RELIABLE ENERGY COMMENTS ON THE DUKE ENERGY INDIANA IRP
February 13, 2025

INTRODUCTION

Reliable Energy (RE) appreciates the opportunity to comment on the Duke Energy Indiana (DEI) Integrated Resource Plan (IRP). DEI pointed out in the IRP Executive Summary there are three external factors that added complexity and greater uncertainty in planning since the 2021 IRP: (1) regulatory requirements under the contested changes to Sections 111(b) and 111(d) of the Clean Air Act (the Greenhouse (GHG) Rule); (2) the potential for significant increases in load resulting from economic development in the region, and (3) cost volatility for new units. In hindsight, while these factors are accurate, they would now be categorized as posing a modest concern given the significant potential changes that are being put into place by President Trump's new administration.

PRESIDENT TRUMP'S ACTIONS ARE SIGNIFICANT WHEN REVIEWING THE IRP RESULTS

The Executive Orders issued by President Trump to date suggest broader and more significant changes that could affect the regulatory landscape going forward. Starting with the declaration of a National Energy Emergency under the National Emergencies Act (50 U.S.C. § 1601 et seq.) and 3 U.S.C. § 301 (the "Energy Emergency Declaration"),[1] the new Administration is looking to revamp the regulatory landscape, foster growth in new fossil generation to support expected load growth, and expand the production of fossil fuels for both domestic and international markets. Further, it appears that the Administration could use the Energy Emergency Declaration to limit the retirement of operating coal plants. As a result, several assumptions included in the IRP may (i) no longer be relevant; and/or (ii) do not adequately reflect the scenarios that should now be considered.

Thus, the portfolio case that Duke optimized for a future in which the GHG Rule does not survive legal challenges (or is outright withdrawn by the Trump Administration), is most likely to hold (the No 111 Case). DEI concluded that the **No 111 Case** produced the **lowest costs** on a Present Value of Revenue Requirements (PVRR) basis and the **smallest rate impacts** which RE believes is the metric that should determine relative affordability.[2] **This is precisely the argument that RE has been making for years, e.g., that continued operation of baseload coal-fired assets during this time**

[1] https://www.whitehouse.gov/presidential-actions/2025/01/declaring-a-national-energy-emergency/
[2] https://www.duke-energy.com/home/products/indiana-integrated-resource-plan, Vol. 1, p. 62.

of capacity shortage is the cheapest and most reliable option for customers. Instead, DEI's Preferred Portfolio presumes compliance with the GHG Rule will be required.[3]

The No 111 Case presumes that Cayuga 1 and 2 and Gibson 3 and 4 will not retire until 2032; Gibson 1 and 2 will not retire until 2036; and Edwardsport will not be converted to natural gas until 2035. In the middle of an Energy Emergency Declaration, it makes no sense to plan to shutter baseload coal plants or convert them to less reliable and lower capacity-rated natural gas fuel.

SUMMARY OF RE'S RECOMMENDATIONS

As a result, RE is making the following recommendations,

(a) DEI should update its modeling to reflect the changes to the regulatory landscape, including but not limited to, ***all*** proposed changes in tax credits, permitting, regulations, etc. under consideration *once* there is some clarity as to what changes are likely to be made to determine whether to consider other generation strategies prior to the next IRP;

(b) DEI should modify its IRP conclusions to reflect a preferred portfolio consistent with these changes;

(c) DEI should be directed to **not** pursue a Certificate of Public Convenience and Necessity (CPCN) for any major investments revolving the closure or refueling of Cayuga or any existing generation based upon the filed IRP until there is greater certainty as to future requirements except for capacity needed to support reliability;

(d) DEI should continue to refine its analyses in support of the Five Pillars: Reliability, Resiliency, Stability, Environmental Sustainability and Affordability. Notably, Reliability, Resiliency and Stability should reflect MISO Zone 6 as a whole, as well as for DEI as a stand-alone utility. Environmental Sustainability should include Scope 3 emissions related to natural gas production and transport. Affordability, which DEI has properly included ratepayer impacts in the IRP, should be expanded to include annual rate-payer impacts for at least a 10-year period; and

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[3] IRP, Vol. I, p. 14.

