STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

VERIFIED PETITION OF INDIANAPOLIS POWER & LIGHT COMPANY D/B/A AES INDIANA ("AES INDIANA") FOR (1) ISSUANCE OF CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO REPOWER PETERSBURG GENERATING UNITS 3 & 4 TO OPERATE ON NATURAL GAS ("PETERSBURG REPOWERING PROJECT"); (2) APPROVAL OF PETERSBURG REPOWERING PROJECT AS A CLEAN ENERGY PROJECT; AND (3) ASSOCIATED ACCOUNTING AND RATEMAKING, INCLUDING RECOVERY OF PROJECT COSTS, PROJECT DEVELOPMENT COSTS, FGD DEWATERING AND RELATED COSTS, THE REMAINING NET BOOK VALUE OF PETERSBURG UNITS 3 AND 4 RETIRED ASSETS, AND CERTAIN MATERIALS AND SUPPLIES INVENTORY	)	**CAUSE NO. 46022**

PUBLIC'S EXHIBIT NO. 1

REDACTED TESTIMONY OF BRIAN R. LATHAM

ON BEHALF OF

THE INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR

June 5, 2024

Respectfully submitted,

INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR

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CERTIFICATE OF SERVICE

This is to certify that a copy of the ***Public's Exhibit No. 1 – Redacted Testimony of Brian R. Latham on behalf of the OUCC*** has been served upon the following captioned proceeding by electronic service June 5, 2024.

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REDACTED TESTIMONY OF OUCC WITNESS BRIAN R. LATHAM
CAUSE NO. 46022
INDIANAPOLIS POWER AND LIGHT COMPANY
D/B/A AES INDIANA

Q: Please state your name and business address.

A: My name is Brian R. Latham, 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 by the Indiana Office of Utility Consumer Counselor ("OUCC") as a Utility Analyst in the OUCC's Electric Division. A summary of my educational background and experience is included in Appendix A attached to my testimony.

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

A: Yes.

Q: What is the purpose of your testimony?

A: Indianapolis Power & Light Company d/b/a AES Indiana ("AES Indiana" or "Petitioner") is seeking approval to convert or "repower" its Petersburg Generating Units 3 and 4 from operating on coal to operating on natural gas ("Project"). My testimony addresses Petitioner's proposed Project from a cost perspective. In addressing the "Five Pillars of Electric Utility Service" as defined in § 8-1-2-0.6, I discuss the Project's impact on customer affordability and environmental sustainability. OUCC Witness Roopali Sanka addresses the attributes of reliability, resiliency, and stability as referenced in § 8-1-2-0.6. Overall, the OUCC does not oppose Petitioner's request as presented in this Cause.

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

A: I reviewed relevant portions of AES Indiana's petition, testimony, exhibits, data responses, and workpapers in this Cause. I also reviewed previous filings and the Commission's Order in Cause No. 45911.

Q: To the extent you do not address a specific issue, item, or adjustment, should that be construed to mean you agree with AES Indiana's proposal?

A: No. My silence regarding any topics, issues, or items AES Indiana proposes does not indicate my approval of those topics, issues, or items. Rather, the scope of my testimony is limited to the specific items I address, and my silence in response to an issue or adjustment should not be construed as an endorsement.

I. <u>PROJECT COSTS & AFFORDABILITY</u>

Q: What is AES Indiana's projected Project cost?

A: AES Indiana expects the total project cost to be approximately <CONFIDENTIAL> [redacted] <CONFIDENTIAL> (including Allowance for Funds Used During Construction).[1] Petitioner estimates that repowering the facility will generate approximately <CONFIDENTIAL> [redacted]

[1] Direct Testimony of Chad Rogers, Confidential workpaper CAR-1, line 15, column (b).

<CONFIDENTIAL>[2] in yearly cost savings compared to its current coal operation. Combining the yearly cost savings with the return "on" and "of" the additional rate base and the recovery of deferred amounts, discussed below, results in an estimated $4.6 million[3] increased annual revenue requirement in the Project's first year of operations.

Q: How does AES Indiana's proposed $4.6 million incremental revenue requirement affect residential customers?

A: Petitioner calculates an increased residential bill impact of approximately $0.37[4] per residential customer per month (using 1,000 kWh). The remaining revenue requirement is allocated to the other customer classes. My review found no errors in Petitioner's calculations.

