#### **BEFORE**

### THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Duke	)	
Energy Ohio for Approval of a Market	)	
Rate Offer to Conduct a Competitive	)	
Bidding Process for Standard Service	) Case No. 10-2586-EL-S	SO
Offer Electric Generation Supply,	)	
Accounting Modifications, and Tariffs for	)	
Generation Service.	)	

#### **VOLUME II**

#### **TESTIMONY**

PUCO

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DUKE	<b>ENERGY</b>	ОНЮ	<b>EXHIBIT</b>	

# **BEFORE**

# THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Duke Energy Ohio for Approval of a Market Rate Offer to Conduct a Competitive Bidding Process for Standard Service Offer Electric Generation Supply, Accounting Modifications, and Tariffs for Generation Service.	) ) Case No. 10-2586-EL-SSO ) )
DIRECT TEST	
ON BEHA DUKE ENERGY	

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RJL-1: Curriculum Vitae

#### I. INTRODUCTION

- Q. PLEASE STATE YOUR NAME, PROFESSIONAL POSITION, BUSINESS
- 2 ADDRESS, AND FOR WHOM YOU ARE TESTIFYING.
- 3 A. My name is Robert J. Lee. I am a Principal at CRA International, Inc. d/b/a
- 4 Charles River Associates (CRA) and a member of CRA's Auctions &
- 5 Competitive Bidding consulting practice. Founded in 1965, CRA provides
- 6 economic and financial expertise and management consulting services to
- businesses, law firms, accounting firms, and governments. My business address
- 8 is John Hancock Tower, T-32, 200 Clarendon Street, Boston,
- 9 Massachusetts 02116. I am testifying on behalf of Duke Energy Ohio, Inc. (Duke
- 10 Energy Ohio or the Company).
- 11 Q. WHAT IS YOUR PROFESSIONAL AND EDUCATIONAL
- 12 BACKGROUND?
- 13 A. I have been at CRA since 2001. I received an MSIA degree from Carnegie
- Mellon University in Pittsburgh in 1996. From the mid 1990s through the mid
- 15 2000s, my work focused on the domestic energy sector generally and the power
- sector specifically. For the past five years, I have focused primarily on auctions
- and other transaction mechanisms in a range of industries, including the power
- sector. In various industries including electricity, CRA's Auction & Competitive
- Bidding practice designs and conducts auctions and other bidding mechanisms,
- acts as independent monitors of bidding processes, and provides support to
- 21 bidders. In the course of that work, I have played a leadership role in a wide

1		range of auctions in a broad set of industries, including auctions in the power
2		sector. My curriculum vitae is marked as Attachment RJL-1, listing my
3		background and experience in further detail.
4	Q.	HAVE YOU PREVIOUSLY WORKED ON MATTERS BEFORE THE
5		PUBLIC UTILITIES COMMISSION OF OHIO?
6	A.	Yes I have. CRA was retained by the FirstEnergy's Ohio electric distribution
7		utility companies (FE Companies) for structured procurements in 2008, 2009, and
8		2010. I served as part of the CRA Auction Manager team on the procurements.
9		In addition, during the late 1990s, prior to joining CRA, I worked on behalf of
10		Cinergy and Dayton Power & Light on their transition plans related to the
11		deregulation of the Ohio power sector.
12	Q.	AS PART OF THE AUCTION MANAGER TEAM FOR STRUCTURED
13		PROCUREMENTS, HAVE YOU HAD OCCASION TO INTERACT WITH
14		THE PUCO?
15	A.	Yes, CRA worked with the Public Utilities Commission of Ohio (Commission) in
16		administering and conducting the structured procurement auctions for the FE
17		Companies that I mentioned previously. This interaction included, but was not
18		limited to, elements of the design of the CBP process, product definition, bidding
19		format, and general indications of interest from prospective bidders.

Q. DURING THESE INTERACTIONS WITH THE COMMISSION, DID THE
COMMISSION EVER EXPRESS CONCERN AS TO CRA'S

1		INDEPENDENT ROLE IN THE STRUCTURED PROCUREMENT
2		PROCESS?
3	A.	No. The Commission found CRA to be an active, fair, and impartial participant
4		in the structured procurement process. The Commission, either acting on its own
5		volition or through its consultant, had ready insight into the auction process and I
6		am thus confident that CRA would not have served, and would not continue to
7		serve, in this capacity as an Auction Manager if there was any question about its
8		unbiased and independent role.
9	Q.	HAS THE COMMISSION AFFIRMATIVELY FOUND CRA TO BE AN
0		INDEPENDENT AUCTION MANAGER?
1	A.	Yes. In connection with the most recent auction that CRA conducted for the
12		FirstEnergy Ohio Utilities, the Commission found CRA to be independent.
13		Furthermore, Commission Staff did not dispute CRA's designation as an
4		independent auction manager in the request for an MRO made by the FirstEnergy
15		Ohio Utilities under Case No. 09-906-EL-SSO.
6	Q.	HAVE YOU PREVIOUSLY WORKED ON MATTERS ON BEHALF OF
17		DUKE ENERGY OHIO?
8	A.	As noted above, prior to my employment with CRA, I worked on a matter for
9		both Cinergy and Dayton Power & Light Company related to deregulation. This
20		was more than ten years ago.

