



Franklin County Line Upgrade Project FAQs

These Frequently Asked Questions are intended to provide background information and address questions regarding the “Franklin County Line Upgrade Project.” For more information, please contact slouiselle@velco.com or call 802-770-6381.

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What is the Franklin County Line Upgrade Project? What is VELCO proposing to do?

The Franklin County Line Upgrade is a VELCO-proposed project to rebuild the power line from our Georgia Substation to our Highgate Substation in northwestern Vermont. It includes replacing deteriorating two-pole and three-pole wood structures with more resilient single-pole steel structures, although some two-pole and three-pole structures will still be utilized in certain locations. As part of this project, VELCO will also replace the current single wire, known in our industry as conductor, with a doubled-bundled conductor. The rebuilt line will be in the same general location as today but slightly shifted, by 10-15 feet toward the eastern side of the corridor with a 30-foot increase in height for the most common single-pole structure. Despite this shift, the line will remain within the existing corridor which will not expand. Once the new structures are installed and the conductor is energized, the old structures will be removed.

Why is this project needed?

As the planner, builder, operator, and manager of Vermont's high-voltage electric transmission system, it is VELCO's responsibility to ensure grid safety, reliability, and efficiency so that every Vermonter's electrical needs are met. A routine inspection of this Highgate-to-Georgia line revealed that 146 of its 212 wooden transmission structures are in need of replacement within the next few years in order to maintain safe and reliable grid operations. Nearly two-thirds or 60 percent of the wooden structures in question have been in place since 1958 and are more than 60 years old. Completing this project will ensure Vermont's transmission grid stays resilient and efficient. While not the main objective, the project will allow for the transmission of additional in-state renewable energy, which is currently limited by the capacity of the existing line.

What is the project timeline?

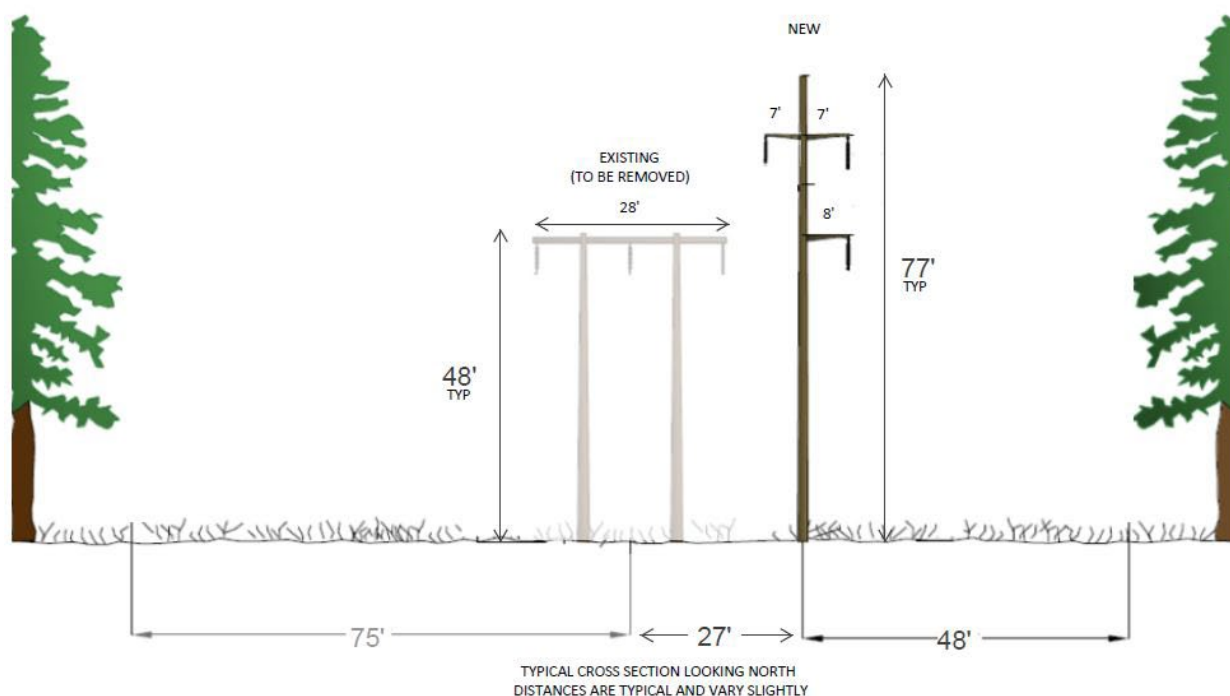
VELCO will petition the Vermont Public Utility Commission (PUC) for a Certificate of Public Good in 2023. Subject to PUC approval, construction will begin in 2024 and be completed in 2025. Restoration work will continue through 2026.