Q: Is AES Indiana requesting to defer certain costs associated with the Project for future recovery?

A: Yes. AES Indiana seeks to defer depreciation expense, post-in-service carrying costs ("PISCC"), and incremental property taxes as a regulatory asset for future recovery.[5] AES Indiana also will have an estimated net balance of $20 million of materials and supplies inventory that will no longer be needed after Petersburg Units 3 and 4 are converted and requests the Commission approve deferring this

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[2] Confidential Workpaper CAR-1, line 32, column (b).
[3] Rogers Direct, page 17, line 2.
[4] Rogers Direct, page 17, line 5.
[5] Rogers Direct, page 7, line 16 to page 10, line 12.

balance to a regulatory asset for recovery in a future base rate case.[6] Petitioner's total depreciation expense, PISCC, incremental property tax expense, and obsolete inventory recovery totals <CONFIDENTIAL> [redacted] <CONFIDENTIAL>[7] or <CONFIDENTIAL> [redacted] <CONFIDENTIAL>[8] per year over three years. While a three-year amortization period was included in its analysis, AES Indiana proposes to address the amortization period for the recovery of the regulatory asset in a future basic rate case.

Q: Do you oppose AES Indiana's request to defer these amounts for future recovery?

A: No.

Q: What is your recommended amortization period for recovery of the deferred amounts?

A: I recommend amortizing the deferred depreciation expense, Petitioner's PISCC, incremental property tax expense, and obsolete inventory over the same period as AES Indiana's rate case expense in its next rate case. This will allow any over- or under-recovery to be netted with any rate case expense recovery variance in subsequent rate cases.

Q: Did you forecast how residential customers' revenue requirement may change in future years?

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[6] Rogers Direct, page 12, line 11 to page 13, line 11.
[7] Confidential Workpaper CAR-1, line 23, column (b).
[8] Confidential Workpaper CAR-1, line 27, column (b).

A: Yes. I ran a simple revenue requirement forecast as if Petitioner filed a rate case in the third year of the Project's operations with rates taking effect at the beginning of the Project's fourth year of operation, assuming AES Indiana recovered the deferred amounts over the assumed three-year period.

Q: How was the revenue requirement impacted in your year four forecast?

A: My year-four forecast revenue requirement scenario is <CONFIDENTIAL> [redacted] <CONFIDENTIAL>[9] less than it is prior to adding the Project. This is primarily driven by the fully amortized PISCC, incremental property tax expense, and obsolete inventory not being included in the revenue requirement and the <CONFIDENTIAL> [redacted] <CONFIDENTIAL>[10] accumulated depreciation increase (a reduction to rate base) after the first three years of operation. The effect on residential ratepayers is a <CONFIDENTIAL> [redacted] <CONFIDENTIAL>[11] benefit per month for a customer utilizing 1,000 kWh. Confidential workpaper BRL-1 reflects my calculation of the forecasted year four revenue requirement.

Q: How does this compare to AES Indiana's estimates of savings associated with the Project?

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[9] Confidential Workpaper BRL-1, line 36, col (f).
[10] Confidential Workpaper BRL-1 line 7, col (f).
[11] Confidential Workpaper BRL-1 line 59, col (e).

A: AES Indiana's cost savings estimate is projected over the 20-year Integrated Resource Plan ("IRP") planning period. Its estimate is that the Preferred Resource Portfolio, which includes the Petersburg Project, has a lower present value revenue requirement of approximately $437 million compared to operating Petersburg as a coal-fired generating plant.[12]

Q: Does the OUCC have concerns about the affordability of AES Indiana's proposed Project?

A: After considering the costs and benefits of the Project, particularly after recovery of the deferred amounts, the OUCC does not have concerns about the Project's affordability at this time.

II. PRODUCT DEVELOPMENT COSTS

Q: In the event the Commission does not approve AES Indiana's proposed Project, is AES Indiana seeking recovery of its Project development costs?

A: Yes. AES Indiana expects to incur $21.3 million in Project development costs and requests the Commission authorize Petitioner to defer these costs and accrue carrying charges in a regulatory asset for recovery in a future base rate case.[13]

Q: What is the estimated monthly residential cost AES Indiana expects to recover if the Commission does not approve the Project?

