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# nyiso Stage IA Installed Capacity manual

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## 1.0 Introduction

The New York Independent System Operator's Installed Capacity manual (the "Manual") contains the Procedures that will be followed by the ISO and its customers with regard to the Installed Capacity ("ICAP") markets and auctions administered by the ISO pursuant to the ISO Services Tariff. The ICAP provisions are discussed generally at Sections 5.9 through 5.16 of the Services Tariff that was filed at FERC on February 1, 2000 and amended thereafter by subsequent filings with the FERC. FERC accepted this filing on March 29, 2000 in Order ER00-1483-000.

Installed Capacity is defined in the Services Tariff as:

"External or Internal Capacity, in increments of 100 kW, that is made available, pursuant to Tariff requirements and ISO Procedures, for the portion of an Obligation Procurement Period for which that Capacity is being used to satisfy the NYCA's Installed Capacity Requirement."

Capitalized terms used in this Manual shall have the same meaning as prescribed in the Services Tariff, unless otherwise defined, excepted or noted in this Manual.

# 2.0 Overview of ICAP Planning and Procurement Process

This section contains overviews of:

- The Major Elements of New York's Installed Capacity Planning and Procurement Process
- The NYCA Installed Reserve Margin
- The NYCA Installed Capacity Requirement Locational ICAP Requirements within the NYCA, and Limitations on ICAP from External Control Areas

The *ISO Services Tariff* references for this section of the ICAP Manual are Sections 5.10 and 5.11.

#### 2.1 Overview

- The New York State Reliability Council (NYSRC) sets the Installed Reserve Margin ("IRM") and the ISO determines the NYCA Installed Capacity Requirement in accordance with the criteria and standards of the Northeast Power Coordinating Council (NPCC) and the New York Public Service Commission (NYPSC).
- The ISO determines locational Installed Capacity requirements. Initially these are determined in accordance with the retail access agreements or the corporate restructuring agreements of New York's utilities serving Load in these areas. However, the ISO may change the locational Installed Capacity requirements, as noted in Section 2.5 of this manual.
- ISO assigns Installed Capacity Requirements, including locational Installed Capacity requirements to LSEs on a Transmission District basis.
- The ISO establishes, with the collaboration and assent of Market Participants, standards, qualifications and requirements that will apply to potential Installed Capacity Suppliers that are Internal and External to the NYCA.
- The ISO determines the amount of Installed Capacity that Installed Capacity Suppliers may offer within the New York Control Area based upon these standards and qualifications.

- The ISO determines the amount of Installed Capacity that may be supplied by resources that are External to the NYCA, as specified in Section 2.6 of this manual.
- The ISO conducts regularly scheduled ICAP auctions before and during each Obligation Procurement Period.
- Load Serving Entities procure adequate Installed Capacity from Installed Capacity Suppliers, either bilaterally or through ISO administered auctions, to meet their requirements.
- The ISO monitors the compliance of LSEs and Suppliers with the rules and procedures set forth in the ISO Services Tariff and this manual and has the authority to impose sanctions on, or submit deficiency bids on behalf of, any entity that fails to comply with these rules and procedures.

#### 2.2 Timeline

A detailed timeline for the current and the upcoming Capability Period is appended to this manual as Attachment A. Throughout the text of this manual there are references to events that will occur on non-specific dates (*i.e.*, "early in the month"). The specific dates for the current and the upcoming Capability Period are found in Attachment A.

# 2.3 The NYCA Installed Reserve Margin

The NYCA Installed Reserve Margin is established annually by the New York State Reliability Council and is based on the NPCC standard for resource adequacy. Resource adequacy exists in New York State when the probability of disconnecting firm Load due to resource deficiency (Loss of Load Expectancy, or "LOLE") will be, on the average, no more than once in ten years after due allowance for:

- Scheduled and forced outages and scheduled and forced deratings;
- Assistance over interconnections with neighboring Control Areas and regions;
   and
- Capacity and/or Load relief from available operating procedures.

The NYSRC uses General Electric's Multi-Area Reliability Simulation (MARS) program and a base model developed by the ISO to perform this analysis. See Section 2.6 of this manual for further explanation of the development of the base model.

## 2.4 The NYCA ICAP Requirement

The ISO calculates the NYCA Installed Capacity ("ICAP") Requirement in megawatts for the Capability Year as the product of the forecasted NYCA peak Load and one plus the NYSRC Installed Reserve Margin. In deriving the Load forecast, the ISO uses weighted regional Load growth factors.

## 2.5 Locational ICAP Requirements

Due to transmission limitations into certain areas within the NYCA, LSEs serving Load in these areas must procure a percentage of their total ICAP requirement from ICAP suppliers electrically located within the constrained areas. Currently, there are two areas, called Localities, within the NYCA where locational ICAP requirements are imposed. These are the New York City and the Long Island Zones. The locational ICAP requirements applicable to these zones were established by rulings of the NYPSC and the Long Island Power Authority. For the purpose of specifying locational ICAP requirements, the remainder of the NYCA is grouped together as "All other NYCA Zones." Until the ISO makes a filing with FERC providing a methodology to determine locational requirements, and the results thereof, and FERC approves this methodology and results, the locational ICAP requirements established through the rulings of the NYPSC and the Long Island Power Authority remain in place. Maps of the NYCA Transmission Districts and NYCA Zones can be found in Attachment C. Localities that are subject to Tariff restrictions are also noted in Attachment C.

# 2.6 Limitations on ICAP from External Control Areas

The amounts of Installed Capacity that can be provided by resources outside the NYCA are constrained principally by two factors. The first is the requirement in Section 5.12.2 of the *ISO Services Tariff* that an external ICAP Supplier must:

- Demonstrate that its Installed Capacity is deliverable to the NYCA and will not be recalled or curtailed to satisfy the Load of the external Control Area; or
- Demonstrate that the external Control Area in which it is located will afford NYCA Load the same curtailment priority that it affords its own Control Area native Load.

Only neighboring Control Areas that meet one of these criteria will be included in the modeling described below.

The second constraint results from transmission limitations. The ISO will determine the amount of Installed Capacity that may be procured from resources External to New York while meeting the NPCC reliability criterion described in Section 2.3. These studies will be conducted using the methodologies, assumptions and sensitivities recommended by the NYSRC in consultation with the ISO and which determine the NYCA Installed Reserve Margin.

## 2.7 Expansion Rights

The allocation of ICAP associated with transmission expansions has not been addressed in this Manual.

# 3.0 ICAP Requirements of Load Serving Entities

This section contains information and procedures related to:

- Calculating of the NYCA ICAP Requirement
- The transmission district ICAP requirements
- Establishing an LSE's Installed Capacity requirement for the Obligation Procurement Period
- Load shifting
- Procedures for calculating locational ICAP requirements of LSEs
- Grandfathered external ICAP resources
- The Installed Capacity adjustment for firm capacity sales by NYPA

The ISO Services Tariff references for this section of the ICAP Manual are Section 5.10 and 5.11.

# 3.1 The Calculation of the NYCA ICAP Requirement

The ISO calculates the NYCA ICAP Requirement in megawatts for the Capability Year as the product of the forecast NYCA peak Load and one plus the NYSRC Installed Reserve Margin. The ISO arrives at the forecast NYCA peak Load by applying a growth factor to the NYCA's prior calendar year's Adjusted Actual Peak Load. As described in Section 4.11.3, the peak Load will be adjusted in the event that a Special Case Resource was in operation at the time of the system peak.

The ISO forecast is arrived at through a process that compares the growth rate derived from the Transmission District forecast growth rates and the ISO forecast growth rates. The regional Load growth factors proposed by the Transmission Owners will be evaluated by the ISO using criteria and procedures described in the NYISO Load Forecasting Manual. For detailed Load forecasting methodology, refer to the NYISO Load Forecasting Manual.

By January 15 of each year, each Transmission Owner and municipal electric utility shall submit to the ISO a weather-adjusted peak Load forecast for the upcoming Capability Year which includes proposed regional Load growth factors for the Load within its Transmission District. Municipal electric systems may produce their own forecasts for the Loads within a TD, or use the TO's or ISO's forecasted growth rate for its Load in the TD. The ISO produces the peak Load forecast for the Transmission District by combining the forecasts of the Transmission Owners and municipal electric systems.

Also, by February 15 of each year, each Transmission Owner shall also submit to the ISO aggregate peak Load data, coincident with the Transmission District peak, for all customers served by each LSE within its Transmission District, excluding those served by the municipal electric systems. This data shall reflect verified Load-shifting through December 31 of the previous year and may be derived from direct meters or Load profiles of customers served.

Procedures for resolving disagreements between Transmission Owners and the ISO or involving other market participants will be resolved according to the Expedited Dispute Resolution Procedures contained in the ISO Services Tariff.

# 3.2 Transmission District Installed Capacity Requirements

The Installed Capacity requirement for each Transmission District will be calculated as the product of the NYCA Installed Capacity requirement and the ratio of Transmission District's forecast peak Load to the sum of the forecast peak Loads for all Transmission Districts. In equation form:

$$ICR_t = ICR_{NYCA} * OIPL / \sum_{S \in T} oipl_s$$

Where:

ICR<sub>t</sub> = Installed Capacity requirement for a Transmission District t;

ICR<sub>NYCA</sub> = Installed Capacity requirement for the NYCA;

OIPL<sub>t</sub> = Forecast Capability Year One-Hour independent Peak Load for TD t;

T = the set of all Transmission Districts;

OIPL<sub>s</sub> = Forecast Capability Year One-Hour independent Peak Load for TD s within set T.

# 3.3 Establishing an LSE's Installed Capacity Requirement for the Obligation Procurement Period

The Installed Capacity requirement of each LSE for the Capability Period will be calculated in two steps prior to the first day of the Obligation Procurement Period. The first calculation is an initial Installed Capacity requirement ("ICR"), provided to each LSE in March for the Summer Capability Period, which reflects verified Load-shifting through the end of February. The second calculation is made in early April, when the ISO provides each LSE with its beginning Summer Capability Period ICR. The second calculation is binding with regard to the LSE's obligation to purchase ICAP prior to the Obligation Procurement Period.

The ICAP requirement for each LSE will be calculated separately for each Transmission District in which it serves Load. The requirement is based upon the LSE's contribution to each transmission district's forecast peak based on actual contributions to the Transmission District's peak Load for the prior calendar year.

The precise formulation of the requirement is as follows:

 $ICR_{x,t} = ICR_t * CPD_{x,t} / OIPL_t$ 

where:

ICR <sub>x,t</sub> = Initial Installed Capacity requirement for LSE x within TD t;

ICR<sub>t</sub> = Installed Capacity requirement for Transmission District t;

 $CPD_{xt}$  = Demand for LSE x coincident with the forecasted Peak Load for Transmission District t during the Capability Year;

OIPL<sub>t</sub> = Forecast Capability Year One-Hour independent Year Peak Load for TD t.

Each LSE must submit completed Installed Capacity certification forms to the ISO by April 20<sup>th</sup> and October 20<sup>th</sup> of each year demonstrating that it has obtained sufficient Installed Capacity for the following Capability Period. In addition, no later than the twentieth (20<sup>th</sup>) day of each month, each LSE must submit completed Installed Capacity certification forms to the ISO demonstrating that it has obtained sufficient Installed Capacity for the following month and the balance of the Capability Period prior to the beginning of the following month. The certification forms shall, at a minimum, require LSEs to: (i) designate the total amount of Installed Capacity they have procured; (ii) specify how much Installed Capacity is associated with resources

located in each ISO defined Locality, the remainder of the NYCA and each External Control area; and (iii) identify any Installed Capacity Supplier from which they have procured Installed Capacity pursuant to Bilateral Transactions.

## 3.4 Load Shifting

By March 7 of each year, Transmission Owners shall submit an initial forecast and data which will reflect verified Load-shifting that occurred during the prior calendar year. In addition to the initial forecasts and data submitted to the ISO, the Transmission Owner must provide documentation, in the form of copies of notification letters, that each affected LSE has been provided data regarding the customers assigned to it. Transmission Owners shall submit finalized Load-shifting information by April 1 for the preceding calendar year. This information shall be submitted to the ISO and to each LSE affected by the Load-shifting.

Based on documented Load-shifting adjustments through the end of February, the ISO shall calculate a preliminary Installed Capacity requirement for each LSE. By March 22 of each year the ISO will provide each LSE with its preliminary Installed Capacity requirement estimate. The ISO will notify each LSE of its final Installed Capacity requirement by April 10<sup>th</sup> of each year, which shall reflect documented Load-shifts as of April 1st that are scheduled to occur before May 1st. In the event of a dispute as of April 10<sup>th</sup> regarding a Transmission Owner's forecast, the ISO shall nevertheless establish each LSE's final Installed Capacity requirement, subject to possible adjustments required from a resolution of the dispute.

The Transmission Owners will update the ISO and the affected LSEs every month concerning Load shifting. Each Transmission Owner will provide the updated aggregated LSE Loads to each LSE serving Load in the Transmission District and the ISO by the 7th calendar day of each month. Each update will reflect Load-shifting through the end of the prior month.

Based on Load shifting, the ISO will make monthly adjustments to each LSE's ICAP requirement for the following month to reflect an individual LSE's gain and loss of Load. The adjustment will be made in such a way as to keep the total ICAP requirement for the Transmission District constant. By the 10<sup>th</sup> calendar day of each month, the ISO will inform each LSE of monthly adjustments the ISO makes to each LSE's ICAP requirement for the following month.

See the Capability Period Time line in Attachment A for additional details concerning the schedule of updates and notification requirements related to monthly Loadshifting.

# 3.4.1 Assignment of ICAP Obligation for a New Customer in a Transmission District

A new customer will be defined as any entity with a new service connection for which the Transmission Owner cannot identify the entity's contribution to the relevant prior peak period. The ICAP requirements related to new customers are estimated by Transmission Owners and are reflected in the Load growth assumptions of the Capability Year forecasts provided by the Transmission Owners and approved by the ISO. Load growth assumptions typically include a component for new customers and a component for existing customers.

All Load growth will initially be included in the ICAP obligation of LSEs in that Transmission District. There are two different methods that shall be used to adjust the ICAP obligations of LSEs serving Load in that Transmission District when new Loads enter that Transmission District.

- To the extent that a Transmission Owner has the ability to assign an estimated peak Load coincident with the TD peak Load to a new customer in its Transmission District, it shall be permitted to do so. The LSE serving that new customer shall assume the ICAP obligation. The ICAP obligation of each LSE serving Load within that Transmission District shall be reduced by its share of the new customer's total ICAP obligation which is assumed by the LSE serving that new customer.
- In the absence of a direct assignment mechanism, the ICAP obligation of each LSE serving Load within that Transmission District will not be normalized.

The following procedures will be used to account for the direct assignment of an ICAP obligation for a new customer within the Obligation Procurement Period.

- The relevant Transmission Owner shall notify the ISO and the relevant LSE of the new customer's Load based on its estimated peak Load coincident with the TD peak Load.
- The ISO shall normalize the ICRs of all LSEs serving Load in the Transmission District at the time of the new customer's assignment to the relevant LSE such that the total ICAP requirement for the Transmission District remains constant.

If a dispute occurs concerning the assignment of ICAP obligations related to new customers, it will be handled according to Section 3.4.4 of this manual. If the direct assignment of the ICAP obligation for a new customer takes place within the Obligation Procurement Period, the LSE with the new customer obligation shall be required to have sufficient ICAP to cover that assignment on a prospective basis for

the duration of the Obligation Procurement Period on the first day of the month after the first monthly auction following the assignment.

#### 3.4.2 Load Lost due to Departing Customers

To account for Load lost when a customer leaves New York State, the ISO will:

- Reduce the ICR of the Load-losing LSE within the Transmission District,
- Relieve the LSE responsible for the ICAP obligation of the departing customer of
  that obligation. The LSE may sell any excess ICAP. In order for the Load-losing
  LSE to be relieved of this obligation, the Transmission Owner must notify the
  ISO of the customer's departure, by providing adequate supporting
  documentation that it has left New York State. (For example, either a countersigned letter between the Transmission Owner and the departing customer, or
  documentation that the departing customer has requested service disconnection
  would meet this requirement.)
- Normalize the ICRs of all LSEs serving Load in the Transmission District at the time (including the Load-losing LSE) in the relevant Transmission District such that the total ICAP requirement for the Transmission District remains constant.

Within 2 business days, the ISO will notify the LSE that (a) it has either been relieved of the ICAP obligation of the departing customer, or (b) the notification and supporting documentation is deemed inadequate, in which case the LSE must continue to carry the ICAP associated with the departing customer until such time as it has satisfied the ISO's documentation requirement. When informing an LSE that its documentation is inadequate, the ISO will provide guidance as to how the documentation could be made acceptable.

#### 3.4.3 Financial Arrangements to Cover Load Shifting

If a customer switches LSEs or if LSE Load is normalized pursuant to 3.4.1, the following financial arrangements will be executed. Refer to Section 5 of this manual for details concerning the monthly ICAP auctions referred to below. Also refer to Section 5.11.3 of the Tariff.

• The Load-gaining LSE will financially cover the ICAP associated with its new customer by paying the Load-losing LSE for each day that the Load-gaining LSE serves that new customer, until the first day of the next month after the next regular monthly ICAP auction, after the ICR to the LSE reflects the switch.

- The ISO will use the monthly ICAP billing cycle to bill the Load-gaining LSE, for the period referred to directly above, in the same month as the auction referred to directly above.
- The rate that will be used to calculate this financial exchange will be the monthly clearing price established at the most recent previous regular ICAP auction for that month, pro-rated on a daily basis. If the most recent previous regular ICAP auction did not clear, the rate that will be used will be the average monthly clearing price prorated on a daily basis as established in the pre-Obligation Procurement Period strip auction.
- If the Load-losing LSE received a rebate associated with the lost Load (see Section 5.12 of this manual for information concerning rebates), a proportionate share of the rebate will reduce the amount paid by the Load-gaining LSE.

#### 3.4.4 Disputes Related to Load Shifting

Any disputes among market participants concerning Load-shifting shall be resolved either by the ISO Expedited Dispute Resolution Procedures (as set forth in Section 5.16 of the ISO Service Tariff), or the relevant Transmission Owner's retail access procedures, as applicable.

If a dispute occurs, the ISO will make its monthly ICAP adjustments as if the Loadshift had occurred as reported by the Transmission Owner and will retroactively modify these adjustments based on the outcome of the applicable Dispute Resolution Procedure, if necessary.

# 3.5 Procedures for Calculating the Locational ICAP Requirements of LSEs

# 3.5.1 Minimum Requirements for LSEs Serving Loads within Localities

LSEs serving Loads within Localities will be required to obtain a certain percentage of their total Installed Capacity from resources in that Locality. The Locational Installed Capacity requirement for an LSE within a Locality will be calculated as follows:

 $LICAP_{x, p} = ICR_{x, p} * (LP_p * PK_p) / ICR_p$ 

1	1	
w	nere	•
vv		

LICAPx,p = the locational Installed Capacity requirement for LSE x for Locality p;

ICRx,p = the Installed Capacity requirement for LSE x for Locality p;

LPp = the percentage of the Locality p forecast peak Load that must be procured within the Locality p;

PKp = the forecast peak Load for Locality p;

ICR,p = Installed Capacity requirement for all Load in Locality p (which is calculated by submitting the Locality p for the Transmission

District t in the equations in Sections 3.2 and 3.3)

# 3.6 Grandfathered External ICAP Resources

The ISO will make adjustments to the allocations of External Capacity rights to LSEs to ensure that all LSEs holding rights to grandfathered External Installed Capacity resources will be able to access these resources to satisfy their Installed Capacity requirement. In some cases, this may result in grandfathering adjustment factors of less than one to ensure that the total rights allocated to import External Installed Capacity do not exceed the total amount of Installed Capacity that the ISO has determined can be located outside the NYCA (either in total or in any single Control Area).

# 3.7 Installed Capacity Adjustment for Firm Capacity Sales by NYPA

In cases in which NYPA sells firm Capacity to an existing New York Transmission Owner, a municipal or cooperative system or to a neighboring state bargaining agency from the Niagara, St. Lawrence or Fitzpatrick generating plants, an adjustment factor is applied by NYPA to determine the number of MW that each such purchaser of NYPA firm capacity may count towards its Installed Capacity requirement.

# 4.0 ICAP Requirements Applicable to Installed Capacity Suppliers

Generators, Installed Capacity Marketers, Interruptible Load Resources, Special Case Resources, Energy Limited Resources and System Resources may be qualified as Installed Capacity Suppliers if they meet the ISO's requirements. Generators and System Resources may be physically located in the NYCA, or in an External Control Area which meets the recall and curtailment procedures and the locational limitations specified in Section 2.5 of this manual.

#### Section 4 contains:

- An overview of the ISO's requirements applicable to ICAP Suppliers
- The procedures applicable to entities belonging to one of the aforementioned categories of resource in order for those resources to be qualified as an ICAP Supplier
- The bidding and scheduling procedures that must be followed by ICAP Suppliers
- The sanctions that the ISO may assess if an ICAP Supplier does not abide by the Tariff or the procedures contained in this manual
- A summary of required actions

The ISO Services Tariff reference for this section of the manual is 5.12.

#### 4.1 Overview

The requirements that must be met for a resource to qualify as an ICAP Supplier are generally stated below. Detailed requirements and procedures applicable to specific categories of resources are contained later in this Section.