1	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS
2		PROCEEDING?
3	A.	CRA has been retained by Duke Energy Ohio to serve as the independent Auction
4		Manager to design and implement a competitive bidding process (CBP) to
5		procure standard service offer (SSO) supply for delivery periods beginning on
6		January 2012. My testimony describes how the proposed solicitations will work,
7		what alternative CBP designs were considered, and how the proposed CBP
8		supports the establishment of a market rate offer (MRO) under Section 4928.142
9		of the Ohio Revised Code.
10	Q.	WHAT ARE THE ATTACHMENTS AND SCHEDULES FOR WHICH
11		YOU ARE RESPONSIBLE?
12	A.	I am sponsoring all or part of the following items:
13		Attachment RJL-1 - Curriculum vitae
14		Attachment B to the Application – Schedule and Timeline
15		Attachment C to the Application – Bidding Rules
16		• Attachment D to the Application – Parts 1 and 2
17		Attachment E to the Application – Communications Protocols
18		Attachment G to the Application - Glossary
		II. <u>DESCRIPTION OF THE CBP SOLICITATIONS</u>
19	Q.	PLEASE DESCRIBE THE CBP PLAN.
20	A.	The CBP plan is designed to promote open, fair, and transparent competitive
21		solicitations with clear product definitions, standardized bid evaluation criteria,

l	overs	ight by an independent third party, and the evaluation of the submitted bids
2	prior	to the selection of the least-cost bid winner or winners. The major elements
3	includ	de the following:
4	(a)	Developing products and contract terms as formalized in the (Master
5		Standard Service Offer Agreement) that encourage participation from a
6		range of power industry and financial institutions.
7	(b)	Maintaining a CBP Information Website that facilitates interest and
8		participation by providing documents, announcements, a timeline
9		including deadlines for the CBP, load and other data, frequently asked
10		questions (FAQs), and other information.
11	(c)	Conducting bidder information sessions and other pre-bidding activities to
12		promote and encourage participation.
13	(d)	Developing communications protocols to ensure parties have equal access
14		to information.
15	(e)	Administering the two-part bidder application process, including
16		establishing financial and non-financial requirements to encourage
17		participation by serious parties.
18	(f)	Developing the auction design and bidding procedures to attract bidders
19		and to promote competitive bidding.
20	(g)	Educating and training bidders through informational materials and mock
21		auctions.
22	(h)	Customizing and testing the bidding platform and help desk facility.

1		(i) Providing starting prices for the CBP auction that are intended to attract
2		bidding participation.
3		(j) Conducting each solicitation in accordance with the bidding rules and in a
4		manner that promotes participation and allows for verification of
5		procedures and results.
6		(k) Submitting a post-bidding report to the Commission that allows the
7		Commission to select the least-cost bid(s) and bidder(s) in the CBP, and
8		that allows the Commission to determine whether the three criteria in R.C.
9		4928.142(C) of the Revised Code have been satisfied.
10	Q.	HOW WILL THE PRODUCT DEFINITIONS AND CONTRACT TERMS
11		ENCOURAGE PARTICIPATION?
12	A.	The products and contract terms are familiar to market participants and
13		prospective bidders. They are standardized and yet provide flexibility through
14		staggered contract delivery periods that allow participants to bid their preferred
15		supply profile over time. The tranche size also encourages participation from a
16		range of potential suppliers, where each tranche is a specified, fixed percentage of
17		SSO load.
18	Q.	HOW WILL PROSPECTIVE BIDDERS AND OTHER PARTICIPANTS
19		BE KEPT INFORMED DURING THE CBP?
20	A.	Documents, announcements, a timeline, load data, FAQs, and other information
21		will be readily available via the CBP Information Website, which will be hosted

and updated regularly by the Auction Manager. Interested parties can register at

the Information Website to receive updates and announcements about the CBP
directly via email. Parties can submit questions and comments to the Auction
Manager directly via a link on the Information Website or via email. Responses
will be posted to the FAQ section of the Information Website, and registered
parties will receive email notifications of new information posted to the
Information Website. In addition to the Information Website, bidder information
sessions will be conducted with presentations about the CBP and with time
allowed for attendees to ask questions. The bidder information sessions will be
conducted in person and/or via the Web conference to accommodate prospective
bidders. Bidders also will be encouraged to participate in mock auctions to
familiarize themselves with the bidding platform and procedures.

A.

# 12 Q. WHAT PRECAUTIONS AND PROCEDURES WILL BE FOLLOWED TO 13 ENSURE APPROPRIATE COMMUNICATIONS AND INFORMATION 14 EXCHANGE?

The Communications Protocols establish what communications are permitted among various parties including the Auction Manager, Duke Energy Ohio, the Commission, Commission Staff, and prospective bidders. The Communications Protocols are found as Attachment E to the Application. The protocols are intended to protect confidential information and to allow equal access to information without providing any advantage or disadvantage to prospective bidders.

The Auction Manager will provide the communications channel for interested parties. This includes addressing questions from parties about the CBP, providing information via the CBP Information Website, broadcasting email notifications to registered parties (using the BCC email field), conducting bidder information sessions, managing the auctions, communicating results, and submitting a post-bidding report. This will facilitate a process in which information is provided consistently, timely, and on an equal basis to parties.

15-

A.

Certain individuals at Duke Energy Ohio will be part of the information exchange but in a limited way and only to support the competitiveness and success of the CBP. Their role primarily will be as follows: development of data posted to the CBP Information Website, assistance on FAQs (they will not know the identity of questioners), assistance in reviewing certain information in the Part 1 Applications (to determine creditworthiness and pre-bid security requirements), confirming the pre-bid security posted as part of the Part 2 Applications, and administration of the Master SSO Agreement.

