

**DIRECT TESTIMONY OF
ROBERT J. LEE
VICE PRESIDENT OF CRA INTERNATIONAL D/B/A
CHARLES RIVER ASSOCIATES, INC.
ON BEHALF OF DUKE ENERGY INDIANA, LLC
CAUSE NO. 45907 BEFORE THE
INDIANA UTILITY REGULATORY COMMISSION**

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Robert J. Lee, and my business address is 200 Clarendon Street, Boston,
3 Massachusetts 02116.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed by CRA International d/b/a Charles River Associates, Inc. ("CRA") as
6 Vice President.

7 **Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL AND BUSINESS
8 EXPERIENCE.**

9 A. I received a Master of Science in Industrial Administration from Carnegie Mellon
10 University in Pittsburgh, Pennsylvania and a BA in Mathematics from Boston College in
11 Chestnut Hill, Massachusetts. After graduate school, I held senior staff positions with
12 Putnam, Hayes and Bartlett and the PA Consulting Group. I joined CRA's energy
13 practice in 2001 and became a Vice President with the firm in 2013. During my tenure in
14 consulting, I have focused on power industry restructuring, generating asset valuation and
15 the economics of environmental policy. In 2008, I joined CRA's Auctions and
16 Competitive Bidding Practice where I have focused primarily on default service
17 procurements and related issues facing market participants in deregulated wholesale and
18 retail electricity markets. In association with that work, CRA executes request for

1 proposal processes designed to help our utility clients meet their capacity needs.

2 **Q. ON WHOSE BEHALF ARE YOU SUBMITTING THIS DIRECT TESTIMONY?**

3 A. I am submitting this testimony on behalf of Duke Energy Indiana.

4 **Q. PLEASE DESCRIBE CRA AND THE WORK CRA PERFORMS IN MORE**
5 **DETAIL.**

6 A. CRA is an economics and management consulting firm, founded in 1964, and
7 headquartered in Boston, Massachusetts. CRA has worked on behalf of a wide range of
8 stakeholders in the design, management, and execution of structured sales and
9 procurement processes conducted both through formal auctions and RFPs. CRA clients in
10 these engagements have included regulated utilities, government agencies, state and
11 federal regulators, as well as cooperatives and private corporations. CRA has directly
12 managed or monitored structured processes that have resulted in over \$25 billion worth
13 of transactions in the United States and abroad. CRA has worked with a broad set of
14 utilities on resource planning and capacity strategy decisions. In addition, CRA has
15 extensive experience in managing default service procurement processes for utilities in
16 the Midwest and mid-Atlantic United States and currently manages the default service
17 procurement processes for FirstEnergy's Ohio Utilities, FirstEnergy's Pennsylvania
18 Utilities, Duke Energy Ohio, Duquesne Light Company and The Dayton Power & Light
19 Company (d/b/a AES Ohio). All such procurements have been reviewed and approved by
20 the respective utility commissions or other regulatory bodies with oversight over the
21 processes. CRA advises energy sector clients on asset valuation for the purposes of
22 acquisition and divestiture, and senior members of CRA's team have testified as experts

1 on sales and procurement process design before regulatory agencies and in civil
2 litigation.

3 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS OR ANY OTHER**
4 **REGULATORY COMMISSION?**

5 A. Yes. Most recently, I submitted testimony before the Indiana Utility Regulatory
6 Commission ("Commission") in Northern Indiana Public Service Company LLC's
7 ("NIPSCO") request for approval of a solar energy power purchase agreement
8 ("Appleseed PPA") and a wind energy power purchase agreement ("Templeton PPA"),
9 currently pending in Cause No. 45887. I also submitted testimony before the IURC for
10 NIPSCO's request for approval of a certificate of public convenience and necessity
11 ("CPCN") to purchase and acquire (indirectly through a joint venture structure) (1) a 265
12 megawatt ("MW") solar joint venture (the "Bridge I Project"); (2) a 435 MW solar and
13 75 MW energy storage joint venture (the "Bridge II Project"); and (3) a 200 MW solar
14 and 60 MW energy storage joint venture (the "Cavalry Project") in Cause No. 45462;
15 NIPSCO's request for approval and associated cost recovery of (1) a Solar Energy
16 Purchase Agreement between NIPSCO and Brickyard Solar, LLC dated June 30, 2020
17 (the "Brickyard Project"), and (2) a Solar Generation and Energy Storage Energy
18 Purchase Agreement between NIPSCO and Greensboro Solar Center, LLC dated June 30,
19 2020 (the "Greensboro Project") in Cause No. 45403; NIPSCO's request for a CPCN to
20 purchase and acquire (indirectly through a joint venture structure) a (1) 102 MW wind
21 farm (the "Rosewater Project") in Cause No. 45194, and (2) 302 MW wind farm (the
22 "Crossroads Project") in Cause No. 45310; NIPSCO's request for approval and