(e) Prior to any coal plant retirement request, DEI should make a focused effort to sell to a qualified third party any generation it no longer wishes to maintain in its fleet. The sale may or may not include an attendant Power Purchase Agreement (PPA) to maintain capacity and energy during any transition.

While months may be required before the details of Administration policy initiatives are known and how vulnerable these are to litigation, there has been a sea change in U.S. energy policy and that national and economic security are now the key federal policy goals, do not include carbon emission reduction. Therefore, RE believes an endorsement of the 2024 IRP update is misplaced at this time. Rather, RE believes DEI should focus on retaining the existing coal generation and on how best to serve the expected load growth.

FLAWED ASSUMPTIONS IN DEI'S PREFERRED PORTFOLIO

In the IRP, DEI adopted as its Preferred Portfolio what it considers to be "the appropriate balance across resource planning objectives, providing an executable path to adding needed incremental generating capacity to maintain reliability while serving growing load, improving environmental sustainability with a mix of low-emitting natural gas and carbon-free renewable energy resources, mitigating reliability and cost risk through the retirement of aging coal assets and doing so in a cost-effective manner for Duke Energy Indiana's customers." Notably, the Preferred Portfolio reflected "compliance with the Environmental Protection Agency ("EPA") Clean Air Act Section 111 May 2024 Final Rule." DEI also indicated that compliance costs related to compliance at Cayuga with the EPA's Effluent Limitation Guidelines (ELG), and the Clean Water Act compliance in the late 2030s was also a consideration.[4]

In the IRP, DEI noted that if the regulatory landscape changed, the performed analyses may no longer be valid.[5] While DEI indicated it considered scenarios with minimum policy and lagging innovation, RE thinks its assumptions miss the mark based upon what has occurred since the change in administration. For example, DEI assumes the Section 111 Rule is appealed, lower fossil fuel prices, no carbon taxes, repeal of the Inflation Reduction Act (IRA) in 2025, reduced government incentives for renewables, storage, and distributed energy, and lack of incentives for emerging technologies. Meanwhile, the impact of the Energy Emergency Declaration could significantly affect all these

[4] IRP, Vol. I, p. 516.
[5] IRP, Vol. 1, p. 140.

assumptions, as well as a broader group of regulations (e.g., the Mercury Air Toxics (MATS), ELG, and Coal Combustion Residuals (CCR) Rules). In addition, the Energy Emergency Declaration could limit the ability of power plants to retire. The administration is also believed to be considering a reversal of the EPA's finding that greenhouse gasses (GHG) endanger public health and the environment.

FLAWS IN THE COAL PLANT RETIREMENT SCENARIOS CONSIDERED BY DEI

A summary of the coal plant strategies by scenario is provided below. The Preferred Portfolio is Blend 2. **Notably under the No 111 scenario, except for Gibson 5, no coal plants were found to be economically retired until 2032.** Edwardsport was found to be economically converted to natural gas in 2030, presumably subject to the continuation of the IRA 45Q tax credits for carbon capture and storage (CCS) technology.