# Q. PLEASE PROVIDE AN OVERVIEW OF THE BIDDER APPLICATION AND QUALIFICATION PROCESS.

To participate in the CBP, prospective bidders will need to satisfy financial and non-financial requirements through a two-part application process. The purpose of the two-part application process is for prospective bidders to demonstrate their ability and commitment to meet the requirements of participation in the CBP and the requirements of being an SSO Supplier as set forth in the Master SSO

Agreement (Attachment F to the Application). The Part I and Part 2 Applications
are included as Attachment D to the Company's Application. As much as
possible, the Part 1 and Part 2 Application process will be conducted
electronically via the CBP Information Website. The process is designed to be
secure and to make it easier and less time consuming for applicants to submit
applications, for the review and assessment of the applications, for providing
feedback to applicants, for applicants to check on the status of their applications,
and for applicants to cure any deficiencies. If an applicant prefers to submit its
applications manually, the Part I and Part 2 Application forms will be available
on the CBP Information Website for download.

### 11 Q. PLEASE DESCRIBE THE PART 1 APPLICATION PROCESS.

- 12 A. In its Part 1 Application, a prospective bidder must satisfy the following requirements:
- 14 (a) Submit a completed application.

- 15 (b) Provide contact information for the applicant and for designated representatives of the applicant.
- 17 (c) Agree to comply with the provisions of the Master SSO Supply
  18 Agreement and all the rules of the CBP, including the Communications
  19 Protocols.
  - (d) Demonstrate RTO participant status, or certify that there are no impediments to establishing that status prior to the start of the relevant SSO supply period.

- (e) Provide financial and credit information to be used in determining creditworthiness and credit requirements.
- (f) Make certifications regarding confidentiality and other matters.

Part 1 Applications are to be submitted by the Part 1 Application due date. The Auction Manager team will process and evaluate all Part 1 Applications to determine whether each applicant has satisfied the requirements of Part 1. Financial and credit information will be submitted to representatives of Duke Energy Ohio in order to conduct a creditworthiness assessment. If an applicant's Part 1 Application is incomplete or requires clarification, the Auction Manager will send a deficiency notice to the applicant, and the applicant will have until the end of the next business day or until the Part 1 Application due date — whichever is later — to respond.

Following the evaluation of Part 1 Applications, the Auction Manager will notify each Part 1 applicant whether or not they have successfully completed the Part 1 Application process to become a Qualified Bidder. The Auction Manager will send a Notification of Qualification to each Qualified Bidder that will include details about the pre-bid security the Qualified Bidder will be required to post as part of its Part 2 Application. The Auction Manager will send a list of the Qualified Bidders to each Qualified Bidder, including representatives from Duke Energy Ohio, Commission Staff, and any advisor that Commission Staff may have retained for this purpose, as well as to other parties as necessary to oversee the proper conduct of the CBP. All parties, including Qualified Bidders, will have

undertaken to maintain the confidentiality of the list of Qualified Bidders, as further explained in the Communications Protocols. The terms relevant to the Communications Protocols as well as other auction documents are contained in the Glossary Attachment G to the Application.

#### Q. PLEASE DESCRIBE THE PART 2 APPLICATION PROCESS.

A.

To continue participation in the CBP, Qualified Bidders must submit a Part 2 Application. In the Part 2 Application, the Qualified Bidder makes a number of certifications regarding its associations with other Qualified Bidders in order to ensure that each Qualified Bidder participates independently of other Qualified Bidders and to ensure the confidentiality of information regarding the CBP. Also with the Part 2 Application, each Qualified Bidder must submit an indicative offer that specifies the number of tranches that it would be willing to serve at the minimum starting price and at the maximum starting price.

Part 2 applicants also must post pre-bid security in the form of a letter of credit or electronic wire transfer sufficient to support its indicative offer. A Part 2 applicant also may be required to submit additional security in the form of a letter of intent to provide a guaranty and/or a letter of reference; such a requirement would be determined during the assessment of the Part 1 Applications. Any pre-bid security submitted to support the indicative offer must be in a form acceptable to the Duke Energy Ohio. Sample pre-bid security documents will be posted to the CBP Information Website and are attached as appendices to the Part 1 and

1	Part 2 Application forms, which are provided in Attachment D to the Company's
2	Application.
3	Part 2 Applications are to be submitted by the Part 2 Application due date
4	The Auction Manager team will process and evaluate all Part 2 Applications to
5	determine whether each applicant has satisfied the requirements of Part 2. A
6	Part 2 Application will be acceptable if it satisfies the following:
7	(a) Must be complete,
8	(b) Must include an indicative offer in the appropriate form,
9	(c) Must meet the requirements provided to the Part 2 applicant resulting from
10	the Part 1 Application process, and
11	(d) Must include the pre-bid security in a form acceptable to Duke Energy
12	Ohio that is sufficient to cover the indicative offer submitted by the Part 2
13	applicant at the maximum starting prices.
14	If an applicant's Part 2 Application is incomplete or requires clarification
15	the Auction Manager will send a deficiency notice to the applicant, and the
16	applicant will have until the end of the next business day or until the Part 2
17	application due date — whichever is later — to respond.
18	Following the evaluation of Part 2 Applications, the Auction Manager will
19	notify each Part 2 applicant whether or not they have successfully completed the
20	Part 2 Application process to become a Registered Bidder. The Registered
21	Bidder's pre-bid security establishes the Registered Bidder's initial eligibility

which is the maximum number of tranches the bidder will be allowed to bid in the

auction. The Auction Manager will send a Notification of Registration to each Registered Bidder that will include the Registered Bidder's initial eligibility. The Auction Manager will send to each Registered Bidder, as well as to other parties as necessary to oversee the proper conduct of the CBP, a list of the Registered Bidders and the total initial eligibility across all Registered Bidders. All parties, including Registered Bidders, will have undertaken to maintain the confidentiality of this information provided to them.

