

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

- CASE 13-E-0488 - In the Matter of Alternating Current
Transmission Upgrades - Comparative Proceeding.
- CASE 13-T-0454 - Application of North America Transmission
- CASE 13-T-0455 - Application of NextEra Energy Transmission New
York - Marcy to Pleasant Valley Project.
- CASE 13-T-0456 - Application of NextEra Energy Transmission New
York - Oakdale to Fraser Project.
- CASE 13-M-0457 - Application of New York Transmission Owners.
- CASE 13-T-0461 - Application of Boundless Energy NE.

NOTICE OF TECHNICAL CONFERENCE CONCERNING NYISO ANALYSIS OF
INCREMENTAL TRANSFER CAPABILITY

(Issued November 13, 2013)

During the procedural conference held on October 23, 2013, counsel for the New York Independent System Operator stated that the NYISO was able and willing to perform an initial screening-level analysis of the incremental transfer capability that would be provided by each of the projects for which an application has been submitted in this case. To that end, the NYISO has now developed a proposed scope of analysis with base case assumptions defined. A copy of the proposal is attached as Exhibit 1.

PLEASE TAKE NOTICE that a technical conference will be held at the Commission's offices in the 19th Floor Board Room beginning at 10:00 a.m. on Friday, November 22, 2013. The purpose of the conference is to allow interested parties to hear an explanation of the NYISO's proposal, to comment on it, and to raise any questions they may have about it. A reporter will be present and the proceedings will be transcribed and included in the Commission's DMM system. Following the conference, a final

CASES 13-E-0488, et al.

scope of analysis will be adopted by ruling by the administrative law judges.

Parties who cannot be at the conference may participate by telephone. Those wishing to do so should contact Sarah Harris by e-mail at sarah.harris@dps.ny.gov, or phone at 518-474-4521, for instructions.

KATHLEEN H. BURGESS
Secretary

Exhibit 1

Scope of Analysis for the NYSPSC Energy Highway AC Transmission Upgrades (13-E-0488)

Objective: Perform transfer analysis to determine if portfolios of project proposals would accomplish the goal of increasing the N-1-1 transfer capability by 1,000 MW at the UPNY/SENY interface along with an increase in transfer capability across the Central-East interface.

Modeling Year: 2018

Base Case:

- 2013 FERC 715 summer peak case for year 2018, consistent with the NYISO Interconnection Process base case
 - Class Year 2011 projects in-service (Berrians I&II, CPV Valley, Leeds-Hurley series compensation, Taylorville Biomass)
 - Dunkirk out-of-service; local reliability upgrades in-service.
 - Cayuga in-service to represent future generation.
 - Indian Point in-service without the Transmission Owner Transmission Solutions (TOTS) to represent baseline system conditions.
 - 600 MW of additional wind projects, in locations per the NYISO Interconnection Queue, to represent a certain level of achievement of the Renewable Portfolio Standard (RPS)

Portfolios of Projects:

- North America Transmission
(PSC Case No. 13-T-0454) (NYISO Queue: 391, 414)
 - Edic – Fraser 345 kV with series compensation
 - New Scotland – Leeds – Pleasant Valley 345 kV
- NextEra
(PSC Case No. 13-T-0455, 13-T-0456) (NYISO Queue: 405, 418)
 - Marcy – New Scotland 345 kV
 - New Scotland – Leeds – Pleasant Valley 345 kV
 - Oakdale – Fraser 345 kV
- NYTOs
(PSC Case No. 13-M-0457) (NYISO Queue: 368, 380, 384, 410, 412)
 - Edic – Princetown – Knickerbocker 345 kV, Princetown 345/230 kV, Princetown – Rotterdam 230 kV, retire Porter – Princetown 230 kV
 - Tie existing Edic – New Scotland #14 345 kV line into Princetown 345 kV
 - Knickerbocker – Pleasant Valley 345 kV
 - Churchtown 115 kV substation
 - Marcy South Series Compensation and Fraser – Coopers reconductoring
 - Rock Tavern – Sugarloaf – Ramapo 345 kV and new Sugarloaf 345/138 kV
 - Oakdale – Fraser 345 kV

