

SREC Auction Manual

New Jersey Solar Programs



NERA
ECONOMIC CONSULTING

14 June 2016

NERA Economic Consulting
1255 23rd Street NW
Washington, DC 20037
Tel: +1 202 466 3510
Fax: +1 202 466 3605
www.nera.com

Contents

Contents.....	i
ARTICLE I. Introduction.....	1
I.1. Background.....	1
I.2. Overview.....	1
I.3. Information Provided to Bidders.....	3
ARTICLE II. Qualification Standards.....	5
II.1. Requirements.....	5
II.2. Submission of Qualification Materials and Processing.....	7
ARTICLE III. Bidding Rules for a One-Product Auction.....	9
III.1. Schedule.....	9
III.2. Round 1 of the Auction.....	9
III.3. Round 2 and Subsequent Rounds.....	10
III.4. End of Auction.....	11
III.5. Calculation of next round prices.....	12
III.6. Miscellaneous Provisions.....	12
III.7. Bidding Procedures.....	12
ARTICLE IV. Bidding Rules for a Multi-Product Auction.....	13
IV.1. Schedule.....	13
IV.2. Round 1 of the Auction.....	13
IV.3. Round 2 and Subsequent Rounds.....	14
IV.4. End of Auction.....	15
IV.5. Calculation of next round prices.....	16
IV.6. Miscellaneous Provisions.....	17
IV.7. Bidding Procedures.....	17
ARTICLE V. Post-Auction Procedures.....	18
V.1. All Bidders.....	18
V.2. Winning Bidders Only.....	18
ARTICLE VI. Miscellaneous.....	20
VI.1. Warranty on Information.....	20
VI.2. Hold Harmless.....	20
VI.3. Bidder's Acceptance.....	20

ARTICLE I. Introduction

I.1. Background

- I.1.1. The four New Jersey Electric Distribution Companies (“EDCs”) are Atlantic City Electric Company (“ACE”), Jersey Central Power & Light Company (“JCP&L”), Public Service Electric and Gas Company (“PSE&G”), and Rockland Electric Company (“RECO”). The EDCs will be holding Auctions to sell Solar Renewable Energy Certificates (“SRECs”).
- I.1.2. The New Jersey Board of Public Utilities (“BPU” or “Board”) adopted Renewable Portfolio Standards (“RPS”), N.J.A.C. 14:8-2.1 et seq., which require that a portion of the electricity delivered to New Jersey customers be supplied from solar electric generation systems. Suppliers to New Jersey customers must comply with these obligations either by submitting SRECs or by paying a Solar Alternative Compliance Payment (“SACP”). These solar requirements were most recently modified by Senate Bill 1925.
- I.1.3. An SREC is issued once 1 MWh of solar energy is generated through a solar photovoltaic system. Basic Generation Service (“BGS”) Suppliers and Third Party Suppliers (“TPSs”) can use these SRECs for compliance with the RPS.
- I.1.4. NERA Economic Consulting is serving as Auction Manager.

I.2. Overview

- I.2.1. An Energy Year (“EY”) begins on June 1 of the preceding year and ends on May 31 of that year. All SRECs created in GATS as generation during a given Energy Year are referred to as SRECs of a given vintage. For example, all SRECs created in GATS as generation from June 1, 2011 to May 31, 2012 are EY 2012 SRECs or SRECs of the 2012 vintage.
- I.2.2. Each Auction will have available SRECs from the current Energy Year. In addition, an Auction may also have SRECs available from prior Energy Years. If SRECs from different vintages are available in an Auction, each vintage typically would be a different “product” so that bidders have the ability to bid to purchase one or several vintages.
- I.2.3. The SRECs of a given product are grouped into “blocks” of equal size. The block size is expected to be approximately 50 SRECs. Bidders must bid in multiples of the block size for a product and may not purchase portions of a block.
- I.2.4. To participate in the Auction, a bidder must meet basic qualification standards, agree to a standard contract to be used with each EDC, and provide bid assurance collateral in cash. A bidder cannot bid during the Auction to purchase a number of SRECs greater than is guaranteed by its bid assurance collateral.

