

VELCO Florence Substation Project

Town of Pittsford, Vermont

Aesthetic Analysis Report

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I. Introduction

T. J. Boyle Associates, LLC, a landscape architecture and planning firm located in Burlington, Vermont, was retained by Vermont Transco LLC, and Vermont Electric Power Company, Inc. (collectively “VELCO”), to conduct a visual analysis to evaluate potential impacts due to proposed upgrades to an existing substation in Pittsford, Vermont (referred to as the “Florence Substation Project” or “Project”).

T. J. Boyle Associates has conducted field investigations, analyzed geographic information system (“GIS”) data, USGS maps, aerial photography, detailed design plans, and used the latest computer technologies to best understand the Project and how it would alter the visual character of the landscape in which it is located. This aesthetic analysis determines whether changes to the landscape’s visual character attributable to the proposed Project would be adverse, and if so, whether these changes would also be undue.

II. Methodology

Section 248(b)(5) of Title 30 of the Vermont Statutes Annotated requires that the Vermont Public Utility Commission find a proposed project will not have an “undue adverse effect” on a proposed project site’s aesthetics. This requirement is outlined in the Quechee Lakes Decision (Quechee Lakes Corporation, #3EW0411-EB and #30349-EB [1986]). As explained in the Public Utility Commission’s order in Docket No. 6860, this Commission applies the Quechee Test in Section 248 proceedings, as follows:

The Public [Utility Commission] has adopted the Environmental Board’s Quechee analysis for guidance in assessing the aesthetic impacts of proposed projects under Section 248. We have previously explained the components of the Quechee analysis as follows:

In order to reach a determination as to whether the project will have undue adverse effect on the aesthetics of the area, the [Commission] employs the two-part test first outlined by the Vermont Environmental Board in Quechee, and further defined in numerous other decisions.

Pursuant to this procedure, first a determination must be made as to whether a project will have an adverse impact on aesthetics and the scenic and natural beauty. In order to find that it will have an adverse impact, a project must be out of character with its surroundings. Specific factors used in making this evaluation include the nature of the project’s surroundings, the compatibility of the project’s design with those surroundings, the suitability of the project’s colors and materials with the immediate environment, the visibility of the project, and the impact of the project on open space.

The next step in the two-part test, once a conclusion as to the adverse effect of the project has been reached, is to determine whether the adverse effect of the project is “undue.” The adverse effect is considered undue when a positive finding is reached regarding any one of the following factors:

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?

Our analysis, however, does not end with the results of the Quechee test. Instead, our assessment of whether a particular project will have an “undue” adverse effect on aesthetics and scenic or natural beauty is “significantly informed by overall societal benefits of the project.”

Petitions of the Vermont Electric Power Company, Inc. (VELCO), Vermont Transco, Docket No. 6860, Vt. Pub. Util. Comm’n (Jan. 28, 2005) at 79 (footnotes omitted).

T. J. Boyle Associates interprets the first prong of the Quechee test to first require an assessment of the project’s visibility. Visibility establishes the underlying method for which all visual aesthetics are evaluated to comply with the purpose of the Quechee Test. For instance, a project’s design, materials and colors may be completely out of character with its surroundings, but if such project is not visible to the general public (or “average person”), then there would be no adverse visual effect. Likewise, when a project is determined to be out of character with its surroundings, one solution that the Quechee Test offers to mitigate this is to visually obscure the project with landscape mitigation or other screening, which itself is a simple reduction or occlusion of project visibility. In this way, T. J. Boyle Associates interprets the first prong of the Quechee Test to be asking, “What is the project’s visibility, and is that visibility out of character with its surroundings?” In our experience, if the Quechee Test were not interpreted in this way then a given project could be considered adverse even if it was completely invisible to surrounding areas, which would be an unreasonable interpretation and inconsistent with the purpose of the test.

Our study area for visibility of transmission facilities tends to extend approximately two miles from a project location. This distance tells us whether a given project is, or is not, visible from prominent or protected locations in the study area, or, perhaps more importantly, if a project itself is in a prominent or highly visible location. We may find that a project has an adverse effect on a particular viewpoint, but that the project does not have an adverse impact on the surrounding area as a whole.

In conducting the Quechee Analysis and preparing this report, the following three methods have been used: (1) background data collection, (2) GIS viewshed analysis mapping, and (3) field investigation. The background data and field investigation are used to characterize the study area. The GIS viewshed mapping and field investigation are used to identify areas with potential visibility of the Project. All three methods are used to evaluate whether there are in fact “adverse” impacts, and if so, whether those impacts could be considered “undue.”

- (1) **Background Data Collection.** Standard data that can help describe the landscape of the Project site, the surrounding area, and the Project are assembled. These data include available Project plans and details, aerial photography, topographical maps, Geographical Information System (“GIS”) data including digital elevation model data, water and land cover information, transportation data and primary building data (public, commercial, residential), and applicable regulations such as the town plan, zoning ordinances, sub-division regulations, and the regional plan. As part of the background data collection, an “Aerial Context Map” is created using aerial photos as the base (see Appendix A, Map 1), which provides an overview of the general context around the Project site.



