STATE OF INDIANA

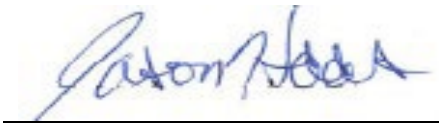
INDIANA UTILITY REGULATORY COMMISSION

VERIFIED PETITION OF DUKE ENERGY INDIANA, LLC ("DUKE ENERGY INDIANA") PURSUANT TO IND. CODE CHS. 8-1-8.5, 8-1-8.8, AND IND. CODE §§ 8-1-2-0.6 AND 8-1-2-23 FOR (1) ISSUANCE OF A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY ("CPCN") PURSUANT TO IND. CODE CH. 8-1-8.5 TO CONSTRUCT TWO COMBINED CYCLE ("CC") NATURAL GAS UNITS, AT APPROXIMATELY 738 MEGAWATTS (WINTER RATING) EACH, AT THE EXISTING CAYUGA GENERATING STATION ("CAYUGA CC PROJECT"); (2) APPROVAL OF THE CAYUGA CC PROJECT AS A CLEAN ENERGY PROJECT AND AUTHORIZATION FOR FINANCIAL INCENTIVES INCLUDING TIMELY COST RECOVERY THROUGH CONSTRUCTION WORK IN PROGRESS ("CWIP") RATEMAKING THROUGH A GENERATION COST ADJUSTMENT ("GCA") TRACKER MECHANISM UNDER IND. CODE CH. 8-1-8.8; (3) AUTHORITY TO RECOVER COSTS INCURRED IN CONNECTION WITH THE CAYUGA CC PROJECT; (4) APPROVAL OF THE BEST ESTIMATE OF COSTS OF CONSTRUCTION ASSOCIATED WITH THE CAYUGA CC PROJECT; (5) APPROVAL OF CHANGES TO DUKE ENERGY INDIANA'S ELECTRIC SERVICE TARIFF RELATING TO THE PROPOSED GCA TRACKER MECHANISM; (6) APPROVAL OF SPECIFIC RATEMAKING AND ACCOUNTING TREATMENT; AND (7) ONGOING REVIEW OF THE CAYUGA CC PROJECT	)	**CAUSE NO. 46193**

INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR
PUBLIC'S EXHIBIT NO. 5
REDACTED TESTIMONY OF OUCC WITNESS
ROOPALI SANKA

Respectfully submitted,

INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR



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CERTIFICATE OF SERVICE

This is to certify that a copy of the ***Indiana Office of Utility Consumer Counselor Public's Exhibit No. 5 Redacted Testimony of OUCC Witness Roopali Sanka*** has been served upon the following in the above-captioned proceeding by electronic service on May 8, 2025.

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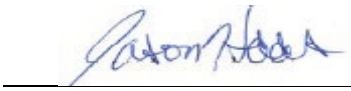

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REDACTED TESTIMONY OF OUCC WITNESS
ROOPALI SANKA
DUKE ENERGY INDIANA, LLC.
CAUSE NO. 46193

I. INTRODUCTION

Q: Please state your name and business address.

A: My name is Roopali Sanka, and my business address is 115 West Washington Street, Suite 1500 South, Indianapolis, Indiana 46204.

Q: By whom are you employed and in what capacity?

A: I am employed as a Utility Analyst in the Indiana Office of Utility Consumer Counselor's ("OUCC") Electric Division. A summary of my educational background and experience is included in Appendix A attached to this testimony.

Q: What is the purpose of your testimony?

A: I address Duke Energy Indiana, LLC's ("Duke" or "Petitioner") request for the Indiana Utility Regulatory Commission ("Commission") to approve a Certificate of Public Convenience and Necessity ("CPCN") for Duke to construct the proposed Cayuga Combined Cycle ("CC") Project, particularly Duke's failure to properly assess its alternative generation resource options and Duke's competitive Request for Proposal ("RFP") bidding process. I support the OUCC's overall recommendation that the Commission deny Duke's request for a CPCN as filed.

Q: Please describe the review and analysis you conducted to prepare your testimony.

A: I reviewed the testimony and attachments included in Petitioner's case-in-chief. I also prepared data requests and reviewed Duke's responses to the OUCC and various parties' data requests ("DR"). Additionally, I participated in internal

meetings with other OUCC staff to discuss aspects of this case. I also participated in a site visit to Duke's existing Cayuga generation facility.

Q: To the extent you do not address a specific item, issue, or adjustment, does this mean you agree with those portions of Duke's proposals?

A: No. Excluding any specific adjustment, issues, or items Duke proposes does not indicate my approval of those adjustments, issues, or items. Rather, the scope of my testimony is limited to the specific matters I address.

II. RFP BIDDING PROCESS

Q: Please explain Duke's proposed Cayuga CC Project.

A: Duke is proposing to build two advanced 1x1 CC natural gas units at its Cayuga Generation Station site. Each unit is expected to provide around 738 MW of winter capacity, totaling 1,476 MW when both units are in operation. The first CC natural gas unit is scheduled to come online in 2029, followed by the second unit in 2030. During construction, Duke intends to maintain the Cayuga site's current 1,005 MW of coal-fired generation capacity. Once both new units are complete, the CC Project is projected to result in a net increase of 471 MW of capacity.[1]

Q: Please explain the RFP bidding process for this project.

A: In 2021, Duke retained Charles River Associates ("CRA") to help design and evaluate the bids for two RFPs - one for intermittent resources and one for non-

[1] Petitioner's Exhibit 1, Direct Testimony of Stan Pinegar, page 12, lines 10-17.

intermittent resources - aligned with its 2021 IRP. In 2023, CRA was again retained for similar support with respect to Duke's 2023/2024 RFPs.[2]

Q: Do you have concerns with Duke's approach to the bidding process for the Cayuga CC Project?

