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# nyiso Installed Capacity Manual

7.25.03 Draft Version 4.1

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#### This document was prepared by:

New York Independent System Operator 3890 Carman Rd Schenectady, NY 12303 (518) 356 6060 www.nyiso.com

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#### 5.4 ICAP Spot Market Auction

The ISO shall conduct an ICAP Spot Market Auction to purchase Unforced Capacity which shall be used by an LSE toward all components of its LSE Unforced Capacity Obligation for each Obligation Procurement Period immediately preceding the start of each Obligation Procurement Period. The exact date of the ICAP Spot Market Auction shall be established in the applicable Capability Period on the Installed Capacity (ICAP) Market page of the NYISO website. All LSEs shall participate in the ICAP Spot Market Auction as described herein. In the ICAP Spot Market Auction, the ISO shall submit monthly Bids on behalf of all LSEs at a level per MW determined by the applicable ICAP Demand Curve established in accordance with Section 5.14.1(b) of the ISO Services Tariff and Section 5.5 of this Manual. The ICAP Spot Market Auction will set the LSE Unforced Capacity Obligation for each NYCA LSE.

Prior to the ICAP Spot Market Auction, LSEs shall certify all Unforced Capacity that will be counted toward their respective Minimum Unforced Capacity Requirement (through Bilateral Transactions, self-supply or ISO-administered auctions). Each entity that has previously committed to supply Unforced Capacity for the Obligation Procurement Period will also certify to the ISO the amount of Unforced Capacity it is using to meet those requirements. The ISO shall receive offers from qualified Installed Capacity Suppliers for the ICAP Spot Market Auction for any amount of qualified Unforced Capacity that they have not previously certified. The ISO shall also receive offers for the ICAP Spot Market Auction of Unforced Capacity for any LSE for any amount of qualified Unforced Capacity such LSE has in excess of its NYCA Minimum Unforced Capacity Requirement or Locational Minimum Unforced Capacity Requirement, as applicable.

The ICAP Spot Market Auction will be conducted and solved simultaneously for Unforced Capacity that shall be used by an LSE towards all components of its LSE Unforced Capacity Obligation for that Obligation Procurement Period using the applicable ICAP Demand Curves, as established in Section 5.5 of this Manual. LSEs that are awarded Unforced Capacity in the ICAP Spot Market Auction shall pay to the ISO the applicable Market-Clearing Price of Unforced Capacity determined in the ICAP Spot Market Auction. The ISO shall pay Installed Capacity Suppliers that are selected to provide Unforced Capacity the applicable Market-Clearing Price determined in the ICAP Spot Market Auction, except in the case of Unforced Capacity associated with In-City generation that is subject to capacity market mitigation measures, which shall receive the lesser of the applicable Market-Clearing Price or the annual mitigated price cap, as applied in accordance with Attachment H of the ISO Services Tariff.

The In-City Capacity bid and price caps applicable to certain In-City generation will account for differences between the amount of Unforced Capacity provided during the Summer Capability Period and the Winter Capability Period such that owners of In-City generation that is subject to capacity market mitigation measures shall have an opportunity to receive the annual mitigated price cap. These caps will be calculated according to the procedures set forth in Sections 5.2 and 5.3 of this Manual. The monthly price caps will be posted under the applicable Capability Period on the Installed Capacity

(ICAP) Market page of the NYISO website. Any entity that resells Unforced Capacity associated with In-City generation that is subject to capacity market mitigation measures shall receive no greater than the monthly mitigated price cap of Unforced Capacity as posted under the applicable Capability Period on the Installed Capacity (ICAP) Market page of the NYISO website.

If the Market-Clearing Price exceeds the total amount paid to Installed Capacity Suppliers, the ISO shall rebate the Excess Amount pursuant to Section 5.15 of the ISO Services Tariff. In-City generation that is subject to capacity market mitigation measures may be sold to meet NYCA LSE Unforced Capacity Obligations in the ICAP Spot Market Auction, provided the New York City Locational Unforced Capacity Requirement has been met. The ISO shall allocate the excess amount to all LSEs with Locational Minimum Installed Capacity Requirements located in the New York City Locality, except NYPA, pursuant to Section 5.15 of the ISO Services Tariff.

