THE BUCKEYE INSTITUTE

Public Comment on U.S. EPA's Proposed Repeal of Greenhouse Gas Standards

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Interest of Commentor

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Introduction

This comment responds to the U.S. Environmental Protection Agency's (EPA) proposed rule, *Repeal of Greenhouse Gas Emissions Standards for Fossil Fuel-Fired Electric Generating Units*, published in the *Federal Register* on June 17, 2025. The Buckeye Institute supports repealing greenhouse gas (GHG) standards for new and existing fossil fuel-fired electric generating units as a necessary correction and prudent policy response to today's reliability, economic, and technological realities.

The carbon pollution standards (CPS)[1] that the proposed rule would repeal were designed under conditions of stagnant load growth. Those conditions, however, no longer apply. Today, the U.S. power sector faces rapid and sustained demand growth, driven by artificial intelligence (AI), domestic manufacturing reshoring, and widespread electrification. In the current environment, the CPS would accelerate the premature retirement of dispatchable baseload generation, threatening grid reliability, energy security, and economic competitiveness. Repealing CPS is essential for maintaining a resilient bulk power system.

In addition to preserving grid reliability, the repeal delivers substantial economic benefits. The EPA's own Regulatory Impact Analysis (RIA)[2] estimates $19 billion in present-value compliance cost savings from 2026 through 2047 (EPA, RIA Table 1-1, pp. 1–3), stemming from avoided capital, operating, and infrastructure burdens, particularly those tied to the now-rejected 90 percent carbon capture and sequestration (CCS) requirement. These savings represent concrete and measurable economic relief for the electric power sector.

Despite acknowledging that CPS mandates are not "adequately demonstrated," cost-reasonable, or logistically achievable within the required compliance timeframe, the RIA presents the repeal as a net economic loss of -$110 billion. This flawed conclusion flows from offsetting certain compliance cost savings with $130 billion in "forgone" particulate matter ($PM_{2.5}$) and ozone-related health co-benefits, which rely on full compliance with a rule the agency deems infeasible.

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[1] **Carbon Pollution Standards for Fossil Fuel-Fired Power Plants Final Rule Fact Sheet**, U.S. Environmental Protection Agency fact sheet, April 25, 2024.

[2] ***Regulatory Impact Analysis for the Proposed Repeal of Greenhouse Gas Emissions Standards for Fossil Fuel-Fired Electric Generating Units***, U.S. Environmental Protection Agency, June 2025.

These speculative estimates, divorced from real-world feasibility, distort the rule's economic impact.

This comment addresses both critical issues. First, The Buckeye Institute highlights the structural demand shifts that now render the CPS an active threat to grid stability. Second, Buckeye presents a corrected economic framework that affirms the repeal's positive net benefit, grounded in core principles of sound regulatory analysis: feasibility, measurable outcomes, and realistic compliance scenarios. The reliability imperative and economic justification are compelling for finalizing the repeal.

Surging Energy Demands and Grid Reliability Issues

The existing GHG standards systematically push utilities away from reliable, dispatchable power toward intermittent renewables by making fossil fuel plants economically impossible to operate. They do so by forcing existing coal plants down one of three paths,[3] each engineered to compel the plant's closure. The first choice is a simple, forced retirement by 2032. Plants are given a second option to operate long-term (beyond 2040): install 90 percent CCS by 2032. This path is unviable because 90 percent CCS is considered an unproven technology that has not been "adequately demonstrated" for large-scale application.[4] The final, "intermediate" option is to convert to co-fire with 40 percent natural gas, which requires "substantial" capital investments. But this path comes with a catch: the plant must shut down by 2039 anyway, severely shortening the investment horizon and making it nearly impossible to recover the upfront infrastructure costs. Meanwhile, wind and solar power face no comparable technology mandates while receiving billions in federal subsidies.[5] This regulatory framework does not explicitly mandate renewables, but it effectively funnels investment toward them as the least constrained alternative, even though they are unreliable and more expensive.

