

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) CAUSE NO. 46022
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.)

**PETITIONER’S REPLY TO OUCC’S BRIEF
AND REI’S EXCEPTIONS TO PROPOSED ORDER**

Indianapolis Power & Light Company d/b/a AES Indiana (“AES Indiana” or “Petitioner”), by counsel, respectfully submits its Reply to Indiana Office of Utility of Consumer Counselor (“OUCC”) Brief on Proposed Order and to Intervenor Reliable Energy, Inc.’s (“REI”) Exceptions to Petitioner’s Proposed Order. As discussed below, REI’s opposition to the Repowering Project should be rejected.

1. Introduction

The OUCC clarifies the scope of its analysis and notes that it does not take exception to the Company’s proposed Order. Through substantial evidence and in its Proposed Order, AES Indiana showed the proposed Petersburg Repowering Project should be approved. AES Indiana

appreciates the OUCC making its post hearing filing and its recognition that the proposed Project reduces costs for the benefit of customers.

REI's filing reflects claims that are refuted by substantial record evidence and discussed in AES Indiana's proposed order. Yet, REI makes little to no effort to reconcile its arguments with the evidentiary record. REI's post hearing filing advocates for a result which sweeps the Company's evidence aside. This approach must be rejected. As the Indiana Supreme Court made clear in 1929:

We repeatedly hear the expression that it is the duty of the Commission to represent the public alone. If, by this remark, it is meant that the Commission is organized but for one purpose, that of antagonistic action toward utilities under any and all circumstances, then one of the great purposes of the law, adequate service by the utility at the least cost to the consumer, might be entirely defeated. The theory of the law creating the Commission is that it shall be conscientiously and impartially administered by a body composed of a personnel especially qualified by knowledge, training and experience pertaining to the subject-matter committed to it for award consonant with reasonable fairness and substantial justice according to legislative mandate, and the circumstances shown relative to its effect in the future on the utility's ability to serve the interest and convenience of the public, the cost and expense to the parties interested being an element for consideration.

In Re Northwestern Indiana Tel. Co., 201 Ind. 667, 674-75, 171 N.E. 65, 67-68 (1929) (emphasis added).

The Company's evidence rests on a sound factual and analytical foundation. AES Indiana's Proposed Order correctly adheres to the long-standing legal principle that the testimony of knowledgeable Company officials or duly qualified outside expert witnesses cannot be disregarded. See *Hancock Rural Tel. Corp. v. Public Serv. Comm'n*, 137 Ind. App. 14, 201 N.E. 2d 573, 587 (1964), reh'g denied, 203 N.E. 2d 204 (1964) (the "'evidence was uncontradicted and unimpeached, and the Commission was not at liberty to disregard such evidence and make

no special findings upon it.”).¹ The Commission may weigh the evidence but refusing to consider competent, uncontradicted evidence and making reasoned findings upon it, is not weighing it, it is ignoring it. *Hancock Rural Tel.*, 201 N.E.2d 573 n.1.

While REI raised questions about the Company’s proposed Project, the Commission’s judicial process affords AES Indiana the opportunity to explain or rehabilitate its position and rebut REI’s claims. REI’s post hearing filing is not based on the record as a whole and fails to provide detailed findings covering all material basic and ultimate facts. *Ind. Bell Tel. Co. v. Office of Util. Consumer Counselor*, 717 N.E.2d 613, 620, 624 (Ind. Ct. App. 1999), modified on other grounds on reh’g, 725 N.E.2d 432 (2000) (“The requirement of detailed findings covering all material basic and ultimate facts is essential, as it enables the court ‘to review intelligently the Commission’s decision’ and thereby ensure that the agency has stayed within its *legal authority and jurisdiction.*”) citing *General Tel. Co. of Ind., Inc. v. Public Serv. Comm’n of Ind.*, 238 Ind. 646, 653, 150 N.E.2d 891, 895 (1958); *Perez v. United States Steel Corp.*, 426 N.E.2d 29, 31-32 7 (Ind. 1981).

REI urges the adoption of findings based on speculation. This is not competent evidence. “[M]ere speculation cannot create questions of fact. Opinions expressing a mere possibility with regard to a hypothetical situation are insufficient to establish a genuine issue of material fact. Put another way, ‘guesses, supposition and conjecture are not sufficient to create a genuine issue of material fact.’” *Beatty v. LaFontaine*, 896 N.E.2d 16, 20 (Ind. Ct. App. 2008) (citations omitted), trans. denied 898 N.E.2d 1233 (2008). “A mere possibility that a thing may be true will not

¹ Also, *Re Indiana Michigan Power Co.*, Cause No. 39314 at 5, 1993 WL 602559 (IURC Nov. 12, 1993) (“Good faith is to be presumed on the part of the managers of a public utility like I&M.”); *West Ohio Gas v. Public Utils. Comm’n*, 294 U.S. 63, 72 (1935) (“In the absence of a showing of inefficiency or improvidence, a court will not substitute its judgment for theirs as to the measure of a prudent outlay.”) (citing *Southwestern Bell Tel. Co. v. Pub. Serv. Comm’n of Missouri*, 262 U.S. 276, 288, 289 (1923)).

sustain a legitimate inference that it is true.” *Deery v. Hall*, 175 N.E. 141, 145 (Ind. Ct. App. 1931). “[T]he IURC’s discretion lies in the area of assessing the impact of known circumstances.” *Citizens Action Coalition v. Public Serv. Co.*, 612 N.E.2d 199, 201 (Ind. Ct. App. 1993).²

Commission decisions must be supported by specific findings that reveal the Commission’s determination of the various relevant sub-issues and factual disputes, which in sum, are dispositive of the claim or ultimate question. *Board of Dirs. for Utils. of Dep’t. of Public Utils. v. Office of Util. Consumer Counselor*, 473 N.E.2d 1043, 1047 (Ind. Ct. App. 1985) (citing *Perez v. U.S. Steel Corp.*, 426 N.E.2d 29, 32 (Ind. 1981)). Agencies bear the responsibility of making specific findings to protect parties’ “legal right to know the evidentiary bases upon which the ultimate finding rests.” *Perez*, 426 N.E.2d at 32 (citing Davis, 2 Administrative Law Treatise § 16.05 p. 444 (1958)). REI’s post hearing filing ignores or distorts substantial probative evidence and otherwise fails to meet the standard for a Commission order. The Commission must reject the invitation to disregard its duty to weigh the totality of the probative evidence.

Sound regulatory policy, a fair and impartial consideration of the record evidence and adherence to Indiana law, lead to the conclusion that AES Indiana’s proposed Petersburg Repowering Project should be approved. The Repowering Project is consistent with the Preferred Resource Portfolio and the Short-Term Action Plan identified in AES Indiana’s 2022 IRP and the 2024 IRP Updates. The Petersburg Repowering Project is the product of a competitive resource solicitation. The Company proposes to investment approximately \$300 million to make Petersburg Units 3 and 4 a much more economic plant, to reduce fixed operating costs by over

² Also *One 1968 Buick v. State of Indiana*, 638 N.E.2d 1313, 1318 (Ind. Ct. App. 1994) (holding that lack of evidence to support assertion made is “purely speculative” and therefore insufficient); *Harper v. James*, 246 Ind. 131, 203 N.E.2d 531, 533 (1965) (“a verdict cannot be based on mere guess, conjecture, surmise, possibility or speculation.”). There is vast difference between proof of what is possible and proof of what actually exists. *Daub v. Daub*, 629 N.E.2d 873, 877 (Ind. Ct. App. 1994), trans. denied (“Standing alone, evidence establishing a mere possibility of cause or which lacks reasonable certainty or probability is not sufficient evidence by itself to support a verdict.”).

\$650 million over the twenty year period, and to create a plant that is much more flexible from an operational perspective, which is particularly important in today's market. Tr. A 20, 27-28, 69. The Repowering Project lowers the exposure to future environmental regulations by significantly reducing air emissions, including CO₂, eliminating coal combustion residuals, and reducing the amount of water needed at the facility. The proposed conversion also provides support for intermittent renewable resources because the Units provide firm capacity that is required for a reliable and stable grid. The Project will have a positive social and economic impact to the community of Petersburg and Pike County. Therefore, for the reasons set forth in AES Indiana's testimony, attachments and post-hearing filings and to further the public interest, AES Indiana respectfully urges the Commission to promptly issue an order approving the Company's proposed Petersburg Repowering Project. These matters are further discussed below.³

2. Reply to OUCC

OUCC's Brief on Proposed Order clarifies that while Ms. Sanka's analysis addressed the Project Best Estimate, OUCC witness Latham's analysis was broader. OUCC Brief at 2-3. Mr. Latham's analysis included the recovery of the costs already incurred related to Petersburg Units 3 and 4. *Id.* at 3. Thus, the OUCC incorporated the recovery of all costs into its recommendation on the overall cost savings to ratepayers. OUCC Brief at 3. The OUCC Brief confirms the OUCC does not oppose the proposed Project and does not oppose the Company's Proposed Order. AES Indiana appreciates the OUCC's clarification and recognition that the proposed Repowering Project should be approved.