#### 5.5 Demand Curve and Adjustments

Three (3) ICAP Demand Curves will be established: one to determine the locational component of LSE Unforced Capacity Obligations for the New York City Locality, one to determine the locational component of LSE Unforced Capacity Obligations for the Long Island Locality and one to determine the total LSE Unforced Capacity Obligations for all LSEs. Each ICAP Demand Curve is set based upon the localized, levelized cost of a gas turbine at the NYCA Minimum Installed Capacity Requirement or the Locational Minimum Installed Capacity Requirement, as applicable, and associated Energy and Ancillary Services revenues. The ICAP Demand Curves will be phased in over three (3) Capability Years beginning in 2003. Each ICAP Demand Curve shall be established within the following fixed, annual ICAP parameters which shall be translated to a dollars per kilowatt-year of Unforced Capacity basis.

	<u>Year 1</u> (Ends April 30, 2004)	<u>Year 2</u> (Begins May 1, 2004)
	\$/kW-year of ICAP	\$/kW-year of ICAP
Total	\$56.24 @ 100% \$0.00 @ 112%	\$67.49 @ 100% \$0.00 @ 112%
LI	\$104.37 @ 100% \$0.00 @ 118%	\$123.94 @ 100% \$0.00 @ 118%
NYC	\$127.89 @ 100% \$0.00 @ 118%	\$151.14 @ 100% \$0.00 @ 118%

NOTE: All percentages are in terms of the applicable NYCA Minimum Installed Capacity Requirement and Locational Minimum Installed Capacity Requirement.

NOTE: All annual dollar values will be translated into monthly values by dividing by twelve (12) and rounding to the nearest cent.

NOTE: The ICAP Demand Curves for each monthly ICAP Spot Market Auction are posted under the applicable Capability Period on the NYISO website at http://www.nyiso.com/markets/icapinfo.html.

In the third year, the costs assigned by the ICAP Demand Curves to the NYCA Minimum Installed Capacity Requirement and each of the Locational Minimum Installed Capacity Requirements will be defined by the results of the independent review conducted pursuant to this Section. The respective point at which each Demand Curve crosses zero, expressed in terms of a percentage of the NYCA Minimum Installed Capacity Requirement or each of the Locational Minimum Installed Capacity Requirements, as applicable, will be fixed through the 2005/2006 Capability Year. These dollar figures will also be translated each year to dollars per kilowatt-year of Unforced Capacity.

#### 5.6 Periodic Independent Review

Except as provided in the previous Section, a periodic independent review of the ICAP Demand Curves will be performed every three (3) years to determine whether the parameters of the ICAP Demand Curves should be adjusted. Among other criteria, the review will determine the current localized levelized embedded cost of gas turbines in each NYCA Locality and the Rest of State and associated Energy and Ancillary Services revenues.

Each periodic independent review, which will include stakeholder input, will be completed by November 1 for the subsequent Capability Year, except the first periodic independent review, which will be concluded by December 31, 2004. The first periodic review will be initiated immediately following the Summer 2003 Capability Period, and the recommendations will be received not later than December 31, 2004 in time to determine the ICAP Demand Curves to be applied for the 2005-2006 Capability Year.

Once these recommendations are received, they shall be issued to stakeholders and the New York State Public Service Commission ("PSC"), who shall be given an opportunity to provide input to the NYISO concerning the review. Upon consideration of each review and input thereon from stakeholders and the PSC, but prior to NYISO Board approval, the NYISO shall issue three (3) proposed ICAP Demand Curves.

Any stakeholder, including the PSC, shall have thirty (30) days within which to request an opportunity to provide the NYISO Board with supplemental information for its consideration when acting on the proposed ICAP Demand Curves. Upon receipt of such

a request, a NYISO Board subcommittee shall be convened, upon notice to all parties, to review filed information and to hear oral arguments on the issues that have been raised.

After considering the proposed ICAP Demand Curves and any comments related thereto, the NYISO Board shall issue three (3) final ICAP Demand Curves and shall file them for approval at FERC. Once the ICAP Demand Curves have been approved by FERC, they shall remain binding for the 3-year period until the next review, absent exigent circumstances.

