

# **AEP Ohio Competitive Bidding Process March 2019 Auction**

**Bidder Webcast  
Wednesday, January 9, 2019**

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# Disclaimer

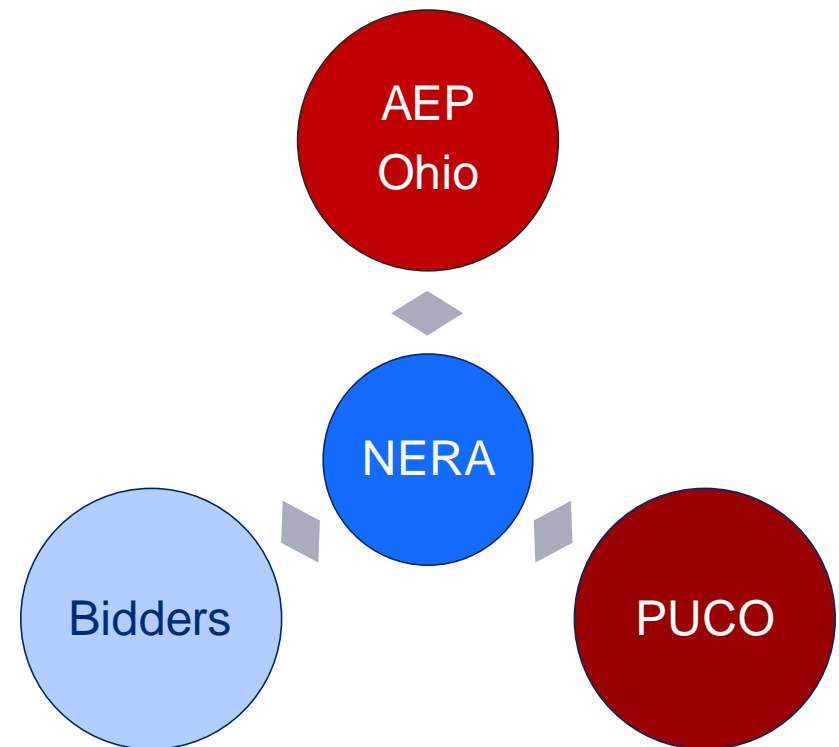
Any statements herein describing or referring to documents and agreements are summaries only, and are ***qualified in their entirety*** by reference to such governing documents

- These governing documents include:
  - PUCO Order under Case No. 16-1852-EL-SSO
  - Bidding Rules for the Auctions Under the Competitive Bidding Process of Ohio Power Company (“CBP Rules”)
  - Master Standard Service Offer (“SSO”) Supply Agreement
  - Rules and Protocols for Participation by Associated Bidders
  - Part 1 Application
  - Part 2 Application

**Please see the CBP website for complete documentation**  
**<http://www.aepohiocbp.com/>**

# NERA's Role as Auction Manager

Role	Description
<b>Communication</b>	To be the main point of contact with bidders
<b>CBP Rules</b>	To ensure the CBP Rules, as approved by the PUCO, are followed
<b>Qualifications</b>	To ensure bidder qualifications are evaluated equitably and fairly
<b>Auction</b>	To administer the Auction
<b>Results</b>	To present results to PUCO

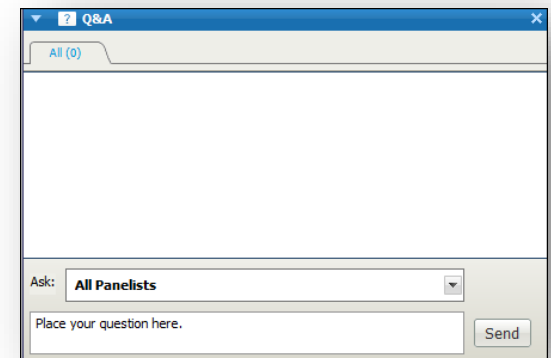


# Agenda

1. Overview of this Auction
2. Product Design and Contract
3. CBP Website
4. Application Process
5. Bidding in the Auction

# Ask a Question during the Webcast

- Questions will be taken in writing through the WebEx interface:
  - Locate the “Q&A” on the right hand side of your screen
  - Select “All Panelists” in the “Ask” box
  - Type in your question including the relevant slide number
  - Click “Send” to submit your question
- We will respond to questions as we go along as practicable and we will also pause to provide responses at the end of the presentation



