



Locational Export Capacity Proposal

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ICAP Working Group

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NYISO*

Agenda

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- ◆ **Problem Statement**
- ◆ **Potential Market Impacts**
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Overview

- ◆ **August 2nd ICAP Working Group**
 - *NYISO described a concern with the current capacity market design and its treatment of exports from constrained Localities*
 - *NYISO notified stakeholders that it agreed with the MMU's concern and would pursue an aggressive schedule to file market design enhancements*
 - **Due to a rule change ISO-NE will soon be filing with FERC, there is the potential for market impacts as early as the 2017/2018 Capability Year (see Appendix: ISO-NE FCA 8 Results Report)**
 - *See Appendix for August 2nd presentation*
- ◆ **NYISO committed to come back to the ICAPWG with proposed market design changes**
- ◆ **Today the NYISO will review its proposal which addresses the key concern, but differs from the MMU's proposal**

Problem Statement

The reliability benefit from a generator exporting capacity from a constrained Locality is not reflected in current capacity market design. Given that the generator supporting the export continues to operate in the Locality the market signals should reflect that the generator still helps satisfy the need for capacity within the constrained Locality.

Potential Market Impacts

- ◆ Under the NYISO's current capacity market construct, a capacity sale from a Locality would result in a matching decrease in supply in that Locality. The potential avoided cost of a more efficient market design is significant.
- ◆ Under a more efficient market design, the avoided cost of a 500 MW export from the G-J Locality is approximately \$300 - \$500 million in the G-J Locality and NYC based on:
 - *A 500 MW export on the G-J demand curve would increase the clearing price approximately \$3.50/kW-month (this estimate is based on the 2016/2017 demand curve parameters)*
 - *If the NYC clearing price is set by G-J the impact is significantly larger (this estimate reflects that possibility during the Winter Capability Period)*
- ◆ Although other variables are relevant, a significant factor affecting the potential impact for 2017/2018 is the extent to which NY resources will be awarded obligations in ISO-NE
- ◆ There will still be a cost impact due to the export in NYCA which is an appropriate market outcome

NYISO's Objective

- ◆ **Determine the amount of locational export capacity that must be replaced within the Locality while maintaining the same level of reliability**
- ◆ **Set a price consistent with the actual reliability need in NYCA and the Locality while accurately reflecting the exporting resource**
- ◆ **The NYISO's proposal is designed to be implementable before 2017/2018 and the immediate implementation will focus on capacity exports from the G-J Locality to ISO-NE over the AC Interface**
 - *The proposal can be applied more broadly if necessary*
 - *The proposal does not apply to exports over UDRs*
 - *Capacity market mitigation rules will remain unchanged as market clearing prices can still be impacted*

Schedule

- ◆ **August 23rd - ICAPWG**
 - *Locational Export Capacity Proposal*
- ◆ **September 13th - ICAPWG**
 - *Updated proposal and tariff revisions*
- ◆ **September 27th - MIWG**
 - *Updated proposal and tariff revisions*
- ◆ **October 11th - BIC**
 - *Vote on proposal*

NYISO's Proposal

- ◆ **The NYISO's proposal is designed to address the market inefficiency by reflecting reliability benefits of a resource's locational export capacity**
 - *Reflects the portion of locational export capacity that must be replaced in the Locality and the portion that can be replaced in ROS while maintaining the same level of reliability*
 - *Decrements the Locality ICAP requirement by the portion that can be replaced in ROS*
 - *Does not provide a NYISO capacity market payment to a generator exporting capacity from a Locality*

Fungible Megawatts

- ◆ **Fungibility of Megawatts**
 - *NYISO is performing analysis to determine the fungibility of G-J megawatts with ROS megawatts*
- ◆ **Given a resource in the G-J Locality and a load in ISO-NE, megawatts may take one of two paths:**
 - *From the G-J Locality directly over the southern AC ties to ISO-NE*
 - *From the G-J Locality over the Zone G and Zone F interface, creating counter-flow, into ROS and over the northern AC ties to ISO-NE*
- ◆ **The expected flows from the G-J Locality to ROS to ISO-NE are considered fungible between the G-J Locality and ROS**
 - *Fungible MW should not produce a market signal to be replaced in a Locality*
- ◆ **The NYISO plans to continue evaluation of how to determine the fungible MW and provide detail to stakeholders in the next presentation**

ICAP Market Requirement

- ◆ **Adjust the Locality's ICAP market requirement**
 - *A Locality resource exporting capacity provides a reliability benefit within its Locality given that it remains operational*
 - No additional reliability need is created by the fungible portion of the locational export capacity
 - *The Locality's ICAP market requirement will be reduced so that the market does not procure more than necessary to maintain the same level of reliability*
 - *The formula below calculates the adjusted Locality ICAP market requirement*

$$ICAP Req_{Adj} = (LCR * FPL) - ICAP_{fungible}$$

Where:

ICAP Req_{Adj}

= The Locality's ICAP requirement adjusted for locational export capacity

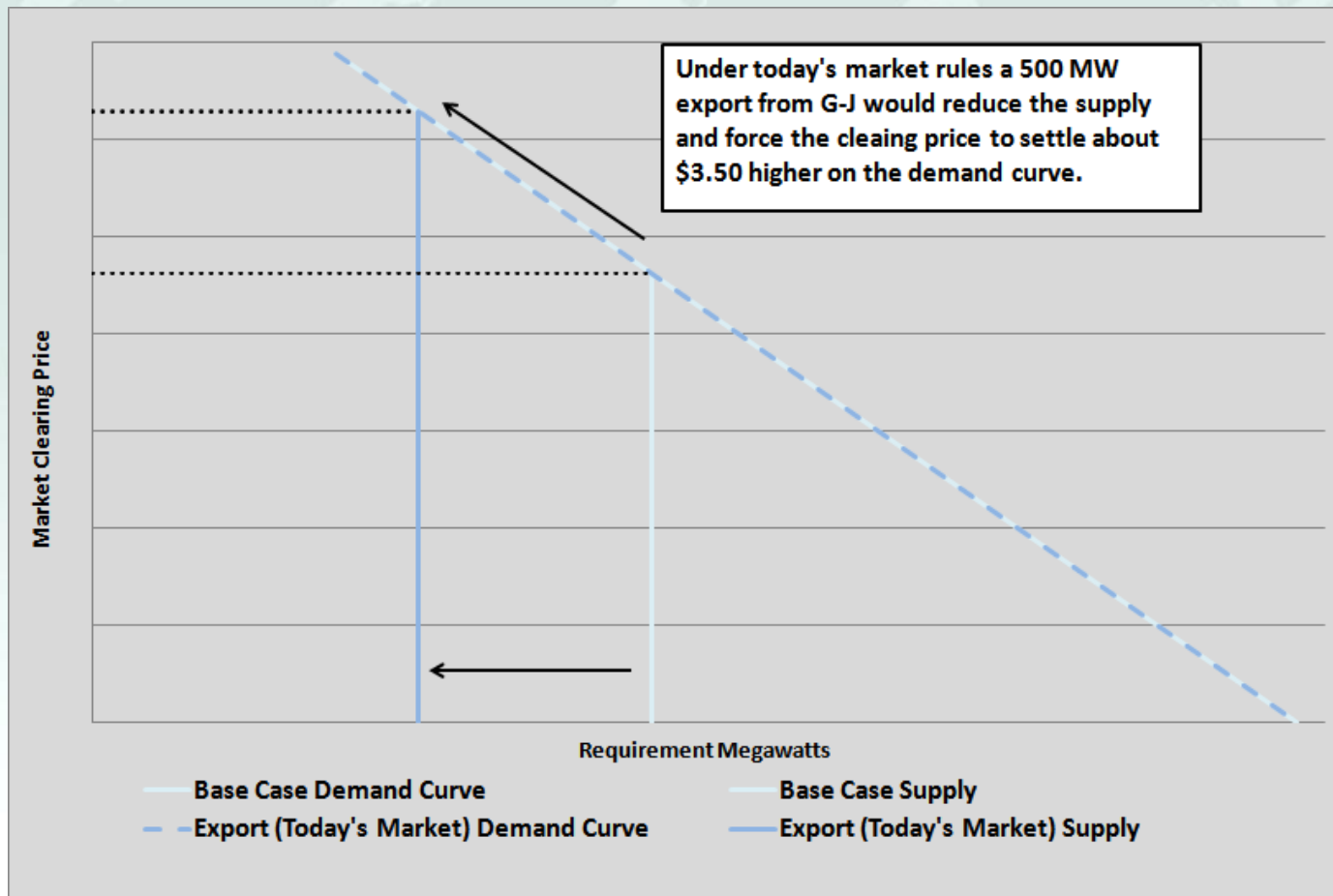
LCR = The Locational Minimum Installed Capacity Requirement