Consequently, the pipeline for new power generation is now almost entirely skewed toward intermittent renewables,[6] while proposals for reliable, dispatchable resources have vanished. PJM's generation queue exemplifies this trend, with renewables comprising 156 GW of the 160 GW of proposed projects.[7] These projects have a historically low completion rate, just four percent for solar and less than one percent for wind, compared to 90 percent for natural gas steam plants.

The United States is experiencing a structural shift in electricity consumption. The North American Electric Reliability Corporation's (NERC) 2024 Long-Term Reliability Assessment[8]

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[3] ***Q & A: Repeal of the Clean Power Plan 2.0***, America's Power, July 23, 2025.
[4] Joseph Winters, **Is carbon capture viable? In a new rule, the EPA is asking power plants to prove it.**, Grist, May 12, 2023.
[5] Robert Bryce, **Wind/Solar/Alt-Energy Subsidies To Cost Federal Taxpayers $425 Billion Between Now And 2033**, Robert Bryce Substack, April 4, 2024.
[6] Alexandra Denney, Vice President of Government Relations & Communications, Ohio Business Roundtable, **Invited Testimony** Before the Ohio House Energy Committee, February 26, 2025.
[7] *Ibid.*
[8] Sonal Patel, **Five Critical Insights from NERC's 2024 Long-Term Reliability Assessment**, Power Magazine, December 19, 2024.

warns that peak demand and energy forecasts have jumped to their highest levels in decades. The primary driver is energy-intensive data centers powering AI and cloud computing. The U.S. Department of Energy projects[9] data centers could consume 12 percent of total electricity by 2028, nearly tripling from 4.4 percent in 2023.

This demand surge puts real stress on regional grids:

- Ohio & PJM: American Electric Power (AEP) projects[10] Central Ohio demand will more than double from 4,000 MW to 9,000 MW within the decade. By 2030, the top five customers will be data centers. Demand is so acute that AEP has paused new data center service requests.
- Texas (Electric Reliability Council of Texas or ERCOT): Peak demand is projected to surge from 87 GW in 2025 to 138 GW by 2030, with data centers accounting for 22 GW growth.[11]
- Virginia & PJM: As the world's largest data center market, Virginia is driving PJM's projection of nearly 30 GW of peak load growth in the next five years.[12]

Data centers, AI facilities, and critical industrial processes require 24/7 electricity with exceptional reliability, often demanding 99.9 percent uptime, meaning the facility can be offline for less than nine hours over an entire year. Wind and solar energy providers cannot meet this requirement. In Ohio[13], natural gas plants achieve 81 percent capacity factors while wind and solar achieve only 33 percent and 22 percent, respectively. Reliably generating one MW of power annually requires 2.78 MW of wind capacity or 5.49 MW of solar capacity[14], plus full natural gas backup capacity to ensure the lights stay on when wind and solar produce zero electricity.

NERC warns that "over half the continent is projected to face elevated or high risk of energy shortfalls in the next 5 to 10 years" as retirements outpace reliable replacement capacity. PJM's independent market monitor[15] projects 24,000-58,000 MW of dispatchable resources at risk of retirement by 2030, with no clear firm replacement capacity. In its most recent capacity auction,[16] which secures future power supply, PJM saw prices jump 22 percent from last year's record to the maximum allowed rate, directly resulting from soaring demand from data centers and AI overwhelming the shrinking supply of reliable generators.

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[9] **DOE Releases New Report Evaluating Increase in Electricity Demand from Data Centers**, U.S. Department of Energy press release, December 20, 2024.
[10] Sonal Patel, **AEP Ohio Proposes New Utility Tariff for Data Centers to Offset Infrastructure Costs**, Power Magazine, October 24, 2024.
[11] ***Long-Term Load Forecast Update (2025-2031) and Methodology Changes***, ERCOT Board of Director Meeting, April 7-8, 2025.
[12] ***2025 Long-Term Load Forecast Report Predicts Significant Increase in Electricity Demand***, PJM Inside Lines, January 30, 2025.
[13] Rea S. Hederman Jr. and Greg R. Lawson, ***Better Energy Policy for Ohio***, The Buckeye Institute, January 22, 2025.
[14] Isaac Orr and Mitch Rolling, ***Renewables Blueprint: How to calculate the cost of renewable energy in your state***, Center of the American Experiment, June 2021.
[15] Ethan Howland, **Up to 58 GW faces retirement in PJM by 2030 without replacement capacity in sight: market monitor**, Utility Dive, March 18, 2024.
[16] Anna Staver, **Electricity price surge: Why your power bill jumped before you touched the thermostat**, cleveland.com, July 28, 2025.