**This presentation as well as questions and answers will be posted to the CBP website**

# Part 1 | Overview

# Upcoming Auction is on March 5, 2019

- This is the fourth of a series of twelve **full requirements auctions** under **Case No. 16-1852-EL-SSO** (“ESP IV”)

Auction	Product Months	Load Cap	2017		2018												2019												2020												2021																																														
			11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12																																			
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## Results of Previous Auction

<b>Registered Bidders</b>	12
<b>Rounds in the Auction</b>	13
<b>Range of Starting Price</b>	\$60/MWh - \$80/MWh
<b>Delivery Period Start</b>	June 1, 2019

<b>Product</b>	<b>Tranche Target</b>	<b>Clearing Price (\$/MWh)</b>
<b>One-year</b>	17	46.16

PUCO accepted results on November 7, 2018.



# Product Description

<b>Product</b>	Load-following, slice-of-system, full requirements Denominated in tranches
<b>Tranche</b>	a fixed percentage of the load of SSO customers
<b>SSO Customers</b>	those customers who take retail generation service from AEP Ohio, excluding PIPP customers
<b>Delivery Point</b>	Pnode ID 1269364670
<b>LSE Responsibility</b>	is assumed by the SSO Supplier, including scheduling SSO Supply and making arrangements for delivery of SSO Supply

# Supply Will Be Divided into Tranches

<b>Auction Date</b>
<b>Tuesday, March 5</b>

Product	Delivery Period	Tranche Target	Load Cap	Tranche Size
<b>One-year</b>	<b>June 2019- May 2020</b>	<b>17</b>	<b>13</b>	<b>1%</b>

# Auction Format is a Clock Auction

- Multiple tranches of a single term
- **Multiple rounds**
  - Each round, suppliers state how many tranches they want to supply at the going price announced by the Auction Manager
  - From one round to the next, auction continues and price ticks down if there is positive total excess supply
- **No sealed bid round**: bidders provide exit prices as they withdraw tranches throughout the Auction
- Auction establishes a **single auction clearing price**

# Announcement: Minimum and Maximum Starting Prices, MW-Measure

- The **minimum and maximum** starting prices are:

<b>Max</b>	<b>\$80/MWh</b>
<b>Min</b>	<b>\$60/MWh</b>

- **The PLC (MW)** is based on the five highest coincident peaks experienced by PJM in prior year for SSO customers (i.e., non-shopping only)
- The MW-measure is provided for reference and information purposes only

<b>PLC (MW)</b>	<b>2,553</b>
<b>MW-measure*</b>	<b>25.53</b>

\*The amount of actual quantity to be delivered depends on many factors (e.g., migration of SSO customers).

- Suppliers are paid the auction clearing price for each MWh of supply during the delivery term (Seasonal Factors = 1.00)

# Key Events

M	T	W	Th	F
Jan. 14				
	15	16	17	18
21	22	23	24	25
28	29	30	31	
				Feb. 1
4	5	6	7	8
11	12	13	14	15
18	19	20	21	22
25	26	27	28	Mar. 1
4	5	6	7	8

**By January 14:** Bidders can access account for application website

## Announcements:

**Jan. 9:** Tranche targets, tranche size, MW-measure, and range of starting price

**Feb. 1:** Update to seasonal factors and MW-measure

**Feb. 28:** Round 1 price for Registered Bidders

# Application Process is Online

## Part 1 Application (Jan. 14 – Jan. 25)

- Provide contact and company information
- Upload Inserts
- Upload required supporting documents

## Part 2 Application (Feb. 1 – Feb. 14)

- Provide information and indicative offer
- Upload Inserts
- Provide hardcopy of pre-bid letter of credit or wire cash

**No hardcopy of application forms required!**

## Post-Auction: PUCO Approval and Power Flow

- Auction results are contingent on final PUCO approval
- Auction Manager submits a **confidential report** on auction results to PUCO on the day the Auction closes
- PUCO will issue a decision **within two days of auction close**
  - If PUCO does not act within this window, auction results are deemed accepted
- PUCO may publicly release the auction clearing price and the names of the winning bidders from the Auction
- Master SSO Supply Agreement fully executed and winning bidders fulfill creditworthiness requirements **within three days** of the Commission's acceptance of results

