



Florence Substation Project

May 24, 2021

Town of Pittsford Selectboard
Town of Pittsford Planning Commission
Rutland Regional Planning Commission
ePUC Statutory Entities

Re: Florence Substation Project
Certificate of Public Good – Section 248 Permit Process
45-Day Notice of Project Filing

Dear Statutory Entities:

This letter and enclosed information describe the Vermont Electric Power Company Inc. and Vermont Transco LLC (collectively “VELCO”) proposed Florence Substation Project (the Project), which includes upgrades to VELCO’s existing facilities in the Town of Pittsford, and generally consists of upgrading VELCO’s substation located at 8040 Whipple Hollow Road. VELCO refers to the substation as the “Florence Substation” because the substation is in Florence, which is an unincorporated community in the Town of Pittsford.

We anticipate filing our formal petition with the Vermont Public Utility Commission (Commission) on July 8, 2021, requesting a Certificate of Public Good to construct the Project. The state permitting process requires VELCO to provide notice to the Commission, Town of Pittsford planning commission and selectboard, and 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 a substation site layout to this letter.

Before the Project is filed with the Commission, VELCO will conduct informal discussions to address concerns you may have about the Project’s impact. VELCO will hold a virtual public meeting on June 16, 2021 at 5:30 PM to share information, collect feedback, and address concerns from affected communities. You will also receive a 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, – July 3, 2021 in this case. 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].” 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 July 8, 2021 anticipated filing date, VELCO is requesting that comments be submitted by July 2, 2021.

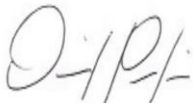
For additional information regarding the Commission’s processes, including your right to participate in the proceeding, please refer to the Commission document titled “Public Participation and Intervention in Proceedings Before the Public Utility Commission,” found on the Commission’s website at <https://puc.vermont.gov/document/public-participation-andintervention-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 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 July 8, 2021. 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. So that we may better address any questions or concerns you may have, please contact us before July 2, 2021.

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

Sincerely,



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

Enclosures:

Attachment A – Project Overview

Attachment B – Florence Substation – Overall Ortho Plan and Vegetation Clearing



Florence 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 Pittsford's local distribution utility, Green Mountain Power, Inc. (GMP).

The Florence Substation Project (the Project) is driven by the need to improve the condition of VELCO's existing facilities in the Town of Pittsford and comprises improvements to VELCO's Florence Substation. As is explained in this overview, we expect to file a request on July 8, 2021 with the Vermont Public Utility Commission (Commission) for permission to undertake this Project and, assuming the Commission and other approvals are granted, currently plan for it to be constructed and in service by December 2022.

This proposed project overview describes the following:

- Deficiencies at VELCO's Florence 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 Florence 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 Florence Substation is connected to VELCO’s electric transmission network in Rutland County Vermont. The Substation is connected to GMP’s sub-transmission system in the Pittsford area. GMP distribution systems are fed from the sub-transmission system and in turn serve GMP customers.

The VELCO Florence Substation was originally built in 1978 with various modifications and improvements occurring over the nearly forty-three years of service. VELCO conducted a condition assessment of the Substation and identified the need to replace some of the equipment due to condition. Deficiencies were identified in equipment such as the protection and controls system, 115 kV breakers, 46 kV breakers, switches, capacitor bank, and control building.

To correct these deficiencies, VELCO proposes to construct a new substation to the north and adjacent to the existing substation. VELCO proposes to design the new substation in a ring bus configuration as opposed to the existing radial bus configuration. In a ring bus configuration, the circuit breakers are connected to form a ring and the circuits feeding the loads are connected between the breakers. In a radial bus configuration, each circuit is fed from a single circuit breaker. A ring bus provides improved reliability and maintainability over a radial bus, as any of the circuit breakers can be opened and isolated for maintenance without interruption of service. In addition, in the event of a fault, the breakers on both sides of the faulted circuit trip, and thereby isolate the fault, while the other circuits remain in service.

After VELCO has successfully commissioned the new substation and placed it into service, VELCO will retire and remove the existing substation.

The attached orthographic plan (Attachment B) identifies the proposed new ring bus substation in red, and identifies the existing radial bus substation that VELCO proposes to remove in blue.

Alternatives Evaluated

An analysis of the Project demonstrated that upgrading the VELCO Florence 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 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 Florence Substation. The screening conclusion was reviewed by the VSPC Geographic Targeting Subcommittee on May 28, 2020.

VELCO considered addressing the condition-related concerns identified during the assessment by performing specific equipment refurbishments, replacements, and upgrades to the existing substation in its current, radial bus configuration. This alternative would require VELCO to install a temporary substation in the vicinity of the existing substation to provide service to GMP customers while performing the identified improvements. This alternative would not improve the reliability and maintainability as compared with the proposed Project.

An analysis of the alternative demonstrated that building a new substation configured in a ring bus arrangement adjacent to the existing substation – the proposed Project – is the most efficient and cost-effective way to address the condition-related concerns while at the same time improving the reliability and maintainability of the substation. This new substation would be built while the existing substation is still providing service to GMP customers and would thus avoid the expense of building a temporary substation as required for the alternative.