How does the project upgrade benefit Vermont?

VELCO's Highgate-to-Georgia line serves an important role in safe and reliable delivery of high-voltage energy in Vermont, including in-state renewable energy and imported clean power from Canada. The new steel poles and "double bundle" conductor configuration will improve reliability, reduce energy losses, and allow for an estimated additional 20 MW of in-state renewable energy generation to join the grid. The exact number of additional megawatts will be determined by [ISO New England](#), the regional grid operator.

What will the new structures look like?

The new line will be built about 15 feet further east from the existing line within the current 150-foot right-of-way using single-pole steel structure. The right-of-way will not widen or expand. The existing wood H-frame structures will be replaced with more resilient single-steel poles that are about 30 feet taller. After the new line is built and energized, the old line will be removed.



Will the Project require the right-of-way to be cleared?

Yes, VELCO will clear many portions of the 150-foot right-of-way prior to construction. This will include cutting trees and mowing vegetation within the corridor to prepare for the new line and the removal of the old line. VELCO's vegetation management practices over the past four growing cycles have encouraged compatible vegetation to remain. The project, however, will require most vegetation, including compatible species to be removed to allow for the construction of the new line and removal of the existing line. Vegetation will be managed in accordance with a Transmission Vegetation

Management Plan (TVMP), which will once again encourage the growth of compatible vegetation in the right-of-way.

Will trees outside the right-of-way need to be cut?

Yes, because the new line will be closer to the eastern edge of the right-of-way, VELCO will need to cut trees outside of the right-of-way that have the potential to grow or fall into the transmission line. As part of the Franklin County Line Upgrade Project, VELCO will notify property owners in advance of any work to remove trees on their property.

Will I be notified that VELCO is performing tree work on my property?

Yes, VELCO will notify landowners before performing tree work on their property. VELCO's Right-of-way and Vegetation Management Teams will contact landowners to discuss trees that have been flagged as danger trees.

What is a danger tree and why does VELCO need to remove these trees?

Danger trees are trees or vegetation that could grow or fall into the transmission lines on VELCO's right-of-way. We refer to these types of trees as danger trees. Trees that could grow or fall into transmission lines are dangerous because they would contact the high-voltage lines and disrupt the transmission of power or worse, cause fire or injury. A danger tree may be completely healthy and intact, or it may be sick or dead. But even a healthy tree could be damaged, for example in a severe storm, and impact nearby power lines, thus the potential for "danger" in even a tree that appears healthy. A hazard tree is typically structurally unsound and positioned in a way that creates significant risk of falling onto the power lines.

VELCO's Vegetation Management Team mitigates the risks of danger trees through regular inspection, monitoring, and where needed trims or removes trees to prevent damage and hazard to the transmission line.

How wide is the existing right-of-way corridor? Will the project expand or shift the right-of-way corridor?

The Georgia-to-Highgate line's right-of-way width is a minimum of 150 feet, and it is wider in some sections. The Franklin County Line Upgrade Project will not widen, expand or shift the right-of-way. The new line will be built within the existing corridor.

What considerations were made in choosing to build the new line on the eastern side of the corridor?

Rebuilding this transmission line further to the east of the existing line will lower project costs, and maximize the long-term value of the transmission and land assets on the line. This benefits all Vermonters by ensuring costs are contained, which has a direct impact on the rates Vermonters pay for electricity. The line will connect to the already-configured eastern side of our St. Albans facility, which simplifies the construction at that location and helps with cost containment. In addition, moving the line to the east allows for the potential future installation of a second transmission line, which may be

needed to serve Vermont's and New England's growing electricity needs as our state shifts from carbon-based resources to more clean energy. VELCO has no plans at this time for a second line in this right-of-way but optimizing this existing space creates an important future option for VELCO and Vermont to help achieve the state's decarbonization goals.

Does VELCO have plans to build a line on the western side of the corridor?

VELCO has no plans currently to build a line on the western side of the right-of-way but we are actively exploring how an additional line on the western side could help Vermont. Vermont and New England face significant winter reliability challenges and have established significant clean energy requirements that will essentially double current energy demand. Meeting these challenges and fulfilling these requirements necessitates new transmission. Using the western corridor to host a new transmission line could greatly contribute to increasing grid resiliency, moderating Vermonters' upward rate pressure and sustainably meeting Vermont and New England's clean power needs.

