Cause No. 46193

On Behalf of Petitioner,
DUKE ENERGY INDIANA, LLC

VERIFIED DIRECT TESTIMONY OF ROBERT J. LEE

Petitioner's Exhibit 5

February 13, 2025

DIRECT TESTIMONY OF
ROBERT J. LEE
VICE PRESIDENT OF CRA INTERNATIONAL D/B/A
CHARLES RIVER ASSOCIATES, INC.
BEFORE THE INDIANA UTILITY REGULATORY COMMISSION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

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

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

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

Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL AND BUSINESS EXPERIENCE.

A. I received a Master of Science in Industrial Administration from Carnegie Mellon University in Pittsburgh, Pennsylvania and a BA in Mathematics from Boston College in Chestnut Hill, Massachusetts. After graduate school, I held senior staff positions with Putnam, Hayes and Bartlett and the PA Consulting Group. I joined CRA's energy practice in 2001 and became a Vice President with the firm in 2013. During my tenure in consulting, I have focused on power industry restructuring, generating asset valuation, and the economics of environmental policy. In 2008, I joined CRA's Auctions and Competitive Bidding Practice where I have focused primarily on default service procurements and related issues facing market participants in deregulated wholesale and retail electricity markets. In association with that work, CRA executes requests for proposal ("RFP") processes designed to help its utility clients meet their capacity needs.

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

A. I am submitting this testimony on behalf of Duke Energy Indiana LLC ("Duke Energy Indiana" or the "Company").

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

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

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

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

A. Yes. Most recently, I submitted testimony before the Indiana Utility Regulatory Commission ("Commission") in Cause No. 45907, in which I testified on behalf of Duke Energy Indiana concerning the approval of a solar energy power purchase agreement ("Speedway Solar PPA"). I also testified in Cause No. 45887, in which Northern Indiana Public Service Company LLC ("NIPSCO") requested approval of a solar energy power purchase agreement ("Appleseed PPA") and a wind energy power purchase agreement ("Templeton PPA"). I also submitted testimony before the IURC for NIPSCO's request for approval of a certificate of public convenience and necessity ("CPCN") to purchase and acquire (indirectly through a joint venture structure) (1) a 265 megawatt ("MW") solar joint venture (the "Bridge I Project"); (2) a 435 MW solar and 75 MW energy storage joint venture (the "Bridge II Project"); and (3) a 200 MW solar and 60 MW energy storage joint venture (the "Cavalry Project") in Cause No. 45462; NIPSCO's request for approval and associated cost recovery of (1) a Solar Energy Purchase Agreement between NIPSCO and Brickyard Solar, LLC dated June 30, 2020 (the "Brickyard Project"), and (2) a Solar Generation and Energy Storage Energy Purchase Agreement between NIPSCO and Greensboro Solar Center, LLC dated June 30, 2020 (the "Greensboro Project") in Cause No. 45403; NIPSCO's request for a CPCN to purchase and acquire (indirectly through a joint venture structure) a (1) 102 MW wind

farm (the "Rosewater Project") in Cause No. 45194, and (2) 302 MW wind farm (the "Crossroads Project") in Cause No. 45310; NIPSCO's request for approval and associated cost recovery of a wind purchased power agreement with (1) Jordan Creek Wind Farm LLC in Cause No. 45195 (the "Jordan Creek Project"), and (2) Roaming Bison Wind Farm LLC in Cause No. 45196 (the "Roaming Bison Project").

I have testified before the Public Utility Commission of Ohio on behalf of Duke Energy Ohio, FirstEnergy Ohio and AES Ohio related to the design and administration of procurement auctions to secure suppliers for their default service needs. In 2024, I testified on behalf of Dominion Energy South Carolina related to a procurement process and the associated analysis in connection to the replacement of the Urquhart combustion turbine facility in that state. In 2024, I, and others at CRA, supported default service providers in Alberta through administrative proceedings before the Alberta Utilities Commission related to Provider of Last Resort pricing. In 2017, I testified before the Public Service Commission of West Virginia on behalf of FirstEnergy's Monongahela Power Company ("Mon Power"). That testimony related to an RFP conducted in support of their anticipated capacity needs. I have submitted testimony before the Federal Energy Regulatory Commission ("FERC") on affiliate transaction issues associated with RFPs conducted for NIPSCO (Rosewater), Mon Power, and DTE Energy. I submitted testimony to FERC quantifying the reactive power tariff for generating assets owned by DP&L and AES Ohio Generation. In addition, I have testified on competitive bidding in

the insurance industry in civil litigation. My curriculum vitae is attached as Attachment 5-A (RJL).

