



# External ICAP Allocation For the 2012/2013 Capability Year

(Before the application of the deliverability test)

A faint background map of New York State is overlaid with a network diagram. The diagram consists of numerous small colored dots (red, blue, and purple) connected by thin grey lines, representing a complex network across the state.

**Frank Ciani**  
*Senior Engineer- Long Term Planning*  
**New York Independent System Operator**

*ICAP Working Group*  
*January 30, 2012*  
*Revised*

# Discussion

- **Study Parameters**
- **Method**
- **Results**

**Draft – For Discussion Purposes only**

# 2012/2013 External ICAP Allocation Study Parameters

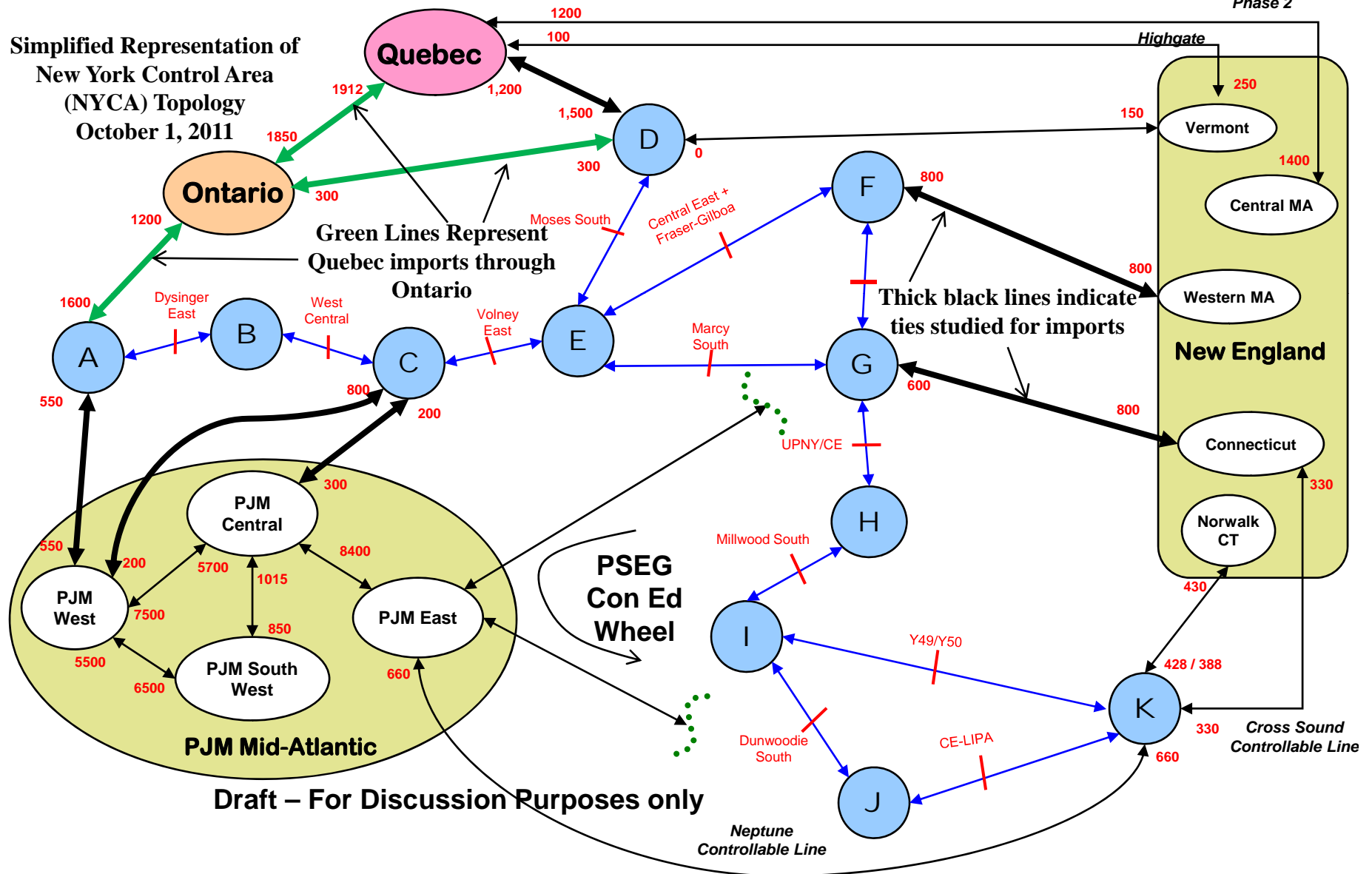
## **Not considered for import allocation limits:**