A: Yes. I have concerns regarding the evaluation methodology used in the bidding process. In turn, these issues raise concerns about whether the process was designed and executed in a way that ensured fair competition and maximum benefits to ratepayers.

Specifically, I am concerned that Duke did not sufficiently evaluate several bids that were competitive with the proposed Cayuga CC Project. This insufficient scrutiny and the disqualification of competitive bids without fully evaluating alternative approaches, as discussed below, shows the bidding process was not adequate to support the final selection of the proposed Cayuga CC Project.

Q: Did Duke receive competitive bids for the acquisition of existing thermal resources?

A: Yes. Duke received **<HIGHLY CONFIDENTIAL>** [redacted] **<HIGHLY CONFIDENTIAL>** through the 2022 RFP. One proposal involved the acquisition of the **<HIGHLY CONFIDENTIAL>** [redacted]

[redacted]

[2] Petitioner's Exhibit 5, Direct Testimony of Robert J. Lee, page 6, line 14 to page 7, line 2.
[3]Highly Confidential Attachment RS-9-HC; Highly Confidential Attachment OUCC 2.2-A.

[redacted] **<HIGHLY CONFIDENTIAL>**[4] However, Duke discounted the **<HIGHLY CONFIDENTIAL>** [redacted] **<HIGHLY CONFIDENTIAL>**

Q: Do you have concerns about the validity of Duke's and CRA's evaluation score of the <HIGHLY CONFIDENTIAL>[redacted]<HIGHLY CONFIDENTIAL> bid?

A: Yes. Duke effectively halted further evaluation of the **<HIGHLY CONFIDENTIAL>**[redacted]**<HIGHLY CONFIDENTIAL>** bid due to interconnection concerns, without conducting a complete assessment of the technical, regulatory, and financial implications of transferring the facility into the MISO RTO. As a result, the evaluation score does not reflect the full range of considerations that would have emerged through a complete analysis. If the **<HIGHLY CONFIDENTIAL>**[redacted]**<HIGHLY CONFIDENTIAL>** proposal had been subject to a thorough review, its score could have either improved or worsened depending on the findings. Because the utility in combination with CRA

[4] Highly Confidential Attachment RS-10-HC: Highly Confidential Attachment OUCC 2.2-B, tab **<HIGHLY CONFIDENTIAL>** "[redacted]" **<HIGHLY CONFIDENTIAL>**.
[5] **<HIGHLY CONFIDENTIAL>** [redacted]. **<HIGHLY CONFIDENTIAL>**
[6] Highly Confidential Attachment RS-10-HC: Highly Confidential Attachment OUCC 2.2-B: **<HIGHLY CONFIDENTIAL>**[redacted] **<HIGHLY CONFIDENTIAL>**.

did not complete or present a full interconnection feasibility analysis, the assigned score lacks a sound basis and should not be relied upon as an accurate reflection of the resource's comparative value.

This dismissal raises concerns about the completeness of the RFP process. Initially, it appears Duke did not conduct a meaningful technical or economic analysis of whether capacity from this non-MISO resource could have been imported into MISO local resource zone ("LRZ") 6, either directly or through deliverability mechanisms such as firm transmission rights. MISO allows capacity imports into LRZs so long as the resource can demonstrate deliverability into the zone under MISO's resource adequacy rules.[7] This means resources external to MISO, including those within PJM's footprint or interconnected near the MISO-PJM seam, may still be viable contributors to MISO's planning reserve margin requirements if proper transmission arrangements are made.

By failing to evaluate the possibility of importing this external capacity, Duke effectively narrowed the scope of its RFP, undermining the claim that a truly competitive, all-source procurement process was conducted. A competitive RFP would include in-zone resources and also consider out-of-zone or out-of-RTO resources as long as they were shown to be deliverable. Duke's approach otherwise is concerning because bids that may have offered a credible dispatchable alternative to in-zone resources, including the proposed Cayuga CC Project, were disqualified. Excluding such a bid at the outset without further evaluation suggests Duke's RFP

[7] MISO Best Practices Manual, 011-Resource Adequacy: 5.2.2 Local Requirements and Transfer Capability, found at: https://www.misoenergy.org/legal/rules-manuals-and-agreements/business-practice-manuals/

was not truly complete. Duke and CRA have not provided evidence demonstrating all these alternative options were thoroughly explored when evaluating the RFP bids.

Q: Are interconnection risks associated with Duke's proposed Cayuga CC Project?

A: Yes. Duke currently has interconnection rights for 1,005 MW for its existing Cayuga coal-fired generation facility, but Duke does not have interconnection rights for the additional 471 MW the proposed Cayuga CC Project would generate. Because the Cayuga CC Project currently faces uncertainty in its interconnection, Duke included $138 Million in network upgrades in its cost estimate, which OUCC Witness Patrick Kelley further discusses. Thus, Duke discounted certain bids based ostensibly on interconnection uncertainty but accepted other bids with similar shortcomings. Bids should not be discounted or completely ruled out due to interconnection uncertainty or without further evaluation.

Q: Did Duke receive competitive bids for thermal Purchase Power Agreements ("PPAs")?

A: Yes. Duke received multiple thermal PPA bids, one being from **<HIGHLY CONFIDENTIAL>** [redacted]

[redacted]

<HIGHLY CONFIDENTIAL>[8]

Q: Were the thermal PPA bids competitive with the thermal facility construction bids?