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

A. CRA was retained by Duke Energy Indiana to support Duke Energy Indiana's long-term resource planning process through the design, administration, and bid evaluation of its all-source RFP processes. My role was to help design and administer the RFP processes. The purpose of my direct testimony is to explain the RFP process and the analysis Duke Energy Indiana used to evaluate its various resource options, including the turbine plant consisting of two combined cycle ("CC") natural gas turbines, each approximately 738 megawatts ("MW") ("CC 1" and "CC 2"), constructed on available property at Duke Energy Indiana's Cayuga Generating Station site ("Cayuga") (the "Cayuga CC Project").

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

A. Yes. In addition to my curriculum vitae attached as Attachment 5-A (RJL), I am sponsoring Confidential Attachment 5-B (RJL), which is the opinion letter provided by CRA to Duke Energy Indiana following the 2022 RFPs (defined below) (the "2022 RFPs Opinion Letter"), and Confidential Attachment 5-C (RJL), which is a detailed table of how each proposal in the 2022 RFPs was evaluated and scored. I am also sponsoring Confidential Attachment 5-D (RJL), which is the opinion letter provided by CRA to Duke Energy Indiana following the 2023/2024 RFPs (defined below) (the "2023/2024 RFPs Opinion Letter," and, together with the 2022 RFPs Opinion Letter, the "Opinion

Letters"), and Confidential Attachment 5-E (RJL), which is a detailed table of how each proposal in 2023/2024 RFPs was evaluated and scored. These attachments were prepared by me or under my direction and supervision.

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

A. In 2021, Duke Energy Indiana conducted an integrated resource plan ("IRP") process through which Duke Energy Indiana developed a preliminary capacity target that included incremental additions of both intermittent and non-intermittent resources (the "2021 IRP"). In 2023, Petitioner performed updated modeling, with CRA supporting those efforts, to address significantly changed circumstances since December 2021, including Midcontinent Independent System Operator, Inc.'s ("MISO") implementation of the seasonal accreditation capacity ("SAC") construct and the Inflation Reduction Act.

Q. WHAT IS THE ROLE OF THE RFP PROCESS IN DUKE ENERGY INDIANA'S LONG-TERM RESOURCING PLANNING?

A. In 2021, CRA was retained by Duke Energy Indiana to assist in the design, administration, and bid evaluation of two Request for Proposal processes, one for intermittent resources (the "2022 Intermittent RFP") and a second for non-intermittent resources (the "2022 Non-Intermittent RFP") (together, the "2022 RFPs"). The intent of the 2022 RFPs was to identify resources consistent with acquisition resources outlined in Duke Energy Indiana's 2021 IRP.

In 2023, CRA was again retained by Duke Energy Indiana to assist in the design, administration, and bid evaluation of two RFP processes, one for intermittent resources (the "2023/2024 Intermittent RFP") and a second for non-intermittent resources (the

"2023/2024 Non-Intermittent RFP") (together, the "2023/2024 RFPs"). The 2022 RFPs and the 2023/2024 RFPs may be referred to collectively herein as the "RFPs."

The role of the 2023/2024 RFPs in Duke Energy Indiana's broader resource planning was to identify the best actionable projects available in the market to fulfill Duke Energy Indiana's 2024 IRP capacity and energy resource requirements for advancement for more detailed modeling and due diligence efforts. The initial magnitude of the 2023/2024 RFPs' resource need was directly dependent on the conclusions derived from the Company's 2021 IRP and updated modeling performed in 2023.

Q. WHAT IS THE PURPOSE OF THE OPINION LETTERS?

A. Through the Opinion Letters and their attachments, CRA provides a review of the RFPs and includes a rank ordering of projects submitted into the RFPs. In the Opinion Letters, the rank ordering of assets and projects is grouped by the following resource types: solar and solar plus storage proposals, wind proposals, standalone storage proposals, and thermal proposals. The ranking of projects was based on the scoring criteria, which were developed in advance of the launch of the RFPs. The Opinion Letters were issued to provide a final overview and evaluation of the RFPs and to confirm that the RFPs were performed in a transparent, fair, and nondiscriminatory manner and that no bidder was given an undue advantage or preference.