- (2) **GIS Viewshed Analysis.** Following the background data collection, ESRI ArcView software is used to calculate a GIS viewshed analysis of potential visibility of the Project. Viewshed analysis mapping can identify areas that may have potential views of a project by utilizing a line-of-sight method from a prescribed point or points (such as the top of substation equipment), representing the Project to all other locations within a designated study area. Figure 1 illustrates how line of sight is determined in the viewshed analysis. The analysis results (portrayed as two viewshed maps), and background data review form the basis for organizing the field investigation.

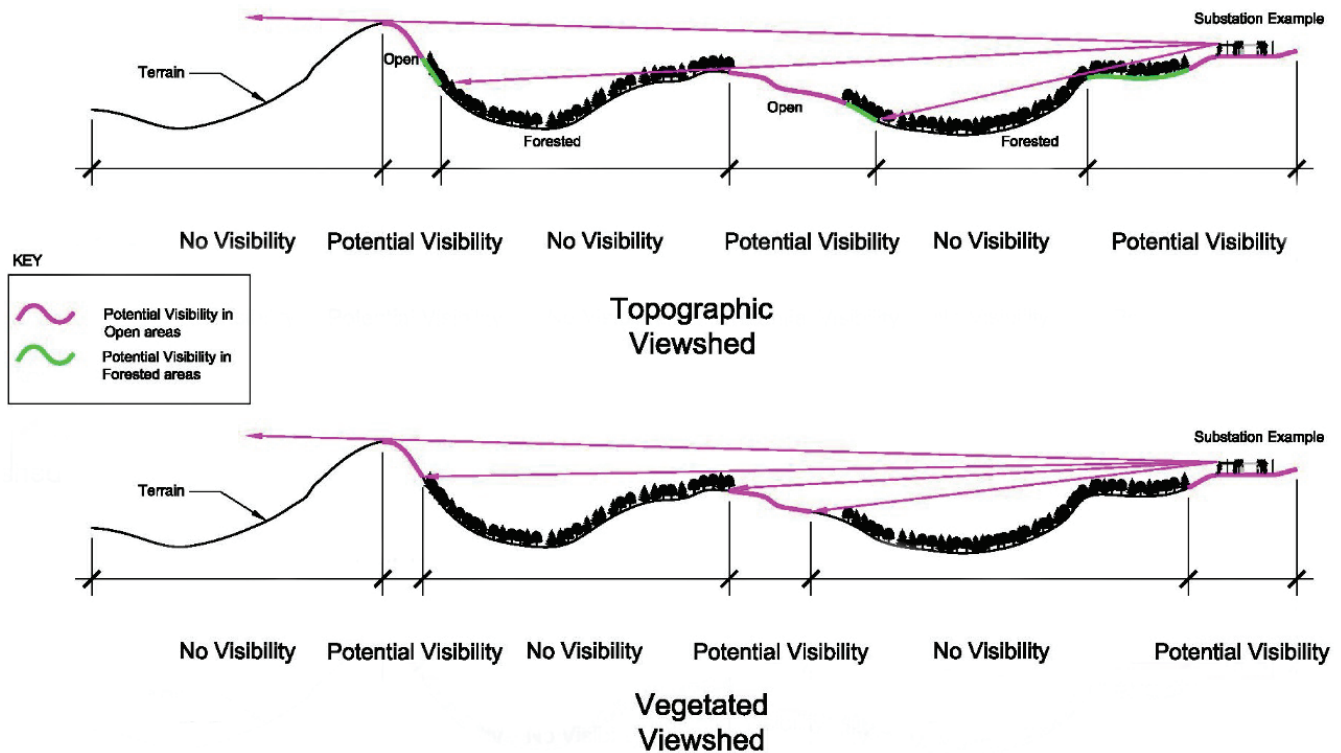


Figure 1: Terrain Viewshed and Vegetated Viewshed Diagrams. (Please note this diagram is to illustrate the results of a GIS Viewshed analysis and is not representative of the proposed Project.)

- a. First, a “Terrain Viewshed” map (see Appendix A, Map 2) is created to evaluate how the landform may block views of Project upgrades. The map differentiates potential viewing areas as “open” areas without forest cover or areas within forest cover. However, this analysis only accounts for intervening landform and does not incorporate how vegetation, buildings, hedgerows, street trees or any other vegetation or buildings would screen visibility of the Project. This map represents the maximum potential area from which the Project could be visible.
- b. Next, a second map (see Appendix A, Map 3) is created to represent a “Vegetated Viewshed.” This map shows how forest trees, in addition to landform, may block views of the Project. The data used to identify forested areas is based on the 2012 National Land Cover Database (NLCD). This analysis reflects a conservative assumption that the forest canopy is only 40 feet high, even though the canopy in the study area is typically between 50 feet and 80 feet high. The screening effect of non-forest land cover (buildings, residential landscaping, hedgerows,

street trees, and other roadside vegetation) is not included in this analysis. This map represents a more likely potential area from which the Project could be visible than the Terrain Viewshed.