#### An ICAP Supplier must:

- Provide the ISO with the name and location of any Resource that it controls
- Provide the ISO with all required documentation

- Comply with the reporting requirements contained in this manual
- Abide by the outage coordination procedures for ICAP Resources
- Inform the ISO of the expected return date from any outages
- Provide documentation to the ISO that it has not sold the same ICAP to more than one entity at a time
- Comply with scheduling and bidding requirements

# 4.2 Operating Data Reporting Requirements (Section 5.12.5 ISO Services Tariff)

New York uses an Installed Capacity ("ICAP") methodology to determine the amount of Installed Capacity each Resource is qualified to sell in the New York market. The Installed Capacity methodology assures that Resources are available to serve Load, while accounting for Planned, Maintenance and Forced Outages.

Installed Capacity Suppliers shall submit Operating Data to the ISO every month in accordance with the following subsections. Installed Capacity Suppliers that do not comply with the following subsections shall be subject to the sanctions provided in Section 5.12.12 of the Services Tariff.

#### 4.2.1 Generators

Generators shall submit to the ISO GADS Data or data equivalent to GADS Data in accordance with the 82-character fixed format provided in Attachment K of this Manual.

Generators shall have submitted by April 20, 2001 their GADS Data or data equivalent to GADS Data pertaining to the months of January 2000 to, and including, March 2001.

From the month of April 2001 forward, Generators shall submit by the twentieth (20<sup>th</sup>) day of each month GADS Data or data equivalent to GADS Data pertaining to the previous month. For example, Generators shall submit by May 20, 2001 GADS Data or data equivalent to GADS pertaining to their operations during the month of April 20, 2001.

#### 4.2.2 System Resources

System Resources shall submit to the ISO GADS Data or data equivalent to GADS Data in accordance with the 82-character fixed format provided in Attachment K of this Manual.

System Resources shall have submitted by April 20, 2001 their GADS Data or data equivalent to GADS Data pertaining to the months of January 2000 to, and including, March 2001.

From the month of April 2001 forward, System Resources shall submit by the twentieth (20<sup>th</sup>) day of each month GADS Data or data equivalent to GADS Data pertaining to the previous month. For example, System Resources shall submit by May 20, 2001 GADS Data or data equivalent to GADS Data pertaining to their operations during the month of April 20, 2001.

#### 4.2.3 Control Area System Resources

Control Area System Resources shall submit to the ISO CARL Data and actual system failure occurrence data in accordance with Section 4.11 of this Manual. CARL Data and actual system failure occurrence data shall include all the data required in Section 4.11 of this Manual to determine the amount of Installed Capacity that each Control Area System Resource is qualified to sell in the NYCA.

Control Area System Resources shall have submitted by April 20, 2001 their CARL Data and actual system failure occurrences data pertaining to the months of January 2000 to, and including, March 2001.

#### 4.2.4 Energy Limited Resources

Energy Limited Resources shall submit to the ISO GADS Data or data equivalent to GADS Data in accordance with the 82-character fixed format provided in Attachment K of this Manual.

Energy Limited Resources shall have submitted by April 20, 2001 their GADS Data or data equivalent to GADS Data pertaining to the months of January 2000 to, and including, March 2001.

From the month of April 2001 forward, Energy Limited Resources shall submit by the twentieth (20th) day of each month GADS Data or data equivalent to GADS Data pertaining to the previous month. For example, Energy Limited Resources shall submit by May 20, 2001 GADS Data or data equivalent to GADS Data pertaining to their operations during the month of April 20, 2001.

#### 4.2.5 Interruptible Load Resources

Subject to Sections 4.2.8 of this Manual, Interruptible Load Resources shall submit to the ISO data equivalent to GADS Data, using a form to be developed.

Interruptible Load Resources shall have submitted by April 20, 2001 their data equivalent to GADS Data pertaining to the months of January 2000 to, and including, March 2001.

From the month of April 2001 forward, Interruptible Load Resources shall submit by the twentieth (20<sup>th</sup>) day of each month data equivalent to GADS Data pertaining to the previous month. For example, they shall submit by May 20, 2001 data equivalent to GADS Data pertaining to their operations during the month of April 20, 2001.

#### 4.2.6 Intermittent Power Resources

Intermittent Power Resources shall submit to the ISO data equivalent to GADS Data in accordance with the 82-character fixed format provided in Attachment K of this Manual.

Intermittent Power Resources shall have submitted by April 20, 2001 their data equivalent to GADS Data pertaining to the months of January 2000 to, and including, March 2001.

From the month of April 2001 forward, Intermittent Power Resources shall submit by the twentieth day of each month data equivalent to GADS Data pertaining to the previous month. For example, Intermittent Power Resources shall submit by May 20, 2001 data equivalent to GADS Data pertaining to their operations during the month of April 20, 2001.

#### 4.2.7 Special Case Resources

Subject to Sections 4.2.8 and 4.2.9, Special Case Resources shall submit to the ISO data equivalent to GADS Data in a manner to be determined.

Special Case Resources shall have submitted by April 20, 2001 their data equivalent to GADS Data pertaining to the months of January 2000 to, and including, March 2001.

From the month of April 2001 forward, Special Case Resources shall submit by the twentieth day of each month data equivalent to GADS Data pertaining to the previous month. For example, Special Case Resources shall submit by May 20, 2001 GADS Data or data equivalent to GADS Data pertaining to their operations during the month of April 20, 2001.

# 4.2.8 Special Case Resources that also are Interruptible Load Resources

Special Case Resources that also are Interruptible Load Resources shall submit to the ISO data equivalent to GADS Data in a manner to be determined.

Special Case Resources that also are Interruptible Load Resources shall have submitted by April 20, 2001 their data equivalent to GADS Data pertaining to the months of January 2000 to, and including, March 2001.

From the month of April 2001 forward, Special Case Resources that also are Interruptible Load Resources shall submit by the twentieth day of each month data equivalent to GADS Data pertaining to the previous month. For example, Special Case Resources that also are Interruptible Load Resources shall submit by May 20, 2001 GADS Data or data equivalent to GADS Data pertaining to their operations during the month of April 20, 2001.

# **4.2.9 Special Case Resources that also are Distributed Generators**

Special Case Resources that also are Distributed Generators shall submit to the ISO data equivalent to GADS Data in a manner to be determined.

Special Case Resources that also are Distributed Generators shall have submitted by April 20, 2001 their data equivalent to GADS Data pertaining to the months of January 2000 to, and including, March 2001.

From the month of April 2001 forward, Special Case Resources that also are Distributed Generators shall submit by the twentieth day of each month data equivalent to GADS Data pertaining to the previous month. For example, Special Case Resources that also are Distributed Generators shall submit by May 20, 2001 GADS Data or data equivalent to GADS Data pertaining to their operations during the month of April 20, 2001.

#### 4.2.10 Municipally-Owned Generation

Municipally-owned generation shall submit to the ISO data equivalent to GADS Data in accordance with the 82-character fixed format provided in Attachment K of this Manual.

Municipally-owned Generation shall have submitted by April 20, 2001 their data equivalent to GADS Data pertaining to the months of January 2000 to, and including, March 2001.

From the month of April 2001 forward, municipally-owned generation shall submit by the twentieth day of each month data equivalent to GADS Data pertaining to the previous month. For example, Intermittent Power Resources shall submit by May 20, 2001 data equivalent to GADS Data pertaining to their operations during the month of April 20, 2001.

# 4.2.11 Resources Capable of Selling Installed Capacity in New York

This subsection applies to Resources which (1) have not previously been in operation in the NYCA, (2) are not subject to the requirements of subsection 4.2.1. to subsection 4.2.8 of this Manual, and (3) want to supply Installed Capacity in the NYCA in the future.

By the tenth day of the month preceding the month when a Resource wants to supply Installed Capacity to the NYCA, the Resource shall submit to the ISO the appropriate Operating Data pertaining to its operations over the previous 12 months, if any. A Resource that wants to continue to supply Installed Capacity in the NYCA immediately thereafter shall submit, by the twentieth day of each month, the appropriate Operating Data.

For example, a Resource that wants to supply Installed Capacity during the month of July shall submit by June 10 Operating Data pertaining to the months of the previous June to May, inclusively. If the Resource wants to continue supplying Installed Capacity in the NYCA, it shall submit by July 20 the appropriate Operating Data pertaining to the month of June, and so on each month, thereafter.

# 4.2.12 Resources not in Operation for the past 12 months

A Resource that wants to qualify as an Installed Capacity Supplier, shall submit monthly Operating Data to the ISO no later than one month after that Resource commenced commercial operation, and in accordance with subsections 4.2.1 to 4.2.9 of this Manual, as applicable.

# 4.3 Operating Data, Default Value and Collection (Section 5.12.6 ISO Services Tariff)

#### 4.3.1 Default Value

In any studies or calculations requiring Operating Data, the ISO shall use NERC class averages for the for each month for which an Installed Capacity Supplier has not submitted its Operating Data in accordance with Section 5.12.5 of this Tariff and the ISO Procedures. Installed Capacity Suppliers will subject to sanctions in accordance with Service Tariff Section 5.12.12 for any month in which they do not submit Operating Data until such time as the Operating Data is submitted. Installed Capacity Suppliers may submit new Operating Data to the ISO at any time. When the ISO undertakes a new study or performs additional calculations, the ISO shall replace the class average value with such new Operating Data values submitted in accordance with Section 4.2 of this Manual.

Upon a showing of extraordinary circumstances, the ISO retains the discretion to accept at any time Operating Data which have not been submitted in a timely manner, or which do not fully conform with Section 4.2 of this Manual.

#### 4.3.2 Exception for Certain Equipment Failures

When a Generator, Special Case Resource, Energy Limited Resource, Non-Utility Generator, or System Resource is forced into an outage by an equipment failure that involves equipment located in the electric network beyond the step-up transformer, and including such step-up transformer, the outage will not be counted against the Resource for purposes of collecting that Resource's Operating Data.

#### 4.4 DMNC Test Procedures

Potential ICAP Suppliers must perform DMNC tests in accordance with the procedures described below (unless exempt in accordance with the provisions of Section 4.6 of this manual), and provide the ISO with the required documentation of those tests. Alternatively, potential ICAP Suppliers, with the exception of new Resources, may use historical production data for the immediately preceding like Capability Period, no more than twelve months old, in lieu of DMNC test data.

Installed Capacity Suppliers offering to sell ICAP as a System Resource from Generators internal external to the New York Control Area must submit DMNC test data, or historical production data, for each Generator that it seeks to aggregate.

Interruptible Load Resources must provide evidence of a one hour disconnection period less than one year old.

#### 4.4.1 DMNC Test Periods

The general DMNC Test Period for the Summer Capability Period is June 1 through September 15. The general DMNC Test Period for the Winter Capability Period is November 1 through April 15.

New Generators may be qualified at any time during a Capability Year based on the results of an appropriate demonstration test or production data. New Generators may temperature-adjust the results of the appropriate demonstration test or production data, using the procedures noted on the DMNC test results forms (Attachment D to this manual) and in the ISO Procedures. In order to qualify as an ICAP supplier for any month, new Generators must submit test results by the tenth day of the month preceding the month in which they intend to sell ICAP. In order to qualify as an ICAP supplier prior to a Summer Capability period auction, a new Generator must submit the appropriate demonstration test or production data results by March 24 of each year in which they would like to qualify as an ICAP Supplier for a Summer Capability Period auction and by September 24 if they would like to qualify as an ICAP Supplier for a Winter Capability Period auction.

Existing Generators that have increased capacity may demonstrate the DMNC of the incremental capacity for and within a Capability Period by following the procedures described in the paragraph above for new Generators.

Generators that qualify to sell ICAP during a Summer Capability Period through tests conducted prior to June 1 will be required to verify the claimed DMNC rating by performing an additional test during the Summer test period.

Generators that qualify to sell ICAP during a Summer Capability Period may use those test results to qualify for the following Winter Capability Period

Generators that qualify to sell ICAP during a Winter Capability Period through tests conducted prior to October 1 will be required to verify the claimed DMNC rating by performing an additional test during the Winter test period.

Generators that qualify to sell ICAP during a Winter Capability Period may use those test results to qualify for the following Summer Capability Period, adjusted to summer ambient weather conditions.

The ISO shall inform each potential Installed Capacity Supplier that is required to submit DMNC data of its approved DMNC ratings for the Summer Capability Period no later than February 15<sup>th</sup>, and for the Winter Capability Period no later than August 15<sup>th</sup>.

#### **4.4.2 Resource Specific Test Conditions**

The Resources listed below must meet the applicable DMNC test conditions specified below in order to be qualified as ICAP Suppliers and report the results to the ISO using the appropriate from in Attachment D.

#### **Fossil Fuel and Nuclear Stations**

Valid DMNCs for fossil fuel or nuclear steam units are determined by the following:

- a. The unit's sustained maximum net output averaged over a four consecutive hour period.
- b. For common-header turbine-generators, the DMNC is determined on a group basis. Each such turbine-generator is assigned a rating by distributing the combined capacity among them.
- c. The sum of the DMNC of individual turbine-generators in a generating station cannot be greater than the DMNC of the whole station.

#### **Hydro Stations**

Valid DMNCs for hydro units are determined by the following:

- a. The sustained maximum net output averaged over a four consecutive hour period using average stream flow and/or storage conditions within machine discharge capacity.
- b. For a multi-unit hydro station, the DMNC is determined as a group and each hydro unit in such a station is assigned a rating by distributing the combined station DMNC among them.
- c. The sum of the DMNC of individual units in a multi-unit hydro station cannot be greater than the DMNC of the whole station.

#### **Internal Combustion Units and Combustion Turbines**

Valid DMNCs for internal combustion units and combustion turbines are determined by the following:

- a. The sustained maximum net output for a one hour period.
- b. Such a unit's winter DMNC rating is determined on the basis of the average ambient and cooling system temperature experienced at the time of the Transmission District's winter peak during the previous four Winter Capability Periods.
- c. Such a unit's summer DMNC is determined on the basis of the average ambient and cooling system temperature experienced at the time of the Transmission District's summer peaks during the previous four Summer Capability Periods.

#### **Combined Cycle Stations**

Valid DMNCs for a combined cycle stations are determined by the following:

- a. The sustained maximum net output over four consecutive hours.
- b. A combined cycle station's winter DMNC rating is determined on the basis of the average ambient and cooling system temperature experienced at the time of the Transmission District's winter peaks during the previous four Winter Capability Periods.
- c. A combined cycle station's summer DMNC rating is determined on the basis of the average ambient and cooling system temperature experienced at the time of the Transmission District's summer peaks during the previous four Summer Capability Periods.

#### Intermittent, Energy Limited, Other Stations

Valid DMNCs for other units are determined by the following:

- a. The sustained maximum net output averaged over a four consecutive hour period.
- b. For a multi-unit station, the DMNC is determined as a group and each unit in such a station is assigned a rating by distributing the combined station DMNC among them.
- c. The sum of the DMNCs of individual units in a multi-unit station cannot be greater than the DMNC of the whole station.

#### 4.4.3 Treatment of Station Service Load

In general, the DMNC rating for a Generator is the amount of power delivered to the transmission grid. The DMNC rating should reflect a reduction in gross output of the Generator for station service Load. In most cases, this determination is straightforward because the Generator is connected to the transmission system, and the amount of power provided to the transmission system reflects the station service Load reduction.

In other cases, a portion of the station service Load may be provided from sources other than the Generator. In these cases, separate measurements must be made of the station service Load and subtracted from the Generator's gross output as measured at the time of the DMNC test.

In the event of disagreement concerning the station service Load for facilities that fall into the later category, the relevant Transmission Owners will provide to the ISO any information available to it which relates to the configuration of the Generator and its station service Load.

#### 4.4.4 Required DMNC Generating Capability Test Data

An entity that wants to establish a DMNC rating for its resources must complete and report the test results for each of its resources by sending the appropriate form provided in Attachment D to the ISO. The test reports include:

- 1. Kilowatt-hour meter readings from the tests to verify net output. Reproduced copies of actual log sheets are preferred where possible.
- 2. For internal combustion units, combustion turbine units, and combined cycle units, a curve of net capability vs. ambient and cooling systems temperatures, with the test result noted on the graph.
- 3. For steam units, test conditions as listed below (see also Attachment D):
  - Over pressure
  - Top feed water heater O/S
- 4. Notes explaining the reason for any failure to achieve claimed DMNC, and intended date and means of correcting the deficiency or re-rating the unit capacity.

# 4.5 Maintenance Scheduling Requirements

All resources intending to supply ICAP to the NYCA must comply with the following procedures, unless specific exceptions are noted below.

- 1. Submit a confidential notification to the ISO of proposed outage schedules for the next two calendar years by September 1st of the current calendar year.
- 2. If Operating Reserve deficiencies are projected to occur in certain weeks for the upcoming calendar year, based upon the ISO's reliability assessment, resources may be requested to voluntarily reschedule planned maintenance.
- 3. The ISO will provide the resource with alternative acceptable times for the rescheduled maintenance.
- 4. If the resource is a Generator and an ICAP Supplier, and does not voluntarily reschedule its planned maintenance within the alternative acceptable times provided by the ISO, the ISO will invoke mandatory re-scheduling using the procedures in Section 2.1 of the ISO Outage Scheduling Manual.
- 5. A resource that did not qualify as an ICAP Supplier prior to the Obligation Procurement Period and that intends to be an ICAP Supplier within the Obligation Procurement Period must provide the ISO with its proposed outage schedule for the current Capability Year and the following two calendar years, no later than the first day of the month preceding the month in which it intends to supply ICAP, so that it may be subject to the voluntary and mandatory rescheduling procedures described above.

### 4.5.1 Interruptible Load Resources

Interruptible Load Resources must comply with the following procedures.

- 1. Notify the ISO at least thirty days prior to the beginning of an Obligation Procurement Period of scheduled maintenance that would reduce their ability to interrupt during the upcoming Obligation Procurement Period.
- 2. Provide the ISO with a written commitment that any scheduled maintenance that would reduce their ability to interrupt without reducing Load will only be conducted from November 1st through March 31st of any calendar year.

#### 4.5.2 External System Resources

The ISO and the External Control Area in which the External System Resource is located will coordinate the maintenance schedules for the interconnections that link these resources to the NYCA. External System Resources are not subject to the voluntary and mandatory re-scheduling procedures described above.

### 4.5.3 Special Case Resources

Special Case Resources are not subject to maintenance scheduling requirements.

# 4.6 Bidding, Scheduling, and Notification Requirements

On any day for which it has sold ICAP, each ICAP Supplier (except as noted below) must schedule, bid or declare to be unavailable an amount of Energy that is not less than the amount of ICAP it sold from a particular resource, rounded down to the nearest whole MW.

Each Resource providing ICAP must designate the entity that will be responsible for complying with these bidding, scheduling and notification requirements.

### 4.6.1 Generators and System Resources

For every hour of any day for which Generators or System Resources sell ICAP, they must make the amount of energy associated with their ICAP commitment available to the NYCA through a combination of scheduling or bidding in the Day Ahead Market, or in accordance with the notification procedure below. See the ISO's Day Ahead Scheduling Manual and Market Participants User Guide for scheduling and bidding procedures.

For any hour of any day that the supplier cannot provide the full amount of energy associated with its ICAP commitment, due to a maintenance or forced outage, the supplier must notify the ISO Operations department.

#### 4.6.2 Energy Limited Resources

Energy Limited Resources that are ICAP suppliers must be able to provide the Energy equivalent of their claimed ICAP for a minimum of four (4) hours each day. Energy Limited Resources must bid or schedule in the Day-Ahead Market each day in such a way as to enable the ISO to schedule them for the period in which they are capable of providing the energy.

An Energy Limited Resource must also provide the ISO with information concerning that Energy Limited Resource's upper operating limit, designating its desired operating level. Once the Energy Limited Resource has provided four hours of Energy equivalent to its ICAP commitment, the ISO will not call on it to provide additional Energy absent an emergency. In the case of an emergency the ISO may request an

Energy Limited Resource for assistance, recognizing that the Energy Limited Resource may not be capable of responding.

### 4.6.3 Interruptible Load Resources

Interruptible Load Resources that are ICAP Suppliers must supply the ISO with Energy and/or Operating Reserve bids in the Day Ahead Market indicating the price at which they are willing to be interrupted.

### 4.6.4 Existing Municipally-Owned Generation

Resources that qualify as Existing Municipally-Owned Generation ICAP Suppliers pursuant to Section 5.12.8(b) of the ISO Services Tariff and Section 4.11.8 of this manual are not required to bid or schedule in the Day Ahead Market.

### 4.6.5 Special Case Resources

Special Case Resources are not subject to Bidding, Scheduling and Notification Requirements.

### 4.7 External Resources

#### 4.7.1 General Requirements

External Generators, System Resources, and entities purchasing from them may qualify as ICAP Suppliers if:

1. They comply with the information requirements in Section 4.7.2 and thereby demonstrate that the energy associated with the ICAP sold to the NYCA is deliverable to the NYCA,

and

- 2. The External Control Area in which the resource is located demonstrates that it either:
  - (a) Will not recall or curtail the Energy associated with the ICAP sale to satisfy its own Control Area Loads, or
  - (b) Will afford NYCA Load the same curtailment priority that it affords its own Control Area Load.

