


NYISO Curtailment Discussion

**ICAP Working Group
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Background

- ◆ **The New York State Reliability Council approved the “IRM Assumptions Matrix” for the Summer 2010- 2011 Capability Year IRM studies at the August 19 NYSRC meeting.**
- ◆ **At the request of the NYSRC, the NYISO presented an overview of its operating procedures to the NYSRC ICS WG as they relate to a couple of extreme, hypothetical scenarios related to export and wheel-through ICAP transactions.**
- ◆ **This presentation briefly lists those same scenarios and provides references to some key governing documents for the generally described operating action.**
- ◆ **There are many other potential effects on the system that may affect these scenarios, that are not captured in this presentation.**

#1 NYISO Transmission Congestion Only

Assumptions

- ◆ No transmission limit violations
- ◆ Congestion results from limited transmission capability

Operating Action

Transaction Type	Curtailed?
Energy Sale without Capacity from Internal Resource out of NYISO	No
Energy Sale with Capacity from Internal Resource out of NYISO	No
Wheel of Energy Only from External Resource to External Control Area	No
Wheel of Energy with Capacity from External Resource to External Control Area	No

#2 Energy or Reserve Shortage without Transmission Limit Violations

Assumptions

- ◆ **No remaining NYISO operating reserves**
- ◆ **Energy shortage (inability to meet Area Control Error)**
- ◆ **Only remaining options are to either invoke internal NYISO load relief or curtail export transaction.**

Transaction Type	Curtailment?	Load Relief?
Energy Sale without Capacity from Internal Resource out of NYISO	Yes	No
Energy Sale with Capacity from Internal Resource out of NYISO	No	Yes
Wheel of Energy Only from External Resource to External Control Area	No	Yes
Wheel of Energy with Capacity from External Resource to External Control Area	No	Yes

#3 Transmission Limit Violation Resulting from Inability to Meet NYCA Load AND Aggravating Impact of Transactions

Assumptions

- ◆ **Inability to meet load in certain area of NY due to transmission limit violation.**
- ◆ **Transmission limit being violated, due, in part, to an aggravating impact of transactions.**
- ◆ **NYISO action is to curtail external energy only export transactions first, then ICAP export transactions to the extent those curtailments relieve the transmission violation.**

Transaction Type	Curtailment?	Load Relief?
Energy Sale without Capacity from Internal Resource out of NYISO	Yes	No
Energy Sale with Capacity from Internal Resource out of NYISO	Yes	No
Wheel of Energy Only from External Resource to External Control Area	Yes	No
Wheel of Energy with Capacity from External Resource to External Control Area	Yes	No

OATT Excerpts: Section 13.6

Section 13.6 Curtailment of Firm Transmission Service

“In the event that a Curtailment on the NYS Transmission System, or a portion thereof, is required to maintain reliable operation of such system, Curtailments will be made on a non-discriminatory basis to the Transaction(s) that effectively relieve the Constraint.”

“If multiple transactions require Curtailment, to the extent practicable and consistent with right to curtail, in whole or in part, any Firm Transmission Service provided under this Tariff when, in the ISO’s sole discretion, an Emergency or other unforeseen condition impairs or degrades the reliability of the NYS Power System.”

“If the ISO declares a Major Emergency State, Transmission Customers shall comply with all directives issued by the ISO concerning the avoidance, management, and alleviation of the Major Emergency and shall comply with all procedures concerning a Major Emergency set forth in the ISO Procedures and Reliability Rules.”

Technical Bulletin 096: Delivering Inter-Control Area Installed Capacity (ICAP) energy (excerpts)

Details:

“PJM, ISO-NE, and the NYISO have agreed to a number of ‘General Principles’ to facilitate access to the energy associated with ICAP contracts with suppliers located in external control areas in the event of a capacity shortage within a control area.”