Q. WHAT DO CONFIDENTIAL ATTACHMENTS 5-C (RJL) AND 5-E (RJL) SHOW?

A. Confidential Attachment 5-C (RJL) and Confidential Attachment 5-E (RJL) provide the detailed scoring results for each project bid into the 2022 RFPs and 2023/2024 RFPs, respectively.

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

A. Prior to issuing the RFPs, CRA worked with the Duke Energy Indiana team to define the process objectives and requirements. Duke Energy Indiana advised CRA that in order to ensure reliable, adequate capacity supplies to meet customer needs, Duke Energy Indiana intended to acquire intermittent and non-intermittent resources that, at a minimum, would meet established industry-wide reliability and performance criteria for electric generation facilities. CRA worked with Duke Energy Indiana to prepare the RFP documentation and ensure the product requested was clearly defined and that the evaluation criteria were clearly specified in the RFP documentation.

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

A. Through the 2022 RFPs, Duke Energy Indiana's objective was to solicit proposals for the purchase and sale of existing electric generating assets or assets in development that were either physically located within MISO Local Resource Zone 6 ("LRZ6") or had firm transmission access to LRZ6 and could be designated as LRZ6 Network Resource Interconnection Service ("NRIS") qualified capacity (the LRZ6 requirement did not apply to wind resources due to the low count of projects and sites within Indiana and the limited unforced capacity ("UCAP") awarded to such resources).

Through the 2023/2024 RFPs, Duke Energy Indiana's objective was to solicit proposals from existing electric generating assets or assets in development physically located within MISO, with a strong preference for resources located in LRZ6 or with firm transmission access to LRZ6. The LRZ6 preference was not a firm requirement for bidding but non-LRZ6 resources were only considered as power purchase agreement ("PPA") arrangements and only considered if there were insufficient in-Zone resources to meet the Company's needs.

Q. PLEASE DESCRIBE THE TIMELINE FOR THE RFP PROCESSES.

A. The 2022 RFPs were issued on February 21, 2022, and CRA announced the process to bidders 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 of the 2022 RFPs had a separate bid due date. For the 2022 Intermittent RFP, final, written bid proposals were due on April 18, 2022; 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. Prior to and following the price refresh, both Cayuga configurations were the highest scoring, long-term, thermal options among projects that remained viable through the due diligence process.

For the 2023/2024 RFPs, CRA announced the process to bidders through a public advisory meeting conducted on November 3, 2023, and the 2023/2024 RFPs were issued

on December 14, 2023. Prospective bidders were required to provide a non-binding Notice of Intent, Non-disclosure Agreement, and Pre-Qualification Application by January 16, 2024. The bid due date for both RFPs was February 23, 2024. CRA provided a ranked list of projects in August 2024.

The timelines 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 both the Duke Energy Indiana 2021 and 2024 IRP stakeholder processes to inform interested parties about the RFP process and approach. CRA maintained a public information website[1] that contained all key documents related to the RFPs, as well as scoring criteria and other RFP details. 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 issued news releases related to the RFPs.

All interested parties were allowed to submit proposals in the RFPs. Ultimately, CRA approved all pre-qualification applications submitted and notified the applicants of

[1] https://www.deirfp.com/

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 2022 RFPS GENERATE SUBSTANTIAL INTEREST FROM BIDDERS?

A. Yes. Across the 2022 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 of the 2022 RFPs 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 2022 RFPs across technology options.

Figure 1: Project ICAP Megawatts by Technology and Acquisition Structure

ICAP by Asset Type				
	Asset Sale	PPA	Both	Total
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**

Figure 1 reflects project count, not proposals. Many of the proposals included both fixed and variable pricing options and flexibility on PPA start dates or contract term. Some proposals offered options on technology configurations. Certain options may be

mutually exclusive and therefore may not constitute independent transaction options.

Q. DID THE 2023/2024 RFPS GENERATE SUBSTANTIAL INTEREST FROM BIDDERS?

A. Yes. Across the 2023/2024 RFPs, 35 bidders submitted prequalification applications by the deadline supported by 86 projects totaling over 25 GW in installed capacity ("ICAP"). While not all pre-qualified project and bidders ultimately submitted a formal bid into the process, each of the 2023/2024 RFPs attracted proposals from a broad set of bidders and resources. Over 18.6 GW of physical projects were bid into the RFP and several times that figure in proposal options. Figure 2 shows the ICAP for projects and proposals bid into the 2023/2024 RFPs across technology options. Figure 2 reflects project count, not proposals. Many of the proposals included both fixed and variable pricing options and flexibility on PPA start dates or contract term. Some proposals offered options on technology configurations. Certain options may be mutually exclusive and therefore may not constitute independent transaction options. The "Both" designation in Figure 2 indicates that the bidder offered a single asset as either an asset sale or a PPA at the Company's discretion.

