

# Renewables and Self Supply Compliance Filing

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**ICAP WG**

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*Krey Blvd, Rensselaer, NY*

**1/19/216 This version corrects the  
date of the next meeting on slide 14**

# Background

- ◆ **Commission’s October 9, 2015 order (EL15-64) directed the NYISO to revise the buyer-side capacity market power mitigation measures (“BSM Rules”) to exempt certain narrowly defined renewable and self-supply resources from Offer Floor mitigation.**
- ◆ **The Commission concluded that applying buyer-side mitigation measures to such resources was unnecessary to the extent that they have “limited or no incentive and ability to exercise buyer-side market power to artificially suppress ICAP market prices.” (¶10).**
- ◆ **The Commission indicated it “expect[s] NYISO to work with its stakeholders in developing this compliance filing.”(¶10)**

# Schedule and timeline

- ◆ The FERC granted an extension of time to February 21, 2016 to make the compliance filing.
- ◆ Stakeholder meetings:
  - ~~ICAP WG November 18, 2015~~
  - ~~Joint MIWG & ICAP WG December 2, 2015~~
  - ~~ICAP WG January 13, 2016~~
  - ICAP WG January 19, 2016
  - ICAP WG January 26, 2016
  - Additional ICAP WG to review tariff language
- ◆ In today's presentation, the NYISO is presenting to stakeholders, and seeking input on, its proposed approach to the Self Supply exemption.
- ◆ The January 26 presentation is expected to cover the approach to both the Renewables and the Self Supply exemption.

# Self Supply Exemption

- ◆ See ¶61 and ¶65 (among others) including:
  - *... The entity self-supply exemption we direct here must be limited to load serving entities whose ICAP portfolios are consistent with reasonably anticipated levels of their future ICAP obligations.... [T]he net-short and net-long thresholds should be tight enough to prevent a load serving from being able to deliberately overpay for a resource in an attempt to manipulate ICAP market prices in a way that benefits the load serving entity's other purchases from the ICAP market .... (¶61, footnotes omitted)*

# Self Supply Exemption

- ◆ A unit seeking a self supply exemption would have to request the exemption. The process will be similar to the process used for a Competitive Entry Exemption.
  - *The unit would either have to be owned by or be under a long term (10 year or more) supply contract with the LSE*
  - *Both the owner of the unit for which the exemption was requested, and the LSE seeking to self supply would have to provide certifications (similar to the Competitive Entry Exemption Certification and Acknowledgement in 23.4.5.7.9.2):*
    - The requesting generator and the LSE would have to certify that there are no irregular or anomalous arms length contracts and that there are no “arrangement for any payments or subsidies that are specifically tied to the [load serving entity] clearing its project in [NYISO’s ICAP market], or to the construction of its project.”
    - The LSE would have to certify that it has not divested substantially all of its capacity resources.
    - The LSE would have to state the amount and certify the last three years of load served (including affiliate loads)
    - The LSE would have to provide information on its (and its affiliates’) long term contracts (including confirms and any other form of agreement) to acquire capacity and a description of all generators in which it (and its affiliates) has a direct or indirect ownership interest (and may be requested by the NYISO to provide contracts)
      - Long term in this context would be an initial contact of 10 years or more with at least 6 years remaining at the time the unit enters the Class Year.

# Self Supply Exemption

- ◆ The NYISO presented possible approaches in December
  - *The PJM approach*
    - The static maximum net short threshold is dependent on the type of Self-Supply LSE.
    - The maximum net long thresholds are based on individual LSE capacity obligations (calculated on a three year average basis)
  - *Calculated*
    - The Complainants' proposed a method to calculate an LSE specific net short threshold (see Mike Cadwalader's Exhibit B to the Complaint EL15-64) – based on the net CONE or a representative unit
- ◆ The NYISO is proposing a calculated unit specific method for the net short threshold.
  - *This uses actual unit net CONE information instead of the CONE of a representative unit.*
  - *The cost of the unit will be collected as part of the mitigation process (similar to the existing BSM process)*
  - *The characteristics of the load will be collected as part of the application and certification process.*
  - *For transparency, the NYISO will post a narrative and numerical example.*