1 associated cost recovery of a wind purchased power agreement with (1) Jordan Creek
2 Wind Farm LLC in Cause No. 45195 (the "Jordan Creek Project"), and (2) Roaming
3 Bison Wind Farm LLC in Cause No. 45196 (the "Roaming Bison Project").

4 I have testified before the Public Utility Commission of Ohio on behalf of Duke
5 Energy Ohio and DP&L related to the design and administration of procurement auctions
6 to secure suppliers for their default service needs. In 2017, I testified before the Public
7 Service Commission of West Virginia on behalf of FirstEnergy's Monongahela Power
8 Company ("Mon Power"). That testimony related to an RFP conducted in support of their
9 anticipated capacity needs. I have submitted testimony before the Federal Energy
10 Regulatory Commission ("FERC") on affiliate transaction issues associated with RFPs
11 conducted for NIPSCO (Rosewater), Mon Power and DTE Energy. I submitted testimony
12 to FERC quantifying the reactive power tariff for generating assets owned by DP&L and
13 AES Ohio Generation. In addition, I have testified on competitive bidding in the
14 insurance industry in civil litigation. My curriculum vitae is attached as Attachment 3-A
15 (RJL).

16 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS**
17 **PROCEEDING?**

18 A. The purpose of my direct testimony is to explain the analysis Duke Energy Indiana used
19 to evaluate its various options for solar and solar plus storage energy and why the solar
20 power purchase agreement ("PPA") between Duke Energy Indiana and Ranger Power
21 LLC ("Ranger Power") for the project known as Speedway Solar ("Speedway Solar
22 PPA") is an economic choice for helping meet Duke Energy Indiana's retail electric load.

1 **Q. ARE YOU SPONSORING ANY ATTACHMENTS TO YOUR DIRECT**
2 **TESTIMONY?**

3 A. Yes. In addition to my curriculum vitae attached as Attachment 3-A (RJL), I am
4 sponsoring Confidential Attachment 3-B (RJL), which is the opinion letter provided by
5 CRA to Duke Energy Indiana following the RFPs (defined below) (the “Opinion Letter”),
6 and Confidential Attachment 3-C (RJL), which is a detailed table of how each proposal
7 was evaluated and scored. All of these attachments were prepared by me or under my
8 direction and supervision.

9 **Q. WHAT WERE THE KEY FINDINGS OUTLINED IN THE OPINION LETTER?**

10 A, In 2022, CRA was retained by Duke Energy Indiana to assist in the design,
11 administration, and bid evaluation of two Request for Proposal processes, one for
12 intermittent resources (the “Intermittent RFP”) and a second for non-intermittent
13 resources (the “Non-Intermittent RFP”) (together, the “RFPs”). The RFPs were designed
14 to support the resource planning process and to identify Midcontinent Independent
15 System Operator, Inc. (“MISO”) Local Resource Zone 6 (“LRZ6”) capacity resources in
16 support of the Company’s anticipated capacity needs. Through the Opinion Letter and its
17 attachments, CRA provides a review of the RFPs and includes a rank ordering of projects
18 submitted into the RFPs. In the Opinion Letter, the rank ordering of assets and projects is
19 grouped by the following resource types: solar and solar plus storage proposals, wind
20 proposals, thermal and standalone storage proposals. The ranking of projects was based
21 on the scoring criteria, which were developed in advance of the launch of the RFPs. The
22 Opinion Letter was issued to provide a final overview and evaluation of the RFPs and to

1 confirm that the RFPs were performed in a transparent, fair, and nondiscriminatory
2 manner and that no bidder was given an undue advantage or preference.

3 **Q. WHAT DOES CONFIDENTIAL ATTACHMENT 3-C (RJL) SHOW?**

4 A. Confidential Attachment 3-C (RJL) provides the detailed scoring results for each project
5 bid into the RFPs. For the reasons specified and discussed further below, the Speedway
6 Solar PPA was not included in the projects bid into the Intermittent RFP and, thus, is not
7 reflected on Confidential Attachment 3-C (RJL).