The amount of Installed Capacity that may be supplied by qualifying External Generators, External System Resources and Control Area System Resources may be reduced by the ISO, as indicated below, to reflect the possibility of curtailment. [?] (5.12.2)

#### 4.7.2 Information Requirements for External Resources

The ISO requires the following information from resources External to the NYCA that wish to qualify as ICAP Suppliers, and for resources relied upon in ICAP contracts that have been assigned Grandfathered External Rights.

- 1. Name and location of Generators.
- 2. Documentation which satisfies the general requirements for DMNC Determination in Section 4.4 of this manual.
- 3. Documentation which satisfies the Maintenance Scheduling Requirements in Section 4.5 of this manual.
- 4. Expected return dates from full or partial outages
- 5. Certification that ICAP sold to the NYCA has not been sold elsewhere.

6. Verification that it has made all arrangements required by its Control Area to ensure that the Energy associated with the resources' ICAP sale to the NYCA will be delivered to the NYCA. For example, if the resource is located in the PJM Control Area, it must demonstrate that it has agreed to make any congestion payments that may be incurred in order to deliver Energy to the NYCA.

### 4.7.3 Allocation of ICAP Rights for External ICAP Supply

The ISO establishes the maximum amount of ICAP that can be provided to the NYCA by resources located in each neighboring Control Area according to the procedures contained in Section 2.6 of this manual. Once this amount has been determined for each neighboring Control Area, the allocation among ISO customers of rights to external ICAP supply is done according to the following procedures.

#### **Grandfathered External Installed Capacity Rights**

Details concerning grandfathered rights are provided in Attachment E to this manual.

#### Other Allocations

After accounting for grandfathered external ICAP rights, the ISO will allocate the remaining rights for external ICAP supply on a first-come, first-serve basis. External ICAP rights may ultimately only be used by LSEs located within the NYCA, but any ISO Customer may submit a request for external ICAP rights.

Initial requests for External ICAP rights may be sent to the ISO during the following time period:

- Beginning at 8:00 AM EST seven (7) business days prior to the Obligation Procurement Period strip auction,
- Ending at 5:00 PM EST three (3) business days prior to this same auction.

Each request must contain the following information:

- 1) Documentation of a bilateral agreement, with pricing redacted, between the requesting entity and either
  - (a) a Load within the NYCA or
  - (b) a previously qualified External ICAP supplier;
- 2) The identity of the ISO Customer making the request;

- 3) The identity of the External ICAP Supplier;
- 4) The name and location of the resource;
- 5) The Control Area in which the resource for which the ICAP Supplier seeks rights is located;
- 6) The MW amount requested to support the ICAP sale to the NYCA from the resource designated in (4) above;
- 7) The time period, in blocks of whole months, for which the rights are requested;
- 8) E-mail address of the requesting party to which a response will be made.

The information listed above must be provided as a "Request for External ICAP Rights" to the ISO's Manager of Resource Reliability via facsimile to the following number: 518-356-6208.

If the ISO determines, by 5:00 PM EST on the day following receipt of an initial request (provided that this day falls during the time period for initial requests specified above) that the information provided in the request is incomplete or inadequate, the ISO will immediately notify the requesting party. The requesting party may resubmit its information to the ISO no later than 24 hours after the expiration of the time period for initial requests.

Only complete requests submitted within the time periods specified above will be evaluated by the ISO. The date and time stamp provided by the FAX machine will determine the priority for the evaluation of requests. If a request is resubmitted during the specified time period, for any reason, the latest time stamp will determine the priority.

The ISO will notify the requesting party if its request has been accepted or rejected, with reasons for rejection, by 5:00 PM EST on the day following receipt of a complete request. A rejection may be based on either or both of the following:

- Incomplete or inadequate information
- Fully subscribed External ICAP rights

By 5:00 PM EST on the day following receipt of an accepted request, the requesting entity must provide the ISO with all documentation and information necessary to qualify an external resource as an ICAP Supplier, in accordance with the procedures contained in this manual. By 5:00 PM EST two (2) business days prior to the Obligation Procurement Period strip auction, an LSE that has procured an External ICAP right must provide the ISO with the information and documents described in

numbers 1, 4 and 5 above. The information described in this paragraph should be forwarded as a "Certification of External ICAP Rights" to the ISO Manager, Resource Reliability by facsimile to 518-356-6208. The ISO will verify this data with the External Control Area to ensure that there is no double counting.

By 5:00 PM EST two (2) business days prior to the pre-Obligation Procurement Period Monthly Auctions, all external ICAP rights should be matched between a Load in the NYCA and an external ICAP Supplier. ICAP supplied by External ICAP Suppliers that have claimed External ICAP rights, but have not entered into bilateral arrangements with an LSE serving NYCA Load by that time, will be offered for sale into those Auctions at a price of \$0/MW. (The Supplier will be paid the marketclearing price determined in those Auctions for the control area in which it is located for that ICAP.) Similarly, if the ISO has not received certification from an LSE which demonstrates that the rights it has secured are matched with a qualified external ICAP Supplier, that LSE will relinquish those rights. All purchasers of ICAP that is located in an External Control Area in an ISO-administered Auction shall receive the external ICAP rights necessary in order to permit that ICAP to count towards the ICAP requirements of an LSE; consequently, in order to ensure that there are sufficient external ICAP rights available, the ISO shall limit the number of MW of ICAP that can be purchased in any External Control Area in those auctions. In each Obligation Procurement Period Auction, the ISO shall limit the number of MW of ICAP that can be purchased in any External Control Area to the number of MW of ICAP that can be provided by ICAP Suppliers located in that Control Area, as determined in Section 2.6 of this manual, less all external ICAP rights that have been requested for that External Control Area under the provisions of this section.

In the Obligation Procurement Period monthly auctions held before and during the Obligation Procurement Period, the ISO shall limit the number of MW of ICAP that can be purchased in any External Control Area to the number of MW of ICAP that can be provided by ICAP Suppliers located in that Control Area, less the number of MW of ICAP purchased in that External Control Area for that month in preceding Auctions, less all external ICAP rights for that Control Area that have been used to support bilateral transactions for the sale of ICAP for that month from ICAP Suppliers in that Control Area to Loads in the NYCA.

The ISO will reduce External ICAP rights eligible to be traded in the Obligation Procurement Period strip auction based on the allocations made according to the above procedures.

If External ICAP rights are not fully subscribed after the Obligation Procurement Period strip auction has concluded, the ISO will open another period of first-come, first-serve allocations prior to each monthly auction for which External ICAP rights remain. The procedures specified above will govern any monthly first-come, first-serve allocations. The period for requesting these rights will open at 8:00 a.m. EST on the

fifth business day prior to the auction and will close at 5:00 p.m. EST on the third business day prior to the auction.

## 4.8 System Resources

A System Resource is defined as a portfolio of Installed Capacity provided by Resources located in a single ISO-defined Locality, the remainder of the NYCA, or any single External Control Area, that is owned by or under the control of a single entity, which is not the operator of the Control Area where such Resources are located, and that is made available, in whole or in part, to the ISO. System Resources may be External or Internal to the NYCA. Please refer to Section 4.9 for information regarding Resources operated by the Control Area in which they are located.

The System Resource must be in an area that either (a) will not recall or curtail transactions from the resource to satisfy its own Control Area Load, or (b) will afford the NYCA Load the same curtailment priority that it affords its own Control Area Load

### 4.8.1 Permissible Aggregations

For the purposes of aggregating System Resources, there are seven defined areas in which ICAP Suppliers may reside. These are:

- 1. New York City Zone
- 2. Long Island Zone
- 3. All other NYCA Zones

and the neighboring Control Areas operated by:

- 4. PJM
- 5. ISO-NE
- 6. Hydro Quebec
- 7. Ontario IMO

Resources located in ISO-NE and the Ontario IMO Control Areas may not qualify as ICAP Suppliers, since these Control Areas do not currently meet the ISO's recall or curtailment requirements for ICAP Suppliers.

Within the other five areas a single entity may aggregate its Generators into a portfolio for the purposes of entering into System Resource ICAP transactions, so long as all the Generators included in the portfolio reside within the same area. With the exception of System Resource ICAP transactions from the Hydro-Quebec Control Area, any entity that wishes to make System Resource sales must provide the required DMNC test data for each of Generator in the portfolio to the ISO. The ICAP associated with an

External Grandfathered Right may not be aggregated with other resources as a System Resource.

For example, an owner may operate Generators in PJM and the Long Island Zone. The Generators in PJM may be aggregated or the Generators in the Long Island Zone may be aggregated. Generators in PJM and the Long Island Zone may not be combined with each other.

#### 4.8.2 External System Resources

The ISO requires the following information for each resource aggregated as an External System Resource that is not owned by the operator of a Control Area. The entity aggregating the resources is responsible for supplying the information.

- 1. Name and location of generators
- 2. Documentation that satisfies the General Requirements for DMNC Determination specified in Section 4.4 of this manual.
- 3. Documentation that satisfies the Maintenance Scheduling Requirements specified in Section 4.5 of this manual.
- 4. Expected return date from full or partial outages.
- 5. Certification that ICAP sold to the NYCA has not been sold elsewhere.

### 4.8.3 Control Area System Resources

Control Area System Resources must provide the following information in order for the sellers of ICAP from those resources to be considered ICAP Suppliers by the ISO. This data must be received by the ISO forty-five days prior to the start of the upcoming Capability Period. This data must be provided on a monthly basis for each month of the upcoming Capability Period. If the amount of ICAP they have available to supply to New York is less than that amount that they have sold to NY, the Control Area will be deemed to be deficient.

- 1. Available capacity (CAP) that does not reflect adjustments for External firm capacity purchases or sales, outages and maintenance.
- 2. External firm capacity purchases (EP)
- 3. Peak Load (PL)

- 4. External firm capacity sales other than sales to New York (EF)
- 5. Planned maintenance (PM)
- 6. Historical average forced outages (FO)
- 7. Operating reserve (OR)

#### Determination of Amount of ICAP that may be Sold

The ISO will perform the following calculation for each month of the Capability Period for an External System Resource that is a Control Area. The amount of ICAP which the External System Resource that is a Control Area may sell for all months, or any month, within the Capability Period may not exceed the minimum value derived from the following formula.

$$ICAP = CAP = EP - PL - EF - PM - FO - OR$$

By the twentieth (20th) day after the end of each month of the Capability Period, the External System Resource will provide to the ISO, at the time of the monthly peak Load, actual values for items 2 through 7 above. The ISO will compare actual values to forecast values and may de-rate future monthly forecast ICAP calculations based on this comparison.

## 4.9 Metered Interruptible Loads

The following procedures apply to Interruptible Loads that are metered by the ISO.

- These resources must bid into the Day-Ahead Market as price cap bid Load. These resources will be scheduled based on their bids and Day-Ahead prices.
- In real-time, these resources determine whether, and at what level, to purchase energy or to interrupt through its bids into the Hour-Ahead market.
- If the Load chooses to purchase Energy, it will pay the LBMP for the difference between its scheduled Load and the Load for which it is purchasing.
- These resources must interrupt, if requested to do so by the ISO.

## 4.10 Special Case Resources

Special Case Resources are Loads capable of being interrupted upon demand, and distributed generators, rated 100 kW or higher that are not visible to the ISO's Market Information System. Special Case Resources may only supply ICAP through bilateral contracts, and may not participate in ISO -administered ICAP auctions.

Capacity from Special Case Resources will be calculated as the pledged amount of Load that can be reduced from the Load Zone increased by the Transmission District system loss factor. A Special Case Resource is not required to be an Energy customer of the LSE that has contracted for the resource's ICAP.

#### 4.10.1 Distributed Generators - General Requirements

Resources that run in parallel with the system must provide historical operating data. Except for those with environmental or operational limitations, these resources must perform a four-hour test of pledged output, and provide test results in the format specified by the ISO, or provide historical operating data. Resources that have environmental or operational limitations may qualify by performing a two-hour test or by providing historical operating data. If the resource consumes auxiliary power from the system, its auxiliary demand must be netted out of its maximum output.

These resources may qualify in the same manner and during the same test periods as "new Generators." Please refer to Sections 4.4.1 and 4.4.3 of this manual.

The amount of ICAP that may be sold shall be the lesser of the pledged output test, or the total Load at the site of the distributed generator.

These resources must meet the qualifications and comply with the procedures described below. LSEs claiming capacity from these resources must comply with the requirements and procedures described below.

## 4.10.2 Loads Capable of Interruption Upon Demand - General Requirements

These resources must conduct a one-hour sustained disconnect test and provide test results in the format specified by the ISO, or provide historical operating data. These resources may qualify in the same manner and during the same test periods as "new Generators." Please refer to Sections 4.4.1 and 4.4.3 of this manual.

LSEs claiming capacity from these resources must comply with the requirements and procedures described below.

#### 4.10.3 Qualifications

The Special Case Resource must make Energy available, in amounts that correspond to the pledged capacity, by interrupting Load or transferring Load to a generator, within two hours of a notice provided by the ISO to the LSE, following a 24-hour notice. If the resource is unable to provide full output within two hours due to operational constraints the LSE may petition the ISO for permission to provide maximum output from the resource within a longer period. The ISO's permission will not be unreasonably withheld. In granting permission the ISO will calculate the appropriate derated DMNC for use in determining the pledged capacity.

In the event the equipment relied upon by the resource was in operation, or its Load was interrupted, at the time of the system or the Transmission District peaks upon which the LSE's capacity requirement is based, the customer's ICAP obligation will be increased by the amount of Load that was interrupted or transferred.

LSEs may claim Special Case Resource capacity from entities that are not their retail customers, provided that they provide notice of the capacity purchase to the LSE supplying the entity's Energy.

Transmission Owners shall permit short periods of parallel operation for Load switching from the Transmission Owner's electrical system to distributed generation equipment claimed as Special Case Resource capacity if the LSE has supplied the Transmission Owner with a wiring and switching equipment diagram which meets the Transmission Owner's approval.

#### 4.10.4 Notification Procedures

The ISO will provide 24 hour-ahead notification and two hour notice, as required under these procedures, to the LSE claiming Special Case Resources as capacity. The 24 hour-ahead notification will be provided after 11 am, day ahead, when the DAM closes. The ISO commits not to use 24 hour notification of potential need to operate indiscriminately but rather only when the DAM indicates serious shortages of supply for the next day.

The ISO shall provide notice no fewer than two hours ahead of required operation or interruption.

LSEs shall contact their Special Case Resources through whatever communication protocols are agreed to between the resource suppliers and the LSE.

LSEs claiming special case resources as capacity shall provide the ISO with LSE phone and Internet contact information that allows for 24x7 communication.

### 4.10.5 Capacity Adjustment Procedures

Special Case Resources that fail to respond to LSE notification by reaching maximum output within 2 hours following ISO - LSE notice or that fail to provide maximum output for the period required by the ISO, or four hours, whichever is less, will be considered forced out (for unserved hours) for purposes of calculating the capacity value of the Special Case Resource for the next Obligation Procurement Period.

Special Case Resource capacity that has successfully petitioned the ISO for permission to reach maximum output in more than two hours will be considered forced out in the amount of capacity not backed by Energy within two hours of the ISO-LSE notice.

Special Case Resource capacity that cannot operate for the full four hours when called for by the ISO, due to environmental permit limits or otherwise, shall be considered forced out for the hours it is unable to operate or is operated at reduced output.

#### 4.10.6 LSE Requirements

LSEs claiming Special Case Resource capacity from their retail customers must certify that the Special Case Resource meets or has met the applicable General Requirements and Qualifications described in Section 4 of this manual. LSEs claiming special case resource capacity from entities that are not their retail customers must further provide the notification described in item number 4 of the Qualifications section of this document.

LSEs shall certify that Special Case Resources claimed as capacity are complying with these procedures by documenting reductions in Load, or Energy production, with interval meters readings for the six hour period following the 2 hour ISO notice. In the event that Energy made available from Special Case Resource capacity is a small percentage of the total metered Load at the location of the special case resource, such that it may not be clearly reflected by meter reads alone, the ISO will also accept operations logs to augment metered output to ensure accurate verification. The LSE or the Transmission Owner, as appropriate, shall retain all interval meter readings upon which it bases its certification of compliance, for a period of three years.

LSEs claiming capacity from Special Case Resources shall document operation of the resource to the TO and the energy supplying LSE, if any.

LSEs claiming Special Case Resource capacity shall file with the ISO, the data necessary to document the source and amount of Special Case Resource capacity.

#### 4.10.7 ISO Verification

The ISO retains the right to audit any records kept by the LSE, the Transmission Owner or the Special Case Resource which are used to support the LSE's certification of compliance with these procedures.

### 4.10.8 Existing Municipally Owned Generation

A municipal utility that owns generation in excess of its ICAP requirement, net of any capacity provided by the New York Power Authority, may qualify to sell the excess capacity as ICAP under the following conditions.

The municipal utility must:

- Provide the ISO with the physical operating parameters of the generators.
- Operate the generation at the ISO's request.
- Ensure that the energy provided by the generation is deliverable to the New York State Power System.

Only generation that was in service or under construction as of December 31, 1999 may qualify for the exemption from the Bidding, Scheduling and Notification requirements.

# 5.0 NYISO Administered Installed Capacity Auctions

The ISO will administer ICAP auctions to accommodate LSEs' and ICAP Suppliers' efforts to enter into ICAP transactions and to give LSEs an opportunity to satisfy their ICAP requirements. In the various ISO-administered auctions, LSEs will have the opportunity to purchase the Installed Capacity necessary to meet the Installed Capacity requirements established by the ISO Services Tariff, and to purchase or sell excess Installed Capacity. Installed Capacity Suppliers will have the opportunity to sell Installed Capacity.

LSEs and Installed Capacity Suppliers may also purchase or sell Installed Capacity through bilateral transactions.

Participation in ISO-administered auctions is restricted to ISO Customers. Installed Capacity sold through the auction may only be used for the commercial interests of the purchaser. In addition, any Installed Capacity purchased through an ISO-administered auction may not be resold for the purposes of meeting Installed Capacity requirements imposed by operators of External Control Areas.

The ISO Services Tariff references are Sections 5.13 through 5.15.

# 5.1 Overview of Auction Structure and Timing

The ISO will conduct regularly scheduled Installed Capacity auctions before and during Obligation Procurement Periods. See Attachment A for the upcoming Capability Period schedule of auctions. The schedule is structured to ensure that there are at least four business days between the time that auction results are posted and the dates that LSEs are required to demonstrate that they have procured sufficient Installed Capacity to cover their Installed Capacity requirements. Auctions shall be conducted prior to the start of each Obligation Procurement Period and each month during an Obligation Procurement Period.

## 5.1.1 Auctions Conducted Prior to the Obligation Procurement Period

The auctions conducted prior to the Obligation Procurement Period occur in three steps. The first auction conducted prior to the start of the Obligation Procurement Period, the "Obligation Procurement Period Auction," will allow Bidders to purchase Installed Capacity and Offerors to sell Installed Capacity for the entire six months included in that Obligation Procurement Period.

The second set of auctions conducted prior to the start of the Obligation Procurement Period, the "pre-Obligation Procurement Period Monthly Auctions," will facilitate transactions for individual months within an Obligation Procurement Period. This set of auctions shall consist of a series of a separate auction for each month in the Obligation Procurement Period.

In the event that all LSEs do not certify that their Installed Capacity requirements have been satisfied for the forthcoming Obligation Procurement Period, the ISO will conduct a third set of auctions prior to the beginning of the Obligation Procurement Period. These are the "initial Deficiency Procurement Auctions," to procure the requisite amount of Installed Capacity on behalf of the deficient LSE or LSEs. During the initial Deficiency Procurement Auction, the ISO will also procure Installed Capacity on behalf of deficient Installed Capacity Suppliers. The initial Deficiency Procurement Auction will consist of six separate monthly auctions.

## 5.1.2 Auctions Conducted within the Obligation Procurement Period

The ISO shall conduct regular Monthly Auctions each month within the Obligation Procurement Period to allow Bidders to purchase Installed Capacity, and Offerors, including new Offerors, to sell Installed Capacity, for any remaining months within that Obligation Procurement Period. The monthly auctions allow Load-gaining LSEs to Bid to purchase Installed Capacity to cover customers acquired as result of Load-shifting during the prior month. Similarly, Load-losing LSEs that have excess Installed Capacity as a result of Load-shifting may offer to sell their surplus in the monthly auctions.

Finally, in any month in which a Load-gaining LSE fails to procure Installed Capacity to cover new Load it has gained, the ISO shall conduct a monthly Deficiency Procurement Auction at the time specified in the Capability Period Timeline. See Attachment A to this manual.

# 5.2 Auctions Conducted Prior to the Obligation Procurement Period

#### 5.2.1 Phased Auctions

The Obligation Procurement Period Auction, the pre-Obligation Procurement Period Monthly Auctions, and the initial Deficiency Procurement Auctions will each consist of two phases. The implementation of FERC-approved mitigation measures in the New York City Localities' Installed Capacity markets creates the requirement for two phases of each auction. Both phases of a given auction shall be conducted on the same day. Under certain circumstances described below, some auctions may only consist of a single phase.