<table>
<tr><th>Unit</th><th>Convert/
Co-Fire</th><th>Retire
Coal</th><th>Blend 1</th><th>Blend 2</th><th>Blend 4</th><th>No 111</th></tr>
<tr><td>Cayuga 1</td><td rowspan="2">NG Conversion by 1/1/30</td><td rowspan="6">Retire by 1/1/2032</td><td rowspan="2">NG Conversion by 1/1/30</td><td colspan="2">Retire by 1/1/2030</td><td rowspan="2">Retire by 1/1/2032</td></tr>
<tr><td>Cayuga 2</td><td colspan="2">Retire by 1/1/2030</td></tr>
<tr><td>Gibson 1</td><td rowspan="2">Co-fire by 1/1/2030</td><td rowspan="4">Retire by 1/1/2022</td><td colspan="2" rowspan="2">Co-Fire by 1/1/2030</td><td rowspan="2">Retire by 1/1/2036</td></tr>
<tr><td>Gibson 2</td></tr>
<tr><td>Gibson 3</td><td rowspan="2">NG Conversion by 1/1/30</td><td>Retire by 1/1/2032</td><td>NG Conversion by 1/1/2030</td><td rowspan="2">Retire by 1/1/2032</td></tr>
<tr><td>Gibson 4</td><td></td><td></td></tr>
<tr><td>Gibson 5</td><td colspan="6">Retire by 1/1/2030</td></tr>
<tr><td>Edwardsport</td><td colspan="5">NG Conversion by 1/1/30</td><td>NG Conversion by 1/1/2035</td></tr>
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The No 111 scenario in the IRP appears limited to assuming that the Section 111 is enforced as written. The **No 111 scenario does not include other environmental regulatory initiatives that could be affected under the Energy Emergency Declaration or other executive actions, including the reversal of the new rules related to CCR, ELG, MATS, and the Good Neighbor Plan.** Thus, eliminating or substantively revising these regulations are also likely to drive down DEI's assumed costs and impact the retirement dates for DEI's coal plants in the No 111 scenario.

RE notes that DEI in the IRP acknowledged that it has reflected the estimated costs and operational impacts associated with both the proposed and final GHG Rules in its scenarios along with sensitivity analyses. Not considered, however, are sufficient sensitivities consistent with the Trump plans such as the potential changes to the IRA and the Infrastructure Investment and Jobs Acts (IIJA). This is not a criticism that DEI "missed the mark" on its sensitivity analyses. In fact, DEI did well to consider the

No 111 scenario. However, given the potential difference between DEI's assumptions and a future reality, it is incumbent upon DEI to revise its analyses accordingly before seeking approvals for power plant closures.

DEI recognized in the IRP an update would be required and stated it "will closely monitor legal and regulatory developments related to the contested EPA rule governing greenhouse gas emissions under CAA Section 111(d)."[6] DEI noted "the likely success or failure of legal challenges to the rule constitute critical signposts that could indicate the need to adjust the Short-Term Action Plan" noting "if the rule is overturned, (it) could continue to operate Gibson units 1 and 2 on coal through 2035."[7]

DEI found that the No 111 scenario was the most affordable as "it would have lower costs, both in terms of near-term customer bill impacts and total costs over the planning period, than any other of the 111-compliant cases."[8] DEI's analyses of No 111 does not capture many of the benefits associated with deferring coal plant retirements, including the following:

- Reduced incremental capacity needed to support Data Center load growth;
- Additional time to obtain clarity on the potential and costs of advanced technologies such as Small Modular Reactors (SMR), hydrogen, energy storage, etc. that could produce lower cost options for future generations and reduce the significant stranded costs of the existing fleet should the fleet be retired per the current preferred plan;
- Reduced risk that new combined cycle gas turbine and natural gas infrastructure will become stranded if a future change in federal policy that imposes a high cost of carbon, otherwise requires decarbonization by CCS, or other high-cost alternatives; and
- Adequate time to further investigate the costs of implementing CCS technology at Edwardsport and whether Edwardsport should remain on coal.

Finally, it is not clear which if any other changes are likely to affect the cost and feasibility of new generation options. For example, the new administration has proposed a moratorium on federal permitting of new onshore and offshore wind projects and grants/financing of clean energy projects. This wind moratorium could find its way into a 2025 Tax Bill and become permanent, along with revisions/elimination of certain clean energy tax credits in the IRA and the Infrastructure Investment

[6] IRP, Vol. I, p. 17
[7] *Id*.
[8] IRP. Vol. I, p. 127.

and Jobs Act. These changes could affect the financial viability of new renewables. The new administration is also considering changes to electric vehicle (EV) tax credits which could reduce expected EV penetration and mute related electricity demand forecasts.

CONCLUSION

A well thought out IRP should result in an energy transition that meets the requirements of *all five pillars* and allows coal plants to continue serve during this natural energy emergency. The IURC should *actively* balance the motives of Indiana's monopoly utilities and ratepayers by insisting on an orderly resource transition.

REI appreciates the opportunity to participate in the IRP stakeholder process and to offer comments on Duke's IRP.