- I.2.5. Approximately two (2) weeks prior to an Auction, the Auction Manager will issue an Addendum to this SREC Auction Manual with the following information for the upcoming Auction:
- The vintage or vintages of SRECs available;
 - The months during which the SRECs were created in GATS;
 - A range of the number of SRECs available of each vintage;
 - The schedule for qualification for and participation in the Auction; and
 - The tentative schedule for future Auctions (if available).
- I.2.6. Approximately two (2) days prior to an Auction, the Auction Manager will issue an announcement with the following information for the upcoming Auction:
- The exact number of SRECs available of each vintage;
 - The number of blocks available of each product and the size of each block; and
 - The starting price for each product (as defined in the next paragraph).
- I.2.7. In the case of an Auction where there is a single product in the Auction, the Auction proceeds in rounds as follows. In the first round, the Auction Manager proposes a price per SREC, called the “starting price”. Bidders bid by stating the number of blocks that they want to purchase at the starting price. If there are more blocks bid than there are available, the Auction goes to a second round. In the second round, the Auction Manager proposes a new, higher price per SREC. Bidders again bid the number of blocks that they want to purchase at the price of the second round. If there are still more blocks bid than there are available to be sold, the Auction proceeds to the next round. The price in the next round will rise again, and bidders will continue to bid, until a price is reached at which the number of blocks of SRECs bid is just equal to the number of blocks of SRECs to be sold. A bidder wins by having a bid on one or more of the available blocks in the last round of the Auction.
- I.2.8. In the case of an Auction where there are multiple products in the Auction, the Auction proceeds in rounds as follows. In the first round, the Auction Manager proposes a price per SREC for each product, called the “starting price” for that product. Bidders bid by stating for each product the number of blocks that they want to purchase at the starting price for that product. If there are more blocks bid for at least one product than there are blocks available, the Auction goes to a second round. In the second round, the Auction Manager proposes a new, higher price per SREC for any product for which the number of blocks bid in the previous round was higher than the number of blocks available. For each product for which the price has increased, bidders bid the number of blocks that they want to purchase of that product at the price of the second round. If there are still more blocks bid than there are available to be sold for at least one product, the Auction proceeds to the next round. The prices in the next round will rise again for products for which there were more blocks bid than there are blocks available, and bidders will continue to bid, until a price is reached for each product at which the number of blocks of SRECs bid is just equal to the number of blocks of

SRECs to be sold. A bidder wins by having a bid on one or more of the available blocks in the last round of the Auction.

- I.2.9. The Auction establishes a single transaction price for all SRECs of a given product sold through the Auction. There is a standard statewide contract, the Master Solar Renewable Energy Certificates Agreements (“Master SREC Agreement”), which a winning bidder may execute with one or more EDCs. A winning bidder purchases the SRECs won through the execution of a Transaction Confirmation Letter (“Confirmation”) under one or more Master SREC Agreements.
- I.2.10. Under the Master SREC Agreement, winning bidders have five (5) days from the date of completion of the Auction to pre-pay for the SRECs. Failure by a winning bidder to execute the necessary Confirmations or to provide pre-payment of the full amount will result in sanctions or penalties, including exclusion from participation in future Auctions.
- I.2.11. The Auction Manager will process the return of bid assurance collateral to a bidder within twenty-four hours of the completion of the Auction or within twenty-four hours of receiving return wire transfer instructions as well as a completed W-9 form, whichever occurs later. If the return of bid assurance collateral is due to be processed on a day that is not a business day, the processing will begin on the next business day.

I.3. Information Provided to Bidders

- I.3.1. The Auction Manager has established a web site that is the main source of information for the Auctions. Bidders and other stakeholders can visit this web site to obtain information and documents related to the Auction. The web site address is www.SolarREC-Auction.com.
- I.3.2. The web site consists of the following sections:
- A “Home” page that provides announcements of interest;
 - A “Background” page with links to the Board decisions, results from previous Auctions, and an “Archives” section that contains bidder information from previous Auctions;
 - A “Bidder Information” page that includes all documents and forms needed to participate in the Auction, frequently asked questions, and data;
 - A “Calendar” page that provides the timeline for the main events in the Auction;
 - A “Contact Us” page with the Auction Manager’s contact information, a web form for participants to register for email updates, and a web form to ask a question to the Auction Manager. The Auction Manager answers each questioner individually via email. The question and answer are then posted to the FAQ portion of the bidder information page; and
 - A “Qualification Form” page where bidders may log in to submit their qualification materials through an online qualification form.

- I.3.3. Information from prior Auctions, including documents and results, are available in the “Archives” section of the “Background” page of the web site.
- I.3.4. This document is called the “SREC Auction Manual”. The Master SREC Agreement is appended to the SREC Auction Manual as Appendix 1.

ARTICLE II. Qualification Standards

II.1. Requirements

- II.1.1. Each bidder must fulfill the basic qualification standards of this Article to participate in the Auction.
- II.1.2. Each bidder must provide contact information, namely the bidder's legal name and address.
- II.1.3. Each bidder must provide contact information for a Representative that will be the main point of contact for the Auction Manager. This contact information must include: (i) name; (ii) title; (iii) address; (iv) phone number; (v) email address; and (vi) fax number. The Representative may, but is not required to, provide a cell phone number. All materials associated with the Auction, including confidential information necessary to submit bids, will be sent to the Representative. A bidder may, but is not required to, name an Alternate and provide contact information for the Alternate in case the Representative is unavailable.
- II.1.4. Each bidder must provide its exact Account Name with PJM Environmental Information Services ("PJM-EIS") Generation Attribute Tracking System ("GATS").
- II.1.5. The Representative of the bidder must certify that the submission of any bid in any round of the Auction is a binding and irrevocable offer to purchase SRECs of the product(s) at the price of the round for the product(s).
- II.1.6. The Representative of the bidder must certify that the bidder, if it is a winner at the Auction, will partially execute all necessary Confirmations within three (3) business days of the close of the Auction and will pre-pay the full amount to purchase the SRECs won at the final Auction price(s) within five (5) business days of the close of the Auction. The Representative must agree that failure to execute the necessary Confirmations or to provide pre-payment of the full amount to purchase the SRECs won at the final Auction price(s) within the specified timeframe will result in sanctions or penalties, including exclusion from participation in future Auctions.
- II.1.7. The Representative of the bidder must certify that it understands and agrees to the rules of the Auction as provided in this SREC Auction Manual.
- II.1.8. The Representative of the bidder must certify that it is bidding independently and that it is not part of a bidding agreement, a joint venture for purposes of participating in the Auction, a bidding consortium, or any other type of bidding arrangement related to bidding in the Auction.
- II.1.9. Each bidder must submit two (2) originals of each of four (4) Master SREC Agreements, one for each EDC as the Seller, signed by an officer of the bidder or other individual empowered to bind the bidder. If a bidder has submitted these documents