A: Yes. However, there were **<HIGHLY CONFIDENTIAL>** [redacted] **<HIGHLY CONFIDENTIAL>** thermal PPAs that Duke disqualified. **<HIGHLY CONFIDENTIAL>** [redacted] **<HIGHLY CONFIDENTIAL>**[9] Although the **<HIGHLY CONFIDENTIAL>** [redacted] **<HIGHLY CONFIDENTIAL>** interconnects at **<HIGHLY CONFIDENTIAL>** [redacted] **<HIGHLY CONFIDENTIAL>**, the center is located within MISO's operational area and has the potential of being evaluated for a direct tie into the MISO grid through a generator interconnection agreement ("GIA") with MISO. MISO permits capacity resources to qualify within an LRZ so long as deliverability can be shown, whether through firm transmission service or other equivalent means. Because of this, the **<HIGHLY CONFIDENTIAL>** [redacted] **<HIGHLY CONFIDENTIAL>**could reasonably be evaluated for capacity accreditation in LRZ 6. The lack of further evaluation of the

[8] Highly Confidential Attachment RS-12-HC: Highly Confidential Attachment OUCC 2.3-A.
[9] Highly Confidential Attachment RS-12-HC: Highly Confidential Attachment OUCC 2.3-A: tab **<HIGHLY CONFIDENTIAL>** [redacted] **<HIGHLY CONFIDENTIAL>**.

project on the grounds of RTO location prematurely excludes a potentially viable capacity resource.

Q: Do you have additional concerns about how Duke and CRA evaluated the bids?

A: Yes. Duke and CRA provided minimal information on their evaluation on the **<HIGHLY CONFIDENTIAL>** [redacted] **<HIGHLY CONFIDENTIAL>** bid, specifically within the economics and benefits categories, which are critical components of the overall scoring framework. In a competitive bidding process, one expects to be able to see the full assessment and information supporting how a bid was scored. The sparse information provided concerning this bid in these areas suggests its potential system value may not have been fully explored and/or presented. This is a concern since the proposal could have represented a viable, near-term alternative. **<HIGHLY CONFIDENTIAL>**[redacted]

[10] Highly Confidential Attachment RS-6-HC: <HIGHLY CONFIDENTIAL> [redacted] <HIGHLY CONFIDENTIAL>

[redacted] **<HIGHLY CONFIDENTIAL>**

Q: Was Duke and CRA's RFP process competitive?

A: No. Based on the disqualification or lack of analysis of potentially competitive bids, Duke and CRA did not perform a truly competitive RFP process. All the alternative resources and generation options were not thoroughly assessed and were disqualified and discounted for reasons that could have potentially been overcome through alternative RFP process approaches. Additionally, the non-intermittent RFP scoring results revealed that ultimately, **<HIGHLY CONFIDENTIAL>** [redacted] **<HIGHLY CONFIDENTIAL>** in all of the **<HIGHLY CONFIDENTIAL>** [redacted] **<HIGHLY CONFIDENTIAL>** thermal asset sale bids proposed.[11] Duke's RFP process may have been tailored to produce its own bid as the preferable choice.

Q: What other concerns or inconsistencies did you observe?

A: The sales price submitted for Duke's self-bids in the RFP were **<HIGHLY CONFIDENTIAL>** [redacted] **<HIGHLY CONFIDENTIAL>** and **<HIGHLY CONFIDENTIAL>** [redacted] **<HIGHLY CONFIDENTIAL>**[12] These prices reflected the assumed overnight capital cost of the proposed facilities at the time of the bid evaluation and made the projects appear competitive relative to other proposals. However, the overnight capital cost Duke now presents for the Cayuga CC Project has increased

[11] Highly Confidential Attachment RS-5-HC: Highly Confidential Attachment 5-E, Tables 11 & 12.
[12] Highly Confidential Attachment RS-11-HC: Highly Confidential Attachment OUCC 2.2-C.

to more than $2,257.45/kW[13]--**<HIGHLY CONFIDENTIAL>** [redacted] **<HIGHLY CONFIDENTIAL>** the original prices used in the RFP process. Had the RFP evaluation reflected the current cost estimate for the Cayuga CC Project, this factor alone could potentially have changed the relative rankings of bids and the overall outcome of the bid selection process. The capital costs Duke now presents for the Cayuga CC Project are more than $2,000/kW, which differs significantly from the bid Duke made.[14]

Q: Did Duke prove that it competitively evaluated the Engineering, Procurement, and Construction ("EPC") RFP bids?

A: Not fully. Duke's response to the OUCC's DR regarding "all quantitative and qualitative metrics" Petitioner used to analyze and select the chosen EPC bid **<HIGHLY CONFIDENTIAL>** [redacted] **<HIGHLY CONFIDENTIAL>**[15] In response to the OUCC's request inquiring about the metrics Duke used to evaluate and determine the best EPC bid, Duke stated:

> For the Cayuga CC project, four bidders were invited to bid for the EPC RFP. One bidder declined to bid after the bid event opened. One bidder declined to bid two months into the bid event. Two bids were received from the four bidders. Of the two bids, one was non-responsive, as the bidder stated with their bid submittal that they would not have the resources to perform the work at Cayuga and

[13] Duke's best estimate of $3,332 Million/the winter capacity of 1,476 MW.
[14] Highly Confidential Attachment RS-11-HC: Highly Confidential Attachment OUCC 2.2-C.
[15] Highly Confidential Attachment RS-2-HC: Highly Confidential Duke Response to OUCC DR 4.10 b.

> declined to move forward. Therefore, one responsive EPC RFP bid was received.[16]

While Duke cannot be faulted for the number of bids received, the fact that only one responsive bid was sufficiently evaluated does not eliminate the need for critical review. When competition is absent - as it was here due to only one responsive bid - it is critical for a Petitioner to provide additional justification that the sole bid represents the current market costs for an equivalent resource. Duke provided no detailed comparison between the bids, no information on why the responsive bid was accepted beyond the fact that it was the only one, and no cost analysis or supporting materials were performed. Duke's DR response as shown above fails to provide any evidence establishing how the EPC bids were ranked and scored, whether cost schedule or risk trade-offs were considered, and why the sole bid that was responsive was acceptable despite being the only remaining option.[17] Additionally, Duke has not provided documentation showing whether it considered alternative procurement approaches such as rebidding the EPC scope, disaggregating the scope into smaller packages, or delaying the procurement to improve competition. It is unclear how Duke ensured or confirmed that Kiewit's proposal represented competitive market valuation or was in the best interest of ratepayers. Additionally, Duke Witness John Robert Smith, Jr. stated that by the time the second 1x1 CC bid was selected from the second RFP in September 2024, Duke asked its preferred bidder to refresh its bid to include construction of both CC

[16] Attachment RS-1, p. 2-3: Duke Response to OUCC DR 4.10a.
[17] Attachment RS-1, p. 2-3: Duke Response to OUCC DR 4.10a and c.

units.[18] Duke has not demonstrated or provided how this refreshed bid remained competitive or aligned with market expectations.