In the Obligation Procurement Period Auction and the pre-Obligation Procurement Period Monthly Auctions, LSEs may submit their own bids, whereas in the initial Deficiency Procurement Auction, the ISO shall submit bids on behalf of deficient LSEs. The ISO shall not reveal the number of MWs that LSEs are deficient prior to the initial Deficiency Procurement Auction

#### 5.2.2 Overview - OPP Phase One

Participation in the first phase of the Obligation Procurement Period Auction and the pre-Obligation Procurement Period Monthly Auctions shall be limited to: (i) LSEs authorized to serve Load in the New York City Locality seeking to make locational Installed Capacity purchases in order to satisfy their In-City Locational Installed Capacity requirements; (ii) any other entity seeking to purchase In-City Locational Installed Capacity; (iii) qualified In-City Generators; and (iv) any other Installed Capacity Supplier that owns excess Installed Capacity associated with qualified In-City Generators.

Suppliers selected to provide ICAP in the first phase of the first two auctions shall be paid the Market-Clearing Price determined in that phase, except in the case of Installed Capacity associated with In-City Generators that are subject to mitigation measures, which shall receive the lesser of the Market-Clearing Price or the applicable locational price cap. Any entity that resells Installed Capacity associated with In-City Generators that are subject to market mitigation measures shall receive the lesser of the Market-Clearing Price determined in that phase, or the price that it paid for that Installed Capacity. The ISO shall retain any Excess Amount and rebate it to all LSEs with ICAP obligations in the New York City Locality (pursuant to Section 5.15) of the ISO Services Tariff.

#### 5.2.3 Overview - OPP Phase Two

Participation in the second phase of the Obligation Procurement Period Auction and the pre-Obligation Procurement Period Monthly Auctions shall not be limited to In-City entities, except with respect to Installed Capacity associated with In-City Generators that are subject to market mitigation measures, which may not participate unless it is established that all In-City LSEs have satisfied their In-City Locational Installed Capacity requirements. LSEs awarded Installed Capacity in the second phase shall pay the applicable Market-Clearing Price of Installed Capacity determined in that phase.

Suppliers selected to provide ICAP in the second phase shall receive the applicable Market-Clearing Price of Installed Capacity determined in that phase, except for entities reselling Installed Capacity associated with In-City Generators subject to market mitigation measures, which shall receive the lesser of the applicable Market-Clearing Price determined in that phase or the price paid for that Installed Capacity.

In-City Generators that are permitted to offer to sell in the second phase shall be permitted to make separate offers in the first and second phases of the first two pre-Obligation Procurement Period Auctions.

## 5.2.4 Results of the Obligation Procurement Period Auction

The results of the Obligation Procurement Period Auction will be made available to Market Participants 20 days before the beginning of that Obligation Procurement Period or five days prior to the next Monthly Auction, which ever is earlier. Individual Market Participants will receive results of the Obligation Procurement Period auction to the extent that such results affect that Market Participant's Installed Capacity transaction(s).

## 5.2.5 Phase One and Two of Initial Deficiency Procurement Auctions

The ISO shall conduct the initial Deficiency Procurement Auction, if necessary, by the twenty-third of the month immediately preceding the start of an Obligation Procurement Period.

Participation in the first phase of the initial Deficiency Procurement Auctions shall be limited to deficient LSEs serving Load in the New York City Locality that are required to make additional locational Installed Capacity purchases in order to satisfy their In-City Locational Installed Capacity requirements, qualified In-City Generators, and any

other Installed Capacity Supplier that owns excess Installed Capacity associated with qualified In-City Generators. The ISO shall submit deficiency bids on behalf of each participating LSE at a level determined pursuant to Section 5.14.1 of the ISO Services Tariff.

LSEs awarded Installed Capacity in the first phase shall pay the lesser of the Market-Clearing Price of Installed Capacity determined in that phase or the deficiency bid, to the ISO. The ISO shall pay Installed Capacity Suppliers that are selected to provide Installed Capacity the Market-Clearing Price determined in that phase, which can be no greater than the deficiency bid, except in the case of Installed Capacity associated with In-City Generators that are subject to mitigation measures, which shall receive the lesser of the Market-Clearing Price determined in that phase or the applicable locational price cap.

Any entity that resells Installed Capacity associated with In-City Generators that are subject to market mitigation measures shall receive the lesser of the Market-Clearing Price determined in that phase or the price that it paid for that Installed Capacity. The ISO shall retain any Excess Amount and rebate it to all LSEs serving Load in the New York City Locality pursuant to Section 5.15 of the ISO Services Tariff.

Participation in the second phase of the initial Deficiency Procurement Auctions shall not be limited to In-City entities. The ISO shall submit deficiency bids on behalf of all remaining deficient LSEs at a level determined pursuant to Section 5.14.1 of the ISO Services Tariff. The ISO shall solicit bids from all qualified Installed Capacity Suppliers, including In-City Generators, otherwise subject to market mitigation measures, that still have Installed Capacity to offer after all LSEs based in the New York City Locality have met their Locational Installed Capacity requirements.

LSEs awarded Installed Capacity in the second phase shall pay the lesser of the applicable Market-Clearing Price of Installed Capacity determined in that phase, or the deficiency bid, to the ISO. The ISO will use these deficiency payments to pay the applicable Market-Clearing Price of Installed Capacity determined in that phase, except as noted below, to Installed Capacity Suppliers that were selected to provide Installed Capacity, including In-City Generators that are otherwise subject to market mitigation measures.

Any entity that resells Installed Capacity associated with In-City Generators that are subject to market mitigation measures shall receive the lesser of the applicable Market-Clearing Price determined in that phase or the price that it paid for that Installed Capacity.

In-City Generators that are permitted to participate in the second phase shall be permitted to submit separate offers to sell in each phase of the initial Deficiency Procurement Auction.

The ISO shall also prospectively purchase Installed Capacity on behalf of deficient Installed Capacity Suppliers in the initial Deficiency Procurement Auctions. The ISO shall submit a deficiency bid on behalf of deficient Installed Capacity Suppliers as if they were deficient LSEs. Deficient Installed Capacity Suppliers must pay the applicable Market-Clearing Price of Installed Capacity to the ISO. If an Installed Capacity Supplier is determined to have been deficient for any prior portion of an Obligation Procurement Period that Installed Capacity Supplier must retroactively pay to the ISO the applicable monthly deficiency charge.

# 5.3 Auctions Conducted During an Obligation Procurement Period

### **5.3.1 Monthly Auctions**

Regular Monthly Auctions that take place after the initial Deficiency Procurement Auctions will be conducted exactly like the Monthly Auctions held prior to the beginning of the Obligation Procurement Period, i.e., in two phases unless the ISO has established that all LSEs with New York City Locational Installed Capacity Requirements have satisfied these requirements. If the ISO has established that each LSE with such Locational Installed Capacity Requirements has satisfied these requirements, each regular Monthly Auction will be conducted as if it were the second phase of a pre-Obligation Procurement Period Monthly Auction.

Each monthly Deficiency Procurement Auction will be conducted exactly like a Regular Monthly Auction, i.e., in two phases when necessary as described in the above paragraph. The ISO shall conduct each monthly Deficiency Procurement Auction, if necessary, by the twenty-third of any month in which a Load-gaining LSE fails to procure Installed Capacity to cover new Load it has gained.

The ISO shall not reveal the number of MWs that LSEs are deficient prior to a monthly Deficiency Procurement Auction.

LSEs that are still deficient after the completion of either an initial or monthly Deficiency Procurement Auction will pay a deficiency charge to the ISO equal to the deficiency bid multiplied by the number of MWs by which they are deficient. The ISO will attempt to use the money it collects through the imposition of deficiency charges to procure Installed Capacity from Generators that are capable of selling Installed Capacity but that failed to qualify to sell it prior to the Deficiency Procurement Auction, e.g., recently upgraded Generators, new Generators and existing Generators that were otherwise not able to qualify.

The ISO shall not procure Installed Capacity from previously qualified Installed Capacity Suppliers that withheld their Installed Capacity. The ISO will not pay an Installed Capacity Supplier more than the applicable deficiency charge per MW of Installed Capacity, or the applicable locational price cap per MW of Installed Capacity, which ever is less, pro-rated to reflect the portion of the Obligation Procurement Period for which the Installed Capacity Supplier provides Installed

Capacity. Any remaining monies collected by the ISO pursuant to Section 5.14.1 of the ISO Services Tariff will be applied to reduce the Schedule 1 charge.

The ISO shall also prospectively purchase Installed Capacity on behalf of deficient Installed Capacity Suppliers in a monthly Deficiency Procurement Auction. The ISO shall submit a deficiency bid on behalf of deficient Installed Capacity Suppliers as if they were deficient LSEs. Deficient Installed Capacity Suppliers must pay the Market-Clearing Price of Installed Capacity to the ISO. If an Installed Capacity Supplier is determined to have been deficient for any prior portion of an Obligation Procurement Period that Installed Capacity Supplier must retroactively pay to the ISO the applicable monthly deficiency charge.

### 5.3.2 Results of the Monthly Auction

The results of the Monthly Auction will be made available to Market Participants five days before the beginning of that Month. Individual Market Participants will receive results of the Monthly Auction to the extent that such results affect that Market Participant's Installed Capacity transaction(s).

### 5.3.3 Deficiency Bids and Charges

LOCATION	INTERIM	END-STATE
	FIRST THREE	AFTER THREE
	YEARS	YEARS OF ISO
	AFTER ISO	OPERATIONS
	COMMENCES	
	OPERATIONS	
In-City New York	\$75/kW per	3 Times Localized
City	Obligation	Levelized
(LBMP Load Zone J)	Procurement Period	Embedded Cost of
		GT
Long Island	Year 1: \$60/kW per	3 Times Localized
(LBMP Load Zone	Obligation	Levelized
K)	Procurement Period	Embedded Cost of
	Year 2: \$65/kW per	GT
	Obligation	
	Procurement Period	
	Year 3: \$70/kW per	
	Obligation	
	Procurement Period	

All other LBMP	Year 1: \$52.5/kW per	3 Times Localized
Load	Obligation	Levelized
Zones in the NYCA	Procurement Period	Embedded Cost of
	Year 2: \$57.5	GT
	Year 3: \$62.5	

## **5.4 Timing of Auctions**

The ISO will develop a Capability Period Timeline which shall ensure that:

- (i) An Obligation Procurement Period Auction will be held at least 30 days before the beginning of that Obligation Procurement Period where Installed Capacity shall be made available for purchase for the entire six month Obligation Procurement Period;
- (ii) Monthly auctions will be held at least fifteen (15) days before the beginning of that Obligation Procurement Period where Installed Capacity is made available for purchase for any and all months within the Obligation Procurement Period;
- (iii) In the event that an LSE does not certify to the ISO ten (10) days before the beginning of the Obligation Procurement Period that its Installed Capacity requirement has been met, the ISO will conduct initial Deficiency Procurement Auctions, consisting of six separate monthly auctions, at least seven (7) days before the beginning of that Obligation Procurement Period to procure the requisite amount of Installed Capacity on behalf of the deficient LSE;
- (iv) During an Obligation Procurement Period, auctions will be held at least 15 days before the beginning of the upcoming month in which Installed Capacity will be made available for any and all remaining months within that Obligation Procurement Period; and
- (v) During the Obligation Procurement Period, a monthly Deficiency Procurement Auction will be held at least seven (7) days before the beginning of the upcoming month during which the ISO will procure Installed Capacity on behalf of LSEs that have not procured sufficient Installed Capacity for all remaining months of the Obligation Procurement Period to cover Load-shifting that occurred during the prior month.

## 5.5 Bids to Buy and Sell - General Requirements

Bids to purchase Installed Capacity and offers to sell Installed Capacity must be submitted separately for each auction. Bids to purchase Installed Capacity and offers to sell Installed Capacity that are not selected in a phase of a given auction will not carry over into subsequent auctions or phases of that auction.

Bidders who wish to purchase and Offerors who wish to sell Installed Capacity in any ISO-administered auction may submit bids to the ISO up to the day before that auction, unless otherwise specified in the ISO Procedures. If no Offerors submit offers to sell Installed Capacity in a phase of an auction by that deadline, the ISO will cancel that phase of that auction. By contrast, if at least one Offeror submits an offer to sell in a phase of an auction, the ISO will not cancel that phase of that auction, and will allow a Market-Clearing Price to be calculated in that phase of that auction, even if no Bidder submits a bid to buy in that phase of that auction.

# 5.6 Limitations on Offerors' Participation in ICAP Auctions

Only Customers will be permitted to offer to sell Installed Capacity in an auction. The amount of Installed Capacity that can be offered for sale in any auction from a given resource will not be permitted to exceed the amount that resource is permitted to provide.

In cases in which the ISO has reduced the amount of Installed Capacity that a resource can supply, the owners of that resource are required to procure any deficiency in Installed Capacity resulting from the reduction through the Deficiency Procurement Auction.

The amount of Installed Capacity that any given Offeror is permitted to offer for sale in the auction shall not exceed the Offeror's share of the amount of Installed Capacity its resources are permitted to offer for sale, as calculated above, less any Installed Capacity that Offeror has offered for sale either through Bilateral Transactions or through sales to External Control Areas.

Installed Capacity Suppliers that wish to participate in an ISO administered auction must submit completed certification forms to the ISO by the twentieth (20<sup>th</sup>) day of the month preceding an auction period in which they intend to offer Installed Capacity. The certification form shall, at a minimum, require Installed Capacity Suppliers to demonstrate: (i) that they own, have contracted to purchase, or have been designated as the agent for the share of each resource that they claim when making offers to sell Installed Capacity; (ii) the Installed Capacity they offer has not been committed or sold to provide Installed Capacity in the New York market or an External Control Area; and (iii) that the Installed Capacity they offer has not been committed to a Bilateral Transaction. Any offer to sell that would cause the total amount of Installed Capacity offered by that Offeror from that resource to exceed the amount of Installed Capacity it is permitted to offer from that resource will be rejected in its entirety.

If a resource (or a portion of a resource) is selected in the auction to provide Installed Capacity, that resource (or portion thereof) cannot provide Installed Capacity to any other Control Area, and shall be required to adhere to the requirements for Installed Capacity Suppliers set forth in the ISO Services Tariff. Therefore, entities wishing to purchase Installed Capacity that will count toward Installed Capacity requirements in other Control Areas will not be able to purchase such Installed Capacity in an auction.

# 5.7 Limitations on Bidders' Participation in ICAP Auctions

As part of its evaluation of each Bidder's creditworthiness, the ISO may establish credit limits for each Bidder. The ISO will reject bids from Bidders if acceptance of that bid could cause the total amount owed by that Bidder as a result of the auction to exceed that Bidder's credit limit. The credit criteria used by ISO are contained in Article 8 of the Services Tariff.

# 5.8 Required Information in Bids to Buy

Each Bidder may submit multiple bids. Each bid to purchase Installed Capacity submitted by a Bidder must include but is not limited to the following information:

- (i) The total amount of Installed Capacity it wishes to purchase in association with that bid, in increments of 100 kW;
- (ii) The maximum price the Bidder is willing to pay for the Installed Capacity it is offering to purchase in its bid, in \$/kW for the time period appropriate to the auction;
- (iii) The auction and phase to which the bid applies;
- (iv) Whether the Installed Capacity must be associated with resources located in a specific Locality, and if so, which Locality; and
- (v) Whether the resources associated with the Installed Capacity can be located in a Control Area outside the NYCA, and if so, which Control Area(s).

The ISO ICAP Purchase Agreement is found in Attachment F to this manual.

## 5.9 Required Information in Offers to Sell

Each Offeror may submit multiple offers. Each offer to sell Installed Capacity submitted by an Offeror must include but is not limited to the following information:

- (i) The amount of Installed Capacity it offers to sell in increments of 100 kW;
- (ii) The minimum price it is willing to accept for the Installed Capacity it is offering to sell in its offer, in \$/kW for the time period appropriate to the auction;
- (iii) The auction and phase to which the offer applies;
- (iv) The name of the resource providing the Installed Capacity offered for sale;
- (v) Documentation of that resource's DMNC (described above);
- (vi) Whether that resource is located in a Locality, and if so, which Locality; and
- (vii) Whether that resource is located in a Control Area outside the NYCA, and if so, which Control Area.

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## 5.10 Determination of Selected Bids and Offers

The ISO will determine which bids to purchase and which offers to sell Installed Capacity are selected by maximizing total gains from trade in each phase of each auction, i.e., by maximizing the sum of the maximum prices bid by Bidders whose bids to purchase Installed Capacity in that phase of that auction were selected minus the sum of the minimum prices specified by Offerors whose offers to sell Installed Capacity in that phase of that auction were selected, subject to the constraints on the location of the associated resource that have been specified in the selected bids as well as the limitations on the total amount of ICAP that can be purchased in each External Control Area in each auction (as described in Section 4.7.3). This maximization will be performed jointly for all locations in each phase of each auction.

All, part, or none of a bid to purchase or an offer to sell Installed Capacity may be selected in any given phase of an auction. As a result, if a Bidder offers in a bid to purchase a given amount of Installed Capacity at a given price, it may be awarded that amount of Installed Capacity, or it may awarded any amount lower than the amount it offered to purchase (including zero MWs).

Neither Bidders nor Offerors will be permitted to submit bids or offers which specify that either all or none of a bid or offer can be selected. Bids to purchase or offers to sell Installed Capacity in a given phase of an auction cannot be made contingent on the outcome of another auction; e.g., an Offeror will not be permitted to offer Installed Capacity within one month's auction contingent upon its sale of Installed Capacity in ally, bids to purchase or offers to sell Installed Capacity

in a phase of a given auction cannot be made contingent on whether another bid or offer is accepted in the same phase. However, the ISO will evaluate the feasibility of making the acceptance of a bid or offer in a phase of a given auction contingent on the acceptance of other bids or offers in that phase.

In cases in which multiple Bidders bid to pay the same price for Installed Capacity in a given location (or group of locations, if there is no price difference between those locations) in the same phase of the same auction, and some but not all of those bids can be selected, the amount of Installed Capacity awarded to each of those Bidders in association with each of those bids shall be proportional to the amount of Installed Capacity that Bidder bid to purchase in that location (or group of locations, if there is no price difference between those locations) at that price. Likewise, in cases in which multiple Offerors offer to sell Installed Capacity in a given location (or group of locations, if there is no price difference between those locations) for the same price in the same phase of the same auction, and some but not all of those offers can be selected, the amount of Installed Capacity selected from each of those Offerors in

association with each of those offers shall be proportional to the amount of Installed Capacity that Offeror offered to sell in that location (or group of locations, if there is no price difference between those locations) at that price.

## 5.11 Determination of Market-Clearing Prices

As a result of each phase of an ISO-administered auction, with the exception of the first phase of auctions conducted in two phases, the following Market-Clearing Prices for Installed Capacity will be determined:

- (i) Prices for Installed Capacity located in each Locality.
- (ii) Prices for Installed Capacity located in each Control Area outside the NYCA.
- (iii) Price for Installed Capacity located in the portion of the NYCA that is not located in any other Locality.

In the first phase of a two-phase auction, only Installed Capacity located in the New York City Locality will be available, so the only Market-Clearing Price determined in that phase will be the price for that Locality.

The objective function that the ISO will use in each phase of each auction, which was described in the previous section, will select the offers of Installed Capacity with the lowest offer prices, insofar as doing so would not cause violations of the locational constraints specified by Bidders whose bids have been selected or violations of the limitations on the total amount of ICAP that can be purchased from an External Control Area, pursuant to Section 4.7.3 "Other Allocations". But the need to honor these locational constraints may require the ISO to accept some offers which specify relatively high offer prices for Installed Capacity while not accepting other offers with lower offer prices, because purchasing the lower-priced Installed Capacity would violate the locational constraints stated in the Bidders' bids. In such cases, locational constraints will be binding and Market-Clearing Prices of Installed Capacity determined in that phase may differ from location to location. If no locational constraints are binding (i.e., if the locational constraints specified by Bidders or the limitations on the total amount of Installed Capacity that can be purchased in any given Control Area did not force the ISO to select more expensive offers of Installed Capacity in the auction than it would have selected in the absence of those locational constraints), then the Market-Clearing Price of Installed Capacity determined in that phase will be the same at every location.

When locational constraints do not bind, the Market-Clearing Price of Installed Capacity in a phase of a given auction will be the marginal bid cost of providing additional Installed Capacity in that auction. The marginal bid cost of providing additional Installed Capacity in the first phase of any two-phase auction will also establish the Market-Clearing Price for Installed Capacity in the New York City

Locality in that phase. This procedure for calculating Market-Clearing Prices is analogous to the procedure that will be used to calculate LBMP prices in the Energy market (which are based upon the marginal bid cost of supplying an increment of Load at a location). Illustrations of these procedures for calculating prices appear in the Appendix.

In order to determine the marginal bid cost of providing Installed Capacity, the ISO will calculate the change in the amount of Installed Capacity that would have been bought and sold by each Bidder and Offeror if there had been-in addition to the bids and offers that were already part of the auction-an additional demand for a very small amount of Installed Capacity. The presence of this additional demand would have had one of two effects: either it would have increased the amount of Installed Capacity purchased from the marginal Offeror (which is the Offeror whose offer price is lowest among those entities that offered Installed Capacity into that phase of that auction, but did not sell all of that Installed Capacity in that phase), so that the amount of Installed Capacity purchased from that Offeror would have been slightly above the amount that was actually purchased in that phase. Alternatively, it would have decreased the amount of Installed Capacity purchased by the marginal Bidder (which is the Bidder whose offer price is lowest among those entities that purchased Installed Capacity in that phase of that auction), so that the amount of Installed Capacity purchased by that Bidder would have been slightly below the amount that was actually purchased in the that phase (with the leftover Installed Capacity used to meet the small additional demand). The algorithm that the ISO uses to conduct the auction will choose whichever of these mechanisms satisfies the additional demand at the lowest cost. That cost (expressed in terms of \$/kW per time period applicable to the auction) will determine the marginal bid cost of providing Installed Capacity in that phase of that auction.