- **Interface facilities having UDRs;**
- **The PSEG Con Ed Wheel;**
- **The NUSCO 1385 (NNC) line (no capacity contracts).**

**Draft – For Discussion Purposes only**

## Transmission System Representation for 2012/2013 External Capacity Rights Study

Summer Emergency Ratings (MW)



# 2012/2013 External ICAP Allocation

## Methodology – Initial Individual Limits

- **Start with 2012-2013 LCR Database**
- **Model Grandfathered imports (consistent with IRM study)**
- **Look at participating external Control Areas and adjust imports on the ties that were described previously**
- **Find initial maximum imports by increasing imports for one Control Area until Loss of Load Expectation (LOLE) violation occurs.**
- **Repeat for each Control Area, individually**

**Draft – For Discussion Purposes only**

# 2012/2013 External ICAP Allocation

## Methodology – Optimally Feasible Solutions

- **The objective of the study is to determine the maximum imports (Sec. 2.7, ICAP Manual)**
- **A series of MARs simulations were performed to maximize the sum of the individual contributions without violating the LOLE criterion.**
- **The key results of these simulations are provided.**

**Draft – For Discussion Purposes only**

# 2012/2013 External ICAP Allocation

Starting Values (MW)

	PJM	Quebec via IESO	Quebec via Chat	Quebec via Cedars	ISO-NE
<b>Starting Values (TTC)</b>	<b>1550</b>	<b>1850</b>	<b>1500</b>	<b>167</b>	<b>1400</b>
<b>Initial Individual<sup>1</sup></b>	<b>1112</b>	<b>0</b>	<b>1100</b>	<b>0</b>	<b>525</b>

1. Individual imports begin with grandfathered rights and ETCNL assumed. In this case, those rights are 1080, 1090, and 50 MW for PJM, Quebec, and ISO-NE, respectively.

**Draft – For Discussion Purposes only**

# 2012/2013 External ICAP Allocation

Maximize Imports Testing Results (MW)

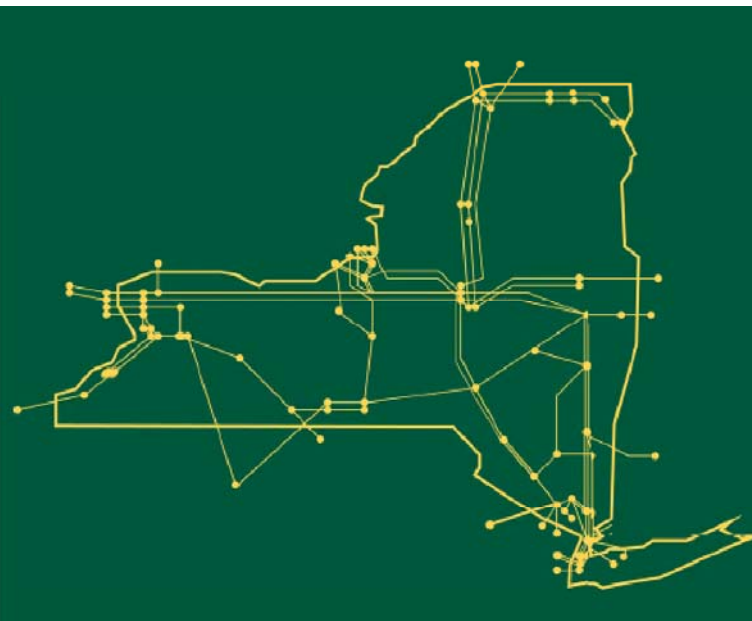
	<u>PJM</u>	<u>Quebec</u>	<u>ISO-NE</u>	<u>Total</u>
<b>Historic Firm Imports</b>	<b>300-400</b>	<b>1000-1100</b>	<b>0</b>	<b>~1400</b>
<b>Final Values<sup>1,2</sup></b>	<b><u>1080</u></b>	<b><u>1100</u></b>	<b><u>300</u></b>	<b>2480</b>

1. PJM import value is reduced to 1080 MW in order to maximize other imports and is selected because of low historic contracts. The 1080 ETCNL is still honored.
2. The 0.1 days/year criterion can be met for all combinations of imports within these underlined limits.

**Draft – For Discussion Purposes only**



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 comprehensive planning for the state's bulk electricity system.



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

**Draft – For Discussion Purposes only**