What is a right-of-way encroachment?

Encroachment is an unauthorized obstruction onto a VELCO right-of-way through the creation or extension of a physical structure above or below the surface of land (e.g., garages, pools, septic systems, sheds, etc.) Such obstructions can happen over time as neighboring homeowners change but they are illegal and violate the right-of-way easement. They also often create a hazard to the lines and maintenance of the right-of-way. VELCO adheres to strict National Electric Safety Code (NESC) standards that require the adequate distances and clearances from energized lines to prevent contact accidents and ensure electric system reliability. Our easement rights, acquired over private and public properties over the course of many decades, generally prohibit the placement of structures and materials, restrict certain uses, and require the management of vegetation, within, overhanging, and outside the easement area. For more information of right-of-way usage, please visit <https://www.velco.com/our-work/land-management/real-estate>.

What should I expect if I have an encroachment on my property?

If an encroachment that is a reliability or safety risk is identified on your property, a VELCO representative will contact you to discuss the best approach for remediation. VELCO representatives will work with landowners to determine if the encroachment needs to be relocated or if the easement can be modified to allow the encroaching structure to remain in place.

Will I be compensated for crop loss impacts?

Yes, you will. VELCO engaged a third party to establish a fair market value for longer term crops impacted by the project. VELCO representatives will contact landowners with agricultural lands within the right-of-way.

Can VELCO rebuild and place the transmission line underground?

Undergrounding transmission lines would be significantly more costly than the current project, and would create other system conditions that would likely require additional mitigation and additional

transmission investments to be constructed. Although we haven't formally estimated the costs to underground this specific line, our past experience, available current information and best judgment lead us to expect such costs to be multiples higher than the proposed project. Also, placing the project's transmission lines underground would have potentially greater impacts on environmental and archaeological resources in the existing corridor. Accordingly, we are not proposing to underground the transmission lines for this project.

Will the new structures require lighting or marking in proximity to the Franklin County State Airport?

The Federal Aviation Administration conducted an aeronautical study and determined that there is no hazard to air navigation and no markings or lighting of the structures will be necessary for aviation safety.

What environmental permits is VELCO required to receive?

The Project will require multiple permit authorizations for construction, including but not limited to: a Vermont Wetlands Permit; U.S. Army Corps of Engineers ("USACE") Section 404 and 10 permits; a Vermont Department of Environmental Conservation ("DEC") Flood Hazard Area and River Corridor Permit; and, a DEC Construction Stormwater Permit.

What electric and magnetic fields will be created by the new lines?

VELCO has modeled the electric and magnetic field levels (EMF) for the proposed rebuild of the transmission line. The highest planned magnetic fields between Highgate and St. Albans Tap, are modeled at approximately 14 Milligauss (mG) at the western edge of the right-of-way, and 60 mG at the eastern edge. These values are substantially lower than the 2,000 mG level for public exposure to EMF set by the International Commission on Non-Ionizing Radiation Protection (ICNIRP), which is a standard the Vermont Public Utility Commission has previously applied to projects like this one. The modeled values are also lower than the levels produced by some typical household appliances, e.g., 200 mG (microwave oven or vacuum cleaner) to 300 mG (can opener) at one foot away, and from 600 mG (electric shaver) to 700 mG (hair dryer) at 6 inches away.

Electric magnetic fields (EMF) were reviewed by state regulators as part of prior VELCO transmission projects and adherence to National Electric Safety Code standards was deemed to be protective. Neither the State of Vermont nor the federal government have established new health standards related to EMF since those previous reviews. Please visit the National Institute of Environmental Health Sciences website here for more information [here](#).

Will I have an opportunity to voice my concerns?

Keeping our neighbors, stakeholders and the entire community informed is a fundamental requirement of all VELCO projects. The VELCO Project Team is available to answer your questions or discuss your concerns at any time. In November 2022, VELCO held four community meetings to discuss the preliminary project details, answer questions, and listen to concerns. Another round of community meetings will be held during the project permitting phase during the first half of in 2023. Please contact us [here](#) and we can schedule a call or in-person meeting that works for you.

How can I stay informed about the project?

All publicly available project information will be posted to the project website at www.velco.com/fclu. In addition, project update emails will be sent to keep interested parties informed of the work underway. Please visit the www.velco.com/fclu website to sign up.