When locational constraints bind, the Market-Clearing Price of Installed Capacity at each location will still be the marginal bid cost of providing additional Installed Capacity in that phase of that auction, but it will be the marginal bid cost of providing Installed Capacity located in a given area. The relevant area is defined in the next several paragraphs.

First, the locational constraints will be divided into two groups. A Locality constraint is binding if the ISO selects offers of Installed Capacity located in a certain Locality while not selecting lower-priced offers of Installed Capacity from outside that Locality. The ISO will only do this in order to avoid violating locational constraints specified by Bidders that state that a bid is only valid for Installed Capacity located in a given Locality.

An External Control Area constraint is binding if the ISO does not select offers of Installed Capacity located in a particular External Control Area (or group of Areas), while selecting offers with higher offer prices from Installed Capacity Suppliers

located in the NYCA or in other External Control Areas or to avoid violating the limits on the total amount of ICAP that can be purchased in a given External Control Area, pursuant to Section 4.7.3.. Again, the ISO will only do this in order to avoid violating locational constraints specified by Bidders that state that a bid is only valid for Installed Capacity that is not located in a given External Control Area (or group of Areas).

#### Then:

- If a Locality constraint is binding in a phase of an auction, then the Market-Clearing Price of Installed Capacity located in that Locality in that phase will be the marginal bid cost of providing additional Installed Capacity in that Locality in that phase.
- If an External Control Area constraint is binding for a particular Control Area in a phase of an auction (or group of Areas), then the Market-Clearing Price of Installed Capacity located in that External Control Area (or group of Areas) in that phase will be the marginal bid cost of providing additional Installed Capacity in that particular External Control Area (or group of Areas) in that phase.
- The Market-Clearing Price in a phase of an auction for Installed Capacity located anywhere else (which includes (1) Installed Capacity located in the NYCA, but not in any other Locality; (2) Installed Capacity located in a Locality, if that Locality constraint is not binding in that phase; and (3) Installed Capacity located in an External Control Area, if no External Control Area constraint affecting that External Control Area is binding in that phase) will be the marginal bid cost of providing additional Installed Capacity in that phase located anywhere other than a Locality for which a Locality constraint is binding in that phase or an External Control Area for which an External Control Area constraint is binding in that phase.

The set of prices that results will ensure that when a Locality constraint is binding, the Market-Clearing Price for Installed Capacity located in that Locality will be higher than the Market-Clearing Price for Installed Capacity located in the portion of the NYCA that is not part of another Locality. It also ensures that when an External Control Area constraint is binding, the Market-Clearing Price for Installed Capacity located in that External Control Area (or group of Areas) will be lower than the Market-Clearing Price for Installed Capacity located in the portion of the NYCA that is not part of another Locality.

Market-Clearing Prices will be calculated independently within each phase of a given auction. As a result, the Market-Clearing Price for Installed Capacity at a given location may vary among phases of the same auction, or among different monthly auctions conducted at the same time.

### 5.12 Billing and Settlements

Subject to the exceptions noted elsewhere regarding New York City generation, the ISO will pay each Offeror whose offer to sell Installed Capacity is selected in any particular phase of an auction the Market-Clearing Price determined in that phase of that auction at the location of each of its resources that have been selected in that phase to provide Installed Capacity, for each 100 kW of Installed Capacity that resource has been selected to supply. Each Bidder for Installed Capacity whose bid to purchase is selected in any particular phase of an auction will pay the ISO the Market-Clearing Price at the location specified in the bid(s) that have been selected, for each 100 kW of Installed Capacity that it purchased in that particular phase.

Settlements for Capability Period auctions (i.e., strip, monthly and deficiency) will occur in the month following the month for which the ICAP was purchased. For example, ICAP purchased for the month of May will be billed and paid for in the month of June. The schedule for bills and payments for ICAP will follow the Energy Market schedule. A timetable for bills and payments for the Energy Market can be found on the ISO Web site.

ICAP purchased in the six-month strip auction will be settled on a monthly basis. The ISO will issue bills for one-sixth of the applicable market clearing price for ICAP on the same schedule referenced above.

In-City LSEs will receive bills the ICAP that are net of any Phase I rebates.

### 5.13 Allocation of Winning Bids

Each Bidder whose bid to purchase Installed Capacity in any particular phase of an auction is selected will be allocated a pro rata share of the Installed Capacity purchased in the auction, subject to the locational constraints specified in that Bidder's bid, using the following procedure:

- (i) Bidders whose bids specified that the Installed Capacity must be associated with a resource located in a Locality will be awarded such Installed Capacity.
- (ii) Bidders whose bids specified that the Installed Capacity could be associated with a resource located in a particular Control Area outside the NYCA, and who paid a lower Market-Clearing Price as a result, will be allocated Installed Capacity located in that External Control Area.
- (iii) Any remaining purchasers of Installed Capacity whose bids specified they could accept Installed Capacity associated with resources located outside the NYCA will be allocated Installed Capacity for all remaining Installed Capacity sold in that phase of that auction that is located outside the NYCA. This allocation shall be performed on a pro rata basis, without violating any locational constraints specified by those bidders.
- (iv) All remaining Installed Capacity associated with resources bcated inside the NYCA shall be allocated on a pro rata basis among all remaining purchasers of Installed Capacity in that phase of that auction.

### **5.14 Posting of Results**

The ISO will post the results of each auction within the time period specified in the ISO Procedures. These results shall include:

- (i) The Market-Clearing Price for each Locality, each External Control Area, and the portion of the NYCA not included in any other Locality, in each phase of each ISO-administered auction.
- (ii) The total amount of Installed Capacity associated with resources in each Locality, each External Control Area, and the portion of the NYCA that is not included in any other Locality that was sold in each phase of each ISO-administered auction.
- (iii) The total amount of Installed Capacity purchased in each phase of each ISO-administered auction, broken down by the constraints placed upon the location of those Installed Capacity by the Bidders placing those bids.

The ISO shall publish all bids and offers made in each auction six months after the conclusion of that auction. The names of Offerors or Bidders will not be revealed publicly; however, the ISO will post these data in a way that permits the identity of a given Offeror or Bidder to be tracked over time.

### 6.0 Sanctions

The ISO may impose sanctions on ICAP Suppliers and LSEs for failing to comply with Tariff requirements.

Sanctions may be assessed against Suppliers for actions that fall into the following two categories:

- Failure to provide required information.
- Failure to comply with bidding, scheduling and notification requirements and procedures.

An LSE that fails to comply with the ISO's requirement to demonstrate ahead of the capability period that it has procured sufficient ICAP to cover its obligation is penalized through the procedures and financial consequences of the Deficiency Procurement Auctions. Please refer to Section 5 of this manual for details.

The ISO Services Tariff references are Sections 5.11.2, 5.12.9 and 5.14.1.

### 6.1 Supplier Sanctions

#### 6.1.1 Failure to Provide Required Information

Section 4 of this manual, and the Capability Period Timeline in Attachment A, contain detailed description of the types of information that must be provided to the ISO, and the deadlines for receipt of that information.

If an ICAP Supplier fails to provide the required information, the following procedures will be followed:

- On the first day that the required information is late (unless that day falls on a weekend or official New York State holiday, in which case the notification shall be made on the next business day), the ISO shall notify the Supplier that the information is past due and that the ISO reserves the right to impose financial sanctions if the information is not provided by the end of the next day.
- Starting on the third day that the required information is late, the ISO may impose a daily financial sanction up to the higher of \$500 or \$5 per MW of ICAP that the Generator, Interruptible Load Resource or System Resource has committed to provide.

• Starting on the tenth day that the required information is late, the ISO may impose a daily financial sanction up to the higher of \$1000 or \$10 per MW of ICAP that the Generator, Interruptible Load Resource or System has committed to provide.

### 6.1.2 Failure to Bid, Schedule and Notify the NYISO of Outages

Section 4.6 of this manual contains the daily bidding, scheduling and notification requirements of ICAP suppliers.

On any day in which the ICAP Supplier, or its designated scheduling entity, fails to comply with these requirements, the ISO may impose a financial sanction up to the product of a daily deficiency charge and the maximum number of MWs for which the ISO should have received a bid, schedule or other notification of operating status.

The deficiency charge will be based on the following table, with the applicable charges pro-rated on a daily basis.

#### **Deficiency Bids and Charges**

LOCATION	INTERIM FIRST	END-STATE AFTER
	THREE YEARS	THREE YEARS OF
	AFTER ISO	ISO OPERATIONS
	COMMENCES	
	OPERATIONS	
In-City New York	\$75/kW per	3 Times Localized
City	Obligation	Levelized
(LBMP Load Zone J)	Procurement Period	Embedded Cost of
		GT
Long Island	Year 1: \$60/kW per	3 Times Localized
(LBMP Load Zone	Obligation	Levelized
K)	Procurement Period	Embedded Cost of
	Year 2: \$65/kW per	GT
	Obligation	
	Procurement Period	
	Year 3: \$70/kW per	
	Obligation	
	Procurement Period	

All Other LBMP	Year 1: \$52.5/kW per	3 Times Localized
Load Zones in the	Obligation	Levelized
NYCA	Procurement Period	Embedded Cost of
	Year 2: \$57.5	GT
	Year 3: \$62.5	

The ISO will assess the sanction against the entity that the ICAP Supplier has designated to provide the bids, schedules and status notification.

### 6.2 Procedural Safeguards

If ISO staff becomes aware of potentially sanctionable activity by a Market Participant it shall report the activity to ISO's Discretionary Acts Committee ("DAC"). The DAC will evaluate the reported activity pursuant to its procedures and, if warranted, shall recommend an appropriate sanction. All DAC decisions shall be made in a reasonable and non-discriminatory manner.

If the DAC recommends a sanction, the ISO shall send a "Notice of Recommended Sanction" to any Market Participant potentially subject to sanctions pursuant to the DAC's procedures. The DAC shall afford Market Participants a reasonable opportunity to demonstrate that its activities are not sanctionable. Market Participants shall also have a reasonable opportunity to bring any mitigating circumstances to the DAC's attention and to explain why the DAC, in the event that it decides to recommend a sanction, should reduce the sanction's severity.

If a Market Participant accepts a sanction recommended by the DAC the ISO will automatically impose the sanction. If a Market Participant disagrees with a recommended sanction it may appeal the DAC's decision to the ISO's President and Chief Executive Officer ("CEO"), who must approve all contested sanctions. Market Participants may challenge any sanction approved by the CEO pursuant to the ISO's Dispute Resolution Procedures.

### **Attachment A:**

## Installed Capacity Reporting and Auction Timeline

#### Stage IA

Date	Description (All time are in Prevailing Eastern Time)		
1/15/2001	TOs provide TD Peak Load Forecasts and Regional Load Growth Factors to the ISO		
1/31/2001	NYSRC sets Installed Reserve Margin for the NYCA for the 2001/2002 Capability Year		
2/15/2001	Transmission Owners (TOs) provide TD and Load Serving Entity (LSE) peak Load coincident with the TD peak to ISO and LSEs. ISO provides Summer 2000 DMNC ratings to Generators		
2/19/2001	ISO informs each potential Installed Capacity Supplier that is required to submit DMNC data of its approved DMNC ratings for the Summer Capability Period.		
2/29/2001	Post NYCA peak Load forecast for Summer 2001 Capability Period, NYCA Installed Capacity Requirement (ICR) determined		
3/1/2001	ISO posts TD ICRs Summer 2001 Capability Period <b>only</b> - Start date for performing weather-adjusted DMNC tests for Summer 2001 Capability Period		
3/8/2001	TOs provide information relating to Load shifting through February $29^{\rm th}$ to the ISO and LSEs		
3/22/2001	<b>ICAP Auction training</b> - bid & offer submittal process ISO provides preliminary ICRs to LSEs		
3/23/2001	<b>8:00 AM</b> . Beginning of period to request external ICAP rights on "first come-first served" basis.		

3/24/2001	Summer 2001 Capability Period only - End date for performing and reporting to the ISO weather-adjusted DMNC tests for Summer 2001 Capability Period. ICAP resources must be Registered Customers of the ISO by this date in order to participate in the Obligation Period Auction.
3/27/2001	<b>5:00 PM</b> End of period to request external ICAP rights on "first come-first served" basis.
3/28/2001	<b>5:00 PM</b> . ISO must receive a letter signed by an appropriate representative declaring that external ICAP rights which have been awarded during the "first come first served" allocation process are matched between a qualified ICAP Supplier and a NYCA Load. The letter may be sent by the NYCA Customer awarded the rights, the ICAP Supplier or an LSE serving NYCA Load.
	5:00 PM. ISO must receive "Certification of External ICAP Rights."
	See Section 4.7.3 of this manual for details.
	ISO posts drafts of Agreements to Purchase and Sell ICAP.
3/29/2001	<b>5:00 PM</b> . All comments relating to the Agreements to Purchase and Sell ICAP due to ISO.
	<b>5:00 PM</b> . ICAP Supplier Certification Forms are due to the ISO by facsimile (518-356-6208).
3/30/2001	<b>Noon</b> . ISO posts final form of Agreements to Purchase and Sell ICAP.
3/31/2001	<b>5:00 PM</b> . Agreements to Purchase and Sell ICAP are due to the ISO by facsimile. Hard copies of these agreements must be delivered to the ISO by noon on April 1, 2001.
	Creditworthiness requirements must be satisfied by 5 PM
4/1/2001	8:00 AM. Beginning of period to submit electronic bids and offers for the ICAP Obligation Period Auction (strip auction)
	<b>Noon</b> . Hard copies of Agreements to Purchase and Sell must be received by the ISO.

4/3/2001	Obligation Period Auction
	5:00 PM. End of period to submit electronic bids and offers for the ICAP Obligation Period Auction (strip auction)
	TOs provide information relating to Load shifting through April $30^{\text{th}}$
4/6/2001	Results of Obligation Period Auction posted
4/7/2001	ISO provides LSEs with Summer 2001 Capability Period ICR
4/10/2001	<b>5:00 PM</b> . Agreements to Purchase and Sell ICAP (if not subsequently submitted for the Obligation Procurement Auction) are due to the ISO by facsimile. Hard copies of these agreements must be delivered to the ISO by noon the next day.
4/11/2001	8:00 AM. Beginning of period to submit electronic bids and offers for the ICAP Obligation Period Auction
	<b>Noon</b> . Hard copies of Agreements to Purchase and Sell must be received by the ISO.
4/12/2001	Obligation Period Auction (monthly auctions)
	5:00 PM. End of period to submit electronic bids and offers for the ICAP Obligation Period Auction (monthly auctions)
4/14/2001	Special Case resources provide DMNC and interruptible Load test data to ISO
4/17/2001	Post results of Obligation Period Auction (monthly auctions)
4/20/2001	Submit GADS Data, or equivalent operating data, pertaining to the months of January 2000 to, and including, March 2001
4/21/2001	LSEs certify to ISO that their Summer 2001 Capability Period ICR is met.
	Generators certify to ISO that they have not sold their ICAP elsewhere
	The ISO will post the deficiency MW amount to be procured in the Deficiency Procurement Auction

4/24/2001	Deficiency Procurement Auction
	Offering period to submit electronic bids for the Deficiency Procurement Auction begins at 8:00 AM and ends at 5:00 PM
4/27/2001	Post results of Deficiency Procurement Auction
4/30/2001	2000 NERC-GADS data or equivalent submitted to the ISO
5/11/2001	TOs provide information relating to Load shifting through May 31st
5/12/2001	ISO provides ICR to LSEs for month of June
5/16/2001	Monthly Auction (auctions for June - October)
	Bidding/Offering period to submit electronic bids/offers for the Monthly Auction begins at 8:00 AM and ends at 5:00 PM
5/18/2001	Post results of Monthly Auction
5/24/2001	LSEs certify to ISO that their ICR is met
5/26/2001	Deficiency Procurement Auction
	Offering period to submit electronic bids for the Deficiency Procurement Auction begins at 8:00 AM and ends at 5:00 PM
5/30/2001	Post results of Deficiency Procurement Auction
6/9/2001	TOs provide information relating to Load shifting through June 30th
6/12/2001	ISO provides ICR to LSEs for month of July
6/16/2001	Monthly Auction (auctions for July - October)
	Bidding/Offering period to submit electronic bids/offers for the Monthly Auction begins at 8:00 AM and ends at 5:00 PM
6/20/2001	Post results of Monthly Auction
6/26/2001	LSEs certify to ISO that their ICR is met
6/28/2001	Deficiency Procurement Auction
	Offering period to submit electronic bids for the Deficiency Procurement Auction begins at 8:00 AM and ends at 5:00 PM

	• • • • • • • • • • • • • • • • • • • •
6/30/2001	Post results of Deficiency Procurement Auction
7/7/2001	TOs provide information relating to Load shifting through July 31st
7/10/2001	ISO provides ICR to LSEs for month of August
	Bidding/Offering period to submit electronic bids/offers for the Monthly Auction begins at 8:00 AM and ends at 5:00 PM
7/14/2001	Monthly Auction (auctions for August - October)
7/18/2001	Post results of Monthly Auction
7/25/2001	LSEs certify to ISO that their ICR is met
7/27/2001	Deficiency Procurement Auction
7/29/2001	Post results of Deficiency Procurement Auction
	Offering period to submit electronic bids for the Deficiency Procurement Auction begins at 8:00 AM and ends at 5:00 PM
8/10/2001	TOs provide information relating to Load shifting through August $31^{\rm st}$
8/11/2001	ISO provides ICR to LSEs for month of September
8/15/2001	ISO informs each potential Installed Capacity Supplier that is required to submit DMNC data of its approved DMNC ratings for the Winter Capability Period.
8/16/2001	Monthly Auction (auctions for September - October)
	Bidding/Offering period to submit electronic bids/offers for the Monthly Auction begins at 8:00 AM and ends at 5:00 PM
8/18/2001	Post results of Monthly Auction
8/25/2001	LSEs certify to ISO that their ICR is met
8/28/2001	Deficiency Procurement Auction
	Offering period to submit electronic bids for the Deficiency Procurement Auction begins at 8:00 AM and ends at 5:00 PM
8/30/2001	Post results of Deficiency Procurement Auction

9/7/2001	TOs provide information relating to Load shifting through September 30 <sup>th</sup>		
9/8/2001	ISO provides ICR to LSEs for month of October		
9/15/2001	Monthly Auction (auction for October)		
	Bidding/Offering period to submit electronic bids/offers for the Monthly Auction begins at 8:00 AM and ends at 5:00 PM		
9/19/2001	Post results of Monthly Auction		
9/26/2001	LSEs certify to ISO that their ICR is met		
9/28/2001	Deficiency Procurement Auction		
	Offering period to submit electronic bids for the Deficiency Procurement Auction begins at 8:00 AM and ends at 5:00 PM		
9/30/2001	Post results of Deficiency Procurement Auction		

### Attachment B:

### NYISO Local Reliability Rules

Minimum Installed Capacity Requirements for Localities:

- The Locational Installed Capacity requirement for New York City (LBMP Zone J) is 80%.
- The Locational Installed Capacity requirement for Long Island (LBMP Zone K) is 93% (this value is equivalent to 106.6% after accounting for Grandfathered agreements).

Maximum Allowances for Installed Capacity Provided by Resources Outside the NYCA:

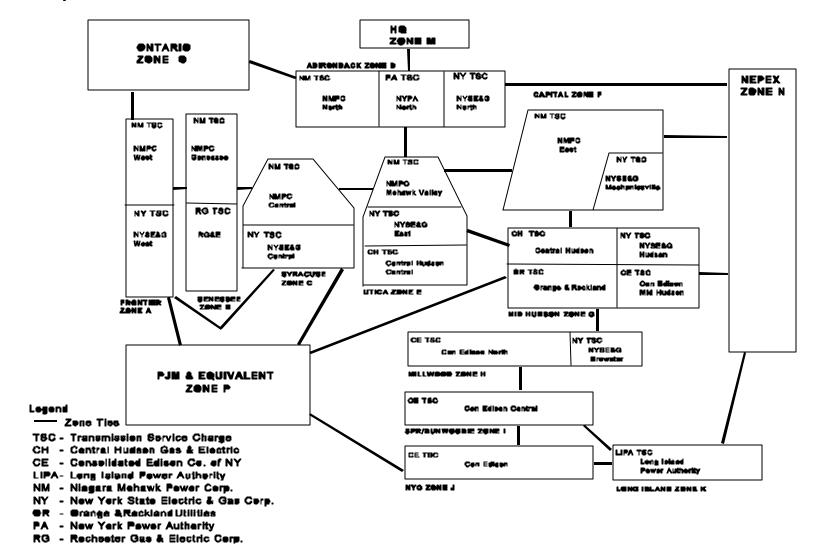
- The maximum amount of Installed Capacity that may be located outside the NYCA is 3165 MW. This number will be updated annually based on ISO reliability studies.
- The maximum amount of Installed Capacity that may be located in each of the following control areas is as follows:

Neighboring	Total (MW)	Grandfathered	Remaining
Control Area		(MW)	(MW)
PJM	1530	1530	0
NEPOOL	110	110	0
Ontario	55	55	0
Quebec	950	600	350

### **Attachment C:**

Maps of the NYCA Transmission Districts and Zones

### Maps of the NYCA Transmission Districts and Zones



### Attachment D:

# Dependable Maximum Net Generating Capability Audit Forms and the Procedure to Weather Adjust DMNC Test Data

The following forms are included in this attachment:

- Steam Generation
- Hydro Generation
- Internal Combustion and Combustion Turbine Generation
- Combined Cycle Generation
- Other

#### **Procedure to Weather Adjust DMNC Test Data**

DMNC tests performed prior to the summer DMNC test period of June 1 through September 15 must be weather-adjusted according to the following procedure. These procedures also apply to combined cycle generation. Combined cycle generation should perform this test in their normal operational configuration.