Q: Did Duke directly solicit any EPC bidders?

A: Duke claimed it solicited EPC bidders[19] but did not provide evidence that it performed a proper solicitation of EPC bidders and solicited capable companies to build the Cayuga CC Project. **<HIGHLY CONFIDENTIAL>** [redacted] combined cycle facility. **<HIGHLY CONFIDENTIAL>**

Q: Please explain Duke's AACE Class estimate for the Cayuga CC Project.

A: Duke's Cayuga CC Project currently has an AACE Class 3 cost estimate, which has a typical accuracy range of -10 to -20% on the low side and +10% to +30% on the high side and has a 10% to 40% project completion.[21] This means that only preliminary design and engineering work has been completed, and significant

[18] Direct Testimony of John Robert Smith, Jr., page 7, lines 9-15.
[19] Attachment RS-1, p.10-11: Duke's Response to OUCC DR 16.13. Please refer to Highly Confidential Attachment RS-7-C: Highly Confidential Attachment OUCC 16.12-A for the list of bidders Duke contacted.
[20] Highly Confidential Attachment RS-7-HC: Highly Confidential Attachment OUCC 16.12-A.
[21] AACE International Recommended Practice No. 18R-97, Rev. August 7, 2020, found at: https://web.aacei.org/docs/default-source/toc/toc_18r-97.pdf?sfvrsn=4

scope, execution, and cost uncertainties remain. Therefore, using Duke's own calculations, the cost of the project could soar to $4.29 Billion (+30%).

Q: Did Duke consider natural gas conversion?

A: Yes. Duke evaluated the natural gas conversion in compliance with the EPA CAA Section 111 Rule in its 2024 IRP but did not evaluate any scenarios without compliance with the EPA CAA Section 111 Rule.[22] However, by limiting its analysis to CAA Rule 111 compliance scenarios, Duke failed to consider the full range of technical possibilities associated with natural gas conversion.

Q: Did Duke consider co-firing?

A: No. Duke acknowledged Petitioner did not evaluate co-firing of the Cayuga Plant in its 2024 IRP, as OUCC Witness John Hanks further discusses.

Q: Did Duke consider extending the life of the existing Cayuga coal units?

A: Despite identifying the retirement of the Cayuga coal units as a key driver for replacement capacity, Duke did not perform any detailed engineering studies to evaluate the feasibility of extending the coal units' operation. In response to discovery, Duke confirmed that it did not conduct detailed studies to assess the potential for continued operation of the Cayuga units whether through continued coal operation, gas conversion, or co-firing.[23] Instead, Duke pointed to various discovery responses discussing discrete cost elements such as environmental compliance or maintenance and extending the life of the steam units,[24] but none of these appear to have been synthesized into a holistic engineering evaluation of

[22] Direct Testimony of Nathan D. Gagnon, p. 13, lines 8-10.
[23] Attachment RS-1, p. 5-6: Duke's Response to DR 14.18.
[24] Attachment RS-1, p. 4: Duke's Response to DR 14.17.

extending the Cayuga coal units as a portfolio alternative. This absence of a rigorous analysis shows that Duke excluded continued use of the existing assets, without fully weighing whether extensions — on coal, gas conversion, or co-firing — could serve as a bridge solution or provide cost or reliability advantages compared to constructing a new 1,476 MW combined cycle facility at this time that is designed to operate for 35 years. The fact that Duke was willing to pursue a new greenfield development despite significant interconnection uncertainty, while not thoroughly analyzing the continued use of already-connected generation, calls into question the comprehensiveness of its alternatives analysis.

Q: Did Duke have the opportunity to pursue a resource that could have served as a bridge resource in the short- to medium-term, avoiding the need for resources starting in 2030?

A: Yes. Duke received a bid in its 2024 RFP from **<HIGHLY CONFIDENTIAL>** [redacted] **<HIGHLY CONFIDENTIAL>** MW ICAP that would have lasted between **<HIGHLY CONFIDENTIAL>** [redacted], **<HIGHLY CONFIDENTIAL>**.[25] This bid was rejected and not even economically evaluated because it was a **<HIGHLY CONFIDENTIAL>**[redacted] **<HIGHLY CONFIDENTIAL>**.[26] In short, this PPA could have provided Duke **<HIGHLY CONFIDENTIAL>** [redacted] **<HIGHLY CONFIDENTIAL>** MW of capacity prior to the implementation of Rule 111 which, if included as a current resource in the IRP's capacity expansion

[25] Highly Confidential Attachment RS-5-HC: Lee Direct, Highly Confidential Attachment 5-E, page 7.
[26] *Id.*

modeling, may have reduced or eliminated the need for gas CCs starting in 2030, as called for in Duke's short-term action plan. However, Duke did not evaluate this option as a possible "bridge resource" to EPA Rule 111 Compliance.

III. NETWORK UPGRADES

Q: What is Duke's interconnection status with respect to the Cayuga site?

A: Duke entered the 2023 MISO queue for an additional 500 MW of interconnection rights from the Cayuga site. Thus, well before seeking the CPCN at issue, Duke approached MISO to secure additional interconnection rights.

Q: Do you have concerns regarding the interconnection status of the proposed Cayuga CC Project?