#### Q. WHAT BIDDING DESIGN WILL BE USED?

A.

A version of the simultaneous, multiple-round, descending-price clock auction format will be used. A version of this format has been used in numerous electricity procurements including in Massachusetts in 1997 and used later in New Jersey, Ohio, Illinois, and elsewhere. It currently is being used in the CBP for the FirstEnergy Companies to procure their SSO supply for the period January 1, 2011 through May 31, 2014. This bidding design also has been used for buying and selling other energy products and has been used in other industries.

The bidding format is simultaneous in that multiple products and/or multiple tranches are bid on simultaneously. Bidding takes place typically online using Web-based software in a series of bidding rounds, with pre-specified starting and ending times for each round. Prior to the start of each round, the announced price for each product is disclosed to bidders. The announced price is the same for each tranche for a product, but may differ across products. The starting announced price for each product — *i.e.*, the announced price in effect

during round 1 — is set artificially high so as to encourage bidding participation.
At the end of each round, the bidding software, as overseen by the Auction
Manager team, determines which products are over-subscribed and which
products are under-subscribed. A product is over-subscribed if more supply
tranches were bid on it across all bidders than the number of tranches needed to
procure for the product. Likewise, a product is under-subscribed if fewer tranches
were bid on it than needed. If a product is over-subscribed, the announced price
for that product will be reduced by a decrement for the next round. If a product is
not over-subscribed, its announced price will not change for the next round. The
bidding process continues in this manner, with prices tending to tick down like
hands on a clock. As prices change across the products, bidders are allowed to
change the number of tranches they bid subject to certain restrictions. Subject to
these restrictions, in each round, a bidder simply specifies the number of tranches
that it is willing and able to supply for each product given the announced price for
each product. There is no pre-determined number of rounds before the auction
each product. There is no pre-determined number of rounds before the auction closes. The auction closes when the closing criteria have been met. For the
closes. The auction closes when the closing criteria have been met. For the
closes. The auction closes when the closing criteria have been met. For the auction to close, the number of tranches bid for each product at the announced
closes. The auction closes when the closing criteria have been met. For the auction to close, the number of tranches bid for each product at the announced price must be less than or equal to the supply for that product. The closing
closes. The auction closes when the closing criteria have been met. For the auction to close, the number of tranches bid for each product at the announced price must be less than or equal to the supply for that product. The closing criteria are outlined in detail in the Bidding Rules. Winning bidders are those

1	Q.	PLEASE DESCRIBE THE PROCESS FOLLOWING THE CLOSE OF
2		THE AUCTION.
3	A.	At the close of the auction, the Auction Manager will provide a report to the
4		Commission. The post-bidding report will summarize the bidding process and
5		results, and will provide a list of the least-cost bidder(s) and the number of the
6		least-cost tranches for each product for each such bidder.
7		R.C. 4928.142(C) states that the Commission will select the least-cost bid
8		winner or winners of the CBP, and such selected bid or bids, as prescribed as
9		retail rates by the Commission, will be the electric distribution utility's (EDU)
10		SSO unless the Commission by order issued before the third calendar day
lI		following the conclusion of the CBP for the MRO, determines that one or more of
12		the following criteria were not met:
13		(1) Each portion of the bidding process was oversubscribed, such that the
14		amount of supply bid upon was greater than the amount of the load bid
15		out.
16		(2) There were four or more bidders.
17		(3) At least 25% of the load is bid upon by one or more persons other than the
18		EDU.
19		The Auction Manager's post-bidding report will provide information that
20		will address the three criteria above.
21		After the last round of the auction, bidders who remained active in the
22		auction will see preliminary auction results through the Bidding Website. These

the bidder tentatively has won for each product. These preliminary results remain subject to the Commission's determination. Before the third calendar day following the close of the auction, unless the Commission determines that at least one of the three criteria above has not been satisfied, the Auction Manager will notify each winning bidder of the number of tranches the bidder has won for each product and the associated clearing prices. The Auction Manager also will provide Duke Energy Ohio the identities of the winning bidders, the number of tranches each winning bidder has won for each product, and the associated clearing prices.

Once the Commission selects the winning bidder(s), the winning bidder(s) and Duke Energy Ohio will execute the Master SSO Agreements. Pre-bid security will be returned to all bidders upon execution of the Master SSO Agreements, on or before the third calendar day after the close of the auction. Pre-bid security may be held back for any bidder that violated any of the rules or certifications of the CBP.

The Commission may release information about the CBP results including winning bidders, winning tranches, and clearing prices.

# 19 Q. WHAT IS THE SCHEDULE FOR BIDDING AND THE TIMELINE 20 PROPOSED BY THE COMPANY?

A. The proposed schedule which shows number of tranches and a schedule for the competitive bid process procurements is Attachment B to the Application.

