

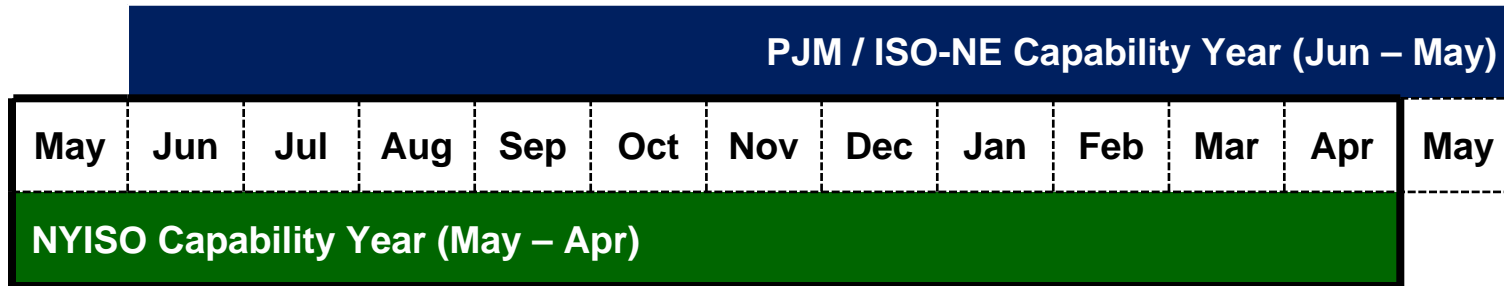
# Interregional Capability Year Alignment

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ICAP Working Group  
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# Background

- ◆ Time gap between the Northeast capacity markets



- ◆ Known implications
  - *LIPA's Case\**

Capacity in PJM qualifying as UCAP in Long Island through UDRs cannot delist until June, one month after start of NYISO capability year

\* ICAPWG Presentation “*Capability Year Adjustment Solutions*” 19 November 2009

# Background – Short-Term Solution

- ◆ Tariff revisions filed on January 14, 2010 and approved by FERC on February 3, 2010 to allow for varying LSE requirements within a Capability Period:
  - *Provides the UDR rights holder an option to receive two sets of Locational Capacity Requirements (LCR)*
    - LCR #1 for May excluding a quantity of MW from the UDRs, thereby treating those MW as emergency assistance only
    - LCR #2 for the rest of the months modeling the controllable facility as providing capacity including the UDR supply in the study
- ◆ Realized Benefits
  - *Short term – fully resolved LIPA’s case*
  - *Long term – will resolve similar issues for other UDR rights holders*

# Opportunity – Long Term Solution

- ◆ Proposed Solution – Re-alignment of NYISO *capacity market* to adjust *ICAP Capability Year* to begin in June.

	Summer (proposed)						Winter (proposed)					
May	Jun	Jul	Aug	Sep	Oct	Nov*	Dec	Jan	Feb	Mar	Apr	May*

\* May will become a Winter month and use  $DMNC_{winter}$  values, conversely for November

- ◆ This presentation identifies potential benefits and market and operational impacts that have been identified through internal NYISO discussions.

# Impact Analysis – Overview

## ◆ Implications

- *Separate, different definitions of “Capability Year / Capability Period” to be used in the NYISO ICAP market and all other NYISO Markets*
- *Exchanging May, November as Winter, Summer months*

## ◆ Required efforts

- *Extensive modifications to relevant tariffs & manuals*
- *Significant software upgrade to implement proposed change*
- *Assessment of all ICAP related NYISO processes associated with current definition of a Capability Year / Period*

# Impact Analysis – NYISO Processes

- ◆ Issue – DAM Bidding / Scheduling Process
  - *An ICAP supplier is required to schedule or bid into the DAM the Installed Capacity Equivalent (ICE) amount of Unforced Capacity it has sold in the NYISO capacity market, or notify the NYISO of an outage or derate.*
- ◆ Key Changes
  - *May will use  $DMNC_{winter}$  and November will use  $DMNC_{summer}$  values under proposed solution*
  - *More capacity will likely be sold in May (and less in November)*
  - *Overall, ICAP suppliers are likely required to schedule or bid more ICE into the DAM in May (and less in November)*

