



NYISO Proposal for New Capacity Zone Criteria, Evaluation Process, and Market Integration

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New Capacity Zone Criteria: Background

Background

- ◆ In the June 30, 2009 FERC Order on the Consensus Deliverability Plan (filed on 10/5/2007), FERC directed the NYISO to submit a Filing by October 5, 2010
 - *Exact wording of FERC Order: “...submit **criteria** for the development of additional capacity zones...” (Order p. 26)*
- ◆ Consensus Deliverability Plan stated:
 - *“The NYISO Staff and market participants will work collaboratively to develop over the next three years criteria for the potential formation of additional locational ICAP zones.” (Plan, Para. 19)*
- ◆ The criteria for creating new capacity zones was previously discussed with market participants at the 4/23/09 IITF meeting and the 5/8/09, 6/5/09, and 7/7/09 ICAPWG meetings

Capacity Zone Criteria: Market Advisor

2009 State of the Market Report (issued April 2010):

- *“Transmission bottlenecks that limit flows into southeast New York have led new resources (or imports) outside this region to be deemed not “deliverable” under a new test implemented in 2009.*
 - Such new resources or imports must make costly transmission upgrades or procure deliverability rights from an existing supplier to sell capacity.
 - This presents a significant inefficient barrier to new entry that will lead to higher capacity costs.
 - In the absence of zones that reflect the transmission bottleneck, the current prices will not be determined efficiently on either side of the bottleneck.
 - Hence, we recommend that the NYISO work with stakeholders to make the necessary preparations to define a new zone(s) in eastern New York.”
(SOM p. 11)

The Market Advisor’s #1 High Priority Recommendation was for the “NYISO to prepare to define a new capacity zone(s) in eastern New York...” (SOM p. 13)

New Capacity Zones: Multiple Criteria

The NYISO proposes three criteria to determine whether a new capacity zone should be developed:

1. Use of a modified “Capacity + Import divided by Load” ratio
 - *This will be similar to the ratios the NYSRC produces*
 - *This criterion would be viewed as a screening one*
2. The difference between a new peaking unit CONE in a potential new capacity zone and other locations
3. Ability for a peaking unit to obtain CRIS rights from their capacity regions to other capacity regions at least equal to the size of the peaking unit in those other capacity regions

Each of these 3 criteria will be addressed in following slides

Capacity Zone Criterion #1: Screen

The NYISO proposes to use a modified version of a formula used by the NYSRC as a screen

- ◆ Modified “Capacity + Import divided by Load” ratio
 - *Capacity as it is used here is in terms of ICAP*
 - *“Imports” include both internal and external supply*
- ◆ The ratios will be modified from the ratios used by the NYSRC such that ICAP from Localities that have Minimum Locational Capacity Requirements (currently Zones J and K) cannot contribute to the numerator (*i.e.*, the “Import” ability).
 - *To the extent a Locality outside the geographic region being examined has ICAP greater than its total ICAP Requirement the incremental amount can be considered to be available in the potential new capacity zone.*
 - *This criterion is similar to the manner in which the UCAP Auctions clear*
- ◆ If the modified ratio less the then current FERC-accepted Installed Capacity Requirement (*e.g.*, 118%) is less than an applied margin threshold, that ratio would “pass” the screen
 - *The NYISO proposes setting the margin threshold at 40%*
- ◆ Only if an area passes this first screen, would Criteria #2 and #3 be applied

Capacity Zone Criterion #1: Screening Ratio 2010 Example

Below is the Screening Ratio based on data from the NYSRC LCR Studies. I and J are limited in imports to K's excess ICAP

Zone(s)	Cap+Imp/Load	Ratio less ICR	Pass Margin Threshold?
A	340%	222%	No
B	207%	89%	No
C	381%	263%	No
D	967%	849%	No
E	790%	672%	No
F	428%	310%	No
G	458%	340%	No
H	1336%	1218%	No
I	569%	451%	No
J	135%	18%	Yes
K	158%	40%	No
NYCA	131%	13%	Yes
G-K	135%	17%	Yes
F-K	139%	21%	Yes
G-I	242%	124%	No