# Self Supply Exemption

- ◆ **Maximum Net Short Threshold:**
  - *Calculated for each applicant. Compares the costs an LSE would incur to procure ICAP via the generator versus the savings to the LSE from that unit's entry.*
    - Uses the LSE's actual capacity obligation(s) and existing Resources, including generation, UDRs and SCRs and bilateral contracts (purchase agreements)
  - *Calculated so that if the cost savings of price suppression are less than the cost of subsidizing the entrant, a self-supplying LSE can receive an exemption.*
- ◆ **Requires the following data:**
  - ***LSE parameters:***
    - MW of capacity from long term contracts and owned generation (direct or indirect )
    - Entrant MW (unit specific) & Entrant Net CONE (unit specific)
    - LSE load obligation (based on peak load share)
  - ***Demand curve parameters:***
    - Price forecast, without the entrant
    - Slope (used to calculate price effect of the entrant)
  - ***System parameters***
    - Total UCAP

# Self Supply Exemption

- ◆ **Maximum Net long threshold:**
  - *The higher of*
    1. 10 years of load growth (using the gold book forecast for the Mitigated Capacity Zone) or
    2. 1 % of load growth over 10 years.
  - *The basis would be the average of the last 3 years of load for the LSE and affiliates.*
  - *The excess of the Self-Supply LSE's owned and contracted capacity in each Mitigated Capacity Zone would be compared to the applicable Maximum Net Long thresholds. If the former is less than the later, the Net Long criteria is satisfied.*
- ◆ **To get a Self Supply Exemption both the Net Short and Net Long criteria must be satisfied**



# Self Supply Exemption- Net Short Threshold Example

## ◆ Assumptions:

- *The LSE only has load in NYC*
- *LSE load share in NYC is such that that the LSE will purchase 500 MW UCAP;*
- *The LSE has 225 MW currently purchased through long term arrangements (i.e., contract or ownership).*
- *Simplifying assumptions*
  - This example estimates only the NYC effects (the actual calculations will include the effects of another Locality in which it is located and the NYCA price)
  - Does not include the effect of the new generator on load UCAP purchase obligation
- *The ICAP price is assumed to be \$12 kW-mo prior to entry.*

## ◆ Thus:

- *LSE's initial capacity costs are \$39.6 million per year*
  - Total capacity costs = LSE market purchases \* ICAP market price \* 12 / 1000  
= 275MW \* 12.00kW-mo \* 12 months/1000 kW/MW  
= \$ 39.6 million/year

# Self Supply Exemption- Net Short Threshold Example


- ◆ Requesting a self supply exemption for a 50 MW entrant generator
  - *Assume a \$13.5kW-month Net CONE (net of energy and ancillary services)*
  - *Entrant cost is \$8.1 million/year levelized cost*
    - Entrant costs = Net CONE \* Entrant size \* 12 / 1000  
 = \$13.5 kW-mo \* [50 MW] \* 12 month / 1000 kW/MW  
 = \$8.1 million
  - *Capacity price goes from \$12 kW-mo to \$11.35 kW-mo*
    - ICAP Price = Initial price + DC Slope \* Entrant MW  
 = \$12 kW-mo + [- \$ 0.013 kW-mo/MW] \* [50MW]  
 = \$11.35 kW-mo
  - *The LSE has to purchase 225 MW in the ICAP market at a cost of \$30.6 million*
    - LSE market purchases  
 = LSE UCAP purchases via short-term bilaterals/ICAP market - Entrant size  
 = 275 MW – 50 MW = 225 MW
    - Cost of market purchases = LSE market purchases \* ICAP market price \* 12 / 1000  
 = 225 MW \* 11.35 kW-mo \* 12 months /1000 kW/MW  
 = \$ 30.6 million/year

