

Ohio SB294
Testimony – James Taylor
Ohio Senate Energy Committee
November 4, 2025

Chairman Chavez and Members of the Committee, I am James Taylor, President of The Heartland Institute. The Heartland Institute is a non-profit, non-partisan public policy organization with a mission of discovering freedom-oriented solutions to policy challenges. Thank you for the opportunity to testify regarding SB294.

With its common-sense definition of affordable, reliable, and clean energy sources, SB294 is crucial to effectively meeting rapid and imminent surging growth in electricity demand.

Ohio faces looming power shortages that threaten to disrupt quality of life and endanger human health and welfare. Electricity demand is growing, yet the availability of reliable, on-demand electricity capacity is not. Energy experts warn that rolling brownouts and blackouts are already an imminent threat, and the threat is only getting worse. Indeed, in June of this year, the PJM regional transmission organization (RTO) – of which Ohio is a member – registered its highest peak electricity demand ever recorded.

National electricity demand is expected to grow between 15 and 30 percent in the next five years. This rapid growth is expected primarily due to the growth of data centers and the power demands of artificial intelligence. Ohio, as a national leader in attracting tech data centers, can expect an even more rapid increase in electricity demand. Ohio will need to add substantial new reliable electric capacity, and this must be accomplished quickly and wisely.

Against this backdrop, Ohio regulators are recklessly approving the shut-down of numerous baseload power plants. Dayton Power & Light shut down its J.M. Stuart and Killen coal power plants in 2018. American Electric Power (AEP) shut down its Conesville coal power plant in 2020. First Energy shut down its Sammis coal power plant in 2023. Vista Energy plans to shut down two coal power plants – the William H. Zimmer and Miami Fort plants – by 2027. None of these closures are operationally necessary, but are politically driven. Such closures mean Ohio will need to build even more new power facilities to meet growing demand.

Climate activists claim new wind and solar power projects can fill the demand gap from shutting down coal power. They are dangerously mistaken. Wind and solar power facilities

provide power at less than 30 percent of their rated capacity. This means during the vast majority of the time, baseload natural gas, nuclear, and coal power plants are required to keep the lights on, furnaces and air conditioners running, and critical infrastructure functioning, regardless of how much money is spent building wind and solar.

Building massive redundancy in wind and solar projects provides little help, as the same intermittency that keeps wind and solar production under 30 percent of rated capacity will debilitate the newly built wind and solar facilities at the same time as existing wind and solar facilities. At night, when clouds obscure the sun, and when there is little or no wind, no wind or solar power would be produced no matter how many wind and solar facilities exist.

Building new natural gas or coal power plants is more affordable than building new wind and solar. Shutting down perfectly operational and already paid-for coal power plants in order to replace them with expensive new solar power projects is even more uneconomical.

Shutting down coal power is completely unnecessary and counterproductive. If, however, a political decision is made to shut down coal power, it should be replaced by natural gas or nuclear power. These baseload power sources are affordable, available on demand, and more environmentally friendly than wind and solar power.

Earlier this year, The Heartland Institute published a policy study, *Affordable, Reliable, and Clean: An objective scorecard to assess competing energy sources*. This study, available online at <https://heartland.org/wp-content/uploads/2025/04/Apr-25-ARC-Scorecard.pdf>, provides objective information validating the affordability and reliability of natural gas and nuclear power, while also validating natural gas as a greener energy source than wind or solar.

The *Affordable, Reliable, and Clean* policy study documents that in the peer-reviewed science publication *Energy*, [economists examined](https://www.sciencedirect.com/science/article/abs/pii/S0360544222018035) the levelized **full system** cost of electricity (Idel, R., “Levelized Full System Costs of Electricity,” *Energy*, 259 (2022) 124905 <https://www.sciencedirect.com/science/article/abs/pii/S0360544222018035>). The “full-system” component accounts for real-world added costs imposed by intermittency, extended transmission line requirements, and other factors that are often left out of generic so-called levelized electricity costs. The peer-reviewed study reports the following costs per megawatt-hour (mwh) of power generation from competing sources:

Solar	\$413
Wind	\$291
Nuclear	\$122
Biomass	\$117
Coal	\$ 90
Natural Gas	\$ 40

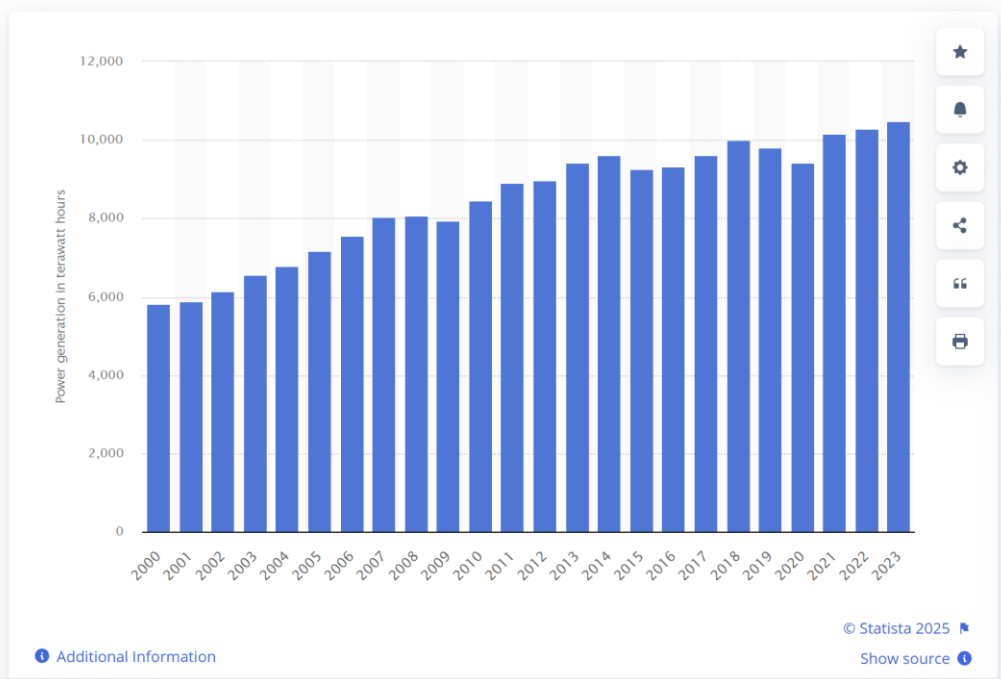
The above numbers were specific to Texas, and primarily west Texas. Wind and solar costs in Ohio are significantly more expensive than in Texas because solar irradiance, sunny skies, and consistent winds are more prevalent in Texas than in Ohio. Applying the full-system levelized formula to Ohio would raise the costs of wind and solar far above the seven-to-10 times cost premium for wind and solar power compared to natural gas in southerly, sunny, and windy west Texas.

The full-system levelized cost numbers above explain why the world as a whole continues to increase the amount of coal power it generates and uses, even while the United States and Western democracies are dramatically reducing coal power. The chart below shows the global growth in coal power production.

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Electricity production from coal worldwide from 2000 to 2023

(in terawatt hours)



Source: Statista, [Global coal power generation 2023 | Statista](#).

Utilizing coal power rather than wind and solar power gives the rest of the world substantial competitive advantages over American and Ohio businesses that must increasingly use expensive wind and solar power.

So, why do utility companies nevertheless lobby to shut down existing coal power and replace it with new wind and solar power projects? Ohio's utilities love shutting down existing and perfectly operational baseload power plants because they are guaranteed an approximately 10-percent profit on any new money they spend, including the cost of building new wind and solar projects. Construction costs for larger wind and solar projects can cost \$2 billion, \$3 billion, or more. That means a guaranteed utility profit of \$200 million or more per project. A utility pushing for more wind and solar power has nothing to do with saving consumers money and everything to do with stuffing the utility's own pockets.

The *Affordable, Reliable, and Clean* policy study also documents how natural gas is better for the environment than wind and solar. In brief, wind and solar power are environmentally friendly only in terms of their air emissions. Weighing against this, wind and solar power are horrible for land conservation, requiring the development of massive amounts of land; directly and indirectly unleash a shocking death toll on plant and animal species; and cause enormous soil and water pollution. By contrast, natural gas results in only modest air emissions while being far more environmentally friendly regarding land conservation, species protection, and soil and water impacts.

For the benefit of Ohioans, existing baseload power plants should not be shut down. Regardless of the ongoing shutdown of existing coal power plants, Ohio will need substantial new power sources to meet imminent spikes in demand. Assessing competing power sources according to affordability, reliability, and environmental impact, natural gas clearly makes the most sense, followed by nuclear and coal. Ohio policymakers would do well to facilitate the construction of such new power generation sources, especially natural gas.

Thank you again for the opportunity to present this testimony.