A: It is estimated a residential customer's bill (1,000 kWh/month) would increase by $0.73[14] per month over three years if the Commission denies the Project but

[12] Attachment BRL-1, AES Indiana's Response to REI DR 2-2.
[13] Rogers Direct, page 13, lines 15-21.
[14] Rogers Direct, Attachment CAR-3, line 34, column (b).

awards AES Indiana its requested Project development costs. This does not compare favorably with the $0.366 monthly residential customer's bill impact that results from an in-service Project.

Q: Does the OUCC oppose AES Indiana's proposed treatment of its Project development costs in the event the Commission does not approve the Project?

A: Yes. If the Commission does not approve AES Indiana's Project, the Commission should deny AES Indiana's proposal to defer the Project development costs and accrue carrying costs for recovery in a future rate case. Under this scenario, ratepayers should not be responsible for any return "on" or "of" the Project development costs because ratepayers will not benefit from these expenditures if the Project is not approved. Petitioner—not its ratepayers—made the decision to incur these expenditures, and the Project development costs should not be risk-free.

Q: If the Commission rejects AES Indiana's proposed Project, do the related Project development costs meet the "used and useful" standard?

A: No.

Q: Is there precedent for the Commission to deny Project development cost recovery?

A: Yes. In Commission Cause No. 45651, the Commission rejected Community Utilities of Indiana's proposal to recover its pre-construction costs on a capital expenditure the Commission had rejected.[15]

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[15] Cause No. 45651, Order, pages 64-66, Feb. 1, 2023.

III. ENVIRONMENTAL SUSTAINABILITY

Q: Did the OUCC consider environmental sustainability in its review?

A: Yes. Petitioner indicates the conversion of Units 3 and 4 from coal to natural gas will result in significant reductions in most criteria air pollutants, mercury, and CO_2 emissions.[16] The conversion will also eliminate the waste streams of coal combustion residuals ("CCR").[17] This reduction in emissions should result in reduced environmental compliance costs.

IV. INTEGRATED RESOURCE PLAN

Q: What is AES Indiana's current energy mix?

A: As of 2023, AES Indiana's energy mix was 50% coal, 42% natural gas, 5% wind, and a 3% mix of solar and storage.[18]

Q: What is AES Indiana's planned energy mix?

A: By 2032, AES Indiana intends to decrease its reliance on coal, with an energy mix of 46% natural gas, 17% wind, and 31% solar and storage combined. Petitioner indicates the remaining amount will be addressed through demand side management ("DSM"). By 2041, AES Indiana's intended energy mix will be 13%

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[16] Direct Testimony of Angelique Collier, page 4, lines 4-6.
[17] *Id.*, page 4, lines 7-8.
[18] AES Indiana. *Integrated Resource Plan (IRP) Non-Technical Summary,* page 2. AES Indiana. https://www.aesindiana.com/sites/default/files/2023-01/AES-Indiana_2022-IRP_Non-Technical-Summary_f0111.pdf.

natural gas, 46% wind, and 32% solar and storage combined, with the remaining amount addressed by DSM.[19]

Q: How does the Project fit into AES Indiana's fleet and future plans?

A: To meet AES Indiana's goal of no longer relying on coal generation for its energy and capacity needs, Petersburg must be shut down or converted to use natural gas; therefore, AES Indiana's 2022 IRP included plans to convert Petersburg to natural gas.[20]

Q: Did the 2022 IRP evaluate other options for Petersburg Units 3 and 4?

A: Yes. The IRP considered five options for Petersburg Units 3 and 4. The first option was to keep both units running on coal for the remainder of their originally expected lifespan. The second option was to convert Petersburg Units 3 and 4 to natural gas. The third option was retiring Petersburg Unit 3 but continuing to operate Petersburg Unit 4 on coal for its originally expected remaining life. The fourth and fifth options were retiring both units and replacing them with either a new gas turbine or renewables.[21]

Q: Has AES Indiana updated its 2022 IRP?

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[19] *Id*.
[20] *Id*., p. 4.
[21] Direct Testimony of Erik Miller Direct, page 6, line 14 to page 7, line 1.

