



Highgate Substation Project

July 18, 2022

Town of Highgate Selectboard
Town of Highgate Planning Commission
Northwest Regional Planning Commission
ePUC Statutory Entities

Re: Highgate Substation Project
Certificate of Public Good – Section 248(j) Permit Process
45-Day Notice of Project Filing

Dear Statutory Entities:

This letter and the enclosed information describe the Vermont Electric Power Company Inc. and Vermont Transco LLC's (collectively "VELCO") proposed Highgate Substation Project (the Project), which includes upgrades to VELCO's existing facilities in Highgate, Vermont, and generally consists of upgrading VELCO's existing substation located at 2731 Route 78.

We anticipate filing our formal petition with the Vermont Public Utility Commission (Commission) on September 6, 2022, requesting a Certificate of Public Good to construct the Project under Section 248(j) because such facilities will be of limited size and scope, and the Project does not raise a significant issue with respect to the substantive Section 248 criteria. The state permitting process requires VELCO to notify the Commission, the Town of Highgate Planning Commission and Selectboard, and the Regional Planning Commission at least 45 days prior to a formal filing with the Commission¹. For your information, we have attached a Project overview, and substation site layout.

Before the Project is filed with the Commission, VELCO will conduct informal discussions to address concerns you may have about the Project's impact. On August 4, 2022, VELCO will hold an in-person public meeting to share information, collect feedback, and address concerns from affected communities. You will also receive notification of our petition when it is filed with the Commission. Please note that the Planning Commissions may make recommendations to VELCO within 40 days of the submission of this 45-day notice, which is August 28, 2022, in this case. Additionally, Commission Rule 5.402(A) establishes that municipal and regional Planning Commissions "shall make recommendations, if any, to the [Commission] and to the petitioner at least 7 days prior to filing the petition with the [Commission]." Planning Commissions also have the right to make revised recommendations within 45 days after the date the Petition is filed with the Commission, if the Petition contains new or more detailed information that was not previously included in these plans. While Section 248(f) and Commission Rule 5.402(A) focus only on the Planning Commission comment process, VELCO welcomes feedback from the affected municipal bodies and state agencies. So

¹ The process is governed by Commission Rule 5.400, which can be viewed on the Commission's website at <http://puc.vermont.gov/>.

that VELCO has sufficient time to incorporate your feedback prior to the September 6, 2022, anticipated filing date, VELCO is requesting that comments be submitted by August 28, 2022.

For additional information regarding the Commission’s processes, including your right to participate in the proceeding, please refer to the Commission document titled, “Public Participation and Intervention in Proceedings Before the Public Utility Commission,” found on the Commission’s website at <https://puc.vermont.gov/document/public-participation-and-intervention-proceedings-public-utility-commission>.

The Commission’s website also includes a Section 248 procedures document found on the Commission’s website at <https://puc.vermont.gov/document/section-248-procedures>.

As VELCO plans to file the petition under Section 248(j), the Commission’s Section 248(j) procedures document can be found on the Commission’s website at <https://puc.vermont.gov/document/section-248j-procedures>.

As the Project is still in the design phase, we will continue discussions and expect to receive feedback on this Project from various stakeholders. Please note that we expect to make the formal filing with the Commission on September 6, 2022. If you are interested in a presentation on this Project, have comments, or want further information, please contact Dan Poulin, Project Manager, at 802-770-6387 or dpoulin@velco.com. Please contact us before August 28, 2022, so that we may better address any questions or concerns you may have.

The documents that accompany this letter have been electronically filed using ePUC.

Sincerely,



Dan Poulin, Project Manager
Vermont Electric Power Company, Inc.

Enclosures:

Attachment A – Project Overview

Attachment B – Highgate Substation – Overall Ortho Plan



Highgate Substation Project Overview

Introduction

Vermont Electric Power Company Inc. (VELCO) was formed when local distribution utilities joined together to create the nation's first statewide "transmission only" company to provide access to clean hydro power and build and maintain the state's high-voltage electric transmission* grid. VELCO constructs, owns, and operates most of this in-state, high-voltage transmission grid (essentially 115 kV and above) that connects Vermont to the regional and national electric power supply system. VELCO's network also provides the electric supply to Highgate's local distribution utility, Vermont Electric Cooperative, Inc. (VEC).

The Highgate Substation Project (the Project) is driven by the need to improve the condition of VELCO's existing facilities in the Town of Highgate and is comprised of improvements to VELCO's existing Highgate Substation. As is explained in this overview, we expect to file a request on September 6, 2022, with the Vermont Public Utility Commission (Commission) for permission to undertake this Project. Assuming the Commission and other approvals are granted, we currently plan for it to be constructed and in service by March 2024.