Wheel-through transactions with ICAP implications

“In the event that an ICAP transaction between two neighboring control areas must pass through the NYCA, the NYISO Operator will take the steps necessary to ensure delivery of the associated energy, subject to transfer limitations on the relevant interfaces.”

Technical Bulletin 096: Delivering Inter-Control Area Installed Capacity (ICAP) energy (con't)

Interface limit Reductions

“System transmission conditions may, at times, require a reduction in the external interface limits for a specific control area. In the event that the ICAP entitlement associated with a specific external control area is less than or equal to the reduced interface limit, then the external control area will be entitled to the contracted ICAP amount (footnote 1). In real time the external control area operator may contact the NYISO Operator and identify the specific external ICAP transactions that they wish to curtail. If the external control area operator does not specify the ICAP transactions to be curtailed, then the NYISO Operator will perform curtailments based upon existing operational procedures for locational Curtailment (footnote 2). In either event, the export transactions will be scheduled or curtailed to a level consistent with the reduced interface limits.”

Footnotes:

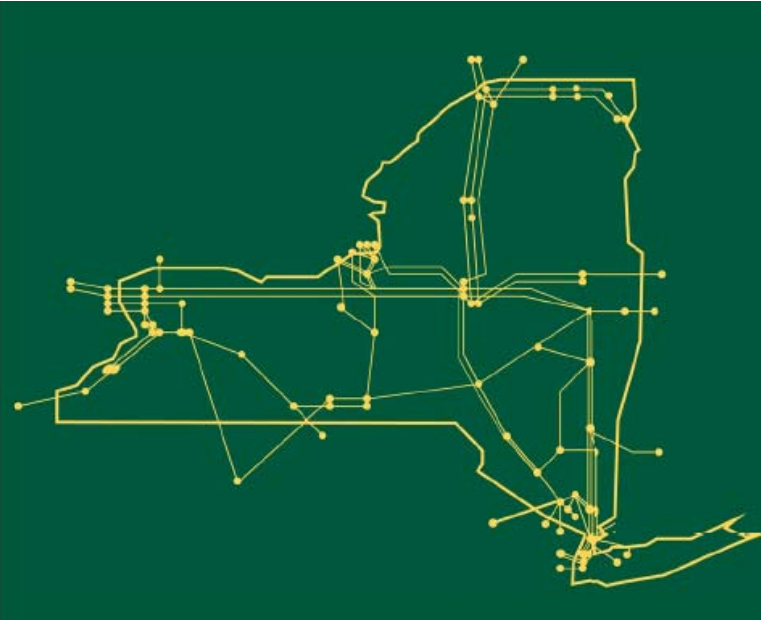
1. Subject to pro-rata adjustments that may be required to address unit capacity deficiencies.
2. Refer to Technical Bulletin #61 (Interchange Scheduler Plus (IS+)...) for additional information.”

Northeast MOU General ICAP Principles

Curtailment Principles (excerpt)

- I. When a sink Operating Jurisdiction has exercised its rights to the capacity and energy associated with an ICAP transaction, the transaction can only be curtailed for the following conditions on the source and external intervening systems:
 - a) “to correct or prevent a violation of voltage, stability, or thermal transmission limits / criteria in accordance with transmission tariffs for the level of transmission service associated with the ICAP contract.”
 - b) for an ICAP contract that is resource specific, temporary unavailability of the resource on which the contract is based.
 - c) for a system contract which is backed by all the resources in the source system, the capacity and energy may be curtailed by the source Operating Jurisdiction for capacity and energy shortage conditions on a pro-rata basis and concurrent with the shedding of source systems firm load.
- ◆ MOU also includes a set of Planning Principles, Scheduling Principles, and Current Day Call Principles

The New York Independent System Operator (NYISO) is a not-for-profit corporation that began operations in 1999. The NYISO operates New York's bulk electricity grid, administers the state's wholesale electricity markets, and conducts reliability and resource planning for the state's bulk electricity system.



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