#### 5.7 Supplemental Supply Fee

Any LSE that has not met its share of the NYCA Minimum Installed Capacity Requirement or its share of the Locational Minimum Installed Capacity Requirement after the completion of an ICAP Spot Market Auction shall be assessed a supplemental supply fee. –The supplemental supply fee shall be calculated based on the localized levelized embedded cost of a gas turbine, as set forth in the Table below multiplied by one and one half (1.5), divided by twelve (12), rounded to the nearest cent and multiplied by the number of MWs the LSE needs to meet its share of the NYCA Minimum Installed Capacity Requirement or its share of the Locational Minimum Installed Capacity Requirement or its share of the Locational Minimum Installed Capacity Requirement for MWs the untiplied by the number of MWs the deficient LSE needs to meet its share of MWs the deficient LSE needs to meet its share of the NYCA Minimum Installed Capacity Requirement or its share of MWs the deficient LSE needs to meet its share of MWs the deficient LSE needs to meet its share of MWs the deficient LSE needs to meet its share of the NYCA Minimum Installed Capacity Requirement.

The ISO will attempt to use these supplemental supply fees to procure Unforced Capacity at <u>athe lowest available</u> price <u>less than or equal to the applicable Market-Clearing Price of</u> <u>Unforced Capacity determined in the Installed Capacity Spot Market Auction</u> from Installed Capacity Suppliers that are capable of supplying Unforced Capacity prior to the ICAP Spot Market Auction; 2) Installed Capacity Suppliers that offered Unforced Capacity at levels above the ICAP Spot Market Auction Market-Clearing Price; and 3) Installed Capacity Suppliers that different Installed Capacity Suppliers offer the same price, the ISO will give preference to Installed Capacity Suppliers that were not qualified to supply Capacity prior to the ICAP Spot Market Auction.

Offers from Installed Capacity Suppliers are subject to review pursuant to the NYISO Market Monitoring Plan-Market Mitigation Measures (Attachment H to the ISO Services Tariff). Installed Capacity Suppliers selected by the ISO to provide Capacity after the ICAP Spot Market Auction will be paid a negotiated price, subject to the standards, procedures and remedies in the NYISO Market Monitoring Plan-Market Mitigation Measures.

The ISO will not pay an Installed Capacity Supplier more than the applicable supplemental supply feeMarket-Clearing Price of Unforced Capacity determined in the Spot Market Auction per MW of Unforced Capacity, or, in the case of In-City generation that is subject to capacity market mitigation measures, the annual mitigated price cap per

MW of Unforced Capacity, whichever is less, pro-rated to reflect the portion of the Capability Period for which the Installed Capacity Supplier provides Unforced Capacity. Any remaining monies collected by the ISO pursuant to Section 5.14.1 of the ISO Services Tariff will be applied in accordance with Section 5.14.3 of the ISO Services Tariff.

Beginning with the first ICAP Spot Market Auction held no less than five days after FERC approval of the ISO's Demand Curve filing, the following localized levelized embedded cost of gas turbines in the New York City Locality, the Long Island Locality, and Rest of State, respectively, times one and one-half (1.5) and adjusted in accordance with Section 5.6 of this Manual will be used to set the supplemental supply fees and deficiency charge in the New York City Locality, the Long Island Locality, or elsewhere in the NYCA.

	Levelized Costs of Gas <u>Turbines</u>	Deficiency Charges <del>Supplemental Supply</del> Fee
In-City New York City (LBMP Load Zone J)	\$159/kW-yr. of ICAP	\$238.50/kW-yr. of ICAP (\$19.88/kW-month of ICAP)
Long Island (LBMP Load Zone K)	\$139/kW-yr. of ICAP	\$208.50/kW-yr. of ICAP (\$17.38/kW-month of ICAP)
All Other LBMP Load (All other LBMP Load Zones in the NYCA)	\$85/kW-yr. of ICAP	\$127.50/kW-yr. of ICAP (\$10.63/kW-month of ICAP.)

NOTE: These dollar figures will be translated each year to dollars per kilowatt-year of Unforced Capacity in accordance with Section 2.5 of this Manual.

NOTE: All annual values will be translated into Unforced Capacity terms and monthly values by dividing by twelve (12) and rounding to the nearest cent. These values will be posted on the NYISO website at http://www.nyiso.com/markets/icapinfo.html.