³References to REI's post hearing filing are cite to the redlined version of the proposed order, cited herein as "REI-Redline at X"). AES Indiana's Proposed Order is cited herein as "AESI-PO". The Company's proposed order and the record evidence address REI's positions in detail. This Reply does not purport to address each and every error in REI's filing. The absence of a specific reply does not indicate acceptance of REI's position.

As Mr. Bigalbal explained, the cost savings from the Repowering Project are primarily driven by fixed O&M. Tr. A-61. These savings are real. The Repowering Project provides a significant reduction in the fixed O&M of the plant and also provides the plant much more flexibility to operate in the current market. Tr. A-61, also A-72-73 (explaining coal plants are very sluggish and most of the time have to run at a loss, an energy loss, through the off-peak period because their start-up costs are significantly high). The Company stress tested its plan with stochastic analysis. This analysis showed 98 percent of the time converting this coal plant to natural gas was better for AES Indiana customers; only 2 percent of the time coal was it less expensive. Tr. at A-66; see also A-69 (explaining that even assuming \$100 million of emissions costs were removed from the \$657 million total O&M savings, a significant customer benefit still exists).

The one point on which the OUCC does not agree with the Company, highlights the importance of the Company's request for a Commission order on or before October 30, 2024. As explained in the direct testimony of Company witness Bigalbal, the Company has prudently incurred costs for this Project, including the cost of an initial engineering study to estimate the cost of the conversion to use as an input in the IRP economic modeling, contract engineering and construction services, and owner's costs. The Company necessarily negotiated a cancellation fee under the EPC Agreement to allow the Contractor to begin ordering long lead time items and begin engineering and design work while ensuring the Company pays a fixed amount in the event the Project is not approved. These costs increase from approximately \$21 million in October 2024 to approximately \$29 million in December 2024 as shown in Table 3 of Mr. Bigalbal's Direct Testimony. Pet. Ex. 1 at 31. These costs are necessary to develop the Project to the extent that allows the Commission to assess the reasonableness of the Project, define the project scope

to the point that the Best Estimate can be determined and fixed price contracts can be awarded, and to allow construction to begin within a reasonable time following Commission approval of the Project. The competitive procurement process required by the CPCN statute and the 240-day Commission review timeline are a resource intensive and protracted process. Given the significant demand for resources across the industry, it is necessary to take steps to secure a Project, contractor(s) and long lead time equipment. Doing so safeguards the overall project cost and timeline. While the Commission will decide whether a given project is approved, regardless of the outcome of the CPCN process, the costs prudently incurred to comply with the statutory requirements should be recovered through rates over a reasonable period of time. While both the OUCC and AES Indiana agree the proposed Repowering Project should be approved, if it is not, these expenditures were reasonably incurred to prudently execute AES Indiana IRP short-term action plan to economically secure capacity and generation to serve AES Indiana customers. Pet. Ex. 11 (Rogers Rebuttal) at 19-20, also pp. 5-9. Therefore, the Commission should still authorize the recovery of these prudently incurred costs as proposed by the Company.

3. Reply to REI

A. Summary of the Evidence. As demonstrated by review of the REI Redline Proposed Order, REI proposes deletions and revisions to the summary of the evidence and ignores substantial evidence in its discussion and findings. These changes should be rejected as they result in an evidentiary discussion and analysis that is incomplete, inaccurate, or misleading as illustrated by the examples discussed below.

1. **Capacity Factor.** REI asserts that Mr. Bigalbal confirmed that the refueled units were expected to operate at a lower capacity factor. REI Redline at 15. REI provides no citation to support this reference, which is not part of Mr. Bigalbal's prefiled testimony. During cross-

examination, Mr. Bigalbal stated that while “coal has higher capacity factors than a similar in-kind 11,000 heat rate gas plant ... it’s not enough in the energy market to cover the fixed O&M so that the fixed O&M savings is not at risk.” Tr. A-62. REI’s Redline ignores the context of Mr. Bigalbal’s testimony and fails to facilitate Commission review of REI’s claims.⁴ Moreover, AES Indiana did not “discount” the capacity factor attribute as REI contends (REI Redline at 58). To the contrary, as shown by Mr. Bigalbal’s testimony, the Company understands that the higher fixed costs of operating on coal coupled with the operational inflexibility of a coal unit outweigh the capacity factor change. Tr. A-20, 27, 28, 61-62 (explaining natural gas units have greater flexibility to operate compared to coal). As explained by Mr. Miller, energy revenue in the economic modeling is driven by the commodity curves included in the analysis. Actual capacity factors depend on actual conditions during the unit operations. Pet. Ex. 8 (Miller Rebuttal) at 39-40. Furthermore, focusing on energy revenues alone fails to consider the whole picture. The PVRR presented by Mr. Miller provides the complete picture and this analysis demonstrates that the Repowering Project should be approved. *Id*; *see also* Tr. B-76.⁵

2. Scope 3 Emissions. Similarly, REI contends “AES witnesses confirmed no consideration of Scope 3 emissions was included related to natural gas production and delivery.” REI-R at 17. Notably, REI provides no evidentiary citation to support this statement. REI also identifies no statute or regulation that requires such calculation. When asked about “scope 1, 2, and 3 emissions”, Mr. Bigalbal’s response was “I’m not familiar with those terms.” Tr. A-41. The term Scope 3 emissions was not used by REI’s witnesses. Consequently, REI’s claim is not

⁴ IURC GAO 2020-5 (p. 2) states that proposed orders shall be supported with citations to the facts. While citations may not be included in the Commission’s order, such references facilitate Commission review.

⁵ In addition to the above referenced flaws in its summary of the evidence, REI’s proposed finding on the Capacity Factor issue (REI Redline at 58) also ignores substantial record evidence and should be rejected.

supported by the plain language of the record and this term is not one that is readily defined in a dictionary.

The record does demonstrate the Company's understanding and consideration of emissions is reasonable. When Company witness Collier was asked about potential downwind contributions, she explained the EPA conducts the analysis to determine downwind contributions. Tr. B-31-32. Ms. Collier clarified that she had done no analysis related to the downwind contributions of Units 3 and 4 to other states because that analysis is conducted by EPA, which is how they established their regulations for Cross State Air Pollution Rule (CSAPR). Tr. B-33. With respect to the CSAPR which is related to the transport of ozone to downwind states' ability to achieve the National Ambient Air Quality Standards, Ms. Collier explained that compliance with National Ambient Air Quality Standards is not a requirement that falls on facilities like power plants. Tr. B-37-38. She explained that "[t]he National Ambient Air Quality Standards are established so that states can develop regulations to determine additional requirements for facilities in their state or counties such that the county can come into attainment with the National Ambient Air Quality Standards. Petersburg is located in Pike County which is currently attainment for National Ambient Air Quality Standards." Tr. B-38-39.

Any consideration of CO₂ emissions associated with upstream natural gas processes must also consider such emissions associated with upstream coal processes. As a far cleaner fuel with far less emissions than a coal plant, natural gas is inherently less risky than continuing to operate Petersburg Units 3 and 4 on coal. Tr. B-20-21. AES Indiana reasonably limited the modeling analysis to only "inside the fence" emissions or emissions directly associated with combustion processes and power production at the plants because upstream emissions are difficult to quantify and open the door for contention among stakeholders. Pet. Ex. 8 (Miller Rebuttal) at QA 49. Also,

by suggesting that AES Indiana include upstream emissions associated with natural gas power production, REI is trying to make the Petersburg Repowering look worse from a Sustainability perspective. However, we must keep in mind that if AES Indiana were to include upstream emissions for power production using natural gas, then the Company would also have to include them for power production using coal thereby also negatively impacting the strategy REI prefers. While AES Indiana explained this in its rebuttal testimony, REI ignores it.

3. State Plans. In her direct and rebuttal testimony, Ms. Collier repeatedly refers to “State Plans”, not “State Implementation Plans” as edited by REI. REI Redline at 35.