Q.	HOW	IS THE CE	BP DES	IGN]	ED TO EN	COURA	GE P	ARTIC	CIPATION	IN
	THE	AUCTION	AND	то	ENSURE	THAT	NO	ONE	BIDDER	IS
	ADV	ANTACEDO								

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Physical generation assets are not required to participate in the CBP or to bid on and win tranches. Financial participants (those who do not own generating assets) have won tranches in previous auctions and will continue to have that opportunity going forward. In fact, any bidder who can purchase power for delivery to the Company's service territory can participate in the CBP. Nothing in the CBP requires bidders to own generation and nothing in the CBP provides preferential treatment to those that do own generation. The descending-price clock auction format is nondiscriminatory because anyone can participate as long as they satisfy the criteria used in the application process. Moreover, the CBP is a structured process that levels the playing field for participants and makes information available so no bidders are advantaged. All bidders are bidding on standardized supply contracts and are subject to identical financial and credit requirements and criteria. All bidders have equal access to information before bidding and during the event itself. Prior to the auction, the process to educate and train bidders on the details of the CBP and the products is the same for all bidders. During the auction, all bidders receive the same information about the status of the auction.

# Q. ARE THERE SPECIFIC DESIGN CONSIDERATIONS CHOSEN TO PROMOTE COMPETITION IN THE AUCTION?

1	A.	There	are several rules in place designed to promote competitive bidding. These
2		includ	de the follow:
3		(a)	All bidders adhere to identical credit qualification procedures. Each
4			bidder's credit-based tranche cap is a function of clearly-defined, objective
5			criteria. The criteria prevent any potential subjectivity or favoritism in the
6			process.
7		(b)	All bidders are bidding on standardized supply contracts. Contracts are
8			not tailored to accommodate the needs or demands of any individual
9			bidder.
10		(c)	The bidder education and training process is designed to provide all
11			bidders equal access to information. The process includes bidder
12			information sessions to educate all bidders on the CBP, the auction rules,
13			and the products being offered. The Q&A process is designed to provide
14			all bidders equal access to information related to the CBP.
15		(d)	During the auction, all bidders receive the same information about the
16			status of the auction, including prices and the supply and demand
17			conditions.
18		(e)	The closing criteria are applied equally to all bidders. Bids are evaluated
19			and winning bidders are determined based on price alone. Any bidder
20			willing to supply at the announced price remains active in the auction.
21			Any bidder active on a product when the auction closes is guaranteed to
22			win the rights to supply SSO load.

# Q. DOES THE PROPOSED CBP PROTECT AGAINST THE EXERCISE OF

### 2 MARKET POWER AND, IF SO, HOW?

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It is my understanding that the applicable statutory provisions and Commission rules do not require the electric distribution utility to demonstrate that its MRO protects against the exercise of market power. Rather, I understand that the statutes and rules only require that the electric distribution utility belong to a regional transmission organization that is overseen by an independent market monitor that is responsible for protecting against market abuses and the improper exercise of market power. Duke Energy Ohio addresses this requirement through Company witness Kenneth J. Jennings. But additionally, the CBP plan proposed here also provides protection against market power abuses. As reflected in the Communications Protocols, Attachment E to the Application. Duke Energy Ohio has expressly defined an affiliate as including that part of its business that engages in merchant activity. As such, affiliates of Duke Energy Ohio cannot be provided with any information regarding the CBP plan that would provide them an unfair competitive advantage. As I have discussed previously, all auction participants are afforded the same amount of information, thus preventing any perceived abuse of market power.

#### Q. ARE CHANGES TO THE CBP POSSIBLE?

A. While the proposed CBP contains the necessary elements that result in a competitive process and meets applicable statutory and regulatory requirements,

changes may be considered if such changes further promote successful CBP solicitations in accordance with such regulatory requirements.

#### 3 Q. DID YOU CONSIDER ALTERNATIVES TO THE PROPOSED CBP?

A.

Yes. In addition to a descending-price clock auction format, we considered a one-shot sealed-bid format. Both formats have been used for a number of years to procure electricity and for other competitive bids in electricity and in other industries. A one-shot sealed-bid format is appropriate in some instances and offers the advantage of a potentially simple bidding process. For the types of products being procured here, there is little if any advantage of a one-shot sealed-bid format, and a descending-price clock auction format offers several advantages.

First, with multiple products, it is more difficult in a one-shot sealed-bid format for bidders to specify their bids. The number of tranches they would be willing and able to supply depends on price levels and relative prices for the different products. In principle, they could submit contingent bids, specifying how many tranches for each product they would bid for different combinations of prices, but specifying all the possible combinations of prices would be challenging.

Second, there is a common value element to the CBP products. This means there is some uncertainty in valuing the tranches and the uncertainty is correlated across bidders (e.g., forecasts of market prices in the future). This can give rise to the winner's curse problem in which the winning bidder wins because

it has the lowest estimate of the cost of supplying the tranches — thus, a bidder faces the risk that its bid is an outlier compared to the bids of other market participants and wins at a price that is below competitive market levels. Unless the winner's curse risk is addressed through the appropriate auction design, bidders will compensate for the risk by bidding conservatively, leading to potentially higher clearing prices for the procurement. In a one-shot sealed-bid format, the winner's curse can be addressed somewhat by using uniform pricing (all winning bidders for a product get paid the same price for the product) rather than first-price discriminatory bidding (each winning bidder gets paid the price it bid). However, the one-shot sealed-bid format lacks an effective price discovery mechanism that also mitigates the winner's curse — a price discovery mechanism in which bidders gain confidence from price signals reflecting other bidders' bids, thereby encouraging bidders to bid more aggressively.