The DMNC is determined on the basis of the average ambient and cooling system temperature at their location experienced at the time of the NYCA summer peak during the previous four Summer Capability Periods.

The NYCA peak Loads and times for the four previous Summer Capability Periods are provided below:

Year 1997	28700 MW	July 15, 1997	3 PM
Year 1998	28160 MW	July 22, 1998	5 PM
Year 1999	30311 MW	July 6, 1999	2 PM
Year 2000	28138 MW	June 26, 2000	5 PM

- To determine the average ambient and cooling system temperature, use the temperatures at the location of the generator performing the DMNC test.
- Determine the weather adjusted DMNC rating for the generator using the manufacturer's provided temperature adjustment curves and generator specific curves (if applicable) produced from historical experience.
- Provide both sets of ratings and temperature adjustment curves.

• The higher of the two values may be claimed. The ISO may lower the value claimed for the weather-adjusted DMNC, if the provided temperature adjustment curves are significantly different.

### NEW YORK ISO DEPENDABLE MAXIMUM NET GENERATING CAPABILITY AUDIT

Fossil or Nuclear Steam Generation

Sheet	
Date	
Capability	

			DEPENDABLE MAXIMUM NET CAPABILITY (MW)										
Generator	Date	Demonstrated		Pre-Test	Post-Test		Test			Remarks			
or	of		Но	urly		Average	DMNC	DMNC	Difference	Α	В	С	
Station	Test	1	2	3	4		Rating*	Rating	(Post-Pre)				

- A. Over Pressure
- B. Top Feed Water Heater OS
- C. Exceptions to Procedure Explained in Remarks Section
- \* From Last Like Capability

### NEW YORK ISO DEPENDABLE MAXIMUM NET GENERATING CAPABILITY AUDIT

Hydro Generation

Sheet	
Date	
Capability	

		DEPENDABLE MAXIMUM NET CAPABILITY (MW)										
Date	Demonstrated		Pre-Test Post-Test			Test			Remarks			
of		Ηοι	urly		Average	DMNC	DMNC	Difference	Α	В	С	
Test	1	2	3	4		Rating*	Rating	(Post-Pre)				
						•						
·												
	of	of	of Ho	Date Den of Hourly	Date Demons	Date Demonstrated of Hourly Average	Date Demonstrated Pre-Test of Hourly Average DMNC	DateDemonstratedPre-TestPost-TestofHourlyAverageDMNCDMNC	DateDemonstratedPre-TestPost-TestofHourlyAverageDMNCDMNCDifference	Date     Demonstrated     Pre-Test     Post-Test       of     Hourly     Average     DMNC     DMNC     Difference     A	DateDemonstratedPre-TestPost-TestTestofHourlyAverageDMNCDMNCDifferenceAB	Date     Demonstrated     Pre-Test     Post-Test     Test       of     Hourly     Average     DMNC     DMNC     Difference     A     B     C

### NEW YORK ISO DEPENDABLE MAXIMUM NET GENERATING CAPABILITY AUDIT

Internal Combustion and Combustion Turbine Generation

Sheet	
Date	
Capability	

ompany
--------

			CAPABILITY AT TE	ST TEMP.	(MW)		DMNC AT AVG. AM	IBIENT TEMP. (MW)	
١r	Date	Test	Demonstrated	Per	Excess (+)	Avg	Pre-Test	Post Test	Remarks
	of	Temp.		Curve	Deficiency (-)	Amb	DMNC	DMNC	
	Test	(/F)				Temp (/F)	Rating	Rating	

<sup>\*</sup> From Last Like Capability Period

### NEW YORK ISO DEPENDABLE MAXIMUM NET GENERATING CAPABILITY AUDIT

Combined Cycle Generation

Sheet	
Date	
Capability_	

Compan	У		

			CAPABILITY AT 1	EST TEI	MP. (MW)			AMBIEN	AT AVG. IT TEMP. IW)	
Generator	Date	Test	Test Demonstrated			Excess(+)	Avg		Post Test	Remarks
or	of	Temp.	Hourly	Aver.	Curve	Deficiency(-	Amb	DMNC	DMNC	
Station	Test	(/F)	1   2   3   4	ļ		,	Temp (/F)	Rating	Rating	

From Last Like Capability Period

### NEW YORK ISO DEPENDABLE MAXIMUM NET GENERATING CAPABILITY AUDIT

Other Generation

Sheet	
Date	
Capability	

Company
---------

		DEPENDABLE MAXIMUM NET CAPABILITY (MW)						CAPABILITY					
Generator	Date	Demonstrated			strated	Pre-Test Post-Test			Test		Remarks		
or	of		Ηοι	urly		Average	DMNC	DMNC	Difference	Α	В	С	
Station	Test	1	2	3	4		Rating*	Rating	(Post-Pre)				
	·												

### **Attachment E:**

# Grandfathered External Installed Capacity Rights

Existing Installed Capacity Agreements entered into by Load Serving Entities and Suppliers in the neighboring Control Areas prior to September 17, 1999 have been provided a Grandfathered status for the duration of the original contract.

Grandfathered External Installed Capacity rights are described in Section 5.12.2 of the NYISO Services Tariff.

For the upcoming Summer 2001 Capability Period the MW amount of Grandfathered contracts associated with each of the neighboring Control Areas is provided below:

Neighboring	Grandfathered	Contract	Contract		
Control Area	(MW)	Est. Date	<b>End Date</b>		
PJM	1080	Attachment L	Indefinite		
PJM	400	Services Tariff	Indefinite		
PJM	25	12/31/1996	8/31/2007		
PJM	25	2/22/1999	4/30/2008		
ISO-NE	50	9/25/1996	12/31/2013		
Ontario-IMO	55	8/16/1996	12/31/2008		
Total	1635				

See Contract #s 14, 15, 16 and 17 of Attachment L, Table 3 to the ISO OATT for 1080 MWs of Grandfathered External ICAP rights for the PJM control area.

See Section 5.12.2 of the ISO Services Tariff for information pertaining to the 400 MW of Grandfathered External ICAP rights for the PJM control area.

### Attachment F:

# Agreement to Purchase Installed Capacity in the Strip Auction

THIS	AGREEMENT	TO I	PURCHASE	INSTALLED	CAPACITY	(the	"Purchase
Agree	ment"), date a	s of thi	s day	y of			_, is given
by					, havir	ng a	principal
busine	ss a	ddress	at				
							(the
"Bidde	er").						

#### **RECITALS**

WHEREAS, pursuant to the terms of the New York Independent System Operator Services Tariff (the "ISO Services Tariff") and the NYISO Installed Capacity Manual (the "ICAP Manual"), the New York Independent System Operator, Inc. (the "NYISO") will administer an auction wherein Offerors may sell and Bidders may purchase Installed Capacity (the "ICAP Aucti

WHEREAS, all capitalized terms used herein without definition shall have the meaning ascribed thereto in the ISO Services Tariff and/or the Independent System Operator Agreement (the "ISO Agreement") and the ICAP Manual; and

WHEREAS, to the extent that Bidder purchases Installed Capacity under the terms of this Purchase Agreement, Bidder satisfies its Installed Capacity requirements with respect to the Installed Capacity so purchased; and

WHEREAS, Bidder is an Eligible Customer and intends that the submission of this Purchase Agreement, coupled with the submission of a properly formatted bid via electronic mail ("Electronic Bid") (together, "Bid Package"), shall constitute an official bid for purposes of the ICAP Auction and that the Bid Package will be recorded and objectively analyzed pursuant to the ISO Services Tariff and the ICAP Manual, which materials have been reviewed by the Bidder;

NOW, THEREFORE, in consideration of the NYISO including Bidder's Electronic Bid in the ICAP Auction, which Bidder acknowledges and agrees is adequate consideration for its obligations hereunder, Bidder and the NYISO (together the "Parties") hereby agree to the following:

#### 1. Bid to Purchase Installed Capacity.

- (a) The Parties agree that the ICAP Auction will be conducted in accordance with the ISO Services Tariff and the ICAP Manual.
- (b) The Bidder agrees to purchase Installed Capacity in the amounts, for the Monthly Effective Periods, in the locations and for the maximum price (or less) listed in the Bidder's Electronic Bid (each individual bid listed in the Bidder's Electronic Bid being referred to as an "Individual Bid") and requests that the NYISO submit the Individual Bids in the ICAP Auction. The Parties agree that the purchase price for the Installed Capacity offered in each Individual Bid in the ICAP Auction shall be the Market Clearing Price established in the ICAP Auction (as determined by the NYISO, or its designee); provided, however, that if the Installed Capacity is from a Subject Generator (as defined in Attachment I of the ICAP Manual) then the purchase price shall be adjusted in the same manner as the sale price is adjusted under the ICAP Manual.
- (c) The Parties agree that the Bidder's submission of a completed Bid Package represents a binding obligation of the Bidder to purchase and pay for the amount of Installed Capacity designated by the NYISO in the Award Notice (as defined below) pursuant to the terms of the ISO Services Tariff and the ICAP Manual.
- (d) The Parties agree that the mere submission of a Bid Package does not obligate the NYISO to accept the Bid Package, in whole or in part, nor does the submission of a Bid Package grant any right to the Bidder to purchase any Installed Capacity.
- (e) The Parties agree that the Market Clearing Price for Installed Capacity could be positive or zero.
- (f) The Parties agree that the bids contained in the Bidder's Electronic Bid may be amended by the Bidder at any time during the period in which Electronic Bids are accepted (the "Bidding Period") by submitting a new Electronic Bid which must be received in accordance with this Section and the ICAP Manual. If an amendment is timely and correctly submitted by the Bidder as provided herein, the most recently received Electronic Bid, as indicated by the date and time of submission reported on the Electronic Bid, will supersede any previous Electronic Bid(s) and any previous Electronic Bid(s) will have no further force or effect.
- (g) The Parties agree that this Purchase Agreement must be received by the NYISO between 2:00 PM and 7:00 PM on March 31, 2001 via fax. This fax submission must be followed by delivery of the original Purchase Agreement via an overnight mail service or a delivery service requiring the signature of the addressee, delivered to the NYISO, by early delivery not later than 12:00 noon

on April 1, 2001. Fax submissions must be sent to: "ICAP Auctioneer c/o NYISO" at (518) 356-6208, (518) 356-6146, or (518) 356-6100. Express mail deliveries must be delivered to:

ICAP Auctioneer c/o New York Independent System Operator 5172 Western Turnpike Altamont, NY 12009

- (h) The Parties agree that to complete the Bid Package, the Bidder must submit, in addition to a Purchase Agreement, a properly formatted Electronic Bid to the NYISO at <br/>buyicap@.com> prior to close of the Bidding Period. The Parties further agree that the Electronic Bid must be submitted in the format provided by the NYISO using Microsoft Excel or Lotus 123 software, that the Bidder must provide all information required on the Electronic Bid, that the Bidder must password-protect the file before transmitting it to the NYISO, and that the time of submission for all Electronic Bids will be determined by the date and time stamp of the automatic return receipt transmitted by the NYISO to the Bidder upon receipt of the Electronic Bid.
- (i) The Parties agree that timely submission of a Bid Package does not guarantee that the Bid Package is valid for inclusion in the ICAP Auction. The Parties agree that a Bid Package that has not been completed in conformity with the ICAP Manual and this Purchase Agreement, in the NYISO's sole judgment, shall be invalid and will be rejected.
- (j) In the event that the NYISO invalidates a Bidder's Bid Package, it shall notify the Bidder as soon as reasonably possible via email. If a Bidder's Bid Package is invalidated, the Bidder shall have the right to submit a revised Bid Package at any time until the close of the Bidding Period.
- (k) The Parties agree that the Bidder bears the sole responsibility for submitting a correct and complete Bid Package.
- (l) The Parties agree that the Bidder will not assign any of its rights or obligations under a Bid Package unless the assignee of such rights and obligations makes the representations and warranties in Section 3(a)(i), (ii) and (iii).
- 2. Payment Procedures for the Purchase of Installed Capacity.
- (a) The Bidder's obligation to purchase and pay for Installed Capacity shall become effective upon the distribution of written notice (the "Award Notice") on April 5, 2001, which notice shall specify the amount of Installed Capacity, if any, that the Bidder shall be required to purchase (the "Awarded Installed")

Capacity"), the Market Clearing Price of such Awarded Installed Capacity, the location of such Awarded Installed Capacity, the Total Purchase Price (as defined in this Section 2(a)) and wiring instructions for paying the Total Purchase Price for the Awarded Installed Capacity. The total purchase price (the "Total Purchase Price") shall equal the sum of the products of the amount of Installed Capacity and the Market Clearing Price for each Individual Bid, except, if any Individual Bid to be included in such calculation includes Installed Capacity from a Subject Generator, then the purchase price shall be adjusted in the same manner as the sale price is adjusted under the ICAP Manual.

- (b) Amounts due on Installed Capacity purchased in the six month strip auction will be settled on a monthly basis. In each monthly billing, the NYISO will issue bills for one sixth of the Total Purchase Price for Installed Capacity. Bills issued by the NYISO for the purchase of ICAP will be net of any rebates due to the Bidder.
- (c) By 10:00 AM on the first banking day after the fifteenth day of the month after the month for which Installed Capacity was purchased, Bidder shall cause funds to be wired to the accounts specified in the Award Notice in an amount equal to the one sixth of the Total Purchase Price, as indicated in the monthly bill issued by the NYISO.
- (d) Within six (6) business days after receipt of an Award Notice by the Bidder, to the extent that the Bidder disputes the calculation of the Total Purchase Price due and payable, the Bidder shall give written notice to the NYISO, or its designee, setting forth in reasonable detail the basis for any such disagreement ("Dispute"). If the Bidder does not give written notice within the six (6) business day period, the Bidder shall be deemed to have irrevocably accepted the Total Purchase Price in the manner specified in the Award Notice as delivered to the Bidder by the NYISO, or its designee.
- (e) If a timely filed written notice of Dispute is given, the Bidder and the NYISO, or its designee, shall promptly commence good faith negotiations with a view to resolving the Dispute(s) within five (5) business days of the NYISO's receipt of such notice. If the Dispute(s) are not resolved within the five (5) business day period, then the Dispute(s) shall thereafter be referred by either the Bidder or the NYISO, or its designee, to Richard L. Miles, Director, of the FERC Office of Dispute Resolution Service, or his successor in office (the "Director") for a resolution of such Dispute(s) in accordance with this Purchase Agreement and the ICAP Manual. The resolution of the Dispute(s) shall be conducted in the following manner:

- (i) Within three (3) business days after being notified of a Dispute, the Director shall identify and create a list of five (5) arbitrators who must be knowledgeable about the energy industry, to be delivered to the Bidder and the NYISO, or its designee.
- (ii) Within five (5) business days of receipt of such list from the Director, the Bidder and the NYISO, or its designee, separately, shall select three (3) arbitrators from the Director's list and resubmit their selections to the Director.
- (iii) Within two (2) business days of the Director's receipt of the resubmitted list of arbitrators from the Bidder and the NYISO, or its designee, the Director shall select in its sole discretion one arbitrator (the "Arbitrator") to resolve the Dispute(s) in accordance with the terms and conditions of this Purchase Agreement and the ICAP Manual. The decision and resolution of the Arbitrator shall be rendered within twenty (20) business days after referral of the Dispute(s) to the Arbitrator and shall be final and binding upon the parties. During this twenty (20) business day period, the Bidder and the NYISO, or its designee, will be allowed to make written and oral presentations to the Arbitrator. The Bidder and the NYISO, or its designee, shall use their best efforts to cause the Arbitrator to render its decision within the twenty (20) business day period described above, and each shall cooperate with the Arbitrator and provide the Arbitrator with access to the books, records and representatives of each as the Arbitrator may require in order to render its determination. All of the fees and expenses of any Arbitrator retained pursuant to this Section shall be paid by the party who does not prevail in the Dispute(s).
- (iv) In the event that the Bidder is barred, by law, from entering into binding arbitration, Disputes shall be heard in a court of competent jurisdiction in the State of New York.
- (f) To the extent that the Bidder disputes the calculation of the Total Purchase Price due and payable, the Bidder shall remain obligated to make payment in full for the Installed Capacity, as indicated in the Award Notice. If it is later determined, in accordance with this Section 2, that an overpayment has been made by the Bidder to the NYISO, then the NYISO shall refund the amount overpaid to the Bidder. If it is later determined, in accordance with this Section 2, that an underpayment has been made by the Bidder, then the Bidder shall pay the amount owed to the NYISO. Payments made pursuant to this Section 2(e) shall also include interest calculated from the date that the overpayment or underpayment was made, in accordance with the methodology specified for interest on refunds in the FERC regulations at 18 C.F.R. § 35.19a(a)(2)(iii).

(g) If a mistake is discovered in the calculation of information provided in an Award Notice after its delivery, the NYISO reserves the right and has the obligation to revise the Award Notice and the information therein, and the Bidder acknowledges that it will be obligated to make arrangement for payment or receipt of payment in accordance with the revised Award Notice. Prior to making such revision, the NYISO shall notify Bidder of the mistake and provide Bidder with an explanation of the basis for the revised Award Notice.

#### 3. Representations and Warranties of the Bidder.

- (a) The Bidder hereby represents and warrants to the NYISO as follows:
  - (i) Bidder is an Eligible Customer and is purchasing Installed Capacity solely for purposes related to its business as a producer, processor, commercial user of or a merchant handling Installed Capacity or the products or by-products thereof.
  - (ii) Bidder shall not resell any Installed Capacity purchased through the ICAP Auction for the purpose of meeting the Installed Capacity requirements imposed by operators of External Control Areas.
  - (iii) Bidder has full power and authority to execute and deliver the Bid Package and to perform its obligations hereunder. The completed Bid Package constitutes a valid and legally binding obligation of the Bidder.
  - (iv) The execution and delivery of the Bid Package and the consummation of the transactions contemplated hereby have been duly and validly approved by all requisite action, corporate or otherwise, on the part of Bidder, and no other proceedings, corporate or otherwise, on the part of Bidder are necessary to approve and submit the Bid Package and to consummate the transactions contemplated hereby.
  - (v) Bidder is qualified to purchase the Installed Capacity and has sufficient funds to purchase the Installed Capacity as contemplated herein.
  - (vi) Bidder holds all licenses, franchises, permits and authorizations in compliance with any applicable laws, rules and regulations that are necessary for the lawful ownership and/or use of the Installed Capacity.
  - (vii) Other than providing the information required by this Purchase Agreement, Bidder has not amended or changed this Purchase Agreement in any way to make it different from the "Purchase Agreement" attached to the ICAP Manual as Attachment F.

- (b) All representations and warranties contained herein shall be deemed to be made again as of the purchase and sale of the Installed Capacity as contemplated in this Purchase Agreement.
- 4. Indemnification; Release of Liability.
- (a) Bidder agrees to indemnify and save and hold harmless the NYISO, and all of its respective officers, directors, employees, and agents, from and against any and all losses, damages, expenses, liabilities, claims or demands, including attorney's fees, (collectively, the "Damages") whatsoever suffered or incurred by such parties resulting, arising from or relating to Bidder's breach of any of its agreements, covenants, representations or warranties contained herein, except for those Damages resulting from the NYISO's gross negligence or intentional misconduct.
- (b) Bidder hereby releases the NYISO, and all of its officers, directors, employees and agents, from any and all liability arising from or relating to the ICAP Auction, except with respect to any gross negligence or intentional misconduct on the part of the NYISO, its officers, directors, employees, or agents.

### 5. Miscellaneous.

(a) All inquires, notices, and communications can be given by the NYISO to the Bidder as follows:

Name:	 
Address:	 
Phone:	 
Fax:	 
E-mail:	 

- (b) All representations, warranties, covenants, and obligations of this Purchase Agreement shall survive the purchase of the Installed Capacity by the Bidder.
- (c) The Bidder's Bid Package, together with the ISO Services Tariff and the ICAP Manual, constitute the entire agreement between the Parties on the subject

matter hereof and supersede all prior discussions, agreements, and understandings of any kind and nature between them.

- (d) It is understood and agreed that the provisions of this Purchase Agreement are intended for the benefit of the Bidder and the NYISO and may be enforced directly by the NYISO against Bidder or by the Bidder against the NYISO.
- (e) This Purchase Agreement and all Electronic Bids shall be governed by and construed in accordance with the laws of the State of New York without giving effect to its conflict of laws provisions.

IN WITNESS WHEREOF, this Purchase Agreement has been submitted as of the date first above written.

NAME OF BIDDER:
By:
Name:
Title:
New York Independent System Operator, Inc.
By:
Name:
Title:

### Attachment G:

# Agreement to Sell Installed Capacity in the Strip Auction

THIS AGRE	EEMENT TO	SELL INSTALLE	D CAPACITY (the $^{\prime}$	'Sale Agreement")	, dated
as of this	day of		, is given by		
having	a	principal	business	address	at
			(the "Offer	ror").	

### RECITALS

WHEREAS, pursuant to the terms of the New York Independent System Operator Services Tariff (the "NYISO Services Tariff") and the NYISO Installed Capacity Manual"), the New York Independent System Operator, Inc. (the "NYISO") will administer an auction wherein Offerors may sell and Bidders may purchase Installed Capacity (the "ICAP Auction"); and

WHEREAS, all capitalized terms used herein without definition shall have the meaning ascribed thereto in the ISO Services Tariff and/or the Independent System Operator Agreement (the "ISO Agreement") and the ICAP Manual; and

WHEREAS, Offeror is an Eligible Customer and intends that the submission of this Sale Agreement, coupled with the submission of a properly formatted offer via electronic mail ("Electronic Offer") (together the "Offer Package"), shall constitute an official offer for purposes of the ICAP Auction and that the Offer Package will be recorded and objectively analyzed pursuant to the ISO Services Tariff and the ICAP Manual, which materials have been reviewed by the Offeror;

NOW, THEREFORE, in consideration of the NYISO including Offeror's Electronic Offer in the ICAP Auction, which Offeror acknowledges and agrees is adequate consideration for its obligations hereunder, Offeror and the NYISO (together the "Parties") hereby agree to the following:

### 1. Offer to Sell Installed Capacity.

- (a) The Parties agree that the ICAP Auction will be conducted in accordance with the ISO Services Tariff and the ICAP Manual.
- (b) The Offeror agrees to sell Installed Capacity in the amounts, for the Monthly Effective Periods, for at least the minimum prices, and from the resources

specified in Offeror's Electronic Offer (each individual offer listed in Offeror's Electronic Offer being referred to as an "Individual Offer") and requests that the NYISO submit the Individual Offers in the ICAP Auction. The Parties agree that the sale price for the Installed Capacity offered in each Individual Offer in the ICAP Auction shall be the Market Clearing Price established in the ICAP Auction (as determined by the NYISO, or its designee); provided, however, that if the Installed Capacity is from a Subject Generator (as defined in the Attachment I of the ICAP Manual) then the sale price for the Installed Capacity indicated in such Individual Offer shall be calculated pursuant to the ICAP Manual.

- (c) The Parties agree that the Offeror's submission of its completed Offer Package represents a binding obligation of the Offeror to sell the amount of Installed Capacity referenced in its Electronic Offer.
- (d) The Parties agree that the mere submission of an Offer Package does not obligate the NYISO to accept the Offer Package, in whole or in part, nor does the submission of an Offer Package grant any right to the Offeror to sell any Installed Capacity.
- (e) The Parties agree that the Market Clearing Price for Installed Capacity could be positive or zero.
- (f) The Parties Agree that the offers contained in Offeror's Electronic Offer may be amended by the Offeror at any time during the period in which Electronic Offers are accepted (the "Offering Period") by submitting a new Electronic Offer which must be received in accordance with this Section and the ICAP Manual. If an amendment is timely and correctly submitted by the Offeror as provided herein, the most recently received Electronic Offer, as indicated by the date and time of submission reported on the Electronic Offer, will supersede any previous Electronic Offer(s) and any previous Electronic Offer(s) will have no further force or effect.
- (g) The Parties agree that this Sale Agreement must be received by the NYISO by between 2:00 PM and 7:00 PM on March 31, 2001 via fax. This fax submission must be followed by delivery of the original Sale Agreement via an overnight mail service or a delivery service requiring the signature of the addressee, delivered to the NYISO, by early delivery not later than 12:00 noon on April 1, 2001. Fax submissions must be sent to: "ICAP Auctioneer c/o NYISO" at (518) 356-6208, (518) 356-6146, or (518) 356-6100. Express mail deliveries must be delivered to:

ICAP Auctioneer c/o New York Independent System Operator

5172 Western Turnpike Altamont, NY 12009

- (h) The Parties agree that to complete the Offer Package, the Offeror must submit, in addition to a Sale Agreement, a properly formatted Electronic Offer to the NYISO at <sellicap@.com> prior to close of the Offering Period. The Parties further agree that the Electronic Offer must be submitted in the format provided by the NYISO using Microsoft Excel or Lotus 123 software, that the Offeror must provide all information required on the Electronic Offer, that the Offeror must password-protect the file before transmitting it to the NYISO, and that the time of submission for all Electronic Offers will be determined by the date and time stamp of the automatic return receipt transmitted by the NYISO to the Offeror upon receipt of the Electronic Offer.
- (i) The Parties agree that timely submission of an Offer Package does not guarantee that the Offer Package is valid for inclusion in the ICAP Auction. The Parties agree that an Offer Package that has not been completed in conformity with the ICAP Manual and this Sale Agreement, in the NYISO's sole judgment, shall be invalid and will be rejected.
- (j) In the event that the NYISO invalidates an Offeror's Offer Package, it shall notify the Offeror as soon as reasonably possible via email. If an Offeror's Offer Package is invalidated, the Offeror shall have the right to submit a revised Offer Package at any time until the close of the Offering Period.
- (k) The Parties agree that the Offeror bears the sole responsibility for submitting a correct and complete Offer Package.

### 2. Payment Procedures for Sale of Installed Capacity

(a) Offeror's obligation to sell Installed Capacity shall become effective upon the distribution of written notice (the "Award Notice") on April 5, 2001, which notice shall specify the amount of Installed Capacity that the Offeror has sold in the auction, the Market Clearing Price of such Installed Capacity, the location of the resource and the Total Selling Price (as defined in this Section 2(a)). The total selling price ("Total Selling Price") shall equal the sum of the products of the amount of Installed Capacity and the Market Clearing Price for each Individual Offer, except, if any Individual Offer to be included in such calculation includes Installed Capacity from a Subject Generator (as defined in the Attachment I of the ICAP Manual), then the individual sales price for any such Individual Offer that must be included in the calculation of Total Selling Price shall be calculated pursuant to the ICAP Manual.

- (b) Within six (6) business days of Offeror's receipt of the Award Notice, Offeror shall give wiring instructions to the NYISO, or its designee, designating the account(s) to which funds generated from the ICAP Auction will be transferred by the NYISO pursuant to the ICAP Manual.
- (c) By 10:00 AM on the first banking day after the twentieth day of the month after the month for which Installed Capacity was purchased, the NYISO shall cause funds to be wired to the accounts specified in Section 2(b) of this Sale Agreement in an amount equal to one sixth of the Total Selling Price specified in the Award Notice.
- (d) Within six (6) business days after receipt of an Award Notice by the Offeror, to the extent that the Offeror disputes the calculation of the Total Selling Price due and payable, the Offeror shall give written notice to the NYISO, or its designee, setting forth in reasonable detail the basis for any such disagreement ("Dispute"). If the Offeror does not give written notice within the six (6) business day period, the Offeror shall be deemed to have irrevocably accepted the Total Selling Price in the manner specified in the Award Notice as delivered to the Offeror by the NYISO, or its designee.
- (e) If a timely filed written notice of Dispute is given, the Offeror and the NYISO, or its designee, shall promptly commence good faith negotiations with a view to resolving the Dispute(s) within five (5) business days of the NYISO's receipt of such notice. If the Dispute(s) are not resolved within the five (5) business day period, then the Dispute(s) shall thereafter be referred by either the Offeror or the NYISO, or its designee, to Richard L. Miles, Director, of the FERC Office of Dispute Resolution Service, or his successor in office (the "Director") for a resolution of such Dispute(s) in accordance with this Sale Agreement and the ICAP Manual. The resolution of the Dispute(s) shall be conducted in the following manner:
  - (i) Within three (3) business days after being notified of a Dispute, the Director shall identify and create a list of five (5) arbitrators who must be knowledgeable about the energy industry, to be delivered to the Offeror and the NYISO, or its designee.
  - (ii) Within five (5) business days of receipt of such list from the Director, the Offeror and the NYISO, or its designee, separately, shall select three (3) arbitrators from the Director's list and resubmit their selections to the Director.
  - (iii) Within two (2) business days of the Director's receipt of the resubmitted list of arbitrators from the Offeror and the NYISO, or its designee, the Director shall select in its sole discretion one arbitrator (the

"Arbitrator") to resolve the Dispute(s) in accordance with the terms and conditions of this Sale Agreement and the ICAP Manual. The decision and resolution of the Arbitrator shall be rendered within twenty (20) business days after referral of the Dispute(s) to the Arbitrator and shall be final and binding upon the parties. During this twenty (20) business day period, the Offeror and the NYISO, or its designee, will be allowed to make written and oral presentations to the Arbitrator. The Offeror and the NYISO, or its designee, shall use their best efforts to cause the Arbitrator to render its decision within the twenty (20) business day period described above, and each shall cooperate with the Arbitrator and provide the Arbitrator with access to the books, records and representatives of each as the Arbitrator may require in order to render its determination. All of the fees and expenses of any Arbitrator retained pursuant to this Section shall be paid by the party who does not prevail in the Dispute.

- (iv) In the event that the Offeror is barred, by law, from entering into binding arbitration, Disputes shall be heard in a court of competent jurisdiction in the State of New York.
- (f) To the extent that the Offeror disputes the calculation of the Total Selling Price due and payable, NYISO shall remain obligated to make payment in full for the Installed Capacity as indicated in the Award Notice. However, if it is later determined, in accordance with this Section 2 that (i) an underpayment has been made by the NYISO to the Offeror, the NYISO shall pay the amount owed to the Offeror, or (ii) an overpayment has been made by the NYISO to the Offeror, the Offeror shall refund the amount of the overpayment to the NYISO, such amounts owed under (i) or (ii) of this paragraph (f) shall also include interest calculated from the date that the underpayment or overpayment was made in accordance with the methodology specified for interest on refunds in the FERC regulations at 18 C.F.R. § 35.19a(a)(2)(iii).

If a mistake is discovered in the calculation of information provided in an Award Notice after its delivery, the NYISO reserves the right and has the obligation to revise the Award Notice and the information therein, and the Offeror acknowledges that it will be obligated to make arrangement for payment or receipt of payment in accordance with the revised Award Notice. Prior to making such revision, the NYISO shall notify Offeror of the mistake and provide the Offeror with an explanation of the basis for the revised Award Notice.

- 3. Representations and Warranties of the Offeror.
- (a) The Offeror hereby represents and warrants to the NYISO as follows:

- (i) Offeror is an Eligible Customer and is selling Installed Capacity solely for purposes related to its business as a producer, processor, commercial user of or a merchant handling Installed Capacity or the products or by-products thereof.
- (ii) Offeror has full power and authority to execute and deliver the Offer Package and to perform its obligations thereunder. The completed Offer Package constitutes a valid and legally binding obligation of the Offeror.
- (iii) The execution and delivery of the Offer Package and the consummation of the transactions contemplated thereby have been duly and validly approved by all requisite action, corporate or otherwise, on the part of Offeror, and no other proceedings, corporate or otherwise, on the part of Offeror are necessary to approve and submit the Offer Package and to consummate the transactions contemplated hereby.
- (iv) Offeror is the ICAP Holder (as defined in the ICAP Manual) of the Installed Capacity being offered pursuant to this Sale Agreement free and clear of any restrictions on transfer (other than imposed under the ISO Services Tariff and the ICAP Manual), taxes, security interests, options, warrants, purchase rights, contracts, commitments, equities, claims, or demands.
- (v) The amount of Installed Capacity that Offeror has offered for sale pursuant to the Sale Agreement does not exceed the amount of Qualified ICAP, as defined in the ICAP Manual, that the resource from which such Installed Capacity is obtained (the "Selected Resource") is permitted to provide. Offeror will provide documentation evidencing the amount of Qualified ICAP that the Selected Resource may provide.
- (vi) The amount of Installed Capacity that the Offeror is offering for sale pursuant to the Sale Agreement does not exceed the Offeror's share of the amount of Installed Capacity that the Selected Resource is permitted to provide.
- (vii) Offeror [owns] [has contracted to purchase] [is designated as the agent for the owner of] the share of the Selected Resource offered pursuant to this Sale Agreement. (Circle the bracketed language that is applicable and strike the remaining bracketed language.) If Offeror has contracted to purchase or is designated as the agent for the owner of the share of the Selected Resource offered, evidence of such arrangement has been attached to this Sale Agreement.

- (viii) The Installed Capacity offered for sale pursuant to this Sale Agreement has not previously been committed in the New York market or in any other market.
- (ix) The Installed Capacity sold by the Offeror into in the ICAP Auction is thereby committed to the NYCA and cannot be released by the Offeror outside the NYCA until the term of the Installed Capacity sold in the ICAP Auction has expired.
- (x) Offeror shall hold, use, and assign any Installed Capacity offered in the ICAP Auction in accordance with the terms and conditions set forth in the ISO Services Tariff and the ICAP Manual.
- (xi) Other than providing the information required by this Sale Agreement, Offeror has not amended or changed this Sale Agreement in any way to make it different from the Sale Agreement attached to the ICAP Manual as Attachment G.
- (b) All representations and warranties contained herein shall be deemed to be made again as of the purchase and sale of the Installed Capacity contemplated in this Sale Agreement.

### 4. Indemnification; Release of Liability.

- (a) Offeror agrees to indemnify and save and hold harmless the NYISO, and all of its respective officers, directors, employees, and agents, from and against any and all losses, damages, expenses, liabilities, claims, or demands, including attorney's fees, (collectively, the "Damages") whatsoever suffered or incurred by such parties resulting, arising from or relating to Offeror's breach of any of its agreements, covenants, representations, or warranties contained herein, except for those Damages resulting from the NYISO's gross negligence or intentional misconduct.
- (b) Offeror hereby releases the NYISO, and all of its officers, directors, employees and agents, from any and all liability arising from or relating to the ICAP Auction, except with respect to any gross negligence or intentional misconduct on the part of the NYISO, its officers, directors, employees, or agents.

### 5. Miscellaneous.

(a)	All inquires, notices and communications can be given by the NYISO to the Offeror as follows:
Name:	

Addre	ess:
Phone	<u></u> ::
Fax:	
E-mai	1:
(b)	All representations, warranties, covenants, and obligations of this Sale Agreement shall survive the sale of the Installed Capacity by the Offeror.
(c)	The Offeror's Offer Package, together with the ISO Services Tariff and the ICAP Manual, constitute the entire agreement between the Parties on the subject matter hereof and supersede all prior discussions, agreements, and understandings of any kind and nature between them.
(d)	It is understood and agreed that the provisions of this Sale Agreement are intended for the benefit of the Offeror and the NYISO and may be enforced directly by the NYISO against Offeror or by the Offeror against the NYISO.
(e)	This Sale Agreement and all Electronic Bids shall be governed by and construed in accordance with the laws of the State of New York without giving effect to its conflict of laws provisions.
	ITNESS WHEREOF, this Sale Agreement has been submitted as of the date first written.
NAM	E OF OFFEROR:
By:	
Name	;
Title:	
New `	York Independent System Operator, Inc.
By:	
Name	;
Title:	

### Attachment H:

# NYISO Administered ICAP Auctions: Illustrations of Market-Clearing Price Calculations

# Example 1: No Locational Constraints Bind, Partially Selected Offer

Suppose that the following offers are made into a second phase of a two-phase auction (or into the single phase of a one-phase auction):

- 100 MW of Installed Capacity from Generator X, which is located in the NYCA but not in any other Locality, is offered at \$2/kW month.
- 100 MW of Installed Capacity from Generator Y, located in Locality Z, is offered at \$5/kW month.

Also suppose the following bids are made into that phase:

- Bidder A offers to purchase 150 MW of Installed Capacity at \$6/kW month.
- Bidder B offers to purchase 75 MW of Installed Capacity at \$3/kW month.

Both Bidders state that the Installed Capacity they are purchasing must be located in the NYCA, but do not place further restrictions on the location of the Installed Capacity Supplier.

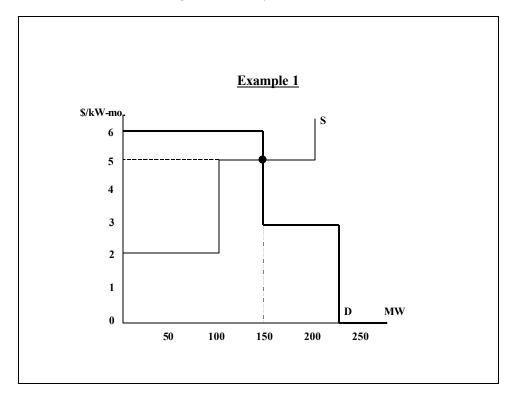
The ISO will select the following offers and bids in this phase:

- All of the 100 MW of Installed Capacity offered from Generator X.
- 50 MW of the 100 MW of Installed Capacity offered from Generator Y.
- All of the 150 MW that Bidder A bids to purchase.
- None of the 75 MW that Bidder B bids to purchase.

Since all of the Installed Capacity offered in this phase meets the locational criteria stated in each of the bids, the locational constraints did not affect the ISO's selection of Installed Capacity Suppliers. This also means that the ISO will only calculate a single

Market-Clearing Price for Installed Capacity for this phase, which will apply to all locations.

That Market-Clearing Price shall be the bid cost of meeting demand for a small incremental amount of Installed Capacity at the lowest cost. If it had been necessary to acquire an additional MW of Installed Capacity in this phase<sup>1</sup>, (1) the ISO could have selected 51 MW from Generator Y, instead of 50 MW; or (2) it could have selected only 149 MW of Bidder A's 150 MW bid to purchase Energy. Since Generator Y's offer price is \$5/kW month, while Bidder A's bid price is \$6/kW month, it would be less expensive to purchase additional Installed Capacity from Generator Y than to buy it back from Bidder A. Therefore, Generator Y's bid of \$5/kW month will set the Market-Clearing Price of Installed Capacity. (If the price were set at \$6/kW month, 200 MW would be offered, while only 150 MW are demanded. Therefore, a price of \$6/kW month would not clear the market, and it is necessary to bring the price down to \$5/kW month to bring the quantity offered into the market down to 150 MW.)



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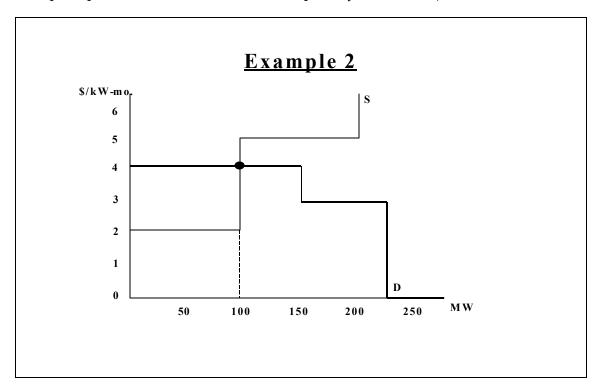
<sup>&</sup>lt;sup>1</sup> The size of the increment of demand that the NYISO will actually use to determine Market-Clearing Prices will be smaller than the minimum increment specified for bids and offers in the ISO Procedures. Therefore, if the ISO Procedures call for the number of MWs of Installed Capacity that a Bidder bids to buy or an Offeror offers to sell to be stated in terms of tenths of a MW, for example, then the ISO would determine Market-Clearing Prices of Installed Capacity by calculating the bid cost of meeting an incremental demand for a quantity of Installed Capacity that is smaller than a tenth of a MW.

# Example 2: No Locational Constraints Bind, Partially Selected Bid

If we modify the preceding example by changing the price specified by Bidder A to \$4/kW month (but not making any other changes), then the ISO would select the following offers and bids in this phase:

- All of the 100 MW of Installed Capacity offered from Generator X.
- None of the 100 MW of Installed Capacity offered from Generator Y.
- 100 of the 150 MW that Bidder A bids to purchase.
- None of the 75 MW that Bidder B bids to purchase.

If it had been necessary to acquire an additional MW of Installed Capacity in this phase, (1) the ISO could have selected 1 MW from Generator Y, instead of 0 MW; or (2) it could have selected only 99 MW of Bidder A's 150 MW bid to purchase Energy. Bidder A's bid price is now \$4/kW month, lower than Generator Y's \$5/kW-month offer price, so Bidder A's bid price will be used to set the Market-Clearing Price of Installed Capacity at \$4/kW month for this phase. (If the price were set at \$5/kW month, then Bidder A would be charged more than it has agreed to pay for the Installed Capacity it has purchased in the auction. In order not to charge more than Bidder A has agreed to pay, it is necessary to bring the price down to \$4/kW month. That price permits the market to clear at a quantity of 100 MW.)

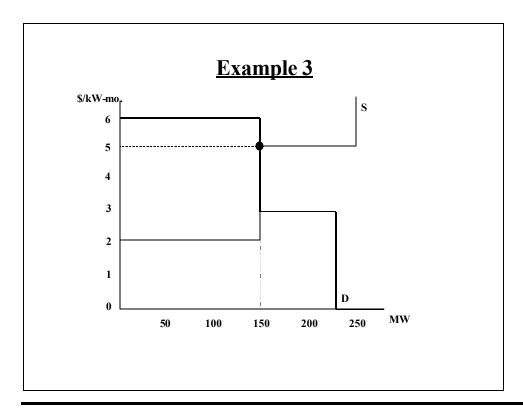


# **Example 3: No Locational Constraints Bind, No Partially Selected Offers or Bids, Offer Sets the Price**

Now modify Example 1 so that the amount of Installed Capacity offered from Generator X increases to 150 MW (still at a price of \$2/kW month). The ISO would select the following offers and bids in this phase:

- All of the 150 MW of Installed Capacity offered from Generator X.
- None of the 100 MW of Installed Capacity offered from Generator Y.
- All of the 150 MW that Bidder A bids to purchase.
- None of the 75 MW that Bidder B bids to purchase.

If it had been necessary to acquire an additional MW of Installed Capacity in this phase, (1) the ISO could have selected 1 MW from Generator Y, instead of 0 MW; or (2) it could have selected only 149 MW of Bidder A's 150 MW bid to purchase Energy. Since Generator Y's offer price is \$5/kW month, while Bidder A's bid price is \$6/kW month, the Market-Clearing Price of Installed Capacity for this phase will be set at the lower of these, or \$5/kW month. The consequences of choosing a higher price are the same as in Example 1.

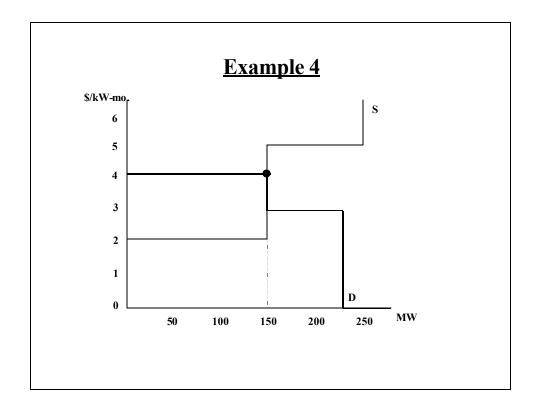


# Example 4: No Locational Constraints Bind, No Partially Selected Offers or Bids, Bid Sets the Price

Next, modify Example 3 by changing the price specified by Bidder A to \$4/kW month. Then the ISO would select the following offers and bids:

- All of the 150 MW of Installed Capacity offered from Generator X.
- None of the 100 MW of Installed Capacity offered from Generator Y.
- All of the 150 MW that Bidder A bids to purchase.
- None of the 75 MW that Bidder B bids to purchase.

If it had been necessary to provide an additional MW of Installed Capacity in this phase, (1) the ISO could have selected 1 MW from Generator Y, instead of 0 MW; or (2) it could have selected only 149 MW of Bidder A's 150 MW bid. Since Generator Y's offer price is \$5/kW month, while Bidder A's bid price is \$4/kW month, the lower of these, or \$4/kW month, will be used to set the Market-Clearing Price of Installed Capacity for this phase.



### **Example 5: Locality Constraint Binds**

Return again to Example 1, but add the assumption that Bidder A has specified that its bid is valid for Installed Capacity located in Locality Z only.

The ISO would select the following offers and bids in this phase:

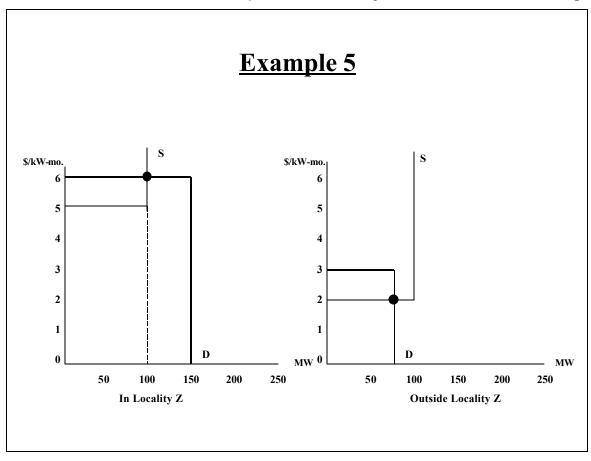
- 75 MW of the 100 MW of Installed Capacity offered from Generator X.
- All of the 100 MW of Installed Capacity offered from Generator Y.
- 100 MW of the 150 MW that Bidder A bids to purchase.
- All of the 75 MW that Bidder B bids to purchase.

While there is more than 150 MW of Installed Capacity available with an offer price of less than \$6/kW-month (Bidder A's bid price), most of it is not located in Locality Z. Only the 100 MW offered from Generator Y at \$5/kW month is located in Locality Z, so only 100 MW of Bidder A's bid was selected.

All of Generator Y's offer was selected, even though Generator X's Installed Capacity was offered at a lower price and not all of it was selected. This means that the Locality Z constraint is binding (since Generator Y is located in Locality Z), so the ISO will calculate two different Market-Clearing Prices for this phase: one for Installed Capacity in Locality Z and one for Installed Capacity everywhere else.

If it had been necessary to acquire an additional MW of Installed Capacity in this phase in Locality Z, the ISO would have had to select only 99 MW of Bidder A's 150 MW bid. (There are no alternatives in this example because Generator Y was the only Installed Capacity Supplier in Locality Z, and all of Generator Y's Installed Capacity was selected in the auction, so none remains available to meet any additional demand in Locality Z.) Since Bidder A's bid price is \$6/kW month, the Market-Clearing Price of Installed Capacity in Locality Z in this phase will be \$6/kW month.

If it had been necessary to acquire an additional MW of Installed Capacity in this phase outside Locality Z, (1) the ISO could have selected 76 MW from Generator X, instead of 75 MW; or (2) it could have selected only 74 MW of Bidder B's 75 MW bid to purchase Energy. Since Generator X's offer price is \$2/kW month, while Bidder B's bid price is \$3/kW-month, the lower of these, or \$2/kW month, will set the Market-Clearing Price of Installed Capacity outside Locality Z in this phase.



### **Example 6: External Control Area Constraint Binds**

Again, return to Example 1, but change the locational constraint that Bidder B specified in its bid. Instead of the constraint specified in Example 1, assume that Bidder B specified that while the Installed Capacity it is bidding to purchase could be located anywhere in the NYCA, it also could be located in External Control Areas P or Q. Bidder A will continue to require that all of its Installed Capacity be located within the NYCA.

In addition, assume that the following new offers of Installed Capacity are submitted into this phase:

- 50 MW of Installed Capacity from a Generator located in External Control Area P is offered at \$1/kW month.
- 50 MW of Installed Capacity from a Generator located in External Control Area Q is offered at \$2/kW month.

The ISO would select the following offers and bids:

- All of the 100 MW of Installed Capacity offered from Generator X.
- 50 MW of the 100 MW of Installed Capacity offered from Generator Y.
- All of the 50 MW of Installed Capacity offered from External Control Area P.
- 25 MW of the 50 MW of Installed Capacity offered from External Control Area Q.
- All of the 150 MW that Bidder A bids to purchase.
- All of the 75 MW that Bidder B bids to purchase.

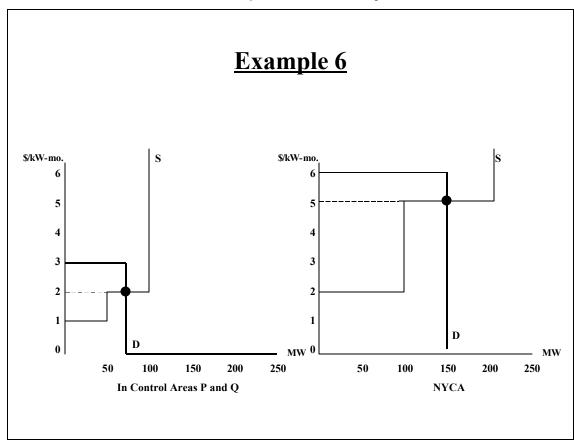
Bidder B is the only Bidder that can purchase the Installed Capacity offered from the External Generators, since Bidder A stated that its Installed Capacity must be located in the NYCA. Since Bidder B's \$3/kW month bid price exceeds the offer prices for the Installed Capacity from these External Generators, all of Bidder B's 75 MW bid to purchase Energy was selected in this phase.

Part of Generator Y's offer was selected, even though not all of the Installed Capacity in External Control Area Q, which was offered at a lower price, was selected. The reason is the constraint that Bidder A placed upon its bid. This causes the External Control Area constraint to bind for External Control Areas P and Q, so the ISO will calculate two different Market-Clearing Prices for this phase: one for Installed Capacity in External Control Areas P and Q, and one for Installed Capacity everywhere else.

(Note that the ISO will calculate a single price that will apply to both External Control Areas P and Q. Bidder B, which is the sole purchaser of Installed Capacity located in these External Control Areas in this phase, has stated that it will accept Installed Capacity from either External Control Area, without any limitations on the amount that it will accept from an individual External Control Area. Therefore, Installed Capacity located in either of these External Control Areas can be substituted for Installed Capacity in the other External Control Area, for the purposes of this phase, so these External Control Areas constitute a single market, with a single price.)

If it had been necessary to acquire an additional MW of Installed Capacity in this phase in External Control Areas P or Q, (1) the ISO could have selected 26 MW from External Control Area Q, instead of 25 MW; or (2) it could have selected only 74 MW of Bidder B's 75 MW bid to purchase Energy. Since the offer price from External Control Area Q is \$2/kW month, while Bidder B's bid price is \$3/kW month, the lower of these, or \$2/kW month, will be used to set the Market-Clearing Price of Installed Capacity for this phase in External Control Areas P and Q.

If it had been necessary to acquire an additional MW of Installed Capacity in this phase outside External Control Areas P or Q - i.e., if it had been necessary to acquire an additional MW of Installed Capacity in the NYCA, since there are no other External Control Areas in this example-(1) the ISO could have selected 51 MW from Generator Y, instead of 50 MW; or (2) it could have selected only 149 MW of Bidder A's 150 MW bid to purchase Energy. Since Generator Y's offer price is \$5/kW month, while Bidder A's bid price is \$6/kW month, the lower of these, or \$5/kW month, will be used to set the Market-Clearing Price of Installed Capacity for this phase in the NYCA. (This price also applies to all Localities within the NYCA, since no Locality constraints are binding in this example).



### Attachment I:

### Miscellaneous Auction Procedures

# Section 1: Procedures Applicable to Installed Capacity Buyers

### 1.1 Submission of Bid Packages

Buyers bidding to purchase Installed Capacity must submit a complete Bid Package to the ISO in the form prescribed in Attachment F to this manual, i.e., a completed Purchase Agreement and a properly formatted Electronic Bid, as those terms are defined in Attachment F to this manual.

Purchase Agreements must be submitted to the ISO via an overnight mail service or a delivery service that requires the signature of the addressee in order to record the date and time of delivery. Purchase Agreements may not be submitted via FAX or email. Each Purchase Agreement, upon receipt, will be time stamped by the ISO.

Electronic Bids must be submitted via e-mail to the NYISO at <br/>buyicap@.com>. An Electronic Bid may contain more than one individual bid (each an "Individual Bid"). All Individual Bids must be contained in only one Electronic Bid.

If the ISO invalidates a Bid Package for any reason it will notify the Buyer that submitted the Bid Package, via email, on the same day that the Bid Package was received.

Buyers may revise their Bid Packages at any time during the Bidding Period by submitting a new Electronic Bid. If a new Electronic Bid is timely, correctly and completely submitted by the Seller, it will completely override any previous Electronic Bid(s) and any previous Electronic Bid(s) will have no further force or effect.

Buyers may not submit negative dollar bids. Only bids specifying a price greater than or equal to zero will be accepted.

#### 1.2 Invalidation of Bids

The ISO shall invalidate an Electronic Bid for any of the following reasons:

a) The Electronic Bid is received by the ISO outside the Bidding Period;

- b) The Electronic Bid does not include all information required by the Electronic Bid form:
- c) The Electronic Bid contains an incorrect registrant name;
- d) The Electronic Bid has been modified, amended or changed other than to provide required information and other than in connection with the submission of a revised Electronic Bid;
- e) The Electronic Bid is not password-protected using the password provided to the Seller by the ISO; or
- f) The Electronic Bid is submitted with a date and time stamp identical to any other Electronic Offer submitted by the Seller.

The ISO shall invalidate an Individual Bid for any of the following reasons:

- a) The bid price is less than zero;
- b) The quantity of Installed Capacity specified is not given to a tenth of a MW;
- c) The Price is not specified to two decimal places;
- d) Missing information in either the Price or MW columns; or
- e) Multiple months are included in the 'Monthly Effective Period' field.

# Section 2: Procedures Applicable to Installed Capacity Sellers

### 2.1 Submission of Offer Packages

Sellers offering to sell Installed Capacity must submit a complete Offer Package to the ISO in the form prescribed in Attachment G to this manual, i.e., a completed Sale Agreement and a properly formatted Electronic Offer, as those terms are defined in Attachment G to this manual. Offer packages must be submitted during the Offering Period established in Attachment A, and described in Attachment G, to this manual.

Sale Agreements must be submitted to the ISO via an overnight mail service or a delivery service that requires the signature of the addressee in order to record the date and time of delivery. Sale Agreements may not be submitted via FAX or email. Each Sale Agreement, upon receipt, will be time stamped by the ISO.

Electronic Offers must be submitted via e-mail to the at <sellicap@.com>. An Electronic Offer may contain more than one individual offer (each an "Individual ffers must be contained in only one Electronic Offer.

Sellers may revise their Offer Packages at any time during the Offering Period by submitting a new Electronic Offer. If a new Electronic Offer is timely, correctly and completely submitted by the Seller, it will completely override any previous Electronic Offer(s) and any previous Electronic Offer(s) will have no further force or effect.

If the ISO invalidates an Offer Package for any reason it will notify the Seller that submitted the Offer Package, via email, on the same day that the completed Offer Package was received.

### 2.2 Invalidation of Offers

The ISO shall invalidate an Electronic Offer for any of the following reasons:

- a) The Electronic Offer is received by the ISO outside of the Offering Period;
- b) The Electronic Offer does not contain all information required by the Electronic Offer form;
- c) The Electronic Offer contains an incorrect registrant name;
- d) The Offer Package has been modified, amended or changed other than to provide required information and other than in connection with the submission of a revised Electronic Offers;
- e) The Electronic Offer is not password protected using the password proved to the Seller by the ISO;
- f) The Electronic Offer is submitted with a date and time stamp identical to any other Electronic Offer submitted by the Seller.

The ISO shall invalidate an Individual Offer for any of the following reasons:

- a) More than one location has been specified;
- b) The resource name does not correspond to the resource for which the Seller holds Installed Capacity;
- c) The offer price is less than zero;
- d) The quantity of Installed Capacity offered is not given to a tenth of a MW;
- e) The quantify of Installed Capacity offered is less than or equal to zero;
- f) The quantity of Installed Capacity offered for a resource is greater than the amount of Installed Capacity the Seller is authorized to sell from that resource;
- g) The Price is not specified to two decimal places;
- h) Missing information in either the Price, MW or Resource name columns;
- i) Non-unique prices are given for Individual Offers to sell capacity for the same resource; or

j)	Multiple months are included in the 'Monthly Effective Period' field.			

### 2.3 Multiple Offers from the Same Resource

Installed Capacity Suppliers may submit multiple offers to sell Installed Capacity associated with a given resource. However, the total amount of Installed Capacity offered for sale from a given resource must not exceed the total amount of Installed Capacity that may be sold from that resource, as determined pursuant to Section 4 of this manual.

Example: Valid offers to sell Installed Capacity from a resource that is qualified to sell 100.5 MW of Installed Capacity. In this example, the resource has offered the maximum allowable amount of Installed Capacity.

Resource Name	Installed Capacity Offered (MW)	Offer Price (\$/kW - month)
XYZ - ABC	50.5	10.50
XYZ - ABC	50.0	11.25

Example: Invalid offers to sell Installed Capacity from a resource that is qualified to sell 100.5 MW of Installed Capacity. In this example, all offers from this resource are invalidated because the total Installed Capacity offered exceeds the maximum amount of Installed Capacity that the resource is qualified to sell.

Resource Name	Installed Capacity Offered (MW)	Offer Price (\$/kW - month)
XYZ - ABC	50.3	10.50
XYZ - ABC	50.3	11.25

### 2.4 Requirement that Offers be Unique

All offers to sell Installed Capacity associated with a given resource must be made at a unique price.

Example: Invalid offers to sell Installed Capacity from a resource that is qualified to sell 100 MW of Installed Capacity. In this example, all offers to sell Installed Capacity are invalidated because the offer prices were not unique.

Resource Name	Installed Capacity Offered (MW)	Offer Price (\$/kW - month)
XYZ - ABC	60.0	11.25
XYZ - ABC	40.0	11.25

### 2.5 Subject Generators and the Capacity Reference Price

With respect to Subject Generator, if the Price for a MW of Installed Capacity offered in the Auction is calculated to be greater than the Capacity Reference Price (see below), then the offer for that MW of Installed Capacity would be invalidated.

### **Section 3: Subject Generators**

### 3.1 Definition and Requirements

Certain generators comprise a special class of Installed Capacity resources located within the New York City Locality that are subject to a FERC and PSC approved Installed Capacity price cap of \$105/kW-year ("Subject Generators").

During the 2001 Summer Obligation Procurement Period, Subject Generators may not offer to sell Installed Capacity at a price higher than \$8.75/kW/month (the "Capacity

Subject Generators must bid their available Installed Capacity into each phase of each ISO-administered ICAP Auction in which they are permitted to participate. Under certain conditions, described in detail in Section 5 of this Manual and in Section 5.13 of the ISO Services Tariff, Subject Generators will be restricted in their ability to participate in the second phase of certain ISO-administered ICAP Auctions.

### 3.2 Subject Generator List

The resources listed below shall be Subject Generators during the 2001 Summer Obligation Procurement Period.

- Arthur Kill Units 2 and 3;
- Arthur Kill GT;
- Astoria Units 3, 4 and 5;
- Astoria GTs;
- East River Units 6 and 7;
- Gowanus GTs;
- Narrows GTs;
- Ravenswood Units 1, 2 and 3;
- Ravenswood GTs;
- Waterside Units 6, 8 and 9.

### **Section 4: Proration of Installed Capacity Awards**

### 4.1 Proration Methodology

In any monthly sub-auction, if multiple bids to purchase Installed Capacity in a Locality have the same bid price and that bid price equals the Market Clearing Price for that Locality, the MW amount of the awarded Installed Capacity to each of these Buyers will be prorated so that the MWs of capacity awarded to each Buyer in association with that bid will be calculated as the product of the MW amount of the bid and the ratio of the MW amount awarded to bidders bidding that price in that locality to the total MW amount of all the bids to purchase in that Locality at that Market Clearing Price.

In any monthly sub-auction the ISO will award as many bids to buy capacity as possible, subject to the limitation that the Market Clearing Price not exceed the price specified in the Buyer's bid.

As a result of the proportional allocation of MWs, Market Participants who purchased Installed Capacity in an ISO-administered Installed Capacity market may be awarded MWs in 0.1 MW increments.

### Section 5: Award Notices

#### 5.1 Electronic Distribution of Award Notices

The ISO will send each Buyer and Seller that is selected to buy or sell Installed Capacity an Award Notice, as defined in Attachments F and G to this manual, respectively, via e-mail within five (5) business days of the conclusion of the Obligation Procurement Period Auction (i.e., no later than April 7, 2001).

Buyers and Sellers shall be presumed to have received Award Notices on the first business day after the Award Notices are e-mailed by the ISO.

### 5.2 Content of Award Notices

Award Notices sent to Buyers shall set forth the Market Clearing Price, the amount of Installed Capacity purchased, the location of resources associated with the Installed Capacity and the Total Purchase Price, as that term is defined in Attachment F to this manual.

Award Notices sent to Sellers shall set forth the Market Clearing Price, the total amount of Installed Capacity sold, the location of the resource(s) associated with the Installed Capacity and the Total Selling Price, as that term is defined in Attachment G to this manual.

### 5.3 Disputes Concerning Award Notices

Any Buyer or Seller that disputes an Award Notice, or the calculations underlying an Award Notice, must provide written notice to the ISO within the earlier of three (3) business days after the date that the Award Notice was received, or April 11, 2001. All disputes other than those concerning the Total Purchase Price or Total Selling Price shall be resolved pursuant to the Dispute Resolution Procedures set forth in the ISO Services Tariff. Disputes concerning Total Purchase Price or Total Selling Price shall be resolved pursuant to the procedures set forth in Attachments F and G to this manual, respectively.

### **Section 6: Posting of ICAP Auction Results**

### 6.1 Information Posted in Auction Results

The ISO will publicly post on the web-site <a href="http://www..com">http://www..com</a> for each "Monthly Effective Period," the results of the ICAP Auction and will include the following information:

- 1) The Market Clearing Price determined for each Locality in each monthly auction;
- 2) The total amount of Installed Capacity in each Locality, in the portion of the NYCA not included in any Locality, and in each External Control Area that was sold in each monthly sub-auction;
- 3) The total amount of Installed Capacity purchased in each monthly auction, broken down by the constraint placed upon the location of that Installed Capacity by the Bidders placing those bids; and
- 4) The MW aggregate of the Bids to purchase and the Offers to sell Installed Capacity.