4. FERC. In his direct testimony, Mr. Cooper correctly stated that an excerpt relied on by Ms. Medine was not a FERC or NERC “recommendation”. This statement reflects an unimpeached, readily verifiable fact, not an opinion. REI’s proposal that the word “clarified” in AES Indiana’s proposed order be changed to “opined” should be rejected. *See* REI Redline at 39.

5. Coal Pricing. REI proposes to delete Mr. Cooper’s explanation that the Company’s assumption for the delivered cost of coal in the 2022 IRP was based on a competitively bid offer from actual suppliers of coal to the Petersburg Units. REI Redline at 29. A review of Mr. Cooper’s rebuttal shows the Company’s summary accurately reflects the market based source of the Company’s starting point for the coal curve in the 2022 IRP. Pet. Ex. 4 (Cooper Rebuttal) at QA 12. The Company used the second lowest offer because this was the price at which the Company would have purchased its next ton of coal. The Company’s summary also accurately reflects the important distinction that the Company’s coal price assumption reflects the “delivered” cost (which is important to understand as Ms. Medine’s testimony does not). Pet. Ex. 4 (Cooper Rebuttal) at 3-5; see also Pet. Ex. 4 (Cooper Rebuttal) at 6 (noting need

to adjust Ms. Medine's coal pricing to reflect delivery costs). AES Indiana acknowledges that at the hearing Ms. Medine revised her mistaken reference to the Company using the second "highest" bid. Tr. B-26. At most, that change warrants the deletion of the parenthetical reference to Ms. Medine not the removal of these pertinent facts, particularly when REI's proposed order persists in making erroneous arguments regarding the Company's coal price assumptions.

In its proposed summary of Ms. Medine's testimony, REI asserts: "She demonstrated that AES Indiana potentially has overstated coal costs by hundreds of millions of dollars, effectively negating the savings to ratepayers of the refueling decision." REI Redline at 22 citing Medine at 13. This is not a reasonable conclusion to draw from Ms. Medine's testimony, much less the record as whole. The table on page 13 of Ms. Medine's testimony is a mere arithmetic exercise regarding a wide range of \$/mmBtu which does not demonstrate anything. In particular, this analysis fails to reflect the correlation of energy, coal and natural gas prices, which, when considered logically demonstrates that keeping these units on coal is *both higher cost and higher risk*.

Mr. Bigalbal testified that the fixed O&M savings from the proposed Repowering Project are real and known. Tr. A-65. Consequently, the question really concerns the "relative movement of coal versus gas." Tr. A-65. "It's basically, the spread between the two [that produces value]."

Id. As Mr. Bigalbal explained:

We see very, very narrow spreads in the markets, and this has been a trend for at least the last ten years, and if you look over the last five years, there was only one year, 2022, during the Ukraine War, where the spread was wide enough for a coal plant to cover its fixed O&M.

So I don't see a lot of risk in this because this is driven by known costs, the fixed O&M costs; that's where the savings are coming from, and then we put it to the test with, okay, what happens in the IRP analysis, what happens if there is a fundamental shift in environmental policy, and that's what the scenarios were about, and this gas conversion lived up to that test.

We also stress tested with stochastic analysis our Reference Case, and 98 percent of the time converting this coal plant to natural gas was better for our customers. Only 2 percent of the time coal was less expensive.

Tr. At 66. Additionally, the Company's rebuttal demonstrates that AES Indiana's 2024 IRP Update accurately reflects the coal pricing trend noted by Ms. Medine. Pet. Ex. 4 (Cooper Rebuttal) at 4-5 (citing Pet. Ex. 8 (Miller Rebuttal), Figure 3A, QA 34).

6. The AES Corporation. REI proposes to delete from AES Indiana's summary of the evidence, text demonstrating REI's omission of key language regarding an announcement from The AES Corporation (AES Indiana's ultimate parent company). See REI Redline at 28. It is an uncontested fact that the announcement included the important constraint that resource changes would need to maintain "reliability and affordability, and [be] subject to necessary approvals." Pet. Ex. 2 (Bigalbal Rebuttal) at 5. It is also indisputable, that REI's witness omitted this important proviso in her arguments regarding the parent company. Deleting references to this evidence does not make it go away. In the context of the post hearing briefing process, it merely highlights a fatal flaw in REI's position.

7. Natural Gas Supply. REI's Redline (at 67, 71) notes that Petersburg Station does not have "natural gas on-site storage". While that's correct (see Tr. B-14), it's not dispositive and cannot reasonably be considered in isolation. The record demonstrates the Petersburg Repowering Project does not need dual-fuel capability or natural gas storage. AES Indiana has arranged firm natural gas transportation to reliably supply fuel to the plant, the highest priority level for service on the interstate natural gas system. Pet. Ex. 4 (Cooper Rebuttal) at 16. Natural gas will be supplied via the Midwestern Gas Transmission ("MGT") pipeline, which is an interstate pipeline that runs across the Petersburg property. Pet. Ex. 3 (Cooper Direct) at 5. The firm transportation for the Petersburg plant is directly connected to Rockies Express Pipeline

(“REX”), Trunkline Gas, Texas Gas Transmission (“TGT”), and Tennessee Gas Pipeline, among others. **As a result, AES Indiana has provided for pipeline diversity as well as supply region diversity.** Pet. Ex. 4 (Cooper Rebuttal) at 7; also Pet. Ex. 3 (Cooper Direct) at 5-6. AES Indiana is experienced in natural gas supply. While there were consequences of the recent storm in Texas affecting generation, AES Indiana did not receive force majeure for its natural gas transportation, including on Texas Gas Transmission, and was able to deliver adequate gas to supply its units. Pet. Ex. 4 (Cooper Rebuttal) at 10-11.⁶

REI’s summary of Ms. Medine’s testimony on the firm transportation for natural gas supply issue ends with the statement that Ms. Medine “said her recommendation is consistent with a FERC decision” citing Medine at 23. This FERC reference does not address force majeure. Furthermore, Ms. Medine did not use the words “FERC decision”. She stated artfully that her testimony is “consistent with FERC”. *Id.* As explained in Mr. Cooper’s Rebuttal (Pet. Ex. 4 at QA 18), the excerpt Ms. Medine quotes is *not* a FERC or a NERC recommendation as indicated in Ms. Medine’s testimony. As Mr. Cooper’s testimony shows, not all pipeline issues are universal nor are costly solutions required where problems do not exist. Pet. Ex. 4 (Cooper Rebuttal) at QA 18. Most issues requiring extraordinary measures and costs for onsite storage or other redundancy investments are related to known constraints. *Id.* There are no such issues or constraints with the Petersburg Repowering Project. *Id.*

8. Statewide Analysis. REI’s redline of the Company’s Proposed Order deletes the summary of Mr. Nasi’s testimony regarding the Commission’s statewide analysis. REI Redline

⁶ REI’s argument about the potential impact of “force majeure” on natural gas supply fails to recognize that coal supply and transportation arrangements also exclude severe weather and other force majeure events. REI focuses on storm events, but reliability reflects unplanned outages regardless of the Cause. Natural gas facilities have less total forced outage rates than coal facilities. Once converted to operate on natural gas, Petersburg Units 3 and 4 will also have greater operational flexibility.

at 27. Mr. Nasi made these points and REI offers no explanation for its proposed deletion. This summary is accurate and relevant to the “discussion and finding” on this contested issue (where REI also deletes most of AES Indiana’s proposed discussion of Mr. Nasi’s testimony). REI Redline at 47).

REI’s contention (REI Redline at 48) that the Company’s proposal is inconsistent with a table in an email from the Commission’s General Counsel’s is unfounded. Petersburg Units 3 and 4 are *existing units* and are therefore reflected as such in the identified table. The proposed Repowering Project maintains this existing capacity into the future, albeit at a lower cost to customers and with improved operational flexibility. Indeed, the converted units maintain this capacity into the future beyond the point where coal units would likely be retired.⁷

While the Commission will ultimately determine the content and length of its order, any decision must necessarily reconcile the parties’ respective positions with the record as a whole, and with governing law and policy.⁸ AES Indiana’s filing is consistent with the governing statute and Commission practice, and is supported by substantial evidence. REI’s arguments regarding the Statewide Analysis and the CPCN Statute lack merit (REI Redline at 47-49) and do not warrant the rejection of the proposed Project.