When properly reviewed, these maps indicate areas most likely to have views, emphasizing areas vulnerable to the greatest impacts while also identifying areas that are unlikely to have views. The assumptions used to calculate these maps are conservative and tend to over-estimate Project visibility. Rather than serving as a final result, these maps are primarily used in preparation of the field investigation, which more fully evaluates the landscape context, views, and potential impacts based on the visibility indicated on the maps. Therefore, it is inappropriate to use these maps as the only basis to evaluate visual extent and impacts. Figure 2 illustrates the difference between the Terrain Viewshed and the Vegetated Viewshed maps.

- (3) **Field Investigation.** The viewshed maps are used to focus the field investigation on areas most likely to have views of the Project. The purpose of the field investigation is to:
- a. Verify potential visibility as indicated on the viewshed maps
 - b. Photograph views toward the Project from these and any other sensitive areas (parks, public facilities, etc.)
 - c. Photographically document the landscape’s visual character within the study area
 - d. Record notes concerning each viewpoint where photographs are taken
 - e. Identify location of photograph viewpoints using a global positioning system (“GPS”) unit

On completion of the field investigation, the GPS data is transferred to a GIS database and synchronization of the data and photograph locations are verified. Documentation of the field investigation is then prepared, which includes: (1) mapping of the routes traveled and locations of photograph viewpoints (Appendix A, Maps 1-3), and (2) a catalog of photographs or photographic inventory (Appendix B). The maps and photographic inventory are coordinated through indexed viewpoint numbers. Unless specified otherwise, all single-frame photos included in Appendix B are captured with a ‘normal lens’ or a focal length equivalent to 50mm on a full frame camera, to most accurately replicate a person’s field of view.

TJB evaluates data from the steps above and compares existing conditions with plans for the proposed Project. The following sections of this report describe in detail the collection and evaluation of data and the resulting conclusions.

III. Project Description

The VELCO Florence Substation (the “Substation”) is connected to VELCO’s electric transmission network in the Rutland area. The Substation is connected to Green Mountain Power’s (“GMP”) sub-transmission systems 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 subsequent nearly forty-three years of service. VELCO proposes to construct a new substation to the north and adjacent to the existing substation. VELCO proposes to install / preform the following major 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/resister filter bank components, and SF6 Breaker
 - A P&C system
 - A control building that can accommodate the new P&C system, redundant AC and DC station services, communication equipment, and security systems.
 - One (1) set of 115 kV, and four (4) sets of 46 kV instrument voltage transformers in support of the new P&C 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 an approximate 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

A diagram of proposed upgrades to the VELCO Florence Substation is provided in Figure 2.