Third, with multiple products, the more that the products are related in value (e.g., they are substitutes and/or complements), the more important it is that meaningful price signals be provided so that bidders gain information about the value of the tranches, reducing risks for bidders and encouraging them to bid lower prices. A one-shot sealed-bid auction does not provide these price signals, thereby increasing risks faced by bidders and discouraging them from bidding lower prices.

In contrast to the one-shot sealed-bid format, the descending-price clock format allows bidders to revise their bids in response to prices that reflect

aggregate bidder interest in the products. Because the auction proceeds in a series of rounds with announced prices reflecting competitive bids, bidders do not need to be concerned with specifying combinations of hypothetical prices. There is an effective price discovery mechanism: prices decline in response to supply being bid, and bidders can adjust their bids accordingly. The descending-price clock format provides the price transparency that facilitates effective and efficient bidding among all bidders. The price signals provided through the process enable bidders to bid confidently and aggressively (*i.e.*, at lower prices) without risking "under-bidding the market". The descending-price clock format also imposes uniform pricing which also reduces bidders' risks. The bidding mechanics for the descending-price clock format are straightforward. It has been my experience that even bidders participating in this bidding format for the first time find the logic, interface, and experience intuitive and efficient.

Fourth, in a simultaneous, multiple-round, descending-price clock procurement, bidders can switch from one of the utility's products to another product in response to price differences that they believe are not reflective of underlying supply cost differences. This behavior leads to a potentially more efficient outcome and contributes to pricing that is more consistent among the products. Similar products will have similar prices through this process. This further simplifies administration and regulatory oversight.

Finally, the descending-price clock format has used successfully in Ohio in the past. The format performed well and resulted in strong participation from

- suppliers reflecting the competitive nature of the process. It is a format that

  participants are used to and are comfortable with.
- 3 Q. WHAT OBSTACLES MIGHT CREATE DIFFICULTIES OR BARRIERS
- 4 FOR THE ADOPTION OF THE PROPOSED CBP?

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A. There should be no barriers or difficulties for bidders with respect to the proposed CBP. As with any competitive procurement, a critical success factor is whether the products are attractive to bidders and whether bidders have been provided sufficient time and information to evaluate the opportunity to participate. As part of that, any uncertainties in the process that bidders face should be addressed to the extent possible. The proposed CBP products are clearly defined and are designed to be attractive to prospective bidders. The proposed CBP plan is designed to provide sufficient time and readily available information for prospective bidders to participate confidently in the CBP. Thus, as noted, there should be no barriers or difficulties.

# III. THE PROPOSED CBP SATISFIES OHIO LAW

- 15 Q. DOES THE PROPOSED CBP SATISFY OHIO LAW?
- 16 A. Yes it does. In accordance with Section 4928.142(A) of the Revised Code, an
  17 EDU may establish an SSO price for retail electric generation service that is
  18 delivered to the utility under an MRO. The MRO will be determined through a
  19 competitive bidding process that provides for all of the following:
- 20 (a) Open, fair, and transparent competitive solicitation.
- 21 (b) Clear product definition.

- 1 (c) Standardized bid evaluation criteria.
- Oversight by an independent third party that shall design the solicitation,

  administer the bidding, and ensure that the criteria specified above are

  met.
- 5 (e) Evaluation of the submitted bids prior to the selection of the least-cost bid winner or winners.
- Each element of the proposed CBP, and the overall CBP plan, is designed to satisfy the requirements above.

### 9 Q. WERE LOAD CAPS CONSIDERED FOR THE AUCTIONS?

- 10 A. Yes. But as load caps can function to deter participants or preclude a robust, 11 competitive bidding, they were not incorporated into the Company's CBP plan.
- 12 Q. PLEASE EXPLAIN HOW THE PROPOSED CBP MEETS THE
  13 REQUIREMENT FOR AN OPEN, FAIR, AND TRANSPARENT
  14 COMPETITIVE SOLICITATION.
- 15 A. The CBP provides for open, fair, and transparent competitive solicitation through 16 the product definition, the information channels, the bidder qualification process, 17 the bidding design, and the rules for participation. The products are familiar to 18 market participants and well-defined and are the same for all bidders. 19 Information about the solicitations will be timely and readily available on an 20 equal basis to interested parties. The bidder qualification process is the same for 21 all participants, familiar to market participants, and fully documented. The 22 version of the descending-price clock auction in the solicitations applies the same

1	bidding rules and procedures to all bidders and is familiar to participants. Finally,
2	all the rules for participating in the solicitation are the known to all participants
3	ahead of time and applied equally to all participants. All the above encourages
4	participation, and promotes the openness, fairness, and transparency of the
5	solicitations.

# 6 Q. PLEASE EXPLAIN HOW THE PROPOSED CBP MEETS THE 7 REQUIREMENT FOR A CLEAR PRODUCT DEFINITION.

- A. The products are standardized and familiar to market participants. The products are load-following, full requirements service including energy, capacity, firm transmission charges, and ancillary services. The products are well-known and understood in the marketplace, and can be readily evaluated and priced by bidders. All bidders know they are bidding on the same products.
- 13 Q. PLEASE EXPLAIN HOW THE PROPOSED CBP MEETS THE
  14 REQUIREMENT FOR STANDARDIZED BID EVALUATION CRITERIA.

