

# Emergency Assistance Modeling at Hydro Quebec Border

---

**NYSRC ICS Meeting**

September 5, 2018



DRAFT – FOR DISCUSSION PURPOSES ONLY

©COPYRIGHT NYISO 2017. ALL RIGHTS RESERVED

# Agenda

- Review of October 22, 2009 ICAP WG Meeting Presentation (Appendix A)
- Review current Emergency Assistance modeling at Hydro Quebec border for the IRM
- Overview of Market Participant Proposal to revisit modeling
- Considerations for ICS to discuss

# Current Emergency Assistance at Hydro Quebec Border

- **Current Emergency Assistance from the Hydro Quebec interface presented to the model**

+1,500 MW      Total Transfer Criteria (TTC) into NY

-1,110 MW      Grandfathered Import Rights

-----

390 MW      Available Capability for Emergency Assistance

- **Note: HQ Cedars is modeled separately and that is under review as part of the 2019 IRM sensitivities**

# Market Participant Proposal

- Historically entities wheeling capacity from HQ to NE have not “bought out” of their New England capacity positions. HQ capacity sales are limited to 1,110 MW and therefore there has been no opportunity to import capacity above 1110 MW, except for as part of the import rights process.
- Proposed Hydro Quebec Emergency Assistance presented to the model

+1,500 MW

Total Transfer Criteria (TTC)

-1,110 MW

Grandfathered Import Rights

-300 MW

Approximate historic annual value of the wheel

90 MW

Available Capability for Emergency Assistance

Note: This proposal does not suggest modeling a capacity wheel across the NY transmission system in the model

# Considerations for Discussion

- **NYSRC Policy No. 5-13, 3.5.7 External Control Area Capacity states “The study models external capacity in a manner that allows the model to utilize emergency assistance from the neighboring control areas to be relied upon as necessary (see section 3.5.6) to meet the LOLE criteria. Only certain grandfathered contracts and External CRIS are explicitly modeled in the study to allow the model to utilize the full amount of emergency assistance that can be made available due to the inter-control area tie capability limits.”**
- **There is a long history of utilizing established, grandfathered rights as the quantity to subtract from TTC as the means to present the effective emergency assistance values for setting NYISO IRM**
  - That method prioritizes reserving transmission capacity for emergency assistance over other non grandfathered rights

# Considerations for Discussion

- How would the proposed modeling be accommodated?
- If a reduction of Emergency Assistance is modeled at the Hydro Quebec border representative of capacity wheeling, should an equal amount of additional Emergency Assistance be modeled on the New England border to reflect the additional excess capability ISO-NE has?
- Consider implications to the Import Rights setting process and results?
  - Reducing the HQ limits as proposed may limit the potential to increase the import capability across HQ above the grandfathered 1110 MW through the Import Rights process. Within the energy market, up to 1310 MW can be imported into NY so theoretically additional capability could be granted through the Imports Rights process, above the grandfathered 1110 MW.
- Any opportunities for entities with wheel through capacity transactions to “buy-out” of their New England capacity positions and sell to a different external entity?
  - Recent FCM qualification only has HQ qualified in Summer months
- Does ICS want to consider this MP Proposal as a defined sensitivity
- ICS next steps?

# **Appendix A**

## **Slides October 22, 2009**

### **ICAP Working Group**

---

**NYISO Curtailment Discussion**  
**ICAP Working Group, October 22, 2009**  
**Wes Yeomans Director, Operations**  
**New York Independent System Operator**



# 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	Curtailement?
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

# The Mission of the New York Independent System Operator is to:

- Serve the public interest and
- Provide benefit to stakeholders by
  - Maintaining and enhancing regional reliability
  - Operating open, fair and competitive wholesale electricity markets
  - Planning the power system for the future
  - Providing factual information to policy makers, stakeholders and investors in the power system



[www.nyiso.com](http://www.nyiso.com)



DRAFT – FOR DISCUSSION PURPOSES ONLY

©COPYRIGHT NYISO 2017. ALL RIGHTS RESERVED