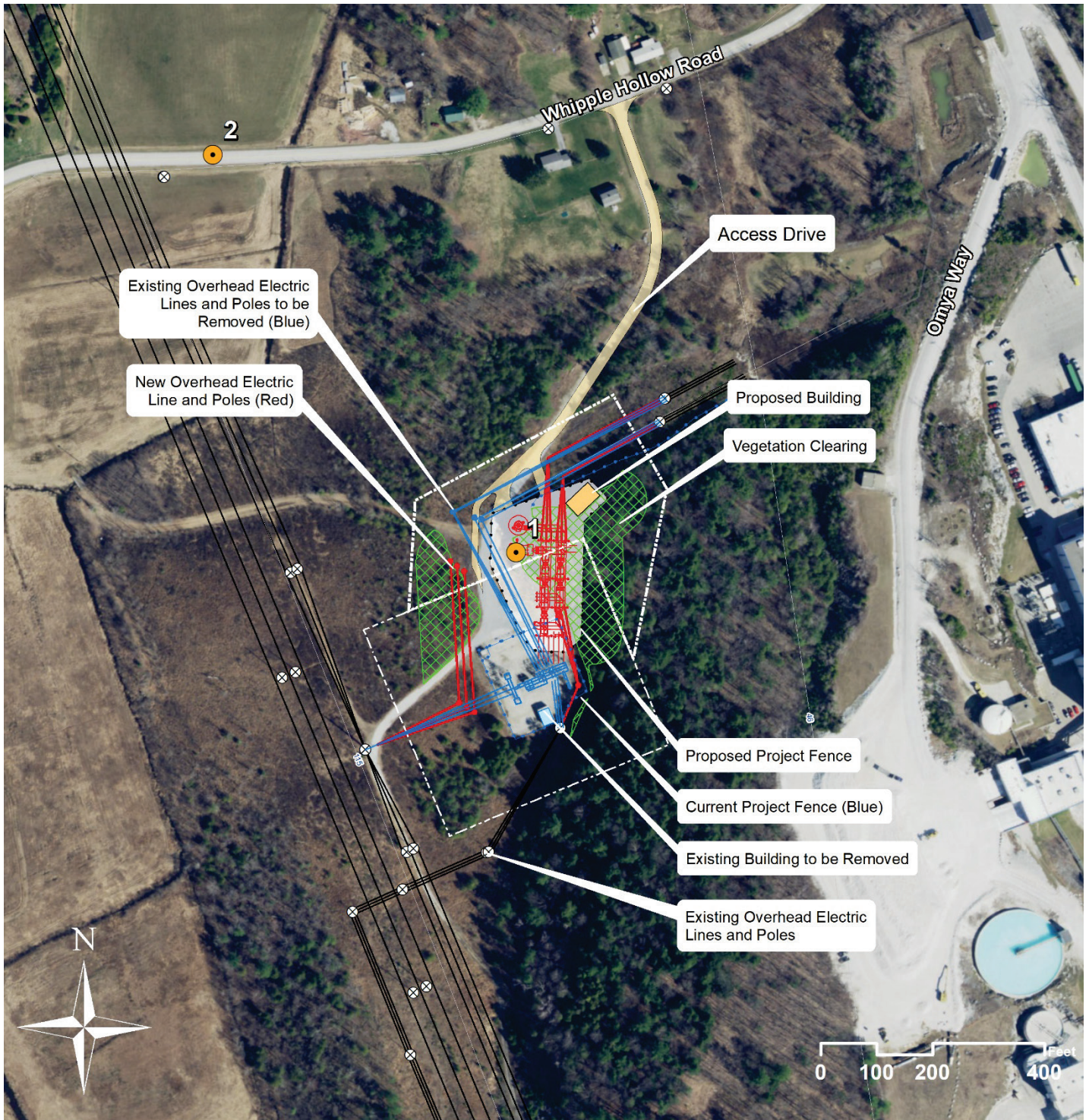


Figure 2: Proposed Substation Improvements

IV. Evaluation of Adverse Impacts

The VELCO Florence Substation is located towards the western side of Pittsford in the unincorporated community of Florence. Florence has a long history of industrial use which began with the establishment of marble quarries back in the mid 1800's. Today, OMYA operates quarries and a large calcium carbonate processing facility east and north of the Project site.

The Project is located along the western side of the Taconic Mountains, and eastern edge the Valley of Vermont physiographic regions. It is accessed by Whipple Hollow Road, a paved surface, class 2 town road, that also provides access to the OMYA facility. There is a major VELCO transmission right-of-way corridor immediately west of the Substation, which contains 345 kV and 115 kV transmission lines that run approximately north-south. Immediately east of the Substation is a sharp rise in landform, and a small, densely vegetated ridge separates the Project from the OMYA facilities. Whipple Hollow Road passes from east to west, north of the Substation and then slowly turns to the south and proceeds past the Substation to the west. Further west of the transmission lines there are open agricultural fields and rural residential properties along Whipple Hollow Road.

The attached Photographic Inventory (see Appendix B) includes Viewpoints that were documented during field investigation and represent locations with the highest potential for visibility of the Project. Images include a series of 180-degree panoramic images to provide context and character of the surrounding area and single-frame photos, captured with a 50mm equivalent focal length, to illustrate views towards the Project, or views from the Project site towards the surrounding area. Viewpoint 1 is taken from the Project site, on a small, elevated knoll within the proposed fenced area of the relocated Substation. The knoll would be removed as part of the Project, but the existing conditions allow an elevated view towards the surroundings area. Two 180-degree panoramic images are provided from Viewpoint 1, which together show a 360-degree view towards the surrounding landscape.

Overall, visibility of Project upgrades would be limited. Visibility of the Project site was only observed from limited locations along Whipple Hollow Road, west of the Project. The Substation would be setback over 600 feet from the closest location along Whipple Hollow Road and further from locations where visibility would be possible. Project upgrades would be limited to replacement of the existing Substation and reconfiguration of electric lines to feed the Project. GIS viewshed analyses were used to identify the general area from which the Substation would be visible. The following section describes anticipated visibility and evaluates potential aesthetic effects under the first part of the Quechee Test.

Whipple Hollow Road

Whipple Hollow Road begins to the east at West Creek Road. It ascends the hill where the OMYA facility is located, adjacent to railroad tracks, and includes several railroad crossings (see Appendix B, Viewpoint 8), before passing the Project access road, north of the Substation. North of the Project are low density residential properties, which are screened by dense vegetation between the Project and road. Continuing west, there are open agricultural fields north and south of the road, roughly beginning near the VELCO corridor and continue to the west. Viewpoints 2 through 7 in Appendix B, the Photographic Inventory, illustrate existing views from Whipple Hollow Road towards the Project site. Viewpoint 1, page one, illustrates an elevated view from the within the proposed fenced area of the Project, looking back towards Whipple Hollow Road.

Visibility of Project upgrades would begin near Viewpoint 2, which would likely be limited to visibility of the upper portions of two proposed 115 kV line structures. These would be three-pole steel angle structures that



would have a similar appearance to other 115 kV structures in the area. They would have an above-ground height of approximately 60 feet. Continuing west and south along Whipple Hollow Road, proceeding to Viewpoints 3 through 7, the steel support structures for the ring bus would become visible. Visibility would be similar to views of the existing substation, which is mostly limited to the tallest components of the Substation. Existing vegetation would screen most of the lower equipment within the Substation, including the fence, substation yard, transformers, and access road. Existing hedgerows in the adjacent fields would also impact visibility, as shown in Viewpoint 6.