- Boundless
(PSC Case No. 13-T-0461) (NYISO Queue: N/A)
 - Leeds – Hurley 345 kV new circuits added to existing towers and reconductoring of existing circuits
 - Roseton – E.Fishkill 345 kV two underground circuits proposed.
 - Tie existing Pleasant Valley – Wood St. 345 kV lines into expanded E.Fishkill 345 kV substation
 - Series compensation at Hurley

Analysis

- Power Flow
 1. Each Portfolio will be evaluated for impacts to normal transfer criteria N-1 thermal transfer limits on Central East/Total East, UPNY-SENY, and NE-NY using linear power flow simulations in accordance with the NYISO Methodology for Assessment of Transfer Capability in the Near-Term Transmission Planning Horizon.
 2. Each Portfolio will be evaluated for impacts to voltage transfer limits on Central East and UPNY-ConEd interfaces using power flow simulations.
 3. Each Portfolio will be evaluated for transmission security criteria (N-1-1) using linear power flow simulations. Results will be reported in terms of SENY surplus or deficiency as measured at the Sprainbrook bus.

As part of the N-1-1 analysis, individual N-1 cases will be created by removing a critical generator, transmission circuit, transformer, series or shunt compensating device, or HVdc pole from the base case. A set of corrective actions will be developed with the objective of eliminating violations in the post-contingency cases for each N-1 case, such that there would be no post-contingency thermal or voltage violations on the New York State Bulk Power Transmission Facilities (BPTFs). Next, N-1-1 contingency analysis will be performed by modeling critical facility outages followed by testing of NPCC and NYSRC Design Criteria contingencies and monitoring applicable limits of the BPTFs in accordance with NYSRC Reliability Rules. All results will assume that all generation resources, and where available, phase angle regulator and HVDC controls have been utilized in the base case (“N”) and/or between the first and second contingencies (“-1”) as appropriate to mitigate potential violations.

DATA REQUIRED FOR POWERFLOW MODELING

The following data is required to model each portfolio. The NYISO may request additional data as necessary to accurately model the proposed projects.

AC Transmission

For each new or modified circuit, provide:

- From Bus, To Bus: Substations at which the circuit terminates
- Base kV: Nominal operating voltage in kV
- R, X: Line impedance in per unit on 100 MVA system base
- B: Total line charging susceptance in per unit on 100 MVA system base
- Normal rating: Summer peak 24 hour thermal rating in MVA
- LTE rating: Summer peak 4 hour long term emergency thermal rating in MVA
- STE rating: Summer peak 15 minute short term emergency thermal rating in MVA
- Common tower: Identify all other circuits that will share common towers with the circuit

Series Compensation

For each new series capacitor, provide:

- Circuit: Identify circuit to be compensated
- Location: Specify location of series compensation (e.g., which end of the circuit)
- X: Percentage compensation of the line
- Normal rating: Summer peak 24 hour thermal rating in MVA
- LTE rating: Summer peak 4 hour long term emergency thermal rating in MVA
- STE rating: Summer peak 15 minute short term emergency thermal rating in MVA

Transformers

For each new or modified transformer, provide:

- From Bus, To Bus: Substations at which the transformer terminates
- Voltage ratio: Nominal operating high side and low side voltages in kV
- R, X: Transformer impedance in per unit on 100 MVA system base
- Control Type: Fixed tap or voltage control
- Fixed Taps: Tap positions available
- Vmax, Vmin: Upper and lower voltage limits at the controlled bus
- Normal rating: Summer peak 24 hour thermal rating in MVA
- LTE rating: Summer peak 4 hour long term emergency thermal rating in MVA
- STE rating: Summer peak 15 minute short term emergency thermal rating in MVA

Substations

For each new substation, provide a breaker diagram depicting the connection of each element to the substation and corresponding breaker locations.

For each modified substation (e.g., new line connecting to existing substation) provide a breaker diagram depicting the connection of each element to the substation and corresponding breaker locations, OR provide a detailed description as to the modifications to the substation. Specifically identify other circuits in breaker positions adjacent to new or modified circuits.