# Self Supply Exemption- Net Short Threshold Example

- *Total costs for the LSE are \$38.7 million per year*
  - Total costs = the cost of purchasing the capacity + the generator cost of new entry  
= \$30.6 million/year + \$8.1 million/year  
= \$38.7 million/year
  
- *Purchasing all the LSE UCAP MW at the initial ICAP market prices would have had a total cost of \$39.6 million/year (see slide 9)*
  
- *Cost for the LSE with the entrant generator are less than the costs to the LSE without the entrant generator so the 50 MW generator does not satisfy the net short threshold.*

# Self Supply Exemption- Net Short Threshold Example

## ◆ Examples of other entrant sizes

Entrant size (MW)	Entrant Net CONE (\$/kW-mo)	Entrant total cost (10 <sup>6</sup> \$/y)	ICAP market price (\$/kW-mo)	LSE market purchases (MW)	LSE market purchase cost (10 <sup>6</sup> \$/y)	Total costs (10 <sup>6</sup> \$/y)	LSE cost savings (10 <sup>6</sup> \$/y)	Satisfies Net-Short threshold?
5	\$13.50	\$0.8	\$11.94	270	\$38.7	\$39.5	\$0.1	No
25		\$4.1	\$11.68	250	\$35.0	\$39.1	\$0.5	No
50		\$8.1	\$11.35	225	\$30.6	\$38.7	\$0.9	No
100		\$16.2	\$10.70	175	\$22.5	\$38.7	\$0.9	No
175		\$28.4	\$9.73	100	\$11.7	\$40.0	<b>-\$0.4</b>	<b>Yes</b>
200		\$32.4	\$9.40	75	\$8.5	\$40.9	<b>-\$1.3</b>	<b>Yes</b>
250		\$40.5	\$8.75	25	\$2.6	\$43.1	<b>-\$3.5</b>	<b>Yes</b>
300		\$48.6	\$8.10	-25	-\$2.4	\$46.2	<b>-\$6.6</b>	<b>Yes*</b>

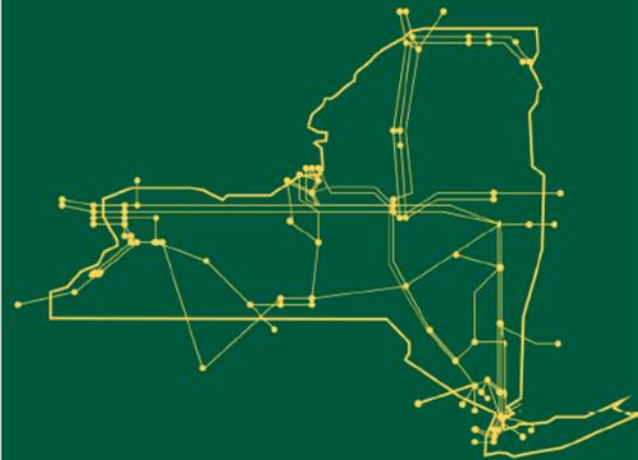
\*At the given size of Entry, the LSE may not meet the Net-Long threshold.

# Next steps

- ◆ **Soliciting stakeholder feedback**
  - *At this meeting, in writing (sent to [deckels@nyiso.com](mailto:deckels@nyiso.com)) or by scheduling a call (by contacting Nicole Bouchez [nbouchez@nyiso.com](mailto:nbouchez@nyiso.com)) as soon as possible.*
- ◆ **Next meeting: January 26\***

\* Date corrected in this version.

The New York Independent System Operator (NYISO) is a not-for-profit corporation responsible for operating the state's bulk electricity grid, administering New York's competitive wholesale electricity markets, conducting comprehensive long-term planning for the state's electric power system, and advancing the technological infrastructure of the electric system serving the Empire State.



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