

December 17, 2021

Town of Wappinger  
Planning Board  
Town Hall  
20 Middlebush Road  
Wappingers Falls, NY 12590

Re: KM Electric Transmission Line Replacement Project

Dear Chairman Flower and Members of the Planning Board:

Central Hudson Gas & Electric Corp. is proposing to reconstruct and replace an existing 69 kilovolt (kV) electrical transmission line, known as the KM Line, within an existing public utility right-of-way (ROW) in the towns of Wappinger NY and Poughkeepsie NY. The ROW has contained the KM Line since the 1920s. The KM Line will remain a 69 kV line after replacement. All poles will be removed and replaced nearly one-for-one in the same general location. SEDC Engineering, P.C. an Affiliate of Sebesta, Inc., dba NV5 (NV5) evaluated both the existing and predicted levels of extremely low frequency (ELF) electric and magnetic fields (EMF) at the edges of the ROW for the KM Line replacement project.

I, Daniel D. McClure, am a director in the Power Delivery Group at NV5, which is an international consulting firm. I have 21 years of experience as an engineer providing studies, design and consulting. I hold a Master's of Science Degree in Engineering from the University of Connecticut, have completed the Electric Power Research Institute's (EPRI) Lenox Redbook Seminar, and I am a registered Professional Engineer in New York along with 11 other jurisdictions. I have experience in computation modeling of ELF EMF's from overhead electric transmission and distribution facilities.

As initial background, EMFs are part of the natural environment and are present in all buildings, including offices and residences. They are found everywhere there is electricity, not just in power lines and electric service equipment. They are created by all electric equipment and appliances.

The New York State Public Service Commission (NYSPSC) addresses health and safety issues and adopted interim operating standards in PSC Opinion No. 78-13. The NYSPSC subsequently adopted a Statement of Interim Policy (SIP) on Magnetic Fields setting forth standards for electric and magnetic fields associated with substations and transmission lines. The SIP provides a maximum standard for magnetic fields at the edge of ROW (measured 1 meter above ground level) of 200 milligauss (mG), and a maximum adherence level for electric field strength of 1.6 kV/m. The PSC Interim Policy standards are based on maximum load conditions. They are applied as a basis of EMF evaluation. Note that utilizing maximum load conditions is a conservative measure as they represent the highest rarely (less than 0.1% of the time) operate at maximum loading (NYSPSC SIP p. 3).

We evaluated the ELF and EMF levels based on models of the KM Line and configuration of the T&D circuits as they exist today, and the replacement KM Line and T&D circuit connections as they will exist after replacement. We compared both the existing and predicted levels at the same ROW edges with the replacement. Conservative modeling assumptions were utilized and applied consistently.

Our evaluation confirmed that existing and predicted EMF levels at all modeled locations are well below applicable regulatory standards at the edges of ROW. The predicated EMF levels, at the ROW edges, after completing the KM Line replacement project will result in levels minimally increased compared to existing conditions.

Central Hudson is proposing to replace the KM Line to update and improve critical electric infrastructure in the Towns of Wappinger and Poughkeepsie in accordance with its mandate under the New York State Public Service Law to furnish and provide safe and adequate service. This project replaces an almost 100-year-old transmission

line, will improve system reliability and reduce safety risks. It will further protect and maintain the quality of utility services in the community and improve energy efficiency.

We appreciate the opportunity to submit this correspondence to the Planning Board.

Sincerely,  
NV5



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Director  
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