

DRAFT MEMORANDUM

To: NYISO
From: RRS
Date: July 25, 2019
Re: Special Interconnection Studies

The NYISO Transmission Expansion & Interconnection Studies Manual, Section 2.3.3.4 – System Impact Study (SIS) says in part, *The SIS also may include various “special studies” (e.g., Electro-Magnetic Transients (EMT) study, Sub-Synchronous Resonance (SSR) study, etc.) as considered appropriate for the type and circumstances of the Transmission Project and its interconnection to the system.*

The TEI Manual is the only place in NYISO’s documentation where “special studies” are mentioned. It has been suggested that the TEI Manual text on “special studies” be replaced with more specific text related to the developing interconnection of new technologies in the NYCA system. The following text is suggested as a starting point for discussions of this matter.

Special studies shall be considered as requirements in the SIS scope whenever the following resource or transmission facilities are proposed for interconnection to the NYCA system:

- *Series compensation*
- *Electronically controlled shunt compensation*
- *Inverter based resources (solar, wind & storage)*
- *HVDC*
- *?*

The special studies shall include the following items:

- *Electro-Magnetic Transients (EMT) studies to validate manufacturer’s Inverter based equipment models for use in planning studies.*
- *Electro-Magnetic Transients (EMT) studies to determine potential control interactions with other equipment.*
- *Sub-Synchronous Resonance (SSR) study to determine potential shaft stresses in nearby generators caused by series compensation.*
- *?*

It is possible that the NYISO may wish to include similar text in other documentation such as Section 22.6.3 & 22.6.4 of Attachment P of the OATT.