A: Yes. AES Indiana supplemented its 2022 IRP with the 2024 IRP Update. As part of the update, AES Indiana delayed the conversion dates from early 2025 to 2026 and set both unit conversions consecutively rather than concurrently.[22] AES Indiana also updated the estimated variable operation and maintenance ("O&M") costs over the 20-year planning horizon for Petersburg Units 3 and 4 to account for budgetary and inflationary changes. These costs increased for coal operation and decreased for gas operation, making the Project more economical.[23] AES Indiana also updated its load forecast.[24]

Q: Is the Project consistent with AES Indiana's 2022 IRP?

A: Yes, the Project is identified as a component of the Short-Term Action Plan and is consistent with the 2022 IRP and the 2024 IRP Update.

V. OUCC RECOMMENDATIONS

Q: Please summarize the OUCC's position and recommendations.

A: The OUCC does not oppose AES Indiana's proposed Project and Petitioner's related financing plan at this time and as presented in Petitioner's case in chief. However, if the Commission does not approve the Project, the OUCC recommends Petitioner's proposed recovery of the Project development costs be denied, as well.

Q: Does this conclude your testimony?

A: Yes, it does.

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[22] Miller Direct, page 17, lines 13-19.
[23] Miller Direct, page 18, lines 15-19.
[24] Miller Direct, page 22, lines 15-17.

APPENDIX A

QUALIFICATIONS OF BRIAN R. LATHAM

Q: Please describe your educational background and experience.

A: I graduated from Northern Illinois University in DeKalb, Illinois, with a bachelor's degree in accounting. I then attended Illinois State University in Normal, Illinois, and obtained a master's degree in accounting. In addition, I have participated in various continuing education programs sponsored by my current and former employers.

I began my employment in 1992 as a Staff Accountant with OSI Industries (Aurora, Illinois). In 1995, I was hired as a cost accountant at Rexnord in Milwaukee, Wisconsin. In 1998, I was hired as a cost accounting manager at Morton Metalcraft (Morton, Illinois) and eventually promoted to a Controller role at Illinois Machine and Tool Works. In 2001, was hired at Hamernik Associates, where I was a work-out and bankruptcy consultant. I was an independent financial recruiter in 2007 and 2008. In March 2008, I was hired as Vice President of Finance for Junior Achievement of Central Indiana. In 2009, I was hired as a Utility Analyst for the Indiana Utility Regulatory Commission, where I worked as a member of the Water Division Staff, reviewing water and wastewater utility filings and making recommendations based on witness' testimony and Indiana law. In 2018, I was hired as Controller for Aqua Indiana, where I was responsible for Aqua Indiana's financial operations, and my roles included the oversight and accountability of the monthly, quarterly, and annual financial closings and reporting, SOX and audit compliance, budget, forecasting, and five-year planning, regulatory petitions, acquisitions, and other strategic projects. After a short stint as Controller at Senior Home Companions, I was hired at the OUCC as a Utility Analyst in October 2022.

At the OUCC I provide written testimony ranging from rate cases to clean energy generation facilities and regional transmission organization adjustments. I work on demand supply management relationships and commission investigation teams. I attended the NARUC Staff Subcommittee on Accounting and Finance Spring Conference in early April 2023.

AFFIRMATION

I affirm the representations I made in the foregoing testimony are true to the best of my knowledge, information, and belief.

By: Brian R. Latham
Cause No. 46022
Office of Utility Consumer Counselor (OUCC)

Date: June 4, 2024

Data Request REI DR 2 - 2

Please produce any analysis, assessment, calculation, or investigation that AES performed to identify the estimated costs of options for AES to comply with the recently published "New Source Performance Standards for Greenhouse Gas Emissions from New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units" issued by the Environmental Protection Agency ("EPA") on May 9, 2024 at 89 Fed. Reg. 38,798 (hereinafter "Final 111 Carbon Rule") assuming that the Petersburg units 3 and 4 coal facilities remain operational.

Objection: AES Indiana further objects to the Request on the grounds and to the extent the Request solicits information that is confidential, proprietary, competitively sensitive and/or trade secret. Subject to and without waiver of the foregoing objections, AES Indiana provides the following response.