A: Yes, Petitioner does not yet have interconnection rights for 471 MW of the proposed 1,476 MW facility. This means approximately one-third of the project's total capacity currently lacks the necessary transmission access to reliably deliver power into the MISO system. Additionally, MISO queue delays and the lack of a Generation Interconnection Agreement make Duke's timeline for transmission access for the full capacity of the second CC unit speculative. Without firm interconnection rights, there is no assurance that the full capacity will be available to meet system needs, particularly during peak demand conditions. This creates a risk not only for project viability and reliability, but also for the cost-effectiveness of the investment. Additionally, if substantial upgrades are needed to secure

interconnection for the remaining 471 MW, those costs may ultimately also be passed on to ratepayers in addition to impacting the project timeline.

Q: Please explain the capacity import limit results MISO set for 2024-2025.

A: The planning year zonal import ability results refer to MISO's analysis of how much capacity (in MW) can be reliably imported into each LRZ during the upcoming planning year as shown below in Table 1. This helps determine whether a zone, in this case LRZ 6, can rely on imports from other zones to meet its reliability needs or whether more capacity must be procured locally. Capacity Import Limits ("CIL") are used to determine the Local Clearing Requirement ("LCR"). Indiana falls in LRZ 6, and as seen below, LRZ 6 has one of the highest import capabilities in comparison to the rest of MISO's LRZs.

Table 1: 2024-2025 Planning Year Zonal Import Ability ("ZIA") Results[27]

LRZ	Summer ZIA (MW)	Fall ZIA (MW)	Winter ZIA (MW)	Spring ZIA (MW)
1	6460	6500	4691	4941
2	4506	5719	5523	5034
3	4911	6684	5600	6514
4	9857	5699	5811	5083
5	3208	3786	4477	3892
6	*7197*	*8661*	*8286*	*7730*
7	4490	4390	4656	4883
8	3444	4942	4262	6030
9	4794	5608	4623	5598
10	3564	4736	3219	4628

Table 2 below reveals a high CIL which means MISO LRZ 6 has flexibility to import capacity from outside the zone. A low CIL would indicate that MISO LRZ

[27] 2024-2025 PY Seasonal CIL/CEL Final Results by MISO: https://cdn.misoenergy.org/20231017%20LOLEWG%20Item%2004%20PY%202024-25%20Final%20CIL-CEL%20Results630536.pdf

6 needs to rely on more local generation to meet its needs. For Summer 2024, MISO tested a contingency where the Kansas West-Sugar Creek line went out and monitored the stress on the Cayuga 345 kV line. Under these stressed conditions, the ZIA was 7,197 MW, but MISO allowed a slightly higher CIL of 7,463 MW. In Fall 2024, MISO monitored and tested the same line with no Generation Limited Transfer ("GLT") factor applied (less constraint) and the lower Reserve Deployment Sensitivity ("RDS") tested likely due to lower seasonal demand. Both the ZIA and CIL are higher compared to Summer.

Table 2: Zone 6 (IN & KY) Capacity Import Limits[28]

LRZ 6	Monitored element	Contingency	GLT	RDS	ZIA	CIL
Summer 2024	Cayuga Sub-Cayuga 345 kV	Kansas West - Sugar Creek 345 kV	5%	712MWx2	7197	7463
Fall 2024	Cayuga Sub-Cayuga 345 kV	Kansas West - Sugar Creek 345 kV	None	282MWx2	8661	8954
Winter 2024/2025	Sullivan - Petersburg 345 kV	Rockport - Jefferson 765 kV	None	890MWx2	8286	8526
Spring 2025	Lawrenceville South - Vincennes 138 kV	Albion South - Gibson 345 kV	none	294MWx2	7730	8015

Q: Did Duke consider the ability to import capacity from resources located outside of MISO LRZ 6 when evaluating capacity needs or assessing

[28] 2024-2025 PY Seasonal CIL/CEL Final Results by MISO: https://cdn.misoenergy.org/20231017%20LOLEWG%20Item%2004%20PY%202024-25%20Final%20CIL-CEL%20Results630536.pdf

alternatives to in-zone generation as part of its RFP process related to replacement capacity for the Cayuga plant?

A: Based on the information provided in Duke's case-in-chief and the disqualification of bids due to the location being outside MISO LRZ 6, it is uncertain whether Duke seriously considered the ability to import capacity from resources located outside LRZ 6 during its evaluation of alternatives. Although Duke allowed resources outside LRZ 6 to participate in the all source 2022 and 2023/2024 RFPs, it did so "with limitations designed to minimize exposure to out of zone facilities."[29] Additionally, "in 2024, resources outside LRZ 6 were limited to wind resources or PPAs of five years in duration or less."[30] These limitations suggest Duke's approach to sourcing capacity from outside LRZ 6 has been relatively conservative, favoring limited-duration PPAs and specific resource types (i.e., wind). While this may help manage the risks associated with external capacity, it also underscores the need for a more comprehensive evaluation of out-of-zone resources as part of the RFP process, especially considering the current interconnection limitations with the Cayuga CC Project. More extensive use of external PPAs could alleviate some of the risks and constraints related to in-zone generation, potentially providing a more flexible, cost-effective solution for Duke's system needs.

Duke's reluctance to consider and, in turn, failure to further evaluate capacity import options may have constrained the resource alternatives and artificially favored in-zone generation, even though such options may be more costly and/or less certain. Capacity can be imported into LRZ 6 provided there is available

[29] Attachment RS-1, p. 9: Duke's Response to OUCC DR 16.09.
[30] *Id.*

transmission capability and deliverability. By not fully evaluating this pathway, Duke potentially excluded more flexible, scalable, and/or cost-effective alternatives, such as PPAs with projects located in neighboring LRZs with available deliverability. Resources from outside LRZ 6 could potentially alleviate local transmission constraints or, conversely, not be viable due to those same constraints.