## Part 2 | Product Design and Contract



## Full Requirements

- SSO Suppliers:
  - **Will assume all responsibilities of an LSE**
  - Are responsible for providing full requirements service to SSO customers of AEP Ohio, excluding PIPP customers, and to bear all costs that are associated with this responsibility
- Full requirements service and the LSE obligations of SSO Suppliers are defined in the Master SSO Supply Agreement

**Attachment F of the Master SSO Supply Agreement:  
Sample PJM Invoice**

# Credit Requirements under the Master SSO Supply Agreement

## Two Credit Requirements and Two Unsecured Credit Lines:

- **Independent Credit Requirement (ICR)** and the **Independent Credit Threshold (ICT)**
    - Amount required per tranche; declines throughout the term of the Master SSO Supply Agreement
  - **Mark-to-Market (MTM)** and **Credit Limit**
    - Differences between the prevailing market prices on a valuation date and the market prices in effect on the date the Auction is completed
- Credit Limit and Independent Credit Threshold will depend upon a credit evaluation
- Form of Guaranty and Form of Performance Assurance Letter of Credit provided as attachments to the Master SSO Supply Agreement

## Part 3 | CBP Website

Navigation



An AEP Company



## AEP Ohio Competitive Bidding Process for SSO Supply

**Home** Home

**Search**

**Background Information**

**Data Room**

**Calendar**

**Contact Us**

**PIPP RFP**

This Ohio Power Company ("AEP Ohio") website provides information to prospective suppliers that seek to provide full requirements service for AEP Ohio's Standard Service Offer ("SSO") customers through a Competitive Bidding Process ("CBP"). This site contains the documents and announcements related to the CBP. NERA Economic Consulting ("NERA") serves as AEP Ohio's Auction Manager.



**Important Dates:**

- Wed 1/9/2019 - Bidder Information Session
- Wed 1/9/2019 - Auction Manager announces tranche targets, tranche size, MW-measure, minimum and maximum starting prices
- Mon 1/14/2019 - Part 1 Window Opens

**Recent Announcements:**

- 12/20/2018 - [ANNOUNCEMENTS: March 2019 Auction Documents posted to CBP Website; Webcast for AEP Ohio's March Auction](#) **NEW>>**

Key Dates and Announcements

## Document page includes:

- CBP Rules
- Master SSO Supply Agreement
- Qualification Information
- Credit Instruments
- Communications Protocols
- Associated Bidder Rules
- Glossary of key terms



**AEP OHIO**  
An AEP Company

**NERA**  
ECONOMIC CONSULTING

### AEP Ohio Competitive Bidding Process for SSO Supply

Home Documents

Search

Background

**Information**

Documents

FAQs

Announcements

Data Room

Calendar

Contact Us

PIPP RFP

A list of all current documents is posted below. For reference, documents for the previous auctions are posted to the [Document Archives](#) page.

- **Auction Documents - March 2019**
  - CBP Rules (December 20, 2018)
  - Illustrative Part 1 Application (December 20, 2018)
  - Illustrative Part 2 Application (December 20, 2018)
  - Rules and Protocols for Participation by Associated Bidders (December 20, 2018)
  - Communications Protocols (December 20, 2018)
  - Glossary (December 20, 2018)
- **Master SSO Supply Agreement Documents - March 2019**
  - AEP Ohio Master SSO Supply Agreement (December 20, 2018)
  - Attachment D Form of Guaranty (December 20, 2018)
  - Attachment E Form of SSO Supplier Letter of Credit (December 20, 2018)
  - Acceptable Modifications to SSO Supplier Letter of Credit (December 20, 2018)
  - Sample Legal Opinion of Foreign Guarantor's Counsel (December 20, 2018)
- **Pre-Bid Credit Documents - March 2019**
  - Pre-Bid Letter of Credit (December 20, 2018)
  - Acceptable Modifications to Pre-Bid Security Documents (December 20, 2018)

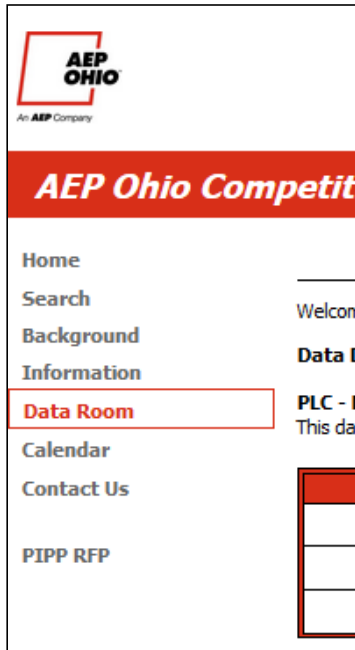
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# Data Room and Data Categories