8 **Q. PLEASE PROVIDE AN OVERVIEW OF DUKE ENERGY INDIANA'S 2021 IRP.**

9 A. In 2021, Duke Energy Indiana conducted an integrated resource plan ("IRP") process
10 through which Duke Energy Indiana developed a preliminary capacity target that
11 included incremental additions of both intermittent and non-intermittent resources (the
12 "2021 IRP"). The 2021 IRP considered a range of market scenarios and options on the
13 potential retirement of existing Duke Energy Indiana fossil generation facilities. In 2023,
14 Petitioner performed updated modeling, with CRA supporting those efforts, to address
15 significantly changed circumstances since December 2021, including MISO's
16 implementation of the seasonal accreditation capacity (SAC) construct and the Inflation
17 Reduction Act.

18 **Q. WHEN DID YOU FIRST BECOME INVOLVED IN DUKE ENERGY INDIANA'S**
19 **RFP PROCESS?**

20 A. My involvement with Duke Energy Indiana began in the fall of 2021 after the 2021 IRP
21 process had been initiated. During the fourth quarter of 2021, Duke Energy Indiana
22 retained CRA to assist in the design, administration, and bid evaluation of the RFPs. My

1 role with Duke Energy Indiana was to help design and administer the RFP processes.

2 **Q. PLEASE PROVIDE AN OVERVIEW OF THE RFPS' DESIGN AND**
3 **EXECUTION.**

4 A. Prior to issuing the RFPs, CRA worked with the Duke Energy Indiana team to define the
5 process objectives and requirements. Duke Energy Indiana advised CRA the Company
6 intended to acquire dispatchable, semi-dispatchable, or renewable resources that, at a
7 minimum, would meet established industry-wide reliability and performance criteria for
8 electric generation facilities. CRA worked with Duke Energy Indiana to prepare the RFP
9 documentation and ensure the product requested was clearly defined and that the
10 evaluation criteria were clearly specified in the RFP documentation.

11 **Q. PLEASE DESCRIBE DUKE ENERGY INDIANA'S OBJECTIVES FOR THE**
12 **RFPS.**

13 A. Through the RFPs, Duke Energy Indiana's objective was to solicit proposals for the
14 purchase and sale of existing electric generating assets or assets in development that were
15 either physically located within MISO's LRZ6 or had firm transmission access to LRZ6
16 and could be designated as LRZ6 Network Resource Interconnection Service ("NRIS")
17 qualified capacity (the LRZ6 requirement did not apply to wind resources due to the low
18 count of projects and sites within Indiana and the limited unforced capacity ("UCAP")
19 awarded to such resources).

20 **Q. PLEASE DESCRIBE THE TIMELINE FOR THE RFP PROCESSES.**

21 A. The RFPs were issued on February 21, 2022, and CRA announced the process to bidders
22 through a public advisory meeting conducted on February 23, 2022. Prospective bidders

were required to provide a non-binding Notice of Intent, Non-disclosure Agreement, and Pre-Qualification Application by March 14, 2022. Each RFP had a separate bid due date. For the Intermittent RFP, final, written bid proposals were due on April 18, 2022; Non-Intermittent RFP bids were due on May 2, 2022. CRA provided a ranked list of projects in July 2022. The bidders for the top ranked projects were asked to refresh their bids due to, but not limited to, the following: the Inflation Reduction Act, inflation, supply chain constraints, and MISO interconnection study delays.

The timeline for the RFPs were consistent with industry standards and all bidders were afforded sufficient time to develop and submit bids into the process. No bidders or potential bidders expressed any concern with the time allotted for bid review or the requirements for bid submission.

Q. HOW WERE INTERESTED PARTIES INFORMED ABOUT THE RFPs?

A. CRA managed the outreach to potential bidders interested in the process. Representatives from potential bidders were contacted via electronic mail notices informing them of the RFPs and relevant due dates. In addition, Duke Energy Indiana and CRA participated in the IRP's Public Advisory meeting to inform interested parties about the RFP process and approach. CRA maintained a public information website¹ that contained all key documents related to the RFPs. Through that information website, interested parties could register to receive notifications related to the RFPs. They could also submit questions and comments related to the process, the documents or any of the RFP requirements. In addition, Duke Energy Indiana published a press release related to the RFPs on its

¹ <https://www.deirfp.com/>

website, and CRA ran trade press advertising in Power Daily on February 17, 2022.