in a previous Auction occurring April 2011 or later, and if the signatory remains valid, the bidder is not required to submit the Master SREC Agreements again.

- II.1.10. Each bidder must provide, in cash, bid assurance collateral of \$1/SREC for the maximum that the bidder intends to bid in the first round of the Auction up to a specified maximum amount. The Auction Manager specifies the maximum amount for an Auction in the Addendum to the SREC Auction Manual. A bidder that submits bid assurance collateral of the maximum amount will receive initial eligibility sufficient to bid on all available SRECs in the Auction. For bidders that submit less than the maximum amount in bid assurance collateral, the number of blocks of a product that the bidder can bid in the first round is equal to the bidder's "initial eligibility" for that product or to the number of blocks available, whichever is lower. A bidder's initial eligibility¹ for a product is equal to the amount of bid assurance collateral divided by the block size in dollars (rounded up).
- II.1.11. In the Auction, a bidder will never be able to bid on a number of blocks for a product greater than the bidder's initial eligibility for that product. In the Auction, a bidder will never be able to bid on a number of blocks for a product greater than the number of blocks available for that product. In round 1 of the Auction, a bidder may bid on fewer blocks for a product than the bidder's initial eligibility for that product (including bidding zero blocks).

¹ A bidder initial eligibility is also referred to as the bidder's "indicative offer".

II.2. Submission of Qualification Materials and Processing

- II.2.1. Each bidder must provide the information required in Section II.1 exclusively by using the online qualification form on the SREC Auction web site.
- II.2.2. Prior to each Auction, the Auction Manager will send to each previously qualified bidder a document with login credentials for the online qualification form and instructions for the submission of bid assurance collateral. An entity that has not previously qualified may request an account to access the online qualification form. The Auction Manager will respond within one (1) business day and will provide login credentials to such an entity as well as instructions for the submission of bid assurance collateral.
- II.2.3. Each bidder that has not submitted Master SREC Agreements in a previous Auction occurring April 2011 or later must submit two (2) originals of each of the signature pages of the four (4) Master SREC Agreements. A bidder uses the signature pages found within the online qualification form and follows the instructions provided in the online qualification form. The eight (8) hardcopy signed and completed signature pages must be submitted by hand delivery or overnight delivery service to the Auction Manager no later than 12 PM (noon EPT) on the Qualification Deadline at the following address: NERA – SREC Auction Manager, One Gateway Center, Suite 720, Newark, NJ 07102.
- II.2.4. Each bidder must submit its bid assurance collateral in cash through a wire transfer. The Auction Manager provides instructions for the wire transfer with the login credentials for the online qualification form. The funds must be available and the wire transfer completed by 12 PM (noon EPT) on the Qualification Deadline.
- II.2.5. For all other requirements (other than the submission of the Master SREC Agreements and the bid assurance collateral), a bidder submits to the qualification requirements of the previous section by completing the online qualification form and uploading any required documents to the online qualification form. In particular:
- All contact information for the bidder and its representatives is provided exclusively through completion of the online qualification form. The online qualification form for a previously qualified bidder is populated with the last information provided to the Auction Manager in a prior Auction. A previously qualified bidder must review the information, provide any updates, and affirm that the information is up to date and accurate;
 - The Representative of the bidder makes all certifications required by completing the representation form found within the online qualification form. The bidder then scans the duly completed, dated, and signed representation form and uploads this document to the online qualification form; and
 - A bidder must press the "SUBMIT" button any time the bidder transmits information to the Auction Manager via the online qualification form.
- II.2.6. On the online qualification form, each bidder is encouraged, but is not required, to provide as early as convenient: (i) return wire transfer instructions for its bid assurance

collateral; and (ii) a completed W-9 form. These documents are required for the Auction Manager to process the return bid assurance collateral. The Auction Manager will process the return of bid assurance collateral for a bidder within twenty-four hours of the completion of the Auction or within twenty-four hours of receiving return wire transfer instructions as well as a completed W-9 form from the bidder, whichever occurs later. If the return of bid assurance collateral is due to be processed on a day that is not a business day, the processing will begin on the next business day.

