### Transmission Utility (VELCO)

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

### Distribution Utilities Providing Transmission (GMP, VEC)

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

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

- \*Bill Powell, WEC
- \*\*JJ Vandette, WEC
- \*\*Munir Kasti, BED

### Transmission Dependent Distribution Utilities (Municipals)

- Sarah Braese, VPPSA
- Scott Johnstone, Morrisville Water and Light
- Tom Petraska, Ludlow Light and Electric
- John Dasaro, Enosburg Water & Light
- Abby Miller, Enosburg Water & Light

### Supply & Demand Resources

- \*Dave Westman, EVT
- \*Nathaniel Vandal, Supply Representative

### Non-Voting Members

- Philip Picotte, PSD
- Lou Cecere, PSD

### Staff

- Shana Louiselle, VELCO
- Lucan Looman, VELCO

### Guests

- Betsy Bloomer, VELCO
- Brian Hall, VEC
- Cam Twarog, GMP
- Craig Kieny, VEC
- Cyril Brunner, VEC
- Dan Poulin, VELCO
- Dave Carpenter, Green Lantern
- Drew Clayson, VPPSA
- Ed McGann, VELCO
- Henry Swayze, 350VT
- Jeff Carara, VELCO
- John Fiske, VELCO
- Jonathan Dowds, REV
- Julia Selker, WATT Coalition
- Katie Seigner, Rocky Mountain Institute
- Kerrick Johnson, VELCO
- Khalid Osman, VELCO
- Kyle Landis-Marinello, VELCO
- Laura Coriell, Lightshift
- Marc Allen, VELCO

Mark Sciarrotta, VELCO  
Matthew Bakerpoole, DPS  
Mike Fiske, VELCO  
Morgan Casella, Dynamic Organics  
Paul Lambert, VEIC  
Paul Nadeau, BED  
Sarah Adams, ISO-NE  
Ted Bloch-Rubin, SmartWires  
Tom Knauer, PUC  
Tom Lyle, BED  
Warren Coleman, MMR  
William Jerome