The GHG standards accelerate this crisis by forcing dispatchable retirements precisely when the economy needs more reliable generation, not less, and blocking new dispatchable generation.

A complete repeal removes regulatory barriers that prevent adequate electricity supply for the 21st-century economy. By eliminating impossible technology mandates, the repeal allows market forces to build the generation mix that reliability requires. Meeting the current and growing reliability requirements is particularly critical for AI and data center development, where the United States competes directly with China. China continues building coal and nuclear plants to power its technology sector, but U.S. companies face artificial scarcity created by regulations that eliminate reliable generation options. Full repeal ensures American industry has access to the dependable power needed to maintain technological leadership.

Correcting Regulatory Impact Analysis

The most reliable and policy-relevant figure in the RIA is the $19 billion in compliance cost savings associated with repealing the CPS. The RIA presents this amount as the value of avoided costs from 2026–2047, discounted at three percent. These savings are not hypothetical. They represent direct cost reductions, including avoided capital expenditures, fixed and variable operations and maintenance costs, and other compliance-related expenses utilities would otherwise incur under the CPS. These projected costs stem primarily from mandates requiring affected units to install and operate 90 percent CCS systems,[17] which the EPA has deemed technically infeasible and economically unjustified. Repealing the CPS stops forcing utilities to invest in technologies that are not commercially demonstrated at scale and would not reliably deliver emissions reductions within the mandated timeframe.

Because these avoided costs are directly tied to regulatory obligations that the EPA itself now acknowledges cannot be met, they represent a specific, measurable, and primary economic benefit of the repeal. Yet the RIA offsets these certain savings with speculative estimates of ancillary health co-benefits unrelated to the rule's core function, while assigning no value to avoided greenhouse gas emissions, producing a distorted and analytically unbalanced estimate of net impact.

Moreover, the Initial Regulatory Flexibility Analysis (IRFA)[18] further understates costs by subtracting projected utility revenue gains from compliance expenditures. This accounting choice misrepresents the compliance burden by treating ratepayer transfers as economic savings. The resulting distortion minimizes the appearance of cost to utilities while ignoring the broader burden on consumers and the economy.

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[17] ***Carbon Capture and Storage in the United States***, Congressional Budget Office, December 2023.

[18] ***Initial Regulatory Flexibility Analysis: Proposed New Source Performance Standards for Greenhouse Gas Emissions from New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions from Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule***, U.S. Environmental Protection Agency, October 2023.

Repealing the CPS removes a costly, unworkable mandate and delivers quantifiable, sector-wide regulatory relief. Any credible cost-benefit analysis must prioritize this $19 billion figure. It reflects the most concrete and immediate economic improvement resulting from the repeal and supports a rational policy choice grounded in technological feasibility and fiscal prudence.

The Source of Savings: Avoiding Technologically and Logistically Infeasible CCS Mandates

A major driver of the $19 billion compliance cost savings is repealing unworkable CCS mandates under the CPS. The EPA acknowledges that 90 percent CCS is neither technologically demonstrated nor feasible within the compliance timeline. Real-world evidence confirms this. Canada's Boundary Dam Unit 3[19] averaged only 63 percent capture, while the Petra Nova project[20] faced frequent outages and needed a separate gas co-generation unit, contradicting core CPS assumptions.

Infrastructure challenges further undercut feasibility. The EPA notes it is "unlikely" that the required CO_2 pipeline and storage infrastructure can be deployed by 2032, citing permitting, siting, and litigation delays. Moreover, the Carbon Storage Atlas is not a validated inventory of usable storage sites.

The CPS effectively imposed a shutdown mandate on dispatchable baseload generation. Repealing it avoids these excessive costs and delivers a tangible economic benefit.

Flawed and Speculative Assumptions Drive the RIA's Negative Net Benefit Calculation.