- II.2.7. When a bidder submits materials to the Auction Manager for purposes of the qualification procedure, the Auction Manager sends a notice by email to the Representative that includes: (i) the date on which the materials were received; and (ii) an assessment of whether the materials are complete and consistent with the requirements of Section II.1. This assessment states either that the materials are complete or the assessment lists items that are deficient or require clarification. In this latter case, the bidder has until 6 PM on the Cure Deficiency Deadline to amend or supplement the materials to remedy any deficiencies.
- II.2.8. The Auction Manager notifies each bidder of whether it has qualified for the Auction no later than 6 PM on the Notification of Qualification date. If a bidder's materials are complete and consistent with the requirements of Section II.1, the Auction Manager sends to the bidder a notification of qualification and the bidder may participate in the Auction. The Auction Manager advises each bidder of its qualification status by email.
- II.2.9. If a bidder fails to qualify for a given Auction and is not provided with a notification of qualification, the bidder may not submit bids in that Auction.

ARTICLE III. Bidding Rules for a One-Product Auction

III.1. Schedule

- III.1.1. Each round of the Auction is divided into three phases: a bidding phase, a calculating phase, and a reporting phase.
- III.1.2. In the bidding phase of the round, bidders place bids. A bidder can modify its bid as long as the bidding phase of the round is open. The valid bid is the last received bid that is submitted during the bidding phase and processed by the Auction software. A valid bid is a firm commitment to purchase SRECs at the price of the round and a valid bid cannot be rescinded.
- III.1.3. The calculating phase immediately follows the bidding phase. In the calculating phase of the round, the Auction Manager tabulates the results of that round's bidding phase and calculates the price for the next round. During this phase, bidders cannot submit bids and bidders do not yet have access to the results from that round's bidding phase.
- III.1.4. The reporting phase immediately follows the calculating phase. In the reporting phase of the round, the Auction Manager informs the bidders of the results of that round's bidding phase. All bidders are informed of the going price for the next round's bidding phase and are provided with a range of excess demand in the Auction. Each bidder privately receives the results of its own bid from that round.
- III.1.5. The Auction Manager advises the bidders of the times of the start and end of each phase of the rounds with their notification of qualification. The schedule is subject to change at the Auction Manager's discretion and bidders will be advised of any changes in the schedule through the Auction software.

III.2. Round 1 of the Auction

- III.2.1. The going price in a round is the price at which the Auction Manager solicits bids. The starting price is the going price in the bidding phase of round 1. Bidders submit bids during the bidding phase.
- III.2.2. A bid consists of a number of blocks that the bidder wants to purchase at the round 1 price. In round 1, a bidder cannot bid more blocks than its initial eligibility as determined by the amount of bid assurance collateral provided. In round 1, a bidder cannot bid more blocks than the number of blocks available. In round 1, a bidder may bid on fewer blocks than the bidder's initial eligibility (including bidding zero blocks).
- III.2.3. If a bidder does not submit a bid during the bidding phase of round 1, the bidder is assigned a default bid. The default bid in round 1 is zero blocks.
- III.2.4. During the calculating phase, the Auction Manager reviews the results of bidding in round 1 and round 1 then moves to the reporting phase.

- III.2.5. If it is the case that the number of blocks bid by all bidders exceeds the number of blocks available, the Auction proceeds to round 2. During the reporting phase of round 1, the Auction Manager informs all bidders of the going price for round 2. The going price for round 2 is higher than the going price for round 1. During the reporting phase of round 1, the Auction Manager informs all bidders of a range of excess demand. The possible ranges of excess demand will be provided to bidders no later than one (1) day prior to the Auction. During the reporting phase of round 1, the Auction Manager informs each bidder individually of its eligibility for round 2. The eligibility of a bidder for round 2 is the number of blocks the bidder bid in round 1.
- III.2.6. If it is not the case that the number of blocks bid by all bidders exceeds the number of blocks available, the Auction ends in the reporting phase of round 1. Round 1 is the final round. The Auction Manager informs the bidders of that fact.

III.3. Round 2 and Subsequent Rounds

- III.3.1. The going price in a round is the price announced in the reporting phase of the previous round. Bidders submit bids during the bidding phase.
- III.3.2. A bid must specify the number of blocks of SRECs that the bidder wants to purchase at the going price. A bidder cannot bid more blocks in a round than its eligibility for that round. A bidder can either select the same number of blocks as it bid in the previous round, or it can select to bid fewer blocks. A bidder cannot increase the number of blocks bid from the previous round.
- III.3.3. If a bidder selects to bid fewer blocks than in the previous round, the bidder withdraws blocks from the Auction. The bidder is required to specify an exit price for the blocks that the bidder is withdrawing. An exit price must be greater than or equal to the going price in the previous round and must be less than the going price in the current round. A bidder that withdraws blocks loses the eligibility associated with these blocks and forfeits the right to bid these blocks for the remainder of the Auction.
- III.3.4. A bidder with positive eligibility must submit a bid in every round (even when the bidder's bid does not change). If a bidder with positive eligibility does not submit a bid during the bidding phase of a round, the bidder is assigned a default bid. The default bid is zero blocks. The default bid withdraws all blocks at an exit price equal to the going price in the previous round.
- III.3.5. During the calculating phase, the Auction Manager reviews the results of bidding for the round and the round then moves to the reporting phase.
- III.3.6. If it is the case that there are more blocks bid than are available, the Auction proceeds to the next round. In the reporting phase of the current round, the Auction Manager informs all bidders of the going price for the next round. During the reporting phase, the Auction Manager informs all bidders of a range of excess demand. The Auction Manager informs each bidder individually of its eligibility for the next round. The eligibility of a bidder for the next round is the bidder's eligibility for the current round less the number of blocks withdrawn in the current round.