All interested parties were allowed to submit proposals in the RFPs. Ultimately, CRA approved all pre-qualification applications submitted and notified the applicants of their pre-qualification status. CRA reserved the right, in its sole and exclusive discretion, to reject any and all proposals on the grounds that such proposal did not conform to the terms and conditions of the RFPs or on the grounds that the bidder did not comply with the provisions of the RFPs.

Q. DID THE RFPs GENERATE SUBSTANTIAL INTEREST FROM BIDDERS?

A. Yes. Across the RFPs, 31 bidders submitted prequalification applications by the deadline supported by 75 projects totaling over 18 GW in installed capacity (“ICAP”). While not all pre-qualified project and bidders ultimately submitted a formal bid into the process, each RFP attracted proposals from a broad set of bidders and resources. Over 12 GW of physical projects were bid into the RFP and several times that figure in proposal options. Figure 1 shows the ICAP for projects and proposals bid into the RFPs across technology options.

Figure 1: Project ICAP Megawatts by Technology and Acquisition Structure

	ICAP by Asset Type			Total
	Asset Sale	PPA	Both	
Solar	1,440	1,060	1,410	3,910
Solar + Storage	1,237	1,275	300	2,812
Storage	-	700	457	1,157
Thermal	1,529	1,363	780	3,672
Wind	-	550	-	550
Total	4,206	4,948	2,947	12,101

1 Figure 1 reflects project count, not proposals. Many of the proposals included both fixed
2 and variable pricing options and flexibility on PPA start dates or contract term. Some
3 proposals offered options on technology configurations. Certain options may be mutually
4 exclusive and therefore may not constitute independent transaction options.

5 I would characterize the RFPs as highly competitive. In total, over 12 GW of
6 ICAP was offered into the RFPs providing a wide range of capacity choices across
7 technologies and acquisition structures.

8 **Q. PLEASE DESCRIBE THE REVIEW AND EVALUATION OF THE PROPOSALS.**

9 A. CRA evaluated the economics and other scoring considerations related to each proposal
10 independent of Duke Energy Indiana or any Duke Energy Indiana affiliates. However,
11 CRA did rely on subject matter experts within Duke Energy Corporation for support on
12 the review of certain technical considerations related to individual bids. In such cases,
13 CRA redacted project identifying information to preserve bidder confidentiality.

14 After the proposals were received, CRA, as the third party administrator: (1)
15 reviewed all proposals and screened the responses to ensure they conformed with all
16 response requirements; (2) as necessary, conducted follow up calls and sent targeted
17 email outreach to representatives of each company submitting a conforming proposal to
18 clarify asset-specific issues with the information provided; (3) developed representative
19 “tranches” of resources providing market-based cost and performance characteristics by
20 resource type for use in Duke Energy Indiana’s updated modeling; (4) evaluated all
21 conforming proposals according to the pre-specified criteria as outlined in Appendix G of
22 each RFP document; (5) managed bidder communication and outreach; and (6)

1 developed a rank ordered list of candidate resources as input to the advanced due
2 diligence and portfolio construction phase of the modeling update process.

3 CRA reviewed all proposals that met or appeared to meet pre-determined
4 qualifying criteria set forth in the RFP documentation and evaluated each based on
5 certain pre-specified evaluation criteria. Each project was evaluated based on multiple
6 categories consistent with the evaluation criteria for the RFPs, which were pre-
7 determined and finalized prior to RFP launch; the non-economic categories included
8 development risk, asset reliability and deliverability, and asset-specific benefit and risk
9 factors. The economic portion of the evaluation considered the levelized net UCAP for
10 each project on a net present value basis for the project over a fixed period of time.

11 Duke Energy Indiana was not directly involved in scoring the proposals nor was
12 Duke Energy Indiana aware of bidder identities as part of the frequently asked questions
13 (FAQ) RFP process. Duke Energy Indiana was provided general information about the
14 level of interest in each RFP, the MW of capacity offered by asset type and deal structure,
15 and the general level and range of prices received for various asset categories in order to
16 facilitate communication with internal stakeholders. In some cases, subject matter experts
17 within Duke Energy Corporation supported the review through specific policy or
18 technical guidance.