Generally, the Project would have a similar visibility from Whipple Hollow Road as the existing Substation. Only portions of Project upgrades would be visible for a stretch of roughly one-half mile. An area of existing vegetation between the VELCO transmission corridor and Project upgrades would be retained and left undisturbed. This area has a high number of shrubs, saplings, and young trees, which would grow and provide additional screening of the Project. Project visibility would be greater during leaf-off times of year.

Other Roads and Surrounding Areas

With the exception from the very end of Markowski Road, at the intersection with Whipple Hollow Road (see Viewpoint 7), no other visibility was observed during field investigation. GIS viewshed mapping indicates potential minor visibility east on Whipple Hollow Road, near the intersection with Fire Hill Road, and also on Fire Hill Road, along the VELCO transmission corridor, but intervening vegetation not fully represented by GIS data fully screen the Project from these locations. No significant visibility is anticipated from locations other than Whipple Hollow Road.

Private Residences

The closest residence is roughly 550 north of the Project, adjacent to where the access road intersects with Whipple Hollow Road. Dense woods between the residence and the Project would screen visibility from this area, including two additional residences along the opposite side of Whipple Hollow Road. It appears two residences further west on Whipple Hollow Road would have partial visibility of the Project, the first slightly to the northwest adjacent to Viewpoint 4 is slightly less than 1,200 feet from the fence line of the new Substation. The second, which is visible from the single-frame image from Viewpoint 1, page one, is slightly more the 2,000 feet from the fence portion of the Project. A large portion of the Project would be screened by intervening vegetation from these residences, which currently have views of the VELCO transmission lines and partial visibility of the existing Substation.

Suitability of Colors and Materials

The Project consists of upgrades to the existing VELCO Florence Substation. In locations where proposed upgrades would be visible, there are existing views of electrical transmission infrastructure including limited views of the existing Substation and transmission lines. Proposed improvements would include colors, materials, and textures that would be similar and within the immediate context of similar existing components.

Open Space

Previous Act 250 and Section 248 decisions do not clearly define what is meant by the term “open space,” and some regional plans and town plans have differing definitions of open space, if any at all. The Rutland Regional Plan adopted June 19, 2018 (“Regional Plan”)¹, and the Pittsford Town Plan adopted February 7,

¹ <https://www.rutlandrpc.org/web-rrp-adopted-6-19-18.pdf>



2018 (“Town Plan”)² both mention open spaces throughout the plans, but neither plan clearly defines what open space is. The Town Plan states, “Open space is important to the town as a component of local planning and serves two functions: first, it protects and enhances natural resources; and secondly, it is intimately related to the economic development of the area by virtue of its appeal to potential landowners and visitors who view it as part of the region's character.” (Town Plan at 35)

The United States Environmental Protection Agency, Region 1, New England provides the following description of ‘What is Open Space / Green Space’.

Open space is any open piece of land that is undeveloped (has no buildings or other built structures) and is accessible to the public. Open space can include:

- Green space (land that is partly or completely covered with grass, trees, shrubs, or other vegetation). Green space includes parks, community gardens, and cemeteries.
- Schoolyards
- Playgrounds
- Public seating areas
- Public plazas
- Vacant lots

Open space provides recreational areas for residents and helps to enhance the beauty and environmental quality of neighborhoods. But with this broad range of recreational sites comes an equally broad range of environmental issues. Just as in any other land uses, the way parks are managed can have good or bad environmental impacts, from pesticide runoff, siltation from overused hiking and logging trails, and destruction of habitat.³

If the Project location were to be considered open space for the purposes of this review, it should be noted that the Project site is not general open to the public. It is already the site of the existing Substation and other electrical transmission and distribution infrastructure. Furthermore, there is limited visibility from the surroundings area onto the Project site.

Summary

Review under the first part of the Quechee Test found that the proposed Project would have limited visibility. Views would be constrained to a short section of Whipple Hollow Road, west of the Project. Where visibility is possible, the Project would be setback between 800 to over 2,000 feet from the road and adjacent residences. Whipple Hollow Road is a relatively low volume, local roadway. Where the Project is visible, only partial views of Project upgrades would be visible and views contain visibility of existing electrical transmission infrastructure, including the existing Florence Substation, a 345 kV transmission line, and a 115 kV transmission line. West of the Project, a dense area of saplings and other vegetation is emerging, which would be left undisturbed and would grow to further screen views of the Project. The Project’s colors, materials, and textures would be similar to existing components immediately in the same context. Given these factors, the VELCO Florence Substation Project WOULD NOT have an adverse effect to the aesthetics and the scenic and natural beauty of the surrounding area.

Since the Project was found NOT to result in an adverse effect, it is not necessary to review the Project under the second part of the Quechee Analysis. However, in the event it was determined the Project would result in adverse impacts, the following section reviews the Project under the second step of the Quechee Analysis.