## **5.8 ICAP Supplier Shortfalls and Deficiency Payments**

In the event that an Installed Capacity Supplier sells more Unforced Capacity than it is qualified to sell in any specific month in the Capability Period or Monthly Auctions, the Installed Capacity Supplier shall be deemed to have a shortfall for that month. To cover this shortfall, the Installed Capacity Supplier shall purchase sufficient Unforced Capacity in the relevant Monthly Auction or through Bilateral Transactions, and certify to the ISO consistent with the timeline posted under the applicable Capability Period on the Installed Capacity (ICAP) Market page of the NYISO website that it has covered such shortfall. If the Installed Capacity Supplier does not cover such shortfall or if it does not certify to the ISO in a timely manner, the ISO shall prospectively purchase Unforced Capacity on behalf of that Installed Capacity Supplier in the appropriate ICAP Spot Market Auction or, in the event of shortages in that auction, through post-ICAP Spot Market Auction Unforced Capacity purchases to cover the remaining shortfall.

In the event that an External Installed Capacity Supplier fails to deliver to the NYCA the Energy associated with the Unforced Capacity it committed to the NYCA due to a failure to obtain appropriate transmission service or rights, the External Installed Capacity Supplier shall be deemed to have a shortfall from the last time the External Installed

Capacity Supplier "demonstrated" delivery of its Installed Capacity Equivalent ("ICE"), or any part thereof, until it next delivers its ICE or the end of the term for which it certified the applicable block of Unforced Capacity, whichever occurs first, subject to the limitation that any prior lack of demonstrated delivery will not precede the beginning of the period for which the Unforced Capacity was certified. An External Installed Capacity Supplier deemed to have a shortfall shall be required to pay to the ISO a deficiency charge equal to one and one-half times the applicable Market-Clearing Price of Unforced Capacity as determined in the Spot Market Auction multiplied by the number of MWs the Installed Capacity Supplier is deficientas set forth in Section 5.14.1(c) of the ISO Services Tariff, pro-rated for the number of hours in the month that External Installed Capacity Supplier is deemed to have a shortfall (*i.e.*, (((deficiency charge  $\div 12 \text{ months}) \div$  total number of hours in month of shortfall) \* number of hours the shortfall lasted) \* number of MWs of shortfall).

The ISO shall submit a Bid, calculated pursuant to Section 5.14.1 of the ISO Services Tariff, in the appropriate ICAP Spot Market Auction on behalf of an Installed Capacity Supplier deemed to have a shortfall as if it were an LSE. Such Installed Capacity Supplier shall be required to pay to the ISO the applicable Market-Clearing Price of Unforced Capacity established in that ICAP Spot Market Auction. In the event that the ICAP Spot Market Auction clears below the NYCA Minimum Installed Capacity Requirement or the Locational Minimum Installed Capacity Requirement, whichever is applicable to the Installed Capacity Supplier, the Installed Capacity Supplier shall be assessed the applicable Market-Clearing Price of Unforced Capacity as determined in the Spot Market Auction multiplied by the number of MWs the Installed Capacity Supplier needs to meet the applicable deficiency charge based on the localized levelized embedded cost of a gas turbine, as set forth in the Table above, multiplied by one and one half (1.5), divided by twelve (12), times the amount of its shortfall.

If an Installed Capacity Supplier is found, at any point during a Capability Period, to have had a shortfall for that Capability Period, *e.g.*, when the amount of Unforced Capacity that it supplies is found to be less than the amount it was committed to supply, the Installed Capacity Supplier shall be retrospectively liable to pay the ISO the applicable <u>deficiency charge-supplemental supply fee equal to one and one-half times the applicable</u> <u>Market-Clearing Price of Unforced Capacity as determined in the Spot Market Auction</u> <u>multiplied by the number of MWs the Installed Capacity Supplier is deficient</u>.

Any remaining monies collected by the ISO pursuant to Sections 5.14.1 and 5.14.2 of the ISO Services Tariff will be applied as specified in Section 5.14.3 of the ISO Services Tariff.

#### **5.9 Timing of Auctions**

The ISO will develop a Capability Period Timeline *that will attempt to* ensure that:

1. A Capability Period Auction where Unforced Capacity shall be made available for purchase for the entire six-month Capability Period will be