19 As discussed above, Duke Energy Indiana performed updated modeling analysis
20 with CRA supporting those efforts. Duke Energy Indiana used the RFP-based data for the
21 updated modeling and modeled individual assets to develop the portfolio of potential
22 projects based on updated modeling inputs. The final selection of assets was based on

1 that modeling and the rank ordered list of RFP assets; asset selections were determined in
2 consultation with both the CRA RFP and the CRA IRP teams.

3 **Q. PLEASE DESCRIBE THE BID DISQUALIFICATION PROCESS.**

4 A. Certain bids into the RFPs were disqualified and eliminated from further consideration.
5 Disqualifications fell into four categories: (1) projects did not meet the site control
6 standards of the RFPs; (2) projects did not meet the LRZ6 location requirement for the
7 RFPs; (3) projects' development plan relied on generator replacement for Duke Energy
8 Indiana facilities with uncertain retirement status; and (4) developmental technology bids
9 that did not provide sufficient pricing or development plan information to evaluate on a
10 level basis with more proven technologies.

11 **Q. WHAT IS YOUR OPINION OF THE RFPS' SOLICITATION AND**
12 **EVALUATION PROCESSES?**

13 A. In my opinion, the RFPs were performed in a transparent, fair, and nondiscriminatory
14 manner, and the processes used to solicit and evaluate proposals were executed consistent
15 with the processes as defined and envisioned by Duke Energy Indiana and CRA at the
16 outset. Further, no bidder was given an undue advantage or preference in any of the RFPs
17 nor was any advantage or preference alleged by any participant in the RFPs.

18 **Q. DID CRA EVALUATE THE BIDS INDEPENDENT OF DUKE ENERGY**
19 **INDIANA?**

20 A. Yes. CRA executed the RFP on behalf of Duke Energy Indiana, which included
21 facilitating all bidder communication, maintaining all appropriate separation protocols
22 between Duke Energy Indiana and the submitted RFP proposals during bid evaluation,

process marketing, as well as bid review and evaluation for the RFP process. As discussed above, Duke Energy Indiana was not directly involved in the evaluation of proposals nor was Duke Energy Indiana aware of bidder identities as part of the process. Duke Energy Indiana was provided general information about the level of interest in the RFPs, the MWs of capacity offered by asset type, and deal structure. During the evaluation, Duke Energy Indiana was only made generally aware of CRA's progress and was only involved with bidder-specific issues if those issues required policy or technical guidance from Duke Energy Indiana subject matter experts.

Q. WHAT WAS CRA'S RECOMMENDATION AS A RESULT OF THE RFPS?

A. The RFP process resulted in a rank ordered list of qualifying projects based on their relative scoring on the RFP evaluation criteria. The rank ordered list was categorized by technology type (*e.g.*, wind, solar, etc.) and submitted to Duke Energy Indiana. Projects were selected for further due diligence based on the resource planning requirements and analysis. After issuance of the rank ordered list, Duke Energy Indiana and CRA performed advanced due diligence on projects. Based on that detailed review, the rank ordered list was updated.

Q. PLEASE DISCUSS YOUR RECOMMENDATION FOR DUKE ENERGY INDIANA WITH REGARD TO THE ACQUISITION OF SOLAR POWER?

A. CRA rank ordered qualifying solar projects consistent with the evaluation criteria that captured the project economics, project specific risks, and benefits associated with each option. These projects offer Duke Energy Indiana customers low cost, renewable energy, and the associated renewable energy credits ("RECs"). They also provide capacity in

1 support of Duke Energy Indiana's needs. As further discussed below, CRA further
2 evaluated the Speedway Solar PPA using the RFP criteria, and it received the second
3 highest score based on the evaluation criteria used for the RFP.

4 **Q. HOW WERE THE BENEFITS OF RENEWABLE ENERGY CAPTURED IN THE**
5 **RESOURCE PLANNING PROCESS AND FOR BID SELECTION?**

6 A. The value of renewable energy was incorporated into the 2021 IRP process through
7 evaluation of portfolio costs, risks, and carbon dioxide emissions. The 2021 IRP's
8 preferred portfolio included renewable and other resources based on the range of benefits
9 offered by each resource and technology class (wind, solar etc.). The RFPs then selected
10 individual projects consistent with that 2021 IRP preferred portfolio. During the RFP
11 phase, solar assets were compared to other solar, wind to other wind. Because the RFP
12 process compared assets within technology classes to each other, there was no explicit
13 evaluation step associated with individual project renewable attributes. Assuming a
14 similar facility capacity factor for like assets, assets within the same asset class would
15 generate a similar number of RECs per MW-year and therefore similar REC values. As
16 further discussed by witness Scott Tharp, the Speedway Solar PPA includes provisions
17 that Duke Energy Indiana will own or be entitled to claim all RECs from the project.