FPL = The ICAP forecast peak load of the Locality

ICAP_{fungible} = Locational export capacity determined to be fungible with ROS

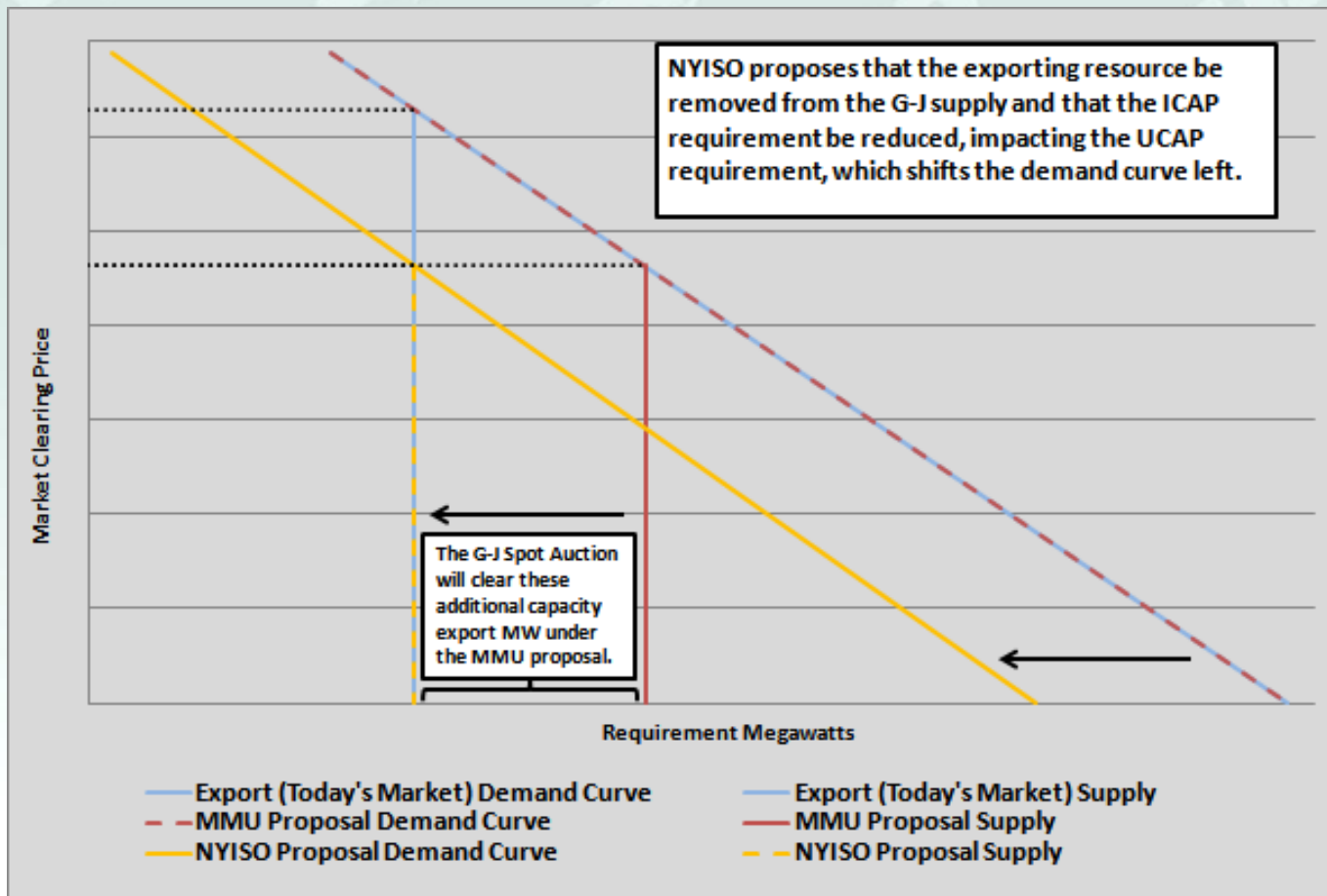
Market Rules – Current

- ◆ Under current market design an export from a Locality would reduce supply and raise price accordingly



Market Rules – Proposal

- ◆ Shifting the demand curve left achieves a comparable clearing price to the MMU proposal, shown for comparative purposes only



Generator Obligations

- ◆ **It is expected that the exporting generator will:**
 - *Continue to be available in the NYISO's energy market – as related to the generator fulfilling its capacity export obligation*
 - *Continue to participate in the NYISO's energy market and be included in the system dispatch*
 - *Continue to be available for SRE by the NYISO*

NYSRC

- ◆ **2017/2018 Capability Year**
 - *Actual commitments from forward sales to ISO-NE for the 2017/2018 Capacity Year will not be fully known by the time the 2017/2018 Capability Year IRM and LCR assumptions need to be finalized*
 - *The modeling assumptions for the 2017/2018 Capability Year IRM and LCRs are currently being discussed at ICS to be decided by October 1, 2016*
 - *The IRM models long-term contracts, but does not currently model forward auction sales*
- ◆ **The NYISO's proposed solution addresses potential market impacts**
- ◆ **Further discussion is required with the ICS and NYSRC**

