

- l) provide a single line drawing showing all breakers, switches, transformers, motor operated switches, etc.
- m) include a map showing the location of interconnection substation, lines, and individual collection line circuits.

Stipulation 35-1001.35 Exhibit 35: Electric and Magnetic Fields

The Application will include an electric and magnetic field (EMF) study to address the requirements of 16 NYCRR §1001.35. This Exhibit will include assumptions used in the calculations. Exhibit 35 shall contain:

- a) An identification of every right-of-way (ROW) segment of the proposed electrical interconnection power line having unique EMF characteristics due to structure types and average heights, rights-of-way widths, and co-location of other transmission facilities in the right-of-way.
- b) The EMF base case and proposed cross-sections to scale for each identified ROW segment, showing, to the extent that such information is available from third-party sources, such as regulated utilities:
 - 1. All overhead electric transmission, sub-transmission and distribution facilities in the ROW for the electrical interconnection, including those associated with the proposed Facility, showing structural details and dimensions and identifying phase spacing, phasing, and any other characteristics affecting EMF emissions.
 - 2. All underground electric transmission, sub-transmission and distribution facilities.
 - 3. All underground gas transmission facilities.
 - 4. All ROW boundaries.
 - 5. Structural details and dimensions for all structures (dimensions, phase spacing, phasing, and similar categories) and include a station number identifying the location.
- c) A set of the aerial photos/drawings within the EMF study showing the exact location of:
 - 1. Each identified ROW segment;
 - 2. Each cross-section identified in (b) above; and
 - 3. The nearest residence or occupied non-residential building in each ROW segment with a stated measurement of the distance between the edge of ROW and the nearest edge of the residence or building.
- d) An EMF study with calculation tables and field strength graphs for each identified ROW segment cross-section providing the following information:
 - 1. A signature and stamp/seal by a licensed professional engineer registered and in good standing in the State of New York.

2. The name of the computer software program used to model the facilities and make the calculations.
3. For the electric fields, model the circuits at 1.05 of rated voltage and provide electric field calculation tables and field strength graphs calculated at one meter above ground level with five-foot measurement intervals depicting the width of the entire ROW and extending 500 feet from the edge of the ROW on both sides, including digital copies of all input assumptions and outputs for the calculations;
4. For the magnetic fields, model the circuit phase currents equal to the manufacturer's summer normal conductor rating, summer short term emergency (STE Sum), manufacturer's winter- normal conductor rating, and winter short term emergency (STE Win) loading conditions and provide magnetic field calculation tables and field strength graphs calculated at one meter above ground level with five-foot measurement intervals depicting the width of the entire ROW and extending 500 feet from the edge of the ROW on both sides, including digital copies of all input assumptions and outputs for the calculations. For purposes of the EMF calculations, the transmission interconnect line will be treated as part of the 345 kV transmission system.
5. For the magnetic fields, also model the circuit phase currents equal to the maximum average annual load estimated to be occurring on the power lines within ten years after the proposed Facility is put in operation and provide magnetic field calculation tables and field strength graphs calculated at one meter above ground level with five-foot measurement intervals depicting the width of the entire ROW and extending 500 feet from the edge of the ROW on both sides, including digital copies of all input assumptions and outputs for the calculations; and
6. For the magnetic fields, also model a base case with the circuit phase currents equal to the maximum average annual load currently estimated to be occurring on the existing power lines within the ROW (without construction or operation of the proposed Facility), if applicable, and provide magnetic field calculation tables and field strength graphs calculated at one meter above ground level with five-foot measurement intervals depicting the width of the entire ROW and extending 500 feet from the edge of the ROW on both sides, including digital copies of all input assumptions and outputs for the calculations.

Stipulation 36-1001.36 Exhibit 36: Gas Interconnection

A gas interconnection is not proposed for the Facility, and therefore Exhibit 36 will not be included in the Application.

Stipulation 37-1001.37 Exhibit 37: Back-Up Fuel

A back-up fuel is not proposed for the Facility, and therefore Exhibit 37 will not be included in the Application.

Stipulation 38-1001.38 Exhibit 38: Water Interconnection

Water Interconnection is not applicable to the Facility; however, water supply needs at the O&M building or other Facility components will be explained in Exhibits 3, 11, 31 and 38, as needed.