Q: Did the RFP bids include resources located outside of MISO LRZ 6?

A: Some were submitted, but Duke disqualified these solely because the resources are located outside MISO LRZ 6. This overlooks the fact that MISO allows LRZ 6 to import capacity from other zones up to a capped amount. Rather than assuming out-of-zone resources were nonviable, Duke should have evaluated these based on expected import limits — especially those resources that were otherwise competitive.

Q: Please explain MISO's Definitive Planning Phases.

A: MISO's Definitive Planning Phases are divided into three sequential phases:[31]

DPP Phase 1: Conduct a preliminary system impact study ("SIS") to assess the project's impact on the transmission system.

DPP Phase 2: Perform a revised SIS, incorporating updates such as changes from withdrawn projects.

DPP Phase 3: Finalize the SIS, providing a comprehensive analysis of the project's impact.

Each phase includes a decision point where the applicant attempting to interconnect

[31] MISO Business Practices Manual Generator Interconnection, BPM-015-r30, Dec. 1, 2024, found at: https://cdn.misoenergy.org/BPM-015%20Generator%20Interconnection49574.zip?v=20250116160413

can choose to proceed or withdraw based on the study results.[32]

Q: What stage of the MISO interconnection process is Duke's additional 471 MW Cayuga CC Project in?

A: Currently, the DPP-2023 cycle has not entered phase 1 for Duke's queue number J3232. This delay is due to the substantial backlog from previous cycles, notably DPP-2022, which experienced an unprecedented volume of interconnection requests. Once DPP-2023 Phase 1 begins, MISO will initiate the preliminary SIS for projects such as the Cayuga CC Project. The entire DPP process is expected to take approximately 355 days overall, though this timeline may vary based on a project's complexity and the backlog.

IV. RECOMMENDATIONS

Q: Please summarize your recommendations to the Commission.

A: I support the OUCC's overall recommendation that the Commission deny Duke's request for a CPCN as proposed, due to substantial flaws in Duke's and CRA's evaluation of RFP bids. Without a comprehensive and competitively structured process and solicitation, it is difficult to conclude the Cayuga CC Project represents a prudent option for ratepayers, particularly its affordability. A lack of true competition can lead to higher costs and overlooked resource solutions as opposed to a viable best estimate.

Q: Does this conclude your testimony?

A: Yes.

[32] *Id.*

APPENDIX TO TESTIMONY OF
OUCC WITNESS ROOPALI SANKA

Q: Please describe your educational background and experience.

A: I hold a bachelor's degree in Energy Engineering from Indiana University Purdue University of Indianapolis. In August 2022, I began my employment with the OUCC as a Utility Analyst II in electric division and work on demand side management ("DSM"); evaluation, measurement, & verification ("EM&V"); certificates of public convenience and necessity ("CPCN"). Additionally, I attended Scott Hempling's 'Fundamentals of Utility Law' course in the first quarter of 2023, and I attended the 2022 Indiana Energy Conference in October 2022, which focused on the current and future challenges facing the energy market.

Q: Have you previously testified before the Indiana Utility Regulatory Commission?

A: Yes.

AFFIRMATION

I affirm, under the penalties for perjury, that the foregoing representations are true.

Roopali Sanka
Utility Analyst II
Indiana Office of Utility Consumer Counsel

Cause No. 46193
DEI, LLC

Date: May 8, 2025

OUCC Attachment RS-1

Cause No. 46193

Office of Utility Consumer Counselor
IURC Cause No. 46193
Data Request Set No. 4
Received: 3/25/2025

HIGHLY CONFIDENTIAL RESPONSE
OUCC 4.10

Request:

In reference to the project proposed in this cause, please list all the Engineering, Procurement, and Construction ("EPC") RFP bids DEI received.

a. Please provide the total number of EPC RFP bids.
b. Please provide all quantitative and qualitative metrics DEI used to perform its analysis on selecting the chosen bidder.
c. Please provide the total number of EPC RFP bids that made it to the final round.
    i. Please explain why the remaining bids were rejected in the RFP process.
        1. Please explain the distinguishing features that contributed to the chosen bid vs. the rejected bids.
            a. If the chosen bid possesses a larger cost than the remaining bids, please explain why the chosen bid was chosen over the remaining bids.
    ii. Please provide all information, analysis, and details on the EPC RFP bids that made it to the final round.

Objection:

Duke Energy Indiana objects to the request on the grounds and to the extent the request seeks information that is trade secret or other proprietary, confidential, and competitively sensitive business information of Duke Energy Indiana, its customers, or third parties. Duke Energy Indiana has made reasonable efforts to maintain the confidentiality of this information. Such information has independent economic value and disclosure of the requested information would cause an identifiable harm to Duke Energy Indiana, its customers, or third parties. The responses are "trade secret" under law (Ind. Code § 24-2-3-2) and entitled to protection against disclosure. See also Indiana Trial Rule 26(C)(7). All responses containing designated confidential information are being provided pursuant to nondisclosure agreements between Duke Energy Indiana and the receiving parties. **Please note that the highly confidential information contained and or referenced within this response cannot be provided to Intervenor Reliable Energy, Inc. ("REI") or any other competitive intervenor due to the competitive nature of the information**.

Response:

Subject to and without waiving or limiting its objections, Duke Energy Indiana responds as follows:

a. As Duke Energy plans to engage qualified EPCs and undertake a competitive selection process, my team initiates a screening process to identify those companies whom we believe to be a good fit for the scope of work and type of project. Duke Energy evaluates potential EPC providers through site visits and interviews to understand their abilities and availability by assessing their experience, financials, workload, and available resources. For the Cayuga CC project, four bidders were invited to bid for the EPC RFP. One bidder declined to bid after the bid event opened. One bidder declined to bid two months into the bid event. Two bids were received from the four bidders. Of the two bids, one was non-responsive, as the bidder stated with their bid submittal that they would not have the resources to perform the work at Cayuga and declined to move forward. Therefore, one responsive EPC RFP bid was received.