# Impact Analysis – NYISO Processes

## ◆ Potential Impact(s)

- *Since May is traditionally warmer than November in NY, this change increases the gap between DMNC values and actual, dependable capacity in these months*
- *While temperature spikes occur normally (e.g. hot days in April), the proposed change would widen the gap consistently for entire months*
- *The overestimation of capacity has implications for reliability, and is likely to add a layer of uncertainty around the DAM bidding / scheduling process*

# Impact Analysis – NYISO Processes

- ◆ Magnitude of Potential Impact\*

- *By Capacity Region*

Region	Capacity <sub>winter</sub> (MW)	Capacity <sub>summer</sub> (MW)	Difference (MW)
ROS	24,067.1	22,931.2	1,135.9
NYC	9,998.6	8,969.6	1,029.0
LI	6,019.8	5,515.0	504.8
NYCA	40,085.5	37,415.8	2,669.7

- *By Generation Type*

Unit Type	CC	GT	WT	JE	HY	CT	CW	NP	NB	IC	PS	CG	ST	Total
Count	39	154	15	14	349	8	4	3	3	62	5	3	68	727
Winter - Summer (MW)	1111.6	1049.9	247.1	161.7	35.9	32.1	16.3	12.2	8.9	5.4	1.7	0.0	-13.0	2669.7