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Bidders who submit bids are allowed to submit bids only by first successfully completing the Part I and Part 2 Application process. That process uses standardized evaluation criteria applied equally to all applicants, and ensures that bidders allowed to submit bids are willing, able, and committed to satisfying the obligations of an SSO supplier should they win tranches in the bidding. The two-part application process ensures that non-price criteria are satisfied in evaluating the qualifications of bidders to become SSO suppliers. This pre-qualification process further ensures: (i) a level playing field for all bidders, (ii) a clear

evaluation of bids such that no bidder can gain an unfair advantage in the process
(iii) that all bidders are judged on the same, standardized basis, and (iv) that the
only necessary evaluation by the Commission is on price. This means that bids
subsequently can be evaluated on an objective, price-only basis. The bidding
design encourages bidders to bid supply at the lowest possible price. There is no
ambiguity as to the winning bids, the winning bidders, and the non-winning
bidders. Winning bidders win simply because non-winning bidders are not
willing and able to supply tranches at prices as low as the prices at which winning
bidders are willing and able to supply the tranches. The Commission's statutory
oversight in selecting the least-cost bids also ensures standardized bid evaluation
criteria are used.

- 12 Q. PLEASE EXPLAIN HOW THE PROPOSED CBP MEETS THE
  13 REQUIREMENT FOR OVERSIGHT BY AN INDEPENDENT THIRD
  14 PARTY.
- 15 A. The Auction Manager, CRA International, has provided independent management
  16 and oversight of competitive bids for numerous clients in electricity since the mid
  17 1990s and CRA's remuneration as Duke Energy Ohio's Auction Manager does
  18 not depend on the outcome of the CBP solicitations or which bidders win what
  19 tranches at what prices.
- Q. PLEASE EXPLAIN HOW THE PROPOSED CBP MEETS THE
  REQUIREMENT FOR EVALUATION OF THE SUBMITTED BIDS

#### PRIOR TO THE SELECTION OF THE LEAST-COST BID WINNER OR

2 WINNERS.

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3 After the close of bidding, the Auction Manager will provide to the Commission A. the post-bidding report that provide the information the Commission needs to 4 5 evaluate the solicitation and to select the least-cost bid winner(s). As is required 6 by the Commission's Rule 4901:1-35-08 (B), the Auction Manager will provide 7 the report within twenty-four hours of the completion of the bidding process, and 8 the report will include a summary of the results of the CBP, and all of the 9 elements set forth in 4901:1-35-08(B) (1) through (7). Likewise, Duke Energy 10 Ohio shall provide access to its Staff and CRA to assist the Commission in its 11 review of the CBP, as well as data, information and communications pertaining to 12 the bidding process, on a real time basis and regardless of the confidential nature

#### IV. CONCLUSION

- 14 Q. WERE ATTACHMENTS B, C, D, E, AND G PREPARED UNDER YOUR
- 15 **DIRECTION?**

of such data and information.

- 16 A. Yes, they were.
- 17 Q. DOES THAT CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY AT
- 18 THIS TIME?
- 19 A. Yes.



## ROBERT J. LEE

**Principal** 

M.S. Industrial Administration, Camegie Mellon University,

> B.A. Mathematics, Boston College

Mr. Lee is a Principal in CRA's Auctions & Competitive Bidding Practice. During his consulting career, Mr. Lee has assisted numerous clients to develop structured sales and procurement channels in an array of industries and markets. He has managed structured transactions, acquisitions and divestitures in both traditional and competitive bidding environments. In addition, Mr. Lee has helped clients on a range of valuations and market analyses related to changes in market dynamics and market structure. Prior to joining CRA, Mr. Lee was a Principal with the PA Consulting Group and at Putnam, Hayes and Bartlett, Inc.

AUCTIONS, COMPETITIVE BIDDING AND MARKET MECHANISMS

#### Electricity

#### FirstEnergy Ohio Utilities

- For FirstEnergy Service Company, currently assisting in designing and conducting ongoing
  competitive bidding processes using a clock auction format to procure wholesale generation
  and capacity for retail Standard Service Offer (SSO) load to be delivered starting June 2011
  to customers of FirstEnergy Ohio Utilities Cleveland Electric Illuminating Company, The
  Toledo Edison Company, and Ohio Edison Company. Two auctions per year starting in
  2010 are planned. The auction process and outcome are subject to approval by the Public
  Utilities Commission of Ohio (PUCO).
- For FirstEnergy Service Company, assisted in designing and conducting a competitive bidding process using a hybrid clock auction and sealed-bid format to procure wholesale generation and capacity for retail Standard Service Offer (SSO) load to be delivered June 2009 through May 2011 to customers of FirstEnergy Ohio Utilities Cleveland Electric Illuminating Company, The Toledo Edison Company, and Ohio Edison Company, Played a key role on the Auction Manager team including logistics and managing the mock auction and the live event. The successful auction procured more than \$6 billion in supplies. The auction process and outcome were subject to approval by the Public Utilities Commission of Ohio (PUCO).

#### RWE

Auction Manager for RWE's ongoing power supply auction serving major commercial and
industrial customers in Europe. Currently working with RWE and the broader CRA auction
team on the auction design framework, including all bidding rules, auction parameters, and
bidder support documentation and tools. In addition, Mr. Lee helped to develop and test
the customized auction software working with software engineering through the design and
testing process. The auction process and outcome are subject to approval by the German
cartel office (BKartA).

#### Trans Elect

Part of CRA's Auction Manager team on an open season auction process for Trans Elect.
The open season auction process used CRA's Auction Management System to
successfully sell transmission capacity rights through an open and transparent bidding
process. The auction process and outcome were subject to approval by the U.S. Federal
Energy Regulatory Commission (FERC).