B. Best Estimate. The CPCN Statute requires the CPCN applicant to “file an estimate of construction, purchase, or lease costs in such detail as the commission may require”, and the Commission to make “a finding as to the best estimate of construction, purchase, or lease costs based on the evidence of record.” Ind. Code § 8-1-8.5-5(a)-(b). AES Indiana provided the

⁷ See Tr. B-95 (witness Miller explaining that in the eyes of MISO the Repowering will be a one for one capacity replacement that’s “like we haven’t lost that capacity to begin with.”); also Pet. Ex. 8 (Miller Rebuttal) at 13, 18 (discussing impact of final GHG NSPS on cost to keep Petersburg at a coal-fired resource).

⁸ See this brief, Section 1.

required estimate. The OUCC reviewed it and made no objection to it. REI's witnesses did not address the Best Estimate of the Project cost.

REI proposes the Commission reject the Company's Best Estimate because it does not reflect the undepreciated capital cost of the existing Units. REI Redline at 46. Notably, this cost is not a "construction, purchase or lease cost" of the Conversion Project which is the subject of the CPCN petition. The incremental investment associated with the Conversion Project is the subject of this CPCN proceeding and is properly reflected in the Company's Best Estimate consistent with the governing statutory language and Commission practice. There is nothing unreasonable about following the plain language of the statute regarding the "best estimate". The Company's approach is consistent with Commission practice and allows the Commission to assess the incremental cost of a resource proposal.

The undepreciated cost of Petersburg Units 3 and 4 was not hidden during the course of this proceeding; the record shows this cost was identified in discovery and it is reflected in the evidentiary record. Tr. A-16-17. As clarified in the OUCC's post hearing filing, OUCC took all costs into consideration in its assessment of the overall cost savings to ratepayers (OUCC Brief at 3) and in its conclusion that the OUCC does not oppose the proposed Project. *Id.*

REI's reference to the undepreciated capital costs as a "\$511 million deferred regulatory assets" is erroneous. REI Redline at 46. The undepreciated capital costs of these units is Electric Plant in Service, not a regulatory asset as reflected in REI's post hearing filing. REI Redline at 46. Petersburg Units 3 and 4 are not being retired; these units will remain in service but will be operated on natural gas. As Mr. Bigalbal explained during REI's cross-examination, "most of the plant will be used other than the coal and material handling equipment." Tr. A-21. Moreover, the "sunk" costs associated with the coal related retirements are approximately \$24 million (Pet.

Ex. 9 (Mehring Direct) at 6), not \$551 million as reflected in REI's proposed order. REI Redline at 46.

In addition to being meritless in the context of a plant that is *not* being retired – meaning the investment is not “stranded” -- REI's argument about the recovery of stranded costs is contradicted by substantial precedent allowing the recovery of stranded cost associated with property that was once used and useful. Allowing recovery of remaining net book balances is typical ratemaking treatment where the property at issue has been in service and used and useful for a number of years, but where the property has not been fully depreciated at the time of its retirement. This standard ratemaking practice has been recognized by both this Commission and the Indiana Supreme Court. For example, in *Citizens Action Coalition of Ind., Inc. v. N. Ind. Pub. Service Co.*, 485 N.E.2d 610 (Ind. 1985), the Indiana Supreme Court stated that:

With the exception of the last case these cases establish a long-adhered to administrative interpretation of allowing amortization of abandoned plants. *i.e.* plants that were “used and useful” property and then retired from service. This is clearly distinguishable from allowing amortization of cancelled plants that never became “used and useful”. Allowance of amortization of cancelled plants would encourage uneconomical or unproductive ventures; whereas, allowance for amortization of abandoned or retired plants encourages utilities to remove obsolete plants and property from the ratebase. This treatment also benefits consumers because obsolete and inefficient property is removed from the ratebase.

Id. at 616.^{9, 10}

⁹ The Court reference to “these cases” was referring to the following cases, which it cited as follows: *Commercial Club v. Terre Haute, I & E Traction Co.*, (Ind. Pub. Serv. Comm'n April 27, 1917), Cause No. 317, P.U.R. 1917 D., 743, 747 - 748; *Owensville Light Co.*, (Ind. Pub. Serv. Comm'n, Sept. 29, 1920), Cause No. 5556; *Toner v. Martinsville Gas & Elec. Co.*, (Ind Pub. Serv. Comm'n, April 27, 1923), Cause No. 6959, P.U.R. 1923 E., 69, 71-73; *Indianapolis Railways, Inc.*, Pub. Serv. Comm'n, May 7, 1953), Cause No. 23408, 382-A, 100 P.U.R. (N.S.) 207, 217; *Indiana & Michigan Elec. Co.*, (Ind. Pub. Serv. Comm'n September 21, 1978), Cause No. 35251.

¹⁰ The Commission has similarly recognized “the long standing regulatory policy of allowing for current amortization of [an] undepreciated portion of property which, having been used and useful is then removed from service.” See *In Re GTE North, Inc.*, Cause No. 38427, at p. 48, 1988 WL 1621425 (IURC Aug. 31, 1988). See also, *e.g.*, *In Re Petition of South Haven Sewer Works, Inc.*, Cause No. 40398, 1997 WL 34880736 at *17 (IURC May 28, 1997) (“...we do agree that we can permit the amortization of the undepreciated balance of formerly used and useful plant that has been abandoned”); *In Re Application of*

REI makes no effort to reconcile its position with Indiana law and policy. Nevertheless, the Commission must apply the law and policy in an even and consistent manner, treating those who are similarly situated in a like manner. *Re Indiana-American Water Co.*, Cause No. 39150 at 6, 1991 WL 497157 (IURC June 19, 1991) (citing *Coppedge v. U.S.*, 369 U.S. 438, 446-47 (1962)). Any departure from precedent or change in policy must be fully explained in the Commission's order. *Atchison, T. & S.F. Ry. Co. v. Wichita Bd. of Trade*, 412 U.S. 800, 808 (1973).

REI's argument regarding firm transportation of natural gas cost is similarly unavailing. While these fixed O&M costs are not part of the Project capital investment reflected in the Best Estimate, these costs were included in the PVRr analysis of the Project. AES Indiana included approximately \$10.6 million per year or \$191 million in nominal dollars over the planning period as a fixed O&M cost for the firm transportation of natural gas to the repowered Petersburg units. Pet. Ex. 8 (Miller Rebuttal) at QA 57. During the 2022 IRP process and as part of the workpapers submitted in this filing, AES Indiana was fully transparent in providing documents related to the IRP analyses and its associated inputs. *Id.*¹¹ Ms. Medine had access to the supporting documents to confirm that firm natural gas transportation was included in the analysis. *Id.* These firm natural gas transportation costs also were included in AES Indiana witness Rogers' rate impact analysis. See QA 39 of Pet. Ex. 10 (Rogers Direct).

Accordingly, REI's proposed findings on the Best Estimate and Stranded Costs cannot reasonably be reconciled with the statutory requirement, record evidence, and Commission

Southside Utilities, Inc., Cause No. 36569, 1982 WL 969888 at *7 (IURC July 12, 1982); *In Re Application of Old State Utility Corp.*, Cause No. 36470, 1982 WL 970148 at *1 (IURC March 16, 1982).

¹¹ See Confidential Workpaper Witness EKM-2 on the Pete 3 Updated and Pete 4 Updated tabs, Row 18.

practice. In addition to the matters discussed above, these proposals include REI's erroneous reference to *retirements* in the Environmental Sustainability section of REI's Proposed Order (see REI Redline at 71) and REI's quote from a 2017 Commission decision to the effect that a "decision to retire the Petersburg Station would be difficult to reverse ..." REI Redline at 73. The Company is not proposing to retire Petersburg Units 3 and 4 in this proceeding. The Company seeks to repower them.

The Company's analysis reflects an expectation that the refueled units will operate through the planning period.¹² There is no legitimate basis to conclude this will not happen. The record shows the difference between depreciation over 20 years (as reflected in AES Indiana's analysis) versus 13 years (as proposed by REI) would not change the outcome of the financial analysis. Pet. Ex. 2 (Bigalbal Rebuttal) at 13. If the future unfolds in a different manner and results in stranded costs, the Commission can address the matter based on the facts and circumstances as they exist at that future point in time. Additionally, the relationship between the coal and gas markets has changed since 2017. Indiana law requires this relationship, as well as the costs/benefits of operations on coal versus natural gas, to be assessed based on the record of the instant proceeding, not one decided seven years ago under different facts and circumstances. REI's suggestion that the Commission's conclusion in this instant docket should reflect otherwise is unfounded and should be rejected.