The EPA concludes that repealing the CPS results in a -$110 billion net cost, based on Table 6-2[21] of its RIA. This figure reflects -$19 billion in compliance cost savings, offset by -$130 billion in forgone health co-benefits from reductions in particulate matter ($PM_{2.5}$) and ozone precursors. But this accounting fails to distinguish between actual, realized cost savings and theoretical co-benefits that depend on fully implementing a rule the EPA now concedes is neither technologically nor logistically feasible.

Although the -$19 billion figure reflects a tangible and measurable economic benefit from avoided capital investments and operating costs, the -$130 billion estimate is speculative and methodologically flawed. It assumes that the CPS could be fully implemented, which contradicts the EPA's finding that the rule is infeasible. More importantly, the -$130 billion in projected co-

[19] Beth (Hardy) Valiaho, Alex Kotsopoulos, and Michael Morrison, ***Incentivizing Large-Scale CCS in Canada: A White Paper***, International CCS Knowledge Centre and RSM Canada, October 2020.
[20] Petra Nova Parish Holdings LLC, ***W.A. Parish Post-Combustion CO2 Capture and Sequestration Demonstration Project Final Scientific/Technical Report***, U.S. Department of Energy, March 31, 2020.
[21] ***Regulatory Impact Analysis for the Proposed Repeal of Greenhouse Gas Emissions Standards for Fossil Fuel-Fired Electric Generating Units***, Table 6-2, U.S. Environmental Protection Agency, June 2025.

benefits comes not from GHG reductions but from incidental reductions in pollutants already regulated under other parts of the Clean Air Act.[22]

This methodological approach has been criticized by independent analysts. National Economic Research Associates[23] reviewed multiple RIA practices and concluded that heavy reliance on co-benefits can obscure the regulatory actions' actual costs and benefits. The Federalist Society[24] and other policy experts argue that the EPA's use of indirect benefits goes beyond statutory intent and undermines analytical transparency. Additionally, researchers at the Manhattan Institute[25] have found that many of the projected $PM_{2.5}$-related health benefits rely on overstated or unverified modeling assumptions. Including these speculative co-benefits in the RIA inflates the perceived cost of repeal and misrepresents the rule's actual economic impact.

The Analytical Absurdity of "Forgone Benefits" from an Infeasible Rule

The RIA's negative net benefit calculation depends entirely on assigning value to benefits that are unlikely to occur. Treating these hypothetical co-benefits as actual losses contradicts the factual record and misrepresents the repeal's impact. The RIA's flawed calculation is analogous to claiming a financial loss from an investment that was never made because it was unfeasible, and it undermines the credibility of the RIA's conclusions. A proper cost-benefit analysis must consider real-world practicality and outcomes. In this case, repeal prevents unmanageable mandates while preserving essential dispatchable power. The RIA overestimates repeal costs by arbitrarily assigning value to uncertain effects over tangible savings and conceals its apparent economic benefits.

A Rational Framework for Evaluating the CPS Repeal: Grounding Net Benefit in Feasibility and Certainty

Principles of Rational Economic Analysis for Regulatory Actions

The EPA's RIA concludes that repealing the CPS would yield a -$110 billion net cost. But this conclusion relies on illogical and methodologically inconsistent assumptions. Rescinding a rule that the EPA has deemed technologically and economically unfeasible cannot reasonably impose a net societal cost. A more accurate framework, based on feasibility, verifiable results, and transparent accounting, shows that the repeal provides a positive net benefit by avoiding unjustifiable compliance costs and eliminating reliance on speculative co-benefit projections.

[22] **Clean Air Act**, 42 U.S.C. § 7401 et seq. (2025).
[23] Scott J. Bloomberg, **EPA's Particulate Matter Co-Benefits: A Case of Ever-Declining Credibility**, NERA Economic Consulting, April 2016.
[24] C. Boyden Gray, ***EPA's Use of Co-Benefits***, The Federalist Society, July 2015.
[25] Jonathan A. Lesser, ***Missing Benefits, Hidden Costs: The Cloudy Numbers in the EPA's Proposed Clean Power Plan***, Manhattan Institute, June 16, 2016.