<BEGIN HIGHLY CONFIDENTIAL>

b. [redacted]

<END HIGHLY CONFIDENTIAL>

c. Please see the Company's response to subpart a. above. The bid received met the requirements of the RFP.

Witness: John Robert Smith

Office of Utility Consumer Counselor
IURC Cause No. 46193
Data Request Set No. 14
Received: 4/4/2025

OUCC 14.17

Request:

Did Duke conduct an analysis extending the life of the Cayuga coal units vs. building a new CC plant?

a. If yes, please provide the analysis along with all data and documentation supporting Duke's analysis.

Response:

The Company evaluated extending the life of the existing Cayuga steam units in compliance with the EPA CAA Section 111 Rule by converting them to natural gas fuel or coal/natural gas co-firing. Please review the 2024 IRP (Attachment 6-A (NDG)) for a complete discussion of this analysis. The analytical framework developed for the 2024 IRP is explained in detail in Chapter 2 beginning on page 52.

Witness: Nathan D. Gagnon

Office of Utility Consumer Counselor
IURC Cause No. 46193
Data Request Set No. 14
Received: 4/4/2025

OUCC 14.18

Request:

Has Duke conducted any engineering studies or assessments to evaluate the feasibility of keeping Cayuga's coal units operational beyond their planned retirement date?

a. If yes, please provide any studies or evaluations were performed, including:
   i. A list of the specific studies conducted, including any reports, modeling, or technical assessments.
      1. Identification of the critical equipment and systems that would require upgrades or replacements to extend the life of Cayuga's coal units, including but not limited to boilers, turbines, emissions control systems, cooling towers, other major components necessary for continued operation.
      2. Historical and projected heat rate efficiency data for Cayuga's existing coal units.
      3. An explanation of how efficiency is expected to change with extended operation and potential retrofits, including:
         A. The impact of aging equipment on heat rate and performance.
         B. Any improvements in efficiency from retrofits or modernization efforts.
         C. The expected operational and maintenance challenges that impact efficiency over time.
         D. The estimated costs associated with maintaining or improving efficiency through retrofits

Objection:

Duke Energy Indiana objects to this request as vague, ambiguous, and overly broad. In particular, the term "assessment" is vague, and the request is not specific to any time period or limited in scope.

Duke Energy Indiana objects to the request on the grounds and to the extent the request seeks information that is trade secret or other proprietary, confidential, and competitively sensitive business information of Duke Energy Indiana, its customers, or third parties. Duke Energy Indiana has made reasonable efforts to maintain the confidentiality of this information. Such information has independent economic value and disclosure of the requested information would cause an identifiable harm to Duke Energy Indiana, its customers, or third parties. The responses are "trade secret" under law (Ind. Code § 24-2-3-2) and entitled to protection against disclosure. See also Indiana Trial Rule 26(C)(7). All responses containing designated confidential information are being provided pursuant to nondisclosure agreements between Duke Energy Indiana and the receiving parties. **Please note that the highly confidential information contained and or referenced within this response cannot be provided to Intervenor Reliable**

Energy, Inc. ("REI") or any other competitive intervenor due to the competitive nature of the information.

Response:

Subject to and without waiving or limiting its objections, Duke Energy Indiana responds as follows:

The Company has not performed any detailed engineering studies to evaluate extending the lives of the Cayuga units. However, please refer to the Company's Confidential Response to OUCC 2.10 for a discussion of environmental compliance costs, the Company's Highly Confidential Response to OUCC 6.04 for a discussion of maintenance costs, and the Company's Highly Confidential Response to IG 2.07 for a discussion of gas conversion and co-firing costs. Please also refer to the Company's response to OUCC 14.17 on the topic of evaluating continued operations in compliance with the EPA CAA Section 111 Rule by converting to natural gas fuel.

Witness: Nathan D. Gagnon

CONFIDENTIAL PER ACCESS TO COURT RECORDS RULE 5

Office of Utility Consumer Counselor
IURC Cause No. 46193
Data Request Set No. 16
Received: April 15, 2025

HIGHLY CONFIDENTIAL RESPONSE
OUCC 16.02

Request:

In reference to DEI's data response to OUCC request 4.10, please provide the names of the EPC bidders resulting from the EPC RFP.

a. Please explain in detail the process through which Kiewit was selected as the EPC contractor in the EPC RFP evaluation.
    i. Please provide the evaluation criteria used in the selection process.
    ii. Please provide the documents and analyses supporting the decision to select Kiewit, including comparisons with competing bids.

Objection:

Duke Energy Indiana objects to the request on the grounds and to the extent the request seeks information that is trade secret or other proprietary, confidential, and competitively sensitive business information of Duke Energy Indiana, its customers, or third parties. Duke Energy Indiana has made reasonable efforts to maintain the confidentiality of this information. Such information has independent economic value and disclosure of the requested information would cause an identifiable harm to Duke Energy Indiana, its customers, or third parties. The responses are "trade secret" under law (Ind. Code § 24-2-3-2) and entitled to protection against disclosure. See also Indiana Trial Rule 26(C)(7). All responses containing designated confidential information are being provided pursuant to nondisclosure agreements between Duke Energy Indiana and the receiving parties. **Please note that the highly confidential information contained and or referenced within this response cannot be provided to Intervenor Reliable Energy, Inc. ("REI") or any other competitive intervenor due to the competitive nature of the information.**

Response:

Subject to and without waiving or limiting its objections, Duke Energy Indiana responds as follows:

The four EPC bidders referenced in response to OUCC 4.10(a) were **<BEGIN HIGHLY CONFIDENTIAL>** [redacted] **<END HIGHLY CONFIDENTIAL>**

a) See the response to OUCC 4.10.
    i.) See the response to OUCC 4.10.