18 **Q. PLEASE DESCRIBE THE SPEEDWAY SOLAR PROJECT.**

19 A. The Speedway Solar project is a 199 MWac solar facility located south of Gwynneville,
20 Indiana with an anticipated commercial operation date of September 2025. The project is
21 under development by Ranger Power.

Q. WAS THE SPEEDWAY SOLAR PPA BID INTO THE INTERMITTENT RFP?

A. No. Ranger Power bid two solar projects into the Intermittent RFP, one of which ultimately became unavailable, the second of which was selected by CRA as a Tier 1 project. In February 2023, Ranger Power informed Duke Energy Indiana that the Speedway Solar project, which was not bid into the Intermittent RFP because it had previously been contracted to a different offtaker, had become available. CRA evaluated the Speedway Solar PPA using the RFP criteria, and selected it as a Tier 1 project. As the Speedway Solar PPA price was lower than the remaining solar project that Ranger Power bid into the Intermittent RFP, negotiations for a definitive agreement commenced on the Speedway Solar PPA.

Q. IS THE SPEEDWAY SOLAR PPA AN ECONOMIC OPTION FOR MEETING DUKE ENERGY INDIANA'S RETAIL ELECTRIC LOAD?

A. Yes. The 2021 IRP identified that, based on the current market economics and outlook, solar power represents an excellent resource option for Duke Energy Indiana and its customers. Although the Speedway Solar PPA was not bid into the Intermittent RFP, CRA analyzed the project once it became available using the RFP evaluation criteria as a framework. Had the project been bid into the Intermittent RFP, the Speedway Power PPA would have received <BEGIN CONFIDENTIAL> [REDACTED] [REDACTED] <END CONFIDENTIAL>. CRA considers this a competitive economic score; the highest <BEGIN CONFIDENTIAL> [REDACTED] [REDACTED] <END CONFIDENTIAL>. The Speedway Solar PPA would have received <BEGIN CONFIDENTIAL> [REDACTED] [REDACTED]

1 [REDACTED]

2 [REDACTED] <END CONFIDENTIAL>. The

3 Speedway Solar project is a mature development project and comes with limited

4 development or asset specific risk. The Speedway Solar project received <BEGIN

5 CONFIDENTIAL> [REDACTED]

6 [REDACTED] <END CONFIDENTIAL>.

7 Although the Speedway Solar PPA received <BEGIN CONFIDENTIAL> [REDACTED]

8 [REDACTED] <END CONFIDENTIAL>, the

9 proposal received a <BEGIN CONFIDENTIAL> [REDACTED]

10 [REDACTED] <END

11 CONFIDENTIAL>. No significant asset-specific issues were identified for the project.

12 **Q. WHAT TRANSACTION STRUCTURE OPTIONS WERE OFFERED FOR THE**
13 **SPEEDWAY SOLAR PROJECT PROPOSAL?**

14 **A.** Ranger Power offered the Speedway Solar Project under a PPA structure.

15 **Q. DOES THIS CONCLUDE YOUR PREFILED DIRECT TESTIMONY?**

16 **A.** Yes.

ROBERT J. LEE
Vice President

M.S. Industrial Administration,
Carnegie Mellon University,

B.A. Mathematics,
Boston College

Mr. Lee is a Vice President 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's Auctions and Competitive Bidding Practice, Mr. Lee was a member of CRA's Energy Practice and he still consults to clients in that area. Mr. Lee began his consulting career in senior staff positions at the PA Consulting Group and at Putnam, Hayes and Bartlett, Inc. At Putnam, Hayes and Bartlett, Mr. Lee was involved in quantifying the stranded costs for several utilities in Ohio, Pennsylvania and West Virginia resulting from proposed changes in market structure. Mr. Lee led modeling teams for clients at Allegheny Power Systems, Dayton Power and Light Company and Cinergy in support of their transition from vertically integrated utilities operating under cost of service regulation to utilities operating in markets with retail choice.

AUCTIONS AND COMPETITIVE BIDDING

Electricity

Consumers Energy

- Supported Consumers to execute a request for proposal process designed to identify existing thermal resources in support of Consumers' energy and capacity needs. CRA managed the RFP process from project launch through winner selection and the pending regulatory phase. CRA marketed the process to bidders, supported bidders through bid submission, evaluated proposals based on project economics and other factors and recommended projects for advancement.

