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**CLEAN Draft Stage IA ICAP Manual Subject to Review  
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# 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 New York Independent System Operator ("ISO") and its Customers with regard to the Installed Capacity markets and auctions administered by the ISO pursuant to the ISO Services Tariff. The Installed Capacity provisions are discussed generally at Sections 5.9 through 5.16 of the ISO Services Tariff that was filed at FERC on February 1, 2000 and amended thereafter by subsequent filings with the FERC. FERC accepted the February 1, 2000 filing on March 29, 2000 in Order ER00-1483-000.

Installed Capacity is defined in the ISO 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 Installed Capacity Requirement.

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

## 2.0 Overview of Installed Capacity Planning and Procurement Process

This section contains overviews of:

- The Major Elements of New York’s Installed Capacity Planning and Procurement Process
- The New York Control Area (“NYCA”) Installed Reserve Margin
- The NYCA Installed Capacity Requirement Locational Installed Capacity Requirements within the NYCA, and Limitations on Installed Capacity from External Control Areas

The ISO Services Tariff references for this section of the 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.
- The 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 Transmission Owners, LSEs, and 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 NYCA 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.

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- The ISO conducts regularly scheduled Installed Capacity auctions before and during each Obligation Procurement Period.
- LSEs 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 (“NPCC Resource Adequacy Standard”). Resource adequacy exists in New York State when the probability of disconnecting firm Load due to a 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 ISO uses a base model of the NYCA electric power system and its interconnections with neighboring control areas to perform this analysis for the NYSRC.

## **2.4 The NYCA Installed Capacity Requirement**

The ISO calculates the NYCA Installed Capacity 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 the procedures in the Load Forecasting Manual.

## **2.5 Locational Installed Capacity Requirements**

Due to transmission limitations into certain areas within the NYCA, LSEs serving Load in these areas must procure a percentage of their total Installed Capacity requirement from Installed Capacity Suppliers electrically located within the constrained areas. Currently, there are two areas, called Localities, within the NYCA where Locational Installed Capacity Requirements are imposed. These are the New York City and the Long Island Zones. The Locational Installed Capacity Requirements applicable to these zones were established by rulings of the NYPSC and the Long Island Power Authority. For the purpose of specifying Locational Installed Capacity 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 Installed Capacity Requirements established through the rulings of the NYPSC and the Long Island Power Authority remain in place. Locational Installed Capacity Requirements are shown in Attachment B. Maps of the NYCA Transmission Districts and NYCA Zones can be found in Attachment C. Localities that are subject to ISO Services Tariff restrictions are also noted in Attachment C.

## **2.6 Limitations on Installed Capacity from External Control Areas**

The amounts of Installed Capacity that can be provided by Resources outside the NYCA are constrained by two factors. The first is the requirement in Section 5.12.2 of the ISO Services Tariff that an External Installed Capacity 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 in this Section 2.6.

The second constraint results from transmission limitations. The ISO will determine the amount of Installed Capacity that may be procured from Resources External to the NYCA while

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meeting the NPCC Resource Adequacy Standard described in Section 2.3. Starting with the forecast Loads for the upcoming Capability Year, known Capacity within the NYCA, grandfathered External Installed Capacity and accounting for a variety of assumptions and uncertainties in consultation with the NYSRC, a NYCA Installed Reserve Margin will be determined. Once the NYCA Installed Reserve Margin is established, the ISO will determine the total NYCA Installed Capacity Requirement.

Next, the maximum Installed Capacity that may be procured from each qualified neighboring Control Area is determined. This is achieved by replacing upstate NYCA Installed Capacity with External Installed Capacity from each adjacent Control Area without increasing the Loss of Load Expectancy (“LOLE”) above that of the base case. In subsequent simulations, the maximum Installed Capacity import from each Control Area is determined. To determine the simultaneous maximum External Installed Capacity that may be procured from all neighboring Control Areas, the total of the maximum External Installed Capacity determined above, for each neighboring Control Area, is reduced in direct proportion until the LOLE matches that of the base case.

Determinations on Locational Installed Capacity Requirements and External Resources are open to review by all Market Participants.

The allocation of Installed Capacity rights associated with transmission expansions is not addressed at this time.

## 3.0 Installed Capacity Requirements of Load Serving Entities

This section contains information and procedures related to:

- Calculating the NYCA Installed Capacity Requirement
- The Transmission District Installed Capacity requirements
- Establishing an LSE's Installed Capacity requirement for the Obligation Procurement Period
- Load-shifting
- Procedures for calculating Locational Installed Capacity Requirements of LSEs
- Grandfathered External Installed Capacity Resources
- The Installed Capacity adjustment for firm Capacity sales by NYPA

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

### 3.1 The Calculation of the NYCA Installed Capacity Requirement

The ISO calculates the NYCA Installed Capacity Requirement in megawatts for the Capability Year as the product of the forecast NYCA peak Load and one plus the NYSRC Installed Reserve Margin.

For detailed Load forecasting methodology, refer to the ISO Load Forecasting Manual.

## 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:

$$ICR_t = ICR_{NYCA} * OIPL_t / \sum_{s \in T} OIPL_s$$

Where:

$ICR_t$  = Installed Capacity requirement for a Transmission District t;

$ICR_{NYCA}$  = Installed Capacity requirement for the NYCA;

$OIPL_t$  = Forecast Capability Year One-Hour independent Peak Load for TD t;

T = the set of all Transmission Districts;

$OIPL_s$  = 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 Installed Capacity prior to the Obligation Procurement Period.

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The Installed Capacity 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. Where an LSE serves partial requirement customers (i.e. customers for whom the LSE provides service up to a specified amount), the portion of the LSE's contribution to the peak attributable to such partial requirement customers shall be equal to the lesser of their actual contribution to the peak or the contract demands of such partial requirement customers, if fully utilized, at the time of the Transmission District's peak.

The precise formulation of the requirement is as follows:

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

where:

$ICR_{x,t}$  = Installed Capacity requirement for LSE x within TD t;

$ICR_t$  = Installed Capacity requirement for Transmission District t;

$CPD_{x,t}$  = Forecasted contribution to peak demand in Transmission District t for LSE x, as defined further below; and

$OIPL_t$  = Forecast Capability Year One-Hour independent Year Peak Load for TD t.

The forecasted contribution to peak demand of each LSE x within each Transmission District t is calculated according to the following equation:

$$CPD_{x,t} = GF_t \sum_{c \in FRC_{x,t}} HPD_{c,t} + \sum_{c \in PRC_{x,t}} \min(PRCA_{c,t}, GF_t HPD_{c,t}) + \sum_{c \in SRC_{x,t}} \max(GF_t HPD_{c,t} - PRCA_{c,t}, 0)$$

where:

$GF_t$  = the growth factor applied to each Load in Transmission District t to determine the Installed Capacity requirement for LSEs serving that Load, equal to

$$OIPL_t / \sum_c HPD_{c,t};$$

$FRC_{x,t}$  = set of full-requirement customers of LSE x in Transmission District t;

$HPD_{c,t}$  = demand by customer c in Transmission District t during the Peak Demand hour for Transmission District t of the last calendar year;

$PRC_{x,t}$  = set of partial-requirement customers of LSE x in Transmission District t;

$PRCA_{c,t}$  = the maximum contractual purchase in Transmission District t by a partial requirements customer c; and

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$SRC_{x,t}$  = set of supplemental-requirements customers of LSE x in Transmission District t.

Each LSE must submit completed Installed Capacity certification forms to the ISO by April and October of each year demonstrating that it has obtained sufficient Installed Capacity for the following Capability Period. In addition, 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. Specific dates are provided in Attachment A.

## 3.4 Load Shifting

Each year (all dates are defined in Appendix A), Transmission Owners shall submit an initial forecast with supporting 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 email form of copies of notification letters, that each affected LSE has been provided data regarding the load changes assigned to it.

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 (see Attachment A). 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. This information shall also be submitted 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. 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 for each year, which shall reflect documented Load-shifts as of April 1<sup>st</sup> that are scheduled to occur before May 1<sup>st</sup>. 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 the

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ISO and each LSE serving Load in the Transmission District within the first seven (7) calendar days 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 Installed Capacity 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 Installed Capacity requirement for the Transmission District constant. Each update will reflect scheduled Load-shifting through the end of that month based on Load-shifting documented as of the end of the prior month.

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

### **3.4.1 Assignment of Installed Capacity 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 Installed Capacity 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 Installed Capacity obligation of LSEs in that Transmission District. There are two different methods that shall be used to adjust the Installed Capacity 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 Installed Capacity obligation. The Installed Capacity obligation of each LSE serving Load within that Transmission District shall then be reduced by its share of the new customer's total Installed Capacity obligation which is assumed by the LSE serving that new customer.
- In the absence of a direct assignment mechanism, the Installed Capacity 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 Installed Capacity 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.

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- 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 Installed Capacity requirement for the Transmission District remains constant.

If a dispute occurs concerning the assignment of Installed Capacity obligations related to new customers, it will be handled according to Section 3.4.4 of this Manual. If the direct assignment of the Installed Capacity 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 Installed Capacity 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 Installed Capacity obligation of the departing customer of that obligation. The LSE may sell any excess Installed Capacity. 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 counter-signed 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 Installed Capacity 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 Installed Capacity 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 Installed Capacity 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 Section 3.4.1 of this Manual, the following financial arrangements will be executed. Refer to Section 5 of this



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Manual for details concerning the monthly Installed Capacity auctions referred to below. Also refer to Section 5.11.3 of the ISO Services Tariff.

- The Load-gaining LSE will financially cover the Installed Capacity 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 Installed Capacity auction, after the ICR to the LSE reflects the switch.
- The ISO will use the monthly Installed Capacity 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 Installed Capacity auction for that month, pro-rated on a daily basis. If the most recent previous regular Installed Capacity auction did not clear, the rate that will be used will be the clearing price of the pre-Obligation Procurement Period strip auction divided by six to determine a monthly average clearing price, and then prorated on a daily basis for the number of days in the month.
- If the Load-losing LSE received a rebate associated with the lost Load (see Section 5.12 and Attachment L 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 Services Tariff), or the relevant Transmission Owner's retail access procedures, as applicable.

If a dispute occurs, the ISO will make its monthly Installed Capacity adjustments as if the Load-shift had occurred as reported by the Transmission Owner and will retroactively modify these adjustments based on the outcome of the applicable Dispute Resolution Process, if necessary.

## **3.5 Procedures for Calculating the Locational Installed Capacity 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:

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

where:

- $LICAP_{x,p}$  = the Locational Installed Capacity Requirement for LSE x for Locality p;
- $ICR_{x,p}$  = the Installed Capacity requirement for LSE x for Locality p (which is calculated by substituting the Locality p for the Transmission District t in the equations in Section 3.3);
- $LP_p$  = the amount of Installed Capacity that must be procured within the Locality p, expressed as a percentage of the Locality p forecast peak Load;
- $PK_p$  = the forecast peak Load for Locality p;
- $ICR_p$  = Installed Capacity requirement for all Load in Locality p (which is calculated by substituting the Locality p for the Transmission District t in the equations in Section 3.2)

## 3.6 Grandfathered External Installed Capacity 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.

## 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. The adjustment factor shall be calculated separately for the Niagara, St. Lawrence and Fitzpatrick plants and each such adjustment factor shall be applied only to firm capacity sales from that plant.

$$\frac{\text{Demonstrated Net Plant Capability}}{\text{Sum of all firm Capacity Sales from Plant}} = ICAF_{plant}$$

These adjustment factors cannot exceed one plus the NYCA IRM. Once the Adjustment Factors are obtained, the Adjusted NYPA Installed Capacity from these plants is calculated as:

$$\text{Adjusted } IC_{NYPA} = \sum ICAF_{plant} * IC_{plant}$$

Where:

Adjusted  $IC_{NYPA}$  = The amount that the purchasers of firm capacity and NYPA use in their Installed Capacity calculations

$ICAF_{plant}$  = NYPA adjustment factor applied to the contractual amount from plant.

$IC_{plant}$  = The contractual Capacity amount purchase from plant

Plant = Niagara, St. Lawrence, or Fitzpatrick

The ISO will use this adjustment factor to determine whether an LSE purchasing from these NYPA Resources has procured sufficient Installed Capacity to meet its Installed Capacity Obligations.

# 4.0 Installed Capacity Requirements Applicable to Installed Capacity Suppliers

## 4.1 Overview

Resources must follow certain procedures and provide pertinent information to the ISO in order to qualify as Installed Capacity Suppliers. The requirements necessary to qualify as an Installed Capacity Supplier can be found in Sections 4.2 and 4.3 below, and include DMNC testing and maintenance schedule reporting.

After completing the procedures listed above, Resources which have qualified as Installed Capacity Suppliers must fulfill certain requirements provided by the ISO in order to retain all of the privileges to which an Installed Capacity Supplier is entitled. These requirements are provided in detail in Sections 4.4 through 4.7 below. The requirements include reporting Operating Data; planned maintenance and forced outage notification requirements; the filing of monthly Installed Capacity certification forms; and bidding, scheduling, and notification responsibilities.

Certain Installed Capacity Suppliers must fulfill alternative requirements provided by the ISO in addition to or in place of the requirements found in Sections 4.2 through 4.7. These alternative or additional requirements can be found in Sections 4.8 through 4.13. Each of these sections address a different individual Resource.

Installed Capacity Suppliers which fail to fulfill the requirements detailed in Sections 4.4 through 4.13 are subject to sanctions, as provided in Section 5.12.12 of the ISO Services Tariff. Details regarding these sanctions may be found in Section 6.1 of this Manual.

Resources may be physically located in the NYCA, or in an External Control Area which meets the recall and Curtailment requirements and the locational limitations specified in Sections 2.5 and 2.6 of this Manual.

## 4.2 DMNC Test Procedures (Section 5.12.8 ISO Services Tariff)

Potential Installed Capacity Suppliers must perform DMNC tests in accordance with the procedures described below (unless exempt in accordance with the provisions of Section 4.10 of this Manual), and provide the ISO with the required documentation of those tests.

Alternatively, potential Installed Capacity 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 supply Installed Capacity as a System Resource 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.

Testing must be completed by the end of the test period, and final reports (see Attachment D) must be transmitted to the ISO no later than thirty days following the end of the test period.

### 4.2.1 DMNC Test Periods

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

New Resources may be qualified at any time during a Capability Year based on the results of an appropriate demonstration test or production data. New Resources may temperature-adjust the results of the appropriate demonstration test or production data, using the procedures noted in Attachment D to this Manual. In order to qualify as an Installed Capacity Supplier for any month, New Resources must submit test results by the tenth day of the month preceding the month in which they intend to supply Installed Capacity. A new Resource must submit the appropriate demonstration test or production data results by March 24 of each year in which it would like to qualify as an Installed Capacity Supplier for a Summer Capability Period strip auction and by September 24 if it would like to qualify as an Installed Capacity Supplier for a Winter Capability Period strip auction.

Existing Resources that have increased Capacity due to changes in their generating equipment may demonstrate the DMNC of the incremental Capacity for and within a Capability Period by following the procedures described above for new Generators.

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Resources that qualify to supply Installed Capacity for a Summer Capability Period through tests conducted between September 15<sup>th</sup> and June 1<sup>st</sup> will be required to verify the claimed DMNC rating by performing an additional test during the Summer Capability Period test period.

Resources that initially qualify to supply Installed Capacity during a Summer Capability Period may use those test results to qualify for the following Winter Capability Period, adjusted to winter ambient weather conditions as described in Attachment D.

Resources that qualify to supply Installed Capacity for a Winter Capability Period through tests conducted between April 15<sup>th</sup> and November 1<sup>st</sup> will be required to verify the claimed DMNC rating by performing an additional test during the Winter Capability Period test period.

Resources that initially qualify to supply Installed Capacity during a Winter Capability Period may use those test results to qualify for the following Summer Capability Period, adjusted to summer ambient weather conditions as described in Attachment D.

The ISO shall inform each potential Installed Capacity Supplier, that is required to submit DMNC data, of ISO-documented DMNC ratings for the Summer Capability Period in February, and for the Winter Capability Period in August (See Attachment A).

### **4.2.2 Resource Specific Test Conditions**

The Resources listed below must meet the applicable DMNC test conditions specified below in order to be qualified as Installed Capacity Suppliers and report the results to the ISO using the appropriate form 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:

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- a. The sustained 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 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**

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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.

Valid DMNCs for Intermittent Power Resources may also be determined by the Intermittent Power Resources' units nameplate rating provided, however, that the ISO shall have the authority to review the Intermittent Power Resources' production data.

### **4.2.3 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 measured at the generator leads 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. If the disagreement concerning the station service Load is not resolved by the additional information the Transmission Owners provide, the ISO Expedited Dispute Resolution Procedures (as set forth in Section 5.16 of the ISO Services Tariff) shall be used to determine the station service Load in dispute.

### **4.2.4 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.



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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.

## **4.3 Maintenance Scheduling Requirements (Section 5.12.3 ISO Services Tariff)**

All Resources intending to supply Installed Capacity 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 Installed Capacity Supplier, and does not voluntarily re-schedule 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 Installed Capacity Supplier prior to the Obligation Procurement Period and that intends to be an Installed Capacity 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 Installed Capacity, so that it may be subject to the voluntary and mandatory re-scheduling procedures described above.

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An Installed Capacity Supplier that refuses the ISO's forced rescheduling of its proposed outages shall not qualify as an Installed Capacity Supplier for that unit for any month during which it schedules or conducts an outage.

### **4.3.1 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. Notify the ISO of any major equipment which is out of service and therefore cannot be interrupted because it is already off, and notify the ISO when the equipment is coming back on.
3. 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.

Interruptible Load Resources that qualify as Special Case Resources are not subject to the requirements of this Section 4.3.1.

### **4.3.2 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.

### **4.3.3 Special Case Resources**

Special Case Resources are not subject to maintenance scheduling requirements. However, a Special Case Resource must report a change of status that would affect its ability to provide capacity to the ISO.

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

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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 ISO Services Tariff.

### **4.4.1 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 Data pertaining to their operations during the month of April, 2001.

### **4.4.2 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, 2001.

### **4.4.3 Control Area System Resources**

Control Area System Resources shall submit CARL Data to the ISO and actual system failure occurrence data in accordance with Section 4.9 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 supply in the NYCA.

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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.

From the month of April 2001 forward, Control Area System Resources shall submit by the twentieth (20<sup>th</sup>) day of each month CARL Data and actual system failure occurrence data pertaining to the previous month. For example, Control Area System Resources shall submit by May 20, 2001 CARL Data and actual system failure occurrence data pertaining to their operations during the month of April, 2001.

### **4.4.4 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 (20<sup>th</sup>) 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, 2001.

### **4.4.5 Interruptible Load Resources**

Subject to Sections 4.4.7 of this Manual, Interruptible Load Resources shall submit documentation for each operation using the form provided in Attachment K.

Interruptible Load Resources shall have submitted their data pertaining to the months of January 2000 to, and including, March 2001 by April 20, 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 in the format shown in Attachment K for each interruption. For example, they shall submit by May 20, their operations during the month of April, 2001.

### **4.4.6 Intermittent Power Resources**

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Intermittent Power Resources shall submit to the ISO data pertaining to their net dependable Capacity, actual generation, maintenance hours, planned hours, periods hours, and other information as may be reasonably requested by the ISO such as the location and name of the Intermittent Power Resource. Intermittent Power Resources shall submit this 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 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 (20<sup>th</sup>) day of each month data pertaining to the previous month. For example, Intermittent Power Resources shall submit by May 20, 2001 data pertaining to their operations during the month of April, 2001.

### **4.4.7 Special Case Resources**

Special Case Resources shall submit documentation to the ISO each time they are called upon to operate, in the form of Figure 2 provided in Attachment K.

#### **4.4.7.1 Special Case Resources that are Interruptible Load Resources**

Special Case Resources that were interrupted during the months of January 2000 to, and including, March 2001, by April 2001 shall submit data for each request to interrupt using the form of Figure 2 for Special Case Resources reporting as provided in Attachment K.

From the month of April 2001 forward, Special Case Resources that were requested to perform shall submit by the twentieth (20<sup>th</sup>) day of each month data in the format shown in Figure 2 of Attachment K for each interruption. For example, Special Case Resources shall submit by May 20, 2001, their data pertaining to the month of April, 2001.

#### **4.4.7.2 Special Case Resources that are Generators**

Special Case Resources that are Generators shall submit to the ISO data using the minimum data set for GADS reporting or the Special Case Resource reporting form provided in Attachment K, as appropriate. GADS data reporting should treat all non-service hours in the month as Reserve Shutdown Hours.

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

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From the month of April 2001 forward, Special Case Resources that are Generators shall submit by the twentieth (20<sup>th</sup>) day of each month data pertaining to the previous month. For example, Special Case Resources that are Generators shall submit by May 20, 2001, data pertaining to their operations during the month of April, 2001.

### **4.4.8 Municipally-Owned Generation**

Municipally-owned generation shall submit to the ISO data in accordance with the form provided in Attachment K of this Manual, GADS or Special Case Resource reporting, as appropriate.

Municipally-owned Generation shall have submitted by April 20, 2001 their data in the required format 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 (20<sup>th</sup>) day of each month data equivalent to GADS Data pertaining to the previous month. For example, Municipally-Owned Generation shall submit by May 20, 2001 data equivalent to GADS Data pertaining to their operations during the month of April, 2001.

### **4.4.9 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 subsections 4.4.1. through subsection 4.4.8 of this Manual, and (3) want to supply Installed Capacity in the NYCA in the future.

By the tenth (10<sup>th</sup>) 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 it was in operation. A Resource that wants to continue to supply Installed Capacity in the NYCA immediately thereafter shall submit, by the twentieth (20<sup>th</sup>) 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 previous June to May, inclusively, and so on each month, thereafter.

### **4.4.10 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 4.4.1 to 4.4.8 of this Manual, as applicable.

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

### **4.5.1 Default Value**

In any studies or calculations requiring Operating Data, the ISO shall use NERC class averages for each month for which an Installed Capacity Supplier has not submitted its Operating Data in accordance with Section 5.12.5 of the ISO Services Tariff and the ISO Procedures. Installed Capacity Suppliers will be subject to sanctions in accordance with Section 5.12.12 of the ISO Services Tariff 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 4.4 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 4.4 of this Manual.

### **4.5.2 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 as a Forced Outage for purposes of collecting that Resource's Operating Data.

## 4.6 Monthly Installed Capacity Supplier Certification Forms

Each Installed Capacity Supplier must submit the appropriate ISO certification form to the ISO no later than the twentieth (20<sup>th</sup>) day of each month, demonstrating that the Installed Capacity it is supplying is not already committed to meet the Installed Capacity requirement of an External Control Area.

## 4.7 Bidding, Scheduling, and Notification Requirements (Section 5.12.7 ISO Services Tariff)

On any day for which it supplies Installed Capacity, each Installed Capacity 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 Installed Capacity it supplied from a particular Resource, rounded down to the nearest whole MW.

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

### 4.7.1 Generators and System Resources

For every hour of any day for which Generators or System Resources supply Installed Capacity, they must make the amount of Energy associated with their Installed Capacity 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 Installed Capacity Supplier cannot provide the full amount of Energy associated with its Installed Capacity commitment, due to a maintenance or forced outage, the supplier must notify the ISO Operations department.

### 4.7.2 Energy Limited Resources



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Energy Limited Resources that are Installed Capacity Suppliers must be able to provide the Energy equivalent of their claimed Installed Capacity 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 Installed Capacity 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.

### **4.7.3 Interruptible Load Resources**

Interruptible Load Resources that are Installed Capacity 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. This applies only to Interruptible Loads that are not Special Case Resources.

### **4.7.4 Existing Municipally-Owned Generation**

Resources that qualify as existing Municipally-Owned Generation Installed Capacity Suppliers pursuant to Section 5.12.11(b) of the ISO Services Tariff and Section 4.14 of this Manual are not required to bid or schedule in the Day Ahead Market.

### **4.7.5 Special Case Resources**

Special Case Resources are not subject to bidding, scheduling and notification requirements.

### **4.7.6 Intermittent Power Resources**

As set out in Section 5.12.11(d) of the ISO Services Tariff, Intermittent Power Resources may qualify as Installed Capacity Suppliers, without having to comply with the daily bidding and scheduling requirements set forth in Section 5.12.7 of the ISO Services Tariff. To qualify as Installed Capacity Suppliers, Intermittent Power Resources shall comply with the notification requirement of Section 5.12.7 of the ISO Services Tariff by notifying the ISO of outages.

## 4.8 External Resources

### 4.8.1 General Requirements

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

1. They comply with the information requirements in Section 4.9.2 and thereby demonstrate that the energy associated with the Installed Capacity 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 Installed Capacity 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. (ISO Services Tariff Section 5.12.2)

### 4.8.2 Information Requirements for External Resources

The ISO requires the following information from Resources External to the NYCA that wish to qualify as Installed Capacity Suppliers, and for Resources relied upon in Installed Capacity 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 4.2 of this Manual.
3. Documentation which satisfies the Maintenance Scheduling Requirements in Section 4.3 of this Manual.
4. Expected return dates from full or partial outages
5. Certification that Installed Capacity sold to the NYCA has not been sold elsewhere.

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6. Verification that it has made all arrangements required by its Control Area to ensure that the Energy associated with the Resources' Installed Capacity 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.

### **4.8.3 Allocation of Installed Capacity Rights for External Installed Capacity Supply**

The ISO establishes the maximum amount of Installed Capacity 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 Installed Capacity 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 Installed Capacity rights, the ISO will allocate the remaining rights for External Installed Capacity supply on a first-come, first-serve basis. External Installed Capacity rights may ultimately only be used by LSEs located within the NYCA, but any ISO Customer may submit a request for External Installed Capacity rights.

Initial requests for External Installed Capacity 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 Installed Capacity Supplier;

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- 2) The identity of the ISO Customer making the request;
- 3) The identity of the External Installed Capacity Supplier;
- 4) The name and location of the Resource;
- 5) The Control Area in which the Resource for which the Installed Capacity Supplier seeks rights is located;
- 6) The MW amount requested to support the Installed Capacity 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 Installed Capacity 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 Installed Capacity 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 Installed Capacity 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 Installed Capacity right must provide the ISO with the information and documents described in numbers 1, 4 and 5 above. The

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information described in this paragraph should be forwarded as a “Certification of External Installed Capacity 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 Installed Capacity rights should be matched between a Load in the NYCA and an External Installed Capacity Supplier. Installed Capacity supplied by External Installed Capacity Suppliers that have claimed External Installed Capacity 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 market-clearing price determined in those Auctions for the control area in which it is located for that Installed Capacity.) 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 Installed Capacity Supplier, that LSE will relinquish those rights. All purchasers of Installed Capacity that is located in an External Control Area in an ISO-administered Auction shall receive the External Installed Capacity rights necessary in order to permit that Installed Capacity to count towards the Installed Capacity requirements of an LSE; consequently, in order to ensure that there are sufficient external Installed Capacity rights available, the ISO shall limit the number of MW of Installed Capacity 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 Installed Capacity that can be purchased in any External Control Area to the number of MW of Installed Capacity that can be provided by Installed Capacity Suppliers located in that Control Area, as determined in Section 2.6 of this Manual, less all External Installed Capacity 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 Installed Capacity that can be purchased in any External Control Area to the number of MW of Installed Capacity that can be provided by Installed Capacity Suppliers located in that Control Area, less the number of MW of Installed Capacity purchased in that External Control Area for that month in preceding Monthly Auctions, less all External Installed Capacity rights for that Control Area that have been used to support Bilateral Transactions for the sale of Installed Capacity for that month from Installed Capacity Suppliers in that Control Area to Loads in the NYCA.

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

If External Installed Capacity 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 Installed Capacity rights remain. The procedures specified above will govern any monthly first-come, first-serve allocations. The

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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.

## **4.9 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 4.11 for information regarding Resources operated by the operator of the Control Area in which they are located.

The System Resource must be in a Control 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.

### **4.9.1 Permissible Aggregations**

For the purposes of aggregating System Resources, there are seven defined areas in which Installed Capacity 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 Installed Capacity Suppliers, since these Control Areas do not currently meet the ISO's recall or Curtailment requirements for Installed Capacity Suppliers.

Within the other five areas a single entity may aggregate its Generators into a portfolio for the purposes of entering into System Resource Installed Capacity transactions, so long as all the Generators included in the portfolio reside within the same area. Any entity that wishes to make System Resource sales must provide the required DMNC test data to the ISO for each Generator in its portfolio, unless that entity can re-dispatch Resources under its control located within an External Control Area to maintain a pre-determined interchange schedule between that Control Area and the NYCA. The Installed Capacity associated with an External Grandfathered Right may not be aggregated with other Resources as a System Resource.

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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.

### **4.9.2 External System Resources**

The ISO requires the following information for each Resource aggregated as an External System Resource. The entity aggregating the Resources is responsible for supplying the information.

1. Name and location of Generators included in the portfolio.
2. Documentation that satisfies the General Requirements for DMNC Determination specified in Section 4.2 of this Manual.
3. Documentation that satisfies the Maintenance Scheduling Requirements specified in Section 4.3 of this Manual.
4. Expected return date from full or partial outages.
5. Certification that Installed Capacity supplied to the NYCA has not been supplied elsewhere.

## **4.10 Control Area System Resources**

### **4.10.1 Data Reporting Requirements**

Control Area System Resources or sellers of Installed Capacity from those Resources that qualify as Installed Capacity Suppliers shall provide to the ISO specific data, which shall be defined as “CARL Data.” CARL Data shall include data as follows:

- Available Capacity (CAP) that does not reflect adjustments for External firm Capacity purchases or sales, outages and maintenance (in MW);
- External firm Capacity purchases, other than purchases from New York (EP) (in MW);
- Summer peak Load (SPL) (in MW);
- Winter peak Load (WPL) (in MW);
- External firm Capacity sales other than sales to New York (EF) (in MW);



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- Planned maintenance (PM) (in MW);
- Historical average Forced Outages (FO) (rate in decimal form);
- Average Forced Outage Rate of the Resources included in the portfolio operated by the Control Area System Resource (AFO) (rate in decimal form);
- Operating reserve (OR) (in MW); and
- Planning reserve (PR) – corresponds to the required reserves necessary to meet the NERC Resource Adequacy Criteria of 1 day in 10 years.

Forty-five (45) days prior to any Capability Period, Control Area System Resources shall submit forecasted CARL Data for the following Capability Period.

In accordance with Section 4.4.3 of this Manual and Section 5.12.5(c) of the ISO Services Tariff, Control Area System Resources shall submit CARL Data and actual system failure occurrences data to the ISO every twentieth of the month following the month for which the data has been collected except for the period from December to March which is treated as a whole.

If the amount of Installed Capacity it has available to supply to the NYCA is less than the amount that they have sold to the NYCA, a Control Area System Resource will be deemed to be deficient.

#### **4.10.2 Determination of Amount of Installed Capacity that May be Supplied**

The ISO will perform the following calculations at the beginning of each Capability Period to determine the amount of Installed Capacity a Control Area System Resource may supply to the NYCA. These calculations shall be based on the forecasted CARL Data reported pursuant to Section 4.11.1 of this Manual.

For winter peaking Control Area System Resources, the following equations shall be used for Summer and Winter Capability Periods.

For the Summer Capability Period as well as for the individual months of November and April within the Winter Capability Period, this amount shall not exceed for all months, or any month, of that Period the minimum monthly value derived from the following formula:

$$ICAP = (CAP + EP - SPL - EF - PM - FO - OR)$$

For the months of December to March, which shall be treated as a whole for the purpose

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of Installed Capacity calculations, this amount shall not exceed for all months, the value derived from the following formula:

$$\text{ICAP} = (\text{CAP} + \text{EP} - \text{WPL} - \text{EF} - \text{PR}) \bullet (1 - \text{AFO})$$

## 4.11 Interruptible Load Resources

The following procedures apply to Interruptible Load Resources, if any, 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.

## 4.12 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.

### 4.12.1 Sale of Installed Capacity Associated with Special Case Resources in Bilateral Transactions and in ISO-Administered Auctions

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. Special Case Resources may sell their Installed Capacity in Bilateral Transactions to LSEs or Installed Capacity Marketers (the "Purchasing Entity"). The Purchasing Entity may then resell such Installed Capacity in another Bilateral Transaction to another party (the "Other Party") provided, however, that the Purchasing Entity or Other Party agrees to be bound and comply with the notification requirements set forth in this Section 4.13. The Purchasing Entity or the Other Party may resell such Installed Capacity in Bilateral Transactions, or in an ISO-administered auction subject to the conditions set forth in the following paragraph.

Special Case Resources and Purchasing Entities may offer and sell their Installed Capacity or the Installed Capacity associated with Special Case Resources in ISO-administered auctions provided, however, that (1) the amount of Installed Capacity offered is greater than 1 MW and (2) they agree to be bound and comply with the notification requirements set forth in this Section 4.13. Special Case Resources and Purchasing Entities may aggregate Installed Capacity associated with Special Case Resources to offer and sell it in ISO-administered auctions.

Market Participants that are bound by the notification requirements set forth in this Section 4.13 shall be considered "Responsible Interface Parties" ("RIPs"). In addition to the notification requirements set forth in this Section 4.13, RIPs shall be responsible for all forms of communication to and from the ISO for purposes of dispatch, validation, and verification of Special Case Resources or the Installed Capacity associated with Special Case Resources.

### 4.12.2 Distributed Generators - General Requirements

Special Case Resources that are distributed generators and that run in parallel with the system must provide historical operating data. Except for those with environmental or operational limitations, these Special Case Resources must perform a one-hour (1) 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 (2) test or by providing historical operating data. If the Special Case Resource consumes auxiliary power from the system, its auxiliary demand must be netted out of its maximum output.

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Special Case Resources that are not called by the ISO to supply Energy in a Capability Period may be required to run a test once every Capability Period.

Special Case Resources may qualify in the same manner and during the same test periods as “new Generators.” Please refer to Sections 4.2.1 and 4.2.3 of this Manual.

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

These Special Case Resources must meet the qualifications and comply with the procedures described below. RIPs claiming Installed Capacity from these Special Case Resources must comply with the requirements and procedures set forth below.

### **4.12.3 Loads Capable of Interruption Upon Demand - General Requirements**

Loads capable of Interruption upon demand must conduct a one-hour (1) sustained disconnect test and provide test results in the format specified by the ISO, or provide historical operating data. These Special Case Resources may qualify in the same manner and during the same test periods as “new Generators.” Please refer to Sections 4.2.1 and 4.2.3 of this Manual.

Special Case Resources that are not called by the ISO to supply Energy in a Capability Period may be required to run a test once every Capability Period.

RIPs claiming Installed Capacity from these Loads capable of interruption upon demand must comply with the requirements and procedures set forth below.

### **4.12.4 Qualifications**

Special Case Resources must make Energy available, in amounts that correspond to the pledged Installed Capacity, by interrupting Load or transferring Load to a Generator, within two (2) hours of a notice provided by the ISO to the RIP, following a 24-hour notice. If the Special Case Resource is unable to provide full output within two (2) hours due to operational constraints, the RIP may petition the ISO for permission to provide maximum output from the Special Case 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 Installed Capacity.

In the event that a Special Case Resource located at a retail customer was in operation (in the case of a distributed generator) or providing Load reduction (in the case of interruptible Load), at the time of the system or Transmission District peaks upon which the Installed Capacity requirement of the LSE serving that customer is based, the LSE’s Installed Capacity

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requirement shall be increased by the amount of Load that was served or interrupted by the Special Case Resource.

An RIP may claim Special Case Resource Installed Capacity for its own Installed Capacity requirement (in the case of an RIP that is an LSE), or claim such Installed Capacity for purposes of sale in an Installed Capacity auction provided, in either case, that it gives notice of such action to the LSE supplying Energy to the customer where the Special Case Resource is located.

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 Installed Capacity provided that the distributed generator meets the Transmission Owner's interconnection requirements.

### **4.12.5 Notification Procedures**

The ISO will provide 24 hour-ahead notification and two (2) hour notice, as required by this Manual, to the RIP. The 24 hour-ahead notification will be provided after 11 am, day-ahead, when the Day-Ahead Market closes. The ISO commits not to use 24 hour notification of potential need to operate indiscriminately but rather only when the Day-Ahead Market indicates serious shortages of supply for the next day.

The ISO shall provide notice no fewer than two (2) hours ahead of required operation or interruption.

RIPs shall contact their Special Case Resources through whatever communication protocols are agreed to between the Special Case Resources and the RIPs.

RIPs claiming Special Case Resource Installed Capacity shall provide the ISO with RIP phone and Internet contact information that allows for communication at any time.

### **4.12.6 Capacity Adjustment Procedures**

Special Case Resources that fail to respond to RIP notification by reaching maximum output within two (2) hours following notice from the ISO to the RIP, or that fail to provide maximum output for the period required by the ISO or four (4) hours, whichever is less, will be considered forced out (for unserved hours) for purposes of calculating the Installed 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 (2) hours will be considered forced out in the amount of Installed Capacity not backed by Energy within two hours of the ISO-RIP notice.

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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.

#### **4.12.7 RIP Requirements**

RIPs shall certify that the Special Case Resources for which they claim Installed Capacity meet or have met the applicable general requirements and qualifications described in Section 4 of this Manual. RIPs claiming Special Case Resource Installed 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.

RIPs shall certify that Special Case Resources claimed as Installed Capacity are complying with the procedures set forth in this Section 4.13 by documenting reductions in Load, or Energy production, with interval meters readings for the six (6) hour period following the two (2) hour ISO notice. In the event that Energy made available from Special Case Resource Installed 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 RIP 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.

RIPs that claim Installed Capacity from Special Case Resources shall document operation of the Special Case Resource to the Transmission Owner and to the LSE supplying Energy to the retail customer on whose premises the Special Case Resource is located if such LSE is different from the RIP.

RIPs that claim Installed Capacity from Special Case Resources shall file with the ISO the data necessary to document the source and amount of Special Case Resource Installed Capacity.

#### **4.12.8 ISO Verification**

The ISO retains the right to audit any records kept by the RIP, the Transmission Owner, or the Special Case Resource which are used to support the RIP's certification of compliance with the procedures set forth in this Section 4.

## 4.13 Existing Municipally-Owned Generation

A municipal utility that owns generation in excess of its Installed Capacity requirement, net of any capacity provided by the New York Power Authority, may qualify to supply the excess capacity as Installed Capacity 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 Installed Capacity auctions to accommodate LSEs' and Installed Capacity Suppliers' efforts to enter into Installed Capacity transactions and to give LSEs an opportunity to satisfy their Installed Capacity 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 supplied 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 adequate time 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

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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 Installed Capacity Suppliers; and (iv) any other Installed Capacity Supplier that owns excess Installed Capacity associated with qualified In-City Installed Capacity Suppliers.

Suppliers selected to provide Installed Capacity 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 Installed Capacity Suppliers 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 Installed Capacity Suppliers 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 Installed Capacity 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 Installed Capacity 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.

### **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 before the beginning of that Obligation Procurement Period or before the next Monthly Auction. 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, 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 Installed Capacity Suppliers, and any other Installed Capacity Supplier that owns excess Installed Capacity associated with qualified In-City Installed Capacity Suppliers. 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 Installed Capacity

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Suppliers 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 Installed Capacity Suppliers 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 Resources. 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 Installed Capacity Suppliers 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 Resource that resells Installed Capacity associated with In-City Installed Capacity Suppliers 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.

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 Resources that are capable of supplying Installed Capacity but that failed to qualify to supply it prior to the Deficiency Procurement Auction, e.g., recently upgraded Resources, new Resources and existing Resources 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.

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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 within five (5) days of the Monthly Auction. 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**

| <b>LOCATION</b>   | <b>INTERIM<br/>FIRST THREE<br/>YEARS<br/>AFTER ISO<br/>COMMENCES<br/>OPERATIONS</b>   | <b>END-STATE<br/>AFTER THREE<br/>YEARS OF ISO<br/>OPERATIONS</b>   |
|---|---|--|
| <b>In-City New York<br/>City<br/>(LBMP Load Zone<br/>J)</b> | <b>\$75/kW per<br/>Obligation Procurement<br/>Period</b>  | <b>3 Times Localized<br/>Levelized<br/>Embedded Cost of<br/>GT</b> |
| <b>Long Island<br/>(LBMP Load Zone<br/>K)</b>               | <b>Year 1*: \$60/kW per<br/>Obligation Procurement<br/>Period<br/>Year 2: \$65/kW per<br/>Obligation Procurement<br/>Period<br/>Year 3: \$70/kW per<br/>Obligation Procurement<br/>Period</b> | <b>3 Times Localized<br/>Levelized<br/>Embedded Cost of<br/>GT</b> |
| <b>All other LBMP<br/>Load<br/>Zones in the NYCA</b>        | <b>Year 1*: \$52.5/kW<br/>per<br/>Obligation Procurement<br/>Period<br/>Year 2: \$57.5<br/>Year 3: \$62.5</b>   | <b>3 Times Localized<br/>Levelized<br/>Embedded Cost of<br/>GT</b> |

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\*Year one (1) ends April 30, 2001.



## 5.4 Timing of Auctions

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

*The above guidelines may be adjusted for weekends and holidays. The intent of the above will direct the ISO towards fair compromises when developing or amending Appendix A.*

## 5.5 Bids to Buy and Sell - General Requirements

Bids to purchase Installed Capacity and offers to supply Installed Capacity must be submitted as separate bids for each auction. Bids to purchase Installed Capacity and offers to supply 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.

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Bidders who wish to purchase and Offerors who wish to supply Installed Capacity in any ISO-administered auction may submit bids to the ISO only on the day of the auction, unless otherwise specified in the ISO Procedures. If no Offerors submit offers to supply 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 Installed Capacity 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 Installed Capacity Supplier will not be permitted to exceed the amount that Installed Capacity 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 supply Installed Capacity; and (ii) that 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. 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

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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 Installed Capacity 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 the ISO are contained in Article 8 of the ISO 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 Installed Capacity 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;

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- (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.

## **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 Installed Capacity 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 another month's auction. Initially, 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

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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 Installed Capacity that can be purchased from an External Control Area, pursuant to Section 4.9.3 “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

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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 Attachment H.

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 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 Installed Capacity that can be purchased in a given External Control Area, pursuant to Section 4.9.3. 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:



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- 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 Installed Capacity was purchased. For example, Installed Capacity purchased for the month of May will be billed and paid for in the month of June. The schedule for bills and payments for Installed Capacity will follow the Energy Market schedule. A timetable for bills and payments for the Energy Market can be found on the ISO Web site.

Installed Capacity 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 Installed Capacity on the same schedule referenced above.

In-City LSEs will receive bills the Installed Capacity 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

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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 located 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 Installed Capacity Suppliers and LSEs for failing to comply with the ISO Services 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 Installed Capacity 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, 5.12.12 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 Installed Capacity Suppliers must provide to the ISO, and the deadlines for receipt of that information.

If an Installed Capacity 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 Installed Capacity that the Resource has committed to provide on the unit for which it has not provided information.

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- 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 Installed Capacity that the Resource has committed to provide.

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

Section 4.8 of this Manual contains the daily bidding, scheduling and notification requirements of Installed Capacity Suppliers.

On any day in which the Installed Capacity 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**

| <b>LOCATION</b>                                 | <b>INTERIM FIRST THREE YEARS AFTER ISO COMMENCES OPERATIONS</b>   | <b>END-STATE AFTER THREE YEARS OF ISO OPERATIONS</b>   |
|---|---|--|
| <b>In-City New York City (LBMP Load Zone J)</b> | <b>\$75/kW per Obligation Procurement Period</b>  | <b>3 Times Localized Levelized Embedded Cost of GT</b> |
| <b>Long Island (LBMP Load Zone K)</b>           | <b>Year 1*: \$60/kW per Obligation Procurement Period</b><br><b>Year 2: \$65/kW per Obligation Procurement Period</b><br><b>Year 3: \$70/kW per Obligation Procurement Period</b> | <b>3 Times Localized Levelized Embedded Cost of GT</b> |
| <b>All Other LBMP Load Zones in the NYCA</b>    | <b>Year 1*: \$52.5/kW per Obligation Procurement Period</b><br><b>Year 2: \$57.5</b><br><b>Year 3: \$62.5</b>   | <b>3 Times Localized Levelized Embedded Cost of GT</b> |

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\* Year one (1) ends April 30, 2001.

The ISO will assess the sanction against the entity that the Installed Capacity 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

| <b>Date</b> | <b>Description (All time are in Prevailing Eastern Time)</b>   |
|-------------|--|
| 1/16/2001   | 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   | Holiday - ISO closed.  |
| 2/20/2001   | ISO informs each potential Installed Capacity Supplier that is required to submit DMNC data of its approved DMNC ratings for the Summer Capability Period.<br><br>Beginning of period to request external rights on a “First Come, First Serve” basis. |
| 2/22/2001   | Post NYCA peak Load forecast for Summer 2001 Capability Period, NYCA Installed Capacity Requirement (ICR) determined   |
| 2/23/2001   | ISO posts TD ICRs Summer 2001 Capability Period <b>only</b> .  |
| 3/1/2001    | Start date for performing weather-adjusted DMNC tests for Summer 2001 Capability Period.   |
| 3/5/2001    | TOs provide information relating to Load shifting through February 28 <sup>th</sup> to the ISO and LSEs for the Summer 2001 only.  |
| 3/21/2001   | ISO provides preliminary ICRs to LSEs based on February 28 <sup>th</sup> data for Summer 2001  |



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- 3/22/2001 Creditworthiness requirements must be satisfied by 5:00 PM
- 3/23/2001 Summer 2001 Capability Period only - End date for performing and reporting to the ISO weather-adjusted DMNC tests for Summer 2001 Capability Period.
- Installed Capacity Resources must be Registered Customers of the ISO by this date in order to participate in the Obligation Period Auction.
- 5:00 PM** End of period to request external Installed Capacity rights on “first come-first served” basis.
- 3/27/2001 **5:00 PM.** ISO must receive a letter signed by an appropriate representative declaring that external Installed Capacity rights which have been awarded during the “first come first served” allocation process are matched between a qualified Installed Capacity Supplier and a NYCA Load. The letter may be sent by the NYCA Customer awarded the rights, the Installed Capacity Supplier or an LSE serving NYCA Load.
- 5:00 PM.** ISO must receive “Certification of External Installed Capacity Rights.”
- See Section 4.7.3 of this manual for details.
- 3/28/2001 **5:00 PM.** Installed Capacity Supplier Certification Forms are due to the ISO by facsimile (518-356-6208).
- 3/29/2001 **5:00 PM.** Agreements to Purchase and Sell Installed Capacity are due to the ISO by facsimile. Hard copies of these agreements must be delivered to the ISO by noon on April 2, 2001.
- 3/30/2001 **Noon.** Hard copies of Agreements to Purchase and Sell must be received by the ISO.
- 8:00 AM. Obligation Period Auction (Strip Auction)**
- 4/4/2001 Results of Strip Auction are posted and awards issued.
- Credit documents for new participants must be submitted to buy in the Monthly Auctions

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- 4/5/2001 TOs provide information relating to Load Shifting through April 30<sup>th</sup> and forecast for May 1.
- Note: Load shifting for April period is based on 2000 data and forecast for May is based on 2001 projections
- 4/7/2001 ISO provides LSEs with Summer 2001 Capability Period ICR
- 4/9/2001 **5:00 PM.** Agreements to Purchase and Sell Installed Capacity (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.
- 4/10/2001 **Noon.** Hard copies of Agreements to Purchase and Sell must be received by the ISO.
- For new Installed Capacity or changes to Installed Capacity levels, DMNC or interruptible Load test data must be submitted by 5:00 PM to be eligible for next month.
- 4/12/2001 Special Case Resources provide DMNC and interruptible Load test data to ISO
- Obligation Period Auction (monthly auctions)
- 8:00 AM to 5:00 PM. Period to submit electronic bids and offers for the Installed Capacity Obligation Period Auction (monthly auctions)**
- 4/13/2001 Holiday - ISO Closed
- 4/18/2001 Installed Capacity training at NYMOC
- 4/19/2001 Post results of Obligation Period Auction (monthly auctions) and issue awards

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- 4/20/2001      Submit GADS Data, or equivalent operating data, pertaining to the months of January 2000 to, and including, March 2001
- LSEs certify to ISO that their Summer 2001 Capability Period ICR is met.
- Generators certify to ISO that they have not sold their Installed Capacity elsewhere
- GADS data or equivalent operating data submittal for January 2000 through March 2001 required.
- TOs provide true-up Load-shifting for January 2001 to ISO and LSEs based on 2000 data.
- 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**
- 4/26/2001      Post results of Deficiency Procurement Auction and issue award notices
- 5/7/2001      TOs provide information relating to Load shifting through May 31<sup>st</sup> and forecast for June 1<sup>st</sup> to ISO and LSEs
- Credit documents, for new participants must be submitted to buy in the Monthly Auctions
- 5/10/2001      ISO provides ICR to LSEs for month of June
- For new Installed Capacity or changes to Installed Capacity levels, DMNC or interruptible Load test data must be submitted by 5:00 PM to be eligible for next month.
- 5/15/2001      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**
- 5/16/2001      ISO posts invoices, Buyer's payments due

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- 5/18/2001 Post results of Monthly Auction and issue award notices
- GADS data or equivalent operating data submittal for April 2000 required
- TOs provide true-up Load-shifting for February 2001 to ISO and LSEs based on 2000 data
- 5/21/2001 LSEs certify to ISO that their ICR is met
- Seller's payments sent
- 5/25/2001 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**
- 5/28/2001 Holiday - ISO Closed
- 5/29/2001 Post results of Deficiency Procurement Auction and issue award notices
- 6/7/2001 TOs provide information relating to Load-shifting through June 30<sup>th</sup> and forecast for July 1<sup>st</sup> to ISO and LSEs
- Credit documents for new participants must be submitted to buy in the Monthly Auctions
- 6/9/2001 ISO provides ICR to LSEs for month of July
- For new Installed Capacity or changes to Installed Capacity levels, DMNC or interruptible Load test data must be submitted by 5:00 PM to be eligible for next month.
- 6/15/2001 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**
- 6/18/2001 ISO posts invoices, Buyer's payments due
- 6/19/2001 Post results of Monthly Auction and issue award notices

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- 6/20/2001      Installed Capacity training at NYMOC
- GADS data or equivalent operating data submittal for May 2001 required.
- TOs provide true-up Load-shifting for March 2001 to ISO and LSEs based on 2000 data.
- 6/21/2001      Seller's payments sent.
- LSEs certify to ISO that their ICR is met.
- 6/22/2001      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**
- 6/27/2001      Post results of Deficiency Procurement Auction
- 7/4/2001        Holiday - ISO closed
- 7/6/2001        TOs provide information relating to Load-shifting through July 31<sup>st</sup> and forecast for August 1<sup>st</sup> to ISO and LSEs
- Credit documents for new participants must be submitted to buy in the Monthly Auctions
- 7/9/2001        ISO provides ICR to LSEs for month of August
- For new Installed Capacity or changes to Installed Capacity levels, DMNC or interruptible Load test data must be submitted by 5:00 PM to be eligible for next month.
- 7/13/2001      Monthly Auction (auctions for August - October)
- 7/16/2001      ISO posts invoices, Buyer's payments due
- 7/17/2001      Post results of Monthly Auction and issue award notices
- 7/20/2001      GADS data or equivalent operating data submittal for June 2001 required
- TOs provide true-up Load-shifting for April 2001 to ISO and LSEs based on 2001 data
- LSEs certify to ISO that their ICR is met

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|           |  |
|-----------|--|
| 7/23/2001 | Deficiency Procurement Auction<br><br>Seller's payments sent   |
| 7/27/2001 | Post results of Deficiency Procurement Auction and issue award notices   |
| 8/7/2001  | TOs provide information relating to Load-shifting through August 31 <sup>st</sup> and provide forecast for September 1 <sup>st</sup> to ISO and LSEs<br><br>Credit documents for new participants must be submitted to buy in the Monthly Auctions   |
| 8/10/2001 | ISO provides ICR to LSEs for month of September<br><br>For new Installed Capacity or changes to Installed Capacity levels, DMNC or interruptible Load test data must be submitted by 5:00 PM to be eligible for next month.  |
| 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<br><br>Monthly Auction (auctions for September - October)<br><br><b>Bidding/Offering period to submit electronic bids/offers for the Monthly Auction begins at 8:00 AM and ends at 5:00 PM</b> |
| 8/16/2001 | ISO posts invoices, Buyer's payments due   |
| 8/17/2001 | Post results of Monthly Auction and issue award notices  |
| 8/20/2001 | GADS data or equivalent operating data submittal for July 2001 required<br><br>TOs provide true-up Load-shifting for May 2001 and LSEs   |
| 8/21/2001 | Seller's payments sent   |
| 8/24/2001 | LSEs certify to ISO that their ICR is met  |
| 8/27/2001 | Deficiency Procurement Auction<br><br><b>Offering period to submit electronic bids for the Deficiency Procurement Auction begins at 8:00 AM and ends at 5:00 PM</b>  |
| 8/29/2001 | Post results of Deficiency Procurement Auction   |

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|            |   |
|------------|---|
| 9/1/2001   | Installed Capacity Suppliers must provide 2 years of outage schedules to ISO  |
| 9/3/2001   | Holiday - ISO Closed  |
| 9/6/2001   | TOs provide information relating to Load-shifting through September 30 <sup>th</sup> and forecast for October 1 <sup>st</sup> to ISO and LSEs   |
| 9/10/2001  | ISO provides ICR to LSEs for month of October<br><br>For new Installed Capacity or changes to Installed Capacity levels, DMNC or interruptible Load test data must be submitted by 5:00 PM to be eligible for next month. |
| 9/14/2001  | Monthly Auction (auction for October)<br><br><b>Bidding/Offering period to submit electronic bids/offers for the Monthly Auction begins at 8:00 AM and ends at 5:00 PM</b>  |
| 9/17/2001  | ISO posts invoices, Buyer's payments due  |
| 9/18/2001  | Post results of Monthly Auction and issue award notices   |
| 9/20/2001  | GADS data or equivalent operating data submittal for August 2001 required<br><br>TOs provide true-up Load-shifting for June 2001 to ISO and LSEs  |
| 9/22/2001  | Seller's payments due   |
| 9/24/2001  | LSEs certify to ISO that their ICR is met   |
| 9/26/2001  | Deficiency Procurement Auction<br><br><b>Offering period to submit electronic bids for the Deficiency Procurement Auction begins at 8:00 AM and ends at 5:00 PM</b>   |
| 9/28/2001  | Post results of Deficiency Procurement Auction and issue award notices  |
| 10/5/2001  | TOs provide information relating to Load-shifting through October 30 <sup>th</sup>  |
| 10/8/2001  | Holiday - ISO Closed  |
| 10/16/2001 | ISO posts invoices, Buyer's payments due  |

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|            |   |
|------------|---|
| 10/19/2001 | GADS data or equivalent operating data submittal for September 2001 required<br><br>TOs provide true-up Load-shifting for July 2001 to ISO and LSEs |
| 10/22/2001 | Seller's payments sent  |
| 11/20/2001 | GADS data or equivalent operating data submittal for October 2001 required<br><br>TOs provide true-up Load-shifting for August 2001 to ISO and LSEs |
| 12/20/2001 | TOs provide true-up Load-shifting for September 2001 to ISO and LSEs  |
| 1/18/2002  | TOs provide true-up Load-shifting for October 2001 to ISO and LSEs  |



# Attachment B:

## Locational Installed Capacity Requirements

- 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 TBD% (this value is equivalent to TBD after accounting for Grandfathered agreements).

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

- The maximum Installed Capacity that may be located outside the NYCA is 2558 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:

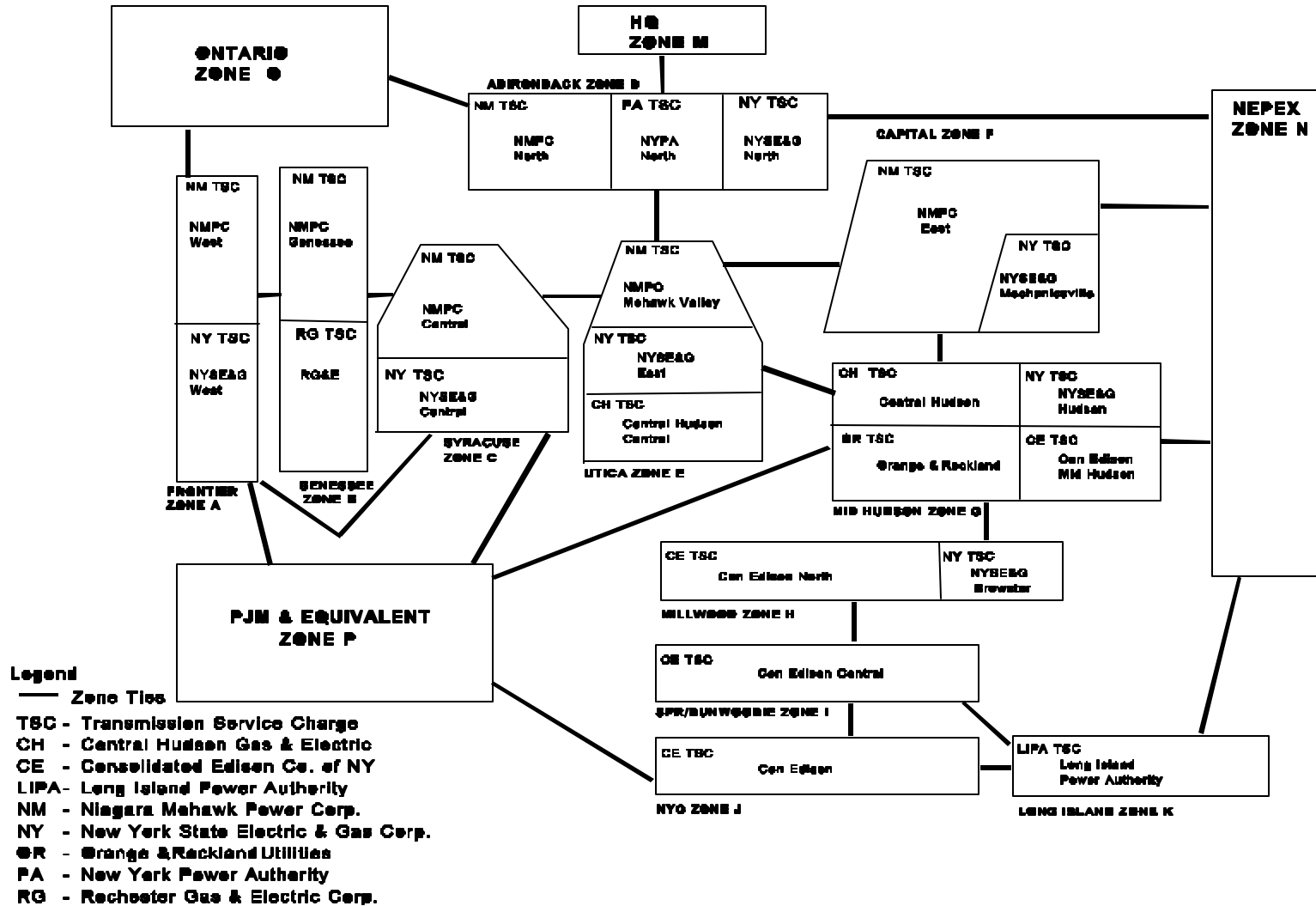
| Neighboring Control Area | Total (MW) | Grandfathered (MW) | Remaining (MW) |
|--------------------------|------------|--------------------|----------------|
| PJM                      | 1253       | 87                 | 1166*          |
| ISO-NE                   | 50         | 50                 | 0              |
| Ontario-IMO              | 55         | 55                 | 0              |
| Hydro Quebec             | 1200       | 400                | 800            |
| Totals                   | 2558       | 592                | 1966           |

\* 993 MW subject to reservation under Section 5.12.2 of the ISO Services Tariff in amounts up to those listed in OATT Attachment L Table 3 (Existing Transmission Capacity for Native Load - ETCNL).

# **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

All DMNC tests on internal combustion, combustion units and combined cycles units must be temperature adjusted. The temperature to be used for the temperature adjustment is the average ambient and cooling system temperature at the generator location experienced at the time of the TD peak during the previous four relevant Capability Periods. The dates and times of the TD peak in each Capability Period will be posted on the ISO website. (Directions will be provided when available.)

- 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.

## **Submission of DMNC Test Data**

DMNC test data should be submitted to the address listed below. Data should be submitted in accordance with Attachment A and Section 4.2 of the Installed Capacity Manual.

Manager Resource Adequacy  
C/o New York Independent System Operator  
290 Washington Ave. Ext.  
Albany, NY 12203





**NEW YORK ISO**

**DEPENDABLE MAXIMUM NET GENERATING CAPABILITY AUDIT**  
Internal Combustion and Combustion Turbine Generation

Sheet \_\_\_\_\_  
Date \_\_\_\_\_

Company \_\_\_\_\_

| Generator or Station | Date of Test | CAPABILITY AT TEST TEMP. (MW) |              |           |                              | Avg<br>Amb<br>Temp<br>(/F) | DMNC AT AVG. AMBIENT TEMP. (MW) |                       | Remarks |
|----------------------|--------------|-------------------------------|--------------|-----------|------------------------------|----------------------------|---------------------------------|-----------------------|---------|
|                      |              | Test Temp. (/F)               | Demonstrated | Per Curve | Excess (+)<br>Deficiency (-) |                            | Pre-Test DMNC Rating*           | Post Test DMNC Rating |         |
|                      |              |                               |              |           |                              |                            |                                 |                       |         |
|                      |              |                               |              |           |                              |                            |                                 |                       |         |
|                      |              |                               |              |           |                              |                            |                                 |                       |         |
|                      |              |                               |              |           |                              |                            |                                 |                       |         |
|                      |              |                               |              |           |                              |                            |                                 |                       |         |
|                      |              |                               |              |           |                              |                            |                                 |                       |         |
|                      |              |                               |              |           |                              |                            |                                 |                       |         |
|                      |              |                               |              |           |                              |                            |                                 |                       |         |
|                      |              |                               |              |           |                              |                            |                                 |                       |         |
|                      |              |                               |              |           |                              |                            |                                 |                       |         |
|                      |              |                               |              |           |                              |                            |                                 |                       |         |
|                      |              |                               |              |           |                              |                            |                                 |                       |         |
|                      |              |                               |              |           |                              |                            |                                 |                       |         |
|                      |              |                               |              |           |                              |                            |                                 |                       |         |
|                      |              |                               |              |           |                              |                            |                                 |                       |         |
|                      |              |                               |              |           |                              |                            |                                 |                       |         |
|                      |              |                               |              |           |                              |                            |                                 |                       |         |
|                      |              |                               |              |           |                              |                            |                                 |                       |         |
|                      |              |                               |              |           |                              |                            |                                 |                       |         |
|                      |              |                               |              |           |                              |                            |                                 |                       |         |

\* From Last Like Capability Period







# Attachment E:

## Grandfathered External Installed Capacity Agreements

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

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

For the Summer 2001 Capability Period the Grandfathered contracts associated with each of the neighboring Control Areas are listed below:

| Neighboring Control Area | Grandfathered (MW) | Contract Est. Date     | Contract End Date      |
|--------------------------|--------------------|------------------------|------------------------|
| PJM                      | 37                 | 10/1/1990<br>11/1/1990 | 10/1/2030<br>11/1/2030 |
| 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             |
| Hydro Quebec             | 400                | 4/1/1999               | 3/31/2004              |

# Attachment F:

## Agreement To Purchase Installed Capacity in NYISO Installed Capacity Auctions

THIS AGREEMENT TO PURCHASE INSTALLED CAPACITY (the “Purchase Agreement”), dated as of this \_\_\_\_\_ day of \_\_\_\_\_, is given by \_\_\_\_\_, having a principal business address at \_\_\_\_\_ (the “Bidder”).

### 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 “Strip” (twice per year), “Monthly” (twelve per year), and as needed “Deficiency” auctions (the “Auctions”), wherein Offerors may sell and Bidders may purchase Installed Capacity; 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, 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 each Auction in which the Bidder submits an Electronic Bid 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 Bids in the Auctions, 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.**

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- (a) The Parties agree that Auctions will be conducted in accordance with the ISO Services Tariff and the ICAP Manual.
- (b) The Parties agree that each Electronic Bid submitted is valid for only one Auction and that an Electronic Bid must be submitted for each Auction in which the Bidder desires to participate.
- (c) 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 Bids (each individual bid listed in the Bidder's Electronic Bid being referred to as an "Individual Bid") and requests that the NYISO include the Individual Bids in the Auction for which they are submitted.
- (d) The Parties agree that the purchase price for the Installed Capacity offered in each Individual Bid in an Auction shall be the Market Clearing Price established in that 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.
- (e) 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.
- (f) 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.
- (g) The Parties agree that the Market Clearing Price for Installed Capacity could be positive or zero.
- (h) 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.
- (i) The Parties agree that this Purchase Agreement must be received by the NYISO, via fax, by **5:00 PM** on the Return Date prior to the first Auction in which the Bidder desires to participate, as specified in Attachment A of the ICAP Manual. 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 **12:00**

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noon on the following day. 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  
290 Washington Ave. Ext.  
Albany, NY 12203

- (j) 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 <buyicap@nyiso.com> prior to close of the Bidding Period in each Auction in which the Bidder wishes to participate. The Parties further agree that the Electronic Bid must be submitted in the format provided by the NYISO using Microsoft Excel 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.
- (k) The Parties agree that timely submission of a Bid Package does not guarantee that the Bid Package is valid for inclusion in an 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.
- (l) 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.
- (m) The Parties agree that the Bidder bears the sole responsibility for submitting a correct and complete Bid Package.
- (n) 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") following each Auction, as specified in Attachment A to the ICAP Manual. The Award 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

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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 Strip Auctions will be settled on a monthly basis. In each monthly billing, the NYISO will issue bills for one sixth Total Purchase Price specified in the Award Notice for the last obligation procurement period. Bills issued by the NYISO for the purchase of Installed Capacity will be net of any rebates due to the Bidder.
- (c) Amounts due on Installed Capacity purchased in the Monthly and Deficiency Auctions will be settled on a monthly basis. In each monthly billing, the NYISO will issue bills for the Total Purchase Price specified in the Award Notice for the last Auction. Bills issued by the NYISO for the purchase of Installed Capacity will be net of any rebates due to the Bidder.
- (d) 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 Total Purchase Price, as indicated in the monthly bill issued by the NYISO for that Auction .
- (e) 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.
- (f) 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.

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- (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.
- (g) 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).
- (h) 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.**



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- (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 Auctions 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 J.
- (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.

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- (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 Auctions, 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 supercede 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.

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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 NYISO Administered Installed Capacity Auctions

THIS AGREEMENT TO SELL INSTALLED CAPACITY (the “Sale Agreement”), dated as of this \_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, is given by \_\_\_\_\_, having a principal business address at \_\_\_\_\_ (the “Offeror”).

### 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 “Strip” (twice per year), “Monthly” (twelve per year), and as needed “Deficiency” auctions (the “Auctions”), wherein Offerors may sell and Bidders may purchase Installed Capacity; 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 each Auction in which the Offeror submits an Electronic Offer 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 Offers in the Auctions, 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 Auctions will be conducted in accordance with the ISO Services Tariff and the ICAP Manual.

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- (b) The Parties agree that each Electronic Offer submitted is valid for only one Auction and that an Electronic Offer must be submitted for each Auction in which the Offeror desires to participate.
- (c) The Offeror agrees to sell Installed Capacity in the amounts, for at least the minimum prices, and from the resources specified in Offeror's Electronic Offers (each individual offer listed in an Offeror's Electronic Offer being referred to as an "Individual Offer") and requests that the NYISO submit the Individual Offers in Auction for which they are submitted. The Parties agree that the sale price for the Installed Capacity offered in each Individual Offer in an Auction shall be the Market Clearing Price established in that 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.
- (d) The Parties agree that the Offeror's submission of a completed Offer Package represents a binding obligation of the Offeror to sell the amount of Installed Capacity referenced in its Electronic Offer.
- (e) 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.
- (f) The Parties agree that the Market Clearing Price for Installed Capacity could be positive or zero.
- (g) 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.
- (h) The Parties agree that this Sale Agreement must be received by the NYISO, **via fax**, by **5:00 PM** on the Return Date prior to the first Auction in which the Offeror desires to participate, as specified in Attachment A of the ICAP Manual. 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 **12:00 noon** on the following day. 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

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290 Washington Ave. Ext.  
Albany, NY 12203

- (i) 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@nyiso.com> prior to close of the Offering Period in each Auction in which the Offeror wishes to participate. The Parties further agree that the Electronic Offer must be submitted in the format provided by the NYISO using Microsoft Excel 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.
- (j) The Parties agree that timely submission of an Offer Package does not guarantee that the Offer Package is valid for inclusion in an 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.
- (k) 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.
- (l) 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) The Offeror's obligation to sell Installed Capacity shall become effective upon the distribution of written notice (the "Award Notice") following each Auction, as specified in Attachment A to the ICAP Manual. The Award 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 Auction will be transferred by the NYISO pursuant to the ICAP Manual.

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- (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 sold, 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 the Total Selling Price specified in the Award Notice for that obligation procurement Auction.
- (i) Installed Capacity sold in the Strip Auction will be paid at one sixth the total amount specified in the Award Notice after the month for which Installed Capacity was sold, and each month thereafter until the total award value is satisfied.
- (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

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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. If it is later determined, in accordance with this Section 2 that an underpayment has been made by the NYISO to the Offeror, then the NYISO shall pay the amount owed to the Offeror. If it is later determined, in accordance with this Section 2, that an overpayment has been made by the NYISO to the Offeror, then the Offeror shall refund the amount of the overpayment to the NYISO. Payments made pursuant to this Section 2(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).
- (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 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.



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- (iv) Offeror is the Installed Capacity 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 Installed Capacity, 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 Installed Capacity 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 in the Auctions 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 Auctions has expired.
  - (x) Offeror shall hold, use, and assign any Installed Capacity offered in the Auctions 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 K.
- (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.

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**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 Auctions, 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: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

- (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 supercede 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.

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

NAME OF OFFEROR:

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

New York Independent System Operator, Inc.

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

# Attachment H:

## NYISO Administered Installed Capacity 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.

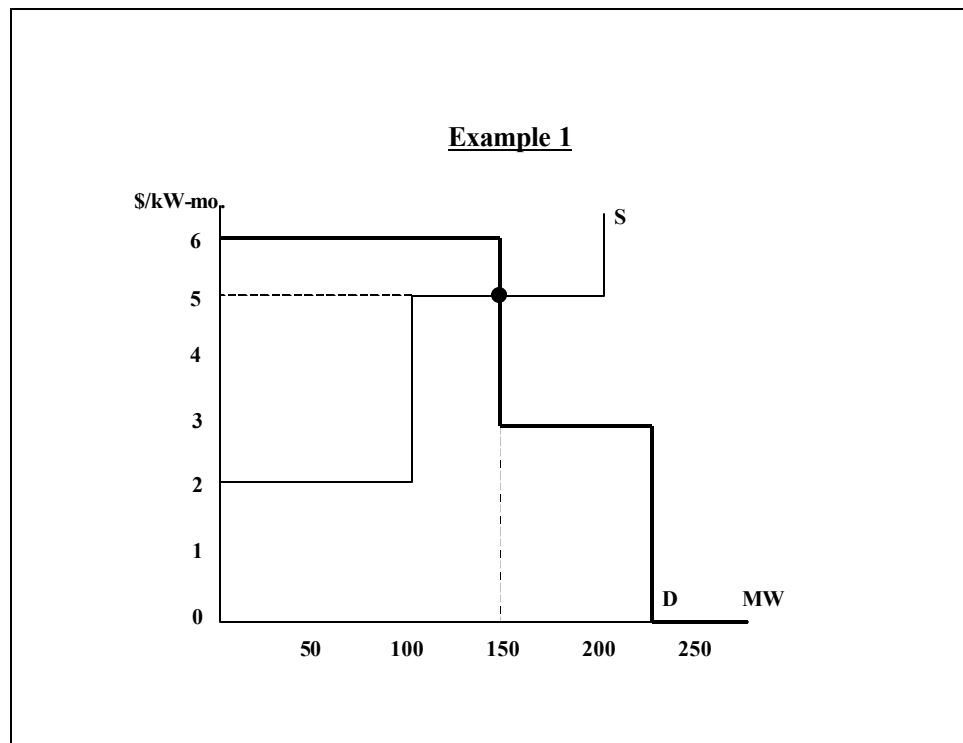
The ISO will select the following offers and bids in this phase:

- 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.

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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.)



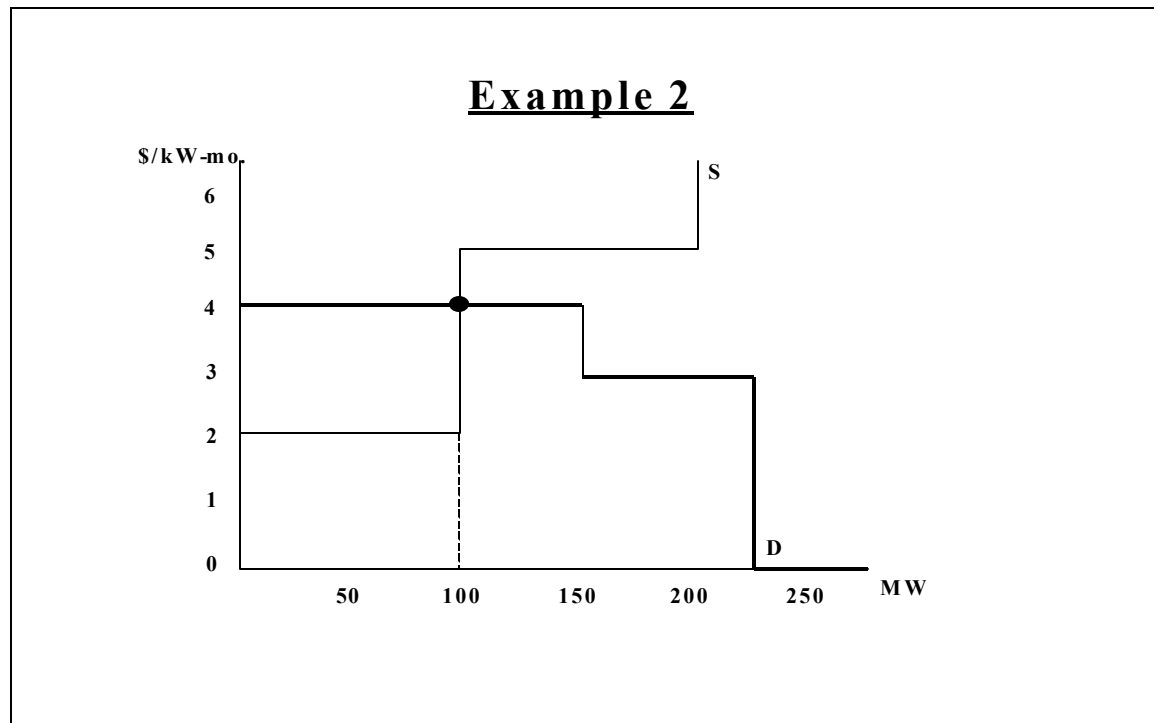
<sup>1</sup> The size of the increment of demand that the ISO will actually use to determine Market-Clearing Prices will be smaller than the minimum increment specified for bids and offers in the ISO Procedures. Therefore, if the ISO Procedures call for the number of MWs of Installed Capacity that a 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.)

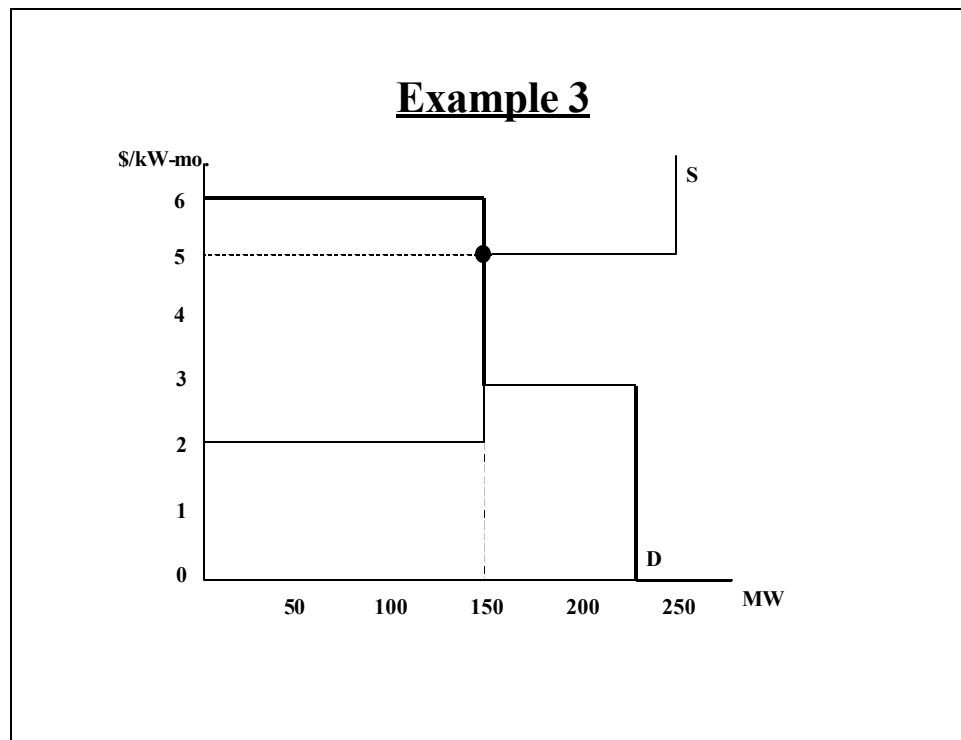


### Example 3: No Locational Constraints Bind, No Partially Selected Offers or Bids, Offer Sets the Price

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.

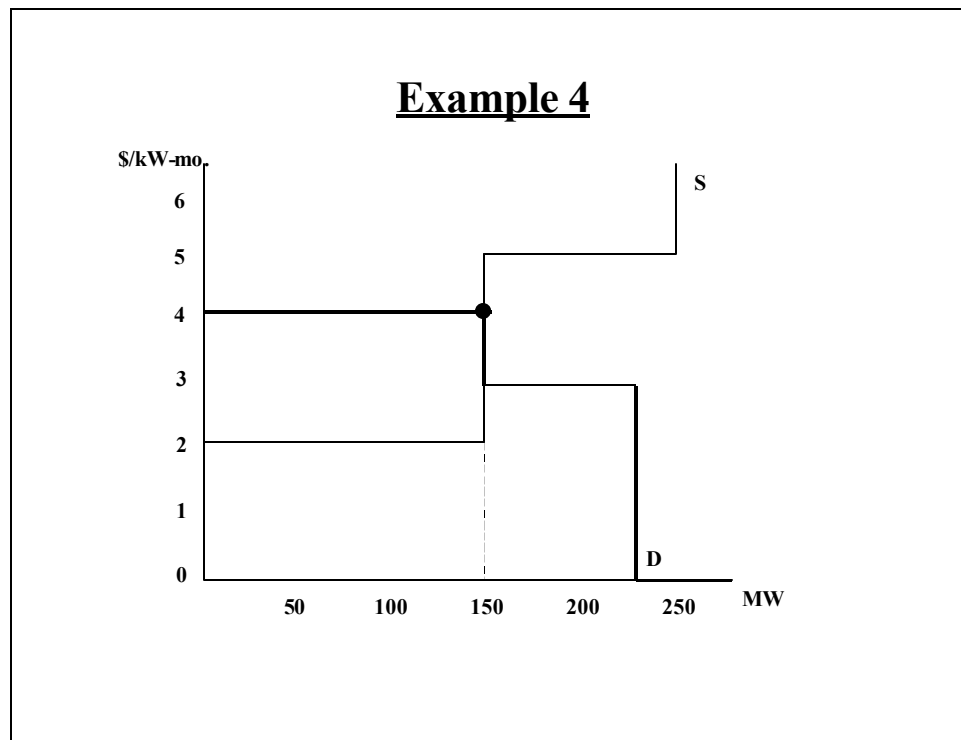


### Example 4: No Locational Constraints Bind, No Partially Selected Offers or Bids, Bid Sets the Price

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.

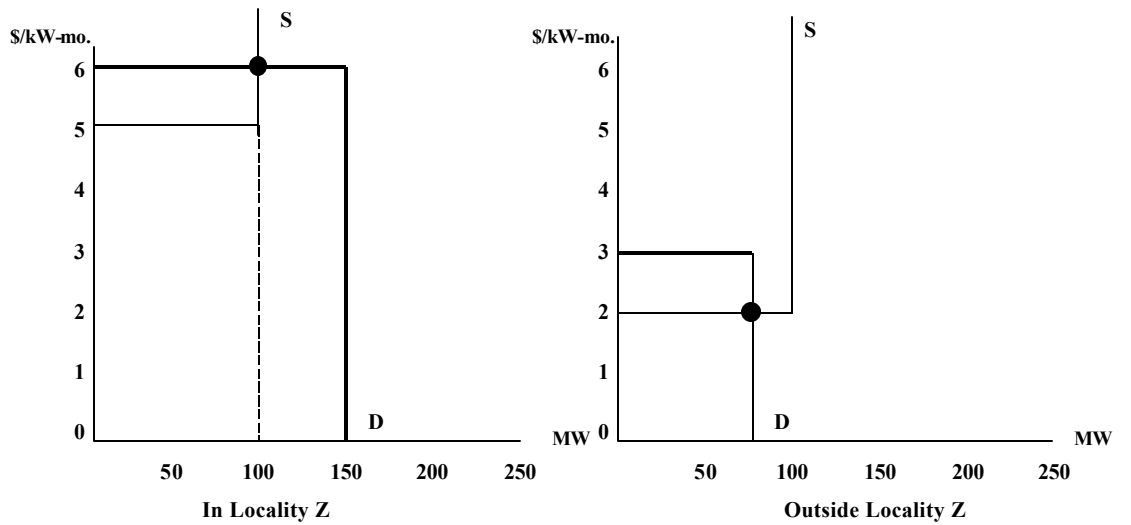
While there is more than 150 MW of Installed Capacity available with an offer price of less than \$6/kW-month (Bidder A's bid price), most of it is not located in Locality Z. Only the 100 MW offered from Generator Y at \$5/kW month is located in Locality Z, so only 100 MW of Bidder A's bid was selected.

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 5



## **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

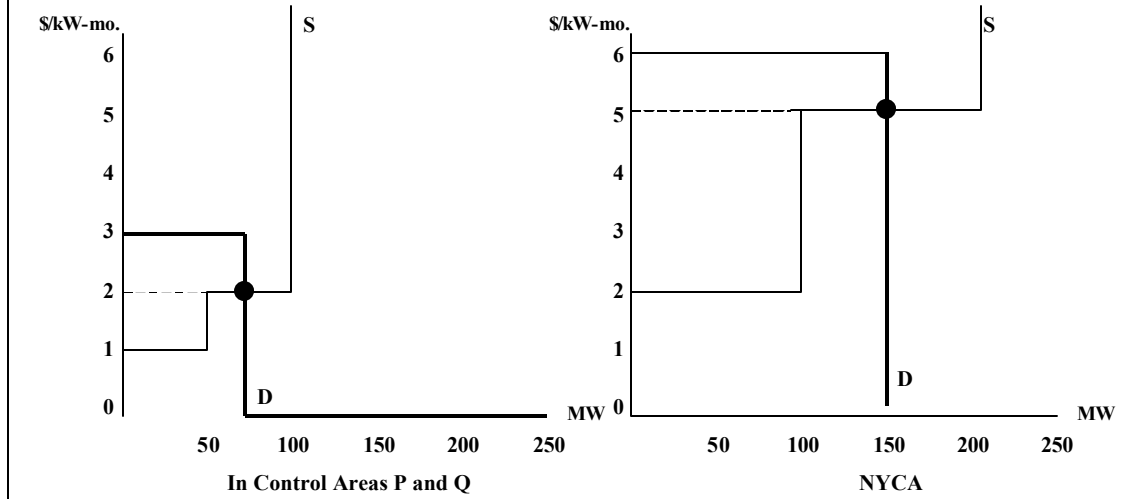
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External Control Area, without any limitations on the amount that it will accept from an individual External Control Area. Therefore, Installed Capacity located in either of these External Control Areas can be substituted for Installed Capacity in 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).

### Example 6



# 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 ISO at <buyInstalledCapacity@.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 e-mail, 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;

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- 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 <sellInstalledCapacity@.com>. An Electronic Offer may contain more than one individual offer (each an “Individual Offer”). All Individual Offers 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.



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**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.

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**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.

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

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.

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

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**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.

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

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**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 Reference Price”).

Subject Generators must bid their available Installed Capacity into each phase of each ISO-administered Installed Capacity 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 Installed Capacity Auctions.

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**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 Installed Capacity Auction Results**

### **6.1 Information Posted in Auction Results**

The ISO will publicly post on the web-site <<http://www..com>> for each “Monthly Effective Period,” the results of the Installed Capacity 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.

# **Attachment J:**

## Reserved for Stage II

# Attachment K:

## Reportable Operating Data

### NERC-GADS Data Reporting Requirements

#### Forced Outage

An unplanned failure that requires a unit to be removed from service, or the Load on the unit to be reduced before the end of the nearest following Weekend

#### Maintenance Outage

A scheduled outage or derating that can be deferred beyond the end of the nearest following Weekend but that requires the unit to be removed from service or the Load reduced before the next Planned Outage. Such an outage or derating may be scheduled earlier by mutual agreement in accordance with ISO Procedures.

In order to begin to use unforced capacity, the ISO will require, at a minimum, from each generator desiring to be an Installed Capacity Supplier to the NYCA one year's worth of NERC-GADS data. The ISO is requiring that these generators begin reporting NERC-GADS data to the ISO starting with data for January 2000.

NERC-GADS data for each generator is to be provided to the ISO by the twentieth of the month following the month for which the data applies.. All data for January 2000 through March 2001 must be reported by April 20, 2001, for a generator to meet its commitment to supply Installed Capacity to the NYCA.

The ISO will treat those generators that have not provided the data in a timely manner as being unavailable (a Forced Outage) for any month in which they do not submit data.

The input formats for NERC-GADS data can also be found on the NERC web-site at:

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

Find **GADS Services** in the **GO** link. The reporting manuals are also located there. The NERC-GADS data follows an 82 character fixed format as defined in these manuals.



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ISO NERC-GADS Reporting Requirements  
For Submittal of Data for Calendar Year 1999**

**Performance Data**

Card 01

|                                      |                    |
|--------------------------------------|--------------------|
| Card Code                            | Required           |
| Utility Code                         | Required if known, |
| TBD                                  |                    |
| Unit Code                            | Required if known, |
| TBD                                  |                    |
| Year                                 | Required           |
| Report Period                        | Required           |
| Report Revision Code                 | Required           |
| Gross Maximum Capacity               | -                  |
| Gross Dependable Capacity            | -                  |
| Gross (MWhr) Actual Generation       | -                  |
| Net Maximum Capacity                 | Required           |
| Net (MWhr) Actual Generation         | Required           |
| Typical Unit Loading Characteristics | Required           |
| Attempted Unit Starts                | Required           |
| Verbal Description                   | -                  |
| Card Number                          | Required           |

Card 02

|   |                    |
|---|--------------------|
| Card Code                                   | Required           |
| Utility Code                                | Required if known, |
| TBD   |                    |
| Unit Code                                   | Required if known, |
| TBD   |                    |
| Year  | Required           |
| Report Period                               | Required           |
| Report Revision Code                        | Required           |
| Unit Service Hours (SH)                     | Required           |
| Reserve Shutdown Hours (RH)                 | Required           |
| Pumping Hours                               | Required           |
| Synchronous Condensing Hours                | Required           |
| Available Hours (AH)                        | Required           |
| Planned Outage Hours (POH)                  | Required           |
| Forced Outage Hours & Startup Failure Hours | Required           |
| Maintenance Outage Hours (MOH)              | Required           |

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|   |          |
|---|----------|
| Extension of Scheduled Outage Hours (SEH) | Required |
| Unavailable Hours (UH)                    | Required |
| Period Hours                              | Required |
| Card Number                               | Required |

Card 03 Not Required

Card 04 Not Required

**Event Report Data**

Card 01

|   |                    |
|---|--------------------|
| Card Code                                   | Required           |
| Utility Code                                | Required if known, |
| TBD   |                    |
| Unit Code                                   | Required if known, |
| TBD   |                    |
| Year  | Required           |
| Report Period                               | Required           |
| Report Revision Code                        | Required           |
| Event Type                                  | Required           |
| Start of Event                              | Required           |
| End of Event                                | Required           |
| Gross Available Capacity as Result of Event | -                  |
| Net Available Capacity as Result of Event   | Required           |
| Card Number                                 | Required           |

Cards 02 –99 Provide data on system component events Not Required

## Special Case Resource Qualification

Rules:

1. Determine Average of Peak Monthly Demands (Fig. 1 below)
2. Document/Certify a Minimum Load Commitment when requested to interrupt Load (sign agreement below)
3. Report actual performance from meter readings covering the time period of the request. (Fig. 2 next page)

Figure 1  
Peak Load Certification  
Maximum Monthly One-hour Integrated Demand  
Capability Period \_\_\_\_\_

|             | June | July | August | September | Summer Average |
|-------------|------|------|--------|-----------|----------------|
| Date/Time   |      |      |        |           | N/A            |
| Demand (MW) |      |      |        |           |                |

|             | November | December | January | February | Winter Average |
|-------------|----------|----------|---------|----------|----------------|
| Date/Time   |          |          |         |          | N/A            |
| Demand (MW) |          |          |         |          |                |

Minimum Load Commitment \_\_\_\_\_(MW)

Installed Capacity Declaration \_\_\_\_\_(MW)

Entity Name:

Signed:

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Figure 2

**Minimum Load Demonstration  
Demonstrated Demand During Special Case Resource Implementation**

| Event #                   |               |                   |
|---------------------------|---------------|-------------------|
| Requested Start Date/Time |               |                   |
| Requested End Date/Time   |               |                   |
| Date/Time                 | Meter Reading | Cumulative Energy |
|                           |               | -----             |
|                           |               |                   |
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|                           |               |                   |
| Avg. Min. Demand          |               |                   |
|                           |               |                   |

| Event #                   |               |                   |
|---------------------------|---------------|-------------------|
| Requested Start Date/Time |               |                   |
| Requested End Date/Time   |               |                   |
| Date/Time                 | Meter Reading | Cumulative Energy |
|                           |               |                   |
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|                           |               |                   |
|                           |               |                   |
| Avg. Min. Demand          |               |                   |
|                           |               |                   |



## Special Case Resource Certification

Entity Name: \_\_\_\_\_

Contact: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

E-mail \_\_\_\_\_

Average Capability Period Peak Demand \_\_\_\_\_ (MW)

Minimum Load Commitment \_\_\_\_\_ (MW)

Installed Capacity Certified \_\_\_\_\_ (MW)

IN WITNESS WHEREOF, this Installed Capacity Certification has been submitted on  
this, the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

Name of Installed Capacity Supplier: \_\_\_\_\_

By:

\_\_\_\_\_

Name:

\_\_\_\_\_

Title:

\_\_\_\_\_

# Attachment L

## Revisions in Transmission Owner Installed Capacity Data Submittals

This Attachment establishes the process and procedures associated with the reporting of Load-serving entity (LSE) Load data to the ISO by the Transmission Owners. It discusses how this data is used to calculate LSE Installed Capacity obligations as of the first day of each month and the financial reconciliation associated with Load-shifting among LSEs.

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### Details:

Transmission Owners are required to provide two data submittals each month documenting LSE Load-shifting and Load obligations. The first submittal is used for an initial financial reconciliation of Load-shifting in the current month and for establishing an LSE's Installed Capacity obligation as of the first of the following month. The second data submittal will be used for a final financial reconciliation of Load-shifts in a designated previous month. Additional Load-shifting adjustments requiring a financial reconciliation will be handled on a case-by-case basis.

### Data Submittal One

In the first data submittal, Transmission Owners will provide (1) the daily shifts in Load obligations for each Load-serving entity (LSE) occurring in the current month and (2) the Load obligation of LSE for the first day of the following month. This submittal should contain the best available information at the time of the data submittal. For example, Transmission Owner A would submit Load-shifting data for August in early August as well as the final Load obligation for September 1. See Attachment A for data submittal schedule.

The ISO will use this data for two purposes:

- (1) To set each LSE's total and locational Installed Capacity requirement for the following month (and any remaining months in the Capability Period).
- (2) To perform an initial financial reconciliation of Load-shifts occurring in the course of the current month. That is, an initial reconciliation would be conducted for August Load-shifting based on data received in the month of August.

This reconciliation would *credit* Load-losing and *bill* Load-gaining LSEs based on the clearing price for the current month's Installed Capacity in the prior month's Installed Capacity auction.

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**Example A:** 10 MW of Load-shifts from LSE A to LSE B on June 5<sup>th</sup>. First, this 10 MW of Load is equivalent to 11.86 MW of Installed Capacity shifting based on a reserve requirement of 18.6%. LSE A then is credited for 9.8833 (11.86 MW \* 25 days / 30) MWs (weighted average) of Installed Capacity; LSE B is billed for 9.8833 MWs of Installed Capacity. A market clearing price for June Installed Capacity in the May auction of \$3.00 per kW-month translates into \$3,000.00 per MW-month (\$3.00/kW-month \* 1,000). Therefore, LSE A is credited \$29,650 (\$3.00/kW-month \* 1000 kW \* 9.8833 MWs); LSE B is billed \$29,650 (\$3.00 /kW-month \* 1000 kW \* 9.8833 MWs).

This initial financial reconciliation can also be used by the ISO to address those cases in which an LSE's Load obligation for the current month was set too high or too low causing the LSE to have purchased too much or too little Installed Capacity for the entire month. In these cases, an LSE would be billed or credited for an entire month of Installed Capacity.

**Example B:** Based on the best available data at the time, Transmission Owner A submits a report in early May indicating that LSE A will be serving 110 MW of Load on June 1; and that LSE B will be serving 90 MW of Load on June 1. However, due to the uncertainties of Retail Access, Data Submittal One for June indicates that LSE A actually served 100 MW on June 1, or 10 MW less than projected. Similarly, Data Submittal One for June indicated that LSE B actually served 100 MW on June 1, or 10 MW more than projected. Recall that this 10 MW of Load is equivalent to 11.86 MW in Installed Capacity. Using the market clearing price in the above example (\$3.00/kW-month), LSE A would be credited \$35,580 (\$3.00/kW-month \* 1000 kW \* 11.86 MW \* 30 days); LSE B would be billed the same \$35,580.

### **Data Submittal Two**

In the second data submittal, Transmission Owners will provide for a designated prior month (1) the actual Load obligation of each LSE for the first day of the designated month and (2) the daily shifts in Load obligations for each LSE documented to have actually occurred. For example, Transmission Owner A would submit in late August actual Load-shifting data for May and the actual Load obligation for May 1. These "true-up" transactions would then be included in the September Installed Capacity billing. See Attachment A for data submittal dates.

This data will be used to true-up the Load-shifting adjustments that were made based on the initial Load-shifting provided in Data Submittal One. Any credits or bills would then be net of the prior bills and credits calculated based on the Load-shifting reported in Data Submittal One.

**Example C:** In Example A, it is reported in Data Submittal One for the month of June (based on the best available data at the time) that on June 5<sup>th</sup> a 10 MW Load is scheduled to shift from LSE A to LSE B. This shift results in LSE A being credited \$29,650 and LSE B being billed \$29,650.

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However, in Data Submittal Two, the Transmission Owner reports that this 10 MW Load actually shifted from LSE A to LSE C - not LSE B. In this case, LSE A would not be affected (since it had already been credited for the \$29,650 it was due); LSE B would now be credited \$29,650 since it had been initially billed this amount for a Load-shift which did not occur; LSE C would now be billed the \$29,650 since in retrospect it had actually assumed the 10 MW Load obligation.

### **Standardization of Load-Shifting Documentation**

Transmission Owners will be required to provide electronic data submittals in the format below that will also be available on the ISO Web Site. A PDF version of the required format can be found below. The data submittal will consist of an Excel workbook containing a separate worksheet for each LSE's data. Transmission Owners should complete the worksheets for each Load-serving entity, adding sheets as necessary. Transmission Owners will be required to provide each LSE a copy of the pertinent Excel worksheet.

### **Schedule**

See Attachment A.

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**ISO Load Shifting Reporting Format  
Data Submittal One**

**LSE:** XYZ Electric  
**Month:** Jun-00  
**Transmission Owner:** Acme Transmission Owner  
**Vintage:** 7-Jun-00

| Date      | Total |            | In-City |            | On-Island |            |
|-----------|-------|------------|---------|------------|-----------|------------|
|           | Load  | Load Shift | Load    | Load Shift | Load      | Load Shift |
| 01-Jun-00 | 101.2 | 1.2        | 50.6    | 0.6        | 25.2      | 0.2        |
| 02-Jun-00 | 102.2 | 1.0        | 51.1    | 0.5        | 25.4      | 0.2        |
| 03-Jun-00 | 100.9 | -1.3       | 50.5    | -0.7       | 25.2      | -0.3       |
| 04-Jun-00 | 120.0 | 19.1       | 60.0    | 9.6        | 29.0      | 3.8        |
| 05-Jun-00 | 125.0 | 5.0        | 62.5    | 2.5        | 30.0      | 1.0        |
| 06-Jun-00 | 117.0 | -8.0       | 58.5    | -4.0       | 28.4      | -1.6       |
| 07-Jun-00 | 113.0 | -4.0       | 56.5    | -2.0       | 27.6      | -0.8       |
| 08-Jun-00 | 112.5 | -0.5       | 56.3    | -0.3       | 27.5      | -0.1       |
| 09-Jun-00 | 117.8 | 5.3        | 58.9    | 2.7        | 28.6      | 1.1        |
| 10-Jun-00 | 114.5 | -3.3       | 57.3    | -1.7       | 27.9      | -0.7       |
| 11-Jun-00 | 114.5 | 0.0        | 57.3    | 0.0        | 27.9      | 0.0        |
| 12-Jun-00 | 114.5 | 0.0        | 57.3    | 0.0        | 27.9      | 0.0        |
| 13-Jun-00 | 114.5 | 0.0        | 57.3    | 0.0        | 27.9      | 0.0        |
| 14-Jun-00 | 114.5 | 0.0        | 57.3    | 0.0        | 27.9      | 0.0        |
| 15-Jun-00 | 114.5 | 0.0        | 57.3    | 0.0        | 27.9      | 0.0        |
| 16-Jun-00 | 114.5 | 0.0        | 57.3    | 0.0        | 27.9      | 0.0        |
| 17-Jun-00 | 114.5 | 0.0        | 57.3    | 0.0        | 27.9      | 0.0        |
| 18-Jun-00 | 114.5 | 0.0        | 57.3    | 0.0        | 27.9      | 0.0        |
| 19-Jun-00 | 114.5 | 0.0        | 57.3    | 0.0        | 27.9      | 0.0        |
| 20-Jun-00 | 114.5 | 0.0        | 57.3    | 0.0        | 27.9      | 0.0        |
| 21-Jun-00 | 114.5 | 0.0        | 57.3    | 0.0        | 27.9      | 0.0        |
| 22-Jun-00 | 114.5 | 0.0        | 57.3    | 0.0        | 27.9      | 0.0        |
| 23-Jun-00 | 115.0 | 0.5        | 57.5    | 0.3        | 28.0      | 0.1        |
| 24-Jun-00 | 116.0 | 1.0        | 58.0    | 0.5        | 28.2      | 0.2        |
| 25-Jun-00 | 112.0 | -4.0       | 56.0    | -2.0       | 27.4      | -0.8       |
| 26-Jun-00 | 113.0 | 1.0        | 56.5    | 0.5        | 27.6      | 0.2        |
| 27-Jun-00 | 112.7 | -0.3       | 56.4    | -0.2       | 27.5      | -0.1       |
| 28-Jun-00 | 119.9 | 7.2        | 60.0    | 3.6        | 29.0      | 1.4        |
| 29-Jun-00 | 121.9 | 2.0        | 61.0    | 1.0        | 29.4      | 0.4        |
| 30-Jun-00 | 120.9 | -1.0       | 60.5    | -0.5       | 29.2      | -0.2       |
| 01-Jul-00 | 121.0 |            | 61.0    |            | 29.5      |            |

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**ISO Load Shifting Reporting Format  
Data Submittal Two**

**LSE:** XYZ Electric  
**Month:** Jun-00  
**Transmission Owner:** Acme Transmission Owner  
**Vintage:** 22-Sep-00

| Date      | Total |            | In-City |            | On-Island |            |
|-----------|-------|------------|---------|------------|-----------|------------|
|           | Load  | Load Shift | Load    | Load Shift | Load      | Load Shift |
| 01-Jun-00 | 101.2 | 0.0        | 50.6    | 0.0        | 25.2      | 0.0        |
| 02-Jun-00 | 102.2 | 1.0        | 51.1    | 0.5        | 25.4      | 0.2        |
| 03-Jun-00 | 100.9 | -1.3       | 50.5    | -0.7       | 25.2      | -0.3       |
| 04-Jun-00 | 120.0 | 19.1       | 60.0    | 9.6        | 29.0      | 3.8        |
| 05-Jun-00 | 125.0 | 5.0        | 62.5    | 2.5        | 30.0      | 1.0        |
| 06-Jun-00 | 117.0 | -8.0       | 58.5    | -4.0       | 28.4      | -1.6       |
| 07-Jun-00 | 115.0 | -2.0       | 57.5    | -1.0       | -0.5      | -0.2       |
| 08-Jun-00 | 114.5 | -0.5       | 57.3    | -0.3       | -0.6      | -0.1       |
| 09-Jun-00 | 119.8 | 5.3        | 59.9    | 2.7        | 0.5       | 1.1        |
| 10-Jun-00 | 116.5 | -3.3       | 58.3    | -1.7       | -0.2      | -0.7       |
| 11-Jun-00 | 116.5 | 0.0        | 58.3    | 0.0        | -0.2      | 0.0        |
| 12-Jun-00 | 116.5 | 0.0        | 58.3    | 0.0        | -0.2      | 0.0        |
| 13-Jun-00 | 116.5 | 0.0        | 58.3    | 0.0        | -0.2      | 0.0        |
| 14-Jun-00 | 116.5 | 0.0        | 58.3    | 0.0        | -0.2      | 0.0        |
| 15-Jun-00 | 116.5 | 0.0        | 58.3    | 0.0        | -0.2      | 0.0        |
| 16-Jun-00 | 116.5 | 0.0        | 58.3    | 0.0        | -0.2      | 0.0        |
| 17-Jun-00 | 116.5 | 0.0        | 58.3    | 0.0        | -0.2      | 0.0        |
| 18-Jun-00 | 116.5 | 0.0        | 58.3    | 0.0        | -0.2      | 0.0        |
| 19-Jun-00 | 116.5 | 0.0        | 58.3    | 0.0        | -0.2      | 0.0        |
| 20-Jun-00 | 116.5 | 0.0        | 58.3    | 0.0        | -0.2      | 0.0        |
| 21-Jun-00 | 116.5 | 0.0        | 58.3    | 0.0        | -0.2      | 0.0        |
| 22-Jun-00 | 116.5 | 0.0        | 58.3    | 0.0        | -0.2      | 0.0        |
| 23-Jun-00 | 117.0 | 0.5        | 58.5    | 0.3        | -0.1      | 0.1        |
| 24-Jun-00 | 118.0 | 1.0        | 59.0    | 0.5        | 0.1       | 0.2        |
| 25-Jun-00 | 114.0 | -4.0       | 57.0    | -2.0       | -0.7      | -0.8       |
| 26-Jun-00 | 115.0 | 1.0        | 57.5    | 0.5        | -0.7      | 0.2        |
| 27-Jun-00 | 114.7 | -0.3       | 57.4    | -0.2       | -0.5      | -0.1       |
| 28-Jun-00 | 121.9 | 7.2        | 61.0    | 3.6        | 0.9       | 1.4        |
| 29-Jun-00 | 123.9 | 2.0        | 62.0    | 1.0        | 1.3       | 0.4        |
| 30-Jun-00 | 122.9 | -1.0       | 61.5    | -0.5       | 1.1       | -0.2       |