C. Bill Impact. The Company's bill impact analysis is consistent with the analysis previously accepted by the Commission. Pet. Ex. 11 (Rogers Rebuttal) at 14-15. Company witness Miller presented the 20-year PVRR and the 10-year PVRR for the 2022 IRP and 2024

¹² Pet. Ex. 8 (Miller Rebuttal) at 27 (in the 2022 IRP and 2024 IRP Update, Petersburg is assumed to operate through the planning period (2023 – 2042) in both the strategy that continues to operate the units on coal and the strategy that repowers the units to gas).

IRP Update. Pet. Ex. 7 (Miller Direct) at Figure 6 (p. 26). This PVRR analysis compares different resource portfolios on a comparable basis over a planning period and over a range of alternative potential futures. Calculating the PVRR for different portfolios provides a basis for comparison of the overall incremental cost of each portfolio on all customers over the planning period. The annual revenue requirement reflected in the PVRR is a general proxy for customer rate impact by year over the planning period. Mr. Miller also presented a comparison of the annual revenue requirements of the Petersburg Conversion and Retirement & Replace/Clean Energy strategies to keeping Petersburg on coal in both nominal and real dollars. *Id.* at Figures 7 and 8, pp. 26-27. This is precisely the analysis the Draft Director’s Report for AES Indiana’s 2022 IRP identified as useful. AES Indiana CX-1 at 19, 24-25. The Commission should reject the REI argument that there is no relationship, or equivalency, between PVRR and affordability.¹³

Furthermore, as discussed above, the Company has not ignored the “all-in” cost of the Project. To the contrary, the Company correctly focused on incremental costs; the existing capital investment will be reflected in rates regardless of the resource strategy. Moreover, because Petersburg Units 3 and 4 will remain in service, REI’s contention that the Project will “strand” (REI Redline at 61, 71, 73) \$511 million in capital investment is erroneous. The proposed Project will keep these units operating and reduce fixed costs by approximately \$657 million over the planning period. Accordingly, REI’s criticism of the Company’s affordability analysis REI’s opposition to the Project should be rejected.

D. Parent Company ESG and Executive Compensation. REI’s arguments regarding parent company compensation rest on numerous errors. For example, REI argues that

¹³ For completeness, AES Indiana advises the Commission that the Final Director’s Report on AES Indiana’s 2022 IRP was issued on August 26, 2024; the points from the Draft Report discussed herein were also made in the Final Report. [Directors-Final-AES-IRP-Report-8-14-24.pdf](#) at 29, 35, 36.

“certain personnel” are “eligible for up to 7.5% in bonus compensation”. REI Redline at 49. This is not correct. As shown by REI CX-10 (p. 46), the 7.5% is the weighting given to specified categories not the compensation percentage. Additionally, this parent company compensation is addressed to Restricted Stock Units (“RSUs”) for “Named Executive Officers” (NEOs). *Id.* at 7, 46; also Tr. A-60. REI’s reference to “bonus” is not accurate. See REI Redline at 49. RSUs represent the right to receive a single share of AES common stock subject to service-based vesting conditions. REI CX-10 at 45. More importantly, REI’s reference to Mr. Bigalbal in a statement addressed to NEO compensation is misleading. REI Redline at 49. Mr. Bigalbal testified that he is not eligible for this compensation (Tr. A-59) and REI CX 10 (p. 36) confirms he is not an NEO.

With respect to his own compensation structure, Mr. Bigalbal explained that AES Indiana has multiple goals, including safety, reliability, and customer satisfaction, and added that cost impact on the customer is very important. Tr. A-60-61. Simply put, the success of the conversion project is important, but a small portion of Mr. Bigalbal compensation and this portion is not limited to just the approval -- the safe, efficient, and cost of executing the project are also a part of it.

Accordingly, the Commission should reject REI’s contention that “there is no evidence that AES Indiana is not bound (and various executives responsible for Indiana operations receive incentives for achieving) those [parent company] goals”. REI Redline at 49. This evidence was presented in the rebuttal testimony of Mr. Bigalbal and Mr. Miller and discussed in the Company’s proposed order. AESI-PO at 24, 48, 51. While REI’s filing strikes this material in its version of the proposed order, this action does not make the evidence go away.

E. Bias. REI proposes the Commission:

conclude ...the proposed Project is not consistent with an IRP that selects a preferred portfolio based on unbiased inputs that favor a predetermined outcome.

REI Redline 49. This proposal is nonsensical. The idea that a preferred portfolio should be based on “unbiased inputs that favor a predetermined outcome” is a contradiction in terms. Substantial evidence refutes REI’s premise that the IRP inputs were biased. In particular, the record shows the updated 2024 IRP analysis coal pricing is consistent with the pricing presented by REI witness Medine. The record also demonstrates the 2022 IRP coal price came from the Indiana coal industry participants who seek to sell coal to Petersburg via a competitive solicitation process. The competitive bidding process is a sound means of identifying a market price.

As recognized in the Draft Director’s Report, utility resource decisions are subject to regulatory oversight. AES Indiana CX-1 at 24. “The IRP stakeholder process with several public advisory sessions and an opportunity to provide written comments on the utility IRP helps provide an informed check on the exercise of company judgment. An additional layer of oversight comes when the utility seeks a CPCN or approval of a PPA before the Commission.” *Id.* AES Indiana has provided substantial information to the Commission and to the broader public to solicit input and facilitate understanding of the Company’s resource needs and decisions. The Company’s stakeholder process was found to be exemplary:

The Director agrees with the Joint Commenters that the stakeholder process used by AES Indiana was excellent and sets a high bar for future IRP processes by AES Indiana and other Indiana utilities. Especially important was AES Indiana’s commitment to making available modeling inputs, outputs, and supporting data to stakeholders in a timely manner.

Id. at 34.¹⁴ REI has identified no credible basis for the Commission to conclude the 2022 IRP and related analyses and decisions are based on biased inputs. REI's position should be rejected.

F. REI Criticism of 2022 IRP and 2024 IRP Update. REI's criticism of the Company's 2022 IRP and 2024 IRP Update is unfounded. The IURC rules expressly contemplate the presentation of updated analysis in CPCN proceedings. 170 IAC 4-7-2.5(b). Updating the analysis to reflect current market conditions allows the Company, the Commission, and stakeholders to assess whether the Project continues to be a viable choice.

REI's proposed discussion and finding cherry picks the evidentiary record. Nevertheless, the Commission decision in this case must weigh the totality of the probative evidence, including the substantial evidence refuting REI's contentions. Challengers have the burden of showing there is insufficient evidence in the record to support the findings of the Commission; they cannot merely cite to other evidence of record which would support a determination more favorable to their position." *Citizens Action Coalition of Indiana, Inc. v. Indianapolis Power & Light Co.*, 74 N.E.3d 554, 565 (Ind. Ct. App. 2017) (citing *Bethlehem Steel Corp. v. N. Ind. Pub. Serv. Co.*, 397 N.E.2d 623, 628 (Ind. Ct. App. 1979)). See also, *Hancock Rural Tel. Corp. v. Pub. Serv. Comm'n*, 137 Ind. App. 14, 43, 201 N.E.2d 573, 587, *reh'g denied*, 203 N.E.2d 204 (1964); *Hidden Valley Lake Prop. Owners Ass'n v. HVL Utils., Inc.*, 408 N.E.2d 622, 626, *reh'g denied*, 411 N.E.2d 1262 (Ind. Ct. App. 1980) (Commission must in one way or another address each issue raised by the parties appearing before it. If the issue raised is material to the ultimate conclusions, then a specific finding of fact based on substantial evidence must be made concerning that issue). REI's proposed order fails to satisfy this standard.

¹⁴ Also, [Directors-Final-AES-IRP-Report-8-14-24.pdf](#) at 34-35, 49.