\* Source: 2010 Gold Book

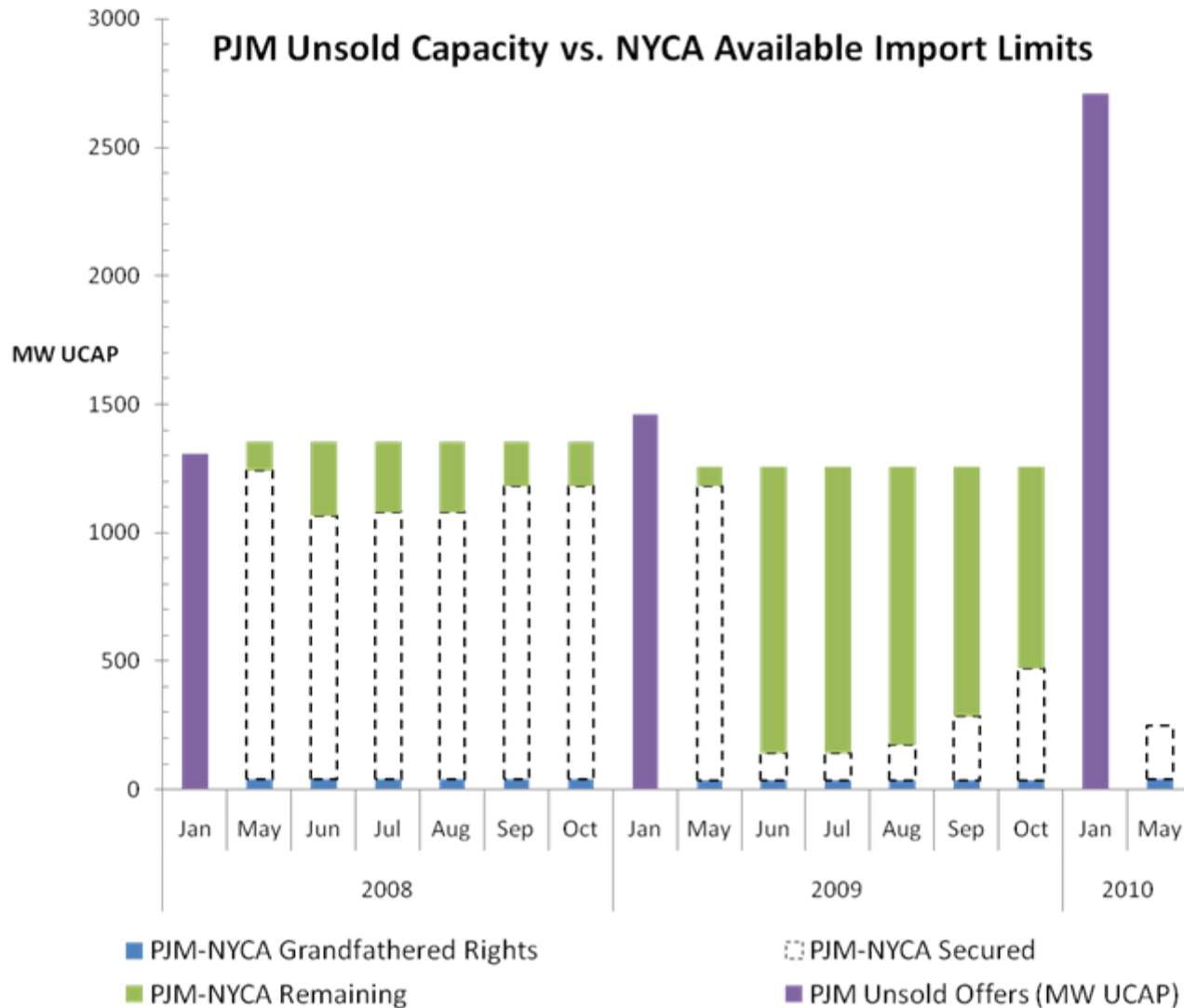


# Benefit Analysis

- ◆ Potential Benefits – Interregional Alignment
  - *Wider selection of capacity suppliers*
    - Based on available capacity from neighboring forward capacity markets
  - *Better utilization of tie lines*
    - Based on available transfer capabilities on tie lines and UDRs
- ◆ Additional obstacles in procuring capacity from neighboring markets?
  - *Assume the proposed changes are implemented, what else can still prevent efficient import from our neighbors?*

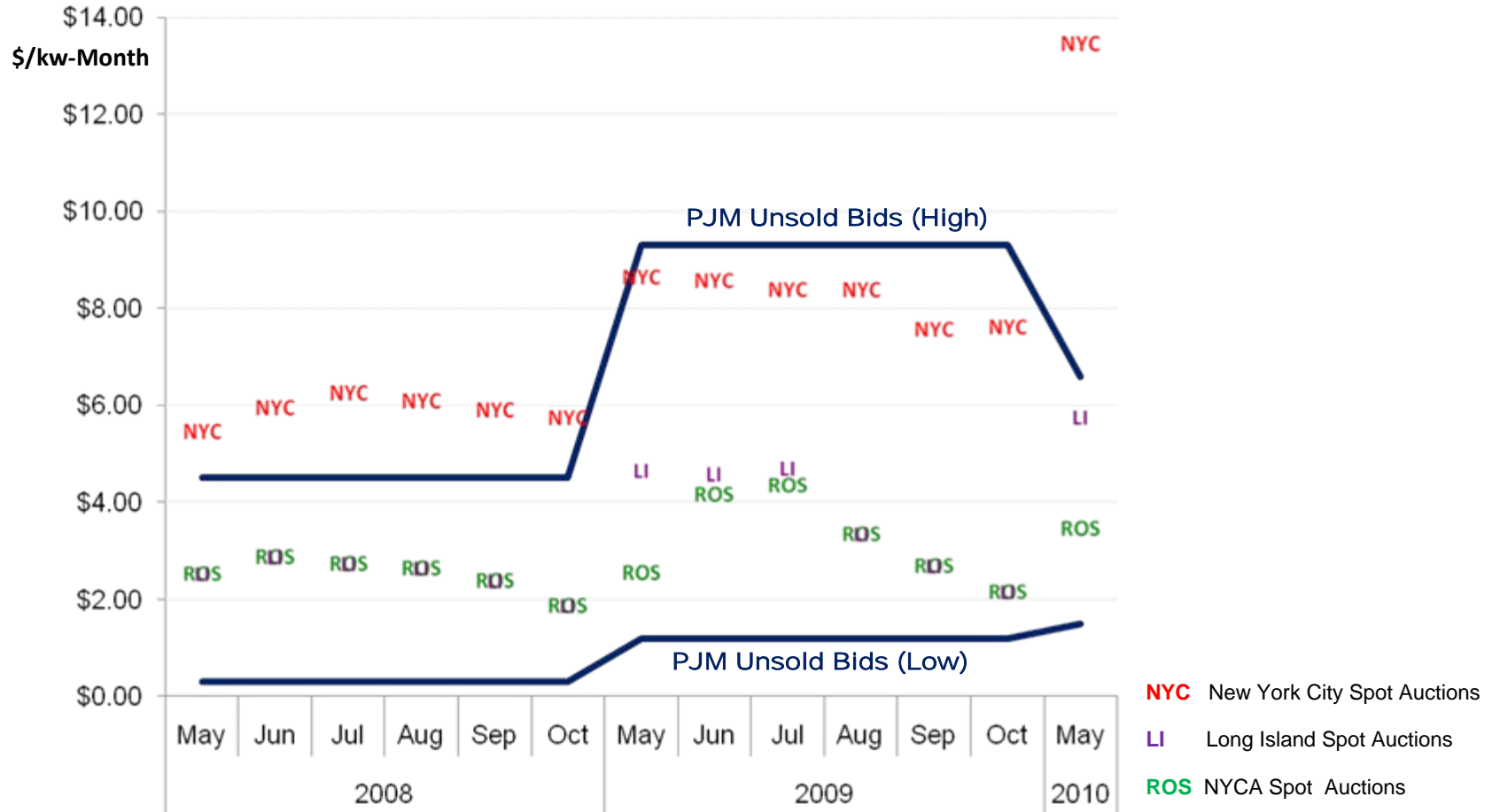
## Benefit Analysis – Additional Obstacles?

