

North Country Reliability Commitment

MIWG
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Background

- ◆ The NYISO has identified a need for the commitment of North Country generation to meet statewide reliability requirements.
- ◆ There are two 230kV transmission facilities (Moses St. Lawrence-Willis 230 kV lines) and two 115 kV transmission facilities (Plattsburgh-Vermont and Colton-Parshville 115 kV) involved.
- ◆ The NYISO secures the two 230 kV transmission facilities and the Plattsburgh-Vermont 115 kV line.
- ◆ The NYISO commits North Country generation as necessary to manage the double circuit (common tower) contingency loss of the Moses St. Lawrence –Willis 230 kV transmission facilities and resulting post-contingency loadings on the remaining 115 kV facilities.

North Country Reliability Commitment

Day Ahead North Country SRE Process

- ◆ Calculation performed after Day Ahead Market results are posted
 - + North Country Load Forecast (42% of Zone D Forecast)
 - North Country Day Ahead Generation Schedules
(does not include Day-Ahead wind generation)
 - Forecast assistance from ISO-NE across PV-20
 - LTE Rating of 115 kV Colton-Parishville #3

= **IF POSITIVE**, Requires Supplemental Commitment

Note : Forecast assistance from ISO-NE across PV-20 does not assume power flows to Vermont.

Mutual Assistance Agreement

- ◆ NYISO implemented a day ahead mutual assistance agreement with ISONE from Vermont to Northern New York on August 28, 2009. ISO-NE provides a day ahead forecast of assistance from Vermont.
 - *The ISO-NE forecast of assistance is a function of forecast Vermont loads, status of Vermont lines, the Essex STATCOM, and availability of the Highgate interconnection with Hydro Quebec.*

Expected Assistance (Vermont to New York) Across PV-20 with all Vermont Transmission In-Service & Highgate in Available

0 MW	Forecast Vermont loads over 871 MW
25 MW	Forecast Vermont loads between 830-870 MW
50 MW	Forecast Vermont loads below 830 MW

- ◆ If NYISO utilizes the offered assistance from ISO-NE to avoid a supplemental commitment, then no assistance is offered from NYISO to ISO-NE. If NYISO needs a supplemental commitment of North Country generation, any excess capability associated with the generation minimum level is provided to ISO-NE.

North Country Reliability Requirement

- ♦ NPCC Criteria: Document A-2, Section 6.3 “Post Contingency Operation” requires that: “Immediately after the occurrence of a **contingency**, the status of the **bulk power system** must be assessed and transfer levels must be adjusted, if necessary, to prepare for the next **contingency**. If the readjustment of generation, load resources, phase angle regulators, and direct current facilities, is not adequate to restore the system to a secure state, then other measures such as voltage reduction and shedding of firm load may be required. System adjustments shall be completed as quickly as possible, but in all cases within 30 minutes after the occurrence of the **contingency**.”
- ♦ Following the double circuit (common tower) contingency loss of the Moses St. Lawrence –Willis 230 kV transmission facilities, PV20 power flows are expected to swing into New York by over 100MW.
- ♦ Prior to the NYISO-ISONE Mutual Assistance Agreement, ISONE communicated that they could not provide any level of sustained PV20 power flows to NYISO beyond 30 minutes and that ISONE would need to reset PV20 flows to zero in order to maintain reliability of the Vermont transmission system.

Draft for discussion

North Country Reliability Requirement

- ◆ As a result of the NYISO-ISONE Mutual Assistance Agreement, ISONE will reduce the PV20 power flows from over 100MW immediately following the common tower contingency but still provide up to 50MW of sustained PV20 power flow to NYISO after 30 minutes.
- ◆ SCUC cannot explicitly represent the above expected reduction in PV20 power flows into New York. As a result, SCUC will not identify a need to commit additional North Country generation in response to the reduced PV20 support from ISONE.
- ◆ The NYISO accomplishes this reliability need via the Supplemental Commitment process described, but will consider a modified process employing DARU once it has tariff authority to do so and to the extent the DARU process can be aligned with the NYISO-ISONE Mutual Assistance Agreement.

Draft for discussion



Questions?

The New York Independent System Operator (NYISO) is a nonprofit corporation that began operations in 1999 to facilitate the restructuring of New York's electric industry. The NYISO operates the state's bulk electricity grid and administers New York's wholesale electricity markets.

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