Great River Energy

- Supported Great River management on soliciting and evaluating bids for Great River's (GRE) HVDC transmission line that connects the Coal Creek power plant to MISO at or around Minneapolis/St. Paul. Worked with GRE on the solicitation process, identifying data gaps and material uncertainty for potential counterparties and stakeholder communication related to the potential HVDC sale.

Hoosier Energy

- Designed and executed a competitive, all-sources RFP for resources in MISO on behalf of Hoosier Energy. The RFP was designed to solicit bids for capacity to replace Hoosier's Merom coal-fired power plant. Managed the CRA team in the development of the RFP rules, marketing the opportunity to potential counterparties and worked closely with Hoosier on the bid review and winner selection.

Northern Indiana Public Service Company

- Designed and executed a series of competitive RFP for capacity in MISO LRZ6 on behalf of Northern Indiana Public Service Company. Managed a process designed to be compliance with FERC Edgar Allegheny requirements. Examined options for a structured tax-equity joint venture structure to monetize tax assets associated with renewable ownership. Let several working sessions with FERC staff related to tax-equity financing structures and the implications of renewable ownership for utilities.

Monongahela Power Company

- Designed a competitive RFP process for Monongahela Power Company to evaluate options to meet anticipated capacity shortfalls for the West Virginia utility. Designed and managed the bidding process, modeled the anticipated operations of facilities bid into the RFP, selected the winning bidder and supported the acquisition through testimony at FERC and the West Virginia PSC.

Duke Energy Ohio, Inc.

- Designed a competitive bidding process (CBP) to procure wholesale generation for retail Standard Service Offer (SSO) load for Duke Energy Ohio, Inc. covering the period from January 1, 2012 through May 31, 2018. The CBP used a clock auction format. The auction process was subject to approval by the Public Utilities Commission of Ohio (PUCO).
- Designed and managed a request for proposal process (RFP) to identify a supplier for the Percentage of income Payment Plan (PIPP) customer load of Duke Energy Ohio.

The Dayton Power and Light Company

- Designed a competitive bidding process (CBP) to procure wholesale generation for retail Standard Service Offer (SSO) load for Dayton Power and Light. The procurements covered the period from January 1, 2014 through May 31, 2017. The CBP used a clock auction format. The auction process and outcome were subject to approval by the Public Utilities Commission of Ohio (PUCO).

Duquesne Light Company

- Designed a competitive bidding process (CBP) to procure wholesale generation for retail provider of last resort (POLR VIII) load for the Duquesne Light Company.

DTE Electric Company

- Managed DTE Electric Company (DTE)'s 2017 capacity RFP. The RFP was designed to analyze options for combined cycle generating capacity within MISO Zone 7 for the purposes of acquisition.
- Managed DTE Electric Company (DTE)'s 2015 capacity RFP. The RFP was designed to acquire a power plant to help DTE close an identified capacity shortfall. DTE acquired the East China combustion turbine from an affiliate under a process approved by FERC under affiliate transaction guidelines.

FirstEnergy Corporation

- Assisted in the design and ongoing execution of a competitive bidding processes to procure wholesale generation and capacity for retail Standard Service Offer (SSO) load of customers of FirstEnergy's Ohio Utilities — Cleveland Electric Illuminating Company, The Toledo Edison Company, and Ohio Edison Company. 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 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).
- Designed and managed a request for proposal process (RFP) to identify a supplier for the Percentage of income Payment Plan (PIPP) customer load of FirstEnergy's Ohio Utilities.
- Managed an RFP process for FirstEnergy's Monongahela Power (Mon Power) affiliate in West Virginia. The RFP was designed to acquire a power plant to help Mon Power close an identified capacity and energy shortfall.
- Managed an RFP process for Mon Power to divest a share of the Bath County pumped storage facility.

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.

ASSET VALUATION AND MARKET STRATEGY

Monongahela Power Company

- Managed the modeling and valuation of fossil power stations within the APS Zone of PJM. Modeling was conducted in support of Mon Power's 2017 RFP for capacity resources.

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_x 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.

The Dayton Power and Light Company – AES Ohio Generation

- Quantified the reactive power revenue requirements for the combined fossil fleet of Dayton Power and Light and AES Ohio Generation.

