

Reliable Energy Inc.'s Comments on the AES Indiana 2022 Integrated Resource Plan

March 31, 2023

I. Introduction

AES Indiana published its Integrated Resource Plan (IRP) in December 2022. The IRP followed a yearlong effort with stakeholder input to develop a plan. According to AES Indiana, the goal of the IRP was to determine a Preferred Resource Portfolio and Short Term Action Plan that provides affordable, reliable, and sustainable energy for its customers. Reliable Energy believes it is important for the Indiana Utility Regulatory Commission (IURC) to know that AES Indiana's IRP development and outcome were significantly influenced by the Company's previously announced plans to end coal generation by 2025.¹ As discussed below, this was accomplished by establishing IRP assumptions that would support this result.

While AES Indiana has yet to file for a Certificate of Public Convenience and Necessity (CPCN) to execute its preferred portfolio generation plans, AES has already adopted metrics in its most recent proxy statement² providing strong long-term incentives for accomplishing its off-coal plans. As shown in the proxy statements, AES's "Named Executive Officers" are eligible for annual incentive compensation awards under the stockholder-approved "AES Corporation Performance Incentive Plan," which includes specific environmental, social, and governance (ESG) metrics for these executive compensation bonuses:

ESG Goal	Weight	Measure (Performance by December 31, 2024 as compared to December 31, 2021)	Performance Level	Adjustment Percentage
Environmental	7.5%	Reduction of gigawatt hours from coal generation across the Company's portfolio of fuel sources by the end of the fiscal year ending December 31, 2024	Maximum	+15.0%
			Target	0.0%
			Below Target	-15.0%
Social	7.5%	Qualitative assessment by the Compensation Committee of Company performance in: (1) improving diversity measured by the increase of the representation of women within leadership roles and increasing the representation of historically underrepresented groups in the Company's employee population in the United States; and (2) creating a culture of inclusion measured by the reduction of the voluntary attrition of underrepresented groups.	Maximum	+15.0%
			Target	0.0%
			Below Target	-15.0%

Despite the fact that AES Indiana has not yet filed a CPCN supporting the refueling of coal capacity, the March 23, 2023 Proxy³ has executive compensation bonuses that are identical to last year's Proxy Statement.⁴

¹ <https://www.prnewswire.com/news-releases/aes-announces-intent-to-exit-coal-by-2025-reaffirms-7-to-9-annualized-growth-target-through-2025-delivers-on-all-2021-financial-and-strategic-objectives-301490172.html#:~:text=To%20continue%20to%20accelerate%20the,and%20delivering%20strong%20financial%20results.%22>

² <https://www.aes.com/investors/reports-filings/sec-documents>

³ https://s26.g4cdn.com/697131027/files/doc_financials/2022/ar/2023-Definitive-Proxy-Statement.pdf at page 41.

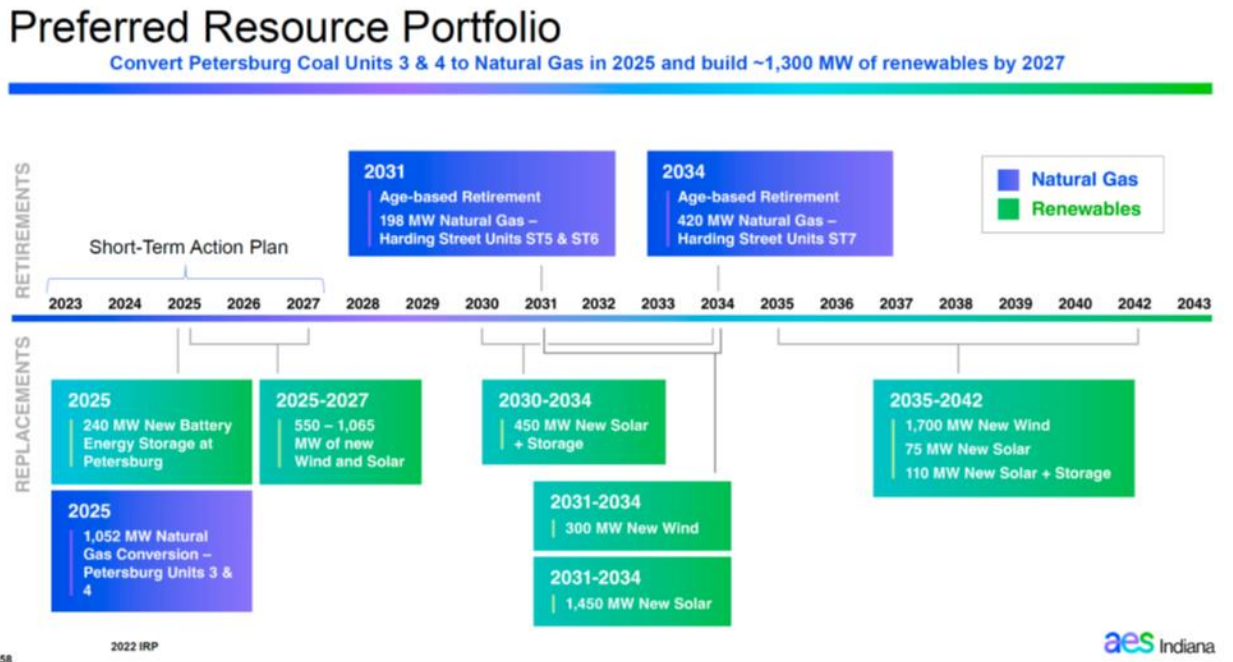
⁴ <https://aescorp2020cr.q4web.com/sec-documents/sec-filings-details/default.aspx?FilingId=100116527074>, at page 51.