## Data Room includes:

- Hourly energy
- Customer counts
- PLC and NSPL Data
- Monthly Switching Statistics
- Historical Unaccounted for Energy

Updated on or before the 20<sup>th</sup> of each month





# November 2018 Auction Data Room Changes

Starting with the September 2018 Data Update :

- Hourly Energy, Customer Counts, and switching statistics aggregated across AEP Ohio Rate Zones (sum of CSP and OPCo instead of reported separately)
- Data provided at an aggregate level, as well as for residential and commercial customer groups (small commercial & industrial and large commercial & industrial data is reported together instead of reported separately)
- Data going forward will only be provided using the new groups and zones
- Five years of historical data will be available using the new groups and zones

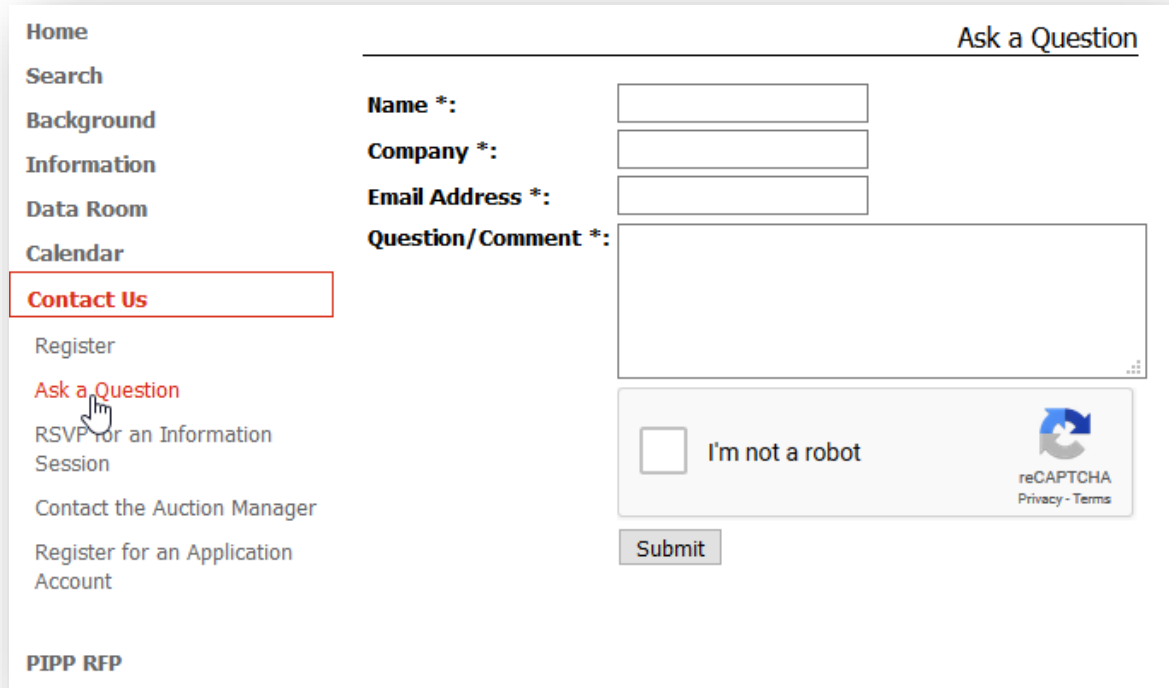
## AEP Ohio Hourly Energy & Customer Counts

This data is typically updated monthly on or before the 20th of each month.