Project Description

The Project consists of the following primary components:

- Construct a new 115/46 kV ring bus substation with all new components adjacent to the existing substation, including installing:
 - A new 115/46 kV, 33.6/44.8/56 MVA transformer.
 - Four (4) 46 kV vacuum circuit breakers
 - One (1) 115 kV, SF6 circuit breaker
 - Ten (10) MVar capacitor bank and associated reactor and SF6 Breaker
 - A protection and control system that provides diversity, redundancy, and communication aided schemes
 - A control building that can accommodate the new protection and controls system, redundant AC and DC station services, communication equipment, and security systems.
 - One (1) 115 kV, and four (4) 46 kV instrument voltage transformers in support of the new protection and controls system.
 - Passive secondary oil containment system for the new 115/46 kV transformer.
 - A new fence to accommodate the new substation. The substation fence will enclose a 39,500 square foot area to the north of the existing substation fence. For comparison, the existing substation fence encloses an area of 24,900 square feet. In addition, VELCO will install a fence at the top of the hillside for safety purposes.
 - Two (2), three pole structures to connect the existing 115 kV transmission line to the new substation.
- Perform tree clearing to accommodate new substation and pole structures
- Remove existing substation, including all above and below grade components and restore the area to fit in with the surrounding property

Assuming regulatory approval, construction is expected to start in May of 2022 with a targeted completion date of December 2022.

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

Project's Impacts

Aesthetics

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 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 initial design plans and performed a preliminary visual analysis of the area near 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. Visibility appears to be limited mostly to nearby portions of Whipple Hollow Road. Existing vegetation and landform screen visibility from other surrounding areas. The substation is located off Whipple Hollow Road from the north. To the northwest, Whipple Hollow Road turns to the south and continues by the substation to the west. At the closest point, the substation will be setback over 600-feet from the road. There are existing VELCO 115 kV and 345 kV transmission lines west of the substation site, between the substation and Whipple Hollow Road. The lines are oriented roughly north-south and cross Whipple Hollow Road to the north. Immediately to the east is a small, vegetated ridge which separates the Project site from OMYA’s Florence facility, a large calcium carbonate processing plant. Proposed improvements will require vegetation clearing, shown on Attachment B. West of the clearing for the relocated VELCO 115 kV transmission line there is existing successional vegetation, which will help screen and soften views from Whipple Hollow Road. At this time, no additional mitigation plantings are being proposed. VELCO’s Petition to be filed July 8, 2021 shall address any comments received on the proposed plan and will include a full analysis of potential aesthetic impacts and proposed landscaping mitigation measures. TJB will work with VELCO, the Town of Pittsford, the Regional Planning Commission, and other interested parties and if it is determined that additional mitigation

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

plantings are necessary, VELCO will provide a mitigation plan that includes locations and specifications of proposed plantings.

Noise

VELCO's noise consultant, Resource Systems Group, Inc. (RSG) will assess the potential noise impacts associated with the Project. VELCO will provide a noise analysis as part of the Project's filing with the Commission, but no adverse impacts are expected at the residences closest to the Substation.

Transportation

The Project poses no long-term traffic impacts in Pittsford. 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 May 2022 to December 2022). Such deliveries will use existing 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. Equipment deliveries will be crossing an active rail line and the Petitioner will communicate with the railroad regarding such deliveries.

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, "Make 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 the letter and this Attachment will be provided to municipal and regional Planning Commissions is July 3, 2021. 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>.

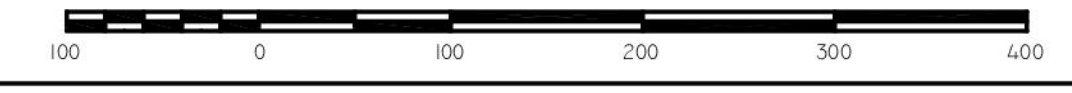
The Commission’s website also includes a Section 248 procedures document found on the Commission’s website at <https://puc.vermont.gov/document/section-248-procedures>.

As 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 July 8, 2021 as well as other pertinent Project updates, will be posted on VELCO’s website at: <http://www.velco.com/florence>. 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.



LEGEND	
	SUBSTATION FENCE
	EXISTING INFRASTRUCTURE TO REMAIN
	EXISTING INFRASTRUCTURE TO BE REMOVED
	NEW AND/OR REPLACED INFRASTRUCTURE
	PROPOSED TREE CLEARING
	APPROXIMATE BOUNDARY LINE
	PROPOSED BOUNDARY LINE
	APPROXIMATE EDGE OF ROW

GENERAL NOTES:
 --THIS PLAN DOES NOT CONSTITUTE A BOUNDARY SURVEY.



REV	DATE	DR	CK	DESCRIPTION
0	5/14/21	JWK	EJM	ISSUED FOR PERMIT

	VERMONT ELECTRIC POWER CO., INC.	
	RUTLAND, VERMONT	
	FLORENCE SUBSTATION	
OVERALL ORTHO PLAN 115/ 46 kV YARD		
SCALE: AS SHOWN	DRAWN BY: JWK	APPROVED BY:
DATE: 5/14/21	CHECKED BY:	DATE:
SHEET NUMBER:	217-ORTHO	