It is problematic on many levels that AES Indiana’s performance metrics and executive bonuses related to the shutdown of coal capacity *presume that a CPCN will be approved before it is even filed*, not to mention the IRP has not even been reviewed by the Director. AES’s executives appear to be eligible for significant bonuses based on reduced coal generation – *regardless* of whether the choice to reduce coal generation is economic for customers. The “public” has not been given an opportunity to submit testimony to the IURC as to whether AES Indiana’s plans are in the best interest of AES Indiana ratepayers and the State of Indiana. This concern also extends to AES’s corporate target to achieve net zero emissions from the electricity sector by 2040.⁵ The best interests of AES Indiana’s customers in receiving reliable service at low costs directly conflict with its corporate goals, thus AES’s IRP should be subject to significant scrutiny (perhaps by a third party at the Company’s expense, but not under the Company’s direction). This conflict between the interests of management and shareholders and the interests of ratepayers is why state and federal governments regulate monopoly utilities in the first place. The question that the IURC ultimately needs to address is to what extent Indiana ratepayers should be paying for its utilities to achieve lofty ESG goals driven by management’s strong interests in financial compensation, when those ESG goals are *not* legal obligations of the utilities.

II. Concerns with the IRP

a. Preferred Portfolio

The Preferred Portfolio seeks to convert Petersburg Units 3 and 4 to natural gas, add thousands of megawatts (MW) of wind and solar, and significant battery storage. In addition, AES Indiana plans to retire the refueled Harding Street Units 5, 6, and 7:



⁵ <https://www.aes.com/sustainability>

b. Reliance on Renewables

Except for the proposed conversion of Petersburg Units 3 and 4 to natural gas, the Preferred Plan provides for no additional dispatchable resources during the 20-year plan period. AES Indiana states it is continuing to evaluate resource options including “green hydrogen, small modular reactors, gravity storage, pumped-hydro and carbon capture and sequestration.”⁶ These plans are nebulous at best, and whether they will ever result in additional dispatchable resources is unknown. PJM CEO Manu Asthana spotted this concern in his March 23, 2023 keynote address to the Electric Power Supply Association: “I think the math is pretty straightforward,” Asthana said. “I think we need to add [supply resources] faster ... but I also think we need to subtract slower and **subtract generation only when the replacement generation is here** at scale. I really think that’s critical.” [Empahsis added.] <https://www.rtoinsider.com/articles/31899-pjm-chief-retirements-need-to-slow-down>.

AES Indiana and other utilities are quite aware that a significant reliance on renewables is problematic in terms of reliability and resilience. While AES Indiana has acknowledged significant increases in renewable/battery pricing and supply chain delays, it is not clear that AES Indiana’s goals can reasonably be accomplished by 2025-2027. AES Indiana acknowledges the biggest risks are with renewables costs and the timing of when the resources come online.