Group	Data Series	SSO	CRES	Data Range
Aggregate, Residential, C&I	Hourly Energy			6/1/2013 – 6/30/2018
Aggregate, Residential, C&I	Customer Counts			6/1/2013 – 6/30/2018

# Ask a Question Through the CBP Website

- Contact Us / Ask a Question
  - Bidder questions answered via email typically within 2 business days
  - Responses and questions are posted as FAQs on CBP website
- You may also contact us via email at [AEP-CBP@nera.com](mailto:AEP-CBP@nera.com)



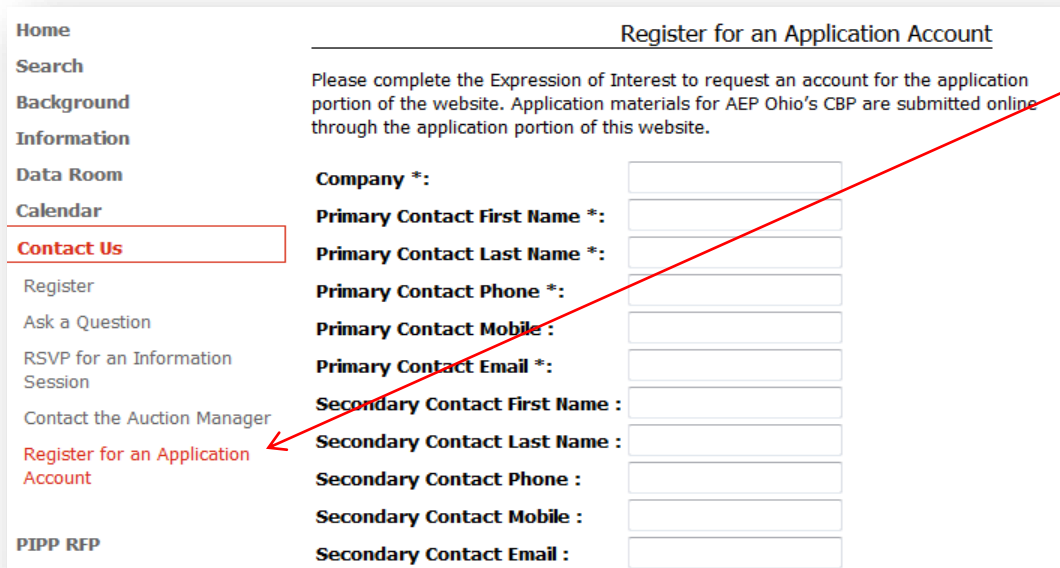
The screenshot shows the 'Ask a Question' form on the CBP website. On the left is a navigation menu with the following items: Home, Search, Background Information, Data Room, Calendar, **Contact Us** (highlighted with a red border), Register, Ask a Question (with a mouse cursor), RSVP for an Information Session, Contact the Auction Manager, Register for an Application Account, and PIPP RFP. The main form area is titled 'Ask a Question' and contains the following fields: Name \*, Company \*, Email Address \*, and Question/Comment \*. Below these fields is a reCAPTCHA widget with the text 'I'm not a robot' and a 'Submit' button.



# Part 4 | Application Process

# Register for your Online Application Account Only for NEW bidders

## www.AEPOhioCBP.com



Home  
Search  
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Information  
Data Room  
Calendar  
**Contact Us**  
Register  
Ask a Question  
RSVP for an Information Session  
Contact the Auction Manager  
Register for an Application Account  
PIPP RFP

Register for an Application Account

Please complete the Expression of Interest to request an account for the application portion of the website. Application materials for AEP Ohio's CBP are submitted online through the application portion of this website.

Company \*:  
Primary Contact First Name \*:  
Primary Contact Last Name \*:  
Primary Contact Phone \*:  
Primary Contact Mobile :  
Primary Contact Email \*:  
Secondary Contact First Name :  
Secondary Contact Last Name :  
Secondary Contact Phone :  
Secondary Contact Mobile :  
Secondary Contact Email :

### Contact Us / Register for an Application Account

Alternatively, email  
[AEP-CBP@nera.com](mailto:AEP-CBP@nera.com) with:

- Company name
- full name of contact
- phone and alternate number
- email address

Returning bidders will receive reminder of  
login credentials by email from the  
Auction Manager

# Application Process Features and Reminders

- Application process for returning bidders is **streamlined**
  - Part 1 Form **pre-populated** with previously submitted contact information and PJM information
  - All bidders (including returning bidders) must provide financial information and make certifications
- **Inserts**. Bidders download, prepare, sign, and upload their own “Inserts” with their applications
- **Acceptable modifications of credit documents** are posted on the CBP website

# Up-Front Requirements for Part 1 Are Simple

## 1. Applicant's Contact Information

- Representative: Represents the Applicant in the Auction
- Legal Representative in Ohio: Agrees to accept service of process
- Nominees (optional): to be included in electronic communications from the Auction Manager to the bidder along with Representative