² <https://pittsfordvermont.com/wp-content/uploads/2018/02/Pittsford-Town-Plan-2017-Adopted-020718.pdf>

³ <https://www3.epa.gov/region1/eco/uep/openspace.html>



V. Evaluation of Undue Adverse Impacts

The following section reviews the Project under the second part of the Quechee Test.

A. Community Standards

Although local permitting of projects seeking a section 248 Certificate of Public Good is not required, local plans and regulations are reviewed under the second prong of the *Quechee* analysis (described in Section II of this Report) where it has been determined that a project may have a potential adverse visual impact. Under *Quechee*, this involves an assessment as to whether or not a project violates a clear, written community standard intended to preserve the aesthetics or scenic beauty of the area. The Public Utility Commission has noted that “[i]n order for a provision to be considered a clear, written community standard, it must be ‘intended to preserve the aesthetics or scenic beauty of the area’ where the proposed project is located and must apply to specific resources in the proposed project area.” *Petition of Georgia Mountain Community Wind, LLC*, Docket No. 7508, Order of 6/11/10 at 52. There, the Commission clarified that “The general scenic resource protection policies contained in these documents are not focused on a particular scenic resource and, in any case, do not offer specific guidance or measures to protect that resource. Therefore, we conclude that the regional and town plans do not set forth any clear, written community standards” (*Id. at 53*). More recently the Commission has further clarified that any such standard must expressly “designate the [project] parcel as a scenic resource worthy of protection.” *Petition of Rutland Renewable Energy, LLC*, Docket No. 8188, Order of 3/11/15 at 85-86.

For the Florence Substation Project, available local and regional planning documents were reviewed to determine if the Project would violate a clear written community standard. These include the Regional Plan and the Town Plan. A review of these plans pertaining to aesthetics, or the Project site are as follows:

REGIONAL PLAN

CHAPTER 14: WILDLIFE AND NATURAL HABITATS

Scenic Resources

The Rutland Region has an abundance of highly scenic resources thanks to a landscape that is dominated by rugged mountain ranges, clear streams, and fertile valleys. Two mountain ranges transect the Region, the Green Mountains and the Taconic Mountains. Killington Peak in the Green Mountains is the second highest in the state.

Much of the Region’s mountainous areas are part of the Green Mountain National Forest including the unique cliffs of the White Rocks National Recreation Area.

The Rutland Region also features picturesque lakes, ponds, wetlands, pools, waterfalls, and marshes. The largest lakes are Bomoseen, St. Catherine and Halfmoon. The major river is the Otter Creek which runs south to north through the Region. There is also Class II-III whitewater in a stretch of the Clarendon River and some thrilling falls at West Rutland.

Another distinguishing feature of the Region’s scenery is its agricultural lands. Many of them occupy the valleys between the two mountain ranges while others cling to the Region’s many hillsides.

These scenic resources have not only attracted numerous residents over time, they also are a major draw for visitors and a vital part of the Region’s economic wellbeing.



(Regional Plan at 128)

Rutland RPC Goals

New Development

No land development should be promoted where the effect of the proposed use unnecessarily impacts highly scenic landscape, ecologically sensitive lands, or irreplaceable natural resources. To do so would be incompatible with land use policies contained in the Regional Plan.

(Regional Plan at 134)

In addition to the above quoted sections from Chapter 14, scenic resources are mentioned in various parts of the Regional Plan. These include the Appalachian National Scenic Trail (p. 110), the Long Trail (p. 110), the Lower Clarendon Gorge State Forest (p. 109), the Catamount Trail (p. 110), the Vermont Association of Snow Travelers trails (p. 110), the D&H Rail Trail (p. 110), the Poultney River (p. 140), and the Stone Valley Byway (p. 259). The Crossroad of Vermont Byway is also located in the region but is not referenced in the Regional Plan. The Project site is not near these other scenic resources, and they would not have visibility of the Project.

CHAPTER 16: ENERGY

Additional Regional and Community Standards for Energy Facility Siting and Development

To carry the most authority in a Public Utility Commission (PUC) proceeding, a municipal or regional plan must be clear, specific, and consistent in expressing community standards. A plan must be unambiguous on stating a community's position on the development of energy facilities. A collaborative approach shall be used to ensure there is a thoughtful planning process that includes input from the region and the municipality and encourages developers and utilities to involve regional and municipal officials as early as possible.

The following sections lay out specific standards for particular types of energy transmission and generation facilities. Where a new generation facility requires a new transmission facility, including electrical substations, both the generation and transmission standards shall apply. The standards below are not the exclusive standards and are intended to apply along with policies elsewhere in the Rutland Regional Plan.

All Transmission and Generation Facilities:

5. Light pollution is minimized to every extent possible. Non-critical outdoor lighting is activated by motion-sensors or on-site personnel. Light fixtures are shielded down to minimize light trespass and upward glare or glow. Lighting for air safety shall be radar activated.
9. Facility construction and renovation is consistent with historic preservation guidelines published by the Secretary of the Interior and the Vermont Division for Historic Preservation.
11. Any proposed facility shall consider the cumulative impact of land use aesthetics, property values, forest fragmentation and landowner compensation for multiple energy generation and transmission facilities.