This proposed Project overview describes the following:

- Deficiencies at VELCO's Highgate Substation
- Alternatives evaluated for this Project
- The Project's description
- The Project's impact
- The anticipated Project filing date with the Commission
- Local and Regional Planning Commissions' Rights to comment on the Project Plans

Description of the VELCO Highgate Substation Deficiencies

Electric energy remains a cornerstone of our local and state economies, our quality of life, and our communities. Households, businesses, and public services like schools and hospitals all rely on electricity for communication, lighting, heating, ventilation, and the operation of appliances and equipment. If transmission facilities fail, large geographic areas can lose their electric service. Transmission utilities such as VELCO are required to design, operate, and maintain a transmission network according to national and regional reliability standards. In addition, VELCO continuously assesses the adequacy of its system to ensure Vermont's transmission network meets national and regional reliability criteria.

* Transmission refers to the part of the electric system that operates at high voltage and carries large amounts of electricity from generation plants to the lower-voltage distribution system, which supplies electricity to local areas.

The VELCO Highgate Substation is connected to VELCO’s electric transmission network in the Highgate area. The Substation is connected to VEC’s sub-transmission systems in the Highgate area. VEC’s distribution systems are fed from the sub-transmission system and in turn serve VEC’s customers.

VELCO purchased the 46 kV equipment in the Highgate Substation in 2003 from Citizens Utility. VELCO rebuilt the 115 kV equipment in 2005 as part of the Northern Loop project. VELCO recently conducted a condition assessment of the Substation and identified the need to replace some of the equipment due to condition. The primary deficiency is the control building.

Alternatives Evaluated

An analysis of the Project demonstrated that upgrading the VELCO Highgate Substation is the most efficient way to address the condition-related concerns. This analysis included a review of the Project timing and Project cost and viability, as well as the effectiveness of the transmission solutions considered. VELCO evaluated replacing the entire VELCO Highgate Substation but concluded that performing specific equipment upgrades of the existing VELCO Highgate Substation was the lowest cost option.

VELCO screened the Project for its potential to be resolved through non-transmission alternatives (e.g., energy efficiency or new generation) using the tool developed by the Vermont System Planning Committee (VSPC). The screening determined that the Project was not a candidate for a non-transmission solution because the proposed upgrades are being driven by the conditions of the substation equipment. Thus, non-transmission alternatives could not resolve the present problems at the VELCO Highgate Substation. The VSPC Geographic Targeting Subcommittee reviewed the screening conclusion on May 21, 2021.

Project Description

The Project consists of the following primary components:

- Replace the existing 24 foot by 61-foot VELCO control building with a new, approximately 32 foot by 80-foot control building that will accommodate a new protection and control system, station service, DC battery systems communication equipment, and security systems. The new control building will be located inside the existing the Substation.
- Adjustments to existing driveway that consist of regrading, widening, and shortening the driveway to accommodate the new entry for the control building.
- Expand a 90-foot portion of fence on the fence’s eastern side to accommodate the new control building. VELCO proposes to expand the fence approximately 5 feet to the east.

VELCO does not anticipate the need to clear any trees for the Project.

While the Project is constructed, VELCO will take advantage of the opportunity to perform regular condition-based maintenance and in-kind replacements at the Substation. This opportunity work is not associated with the Project.

Assuming regulatory approval, construction is expected to start in April 2023 with a targeted completion of March 2024.

Although the engineering for the Highgate Project is not yet complete, Attachment B depicts a preliminary design layout for the Substation.

Project's Impacts

Aesthetics - Commission Rule 5.804

Both the Vermont Natural Resources Board and the Commission utilize the so-called Quechee Lakes standard [set forth in the decision Quechee Lakes Corporation, #3EW0411-EB and #3O439- EB (1986)] to guide their aesthetics analysis. According to the Quechee Lakes standard, regulators must first determine whether a project will have an adverse impact on aesthetics and scenic and natural beauty. A project has an adverse impact if it is out of character with its surroundings. Specific factors that regulators use to make this evaluation include the nature of the project surroundings, the compatibility of the project design with those surroundings, the suitability of the project colors and materials with the immediate environment, the visibility of the project, and the impact of the project on open space. If regulators conclude that a project will have an adverse effect, the next step in the two-part test is to determine whether the adverse effect of the project is “undue.” The adverse effect is considered undue when regulators find that any one of the following questions is answered yes: (1) Does the project violate a clear, written community standard intended to preserve the aesthetics or scenic beauty of the area? (2) Have the applicants failed to take generally available mitigating steps which a reasonable person would take to improve the harmony of the project with its surroundings? (3) Does the project offend the sensibilities of the average person? Is it offensive or shocking because it is out of character with its surroundings, or because it significantly diminishes the scenic qualities of the area? For transmission upgrades, the Commission’s aesthetic analysis, however, does not end with the results of the Quechee test. In addition, the Commission’s aesthetic assessment is “significantly informed by overall societal benefits of the project.” Public Service Board Docket No. 6860, Order of 1/28/05 (footnotes omitted)[†].