Response:
See below from excerpt from Response to OUCC DR 3-1:

> If AES Indiana were to continue to operate Units 3 and 4 as coal-fired after January 1, 2032, emissions reductions of 16% as compared to baseline emissions could be required, consistent with application of 40% natural gas co-firing, resulting in capital investment. If Units 3 and 4 continued to operate as coal-fired after January 1, 2039, emissions reductions of 88.4% compared to baseline emissions could be required, consistent with application of carbon capture sequestration, likely resulting in significant capital investment.

In light of the recently published EPA rules ("New Source Performance Standards for Greenhouse Gas Emissions from New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units" issued by the Environmental Protection Agency ("EPA") on May 9, 2024 at 89 Fed. Reg. 38,798), AES Indiana has estimated the impacts for compliance with these rules in the strategies analyzed in the 2024 IRP Update. The following paragraphs summarize the assumption updates made to capture compliance with the EPA rules in the 2024 IRP Update and concludes with the results from the analysis.

Across all strategies in the 2024 IRP Update, the Company updated two core modeling assumptions. 1) To avoid double counting the impact of carbon regulation, AES Indiana removed the carbon price of $6.50 starting in 2028. This carbon price was originally intended to serve as a proxy for regulation of carbon like the finalized EPA rules. 2) The Company updated the commodities to better align with a future that includes the finalized EPA rules. AES Indiana used Horizons Fall 2023 Zero Carbon Additions commodities. According to Horizons, this set of commodities most closely represents power, gas, and coal prices in a future with the finalized EPA rules.

In the strategy that keeps Petersburg Units 3 & 4 on coal for the planning period, the Company assumed these units would be required to converted to co-fire with 40% natural gas by Jan. 1, 2030 to comply. The co-firing conversion cost was estimated to be 65% of the cost of the full conversion. The appropriate mix of fuel and variable O&M which assumes co-firing the units with natural gas was also modeled in the analysis. These co-fired units were assumed to remain operational through the planning period or through 2042. However, per the EPA rules, these units would either have to retire by 2039 or install CCS by 2032. Either of these options would only make continuing to operate Petersburg as a partly coal-fired asset less cost effective by adding cost for CCS or the cost for replacement resources upon retirement.

Operating Petersburg Units 3 & 4 as natural gas-fired resources starting in 2026 (the request being made in this filing) will largely be unaffected operationally by the EPA rules. As such, in the strategy that converts Petersburg Units 3 & 4 to operate on natural gas, the units were assumed to operate consistent with the operational parameters of the original 2024 IRP Update included in this filing. Also, the strategies that retire and replace Petersburg Units 3 & 4 with other resources were unaffected by compliance with the EPA rules since both strategies replace the units with wind, solar and storage resources.

The table below provides the results of this analysis. The Petersburg Conversion is now $437 million lower in terms of PVRR over the planning period than keeping Petersburg a coal co-fired with gas resource. Also note that the "No Early Retirement" strategy assumes Petersburg Units 3 & 4 operate as a co-fired 40% natural gas and 60% coal resource to comply with the new EPA rule through 2039 and continues through the planning period. Per the EPA rules, either CCS would need to be installed on these units in 2032 or they would need to be retired by 2039. Compliance with either of these options would only make the units less cost effective from a PVRR perspective.

2024 IRP Update with cost for EPA rules compliance ($M)

	2022 IRP 20-yr PVRR ($M)	2024 IRP Update ($M)	2024 IRP Update w/ EPA Rule Compliance ($M)	Reliability Costs ($M)	2024 IRP Update with Reliability Cost ($M)	2024 IRP Update w/ EPA Rule Compliance and Reliability Cost ($M)
No Early Retirement (Units Co-fired with 40% NG by 2030 through analysis period)*	$ 9,572	$ 9,449	$ 9,192	$ 126	$ 9,575	$ 9,318
Petersburg Conversion to Natural Gas (est. 2026)	$ 9,330	$ 9,168	$ 8,745	$ 136	$ 9,304	$ 8,881
Both Petersburg Units Retire (2027 and 2029)	$ 9,618	$ 9,596	$ 9,343	$ 929	$ 10,525	$ 10,272
Clean Energy Strategy - Both Petersburg Units Retire and Replaced with Wind, Solar and Storage (2027 and 2029)	$ 9,711	$ 9,604	$ 9,352	$ 929	$ 10,533	$ 10,281