(Regional Plan Ch 16 at 27)

Electrical Transmission Facilities

Electrical transmission facilities in excess of 30 kV and related substations shall be designed, constructed, and operated such that:



1. Existing rights-of-way shall be used by new facilities. The need for a new facility beyond these corridors shall be based on the PUC review of system need, reliability, and economic benefit
2. Any transmission line, substation or other structure is located away from special flood hazard areas and wetlands.
3. Any upgrade to 3-Phase requires a permit. From the Public Service Board.
4. When electrical transmission lines are less than 50 feet from residences, they shall be re-routed or buried.
5. Whenever possible, transmission lines will be reconducted instead of widening existing right of way and adding another set of poles and wires.

(Regional Plan Ch 16 at 28)

Electricity Strategies

To meet its energy goals, the Rutland Region will rely much more heavily on renewable energy delivered through electricity. This development of infrastructure to generate electricity from renewable resources must be consistent with the Rutland Region's goals to "protect the character of rural areas and resources areas by discouraging scattered development and incompatible land uses" and to "protect the natural environment and its economic, ecological, sociological, psychological and aesthetic benefits Rutland Regional Plan, Future Use of Land, 2015, p. 27; and for "identifying renewable energy development so as to not adversely impact wildlife and natural habitats", Rutland Regional Plan, Wildlife and Natural Habitats, 2015, p. 135.

(Regional Plan Ch 16 at 32)

The discussion in the Energy chapter recognizes the value of participating in the Section 248 process and offers the most direct language regarding the siting of electrical transmission projects. The Project complies with the standards and utilizes existing rights-of-way and locations previously developed with transmission infrastructure.

Otherwise, the Regional Plan covers a wide range of topics including land use, housing, economics, cultural resources and other community issues. It clearly recognizes the importance of scenic resources within the region and lists some of the most outstanding resources. As is often true of Regional Plans, encouragement is offered for the constituent towns to review their own needs and desires, and there are rarely any specific guidelines for scenic quality control. The Regional Plan also includes some text on how towns can incorporate clear written standards within their Municipal Plan to preserve the aesthetics or scenic beauty of an area.

Based on this review, the Regional Plan does not provide clear written standards for the Project site or surrounding area, and only includes a general statement that new development should not unnecessarily impact highly scenic landscapes. The siting of the Project would not conflict with the goals of the land use patterns of the region. Due to the limited visibility of the Project site from surrounding areas and that the Project consists of limited incremental upgrades of an existing facility, the Project would not unnecessarily impact any highly scenic landscapes or scenic resources noted in the Regional Plan.

TOWN PLAN

SECTION B: COMMUNITY RESOURCES

I. Land Use Plan



Future Land Use Areas

Land Use Vision and Goals:

- Promote the health, safety, vitality and aesthetics of the community through economic and residential growth that is targeted to compact, mixed use centers at a scale convenient and accessible for pedestrians and appropriate for the community...
- Protect and preserve environmental quality and important natural historic features of Vermont, including but not limited to natural areas, water resources, air quality, migratory flyways, scenic resources and historic sites and districts.

(Town Plan at 15)

Land Use Districts and Overlays

Other Land Use Considerations

2. Agricultural/Forestry Resources

Pittsford remains a rural area with a variety of active farm businesses...

... Forestry remains a critical component of the lands within Pittsford. Along with lumber production, maple syrup, firewood, and biomass, the forestry industry is extremely important to the town. The scenic forested hills and valleys provide not only panoramic vistas for residents and visitors alike, they also provide habitat for many species of both game and nongame animals. The town recognizes that both Agriculture and Forestry are important assets to Pittsford. These industries provide jobs, sustenance, working landscape, recreation opportunities, and aesthetic appeal to the character of the town.

(Town Plan at 19-21)

II. Transportation

Highways and Roadways

7. Rural Footpaths

Both formal and informal networks of trails exist and traverse both public and private lands. Pittsford is very proud of its trails and boasts more hiking trails and footpaths than most other villages and towns in Vermont. The town offerings include some of the most scenic and most interesting in the state. The Pittsford Trails Committee should develop a 5-year plan on maintaining and enhancing trails in Pittsford.

(Town Plan at 25)

III. Utility and Facility Plan

Recreation

Residents and visitors alike can enjoy our local scenic and historic treasures, which include several historic sites within the town. There are four covered bridges, two of which have been rehabilitated and the Gorham Bridge, which has been completely rebuilt. In addition, there is an eighteenth century iron furnace, historic buildings, the site of the Revolutionary War's Fort Vengeance and Fort Mott, as well as several ice caverns, hiking trails and numerous vistas and views from and of mountain ranges. The scenic view with the Taconic Mountains on the west, Green Mountains on



the east and the beautiful Otter Creek Valley showcases the natural and historic beauty of our town. Brooks and streams, which wind through town provide water for fishing, while our scenic beauty and open space provide opportunities for picnicking, hiking and camping.