- ◆ Availability of Capacity in Neighboring Markets
  - *One reason given for adjusting Capability Periods with neighboring control areas has to do with the existence of unsold capacity in neighboring control areas subsequent to that control area's final reconfiguration auction but prior to the start of a NYISO Capability Year.*
  
- ◆ The following slides review unsold capacity statistics in PJM for the period 2008-2010.



Theoretically, **unsold capacity (purple bars)** after PJM’s last reconfiguration auctions in January of each year would be available to NYCA via the **remaining import rights (green bars)**

### PJM Unsold Bids vs. NYISO Spot Auction Prices



Based on PJM’s reconfiguration auction prices alone (e.g. excluding transmission reservation prices), it appears some of the unsold bids would have been economic in the ROS market

# Summary

- ◆ Comparison – Costs vs. Benefits
  - *Benefits are difficult to quantify*
    - Amount of import / export may be limited due to differences in market design (e.g. forward capacity markets in PJM and ISO-NE) despite aligning capability years
    - Amount of import / export may be limited due to amount of transfer capability between regions
  - *Costs could be significant*
    - Modifications to relevant tariffs, manuals, and guides
    - Software implementation of proposed changes
    - Possible reliability concerns with overestimation of capacity in May

# Summary

- ◆ The NYISO is interested in MP feedback on the need to readjust Capability Periods, specifically:
  - *Examples of market benefits anticipated as a result of the alignment*
  - *Perceived obstacles with using unsold capacity in neighboring control areas to support imports/UDRs*
  - *Impacts on capacity exports from NY to neighboring control areas*
  - *Prioritization of this effort within the larger set of ICAP market topics currently under consideration*

# Summary

- ◆ Please send comments to Pete Lemme ([plemme@nyiso.com](mailto:plemme@nyiso.com)) by June 30; note if comments are to be treated as confidential
- ◆ Based on MP feedback, the NYISO will follow up with additional discussion at upcoming ICAPWG meetings in July/August.

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 provides comprehensive reliability planning for the state's bulk electricity system.

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