## 2. PJM requirements

- Qualified as a “Market Buyer” and “Market Seller”
- Qualified as a “Load Serving Entity”

**Notifications sent to Representative  
and Nominees by email**

# Certifications, Financial Information, and Documents

## 3. Certifications

- Agree to terms of Master SSO Supply Agreement
- Agree to CBP Rules
- Keep information related to the Auction confidential

## 4. Financial Information

- Annual and quarterly financial statements
- Credit ratings
- Additional information for foreign applicants or applicants relying on foreign guarantor
- Submit via upload to application website

## 5. Request for modifications to pre-bid credit instruments (optional)

- Submit redline via upload to application website
- Any modification accepted for one bidder will be made available to all bidders on an optional basis

**New and Returning Bidders  
Provide This Information and Documents**

# List of Inserts and to Whom They Apply

#	Insert	When Applicable	Waived for Returning Bidders
P1-1	Representative Designation	REQUIRED OF ALL BIDDERS	YES
P1-2	Representative Responsibilities	REQUIRED OF ALL BIDDERS	YES
P1-3	Designation of Nominees Insert	OPTIONAL	NO
P1-4	Legal Representative	REQUIRED OF ALL BIDDERS	YES
P1-5	PJM Requirements	Only Applicable in Limited Circumstances	NO
P1-6	Certifications	REQUIRED OF ALL BIDDERS	NO
P1-7	Bidding Agreement	Only Applicable in Limited Circumstances	NO

## Part 2 Application: To Be Registered as a Bidder

1. Submit an indicative offer
2. Submit pre-bid security
3. Make certifications including compliance with Rules related to Associations and Handling of Confidential Information
4. Provide additional certifications
5. Foreign entities: Provide executed additional documents required under the Master SSO Supply Agreement

**Requirements for new and returning bidders are the same  
In the Part 2 Application**

# Indicative Offer

1. **Submit an indicative offer** - the maximum number of tranches that the bidder is willing to bid
  - At the minimum starting price and at the maximum starting price

Indicative Offer at:	Tranches
Minimum Starting Price (60.00/MWh)	(a) <input type="text"/>
Maximum Starting Price (80.00/MWh)	(b) <input type="text"/>
<b>Minimum Pre-Bid Security ( \$500,000 x (b) )</b>	

- The indicative offer at the maximum starting price **determines**:
  - The maximum number of tranches that the bidder can bid in the Auction (the initial eligibility)
  - The amount of pre-bid security required with the Part 2 Application



# Bidders are Subject to Load Caps

- A bidder cannot bid or win more than **80% of the tranches available** at the start of the auction
- Amount a bidder can bid and win **in a given auction** could be further reduced to the credit-based tranche cap depending on creditworthiness assessment of Bidder or Guarantor

Credit Rating for Bidder or Guarantor			
S&P	Moody's	Fitch	Credit Based Tranche Cap
BB and above	Ba2 and above	BB and above	No cap
BB-	Ba3	BB-	10
Below BB-	Below Ba3	Below BB-	5
Not rated			5

# Additional Part 2 Requirements

## 2. Submit pre-bid security

- Each Qualified Bidder must submit a letter of credit or cash in an amount of **\$500,000** per tranche of its indicative offer at the maximum starting price
- **No additional pre-bid security** is required

## 3. Certify compliance with Associations and Confidential Information Rules

- Certify that the Qualified Bidder is not “associated with” another Qualified Bidder to promote competitiveness of the Auction
- Keep information related to the Auction confidential

## 4. Provide Additional Certifications

- Agree that bids in auction will be a binding obligation
- Agree not to assign rights as Registered Bidder

# Additional Part 2 Requirements

## 5. Requirements for foreign entities

- A foreign bidder or a bidder desiring to rely on the creditworthiness of a foreign entity must provide the **executed additional documents** required under the Master SSO Supply Agreement
- Additional documents include an opinion from foreign counsel and a sworn certificate of the corporate secretary
- Additional documents should incorporate all changes required by AEP Ohio upon review of the draft documents submitted with the Part 1 Application

# List of Inserts and to whom they apply

#	Insert	When Applicable
P2-1	Cash Certification	Applicable in Specific Circumstances
P2-2	Certifications	<b>REQUIRED OF ALL BIDDERS</b>