Figure 2: Project Megawatts by Technology and Acquisition Structure

MIN of ICAP and POI by Asset Type (MW)

	Asset Sale	PPA	Both	Total
Solar	310	4,285	550	**5,145**
Solar + Storage[2]	2,562	1,425	625	**4,612**
Storage	0	901	1,100	**2,001**
Thermal	1,438	3,667	0	**5,105**
Wind	0	1,777	0	**1,777**
Total	**4,310**	**12,055**	**2,275**	**18,640**

Q. HOW WOULD YOU CHARACTERIZE THE COMPETITIVENESS OF THE RFPS?

A. I would characterize the RFPs as highly competitive. In total, over 12 GW and 18.6 GW of assets were offered into the 2022 and 2023/2024 RFPs, respectively, providing a wide range of capacity choices across technologies and acquisition structures.

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

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

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

resources as input to the advanced due diligence and portfolio construction phase of the IRP update process.

CRA reviewed all proposals that met or appeared to meet pre-determined qualifying criteria set forth in the RFP documentation and evaluated each based on certain pre-specified evaluation criteria. Each project was evaluated based on multiple categories consistent with the evaluation criteria for the RFPs, which were pre-determined and finalized prior to RFP launch; the non-economic categories included development risk, asset reliability and deliverability, and asset-specific benefit and risk factors. The economic portion of the evaluation considered the Levelized Cost of Energy ("LCOE") or Levelized Cost of Capacity ("LCOC") calculated over a fixed period.

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

Q. PLEASE DESCRIBE THE BID DISQUALIFICATION PROCESS FOR THE 2022 RFPS.

A. Certain bids into the 2022 RFPs were disqualified and eliminated from further consideration. Disqualifications fell into four categories: (1) projects did not meet the site

control standards of the 2022 RFPs; (2) projects did not meet the LRZ6 location requirement for the 2022 RFPs; (3) projects' development plan relied on generator replacement for Duke Energy Indiana facilities with uncertain retirement status; and (4) developmental technology bids that did not provide sufficient pricing or development plan information to evaluate on a level basis with more proven technologies.

Q. PLEASE DESCRIBE THE BID DISQUALIFICATION PROCESS FOR THE 2023/2024 RFPS.

A. Certain bids into the 2023/2024 RFPs were disqualified and eliminated from further consideration. Disqualifications fell into four categories: (1) asset purchase agreement ("APA") bids where the Company declined to propose a cost to complete for project-specific technical reasons; (2) projects not located in MISO; (3) proposals supported by coal-fired resources only; and (4) proposals from facilities located outside LRZ6 when there were sufficient in-zone resources and bid submissions.

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

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

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

A. Yes. CRA executed the RFPs on behalf of Duke Energy Indiana, which included facilitating all bidder communication, maintaining all appropriate separation protocols 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. HAS THE COMPANY SOLICITED COMPETITIVE BIDS FOR PURCHASED POWER CAPACITY AND ENERGY FROM ALTERNATIVE SUPPLIERS AS REQUIRED BY IND. CODE § 8-1-8.5-5?

A. Yes. As I understand it, Ind. Code § 8-1-8.5-5(e)(2)(B) requires the Commission, in a CPCN filing, to consider solicitation by the applicant of competitive bids to obtain purchased power capacity and energy from alternative suppliers. As discussed at length herein, the Company has complied through its RFP processes, which solicitated competitive bids from interested parties for all resource types.

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.*, thermal, wind, solar, etc.) and submitted to Duke Energy Indiana. Projects were selected for further due diligence based on the resource planning requirements and analysis. With respect to the 2022 RFPs, after issuance of the rank ordered list, Duke Energy Indiana and CRA performed advanced due diligence on projects. Based on that detailed review, the corresponding rank ordered list was updated.

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

A. CRA rank ordered qualifying thermal projects consistent with the evaluation criteria that captured the project economics, project specific risks, and benefits associated with each option. As discussed below, CRA evaluated the Cayuga CC Project using the RFP criteria. Based on the evaluation criteria used for the RFP, CC 1 received the second highest score[2] in the 2022 Non-Intermittent RFP, and CC 2 received the highest score in the 2023/2024 Non-Intermittent RFP.