Other changes are also afoot, including MISO plans to reduce solar capacity credits and a general acknowledgement that the necessary transmission upgrades to interconnect new generation resources are not likely to be completed as quickly as expected. Costs have risen significantly, permitting is difficult, project deadlines are slipping, interconnection queues are long, and transmission upgrades are expensive.

The conversion of Petersburg Units 3 and 4 to natural gas needlessly reduces existing capacity and exposes customers to natural gas price volatility during a period when there is great uncertainty regarding resource options and timing. This generation transition is also a problem to the extent it is being unnecessarily accelerated for the financial benefit of senior management. As winter storm Uri and Elliot have shown, Indiana will require dispatchable power on a continuous basis, including during off-nominal winter events, utilizing on-site fuel storage not dependent upon off-site transportation networks.

c. Coal Prices

AES Indiana used a coal price forecast that was unreasonably high. Namely, AES Indiana verbally indicated to Reliable Energy that its methodology for forecasting coal prices was based upon bids received when prices were inflated to previously unseen levels (but only for a short period of time).

The reported prices of coal purchased for Petersburg in 2022 are shown below. This price is materially below what AES Indiana assumed for 2023 and beyond:

⁶ AES Indiana IRP, Volume I, page 64.

Contract Exp Date	MINE	SUPPLIER	Tons	MMBtu/ Ton	Sulfur (%)	Cents/ MMBtu	\$/Ton
1222	GIBSON MINE	ALLIANCE COAL	924,868	23.171	1.93	208.6	48.34
1222	BEAR RUN MINE	COAL SALES	219,071	22.188	2.87	405.5	89.97
1224	BEAR RUN MINE	COAL SALES	904,800	22.145	2.82	200.9	44.50
222	BEAR RUN MINE	COALSALES LLC	101,614	22.419	2.74	201.3	45.13
1222	BEAR RUN MINE	COALSALES LLC	187,191	22.304	2.85	420.0	93.69
1224	BEAR RUN MINE	COALSALES LLC	35,619	21.940	3.10	211.2	46.34
1224	BEAR RUN MINE	COALSALES LLC	493,164	22.182	2.85	201.7	44.74
1222	OAKTOWN FUELS MINE #1	SUNRISE COAL SALES	914,202	23.194	3.14	222.1	51.52
	Spot		405,435	23.384	2.81	236.5	55.30
	TOTAL		4,150,345	22.746	2.70	231.3	52.62

Source: EIA 923

The problem with AES's coal price forecasting methodology is the assumption that the short-lived higher prices for coal would last through the entire critical analysis period for deciding upon the economics of converting Petersburg Units 3 and 4 to gas. In stakeholder discussions with Reliable Energy, AES Indiana indicated that it had not revisited the coal pricing despite the market reductions and an appreciation by the Company for how unusual the high-price market event had been.

AES Indiana has highly experienced coal procurement staff who should have been well aware of how to interpret the “blip” in forward coal pricing. This is an example of a situation where it appears that senior management could have influenced a key IRP input to achieve a predetermined outcome that supported AES Indiana's plan to shutdown coal, without considering the true cost of that decision.

d. Ratepayer Impacts

AES Indiana knows that the Net Present Value (NPV) analysis is not an accurate indicator of full ratepayer cost impacts of generation decisions, yet utilities continue to represent that it is an appropriate metric to evaluate affordability. AES is representing that according to its 20-year NPV analysis the Preferred Plan in the IRP:

- Saves AES Indiana customers more than \$240 million over the 20-year planning horizon; and
- Provides the least cost to customers over the 20-year planning horizon through the economic conversion of the remaining Petersburg Units from coal to natural gas.

The \$240 million alleged “savings” is less than a 3% difference on a NPV basis when compared to the other cases. Given price volatility and supply chain disruptions, this 3% difference is well within the margin of error of any forecast.

To determine affordability, AES Indiana should be doing an analysis of ratepayer impacts *by year for at least the first 10 years*. This has been a perennial problem in Indiana as the utilities on the one hand argue their decisions are based on the least cost option, while simultaneously requesting double-digit rate increases.