Substantial Company evidence, including the following, refutes REI's arguments:

1. REI Redline p. 50: *"REI claims that AES Indiana's 2022 IRP used coal prices that were not market based, and that were inflated in part due to the impacts of pandemic and Ukraine war related events at the time the prices were polled. Medine Testimony at 10."*
 - a. Pet. Ex. 4 (Cooper Rebuttal) at QA 12: showing the 2022 IRP coal price input came from the market participants who actually sell coal for use at Petersburg Station; AES Indiana selected the second lowest offer on a delivered basis as the starting point for the coal curve in the 2022 IRP because AES Indiana purchased the coal associated with the lowest offer and therefore this coal was no longer available.
 - b. AES Indiana Attachment EKM-1 (2022 IRP):
 - pp. 138 and 167: explaining that AES Indiana initially used Horizons Energy Fall 2021 price outlook for natural gas and coal to inform the custom fundamental power price forecasts performed by Horizons Energy. The Horizon Energy Spring 2022 outlook was used **"in response to stakeholder comments"**.
 - p. 169: corroborating Cooper Rebuttal testimony that AES Indiana used objective market based data points from the then most recent RFP for coal procurement to purchase coal and to select starting point for IRP coal price forecast.
 - p. 207: explaining Company did not ignore the price increases driven by ongoing energy crisis in Europe exacerbated by Russia's invasion of Ukraine, along with other economic factors. Rather, the Company used stochastic analysis to evaluate uncertainty in coal pricing and other factors.
 - c. Pet. Ex. 8 (Miller Rebuttal) at QA 32: explaining that Company's methodology for forecasting coal pricing (which used actual coal offers or contracted prices for initial forecast year and applied growth rates from a credible independent source) is completely reasonable and consistent with industry practice because it captures the exact transaction price paid by or offered to AES Indiana as a starting point for the forecast.
 - d. Pet. Ex. 4 (Cooper Rebuttal) at QA 15: explaining the coal curve in the 2024 IRP Update is similar to the Coaldesk current market coal prices for the corresponding years that Ms. Medine uses in her testimony (p. 11) when adjusted for delivery to the Petersburg Plant.
 - e. Pet. Ex. 8 (Miller Rebuttal) at QA 32: stating that REI witness Medine never recommended an alternative methodology or identified what she considers industry best practice.

2. REI Redline, p. 50: *“AES Indiana claims it updated the coal prices in its 2024 IRP Update. Miller Rebuttal at 25. REI claims that AES Indiana provided inadequate analysis and proof supporting the coal pricing in its 2024 IRP Update, and simply noted a 11.9% decrease because of updated coal agreement pricing. Medine Testimony at 12.”*

- a. Pet. Ex. 7 (Miller Direct) at QA 24: sworn testimony that in the 2024 IRP Update AES Indiana used actual contracted coal prices through 2025 and applied Horizon Spring 2023 Illinois Basin Fundamental Forecast growth rates over the planning horizon to forecast coal prices. This testimony and the supporting workpaper show the update reduced coal prices by 11.9% for the full period 2023-2042. This is not a mere “claim”; it is sworn testimony.
- b. AES Indiana Exhibit 12C - AES Indiana Witness EKM Confidential Workpaper 4 (Commodity Updates): setting forth delivered cost of coal price inputs for IRP and for Update.
- c. REI Ex. 1 (Medine Direct) at 12: conceding 2024 IRP Update used coal agreement pricing.
- d. Pet. Ex. 8 (Miller Rebuttal) at QA 31: explaining 2022 IRP Scenario Analysis was a deterministic analysis that included a single base case set of coal prices. AES Indiana accounted for the variability of coal prices in the stochastic analysis that was performed as part of the 2022 IRP to assess potential risks and opportunities to PVRR associated with the variability in commodity prices, load and renewable energy generation of the different Petersburg strategies. In the stochastic analysis, the Company varied not only coal prices, but power prices, gas prices, load and renewable energy generation in 100 unique iterations or outcomes for each of the different Petersburg strategies. The analysis measured the resulting P5 (as opportunity) and P95 (as risk) of the PVRR over the 100 iterations for each Petersburg Strategy. The analysis results indicate that the Petersburg Repowering has the lowest P95 risk when compared to the other strategies including keeping Petersburg as a coal resource (see 2022 IRP Volume 1, pp. 245-249).
- e. Pet. Ex. 8 (Miller Rebuttal) at QA 31: explaining Figure 3 visually illustrates just how much coal price variability was included in the 2022 IRP stochastic analysis. The analysis included coal prices reaching as low as \$0.73/MMBtu and as high as \$9.56/MMBtu. As demonstrated, this approach reasonably captures variability and volatility in coal prices as well as gas prices, power prices, load and renewable energy generation to ensure an unbiased IRP analysis across uncertain futures.
- f. Pet. Ex. 4 (Cooper Rebuttal) at QA 15: explaining that as shown in AES Indiana witness Miller’s Rebuttal Testimony (QA 50, Figure 7), the coal and gas curves used for the 2022 IRP and updated curves for the 2024 IRP Update show an

average spread greater than \$1/MMBtu, which is reasonable to support coal competitiveness from a dispatch cost perspective (fixed costs are not typically included in the dispatch price for generators).

3. REI Redline, p. 50: *“Specifically, Mr. Cooper admitted that the IRP used one coal price forecast, but three natural gas price forecasts. Tr. B-5.”*

- a. Tr. B-3: Company’s stochastic analysis looked at 100 possible future and varies all the commodities, power, gas, coal, and so in that you see, as observed in testimony, a range of potential fuel scenarios, if you will.
- b. Pet. Ex. 4 (Cooper Rebuttal) at QA 15: explaining that in the stochastic analysis, the delivered coal prices ranged from \$0.73/MMBtu to \$9.56/MMBtu. In those same stochastic runs, natural gas prices ranged from \$0.82 to \$22.54.
- c. Pet. Ex. 4 (Cooper Rebuttal) at QA 14: explaining that in the two scenarios in the 2022 IRP that contemplate a future with more stringent environmental regulations on generators and fuel production, the Company used the high natural gas price curve while using the base coal curve; AES Indiana’s choice not to use a high coal is an advantage for Petersburg remaining on coal and is an example of the Company’s effort to avoid bias favoring repowering.

4. REI Redline, p. 50: *“Ms. Medine testified that an overstatement of coal prices could be in the hundreds of millions of dollars, which could effectively negate the cost savings alleged by AES Indiana for the Petersburg conversion Project”.*

- See Section 3.A.5 above demonstrating this contention is meritless.

5. REI Redline, pp. 50-51: *“We find that the IRP’s reliance on renewables does not square with the attributes of reliability and resilience, especially in light of the relative MISO accreditation of renewables as compared to non-renewable assets. We also share the concern that renewable resources are in jeopardy of being built given increasing county moratoria, queue delays, and lingering supply chain and labor shortages.”*

Pet. Ex. 8 (Miller Rebuttal) at QA 35:

- explaining how AES Indiana reasonably accounted for near-term challenges for renewables in 2022 IRP and 2024 IRP Update by constraining volume of renewables model could select at the beginning of the study period.
- explaining that Ms. Medine is focused on the year 2032 which is when the Harding Street units are assumed to be retired and the 2022 IRP picked a large volume of renewables to replace these units in the 2030s.
- testifying that ultimately, the 2030 planning period is far beyond the 2022 Short Term Action Plan window (2023-2027). AES Indiana will conduct another IRP in 2025 that reevaluates strategies for the later period and that update will include assumption updates that account for renewable energy availability and accreditation.
- explaining that the Petersburg Repowering and the Pike County Battery Energy Storage Project included in the Short Term Action Plan period are realistic and deliverable.

6. REI Redline, p. 51: *Company “failed to include any explanation as to why the proposed Project is necessary at this time.”*

- AES Indiana’s case-in-chief and rebuttal make this demonstration. See e.g.:
 - Pet. Ex. 2 (Bigalbal Rebuttal) at 7: AES Indiana demonstrated in its 2022 IRP and in the 2024 IRP Update that the Petersburg Conversion Project performs favorably across the Five Pillars in all scenarios.
 - Pet. Ex. 2 (Bigalbal Rebuttal) at 19-22, 26-27: refuting REI contention that the Repowering Project is premature.
 - Pet. Ex. 8 (Miller Rebuttal) at 11-12: further refuting REI contention that the Repowering Project is premature.

7. REI Redline at 51: *“AES Indiana has not attempted to analyze the cost benefit of keeping the units on coal for less than twenty years.”*

- a. Pet. Ex. 8 (Miller Rebuttal) at QA 39: explaining 10-year PVRR comparison ignores risk and the other Pillars. As regulation on CO₂ becomes more stringent, the cost to operate Petersburg as a coal resource becomes more expensive and less cost effective compared to operating the units on natural gas. After including compliance with the EPA GHG NSPS in the 2024 IRP Update repowering the

units to natural gas costs nearly \$100M less than keeping the units on coal over that 10-year period.

- b. Pet. Ex. 8 (Miller Rebuttal) at QA17: explaining that the Petersburg Repowering has increased in cost effectiveness (lower present value of revenue requirement of approximately \$437 million compared to operating Petersburg as a coal-fired generating plant) for customers under the EPA's GHG NSPS when compared to the 2022 IRP results because the find rules contain more aggressive compliance.

