DATE: January 21, 2021, 1:00 p.m. – 3:30 p.m. **LOCATION:** Virtual Meeting (ZOOM)

PARTICIPATING MEMBERS

- Burlington Electric Department (BED): James Gibbons
- Green Mountain Power (GMP): Brian Otley
- Stowe Electric Department (SED): David Kresock
- Vermont Electric Cooperative (VEC): Peter Rossi, Kris Smith
- Vermont Electric Power Company (VELCO): Chris Root, Frank Ettori, Tina Stevens
- Vermont Public Power Supply Authority (VPPSA): Stephen Fitzhugh
- Washington Electric Cooperative (WEC): Bill Powell

OTHER PARTICIPANTS

Marc Allen (VELCO), Lou Cecere (VELCO), Kevin Cronin (Northview Weather), Jeff Disorda (VELCO), Tom Dunn (VELCO), Mark Ehler (Northview Weather), Kerrick Johnson (VELCO), Shana Louiselle (VELCO), Kim Moulton (VELCO), Dan Nelson (VELCO), Connor Pasquale (Northview Weather), Ryan Paulino (Northview Weather), Hantz Présumé (VELCO), Mark Sciarrotta (VELCO), Jay Shafer (Northview Weather), Doug Smith (GMP), Allen Stamp (AP Stamp, Inc.)

OPENING REMARKS

Mr. Root verified a quorum and called the meeting to order at 1:06 p.m.

SAFETY TOPIC

Mr. Nelson shared a recent experience of encountering a head-on collision while driving up the mountain towards Pico one evening. While traveling up the mountain, snow began to fall making the surface slick. A vehicle that was traveling down the mountain had crossed the centerline and struck another vehicle head-on. The collision resulted in a fatality. Mr. Nelson highlighted the fact that the first part of snowfall can be extremely dangerous since salt may not have been applied in the early stages and a layer of ice can be created.

Mr. Root next mentioned that as part of getting ready for the inauguration yesterday, there were expectations some bad actors may use the opportunity of the transition to create mischief. The information shared pointed to Iran particularly, among others, and increased phishing attempts. Mr. Nelson indicated most are not allowing traffic from those areas, but there is much creativity on their part and awareness is key.

Mr. Smith mentioned this is the time of year when many support renewals occur. The bad actors are aware of this timing. It is important to keep this in mind and be vigilant. Mr. Smith also indicated they are seeing an increased number of emails with gift card scams. Lastly, Mr. Smith shared two important things he has gathered from the recent UVM Health Network cyber event: make sure to have a good disaster recovery plan and be sure this plan includes a complete restart from nothing. This is considered a best practice.

DRAFT MINUTES APPROVAL

Mr. Root presented the meeting minutes from November 19, 2020 for approval.

Mr. Fitzhugh moved for approval, Mr. Powell seconded, and the minutes were approved as

presented without objection.

TELECOM WORKING GROUP

Mr. Stamp reported there is now consensus on the routing criteria, with a 150 kW cutoff point.

The scope includes:

- Proposed substation connections
 - 68 substations
 - o 91 miles of fiber
- Proposed DER Data Point Connections
 - o 394 MW
 - o 616 miles of fiber
 - BED 8 miles
 - GMP 489 miles
 - VEC 51 miles
 - VPPSA 50 miles
 - WEC 18 miles
 - o 485 connection points
 - 416 solar
 - 21 bio
 - 33 hydro
 - 5 storage
 - 10 other

Mr. Stamp indicated the next steps include developing the governance. This will include answering questions such as: how to pay for the work; who is responsible for what; if someone opts in, what are the rules of engagement.

Mr. Presume asked if the team had discussed the potential impact of FERC Order 2222, which pertains to DER aggregated to participate in wholesale markets. Mr. Stamp indicated the analysis did not include any potential impact from this FERC Order.

CLIMATE CHANGE

Mr. Shafer shared some slides on Climate Project Update – Vermont Extreme Weather and Climate Trends. The study included three focus areas: distribution outage risks, extreme precipitation, and vegetation management. Extreme events drive signals. The study looked at frequency of events and storm severity.

The primary impact season related to storm severity appears to be late October through December based on data from 2011 – 2019.

Mr. Shafer discussed the methods used for the study, which included a Deep Learning Model. The Deep Learning Model simulates historic outages back to 1980 based on observed outage data. The results indicate a 14% increase over 40 years in modeled frequency of top storm days and a 19% increase over 40 years in modeled severity of top storm days. Top storm events accounted for approximately 11% of all outages in the modeled dataset; however, based on outage observations it was estimated these storms contribute to 24% of all outages and 33% of

all weather-caused outages. A key takeaway is that overall outage risks have increased both due to the frequency and intensity increases of severe storms.