# Part 5 | Bidding in the Auction

# Rounds Have Three Phases

## Bidding Phase

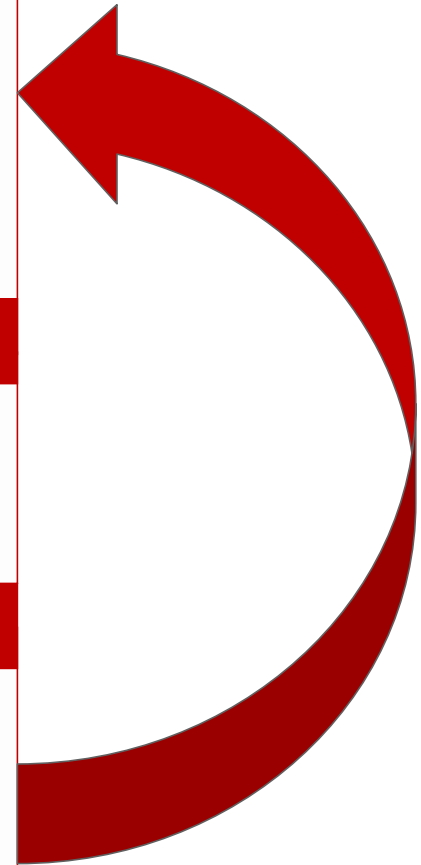
- Suppliers state how many tranches they want to supply at going price in round
- Auction Manager informs Registered Bidders of Round 1 price no later than 3 days before auction

## Calculating Phase

- Auction Manager tabulates the results of that round's bidding phase and calculates the price for the next round

## Reporting Phase

- Information provided to bidders:
  - Total Excess Supply range; and
  - Going price for next round



## Possible Reduction of Tranche Target

- If there is insufficient supply to ensure competitive bidding, **the Auction Manager has the discretion to reduce the tranche target**
- The criteria that could lead to such a reduction will be determined prior to the Auction, but will not be announced to bidders
- Once certain pre-specified criteria have been met, the discretion to reduce the tranche target will be eliminated

## Bid in Round 1

- A bid in round 1 is a number of tranches that the bidder is willing to supply at the round 1 price
- **Bidder cannot bid more than its initial eligibility** determined by the indicative offer at the maximum starting price
- Bidder will not be able to increase the number of tranches bid throughout the Auction



# Sample Reports

## Bidder sees:

- Range of total excess supply
  - Range provided includes actual excess supply
- The next round price
- The result of the bidder's own bid

Report: Round 1	
Total Excess Supply	51-55
Round 2 Price (\$/MWh)	65.75

**Bidder has no information about others' bids, identities or eligibilities**

## Information in Bidder User Manual

- **Decrement is related to amount of total excess supply**
  - Price ticks down if there is positive total excess supply
  - Formula or table for determination of decrement will be provided to bidders
  - Auction Manager has discretion to override decrement
- Possible ranges of total excess supply provided in Bidder User Manual
- Bidder User Manual provided to Registered Bidders

## Bidding in Round 2 and Subsequent Rounds

- In response to a reduction in price, a bidder may:
  - Leave bid unchanged
  - Withdraw tranches from the Auction
- Bidder cannot bid more than its eligibility
  - In round 2, eligibility is the number of tranches bid in round 1
  - In round 3 and all subsequent rounds, eligibility in a round is the eligibility in the prior round less any tranches that were withdrawn from the Auction

## Withdrawing Tranches

- When reducing the number of tranches bid, a bidder must provide an **exit price**

<b>Price Round 1 (\$/MWh)</b>	70.00
<b>Bid Round 1 (tranches)</b>	3
<b>Price Round 2 (\$/MWh)</b>	65.75
<b>Bid Round 2 (tranches)</b>	2
Exit Price	67.37

- Exit price is a **last and best offer**
  - Above current going price
  - Below or equal to previous going price

## How Does the Auction Continue and Close?

- Auction continues as long as there is positive total excess supply:
  - When there are more tranches bid than there are available
- When the auction closes, a uniform price is determined that is the auction clearing price
- **Two cases** on how the auction clearing price is determined:
  - when the number of tranches bid is equal to the number of tranches available, the auction clearing price is the price of the final round
  - when there are fewer tranches bid than tranches available, the auction clearing price is lowest exit price at which the tranche target is filled

# Auction Clearing Price Example

Round	Price \$/MWh	Bidder A	Bidder B	Bidder C	#Bid	Target	#Bid – Target
R11	39.42	7	8	4	19	17	2
R12	38.68	5	7	2	14	17	-3