(Town Plan at 35)

The Pittsford Town Plan recognizes and values the importance of scenic quality within the town. Under Future Land Use Areas, it states under Land Use Vision and Goals to “(p)rotect and preserve... scenic resources and historic sites and districts.” (Town Plan at 15) In the discussion regarding Land Use Districts, it references scenic vistas and notes that development should be limited in the Conservation land use district. The Project is within the Industrial land use district.

Although scenic quality is noted several times, the Town Plan does not include a section specific to scenic quality or preservation and it does not include an inventory of scenic resources. It loosely references scenic views of the Taconic Mountains, Green Mountains, and the Otter Creek. The Town Plan notes several historic sites, including four covered bridges, Fort Vengeance and Fort Mott. It does not list or note the Project site as a scenic resource. The Town Plan does not include an enhanced energy plan. Review of the Town Plan did not identify a clear written community standard that the Project would violate.

Both, the Regional and Town Plan recognize the importance and value of scenic resources within the area. The Project site is not a designated scenic resource or visible from an identified scenic resource from either plan. Neither plan provide a clear written community standard which would apply to the Project. In review of the Regional and Town Plans, the Project would not violate a clear, written community standard intended to preserve the aesthetics or scenic beauty of the area.

B. Mitigating Elements

The Project incorporates several mitigating elements to help significantly reduce potential adverse aesthetic impacts. Mitigation for the Project includes:

- Most importantly, the Project utilizes existing facilities at a site that is currently characterized by electrical transmission, sub-transmission, and distribution infrastructure. The Project proposes upgrades to an existing substation. The Project does not introduce electrical transmission infrastructure into new areas. Upgrades would result in modest changes to the amount of infrastructure visible within the surrounding area.
- The Project is setback from nearby roads and takes advantage of surrounding landform and vegetation to screen the Project from the surrounding area. The Project specifically retains an undisturbed area between the relocated Substation and existing transmission lines that contains dense shrubs, saplings and young trees. This area would continue to mature and further screen the Project from locations to the west and northwest, where most visibility would be possible. In review of the existing conditions, including the existing vegetation, wetlands, and challenges to plant new vegetation in this area, it was determined more beneficial to rely on natural vegetation, opposed to clearing and planting new vegetation.

Mitigation incorporated with the Project would reduce and limit the extent of potential adverse impacts and in time, would further reduce visibility as existing vegetation retained west of the substation continues to grow. These efforts represent generally available mitigating steps which a reasonable person would take to improve the harmony of the Project with its surroundings.



C. Shocking and Offensive

When evaluating whether a project would offend the sensibilities of the average person, the criteria to make this assessment is related back to the first part of the *Quechee* Test; how the project ‘fits’ within its surroundings. An ‘average person’ is considered a disinterested party, not an affected neighbor. The threshold for a project to be shocking or offensive is high, and a project would need to be entirely inconsistent with the surrounding land uses or exceptionally out of scale with the surroundings.

The overall finding is that the Project would not result in an adverse impact to the aesthetics of the area. For similar reasons that it was found to be not adverse, Project upgrades would not offend the sensibilities of the average person; it would not be offensive or shocking. This determination is based on a number of factors that were assessed during the aesthetic analysis:

- The Project consists of upgrades to existing electrical transmission facilities that are an established component of the visual landscape.
- Proposed upgrades would not substantially increase the amount or extent of visible transmission infrastructure from the surrounding area.
- The Project is located within an area noted by the town of Pittsford for industrial use. There is existing electrical transmission, sub-transmission, and distribution infrastructure at the site. The OMYA Florence Plant, a calcium carbonate processing facility is immediate to the east of the Project site.
- Existing vegetation being retained would continue to grow and would further screen visibility of the Project from the surrounding area.
- Project upgrades would incorporate similar colors, materials, and the general appearance of components which they are replacing.

Based on these facts the Project would not be shocking or offensive.



VI. Findings and Conclusions

In review of upgrades proposed as part of the VELCO Florence Substation Project, we conclude that the Project **WOULD NOT** result in an adverse impact to the aesthetics and scenic and natural beauty of the area in which the Project is located. This is a result of limited visibility, setbacks, and the limited increase of electrical transmission infrastructure within views that would be created by the Project. However, even if the Project were determined to result in an adverse impact, it would not be undue.

- 1) The conformance review found that the Project did not violate a clear, written community standard intended to preserve the aesthetics or scenic beauty of the area. Review of the Rutland Regional Plan and Pittsford Town Plan did not find standards that specifically designated the Project site as a scenic resource or provided other scenic standards applicable to the Project.
- 2) The applicant has incorporated generally available mitigating steps which a reasonable person would take to improve the harmony of the Project with its surroundings. The Project utilizes an existing facility, is setback from locations with potential visibility, and utilizes existing vegetation to screen and soften potential views.
- 3) The Project would not be shocking or offensive. The Project was not found to result in adverse impacts. For similar reasons, it would not shock or offend the sensibilities of an average person.

In conclusion, the VELCO Florence Substation Project meets the Quechee Test insofar as its impact on aesthetics would **NOT** be **UNDULY ADVERSE**.



Appendix A

Project Maps 1-3





Appendix B

Photographic Inventory of Existing Conditions