III.3.7. If it is not the case that the number of blocks bid by all bidders exceeds the number of blocks available, the Auction ends in the reporting phase of the round. The Auction Manager informs all bidders of the final Auction price. The Auction Manager informs each bidder of the number of blocks it has won at the final Auction price.

III.4. End of Auction

- III.4.1. The Auction ends in the reporting phase of the first round in which the number of blocks bid equals or falls short of the number of blocks available. This is the final round.
- III.4.2. If the number of blocks bid by all bidders in the final round exactly equals the number of blocks that are available, the final Auction price is the going price in the final round.
- III.4.3. If the number of blocks bid by all bidders in round 1 does not exceed the number of blocks available, the final Auction price is the starting price. Each bidder that bid in round 1 purchases the amount it bid at the starting price.
- III.4.4. If the number of blocks bid by all bidders in the final round falls short of the number of blocks available, and if the number of blocks bid by all bidders in the round immediately preceding the final round exceeded the number of blocks available, the Auction Manager first accepts all bids at the going price. The Auction Manager then ranks the withdrawn blocks in descending order of their exit price. The Auction Manager accepts enough blocks to award all available blocks, in order, starting with the highest exit price. The final Auction price is the exit price associated with the last awarded block.
- III.4.5. If the Auction Manager must award some but not all of the blocks from two (2) or more bidders that named the same exit price, the Auction Manager chooses at random, for each block, the bidder that will be awarded the block. For the first block needed at the tied exit price, the probability that a bidder is chosen is the number of blocks that the bidder has withdrawn at the exit price divided by the total number of blocks withdrawn at the exit price. If a second block is awarded at the exit price, the Auction Manager again will choose at random the bidder whose block will be retained. The probability that any one bidder is chosen is the number of blocks that the bidder has withdrawn at the exit price and that have not yet been awarded divided by the total number of blocks withdrawn at the exit price and that have not yet been awarded. The Auction Manager repeats this procedure until all blocks are awarded.
- III.4.6. The Auction Manager selects withdrawn blocks that are a result of default bids only if all bids at the going price and all blocks withdrawn by bidders (and not by default) are not sufficient to meet the number of blocks available. If the Auction Manager must award withdrawn blocks that are the result of default bids and two (2) or more bidders have default bids, the Auction Manager chooses at random, for each block, the bidder that will be awarded the block, in a procedure analogous to that described in Paragraph III.4.5.

III.5. Calculation of next round prices

- III.5.1. A price in a round is calculated so that the price increase is positively related to the level of excess demand.
- III.5.2. The percentage increase of the going price from one round to the next is called an increment.
- III.5.3. The Auction Manager will define a relationship whereby the increment will be within a specified range for a given reported range of excess demand. The possible values for the increment will be provided to bidders no later than one (1) day prior to the Auction.
- III.5.4. Prices will be rounded off to the nearest cent.

III.6. Miscellaneous Provisions

- III.6.1. The Auction Manager can call a time-out to the Auction at any time during a round. It is intended that a time-out will suspend activity in the Auction for a period of no more than one hour; however, the Auction Manager retains the discretion to suspend activity for a longer period if necessary. Whenever a time-out is called, the Auction Manager reports to all bidders how long the time-out is expected to last.
- III.6.2. A bidder with zero eligibility will lose its ability to view the Auction results within three (3) rounds.

III.7. Bidding Procedures

- III.7.1. The primary bidding method for the Auction is the electronic submission of bids through the Auction software. The Auction Manager may hold a training session for bidders.
- III.7.2. The secondary bidding method for the Auction is by phone. If a bidder is experiencing technical difficulty and cannot submit a bid using the Auction software, the bidder calls a technical assistant who enters the bidder's bid on the bidder's behalf.
- III.7.3. It is the bidder's sole and entire responsibility to submit a bid on time whether using the primary or secondary bidding method.

