

New York Transmission Owners

**Submission of New York Transmission Owners
For Authority to Construct and Operate Electric
Transmission Facilities in Multiple Counties in
New York**

Case 13-M-_____

Part A Filing

Marcy South Series Compensation

**Exhibit 5
Design Drawings**

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**MARCY SOUTH SERIES COMPENSATION
EXHIBIT 5: DESIGN DRAWINGS**

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(DWG. NO. G-PP002)

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EXHIBIT 5: DESIGN DRAWINGS

The MSSC project is currently in the preliminary design phase. The exact dimensions of the series capacitor (“SC”) banks and associated equipment will be finalized as part of final design. The dimensions given here for an SC bank are approximate.

The proposed facility for this amendment consists of two SC banks and associated equipment. An SC bank is a structure consisting of capacitors connected in series on a raised platform. Each series capacitor structure is approximately 30 feet tall, 31 feet wide, and 60 feet long. There are also disconnect switches, circuit breakers, and associated equipment to protect the SC bank and to connect it to the transmission system.

The height, width and length dimensions of the structures are on the plan and elevation drawings for each site. The series capacitor platform material will be galvanized steel and will be grey in color. The insulators are grey. The capacitors are stainless steel. The damping coil and varistors are grey.

(1) 915 MVAR SC bank installation at the Marcy Substation

The preliminary design for the 915 MVAR SC bank consists of series capacitors being attached to each phase (A, B, C) of the UCC2-41 transmission line. A disconnect switch, circuit breaker, and associated equipment will be attached to each series capacitor. Hard pipe conduits will be constructed from the SC bank to three new single phase transmission poles located beneath the existing UCC2-41 conductors. New conductors will be installed between the new transmission poles and the existing conductors.

(1) 315 MVAR SC bank installation at the Fraser Substation

The preliminary design for the 315 MVAR SC bank consists of series capacitors being attached to each phase (A, B, C) of the EF24-40 transmission line. A disconnect switch, circuit breaker, and associated equipment will be attached to the series capacitors. New conductors will be strung from the series capacitors to a three phase transmission pole beneath the existing EF24-40 conductors. New conductor will be installed between the new transmission pole and the existing conductors.

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Marcy South Series Compensation

Exhibit 5: Design Drawings

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Drawing 1

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because it contains critical infrastructure information.]*

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Drawing 5

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