## **Emergency Assistance Modeling at** Hydro Quebec Border

#### **NYSRC ICS Meeting**

September 5, 2018







### Agenda

- (Appendix A)
- border for the IRM
- **Considerations for ICS to discuss**



### **Review of October 22, 2009 ICAP WG Meeting Presentation**

#### Review current Emergency Assistance modeling at Hydro Quebec

## **Overview of Market Participant Proposal to revisit modeling**



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### **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

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



Available Capability for Emergency Assistance





### **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.

#### 

+1,500 MW	Total Transfer Criteria (TTC)	
-1,110 MW	Grandfathered Import Rights	
-300 MW	Approximate historic annual value	
90 MW	Available Capability for Emergence	

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



**Proposed Hydro Quebec Emergency Assistance presented to the model** 

le of the wheel

cy Assistance



### **Considerations for Discussion**

- control area tie capability limits."
- - other non grandfathered rights



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-

#### 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



### **Considerations for Discussion**

- How would the proposed modeling be accommodated?
- excess capability ISO-NE has?
- **Consider implications to the Import Rights setting process and results?**
- 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?**

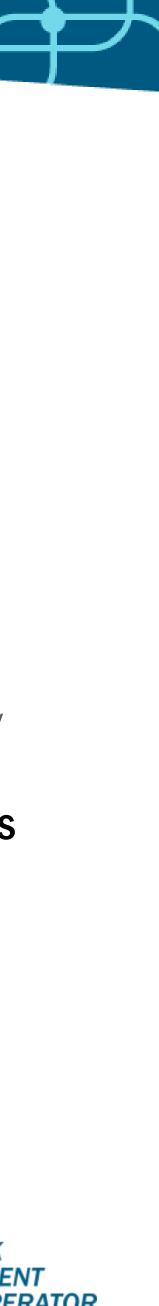


If a reduction of Emergency Assistance is modeled at the Hydro Quebec border representative of capacity wheeling, should an equal amount of additional Emergency Assistance be modeled on the New England border to reflect the additional

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





## **Appendix A** Slides October 22, 2009 **ICAP Working Group**

**NYISO Curtailment Discussion Wes Yeomans Director, Operations** 

ICAP Working Group, October 22, 2009

**New York Independent System Operator** 



### Background

- The New York State Reliability Council approved the "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 wheelthrough ICAP transactions.
- This presentation briefly lists those same scenarios and provides references to some key governing documents for the generally described operating action.
- these scenarios, that are not captured in this presentation.

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# **Assumptions Matrix**" for the Summer 2010-2011 Capability Year IRM

### There are many other potential effects on the system that may affect





#### **#1 NYISO Transmission Congestion Only**

#### <u>Assumptions</u>

- No transmission limit violations
- Congestion results from limited transmission capability Operating Action

**Transaction Type** 

Energy Sale without Capacity from Internal Resource out of NYISO

Energy Sale with Capacity from Internal Resource out of NYISC

Wheel of Energy Only from External Resource to External Control Area

Wheel of Energy with Capacity from External Resource to External Control Area

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	Curtailment?	
	No	
m O	No	
	No	
/	No	
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#### #2 Energy or Reserve Shortage without Transmission Limit Violations

#### <u>Assumptions</u>

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

Transaction Type	Curtailment?	Load Relief?
Energy Sale without Capacity from Internal Resource out of NYISO	Yes	Νο
Energy Sale with Capacity from Internal Resource out of NYISO	Νο	Yes
Wheel of Energy Only from External Resource to External Control Area	Νο	Yes
Wheel of Energy with Capacity from External Resource to External Control Area	Νο	Yes



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#### #3 Transmission Limit Violation Resulting from Inability to Meet NYCA Load <u>AND</u> 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**

Energy Sale without Capacity from Internal Resource out of NYISO

Energy Sale with Capacity from Internal Resource out of NYISO

Wheel of Energy Only from External Resource to External Control Area

Wheel of Energy with Capacity from External Resource to External Control Area



	Curtailment?	Load Relief?	
	Yes	Νο	
1			NEW YORK INDEPEND SYSTEM OF

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- 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

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