

Chateauguay-Massena Interconnection Operation Above 1,500 MW

Kyle Ardolino

Operations Engineering, Technical Specialist

System Operations Advisory Subcommittee

February 8, 2024

Background

- Prior to November 1, 2006, Chateaugay-Massena 765 kV Interconnection Total Transfer Capability (TTC) was limited to 1,500 MW
- As of November 1, 2006, the HQTE-NYISO Chateaugay-Massena Interconnection was allowed to operate above 1500 MW, up to 1,800 MW on an hour-to-hour basis in the Real-Time Market subject to specific ISO system reliability criteria
- These criteria are detailed in [Tech Bulletin 150](#) – “HQTE-NYISO Chateaugay-Massena Interconnection Operation above 1500MW in the Real-Time Market”
- **Considerations for Chateaugay-Massena imports up to 1,800 MW, in the ISO Real-Time Market, include:**
 - Actual and forecasted ISO voltage and reactive performance as seen within the operating day,
 - Status of critical generation and transmission facilities,
 - Operation during certain system conditions (e.g. severe weather operation, thunderstorm alert operation), and
 - Congested operation that would be a direct result of the reduced Central-East Voltage Transfer Interface limits with HQTE-NYISO 765kV operation above 1500MW.
- **Central-East voltage and stability limits assume Chateaugay-Massena transfers at 1,500 MW**

Criteria to operate above 1,500 MW

- System voltages at or above 352 kV at a subset of 345 kV stations
- At least 2 capacitor banks in reserve at Marcy, Edic, Fraser and New Scotland 345kV buses
- At least 3 of 5 Oswego complex AVRs in normal operation
- (Nine Mile 1, Nine Mile 2, Fitzpatrick, Oswego 5, Oswego 6)
- Marcy STATCOM and Fraser and Leeds SVCs in normal operation
- No outages on any 345kV path from Oswego/Clay/Watercure to Pleasant-Valley/Ramapo
- No Thunderstorm Alerts, severe weather Operating Conditions, or Solar Magnetic Disturbance Alerts
- At least 200 MW margin on Central-East

Study Results

- Studies performed as extensions of the 2023 work to evaluate Segment A & B project impacts on Chateauguay-Massena limits
- Voltage and stability studies showed acceptable system performance with imports at 1,800 MW with some slight modifications to the criteria

Actions by NYISO

- **Tech Bulletin 150 will remain in effect, allowing real time scheduling up to 1,800 MW based on system conditions**
- **Add new 345 kV buses to Technical Bulletin 150**
 - Gordon Road
 - Knickerbocker
 - Princetown

Questions?

Our Mission & Vision



Mission

Ensure power system reliability and competitive markets for New York in a clean energy future



Vision

Working together with stakeholders to build the cleanest, most reliable electric system in the nation