



December 20, 2021

## **Central Hudson Gas & Electric**

### **69 kV KM Electric Transmission Line Replacement Project**

#### **Project Description**

Central Hudson Gas and Electric Corporation (Central Hudson) is proposing to reconstruct an existing 69 kilovolt (kV) electrical transmission line, known as the "KM Line" within an existing, cleared public utility right-of-way (ROW). The KM Line is owned and operated by Central Hudson. The existing voltage rating of 69 kV will be maintained with the reconstructed Line.

The entire ROW is appropriated to the public utility use. The KM Line has existed in the ROW for nearly one-hundred years. Existing line conductors and poles have reached the end of their useful life. The proposed KM Line replacement is intended to address long term degradation of the strength of the conductors along the line, as well as many of the existing wood poles. See Photos in Visual Report, Attachment I. All replacement electrical equipment has been designed to meet current standards and industry best practices. Completing the KM Line replacement project is necessary for Central Hudson to continue to safely and adequately provide electric service to the area.

The KM Line ROW traverses in a northwest direction from the border of the Myers Corners Substation on Myers Corners Road (Town of Wappinger), to an area just west of Victor Lane (Town of Poughkeepsie). See Location Map, Attachment B. The total length of the proposed replacement project is approximately 2.8 miles, with nearly 1.7 miles within the Town of Wappinger and nearly 1.1 miles within the Town of Poughkeepsie.

The KM Line replacement project will take place within the existing ROW width, which generally varies from 60 feet to 125 feet. The project will temporarily disturb approximately 8.3 acres of the 37.5-acre ROW. There are currently 49 pole locations within the KM Line project. All existing poles will be removed and replaced nearly one-for-one in the same general location within this existing, cleared and developed utility corridor. The proposed KM Line replacement poles will be sturdier, self-weathering steel poles. They will also be brown-colored and have a uniform appearance. Replacement conductors and ground wire will span the poles, replacing aged copper conductor that spans much of the KM Line.

All electric facilities must be designed and operated in conformance with applicable industry, federal and state codes including standards of the American National Standards Institute (ANSI), National Electrical Safety Code (NESC), Institute of Electrical and Electronics Engineers (IEEE), and stricter standards adopted by the utility. The new KM Line meets these overriding criteria.



The replacement pole heights meet current NESC standards for conductor ground clearance and applicable design requirements. The overall profile of the replacement poles is comparable to the existing poles in the ROW. The average height of all existing poles is approximately 54.5 feet, whereas the average height of all (49) replacement poles would be approximately 59.5 feet. The KM Line replacement poles visibility will continue to be limited to areas along the ROW that currently view poles under existing conditions (*see, Attachment I*), but with the benefit of improved functionality, design and storm-hardening.

By replacing aged equipment and reconstructing an existing transmission line that is beyond its useful life with equipment that meets current standards and industry best practices, the proposed project will provide enhanced storm hardening to accommodate potential extreme storm events and future weather patterns, enhanced lightning protection, and increased electric transmission supply reliability.