

Article VII Application
Canisteo Wind Transmission Facility
Case No. 19-T-__

Exhibit E-5
Effect on Communications

Invenergy

EFFECT ON COMMUNICATIONS

This Exhibit addresses the requirements of 16 NYCRR § 88.5.

The proposed transmission line, having the conductor size and configuration as proposed, is not expected to have any adverse effect on existing television, radio, telephone, microwave, or other communications systems. The level of electric and magnetic fields (EMF) outside of the proposed transmission cable corridor as generated by the electrical current on the line throughout the range of design operating conditions is too low to cause interference to communications broadcasts.

There are conditions that can occur, beyond those for which the line is designed, which could be a source of additional and significant electrical or magnetic field noise. Noise interference to radio and television broadcasts can be caused by corona discharge from the transmission line conductor and line hardware. The conductor size proposed for the transmission line is designed to minimize the level of corona with respect to the operating voltage of the line. Corona levels do increase under weather conditions with higher levels of moisture or water droplets on or around the line. For a properly sized conductor, the corona levels during foul-weather conditions should remain low enough to not cause significant interference on reception of radio, television or other off-air broadcasts. If the conductor is nicked or scratched, or there is a similar problem with the high voltage components of the transmission line, the irregularity most likely will cause a local electrical stress increase, which would be a source of significantly higher corona discharge levels than is characteristic of the transmission line in non-faulty condition. Another source of radio and television broadcast interference is electrical arcing at the interface between components that are not properly held tight to one another, i.e. loss of tension on a suspension insulator unit.

If the operation of the proposed transmission line results in interference levels which pose a problem to off-air receptions or other communications, the Applicant will perform tests to evaluate the grade of reception and enact appropriate measures to eliminate the interference and restore the grade of reception. CWE will utilize the Complaint Resolution Procedure established in the CWE Article 10 application as Exhibit 19M to resolve issues related to interference caused by the proposed transmission line.