

## Transitioning AES Indiana Beyond Coal to Clean Renewable Energy June 27, 2022



Petersburg is dirty, expensive and unreliable and must be retired within the decade
Switching to gas is irresponsibly risky
AES Indiana has been too slow to transition to renewable energy and must plan to do so now



# Petersburg is dirty, expensive and unreliable and must be retired within the decade



- Petersburg is one of 22 so-called Super Polluter coal plants that release the most toxic pollution and greenhouse gases in the U.S.
- In 2021, Petersburg released 9 million tons of CO2; 11 million pounds of NOx and 12 million pounds of SO2.
- AES was forced to pay a \$1.5 million penalty for air permit violations at Petersburg, located in Southwest Indiana, a region already overburdened by air pollution from coal-fired power plants.



- Petersburg continues to generate more than a million tons of coal ash per year that is contaminating the White River.
- Petersburg is the worst water polluter in Indiana, has violated its water permit for years, and continues to do so.

ENVIRONMENT

IPL's Petersburg plant is the worst water polluter in state, violates permit 120 times



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## **AES regularly operates Petersburg uneconomically**

 AES regularly "self-commits" Petersburg, assigning it a "must-run" commitment status even when its operating costs exceed market revenues.

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- During many hours, AES customers would save money if the company didn't forced its Petersburg to stay online and instead bought cheaper energy from the market.
- A Sierra Club expert found (in Cause No. 38703 FAC 127) that AES customers could have saved \$1.5 million over a three-month period in 2019 if the utility had idled Petersburg when market prices for energy were less expensive than burning coal at the plant.

## AES faced many unplanned outages at its fossil plants

- All remaining Petersburg coal-burning units faced an unplanned outage (ie. broke down) between May and July 2021.
- When Petersburg wasn't available to serve customers, AES bought energy from the market. Company then asked regulators to charge customers \$1,198,183 above what they had planned for that energy.
- The Eagle Valley fracked gas plant, also broke down for the 2021 summer.
- The aging Harding Street plant Unit 7, which was converted from coal to gas, was also offline last summer and didn't operate when AES Indiana needed it.
- The assertion that fossil fuels provide superior reliability relative to renewables, or that renewables are to blame for major blackouts (for example, TX and CA) is a myth.

## Resource diversity will make the grid more resilient

 Coal and gas power plants are less reliable than many grid operators assume they will be when evaluating resource adequacy. They tend to fail more often in extreme heat and cold, just when customers need power the most.

KKA

- The continued burning of fossil fuels will only exacerbate the climate crisis and make common extreme weather events where grid stress and failure are more likely.
- A diverse resource portfolio comprised of renewables and efficiency will make the grid more resilient than continued reliance on fossil resources.



#### Switching to gas at Petersburg is irresponsibly risky



#### AES relies heavily on gas and coal

- As of its 2019 IRP, AES relied on coal and gas-fired power plants for 47 and 48 percent respectively of its generation capacity. That over 95 percent of its generation capacity from fossil resources.
- AES has invested negligibly in solar PV and wind to date.
- If AES converts Petersburg Units 3 and 4 from coal to gas, its reliance on a single fuel source, gas, will increase to 80 percent.
- This means that by 2030, less than 20 percent of the Company's generation capacity will come from clean energy resources.
- That is not a plan that meets the challenges of this moment and the privilege of serving the electricity demands of our capital city.



- The converted Petersburg units will be old (35 45 years old) and inefficient even when converted to operate on gas. The units heat rate will be worse operating on gas than when they were operating on coal.
- They will still be costly to maintain, even if AES only plans to operate them minimally.
- Gas plants also emit carbon dioxide and other non-CO2 pollutants such as NOx.
- Methane is a potent greenhouse gas and leaks along the entire gas supply chain will continue to climate impacts.



- Gas is subject to price volatility, and we're seeing exorbitant gas prices in the market now.
- Replacing Petersburg with another fossil fuel marked by price volatility in the midst of a climate crisis is not the solution.





## AES Indiana has been too slow to transition to renewable energy and must plan to do so now



- AES 2019 IRP was a disappointment to many stakeholders, including the Indianapolis Mayor's Office when it was filed in December 2019.
- Mayor's Office submitted comments emphasizing the City's support for AES's Portolio which retired all four units of the Petersburg coal plant by 2030 based on its "alignment with the City's municipal and community-wide goals."
- The following January, the Indianapolis City-County Council responded by passing a resolution asking AES to update its 2019 plan to retire all four units of Petersburg by 2028, and the Sierra Club released <u>a report</u> grading the major utilities' IRPs.
  - AES Indiana's 2019 IRP received a D. Of Indiana's electric utilities, only Duke fared worse, with a F.
- Indianapolis deserves better.



AES should replace the 1000 MW of power from Petersburg Units 3-4 with a Clean Energy Portfolio of solar, wind, energy efficiency, battery storage, and demand response.

AES should not delay, and should begin acting now to procure renewables for the future.



That's a plan that meets the challenges of this moment and the privilege of serving the electricity demands of our capital city.

That is the affordable solution for customers; It does not carry the risk of gas with its price volatility and climate impacts; and it allows the City of Indianapolis and leading Indy-based RE100 companies like Eli Lilly, SalesForce, Anthem and Walmart to meet their 100 percent renewable energy goals.



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Reliability

Fossil fuel advocates like to blame renewable energy for rolling blackouts in California, but that's not true. The state's grid operator published a <u>report</u><sup>1</sup> finding that the blackouts were actually the result of climate change-induced heat waves, outdated rules for resource planning targets, the failure of gas generation, and market practices.

Fossil fuels are responsible for climate change and grid instability.

 Root Cause Analysis Mid-August 2020 Extreme Heat Wave, prepared by California Independent System Operator



Reliability

Similarly, Texas's governor and others blamed the deadly failure of the Texas grid on renewable energy. While politically convenient, perhaps, this was again a lie. The fact is that despite warnings, Texas was not prepared for the record cold that froze gas pipelines and coal piles and forced plants offline, and the isolation of Texas's grid didn't help. A few wind turbines froze, but they were a much smaller part of the problem than the failure of fossil fuel plants that also aren't insulated for that kind of cold.<sup>2</sup>

2. Breaking down the Texas winter blackouts: what went wrong? Wood Mackenzie