Mr. Shafer next discussed extreme precipitation and vegetation tracks. Vegetation growth conclusions included: growing seasons generally appear favorable in a fairly stable climate regime with warming seasons and adequate precipitation, water availability will be primary limiting weather-climate factor, and seasonal drought appears more likely mid to late in growing seasons.

Mr. Shafer ended his presentation with some overall conclusions:

- Climate is getting warmer and wetter, warming fastest in late summer to fall, and getting wetter fastest in the winter.
- Power outage risks have increased 3-6% from 1980 to 2019, driven largely by major storm events becoming more frequent and more intense.
- Fall and early winter season will continue to feature most powerful storm systems.
- Overall power outage risk will continue to increase with widening of warm season (especially late fall to early winter).
- Vegetation growth unclear with competing influences (e.g. seasonal drought) and a complex set of tree health factors.
- Last decade likely best indicator of the next three decades –general seasonal trends are likely to continue.

This work will continue in 2021 and another update will be scheduled later in the year.

EMERALD ASH BORER UPDATE

Mr. Disorda provided an update from the EAB Subcommittee which had met that morning. The Federal quarantine has now ended and they are switching to bio-control. Vermont is still keeping the quarantine, meaning wood is not allowed to be moved from an infested site to a non-infested site. Vermont is also incorporating bio-control, having released wasps in two locations.

Mr. Disorda also shared that WEC had provided slides on an outage that occurred on Christmas day. This is thought to be the first outage caused by the Emerald Ash Borer. A tree broke off approximately 25 feet above ground, impacting a 3-phase line. This is a wakeup call for everyone. We are starting to see trees die and begin to fail quicker than expected. This typically takes 5 years, but we are only about 2.5 years in.

Mr. Dunn asked if there is the chance the Emerald Ash Borer has been here longer than initially thought. Mr. Disorda believes this is the case which is why we are starting to see trees fail.

LONG RANGE TRANSMISSION PLAN

Mr. Presume provided an overview of the 2021 Vermont Long Range Transmission Plan. This plan has been distributed to Vermont System Planning Committee (VSPC) and will be discussed next week.

Mr. Dunn asked how the changing dynamic generation fleet was factored in. Mr. Presume indicated the study is based on what ISO-NE thinks will be in-service.

The study utilized the new ISO-NE generation outage approach, which is a probabilistic approach, rather than the deterministic approach used in the past. This change in approach occurred

approximately 3 years ago.

Next steps include the following:

- Sent draft report to VSPC
- Incorporate VSPC comments (60 days)
- Present plan at public meetings
- Publish report (July 2021)

The 2021 Vermont Long Range Transmission Plan presentation is available in the meeting materials.

ISO-NE BEHIND THE METER UPDATE

Mr. Ettori provided a brief update that included the following:

- Brought the NE Transmission Owners proposal to the Markets and Transmission Committees.
- Received feedback from the Markets Committee and Legal Counsel. Some of the feedback received noted the proposal is a significant change to the language and will likely be an uphill battle with FERC. Some of the pushback on the proposal included such things as cost allocation and cost causation.
- Feedback from the Internal Market Monitor indicated they have an issue with some parts of the proposal.
- Feedback from ISO Management Staff and Legal was a little more helpful in nature and provided suggestions, such as changing the Behind-the-meter terminology to Out-of-Market generator. Their suggestions included modifying the tariff language to indicate what is included rather than what is not included.
- Next steps:
 - Transmission Owners met this week. Need to come up with new language and determine responses. Will let the Transmission Committee know they are digesting the feedback when the committee meets next week.
 - Will be scheduling a RUG meeting to help with draft of the language going forward.
 - The proposal schedule is slipping a little, pushed out a month.

VELCO BOARD OF DIRECTORS UPDATE

No update provided due to time.

OTHER BUSINESS

Open discussion

• None

Next meeting

Date: February 18, 2021, 1:00 p.m. – 3:30 p.m. **Location:** Virtual Meeting (ZOOM)

Possible topics for discussion

- VSPC update Hantz Presume
- Telecom Working Group standing agenda item

- ISO Behind the Meter Update
- Storage Update quarterly agenda item
- VELCO Board of Directors Update

MOTION TO ADJOURN

Mr. Gibbons moved to adjourn, Mr. Powell seconded, and the meeting was adjourned at 3:27 pm.

Respectfully submitted,

Tina Stevens VELCO OC Secretary