TESTIMONY AND ADMINISTRATIVE PROCEEDINGS

PUCO Case No. 22-0900-EL-SSO. Testimony on behalf of The Dayton Power and Light Company d/b/a AES Ohio for Approval of Its Electric Security Plan pursuant to Section 4928.143, Revised Code

Michigan Public Service Commission Case No. U-21090. Testified before the Michigan Public Service Commission on behalf of Consumers Energy and their request for proposals process related to the acquisition of generating stations located in MISO LRZ7.

FERC, ER19-2775-000 and EC20-8-000, Testimony in support of Northern Indiana Public Service Company under Sections 205 and 203 of the Federal Power Act related to Affiliate Transactions.

IURC Case Nos. 45194, 45195, 45196, 45489 and related cases. Testimony before the Indiana Utility Regulatory Commission on behalf of Northern Indiana Public Service Company. At issue was NIPSCO's request for the issuance of a certificate of public convenience and necessity related to the development and acquisition or contractual control of three separate wind farms in Indiana.

PUCO Case No. 17-1263-EL-SSO. Testimony on behalf of the Duke Energy Ohio (Duke) related to Duke's application for authority to establish a Standard Service Offer pursuant to Section 4928.143, Revised Code, in the form of an Electric Security Plan.

Public Service Commission of West Virginia Case No. 17-0269-E-PC. Testimony on behalf of the Monongahela Power Company (Mon Power) in support of Mon Power's petition for approval of a generation resource transaction and related relief.

Monongahela Power Company, Allegheny Energy Supply Company, LLC (AE Supply). *FERC Docket EC17-88-000.* Submitted testimony in support of the proposed transfer of a generating asset from AE Supply to Mon Power.

PUCO Case No. 16-0395-EL-SSO. Testimony on behalf of the Dayton Power & Light Company (DP&L) related to DP&L's application for authority to establish a Standard Service Offer pursuant to Section 4928.143, Revised Code, in the form of an Electric Security Plan.

Dayton Power and Light Company, *et al.*, *FERC Docket No. ER16-2569* Testimony in support of Dayton Power and Light Company's reactive power tariff.

AES Ohio Generation, LLC, *Docket No. FERC ER16-2570*; Testimony in support of AES Ohio Generation reactive power tariff.

DTE Electric Company, *et al.*, *Docket No. FERC EC15-138*; in support of DTE's affiliate acquisition of the East China combustion turbine located in East China Township Michigan

PUCO Case No. 14-841-EL-SSO. Testimony on behalf of the Duke Energy Ohio, Inc. (Duke) related to Duke's application for authority to establish a Standard Service Offer pursuant to Section 4928.143, Revised Code, in the form of an Electric Security Plan.

Sixth Judicial Circuit in and for Pinellas County Florida; Case Number 2012-006187-SC. Testified on the structure and efficacy of a competitive bidding process designed to establish market values for settling automobile insurance claims

PUCO Case No. 12-426-EL-SSO. Testimony on behalf of the Dayton Power & Light Company (DP&L) related to DP&L's application for authority to establish a Standard Service Offer pursuant to Section 4928.143, Revised Code, in the form of an Electric Security Plan.

PUCO Case No. 11-3549-EL-SSO. Testimony on behalf of the Duke Energy Ohio, Inc. (Duke) related to Duke's application for authority to establish a Standard Service Offer pursuant to Section 4928.143, Revised Code, in the form of an Electric Security Plan.

PUCO Case No. 10-2586-EL-SSO. Testimony on behalf of the Duke Energy Ohio, Inc. (Duke) related to Duke's application for approval of a Market Rate Offer to conduct a competitive bidding process for Standard Service Offer electric generation supply.

Developed and presented PSEG and Exelon's joint claim for relief to the Oil Spill Liability Trust Fund, US Department of Homeland Security. Prepared the claim for damages associated with the temporary shut down of the Salem nuclear facility as a result of the November, 2004 Athos I oil spill.

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_x 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

Chestnut Hill, MA

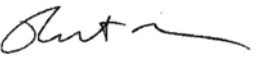
BA Mathematics

PETITIONER'S ATTACHMENT 3-B IS CONFIDENTIAL

PETITIONER'S ATTACHMENT 3-C IS CONFIDENTIAL

VERIFICATION

I hereby verify under the penalties of perjury that the foregoing representations are true to the best of my knowledge, information and belief.

Signed: 
Robert J. Lee

Dated: June 15, 2023