Vermont System Planning Committee
Geographic Targeting Subcommittee
June 21, 2023
Meeting Minutes

Participants: Michael Beaulieu (VEC), Brian Hall (VEC), Kamran Hassan (GMP), Sarah Braese (VPPSA), Brad Williams (BED), David Westman (VEIC), Jay Pilliod (VEIC), Hantz Présumé (VELCO), Khalid Osman (VELCO), Luke Looman (VELCO), Marc Allen (VELCO), Shana Louiselle (VELCO)

Green Mountain Power project screening

GMP does not have any projects driven by load growth and eligible for avoidance by NTAs; however, Kamran Hassan, provided an overview of reliability projects that GMP is pursuing, as well as previously reviewed projects. None of these projects met the criteria for NTA analysis. GMP's project screening list is available on the VSPC website at: https://www.vermontspc.com/library/document/download/7942/GMP%20Geotargeting%20Areas%202023.xlsx)

- GMP presently has planned capital projects at the Georgia Substation (scheduled for 2024), Welden Street Substation (scheduled for 2025), and the Montpelier #3 Substation (scheduled for 2026). None of these projects are load growth-related, but rather to address reliability and asset management.
- The Georgia Substation project will replace obsolete breaker with a new, same-size, transformer and high-side breaker to improve protection. Steel and wood structures will be replaced with new steel structures to improve working clearances, which will prevent future outages during maintenance work.
- The Welden Street Substation project will replace obsolete equipment, including two circuit breakers, voltage transformers, the existing Remote Terminal Unit, existing ground grid, and the installation of security cameras.
- The Montpelier #3 Substation project proposes to rebuild the substation adjacent to the existing substation. The equipment in the existing substation has reached its end of life and is prone to failure. The new substation will be built as a breaker and a half configuration.
- GMP noted that there have been discussions with a Burlington-based company that may have greater load in the future, and may require additional upgrades to enhance feeder back up for reliability. However, at present, the company's plans, load requirements and timing of loads are highly uncertain and are not identified in the five-year plan. GMP will continue to engage with their customer as their future needs emerge.

Vermont Electric Cooperative project screening

VEC does not have any projects that have screened in for NTAs; however Michael Beaulieu provided an overview of reliability projects that VEC is pursuing. VEC's project screening is available on the VSPC website at https://www.vermontspc.com/library/document/download/7948/GT_Screening_VEC_2023.xlsx.

- VEC received a Certificate of Public Good in 2021 to rebuild its Sheldon Substation. Construction is currently underway and it is expected to be commissioned in 2025.

- The Eden Substation is loaded greater than 90% of nameplate on two phases during non-coincident spring sugaring peak loads. VEC plans to replace the substation transformers and voltage regulators with larger units. (Scheduled for 2024)
- VEC noted that they will continue to evaluate the need to address load growth in the Belvidere and Montgomery Substation area on an annual basis. The current peak load at Belvidere is below planning criteria with the increased capacity. This project screened out of Docket 6290 and no non-transmission alternatives were identified for the project.
- VEC continues to evaluate the need to increase capacity at the Hinesburg substation. Currently the peak load sits just below VEC's planning criteria of 80% of nameplate. The load is balanced, leaving about 500 kVA per phase of additional capacity for load growth while VEC plans for replacement or improvement.
- VELCO's Substation Conditions Assessment Program has identified three substations located in VEC's service territory where VEC owns exclusive facilities (facilities that are as necessary for the operation and control of that distribution utility's own system and not required by VELCO). If it is determined that exclusive facilities need to be replaced, VEC will bear 100% of that cost.

Burlington Electric Department

BED reported that they have no projects that would trigger the NTA screen.

Stowe project screening

Stowe reported that they have no projects that would trigger the NTA screen.

Vermont Public Power Supply Authority project screening

VPPSA reported that its municipal utility members have no projects that would trigger the NTA screen.

Washington Electric Cooperative

WEC reported that they have no projects that would trigger the NTA screen.

VELCO project screenings

VELCO does not have any projects that can be avoided or deferred by the use of NTAs. Hantz Présumé provided an overview of the NTA screenings of the following projects:

- **Tafts Corners Substation Project (scheduled for 2024):** VELCO proposes to upgrade the Tafts Corner Substation with a transformer backup solution to serve the VEC and GMP loads with improved system reliability and load restoration times for emergencies. The current configuration requires lengthy protection rework, 24-hour restoration time period, and operating the 115kV ring bus open. VELCO will install a new 115kV breaker on an existing breaker foundation; 115kV voltage transformer on a new foundation and steel mounting stand; new breaker protection relays and controls in the existing relay/control panels, and all required hardware, cabling and wiring. The preliminary cost estimate is $842,351 and $77,000 is non-PTF. Tafts Corners Substation NTA Screening is available here.

- **St. Johnsbury Substation SCAP Project (scheduled for 2025):** VELCO proposes to construct a new control building, new protection and control system, replace 34.5 kV oil circuit breaker,

replace 115 kV circuit switcher with 115 kV gas breaker and disconnect switch, replace and expand the substation fence, replace station service, and bring telecommunication, security, and monitoring systems up to standard. A temporary substation will be installed, as required by GMP's system, to maintain reliable service to St. Johnsbury load during outages. The preliminary cost estimate is $18M. St. Johnsbury Substation Project Screening is available here.

- **Windsor Substation SCAP Project (scheduled for 2025):** VELCO proposes to construct a new control building, new protections and control system, replace 46 kV oil circuit breakers, replace 115 kV circuit switcher, replace the substation fence, replace station service, install transformer secondary oil-containment system, and bring telecommunication, security, and monitoring system up to standard. VELCO and GMP to confirm whether a temporary 115/46 kV substation should be installed to support loads during construction. The preliminary cost estimate is $13M. Windsor Substation Project Screening is available here.

Because these are asset management driven projects, they all screened out of consideration for NTA alternatives. There were no objections to these findings.

Next steps

- VSPC Staff will prepare the draft recommendations for the subcommittee to review and approve in advance of the October VSPC quarterly meeting.
- VELCO will prepare the Vermont Long-Range Transmission Plan and have it ready for VSPC review in January 2024. The plan will consider whether storage and load control measures can address transmission issues. The Subcommittee talked about meeting again next winter (i.e March) when the planning analysis is complete to discuss how load management could be used as a non-transmission alternative to potential load growth related reliability issues.