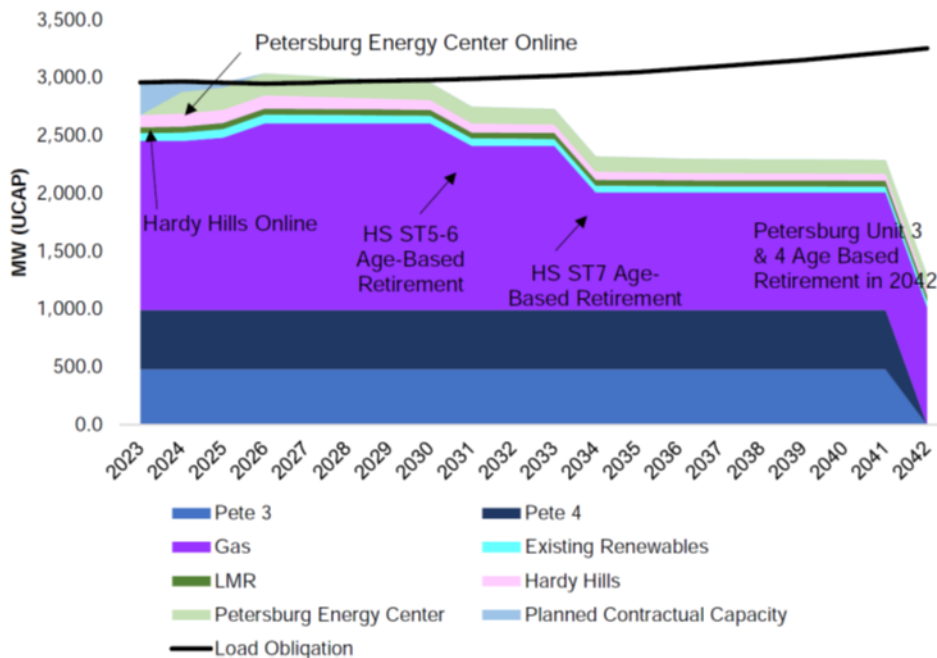
e. Petersburg Environmental Compliance

The Good Neighbor Rule (GNR) was finalized on March 15, 2023. The GNR requires upwind states to ensure that the air pollution created from electric generating units and other stationary sources of air pollution do not affect downwind states’ ability to meet the National Ambient Air Quality Standards (NAAQS). The finalized GNR differs from the proposed rule in several respects that are important when considering the reasonableness of the utilities’ generation decisions. With respect to AES Indiana, the GNR enables Petersburg Unit 3 to continue to operate year-round until the 2030 ozone season, without being retrofit with Selective Catalytic Reduction (SCR). This regulatory relaxation potentially affects the economics of decisions related to any gas conversion. Further, given the number of federal appeals and stay motions already filed by a long list of states based on the SIP revision denials alone, there will be several legal challenges to the GNR Federal Implementation Plan (FIP) Such challenges will include multiple stay motions that have a reasonable chance of success. Any IRP analysis is a point-in-time analysis, and when AES Indiana requests a CPCN, its analysis needs to be updated to reflect changes in law, including whether the GNR FIP has been stayed by a federal court.

f. Retirement of Petersburg

The proposed conversion of Petersburg Units 3 and 4 assumes a retirement date in 2042 as shown in Figure 6-2 below:

Figure 6-2: AES Indiana’s Summer Capacity Position showing Age-Based Retirements



AES Indiana’s economic analysis should reflect closure of the Units by 2040,⁷ otherwise the Company should assume that any undepreciated capital when the plant is closed would be a cost assigned to its shareholders.

⁷ Volume I, page 50.

g. Disposition of Petersburg

If AES Indiana does not wish to operate Petersburg as a coal plant, it should consider a sale of the plant. Hallador’s purchase of Merom presents a model for AES Indiana to consider. Prior to the approval of any conversion, AES should solicit offers for the station from third parties (with or without capacity offtake agreements). Such a transaction would be beneficial to AES Indiana customers by providing for lower rates and less risk as well as supportive of the Indiana coal industry. At a minimum, the economics of a sale should be evaluated against other portfolio options.

III. Conclusion

Reliable Energy appreciates the opportunity to participate in the IRP stakeholder process and to offer comments on an ongoing basis. Reliable Energy also appreciates AES Indiana’s willingness to engage in a robust discussion of the issues and give stakeholder feedback serious consideration. Reliable Energy would be happy to further discuss the issues raised above and to make its consulting experts available to AES Indiana for in-depth discussions.

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