Next Steps

- ◆ **August 30th - September**
 - *NYISO presents proposal to NYSRC ICS*
 - *NYISO provides comments on ISO-NE 205 filing (due date will be set by FERC)*
 - *Continued discussion of NYISO proposal*
- ◆ **September 27th - MIWG**
 - *Updated proposal and tariff revisions*
- ◆ **October 11th - BIC**
 - *Vote on proposal*
- ◆ **October 26th - MC**
 - *Vote on proposal*
 - *Anticipated time for FERC ruling on ISO-NE Section 205 tariff filing*

Next Steps

- ◆ **November 14/15th - Board review**
- ◆ **November 16th**
 - *NYISO 205 filing for FERC*
- ◆ **January 16th**
 - *FERC ruling on NYISO 205 filing*
- ◆ **February 2017**
 - *Software implementation ahead of 2017/2018 Strip Auction*

Appendix: ISO-NE FCA 8 Result Report

ISO-NE FCA 8 Results

- ◆ **ISO-NE FCA 8 Results Report:**
 - http://www.iso-ne.com/static-assets/documents/markets/othrmkts_data/fcm/cal_results/ccp18/fca18/fca_8_result_report.pdf
- ◆ **ISO-NE's FCA 8 Results Report includes 811.3 MW of awarded obligations over the New York AC Ties**
- ◆ **The Capacity Transfer Limit is 1173 MW which leaves 361.7 MW of headroom**
- ◆ **Resources may bid into an annual reconfiguration auction or subsequent monthly reconfiguration auctions to secure that available headroom**
- ◆ **A NYCA resource may enter into a bilateral agreement to serve an existing ISO-NE FCA 8 import obligation**

Appendix: Treatment of Capacity Locality Exports

ICAP Working Group
August 2, 2016



Treatment of Capacity Locality Exports

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**ICAP Working Group
August 2, 2016 NYISO**

Background

- ◆ Roseton was awarded an FCM obligation of 511 MW in ISO-NE's FCM for 2018/2019
- ◆ The MMU's 2015 SOM report included a recommendation for NYISO to modify the treatment of Capacity exports from import constrained zones (SOM Recommendation #8)
- ◆ The MMU's recommendation is currently being prioritized as part of the NYISO's project prioritization process for 2018

Background - continued

- ◆ **ISO-NE stakeholders approved rules that would allow importing resources to participate in reconfiguration auctions for 2017/2018**
 - *Under its current rules (i.e., absent the proposed change) only resources qualified for the 2017/2018 FCM could participate in reconfiguration auctions for 2017/2018*
- ◆ **ISO-NE is planning on filing with FERC for an effective date in October 2016**
- ◆ **If the new rule is accepted by FERC, an export from a Locality could occur as early as June 2017**
 - *ISO-NE posts the results of its 3rd reconfiguration auction on March 17th*

Potential Market Impacts

- ◆ Under the NYISO's current ICAP market construct, when a Roseton capacity sale to ISO-NE occurs, there would be a matching decrease in supply in that Locality
- ◆ Compared to the MMU SOM proposal, that reduction would drive a total cost difference of approximately \$300-\$500 million per year
 - *G-J price would increase approximately \$40/kW-year*

The MMU's Proposal

- ◆ **Include megawatts exported to neighboring control areas from import constrained zones in the supply to account for the reliability benefits to SENY**
- ◆ **Compensate exporter based on the price differential between the Locality and NYCA**
- ◆ **The resulting market outcome:**
 - *Export is not removed from the Locality supply, but is removed from the NYCA supply*
 - *Locality price is not impacted relative to conditions prior to the export*
 - *NYCA price is impacted reflecting the lower NYCA-wide supply*

Locality Export Under Current Design

- ◆ **The NYISO agrees that the pricing outcomes under the current market design construct will not produce efficient market signals in the Locality**
 - *It would not reflect any reliability value from the Generator exporting out of the Locality*
 - *Given that the generator supporting the capacity export continues to operate in the Locality, there are inherent reliability benefits that continue for the Locality*
- ◆ **The NYISO is evaluating the MMU's and alternative proposals that will produce efficient prices in Localities with exporting resources**

Next Steps

- ◆ **The NYISO is evaluating immediate options that could be implemented in time for the Summer 2017 Capability Period**
- ◆ **Continue discussions with Stakeholders on the NYISO's proposed approach**
- ◆ **File NYISO rule revisions with FERC**
- ◆ **The NYISO is also considering intervening in ISO-NE's proceeding, depending on its ability to get a revised rule in place in time for the Summer 2017 Capability Period**

The mission of the New York Independent System Operator, in collaboration with its stakeholders, is to serve the public interest and provide benefit to consumers 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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