ARTICLE IV. Bidding Rules for a Multi-Product Auction

IV.1. Schedule

- IV.1.1. Each round of the Auction is divided into three phases: a bidding phase, a calculating phase, and a reporting phase.
- IV.1.2. In the bidding phase of the round, bidders place bids. A bidder can modify its bid as long as the bidding phase of the round is open. The valid bid is the last received bid that is submitted during the bidding phase and processed by the Auction software. A valid bid is a firm commitment to purchase SRECs of each product at the price of the round for that product and a valid bid cannot be rescinded.
- IV.1.3. The calculating phase immediately follows the bidding phase. In the calculating phase of the round, the Auction Manager tabulates the results of that round's bidding phase and calculates the prices for the next round. During this phase, bidders cannot submit bids and bidders do not yet have access to the results from that round's bidding phase.
- IV.1.4. The reporting phase immediately follows the calculating phase. In the reporting phase of the round, the Auction Manager informs the bidders of the results of that round's bidding phase. All bidders are informed of the going prices for the next round's bidding phase and are provided with a range of excess demand for each product in the Auction. Each bidder privately receives the results of its own bid from that round.
- IV.1.5. The Auction Manager advises the bidders of the times of the start and end of each phase of the rounds with their notification of qualification. The schedule is subject to change at the Auction Manager's discretion and bidders will be advised of any changes in the schedule through the Auction software.

IV.2. Round 1 of the Auction

- IV.2.1. The going price for a product in a round is the price at which the Auction Manager solicits bids for that product. The starting price for a product is the going price in the bidding phase of round 1 for that product. Bidders submit bids during the bidding phase.
- IV.2.2. A bid consists of a number of blocks for each product that the bidder wants to purchase at the round 1 prices. In round 1, a bidder cannot bid more blocks for each product than its initial eligibility as determined by the amount of bid assurance collateral provided. In round 1, a bidder cannot bid more blocks for each product than the number of blocks available for that product. In round 1, a bidder may bid on fewer blocks of a product than the bidder's initial eligibility (including bidding zero blocks on one, several, or all products).
- IV.2.3. If a bidder does not submit a bid during the bidding phase of round 1, the bidder is assigned a default bid. The default bid in round 1 is zero blocks on each product.

- IV.2.4. During the calculating phase, the Auction Manager reviews the results of bidding in round 1 and round 1 then moves to the reporting phase.
- IV.2.5. If it is the case that the number of blocks bid by all bidders exceeds the number of blocks available for at least one product, the Auction proceeds to round 2. During the reporting phase of round 1, the Auction Manager informs all bidders of the going prices for round 2. The going price for a product in round 2 is higher than the going price for that product in round 1 if there were more blocks bid for that product in round 1 than there are available. The going price for a product in round 2 is equal to the going price for that product in round 1 if the number of blocks bid for that product equals or falls short of the number of blocks available. During the reporting phase of round 1, the Auction Manager informs all bidders of a range of excess demand for each product. The possible ranges of excess demand for each product will be provided to bidders no later than one (1) day prior to the Auction. During the reporting phase of round 1, the Auction Manager informs each bidder individually of its eligibility for each product in round 2. The eligibility of a bidder for a product in round 2 is the number of blocks the bidder bid for that product in round 1.
- IV.2.6. If it is not the case that the number of blocks bid by all bidders exceeds the number of blocks available for at least one product, the Auction ends in the reporting phase of round 1. Round 1 is the final round. The Auction Manager informs the bidders of that fact.

IV.3. Round 2 and Subsequent Rounds

- IV.3.1. The going price for a product in a round is the price announced in the reporting phase of the previous round. Bidders submit bids during the bidding phase.
- IV.3.2. A bid must specify the number of blocks of SRECs of each product that the bidder wants to purchase at the going price for that product. A bidder cannot bid more blocks for a product in a round than its eligibility for that product in that round. A bidder can either select the same number of blocks for a product as it bid in the previous round, or it can select to bid fewer blocks for that product. A bidder cannot increase the number of blocks bid on a product from the previous round or switch blocks from one product to another.
- IV.3.3. If a bidder selects to bid fewer blocks for a product than in the previous round, the bidder withdraws blocks from the Auction. The bidder is required to specify an exit price for the blocks that the bidder is withdrawing. An exit price must be greater than or equal to the going price for that product in the previous round and must be less than the going price for that product in the current round. A bidder that withdraws blocks loses the eligibility associated with these blocks and forfeits the right to bid these blocks for the remainder of the Auction.
- IV.3.4. A bidder with positive eligibility for at least one product must submit a bid in every round (even when the bidder's bid does not change). If a bidder with positive eligibility for at least one product does not submit a bid during the bidding phase of a round, the bidder is assigned a default bid. The default bid is zero blocks for all

products for which the price has increased from the previous round. The default bid withdraws all blocks that can be withdrawn for each product at an exit price equal to the going price for that product in the previous round.