8. REI Redline, p. 51: *"The evidence of the comparative capacity factors of the converted natural gas steamer units to the existing coal units also establishes that AES Indiana's proposed natural gas steamers are less efficient than the existing coal-fired units."*

- As discussed in Section 3.A.1 above, capacity factors are driven by fuel cost only relative to market prices; capacity factors do not include the fixed operating and maintenance costs. Natural gas units are efficient when fixed O&M is included, thus the outcome of the PVR analysis. Additional natural gas units provide operational flexibility.

G. Consideration of Resource Alternatives. The Company's 2022 IRP and Mr. Miller's testimony in this Cause demonstrate AES Indiana reasonably considered resource alternatives consistent with Ind. Code § 8-1-8.5-4. As the Commission has previously explained:

The evidence regarding the alternatives enumerated at Ind. Code § 8-1-8.5-4 permits the Commission to make an informed decision as to whether a pending proposal is in the public interest. As we noted in *PSI Energy, Inc.*, Cause Nos. 41924 and 42145, "the statute does not require a utility to exhaust all statutory alternatives before it may request a CPCN for new capacity." *PSI Energy, Inc.*, Cause No. 42145, at 14 (IURC Dec. 19, 2002). "Rather, what is important is that the Commission be given enough information so that the Commission can take into account all of the enumerated alternatives in making its determination." *Id.* "The statute does not limit the Commission's discretion to weigh the importance of each alternative in determining the public interest." *Id.*

Re Indianapolis Power & Light Co., Cause No. 44339 at 21, 2014 WL 2091348 at *22 (IURC May 14, 2014). The record demonstrates nuclear is not a viable alternative to the Repowering Project:

- Tr. A-49-50: explaining that there's not a technology out there right now, other than nuke, which is probably not cost effective right now, that would allow the utility to get off carbon altogether; adding that there's promise in small modular reactors, but time will tell.
- Tr. B-80: in response to question whether there were any non-carbon emitting base load sources the Company did not consider, witness explains that the Company did not consider nuclear options, in particular small modular reactors, which are an emerging technology that hasn't necessarily been demonstrated in the US.
- Tr. B- 82: Company tracks what's happening in the nuclear industry and the development of nuclear fuel.
- Tr. B-94: It takes nine to ten years to permit a nuclear facility with permitting and all the regulatory approvals and all the legwork that needs to be done, siting and everything.
- Tr. B-81: Mr. Miller's response that he is not aware of a study identified the Petersburg "site" as a candidate for nuclear replacement does not bring these facts into the record. REI CX 16 was NOT offered or admitted into evidence. Tr. B-85. As such, this is mere argument of counsel, not evidence.¹⁵ Even if CX 16 had been admitted into evidence, this article was published in June 2024 (well after the 2022 IRP) and states the possibility of using retired coal plant *sites* for nuclear is being evaluated but makes no showing that this possibility is commercially viable now or in near future. While this article refers to AES Indiana Petersburg plant as a top-ranked "site" this ranking does not reflect on-site geological investigations, environmental assessments, and community engagement processes, all of which remain necessary. A further review of this article reveals that the use of retired coal plant sites for nuclear facilities remains a mere "possibility" and not a viable alternative to the Conversion Project assessed in the 2022 IRP and confirmed via the 2024 IRP Update analysis.
- Tr. B-82: While this transcript reference shows the Company is aware that the Indiana Office of Energy Development has commissioned a study by Purdue University "to explore the use of nuclear power to fulfill Indiana's energy needs", it fails to establish nuclear is a viable alternative to the proposed Repowering Project.

¹⁵ 170 IAC 1-1.1-23 ("Posthearing briefs and proposed orders are not evidence and therefore are not part of the evidentiary record on which the commission may rely for support of its factual findings."); *Re NIPSCO Industrial Group*, Cause No. 38706 FAC 130 S2, 2022 WL 17830614 at *17 (IURC Dec. 14, 2022) (post-hearing filing is not evidence); *American Suburban Utils., Inc.*, Cause No. 44676 S1, 2021 WL 4413453 at *1 (IURC Sept. 22, 2021) (same); *Indiana Michigan Power Co.*, Cause No. 39314, 1993 WL 602559 at *73 (IURC Nov. 12, 1993) ("[A]rguments of counsel cannot supplement or stand in the place of adequate evidence of record.").

Finally, AES Indiana's IRP was conducted in accordance with the Commission's stakeholder process. REI was a participant in that process and also filed comments with the Commission on the IRP and the Director's draft report. Medine, Attachments ESM-2 and ESM-3. REI's desire to have nuclear considered was not mentioned in these comments. Nor was this issue raised in REI's prefiled testimony. Had the issue been raised during the stakeholder comment processes or even in REI's testimony, the Company could have addressed this concern more directly. The Commission's General Administrative Order (GAO) 2020-05 – Improving Procedural Efficiencies Guidelines and Recommendations - directs parties not to include any new evidence or arguments not supported by the evidence in the record in proposed orders. This GAO recognizes that doing so unduly broadens the issues, is inefficient and unfair.¹⁶

Accordingly, the Commission should reject REI's contention that: "The record is also clear that AES Indiana summarily dismissed the nuclear power option, which we find is not consistent with the requirements of the statute." (REI Redline, at 51). As the nuclear alternative is the only possibility identified by REI as lacking adequate consideration, the Commission should also reject REI's contention that the Company failed to reasonably consider alternatives in accordance with Ind. Code § 8-1-8.5-4(b).

H. Environmental Regulation Uncertainty. REI's proposal that the Commission reject the Repowering Project based on environmental regulatory uncertainty lacks merit. See REI Redline at 52-53. While perhaps a Freudian Slip, REI's own filing ironically says it best – namely there is an **"absence of evidence that the coal units are capable of continued operation for the next five to seven years."** REI Redline at 52-53. **Economically speaking – that's spot**

¹⁶ In the section of her testimony titled "Alternatives to AES's Refueling Proposal" Ms. Medine addresses only the units staying on coal by the Company withdrawing or delaying its CPCN request or selling the units to a third party. Medine at 32.

on. In other words, substantial evidence demonstrates the proposed Repowering Project reduces costs, reduces risk, and improves operational flexibility for the benefit of customers compared to continuing to operate the units on coal. This is not an environmental regulatory compliance project. The proposal is driven by the financial benefits for customers – namely the fixed cost savings while also reducing exposure to environmental regulatory cost risk. It is in customers’ interest to take this offramp from coal and to provide a less risky natural gas plant that will reduce costs for the benefit of customers versus a retirement and replacement of this plant in the near future. By converting to this low cost option, the Company will be bettered positioned to utilize resources to focus on the potential growth that the industry expects with data centers and industry.

Even assuming *arguendo* that additional regulations are imposed in the future, the probability is very high that the cost to comply with the natural gas requirements will be less than the cost to comply with new requirements on coal units. Natural gas has much less exposure because its emissions are much lower. Substantial reductions in most air emissions will result from the repowering of the existing coal-fired units with natural gas as indicated in the table below.

Pollutant	Limited Potential to Emit (lb/MMBtu)		% Reduction (% <i>increase</i>)
	Current Coal-Fired Units	Repowered Natural gas fired Units	
NO _x	0.700	0.100	85.7%
CO	0.036	0.185	(417%)
VOCs	0.004	0.005	(43.8%)
SO ₂	0.280	0.001	99.8%
PM ₁₀	1.581	0.007	99.5%
PM _{2.5}	0.412	0.007	98.2%
Mercury	1.20e-6	2.55e-7	78.8%
CO ₂	206	117	43.1%

Pet. Ex. 5 (Collier Direct) at QA 11. Additionally, the repowering of Units 3 and 4 eliminates future production of coal combustion residuals associated with the burning coal. *Id.* at 4.

REI's contentions regarding the development of State of Indiana Plan under the final GHG NSPS do not warrant the rejection of the Repowering Project. The idea that the Indiana State Plan could somehow salvage the coal industry to any degree, much less one that would cause the cost and operational advantages of the Repowering to disappear is a real stretch. As Ms. Collier testified, if the State Plan does not comply with the EPA requirements, EPA is then obligated to implement a Federal Plan prescribing the standards of performance of the same stringency as the promulgated requirement. Pet. Ex. 6 (Collier Rebuttal) at QA 17.

Substantial record evidence refutes REI's arguments regarding "reconstruction" and the EPA's development of regulations for "existing combustion turbines". Pet. Ex. 6 (Collier Rebuttal) at QAs 18-20; also AESI-PO at 31-34. REI's arguments are speculative and at odds with EPA's own statements. *Id.* at QA 21. More succinctly, the "EP" in EPA stands for "Environmental Protection" and the net environmental benefit from converting a coal plant to burn natural gas is *huge*. Given this, it is illogical to reject the Repowering Project based on speculation that a future EPA regulation might not encourage such conversions.

REI's "legal frailties" argument (REI Redline at 55) also fails to warrant the rejection of the proposed Project. The energy and electric utility industry and this Commission have long operated under uncertain environmental regulatory and political conditions. Because neither the Commission nor the parties have a crystal ball that tells the future, we must make decisions in the face of uncertainty. See AESI-PO at 45-47, also at 29-30, 33, 41, 44.

The proposed Petersburg Units 3 and 4 Repowering is relatively inexpensive at less than \$300/kW to maintain the existing generation of over 1,000 MW. Pet. Ex. 2 (Bigalbal Rebuttal) at 12. In contrast, the estimated cost of a simple cycle gas turbine (which is commonly used as the least cost option for new capacity) is between \$700/kW - \$1,150/kW (reference Lazard's LCOE+ 2024). *Id.* The conversion lowers the exposure to future environmental regulations by significantly reducing air emissions, including CO₂, eliminating coal combustion residuals, and reducing the amount of water needed at the facility. *Id.* at 12-13. The primary cost savings for the conversion from coal to natural gas are the fixed operations and maintenance cost and the reduction in CO₂. *Id.* at 13.

The Company's IRP analysis effectively "bookended" the range of environmental regulation uncertainty by using a "No Environmental Action" scenario on one end and a "Decarbonized Economy" scenario on the other end. See AESI-PO at 47. Mr. Miller's additional analysis supplemented this modeling. *Id.* The extensive analyses support the conclusion that the Repowering Project is a reasonable "least cost" choice across a range of possible futures. See Pet. Exs. 1, 2, 7, and 8.

If the final GHG NSPS are not overturned, the Company will need to retire or convert the units to gas by 2030. That gives us five years. Prudence dictates that the Company proceed to provide resources to meet its customers' need for electricity and to do so in reasonable, least cost manner consistent with the Five Pillars. Given the environmental risk and impact of the GHG NSPS, if the Company does not proceed with the conversion, this will point the Company toward replacement of the units – an option that will come at a substantially higher cost than the Repowering Project. Because it will take approximately five years to obtain a CPCN and get a new facility in place the idea that we have time to adopt a "wait and see approach" lacks merit.

In contrast, by converting to this low cost option now, the Company will be better positioned to develop the resources needed to continue to meet customers' demand for electricity.

Regardless of how the future unfolds with respect to the GHG NSPS or the Good Neighbor Plan, there will be a definite, significant, known, and quantifiable decrease in fixed O&M costs as a result of converting the units from coal to natural gas. Pet. Ex. 8 (Miller Rebuttal), at 19. This decrease comes from the removal of the cost to operate coal handling and coal emissions equipment and is the primary driver behind the cost effectiveness of repowering the units compared to keeping them on coal. *Id.* These fixed O&M cost reductions benefit customers. *Id.* In other words, the Company proposes to repower the units because the IRP economic modeling supports the conclusion that it is reasonable least cost option. The evidence shows that AES Indiana is not pursuing the repowering as a means to comply with GHG NSPS. *Id.* at 12-13.

AES Indiana entered into the EPC Agreement prior to the announcement of the GHG NSPS, thus avoiding any increase in costs or schedule delays related to an increase in EPC Contractor or materials and supplies demand due to the GHG NSPS. Pet. Ex. 2 (Bigalbal Rebuttal), at 21-22. Maintaining the Petersburg units on natural gas as a lower cost, cleaner, reliable, dispatchable capacity resource supports the reliability of the State of Indiana and MISO, and because it is cleaner there is inherently lower risk to its long-term operation. Pet. Ex. 4 (Cooper Rebuttal), at 13.

Accordingly, the Commission should find and conclude that now is the optimal time to repower Petersburg Units 3 and 4.

I. Five Pillars. REI's proposed discussion of the Five Pillars should be rejected. Reliability is not limited to storm events and such events can impact unit operations whether

fueled with natural gas or coal.¹⁷ As discussed in the Company's Proposed Order, AES Indiana has prudently managed fuel supply risk. AESI-PO at 50, also 11. As discussed above, REI's claims regarding FERC, dual-fuel and storage are meritless.¹⁸ Continuing to operate on coal is more expensive and more risky. It provides less operational flexibility, and it is not a long term solution. At best, one might expect to operate on coal for five more years and THEN, these units would need to be retired and replaced with a resource that will likely be much more costly than the proposed Repowering Project. What's more, if this is the path the Commission directs the Company to take, resource planning must still continue. As a practical matter, this means work on the replacement facility and the associated regulatory approval would need to begin now. As shown by Mr. Bigalbal's testimony, the Company has done what it can reasonably be expected to do to bring the current cost-effective deal to the table but these terms have limitations. Pet. Ex. 2 (Bigalbal Rebuttal) at QA 22-23, 27. Consequently, the cost of the resource will be much greater than the cost of the Project presented in this docket for Commission review.

With respect to environmental sustainability, there is no serious debate that converting the units to operate on natural gas will reduce air emissions, solid waste, and water use. Pet. Ex. 5 (Collier Direct); AESI-PO at 57. REI's proposal that the Commission reject the Project because it would "saddle ratepayers with a costly repowering project that may no longer be required" (REI Redline at 72) is contrary to the substantial evidence demonstrating this proposal is not properly characterized as "costly" or a "compliance project" but rather one that is being proposed due to achieve substantial cost reductions, provide operational flexibility, and reduce regulatory risk going forward.

¹⁷ See Cooper Rebuttal at QA20.

¹⁸ See this brief, Section 3.A.7.

REI's assertion that Ms. Collier testified that the Good Neighbor Plan had not been stayed in Indiana (REI Redline at 72) is not accurate. Ms. Collier's testimony states:

the Good Neighbor Plan was stayed in several states, but it had not been stayed in Indiana where it remained in effect as of the date of this prefiled rebuttal testimony....

As it relates to the U.S. Supreme Court, emergency applications to stay the rule were pending before the U.S. Supreme Court as of the date of this prefiled rebuttal testimony. On June 27, 2024, the U.S. Supreme Court issued an order granting a stay of the Good Neighbor Plan pending resolution of legal challenges.

Pet. Ex. 6 (Collier Rebuttal) at QA 11; also Tr. B-30. Moreover, Ms. Collier's rebuttal testimony explains there is no reason to believe that the outcome of this legal challenge would have a material effect on the operation of the repowered units. Pet. Ex. 6 (Collier Rebuttal) at QA 12. Similarly, REI's assertion that AES Indiana claims "repowering proposal is necessary, in part, to comply with the FIP" (REI Redline at 71 misrepresents the record. As explained in Ms. Collier's Rebuttal, the repowering will "facilitate" compliance with CSAPR, meaning it will make it easier. Pet. Ex. 6 (Collier Rebuttal) at QA 12. This includes the current requirements of CSAPR as revised under the Good Neighbor Plan, which is described in Ms. Collier's Direct Testimony (p. 8). During cross-examination Ms. Collier stated that Units 3 and 4 are already compliant with CSAPR and that repowering reduces emissions of NOx, meaning that Petersburg will be required to purchase fewer allowances of NOx and in that regard repowering facilitates compliance with CSAPR. Tr. B-33-34. These flaws further illustrate how REI's proposed order lacks a sound foundation and should be rejected.

CONCLUSION

The OUCC and the Company support approval of the Project. Maintaining the Petersburg units on natural gas as a lower cost, cleaner, reliable, dispatchable capacity resource supports the reliability of the State of Indiana and MISO, and because it is cleaner, there is inherently lower

risk to its long-term operation. Pet. Ex. 4, at 13. REI's opposition focuses on the interest of the coal industry in continuing to selling coal for use at Petersburg. The Company and the Commission however are charged with finding solutions that are in the public convenience and necessity and consistent with the Five Pillars. The Repowering Project is a reasonable plan for the Company to invest in infrastructure necessary to meet the resource needs of its customers while protecting the affordability of utility services for present and future generations of Hoosiers. REI's arguments do not withstand scrutiny when evaluated against the evidentiary record, sound resource planning, and the public interest. Substantial evidence shows the Repowering Project is a reasonable least cost option over a wide range of futures and is consistent with the Five Pillars. For the reasons set forth in AES Indiana's testimony, attachments and post hearing filings, AES Indiana respectfully requests the Commission to promptly issue an order approving the relief sought by the Company in this Cause.

Respectfully submitted,



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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing was served this 10th day of September 2024, by email transmission, hand delivery or United States Mail, first class, postage prepaid to:

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