Installed Cap Reqt (ICR) 118%
Margin Threshold 40%

Capacity Zone Criterion #2: CONE Difference

The NYISO proposes that if the CONE for the peaking unit in the geographic region being examined is $>20\%$ of the CONE for the peaking unit in a neighboring Locality or ROS, this criterion is satisfied

- ◆ The NYISO is continuing to examine the use of “Net CONE” that would reflect the entry cost less Energy and Ancillary Services revenues
 - *Using Net CONE could delay formation of a new capacity zone*
 - *There is no identified harm in having a capacity zone that may not bind as it will clear at the NYCA price, as recently experienced with Zone K*

CONE and Net CONE Difference

The NYISO proposes that the CONE and Net CONE differences be examined based on new ICAP Demand Curve parameters presently under development

	Peaker	CONE (\$/kW)	Net CONE (\$/kW-yr)
Zone F ¹	2x7FA	840	89.79
LHV ² (G-K)	2xLMS100	1535	123.80
		+83%	+38%

Projected 2011 LHV zone Clearing Prices
Summer: \$5.18
Winter: \$1.65 (set by ROS)

Notes:

- 1) Per Table 5, NYISO Demand Curve Recommendations, 8/13/2010
- 2) Based on NERA Model V1_06 dated 8/16/2010, 1% excess, 115% zero crossing

Capacity Zone Criterion #3: CRIS Rights/Deliverability

The NYISO proposes that if sufficient CRIS rights equivalent to the MW of the new entrant peaking unit are not available without payment for SDUs, then this criterion to establish a new capacity zone is met

- ◆ Class Year 2008 Facilities Study (11/2009) indicates SDU needs of 275 MW on the UPNY-SENY Interface (“Highway”) between Zones F and G
- ◆ This situation is present at the ATBA level (Annual Transmission Baseline Assessment), thus not even partial CRIS rights are available for new suppliers in Zones A-F unless they pay for SDUs

Capacity Zone Criteria: Next Steps

Obtain feedback from stakeholders at ICAPWG meeting on August 30 and September 16, along with comments in writing

FERC Compliance Filing

- ◆ The NYISO proposes that all three criteria presented above for establishing a new capacity zone be
 - *Filed by October 5, 2010 in satisfaction of the Compliance Filing requirements for new capacity zone criteria, as directed by FERC in its June 30, 2009 Order*
 - *Incorporated into new tariff provisions that would be vetted with stakeholders and filed with FERC. Tariff provisions would provide that if the 3 criteria are satisfied, the establishment of a new capacity zone would be reviewed in the stakeholder process, and that there would be a Section 205 filing*

Capacity Zone Formation: Steps

- ◆ When evaluating a possible new capacity zone, the NYISO would consult with the NYS Reliability Council
- ◆ Establishing a new capacity zone would be subject to
 - *NYISO stakeholder process*
 - *Review by the Independent Market Advisor*
 - *NYISO Board approval*
 - *Filing with FERC for a new capacity zone*

Capacity Zone Implementation: Process

Below is a partial list of issues regarding the process to establish and implement new capacity zones

- ◆ Timing of the implementation of any new capacity zone (after it is identified)
 - *Should a new capacity zone only be implemented at the start of a Capability Year; if not, what are the issues if a new capacity zone was established during a Capability Year*
 - *Should a new capacity zone be implemented only concurrent with the Demand Curve reset for the NYCA and existing Localities?*
- ◆ Demand Curve issues:
 - *Peaking unit*
 - *Demand Curve zero crossing point*
 - *Energy and Ancillary Services revenues to determine Net CONE*
- ◆ Software development issues: market interface; Capacity Auctions
 - *Schedule to make software changes, and inclusion in budget priorities*
 - Software changes would be made in a manner to allow further capacity zones to be added without systems rework
 - Initial estimate of schedule for this effort would likely prevent a new capacity zone from being formed before the Demand Curve reset process for the 2014/17 curves

The NYISO will develop and discuss with stakeholders a proposed process after considering stakeholder comments on these any other issues

Stakeholder Written Comments

- ◆ Stakeholders written comments should be provided by September 7, 2010 to plemme@nyiso.com
- ◆ Please indicate on the comments whether they are confidential or whether they can be posted

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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