- IV.3.5. During the calculating phase, the Auction Manager reviews the results of bidding for the round and the round then moves to the reporting phase.
- IV.3.6. If it is the case that there are more blocks bid than are available for at least one product, the Auction proceeds to the next round. In the reporting phase of the current round, the Auction Manager informs all bidders of the going prices for the next round. The going price for a product in the next round is higher than the current going price for that product if there were more blocks bid for that product than there are available. The going price for a product in the next round is equal to the current going price for that product if the number of blocks bid for that product equals or falls short of the number of blocks available. During the reporting phase, the Auction Manager informs all bidders of a range of excess demand for each product. The Auction Manager informs each bidder individually of its eligibility for each product in the next round. The eligibility of a bidder for a product in the next round is the bidder's eligibility for that product in the current round less the number of blocks withdrawn of that product in the current round.
- IV.3.7. If it is not the case that the number of blocks bid by all bidders exceeds the number of blocks available for at least one product, the Auction ends in the reporting phase of the round. The Auction Manager informs all bidders of the final Auction price for each product. The Auction Manager informs each bidder of the number of blocks of each product it has won at the final Auction prices.

IV.4. End of Auction

- IV.4.1. The Auction ends in the reporting phase of the first round in which the number of blocks bid equals or falls short of the number of blocks available for each product. This is the final round.
- IV.4.2. The Auction will continue to another round as long as there is at least one product for which there are more blocks bid than there are blocks available. It is possible that in a round, on a first product there are more blocks bid than there are blocks available, while on a second product the number of blocks bid equals or falls short of the number of blocks available. In that case, the Auction continues. Bidders will, in the next round, be able to maintain or decrease the number of blocks bid on the first product. Bidders will, in the next round, be required to maintain the number of blocks bid on the second product.
- IV.4.3. If the number of blocks bid by all bidders for a product in the final round exactly equals the number of blocks that are available for that product, the final Auction price for that product is the going price of that product in the final round.
- IV.4.4. If the number of blocks bid by all bidders for a product in round 1 does not exceed the number of blocks available for that product, the final Auction price for that product is

the starting price. Each bidder that bid for that product in round 1 purchases the amount it bid at the starting price.

- IV.4.5. If the number of blocks bid by all bidders for a product in the final round falls short of the number of blocks available for a product, and if the number of blocks bid by all bidders for that product in the round immediately preceding the final round exceeded the number of blocks available for that product, the Auction Manager first accepts all bids for that product at the going price. The Auction Manager then ranks the withdrawn blocks from that product in descending order of their exit price. The Auction Manager accepts enough blocks to award all available blocks, in order, starting with the highest exit price. The final Auction price for the product is the exit price associated with the last awarded block.
- IV.4.6. If the Auction Manager must award some but not all of the blocks from two (2) or more bidders that named the same exit price for a product, the Auction Manager chooses at random, for each block, the bidder that will be awarded the block. For the first block needed at the tied exit price, the probability that a bidder is chosen is the number of blocks that the bidder has withdrawn from that product at the exit price divided by the total number of blocks withdrawn from that product at the exit price. If a second block is awarded at the exit price, the Auction Manager again will choose at random the bidder whose block will be retained. The probability that any one bidder is chosen is the number of blocks that the bidder has withdrawn from that product at the exit price and that have not yet been awarded divided by the total number of blocks withdrawn at the exit price and that have not yet been awarded. The Auction Manager repeats this procedure until all blocks are awarded.
- IV.4.7. The Auction Manager selects withdrawn blocks that are a result of default bids only if all bids at the going price and all blocks withdrawn by bidders (and not by default) are not sufficient to meet the number of blocks available for that product. If the Auction Manager must award withdrawn blocks that are the result of default bids and two (2) or more bidders have default bids, the Auction Manager chooses at random, for each block, the bidder that will be awarded the block, in a procedure analogous to that described in Paragraph IV.4.6.

IV.5. Calculation of next round prices

- IV.5.1. A price for a product in a round is calculated so that the price increase is positively related to the level of excess demand on that product.
- IV.5.2. The percentage increase of the going price for a product from one round to the next is called an increment.
- IV.5.3. The Auction Manager will define a relationship whereby the increment for a product will be within a specified range for a given reported range of excess demand for that product. The possible values for the increment for each product will be provided to bidders with their notification of qualification.

IV.5.4. Prices will be rounded off to the nearest cent.

IV.6. Miscellaneous Provisions

IV.6.1. The Auction Manager can call a time-out to the Auction at any time during a round. It is intended that a time-out will suspend activity in the Auction for a period of no more than one hour; however, the Auction Manager retains the discretion to suspend activity for a longer period if necessary. Whenever a time-out is called, the Auction Manager reports to all bidders how long the time-out is expected to last.

IV.6.2. Bidder may have an opportunity, following the conclusion of an Auction, to bid for SRECs from one or multiple vintages offered. Typically there will be 500 or fewer SRECs from any given vintage. Typically all such SRECs will be offered in a single Block, even if there are multiple vintages. If such an opportunity arises, details on the bid process and bid format will be provided to bidders in the SREC Auction Manual Addendum for that Auction.

IV.6.3. For an Auction in which bidders do not have an opportunity to bid on an additional Block following the conclusion of the Auction, a bidder with zero eligibility will lose its ability to view the Auction results within three (3) rounds.

IV.7. Bidding Procedures

IV.7.1. The primary bidding method for the Auction is the electronic submission of bids through the Auction software. The Auction Manager may hold a training session for bidders.