Step 1: Anchor the Analysis in Certainty

The repeal produces $19 billion in avoided compliance costs, measured in present value over 2026–2047, using the EPA's three percent discount rate. These savings are specific, tangible, and independently verifiable, resulting directly from eliminating mandates that would have required utilities to deploy CCS systems technologies that the EPA now concedes are not adequately demonstrated and lack cost-effectiveness. They reflect real reductions in capital investment, operations, maintenance expenses, and premature baseload generation retirements. The various quantified impacts represent the CPS repeal's most transparent and economically justifiable outcome.

Step 2: Eliminate Revenue Offsets and Include Economic Costs of Increasing Energy Prices

The EPA's IRFA erroneously offsets compliance costs with projected electricity revenue gains. This mistaken treatment implies that the burden is negligible if utilities recover costs from ratepayers. But as Zycher (2023)[26] points out, these offsets are not real savings; they are cost transfers that conceal the full economic impact on households and businesses.

A second flaw is the EPA's failure to account for deadweight loss from higher energy prices as compliance raises electricity costs and consumption falls, reducing total economic welfare. The extent of this loss depends on demand elasticity, whether price hikes lead to sharp or modest declines in use, but the welfare loss exists regardless of revenue outcomes. A credible cost-benefit analysis must reflect both effects to assess the rule's economic burden accurately.

Step 3: Remove Speculative and Infeasible Co-Benefits from the Core Calculation

The RIA attributes -$130 billion in forgone health co-benefits to reduced particulate matter ($PM_{2.5}$) and ozone emissions, assuming full implementation of the CPS. The EPA has determined, however, that the rule's core mandates are not technologically or economically feasible. Basing benefit estimates on outcomes that cannot be achieved undermines the credibility of the analysis. These projected co-benefits are not central to the CPS's goal of reducing greenhouse gases but instead reflect reductions in secondary pollutants already regulated under other federal programs. Including them as core benefits inflates the economic cost of repeal and skews the policy's true impact. A valid analysis must be based on achievable outcomes, not on hypothetical scenarios disconnected from regulatory reality.

Step 4: Disclose and Contextualize Omitted Climate Benefits

The RIA neither quantifies nor qualitatively evaluates any climate-related benefits linked to GHG reductions, despite the CPS's stated goal of limiting CO_2 emissions. By omitting these effects entirely, the analysis fails to consider a key regulatory objective and provides an incomplete view of the rule's repeal.

[26] Benjamin Zycher, Senior Fellow, American Enterprise Institute, **Comment to the Environmental Protection Agency on Proposed Rule EPA-HQ-OAR-2023-0072**, August 8, 2023.

Even if monetizing climate impacts proves methodologically complex, a credible benefit-cost framework must reveal material effects, including unquantified but policy-relevant outcomes. Ignoring them skews the overall economic assessment and leads to the misleading conclusion that the repeal results in a -$110 billion net cost.

Conclusion

Repealing the CPS is a necessary correction in federal regulatory policy. The EPA has rightly determined that the rule's core mandates, especially the 90 percent CCS requirement for fossil fuel-fired units, are not technologically feasible, cost-effective, or achievable within the set compliance timeline.

Despite these deficiencies, the EPA's RIA concludes that repeal results in a net cost of $110 billion. This flawed conclusion downplays real compliance cost savings, inflates unlikely co-benefits linked to an unfeasible policy, and excludes relevant discussion of climate-related outcomes. It treats a failed regulatory scenario as if it were inevitable, rather than recognizing the impracticality of implementation.

A revised, more accurate analytical framework shows a very different result. Repealing the CPS rule saves $19 billion in present-value compliance costs and removes a policy that would have caused significant economic burdens with no real chance of enforcement. This repeal backs an energy policy rooted in technical realism, financial caution, and regulatory openness.

We urge the EPA to finalize the repeal and revise its analysis to reflect this corrected economic framework, emphasizing measurable costs, feasible policy baselines, and a comprehensive accounting of relevant effects.

About The Buckeye Institute

Founded in 1989, The Buckeye Institute is an independent research and educational institution – a think tank – whose mission is to advance free-market public policy in the states.

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