<b>Tranches withdrawn</b>	2	1	2
<b>Exit Prices</b>	38.69	38.99	39.42

To fill the tranche target of 17 tranches:

1. take 14 tranches bid at going price
2. take 2 tranches at \$38.69
3. take 1 tranche at \$38.99

<b>Retained Tranches</b>	2	1	0
<b>Auction Clearing Price</b>		<b>\$38.99</b>	

Auction clearing price is \$38.99/MWh, the lowest price at which all tranches available are filled

# Basics of the Bidding Methods

1. **Bidders submit bids online using the Auction Software.** The Trial Auction (Wednesday, February 27, 2019) is the bidders' opportunity to practice
2. The backup bid procedure is by phone
3. The last bid submitted and verified in the bidding phase and processed by the Auction Software is the bid that counts. A backup bid counts when entered and verified by the Technical Assistant in the bidding phase and processed by the Auction Software, not when it is called in
4. **It is the bidder's responsibility to get a bid in on time.** It is the bidder's responsibility to ascertain the systems needed to minimize the chance that technical difficulties will impair its ability to bid in the Auction
5. If providing a backup bid, it is the bidder's responsibility to provide a complete bid consistent with the CBP Rules

# System Requirements are Minimal

<b>Standard PC</b>	Windows Vista, Windows 7 or later, or MacOS 10.7 or later
<b>Internet Connection</b>	Primary access through a company network
<b>Supported Web Browser</b>	Internet Explorer 11 or later, as well as the most recent versions of Mozilla Firefox, Apple Safari, or Google Chrome



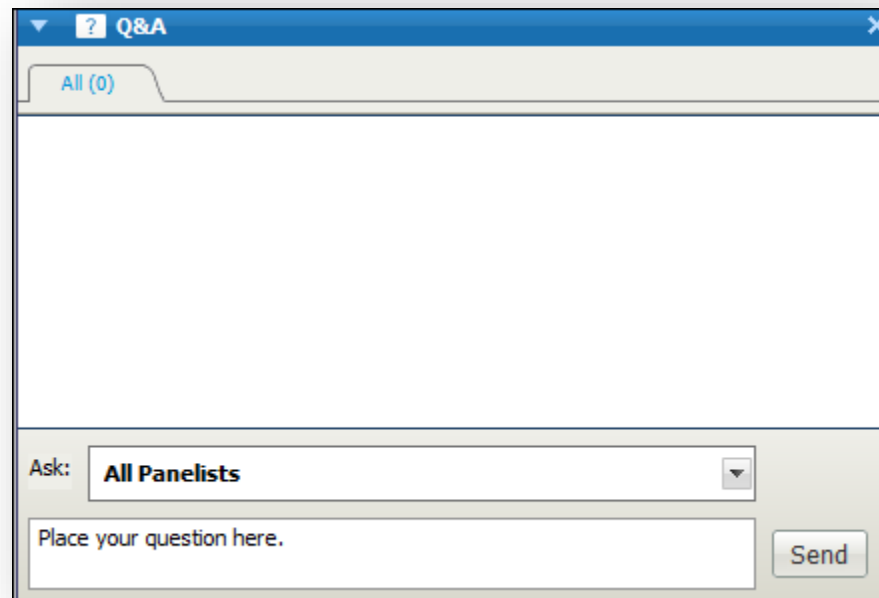
# Contact the Auction Manager Team

**NERA Economic Consulting  
Auction Manager  
For AEP's Ohio CBP  
Contact us by email at [AEP-CBP@nera.com](mailto:AEP-CBP@nera.com)**

**Address for delivery of pre-bid letter of credit  
NERA – Auction Manager  
AEP Ohio CBP  
1835 Market Street, Suite 1205  
Philadelphia, PA 19103**

## Questions?

- To submit questions to the presenters, please locate the “Q&A” on the right hand side of your screen, and select “All Panelists” in the “Send to” box; type in your question and click “Send” to submit your question



The screenshot shows a web browser window titled "Q&A". At the top left of the window, there is a tab labeled "All (0)". The main content area is currently empty. At the bottom of the window, there is a form for submitting a question. It includes a dropdown menu labeled "Ask:" with "All Panelists" selected. Below the dropdown is a text input field with the placeholder text "Place your question here." and a "Send" button to its right.