IV.7.2. The secondary bidding method for the Auction is by phone. If a bidder is experiencing technical difficulty and cannot submit a bid using the Auction software, the bidder calls a technical assistant who enters the bidder's bid on the bidder's behalf.

IV.7.3. It is the bidder's sole and entire responsibility to submit a bid on time whether using the primary or secondary bidding method.

ARTICLE V. Post-Auction Procedures**V.1. All Bidders**

- V.1.1. The Auction Manager will process the return of bid assurance collateral to a bidder within twenty-four hours of the completion of the Auction or within twenty-four hours of receiving return wire transfer instructions as well as a completed W-9 form, whichever occurs later. If the return of bid assurance collateral is due to be processed on a day that is not a business day, the processing will begin on the next business day.
- V.1.2. At the request of the bidder, the Auction Manager will return any signed Master SREC Agreements held by the Auction Manager. If no such request is made, the Auction Manager keeps the Master SREC Agreements for fulfillment of the requirements of participation by the bidder in a future SREC Auction.

V.2. Winning Bidders Only

- V.2.1. No later than one (1) business day after the close of the Auction, the Auction Manager will notify each winning bidder of the number of SRECs that it will purchase, the EDCs from which it will purchase such SRECs and the number to be purchased from each EDC, and the final Auction price for the vintage(s) of SRECs. The date that the Auction is completed is called the "Trade Date". This notification will also include a summary of the procedure for full execution of the Confirmation(s).
- V.2.2. The Auction Manager will determine the number of SRECs that each winning bidder will purchase from each EDC.
- V.2.3. No later than one (1) business day after the close of the Auction, The Auction Manager will notify each EDC of the names of its winning bidders, the number of SRECs it will sell to each winning bidder, the PJM-GATS account number of each of its winning bidders, the amounts due for purchased SRECs from each of its winning bidders, and the final Auction price(s). The Auction Manager will send to each EDC the partially executed Master SREC Agreement for that EDC and for each of its winning bidders for execution, unless that EDC has already executed a Master SREC agreement with a particular bidder pursuant to a previous SREC Auction held in April 2011 or later.
- V.2.4. No later than two (2) business days after the close of the Auction, each EDC will execute two (2) originals of its Master SREC Agreement for each of its winning bidders that has not already executed a Master SREC agreement pursuant to a previous SREC Auction held April 2011 or later and will send one (1) original Master SREC Agreement by overnight delivery service to each such winning bidder.
- V.2.5. Each EDC will prepare the Confirmation for each of its winning bidders. No later than two (2) business days after the close of the Auction, an EDC will partially execute each Confirmation and will send one (1) copy by fax or other electronic means to each of its winning bidders. Each EDC will also send two (2) partially executed originals of the Confirmation to each of its winning bidders by overnight delivery service.

- V.2.6. By 2PM on the third business day after the close of the Auction, each winning bidder will execute the Confirmation received from one or more EDCs and will send a copy by fax or other electronic means to each such EDC. Each winning bidder will also send to each such EDC one (1) original Confirmation by overnight delivery service.
- V.2.7. Within five (5) business days after the close of the Auction, each of the winning bidders of an EDC will pre-pay that EDC for all SRECs purchased from that EDC at the final Auction price(s). This date is called the "Payment Date".
- V.2.8. Within three (3) business days of the Payment Date, each EDC delivers the SRECs to each of its winning bidders' PJM-GATS accounts.

ARTICLE VI. Miscellaneous**VI.1. Warranty on Information**

VI.1.1. The information provided for the auction, including but not limited to information provided on the web site, has been prepared to assist bidders in evaluating the auction process. It does not purport to contain all the information that may be relevant to a bidder in satisfying its due diligence efforts. No representation or warranty, expressed or implied, is made by the Auction Manager or any of the EDCs as to the accuracy or completeness of the information, and the Auction Manager and the EDCs shall not, either individually or as a corporation, be liable for any representation expressed or implied in the auction process or any omissions from the auction process, or any information provided to a bidder by any other source. A bidder should check the web site frequently to ensure it has the latest documentation and information. Neither the EDCs, nor the Auction Manager, nor any of their representatives, shall be liable to a bidder or any of its representatives for any consequences relating to or arising from the bidder's use of information.

VI.2. Hold Harmless

VI.2.1. Bidder shall hold the EDCs and the Auction Manager harmless of and from all damages and costs, including but not limited to legal costs, in connection with all claims, expenses, losses, proceedings or investigations that arise in connection with the auction process or the award of a bid pursuant to the auction process.

VI.3. Bidder's Acceptance

VI.3.1. Through its participation in the auction process, a bidder acknowledges and accepts all the terms, conditions and requirements of the auction process and the Master SREC Agreement.

NERA

ECONOMIC CONSULTING

NERA Economic Consulting
1255 23rd Street NW
Washington, DC 20037
Tel: +1 202 466 3510
Fax: +1 202 466 3605
www.nera.com