VELCO’s aesthetic consultant, T.J. Boyle Associates, LLC (TJB), a landscape architecture and planning firm, has reviewed the preliminary design plans and performed an initial visual analysis of the areas of the proposed Project upgrades. TJB’s preliminary analysis indicates that the Project will not result in an undue adverse impact on aesthetics and scenic and natural beauty of the area. It is not anticipated that aesthetic mitigation will be recommended because VELCO proposes to perform all work within an existing substation site, or immediately adjacent to it. VELCO’s Petition to be filed in September 2022 shall address any comments received on the proposed plan and will include a full analysis of potential aesthetic impacts.

Transportation

The Project poses no long-term traffic impacts in Highgate. The Petitioners anticipate only minor, short duration traffic impacts, if any, due to deliveries of equipment and material to the Substation site during the construction period (expected to be from April 2023 to March 2024). Such deliveries will use existing

[†] The Public Utility Commission was formerly called the Public Service Board.

roads with vehicles that are commonly used on public roads. During delivery of any large equipment, Petitioners will employ the services of traffic control personnel to manage traffic flow.

Right of the Local and Regional Planning Commissions to Comment on the Project Plans

Section 248(f) of Title 30 of the Vermont Statutes Annotated provides that municipal and regional Planning Commissions are entitled to receive notice of projects proposed under the Section 248 statute and to make recommendations to the Commission and to the petitioner. More specifically, municipal and regional Planning Commissions may make recommendations regarding the Project as follows: First, 30 V.S.A. § 248(f)(1)(C), states local and regional Planning Commissions may “[m]ake recommendations to the petitioner [VELCO] within 40 days of the petitioner’s submittal to the planning commission under this subsection.” Forty days from the date that this letter and Attachment will be provided to municipal and regional Planning Commissions is August 28, 2022. Second, Section 248(f)(1)(D) states that, once the petition is filed with the Commission, such local and regional Planning Commissions may make recommendations to the Commission “by the deadline for submitting comments or testimony set forth in the applicable provision of this section, Commission rule, or scheduling order issued by the Commission.” Relatedly, Commission Rule 5.402(A) establishes that municipal and regional Planning Commissions “shall make recommendations, if any, to the [Commission] and to the petitioner at least 7 days prior to filing the petition with the [Commission].” Third, as stated in Commission Rule 5.402(A)(2), local and regional Planning Commissions also have the opportunity to “provide revised recommendations within 45 days of the date on which petitioner has filed a petition with the Commission if the petition contains new or more detailed information that was not previously included in the petitioner’s filing with the municipal and Regional Planning commissions.” Recommendations made to the Commission under Section 248(f), or the lack of such recommendations, do not preclude municipal and regional Planning Commissions from presenting evidence during technical hearings if they exercise their right to appear as a party.

For additional information regarding the Commission’s processes, including your right to participate in the proceeding, please refer to a Commission document titled, “Public Participation and Intervention in Proceedings Before the Public Utility Commission,” found on the Commission’s website at <https://puc.vermont.gov/document/public-participation-andintervention-proceedings-public-utility-commission>. The Commission’s website also includes a Section 248 procedures document found on the Commission’s website at <https://puc.vermont.gov/document/section-248-procedures>.

As VELCO plans to file the petition under Section 248(j), the Commission’s Section 248(j) procedures document can be found on the Commission’s website at <https://puc.vermont.gov/document/section-248jprocedures>.

As the Project is still in the design phase, we will continue discussions and expect to receive feedback on this Project from various stakeholders. Please note that the Commission Petition and filing anticipated for September 6, 2022, as well as other pertinent Project updates, will be posted on VELCO’s website at: <http://www.velco.com/Highgate>. Those interested in a presentation on this Project, have comments or request further information, please contact Dan Poulin, Project Manager, at 802-282-6031 or dpoulin@velco.com.



COLOR KEY	LEGEND
— EXISTING INFRASTRUCTURE TO REMAIN	SUBSTATION FENCE
— EXISTING INFRASTRUCTURE TO BE REMOVED	YARD LIGHT
— PROPOSED OR RELOCATED INFRASTRUCTURE	APPROXIMATE BOUNDARY LINE
	APPROXIMATE ROW LINE

GENERAL NOTE:
1. THIS PLAN DOES NOT CONSTITUTE A BOUNDARY SURVEY.



REV	DATE	DR	CK	DESCRIPTION
0	07/15/22	JJO	JWK	ISSUED FOR PERMIT

	VERMONT ELECTRIC POWER CO., INC. RUTLAND, VERMONT		
	HIGHGATE SUBSTATION		
OVERALL ORTHO PLAN 115/46 kV YARD			
SCALE: AS SHOWN	DRAWN BY: JJO	APPROVED BY:	DATE:
DATE: 07/15/22	CHECKED BY: JWK		DATE:
SHEET NUMBER:	272-ORTHO		REV: