Attachment <u>AII</u>

INSTALLED CAPACITY AUCTION DESCRIPTION

<u>1.</u> DEFINITIONS

All <u>of</u> in the <u>defined terms used in this document are defined in the NYISO's Market Administration and Control</u> <u>Area</u> Services Tariff <u>incorporated herein("ISO Services Tariff")</u>.

2. Overview

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 and/or sell Installed Capacity through Bilateral Transactions conducted outside of ISO-administered auctions. Participation in ISO-administered auctions will be restricted to ISO Customers. Installed Capacity sold through the auction may only be used for the commercial interests of the purchaser. In addition, following definitions will be used in this document:

Test Period: The period during a Capability Period during which a resource's DMNC test must be conducted if that DMNC test is to be valid<u>any Installed Capacity purchased through an ISO-administered auction</u> <u>may not be resold</u> for <u>the</u> purposes of the amount of Installed Capacity that resource is permitted to provide during that Capability Period. This period will be defined for the Summer and Winter Capability Periods in the ISO Procedures.

: An entity that bids to purchase Installed Capacity in the Installed Capacity Auction ("Auction"). : An entity that offers to sell Installed Capacity in the Auction.

. Overview

the Auction, LSEs will have the opportunity to purchase the Installed Capacity necessary to meet the Installed Capacity Requirements set forth in the ISO Services Tariff, and Installed Capacity providers will have the opportunity to sell Installed Capacity. LSEs will also be permitted to purchase part or all of the Installed Capacity necessary to meet their<u>meeting Installed Capacity</u> requirements bilateral transactions for Installed Capacity conducted outside the Auction. Likewise, Installed Capacity providers will be permitted to sell Installed Capacity outside the Auction. Participation in the Auction will not be restricted to LSEs and Installed Capacity providers (although entities wishing to purchase Installed Capacity in the Auction will be required to demonstrate creditworthiness, and entities offering to sell Installed Capacity in the Auction will be required to demonstrate that they have contracted with resources that are likely to be able to provide the offered amountimposed by operators of Capacity).<u>External Control Areas.</u>

.<u>3.</u> Scope of Filing

This document describes Installed Capacity <u>auction</u> procedures, which the ISO <u>shall</u> follow when <u>Installed</u> <u>Capacity that is valid during the Winter 1999-2000 Capability Period, and which conducting Installed</u> <u>Capacity auctions during the time that the Transitional Installed Capacity provisions, which are set forth in proposed</u> <u>Sections 5.9 - 5.15 of the ISO Services Tariff, are in effect.</u> Bidders and Offerors must follow <u>these auction</u> <u>procedures</u> in order to participate in Auctions. Permanent Installed Capacity Auction procedures will be developed by the ISO for auctioning Installed Capacity that is valid during the Summer 2000 Capability Period and subsequent Capability Periods. the ISO has not filed permanent Installed Capacity Auction procedures, or the Commission has not accepted those procedures, by the date of the first Auction in which Installed Capacity valid during the Summer 2000 Capability Period is to be auctioned, or if permanent Installed Capacity Auction procedures have been filed by the ISO and accepted by the Commission by that date, but the ISO has stated in that filing that those permanent Installed Capacity Auction procedures will not take effect until some later date, then the interim Installed Capacity Auction procedures described in this filing will continue be used to perform all Auctions until the date upon which the ISO's permanent Installed Capacity Auction procedures become effective.Installed Capacity auctions,

.4. AUCTION STRUCTURE AND TIMING

A. OVERVIEW

ISO will conduct <u>Installed Capacity auctions</u> on a periodic <u>-basis pursuant to this Section</u>. <u>The ISO Procedures</u> <u>shall specify the dates by which the ISO will post the results of these auctions</u>. <u>The ISO Procedures shall ensure that</u> <u>there are at least four business days between the time that auction results are posted and the dates that LSEs are</u> <u>required to demonstrate that they have procured sufficient Installed Capacity to cover their Installed Capacity</u> <u>requirements</u>.

Auctions shall be conducted least once per Capability Period, and may be conducted more frequently if so specified by ISO Procedures. prior to the start of each Obligation Procurement Period and each month during an Obligation Procurement Period. The auctions conducted prior to the start of an Obligation Procurement Period will occur in three steps.

Auction will consist of a set of sub-auctions. In each of those sub-auctions, <u>The first auction conducted prior to</u> <u>the start of the Obligation Procurement Period, the "Obligation Procurement Period Auction," will allow</u> Bidders be able to purchase Installed Capacity a single month (and only that month), and Offerors be available to sell Installed Capacity for <u>the entire six months included in</u> that .

<u>Obligation Procurement Period.</u> The of thesecond set of auctions conducted prior to the start of the Obligation <u>Procurement Period, the "pre-Obligation Procurement Period Monthly Auctions," will facilitate transactions for</u> <u>individual</u> months within given Auction for which the ISO will conduct sub-auctions will be made by<u>an</u> <u>Obligation Procurement Period.</u> This set of auctions shall consist of a series of a separate auction for each month in <u>the Obligation Procurement Period.</u>

<u>In the event that all LSEs do not certify to</u> the ISO, association with <u>by the time specified in the ISO Procedures, that</u> 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, the "initial Deficiency Procurement Auctions," to procure the requisite amount of Installed Capacity on behalf of the deficient LSE. During the initial Deficiency Procurement Auctions, the ISO will also procure Installed Capacity on behalf of deficient Installed Capacity Suppliers. The initial Deficiency Procurement Auctions will consist of six separate monthly auctions.

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

<u>Finally, in any month in which a Load-gaining LSE fails to procure Installed Capacity to cover new Load it has gained,</u> <u>the ISO shall conduct a monthly Deficiency Procurement Auction at the time specified in the</u> ISO Procedures.—<u>The</u> <u>months for which</u>

B. Auctions Conducted Prior to the Beginning of an Obligation **PROCUREMENT PERIOD**

<u>The Obligation Procurement Period Auction, the pre-Obligation Procurement Period Monthly Auctions, and the initial</u> <u>Deficiency Procurement Auctions will each consist of two phases. The split of each auction into two phases derives</u> <u>from the need to implement FERC approved mitigation measures in the New York City Localities' Installed Capacity</u> <u>markets. Both of the phases of a -auction isgiven auction shall be</u> conducted<u>on the same day. Each auction that</u> <u>does not consist of two phases shall consist of a single phase. In the Obligation Procurement Period Auction and the</u> <u>pre-Obligation Procurement Period Monthly Auctions, LSEs shall bid for themselves, whereas the ISO shall submit</u> <u>deficiency bids on their behalf in the initial Deficiency Procurement Auction</u>.

Participation in the first phase of the Obligation Procurement Period Auction and the pre-Obligation Procurement Period Monthly Auctions shall be limited to: (i) LSEs authorized to serve load in the New York City Locality seeking to make locational Installed Capacity purchases in order to satisfy their In-City Locational Installed Capacity requirements; (ii) any other entity seeking to purchase In-City Locational Installed Capacity; (iii) qualified In-City Generators; and (iv) any other Installed Capacity Supplier that owns excess Installed Capacity associated with qualified In-City Generators. LSEs awarded Installed Capacity in the first phase shall pay the Market-Clearing Price of Installed Capacity determined in that phase. Installed Capacity 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 Generators that are subject to mitigation measures, which shall receive the lesser of the Market-Clearing Price or the applicable locational price cap. Any entity that resells Installed Capacity associated with In-City Generators that are subject to market mitigation measures shall receive the lesser of the Market-Clearing Price determined in that phase, or the price that it paid for that Installed Capacity. The ISO shall retain any Excess Amount and rebate it to all LSEs 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 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 the current month, preceding months, or months in the future (e.g., an Auction 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. Installed Capacity 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. During the 2000 Summer Obligation Procurement Period, In-City Generators that are permitted to offer to sell in the second phase shall be permitted to make separate offers in the first and second phases of the first two pre-Obligation Procurement Period Auctions.

Participation in the first phase of the initial Deficiency Procurement Auctions shall be limited to deficient LSEs serving load in the New York City Locality that are required to make additional locational Installed Capacity purchases in order to satisfy their In-City Locational Installed Capacity requirements, qualified In-City Generators, and any other Installed Capacity Supplier that owns excess Installed Capacity associated with qualified In-City Generators. The ISO shall submit deficiency bids on behalf of each participating LSE at a level determined pursuant to Section 5.14.1 of the ISO Services Tariff. LSEs awarded Installed Capacity in the first phase shall pay the lesser of the Market-Clearing Price of Installed Capacity determined in that phase or the deficiency bid, to the ISO. The ISO shall pay Installed Capacity Suppliers that are selected to provide Installed Capacity the Market-Clearing Price determined in that phase, which can be no greater than the deficiency bid, except in the case of Installed Capacity associated with In-City Generators that are subject to mitigation measures, which shall receive the lesser of the Market-Clearing Price determined in that phase or the applicable locational price cap. Any entity that resells Installed Capacity associated with In-City Generators that are subject to market mitigation measures shall receive the lesser of the Market-Clearing Price determined in that phase or the price that it paid for that Installed Capacity. The ISO shall retain any Excess <u>Amount and rebate it to all LSEs serving Load in the New York City Locality pursuant to Section 5.15 of the ISO</u> <u>Services Tariff.</u>

Participation in the second phase of the initial Deficiency Procurement Auctions shall not be limited to In-City entities. The ISO shall submit deficiency bids on behalf of all remaining deficient LSEs at a level determined pursuant to Section 5.14.1 of the ISO Services Tariff. The ISO shall solicit bids from all qualified Installed Capacity Suppliers, including In-City Generators, otherwise subject to market mitigation measures, that still have Installed Capacity to offer after all LSEs based in the New York City Locality have met their Locational Installed Capacity requirements. LSEs awarded Installed Capacity in the second phase shall pay the lesser of the applicable Market-Clearing Price of Installed Capacity determined in that phase, or the deficiency bid, to the ISO. The ISO will use these deficiency payments to pay the applicable Market-Clearing Price of Installed Capacity, including In-City Generators that are otherwise subject to market mitigation measures. Any entity that resells Installed Capacity associated with In-City Generators that are subject to market mitigation measures shall receive the lesser of the applicable Market-Clearing Price determined in that phase or the price that it paid for that Installed Capacity. During the 2000 Summer Obligation Procurement Period, In-City Generators that are permitted to participate in the second phase shall be permitted to submit separate offers to sell in each phase of the initial Deficiency Procurement Auction.

<u>The ISO shall not reveal the number of MWs that LSEs are deficient prior to the initial Deficiency Procurement</u> <u>Auction.</u>

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

C. AUCTIONS CONDUCTED DURING AN OBLIGATION PROCUREMENT PERIOD

Regular Monthly Auctions that take place after the initial Deficiency Procurement Auctions will be conducted exactly like the Monthly Auctions held July 2000 could include sub-auctions of Installed Capacity for months before July 2000, a sub-auction of Installed Capacity for the month of July 2000, 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.

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

LSEs that are still deficient after the completion of either an initial or monthly Deficiency Procurement Auction will pay a deficiency charge to the ISO equal to the deficiency bid multiplied by the number of MWs by which they are deficient. The ISO will attempt to use the money it collects through the imposition of deficiency charges to procure Installed Capacity from Generators that are capable of selling Installed Capacity but that failed to qualify to sell it prior to the Deficiency Procurement Auction, *e.g.*, recently upgraded Generators, new Generators and -auctions of Installed Capacity for months following July 2000). <u>existing Generators that were otherwise not able to qualify.</u> 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 <u>charge per MW of Installed Capacity, or the applicable locational price cap per MW of Installed Capacity, which ever is</u> <u>less, pro-rated to reflect the portion of the Obligation Procurement Period for which the Installed Capacity Supplier</u> <u>provides Installed Capacity. Any remaining monies collected by the ISO pursuant to section 5.14.1 of the ISO Services</u> <u>Tariff will be applied to reduce the Schedule 1 charge.</u>

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

D. ADDITIONAL DETAILS TO BE PROVIDED IN THE ISO PROCEDURES

ISO Procedures shall ensure that:

- least one sub-auction for each month within a given Capability Period will be held at least 60 days before the beginning of that Capability Period (with the exception of the months within the Winter 1999-2000 Capability Period, for which at least one sub-auction will be held at least 45 days before the beginning of that Capability Period); <u>An Obligation Procurement Period Auction will be held at least</u> <u>30 days before the beginning of that Obligation Procurement Period where Installed Capacity shall be made</u> available for purchase for the entire six month Obligation Procurement Period;
- (ii) least one sub-auction for each month within a given Capability Period will be held after each LSE's final Installed Capacity requirements for that Capability Period have been announced, but before deficiency penalties have been assessed for<u>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;
 </u>
- (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) <u>During an Obligation Procurement Period, auctions will be held at least 15 days before the beginning of the</u> 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 failed to maintain or contract for not procured sufficient Installed
Capacity meet those requirements; and
- (iii) Auction that includes a sub-auction for one month within a given Capability<u>for the remainder of the</u> <u>Obligation Procurement</u> Period include sub-auctions for every other month within that Capability Period.to cover Load-shifting that occurred during the prior month.

sub-auctions will be conducted independently of one another. Bids to purchase Installed Capacity and offers to sell Installed Capacity must be submitted separately for each -auction. <u>auction.</u> Bids to purchase Installed Capacity and offers to sell Installed Capacity that are not selected in a <u>phase of a given -auction auction</u> will not carry over into subsequent -<u>auctions or phases of that auction</u>.

Procedures will define the minimum number of business days <u>Bidders who wish to purchase and Offerors who</u> <u>wish to sell Installed Capacity in any ISO-administered auction may submit bids to the ISO up to the day</u> before

Auction begins by which Bidders who wish to purchase Installed Capacity in that Auction must submit bids to the ISO to purchase Installed Capacity, and Offerors who wish to sell Installed Capacity in that Auction must submit offers to the ISO to sell Installed Capacity.<u>that auction, unless otherwise specified in the</u> <u>ISO Procedures</u>. If no submit bids to purchase Installed Capacity for a given month by that deadline, or no Offerors submit offers to sell Installed Capacity for a given month by that deadline, the ISO will cancel the sub-auction it had planned to conduct for Installed Capacity for that month. <u>Offerors submit offers to sell</u> <u>Installed Capacity in a phase of an auction by that deadline, the ISO will cancel that phase of that auction. By contrast,</u> <u>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.</u>

.5. LIMITATIONS ON OFFERORS' PARTICIPATION IN Auction Installed Capacity Auctions

Only Customers will be permitted to offer to sell Installed Capacity in Auction.

an auction. The amount of Installed Capacity that can be offered for sale in sub-auction for a given monthany auction from a given resource will not be permitted to exceed the amount of Installed Capacity that resource is permitted to provide in that month, which will be limited to the greater of the capacity demonstrated for that resource during the Capability Period containing that month, or the capacity demonstrated for that resource during the preceding like Capability Period. (For example, the amount of Installed Capacity that can be offered for sale during a month in the Summer 2001 Capability Period will be limited to the greater of the capacity demonstrated for that resource for the Summer 2001 Capability Period or the capacity demonstrated for that resource for the Summer 2000 Capability Period.) These procedures are more precisely set forth as follows: that resource is permitted to provide. The amount of Installed Capacity that a given resource may sell shall be established pursuant to Sections 5.12.1 and 5.12.5 of the ISO Services Tariff.

the owners of that resource have not yet submitted to the ISO the results of that resource's DMNC test for the Capability Period that includes the month to be covered by the sub-auction by the time at which offers for that sub-auction are due, then the amount of Installed Capacity that resource is permitted to offer for sale in that sub-auction shall not exceed the amount of Installed Capacity that resource has demonstrated in the past it can provide in the Capability Period that includes the month covered by that sub-auction (either through a DMNC test for that resource conducted during the DMNC Test Period for the preceding like Capability Period).

- (ii) the owners of that resource have submitted to the ISO the results of that resource's DMNC test for the Capability Period that includes the month to be covered by the sub-auction by the time at which offers for that sub-auction are due, then the amount of Installed Capacity that resource is permitted to offer for sale in that sub-auction shall not exceed the greater of: the amount of Installed Capacity that resource has demonstrated it can provide in the Capability Period that includes the month covered by that sub-auction (either through a DMNC test for that resource conducted during the DMNC Test Period for that Capability Period, or actual production data for that resource during the DMNC Test Period for that Capability Period); or the amount of Installed Capacity that resource has demonstrated in the past it can provide in that Capability Period, the determination of which is described in the preceding paragraph.
- (iii) urces located outside the NYCA must provide documentation similar to that described above, as further described in the ISO Procedures.

In cases in which the ISO has reduced the amount of Installed Capacity that a resource can due to the failure of that resource's owner to comply with the requirements for Installed Capacity providers set forth in the ISO Services Tariff, the amount of Installed Capacity that<u>supply</u>, the owners of that resource are <u>required</u> to for sale in that sub-auction shall not exceed<u>procure any deficiency in Installed Capacity resulting from the</u> <u>reduction through the Deficiency Procurement Auction. The circumstances in which the ISO may reduce</u> the amount of Installed Capacity that resource is permitted to provide. <u>that a resource may sell shall be established in the</u> <u>ISO Procedures.</u> The amount of Installed Capacity that any given Offeror is permitted to offer for sale in the <u>auction</u> shall not exceed <u>the</u> Offeror's share of the amount of Installed Capacity <u>that resource isits resources are</u> permitted to offer for sale, as calculated above, less any Installed Capacity that Offeror has offered for sale either through <u>sales of Installed CapacityBilateral Transactions</u> or through sales <u>Installed Capacity from that resource to</u> <u>External</u> Control Areas. Offerors will be required to submit documentation to the ISO verifying that they own, have contracted to purchase, or have been designated as the agent for the share of <u>each</u> resource they claim when making offers to sell Installed Capacity. 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 <u>-rejected in its entirety</u>.

addition, all Offerors wishing to sell Capacity in the <u>auction</u> must submit written statements to the ISO stipulating that the Installed Capacity offered for sale in the <u>auction</u> by that Offeror from a resource has not previously been committed to provide Installed Capacity in the New York market or in any other <u>market for that auction period</u>.

If a resource (or a portion of a resource) is selected in the <u>auction</u> 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 <u>Suppliers</u> set forth in the ISO Services Tariff. Therefore, entities wishing to purchase Installed Capacity that will count toward Installed Capacity requirements in other Control Areas will not be able to purchase such <u>Installed Capacity</u> in <u>an</u>-<u>auction</u>.

.6. LIMITATIONS ON BIDDERS' PARTICIPATION IN Auction Installed Capacity Auctions

potential purchasing auction participant must be a NYISO Customer and a Load Serving Entity ("LSE"). The amount of Installed Capacity that each such LSE will be permitted to bid to purchase in each subauction will be limited to the MW Bid Cap determined by the ISO for that LSE for the month in which Installed Capacity sold in that sub-auction is valid. Any bids submitted to purchase an amount of Installed Capacity that exceeds the MW Bid Cap will be rejected by the ISO. The MW Bid Cap that applies to an LSE for a given month shall be defined as the sum of (i) the Installed Capacity requirement (the "Required Amount") established by the ISO for the bidding LSE for that month, plus (ii) five percent of the Required Amount, plus (iii) any amount of Installed Capacity valid in that month that the bidding LSE has contracted to sell pursuant to a bilateral contract, plus (iv) any amount of Installed Capacity valid in that month that the bidding LSE has sold in a previous Auction; minus the sum of (i) any amount of Installed Capacity valid in that month that the bidding LSE has purchase, plus (ii) any amount of Installed Capacity valid in that month that the bidding LSE has purchased in a previous (iii) any amount of Installed Capacity valid in that month that the bidding LSE has purchased in a previous (iii) any amount of Installed Capacity valid in that month that the bidding LSE has purchased in a previous (iii) any amount of Installed Capacity valid in that month that the bidding LSE has purchased in a previous (iii) any amount of Installed Capacity valid in that month that the bidding LSE has purchased in a previous (iii) any amount of Installed Capacity valid in that month that the bidding LSE has purchased in a previous (iii) any amount of Installed Capacity valid in that month that the bidding LSE has purchased in a previous (iii) any amount of Installed Capacity valid in that month that the bidding LSE has purchased in a previous (iii) any amount of Installed Capacity valid in that month that the bidding LS

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 <u>nauction</u> to exceed that Bidder's credit limit. Procedures for ensuring this does not <u>occur, and for notifying Bidders whose Bids are rejected for creditworthiness reasons</u>, will be <u>set forth</u> in the ISO Procedures.

.7. INFORMATION CONTAINED IN BIDS TO PURCHASE OR OFFERS TO SELL

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

(i) The total amount of Installed Capacity it wishes to purchase in association with that bid, in <u>;increments of 100 kW;</u>

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

The minimum <u>amount</u> of MW that must be specified in each bid to purchase Installed Capacity shall be set forth in the ISO Procedures.

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

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

The minimum <u>amount</u> of <u>Installed Capacity</u> that must be specified in each offer to sell-<u>Installed Capacity</u> shall be set forth in the ISO Procedures.

<u>58.</u> DETERMINATION OF SELECTED BIDS AND OFFERS

ISO will determine which bids to purchase and which offers to sell Installed Capacity are selected by maximizing total gains from trade in each -auction, i.e., <u>phase of each auction, i.e.</u>, by maximizing the sum of the maximum prices bid by Bidders whose bids to purchase Installed Capacity in that -auction<u>phase of that</u> <u>auction</u> were selected minus the sum of the minimum prices specified by Offerors whose offers to sell Installed Capacity in that -auction<u>phase of that auction</u> were selected, subject to the constraints on the location of the <u>associated resource</u> that have been specified in the selected bids. This maximization will be performed jointly for all locations in each -auction, so separate sub-auctions will not be conducted for Installed Capacity located in a given Locality or in a given external Control Area(s). <u>phase of each auction</u>.

All, part, or none of a bid to purchase or an offer to sell Installed Capacity may be selected in any given auction.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 <u>lower</u> than the amount it offered to purchase (including <u>-zero MWs</u>). 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 -auction_phase of an auction cannot be made contingent on the outcome of another -auction: .g.,e.g., an Offeror will not be permitted to offer Installed Capacity within one month's -auction_auction contingent upon its sale of Installed Capacity in a another month's -auction_auction contingent on whether another bid or offer is accepted in the same -auction_phase. However, the ISO will evaluate the feasibility of making the acceptance of a bid or offer in a phase of a given -auction_auction contingent on the acceptance of other bids or offers in that -auction.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 <u>),locations</u>) in the same phase of the same auction, and some but not all of those bids can be selected, the amount of Installed Capacity awarded to each of those Bidders in association with each of those bids shall be proportional to the amount of Installed Capacity that Bidder bid to purchase in that location (or group of locations, if there is no price difference between those locations) at that price. Likewise, in cases in which multiple Offerors offer to sell Installed Capacity in a given location (or group of locations, if there is no price difference between those location) for 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 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. Procedures may call for all selected bids or offers to be rounded to a given increment (e.g., to be rounded to the amount of the selected bids or offers to be rounded to a given increment (e.g., to be rounded to the amount of the amount o

.9. DETERMINATION OF MARKET-CLEARING PRICES

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

- (i) Prices for <u>Installed Capacity located in</u> each Locality.
- for

(ii) <u>Prices for Installed Capacity located in each Control Area outside the NYCA.</u>

(iii) <u>Price for Installed Capacity located in</u> the portion of the NYCA that is not located in any other Locality. for each Control Area outside the NYCA.

general, the market-clearing price of Installed Capacity in a given<u>In the first phase of a two-phase auction, only</u> <u>Installed Capacity located in the New York City Locality will be available, so the only Market-Clearing Price</u> <u>determined in that phase will be the price for that Locality.</u>

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. 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 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 a given sub-auction shall be determined by the least-bid cost method of meeting a price-insensitive demand for a small amount of Installed Capacity in that location. In cases where there are to location. If no locational , constraints are binding *(i.e., if the locational constraints specified by Bidders did not force the ISO to select more expensive offers of Installed Capacity determined in the absence of those locational constraints), then the Market-Clearing Price of Installed Capacity determined in that phase will be the same at every location.*

When locational constraints do not bind, the Market-Clearing Price of Installed Capacity in a phase of a given auction will be the marginal bid cost of providing additional Installed Capacity in that auction. The marginal bid cost of providing additional Installed Capacity in the first phase of any two-phase auction will also establish the Market-Clearing Price for Installed Capacity in the New York City Locality in that phase. This procedure for calculating Market-Clearing Prices is analogous to the procedure that will be used to calculate LBMP prices in the Energy market (which are based upon the marginal bid cost of supplying an increment of Load at a location). Illustrations of these procedures for calculating prices appear in the Appendix.

In order to determine the marginal bid cost of providing Installed Capacity, the ISO will calculate the change in the amount of Installed Capacity that would have been bought and sold by each Bidder and Offeror if there had been—in addition to the bids and offers that were already part of the auction—an additional demand for a very small amount of Installed Capacity. The presence of this beadditional demand would have had one of two effects: either lowest \$/kW-month offer submitted by an Offeror whose offer was not fully selected in the sub-auction or the lowest \$/kW-month bid submitted by a Bidder whose offer was partially selected in the sub-auction, 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 in that phase. Alternatively, it would have decreased the amount of Installed Capacity in that phase of that auction), so that the amount of Installed Capacity purchased by the marginal Bidder (which is the Bidder whose offer price is lowest among those entities that phase of that auction), so that the amount of Installed Capacity purchased by the marginal Bidder (which is the Bidder whose offer price is lowest among those entities that phase of that auction), so that the amount of Installed Capacity purchased to meet the small additional demand). The algorithm that the ISO uses to conduct the auction will choose whichever lower.

, market-clearing prices determined for each of the above locations may differ if locational constraints are binding in the sub-auction. For example, if enough Bidders required Installed Capacity to be located in a given Locality, Offerors of Installed Capacity that is located in that Locality may be selected, even though the prices specified in their offers are higher than the prices specified in offers submitted by Offerors not located in that Locality that were not selected. In this case, the market-clearing price for Installed Capacity located in that Locality would be higher than the market-clearing price of Installed Capacity not located in that Locality.

cases in which 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.

<u>When</u> locational constraints bind, the -clearing price for a Locality shall reflect the least-bid cost method of meeting a price-insensitive demand for a small amount of Installed Capacity in that Locality; the marketclearing price for the portion of the NYCA that is not in any Locality shall reflect the least-bid cost method of meeting a price-insensitive demand for a small amount of Installed Capacity shall reflect the least-bid cost method of meeting a price-insensitive demand for a small amount of Installed Capacity that must be located within<u>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.</u>

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

<u>An External Control Area constraint is binding if the ISO does not select offers of Installed Capacity located in a</u> <u>particular External Control Area (or group of Areas), while selecting offers with higher offer prices from Installed</u> <u>Capacity Suppliers located in the NYCA or in other External Control Areas. Again, the ISO will only do this in order</u> to avoid violating locational constraints specified by Bidders that state that a bid is only valid for Installed Capacity that is not located in a given External Control Area (or group of Areas).

Then:

- If a Locality constraint is binding in a phase of an auction, then the Market-Clearing Price of Installed Capacity located in that Locality in that phase will be the marginal bid cost of providing additional Installed Capacity in that Locality in that phase.
- If an External Control Area constraint is binding for a particular Control Area in a phase of an auction (or group of Areas), then the Market-Clearing Price of Installed Capacity located in that External Control Area (or group of Areas) in that phase will be the marginal bid cost of providing additional Installed Capacity in that particular External Control Area (or group of Areas) in that phase.
- The Market-Clearing Price in a phase of an auction for Installed Capacity located anywhere else (which includes

 (1) Installed Capacity located in the NYCA, but is not required to be in any Locality; not in any other Locality:
 (2) Installed Capacity located in a Locality, if that Locality constraint is not binding in that phase; and the
 market-clearing price for external Control Areas shall reflect the least-bid(<u>3</u>) 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 a price-insensitive demand for a small amount of providing
 additional Installed Capacity in that bephase located the NYCA anywhere other than a Locality for which a
 Locality constraint is binding in that phase,

-clearing

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

<u>Market-Clearing Prices</u> will be calculated independently within each -auction. <u>phase of a given auction</u>. As a result, the <u>-clearingMarket-Clearing Price</u> for Installed Capacity at a given location may vary among <u>phases of</u> the <u>-auctions conducted forsame auction</u>, or among different <u>monthly auctions conducted</u> at the same time.-Additionally, the market-clearing price for Installed Capacity at a given location and in a given month determined in one Auction may differ from the market-clearing price for Installed Capacity at that same location and in that same month determined in another Auction; e.g., the market-clearing price for August Installed Capacity in a given Locality determined in the June Auction may not be the same as the market-clearing price for August Installed Capacity for that same Locality determined in the July Auction.

<u>10.</u> Settlement

Subject to the exceptions noted the next paragraph, <u>elsewhere regarding New York City generation</u>, the ISO will pay each Offeror whose offer to sell Installed Capacity is selected in <u>sub-auctionany particular phase of an</u> <u>auction</u> the <u>-clearingMarket-Clearing pricePrice</u> determined in that <u>-auction phase of that auction</u> at the location of each of its resources that have been selected in that <u>-auction phase</u> to provide Installed Capacity, for each <u>100 kW</u> of Installed Capacity that resource has been selected to supply. <u>subject to the exceptions noted in</u> the <u>next paragraph</u>, <u>eachEach</u> Bidder for Installed Capacity whose bid to purchase <u>Capacity</u> is selected in <u>sub-auctionany particular phase of an auction</u> will pay the ISO the <u>ket-clearingMarket-Clearing Price</u> at the location specified in the bid(s) that have been selected, for each <u>100 kW t</u> of Installed Capacity that it purchased in that <u>-auction.particular phase</u>.

an Offeror's offer to sell Installed Capacity provided by a given Generator has been accepted in the Auction, but Installed Capacity provided by that Generator is subject to market power mitigation procedures which have been accepted by the Commission, and which specify a maximum amount that may be paid for Installed Capacity provided by that Generator, that Offeror shall not be paid more than that maximum amount for Installed Capacity sold in the Auction. The Bidders who have purchased Installed Capacity provided by such a Generator in a sub-auction (as determined in Section -11 of this document) shall be charged the amount that was paid to that Offeror for that Installed Capacity in that sub-auction.

-<u>11.</u> Allocation of Winning Bids

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

- Bidders Installed Capacity whose bids specified that the capacity Installed Capacity must be associated with a resource located in a Locality will be awarded such Installed in that Locality.Capacity.
- (ii) Bidders <u>Installed Capacity</u> whose bids specified that the <u>Installed Capacity</u> could be <u>associated with a resource</u> located in a particular Control Area outside the NYCA, and who paid a lower <u>clearingMarket-Clearing pricePrice</u> as a result, will be allocated Installed Capacity located in that <u>External</u> Control Area.
- (iii) Any remaining purchasers of <u>Installed Capacity</u> whose bids specified they could accept <u>fromInstalled Capacity associated with resources located</u> outside the NYCA will be allocated Installed Capacity for all remaining <u>Installed Capacity</u> sold in <u>sub-auction that phase of that auction</u> 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 <u>Installed Capacity associated with resources</u> located inside the NYCA shall be allocated on a pro rata basis among all remaining purchasers of <u>Installed Capacity</u> in <u>sub-auction.</u><u>that phase of</u> <u>that auction.</u>

XII. 12. POSTING OF RESULTS

ISO will post the results of each <u>auction</u> within business days of that Auction.<u>the time period specified in the</u> <u>ISO Procedures</u>. These results shall include:

- (i) The -clearing price determined <u>Market-Clearing Price</u> for each <u>Locality, each External Control Area, and</u> the portion of the NYCA not included in any other Locality, in each phase of each ISO-administered auction.
- (ii) <u>The total amount of Installed Capacity associated with resources in each Locality, each External Control Area.</u> <u>and the portion of the NYCA that is not included in any other</u> Locality each sub-auction that formed part of the Auction;
- (iii) 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 -auction; and phase of each ISO-administered auction.
- (iv) The total amount of nstalled Installed apacity Capacity purchased in each -auction, phase of each ISOadministered auction, broken down by the constraints placed upon the location of -capacity those Installed Capacity by the Bidders placing those bids.

The ISO shall publish all bids and offers made in each <u>auction</u> six months after the conclusion of that <u>Auction.auction</u>. 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.

.13. Reporting by Auction Participants

Sales Reporting will be per ISO Procedures.

APPENDIX: Illustrations of Market-Clearing Price Calculations

Example 1: No Locational Constraints Bind, Partially Selected Offer

<u>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):</u>

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

Also suppose the .- In particular, all 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.

<u>Both</u> Bidders <u>state that the</u> Installed Capacity <u>the Auction they are purchasing</u> must <u>the ISO of the sale of <u>be</u></u> <u>located in the NYCA, but do not place further restrictions on the location of the Installed Capacity Supplier.</u>

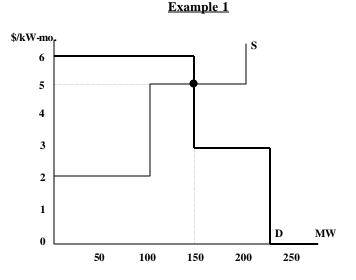
The ISO will select the following offers and bids in this phase:

- <u>All of the 100 MW of Installed Capacity offered from Generator X.</u>
- 50 MW of the 100 MW of Installed Capacity offered from Generator Y.
- <u>All of the 150 MW that Bidder A bids to purchase</u>.
- 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.

<u>That Market-Clearing Price shall be the bid cost of meeting demand for a small incremental amount of Installed</u> <u>Capacity at the lowest cost. If it had been necessary to acquire an additional MW of Installed Capacity in this phase,¹</u> (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.)

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

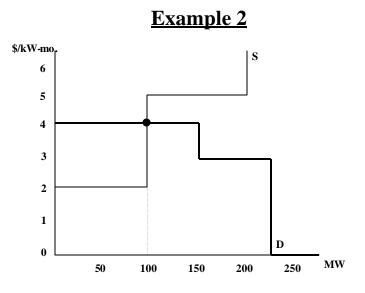


Example 2: No Locational Constraints Bind, Partially Selected Bid

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

- All of the 100 MW of Installed Capacity offered from Generator X.
- None of the 100 MW of Installed Capacity offered from Generator Y.
- <u>100 of the 150 MW that Bidder A bids to purchase.</u>
- 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.)

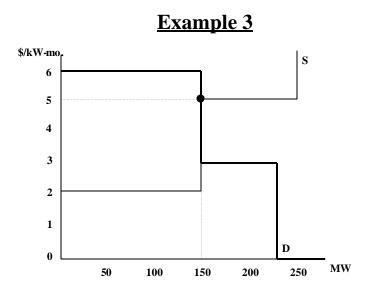


Example 3: No Locational Constraints Bind, No Partially Selected Offers or Bids, Offer Sets the Price

<u>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:</u>

- 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.

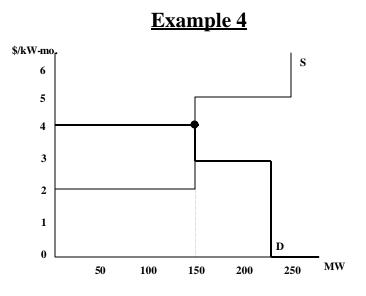


Example 4: No Locational Constraints Bind, No Partially Selected Offers or Bids, Bid Sets the Price

<u>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:</u>

- <u>All of the 150 MW of Installed Capacity offered from Generator X.</u>
- 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 <u>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</u> <u>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</u> <u>month, will be used to set the Market-Clearing Price of Installed Capacity for this phase.</u>



Example 5: Locality Constraint Binds

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

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

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

<u>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.</u>

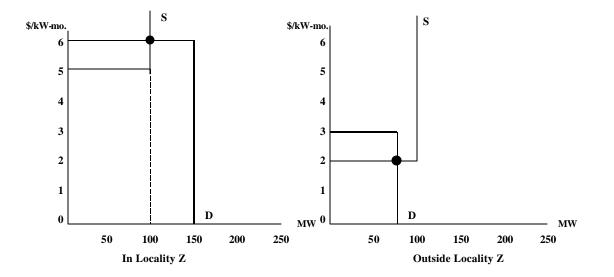
All of Generator Y's offer was selected, even though Generator X's Installed Capacity was offered at a lower price and not all of it was selected. This means that the Locality Z constraint is binding (since Generator Y is located in Locality Z), so the ISO will calculate two different Market-Clearing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

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

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:

- <u>All of the 100 MW of Installed Capacity offered from Generator X.</u>
- 50 MW of the 100 MW of Installed Capacity offered from Generator Y.
- <u>All of the 50 MW of Installed Capacity offered from External Control Area P.</u>
- · <u>25 MW of the 50 MW of Installed Capacity offered from External Control Area Q.</u>

- <u>All of the 150 MW that Bidder A bids to purchase</u>.
- <u>All of the 75 MW that Bidder B bids to purchase</u>.

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

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

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

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

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

Example 6