CONFIDENTIAL PER ACCESS TO COURT RECORDS RULE 5

ii.) See the response to OUCC 4.10. Having received only one compliant bid, a comparative bid tabulation was not completed. See Confidential Workpapers 2-JRS and 3-JRS.

Witness: John Robert Smith

Office of Utility Consumer Counselor
IURC Cause No. 46193
Data Request Set No. 16
Received: April 15, 2025

OUCC 16.09

Request:

Did DEI consider the ability to import capacity from resources located outside of MISO Local Resource Zone ("LRZ") 6 when evaluating capacity needs or assessing alternatives to in-zone generation as part of its RFP process related to replacement capacity for the Cayuga plant?

a. If yes, please describe how the ability to import capacity credits was factored into the RFP bid evaluation and selection process.
    i. Identify whether any bids proposed capacity located outside of MISO LRZ 6 that would require transmission into LRZ 6 in order to meet DEI's capacity needs.
    ii. Explain whether the ability to utilize imports was seen as a viable alternative to building or acquiring new thermal generation within LRZ 6, and if not, explain why.

Response:

Duke Energy Indiana allowed out of zone resources to participate in the 2022 and 2023/24 RFPs with limitations designed to minimize exposure to out of zone facilities while allowing for participation from such resources. In 2022, wind facilities and/or facilities with firm capacity to LRZ6 were permitted to bid into the RFP. In 2024, resources outside LRZ6 were limited to wind resources or PPA of five years in duration or less.

Through the RFP, Duke Energy Indiana solicited bids for long lived asset options, and the current level of import capacity may not capture the long-term risk associated with out of zone resources. Facilities located within Duke Energy Indiana's Load Balancing Authority ("LBA") represent the lowest risk options to meet resource requirements because energy and capacity costs will be fully hedged versus Duke Energy Indiana's load.

If a bid for the amount of NRIS from a resource is received in the RFP outside of Zone 6, but in MISO, the resource would not need additional transmission in order for Duke Energy Indiana to utilize this capacity. However, the resource would be subject to price separation risk in the capacity market. Additionally, in the energy market, the unit would be subject to potential additional congestion and losses between the LMP at the asset location and the LMP at the location of the Duke Energy Indiana load demand bid.

Witness: Robert L. Lee

Office of Utility Consumer Counselor
IURC Cause No. 46193
Data Request Set No. 16
Received: April 15, 2025

OUCC 16.13

Request:

To the extent not provided in the previous question, please provide a list of all firms solicited by DEI, Charles Rivers Associates, or others working on behalf of DEI to provide information through a request for proposal, request for quotation, or other means. Along with the list of firms solicited, please provide the following:

a. identify the firm's area of expertise (expertise may include but not be limited to the following Engineering, Procurement, Construction, General Contracting, Mechanical Contracting, Electrical Contracting, Project Management, Consulting, etcetera.)
b. the date(s) the firm(s) was solicited, and a copy of the solicitation documents,
c. indicate if a response was received, the date of receipt, and the date reviewed,
d. any pricing and terms, limitations, or expirations of the response,
e. any review analysis or summaries prepared,
f. indicate dates of DEI's response to bidders, and
g. indicate any updates requested and the date of the request.

Objection:

Duke Energy Indiana objects to this request on the basis that it is vague and ambiguous, particularly the request for information regarding "responses" and "expirations of the response" and "updates requested" without additional explanation. Duke Energy Indiana also objects to this request as overly broad and unduly burdensome, particularly as this request seeks information regarding highly specific details over several years of RFP activity. Duke Energy Indiana further objects to this request as not reasonably calculated to lead to the discovery of admissible evidence particularly to the extent it seeks information regarding the intermittent RFPs. Duke Energy Indiana further objects to identifying the "firm's area of expertise," on the grounds that the information is as easily publicly available to the OUCC as it is to Duke Energy Indiana.

Duke Energy Indiana also objects to the request on the grounds and to the extent the request seeks information that is trade secret or other proprietary, confidential, and competitively sensitive business information of Duke Energy Indiana, its customers, or third parties. Duke Energy Indiana has made reasonable efforts to maintain the confidentiality of this information. Such information has independent economic value and disclosure of the requested information would cause an identifiable harm to Duke Energy Indiana, its customers, or third parties. The responses are "trade secret" under law (Ind. Code § 24-2-3-2) and entitled to protection against disclosure. See also Indiana Trial Rule 26(C)(7). All responses containing designated confidential information are being provided pursuant to nondisclosure agreements between Duke Energy Indiana and the receiving parties. Please **note that the highly confidential information**

contained and or referenced within this response cannot be provided to Intervenor Reliable Energy, Inc. ("REI") or any other competitive intervenor due to the competitive nature of the information.

Response:

Subject to and without waiving or limiting its objections, Duke Energy Indiana responds as follows:

See the Highly Confidential Response to OUCC 16.12, the attachments to Mr. Lee's testimony filed in this proceeding, and the Company's responses to OUCC 2.02 and 2.03.

Witness: Robert L. Lee

HIGHLY CONFIDENTIAL

OUCC Attachment RS-2-HC

Cause No. 46193

HIGHLY CONFIDENTIAL

OUCC Attachment RS-5-HC

Cause No. 46193

HIGHLY CONFIDENTIAL

OUCC Attachment RS-6-HC

Cause No. 46193

HIGHLY CONFIDENTIAL

OUCC Attachment RS-7-HC

Cause No. 46193

HIGHLY CONFIDENTIAL

OUCC Attachment RS-9-HC

Cause No. 46193

HIGHLY CONFIDENTIAL

OUCC Attachment RS-10-HC

Cause No. 46193

HIGHLY CONFIDENTIAL

OUCC Attachment RS-10-HC

Cause No. 46193

HIGHLY CONFIDENTIAL

OUCC Attachment RS-12-HC

Cause No. 46193