#### GE EFS

Auction Manager for the Linden VFT open season auction process. With CRA's
assistance, GE successfully auctioned incremental transmission capacity from PJM into
New York's Zone J. Mr. Lee worked closely with GE and the broader CRA team to design
and test the customized AMS auction software and to educate bidders on the auction
design parameters as well as the VFT technology. The auction process and outcome were
subject to approval by the U.S. Federal Energy Regulatory Commission (FERC).

#### **Agriculture**

#### Ocean Spray Cranberries

Project Manager and Auction Manager for the development of an Internet-based trading
platform for Ocean Spray Cranberries. The system, launched in the summer of 2009,
represented a major innovation in an industry that lacked price transparency and adequate
market signals for investment. Through the online system, Ocean Spray successfully is
offering cranberry concentrate to major beverage producers worldwide.

#### Fonterra - globalDairyTrade

 Project Manager and Auction Manager for the development and administration of globalDairyTrade, the Internet-based auction sales channel for a major international dairy cooperative. The auction-based system represents a major departure from the industry status quo and served as a mechanism for cost reduction, efficiency improvement, and increased market transparency for the supplier and its customers. Key responsibilities include contributions on the auction design, software development, customer training processes, and client communications. Through December 2009, nearly US\$1 billion in intermediate dairy products have been auctioned and sold to customers worldwide.

#### ASSET VALUATION AND MARKET STRATEGY

#### Confidential Client

Advised the successful bidder in the acquisition of a gas-fired combined cycle power plant
located in a remote region of Pakistan. As part of El Paso's divestiture of its Asian power
generating assets, Mr. Lee worked closely with a the buyer to value the portfolio of power
sales, fuel supply and O&M contracts supporting the facility. Critical considerations
included fuel supply risk, FX risk and the proper assessment of the threat of terrorism
associated with the facility.

#### Confidential Client

Worked closely with the management of a processed coal producer to identify the product's
value versus alternative coal options. Established the breakeven value for the fuel under a
range of alternative environmental, coal price and transportation cost scenarios. Helped
establish the relevant geographic range under which the fuel could potentially compete and
identified attractive utilities for targeted marketing activities. Identified alternative
distribution strategies that would help mitigate transportation cost concerns.

#### Hoosier Energy

Reviewed the NO<sub>X</sub> SIP Call compliance plan for Hoosier Energy, a Midwestern G&T
Cooperative. Worked closely with management to develop a new framework for evaluating
environmental compliance options at Hoosier's principal coal-fired power stations.
Identified key risk factors impacting the value of the cooperative's planned environmental
expenditures, including the risk of domestic CO2 restrictions. Identified potential cost
saving and risk mitigation strategies in association with pending changes in environmental
policies. Proposed alternative allowance banking strategies that would reduce financial
exposure associated with SIP investments.

#### **PSEG**

 Worked with management to evaluate the impact of a range of environmental scenarios on PSEG asset values. Mr. Lee modeled an array of 3P and 4P proposals and evaluated the likely response of market participants. The modeling exercise examined the impact of incremental environmental restrictions on regional and national new capacity builds, PCE retrofits and fuel selection. In addition, the CRA team quantified the impact of proposed or pending regulations on regional power market prices and on the prices for tradable emissions credits.

#### Triton Coal

Advised the management of Triton Coal on antitrust issues associated with their divestiture
of the Buckskin and North Rochelle coal mines located in the Wyoming portion of the
Powder River Basin. Identified substitute products including coal from alternative producing
basins and power generation from alternative fuels. Identified the market for Powder River
Basin coal based on transportation access and costs as well as coal quality considerations.
Evaluated bidders based on the potential impact of the acquisition on market
concentrations. Balanced the bid price for resources versus the likelihood that a potential
sale would withstand DOJ scrutiny.

#### Foster Wheeler

Performed a strategic assessment of the international coal boiler market for Foster
Wheeler. Identified key markets for growth in coal-fired power generation over the near,
mid and long-term. Considered key issues such as resource availability, environmental
policy uncertainties and power demand growth. Worked closely with Foster Wheeler Oy to
identify attractive markets for their CFB coal-boiler marketing activities.

#### British Petroleum

Examined the potential strategic impacts of btu convergence on coal and oil markets. The
analysis evaluated the economics of coal-to-liquids, coal-to-gas and underground coal
gasification. Identified regional discontinuities on project economics and participated in
workshops designed to assess opportunities in the coal space and their impact on markets
for oil, coal and power.

#### PRESENTATIONS AND PUBLICATIONS

Brandeis University, Graduate School of International Business, lecturer on coal and environmental markets and energy market dynamics

National Public Radio (NPR), Marketplace, recurrent on air guest discussing coal, environmental markets and environmental policy

"Creating Markets and Structured Sales Channels", presented at the U.S. Apple Association Outlook 2010, Chicago, IL, August 19, 2010

"Not Your Father's Auction", Industry Week, April 2010

"A Better Way to Transact", Beverage Industry: Market Insights, May 2010

"NO<sub>X</sub> Trading: Strategies for Electric Cooperatives"; with Anne Smith; Cooperative Research Network, National Rural Electric Cooperative Association; April 2003

#### **EDUCATION**

CARNEGIE MELLON UNIVERSITY, Graduate School of Industrial Administration MSIA (MBA) Pittsburgh, PA

**BOSTON COLLEGE**College of Arts and Sciences
BA Mathematics

Chestnut Hill, MA