Q. HOW DID THE CAYUGA CC PROJECT PERFORM IN CRA'S RANK ORDERED LIST?

A. The CC 1 component of the Cayuga CC Project received an economic score of **<BEGIN CONFIDENTIAL>** [redacted] **<END CONFIDENTIAL>**. CC 1 received strong scores in each of the non-economic categories as well, resulting in a total overall score of **<BEGIN CONFIDENTIAL>** [redacted]

[2] With respect to the project with the highest-ranking score in the 2022 Non-Intermittent RFP, there were substantial timeline and cost uncertainties related to the project's tie-line interconnection to MISO and therefore, Duke Energy Indiana opted not to pursue the project.

[redacted] **<END CONFIDENTIAL>**. CC 1 received **<BEGIN CONFIDENTIAL>** [redacted] **<END CONFIDENTIAL>**.

The CC 2 component of the Cayuga CC Project received an economic score of **<BEGIN CONFIDENTIAL>** [redacted] **<END CONFIDENTIAL>**. CC 2 received strong scores in each of the non-economic categories as well, resulting in a total overall score of **<BEGIN CONFIDENTIAL>** [redacted] **<END CONFIDENTIAL>**. CC 2 received **<BEGIN CONFIDENTIAL>** [redacted] **<END CONFIDENTIAL>**. No significant asset-specific issues were identified for either CC 1 or CC 2.

Q. DOES THIS CONCLUDE YOUR PREFILED DIRECT TESTIMONY?

A. Yes.

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: _____ Dated: 2-5-24
Robert J. Lee

ROBERT J. LEE

Vice President

M.S. Industrial Administration,
Carnegie Mellon University,

B.A. Mathematics,
Boston College

Mr. Lee is a Vice President at Charles River Associates. 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. 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

Dominion Energy South Carolina

- Supported Dominion through stakeholder engagement, RFP development and RFP execution for a process designed to identify replacement capacity for the Urquhart CT. CRA executed an All-Source RFP process for resources capable of meeting a range of primary and secondary utility needs related to the facility's retirement.

Duke Energy Carolinas

- Supported Duke Energy's Carolina affiliates, Duke Energy Carolinas and Duke Energy Progress, execute annual solar procurement processes. The procurements were designed to identify local solar and solar paired with storage options. The RFPs were designed to procure over 1,000 MW of PPA and utility ownership options each year in support of Duke's carbon plan targets.

Cause No. 46193

Duke Energy Indiana

- Duke Energy Indiana to execute two, All-Source, RFP processes in support of Duke Indiana's capacity needs. The RFPs were designed to identify resources in support of the targets identified by Duke's integrated resource planning efforts. The RFP's considered thermal and renewable resource options located in MISO LRZ6 and across a broader MISO footprint.

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 Creak 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.

Cause No. 46193

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.

Cause No. 46193

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).

Cause No. 46193

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 *global*DairyTrade, 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.

Cause No. 46193

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.

Cause No. 46193

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. 24-278-EL-SSO. Testified on behalf of Duke Energy Ohio related to their application for authority to establish a Standard Service Offer pursuant to Section 4928.143, Revised Code, in the form of an Electric Security Plan.

Direct Energy Regulated Service, ENMAX Energy Corporation, EPCOR Energy Alberta GP 2025 Rate of Last Resort Energy Price Setting Plan Application Proceeding 29204. Testified on behalf of Rate of Last Resort providers in Alberta related to the cost and risk associated with default service pricing and the Alberta RoLR market structure.

PUCO Case No. 23-301-EL-SSO. Testified on behalf of the FirstEnergy Ohio Utilities related to their 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. 22-0900-EL-SSO. Submitted testimony on behalf of AES Ohio related to an application for authority to establish a Standard Service Offer pursuant to Section 4928.143, Revised Code, in the form of an Electric Security Plan.

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 Norther Indian 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.

Cause No. 46193

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

Cause No. 46193

“NO_X Trading: Strategies for Electric Cooperatives”; with Anne Smith; Cooperative Research Network, National Rural Electric Cooperative Association; April 2003

EDUCATION

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

BOSTON COLLEGE Chestnut Hill, MA
College of Arts and Sciences
BA Mathematics