

# United States Senate

WASHINGTON, DC 20510

August 1, 2023

The Honorable Michael S. Regan  
Administrator  
US Environmental Protection Agency  
1200 Pennsylvania Avenue, NW  
Washington, DC 20004

Dear Administrator Regan:

We write to request that the Environmental Protection Agency (EPA) withdraw the unlawful “Clean Power Plan 2.0” that was proposed in May.<sup>1</sup> The EPA has again grossly misinterpreted the scope of authority Congress granted under Section 111 of the Clean Air Act by proposing a rule that would require generation shifting and transform our nation’s power sector with neither a clear and explicit congressional authorization nor adequate process as required under the Administrative Procedure Act.

Similar to the first iteration of the Clean Power Plan, the EPA again overstepped the legal authority Congress provided it in the Clean Air Act with this new rule. This proposal flagrantly runs counter to the Supreme Court’s decision in *West Virginia v. EPA*, 597 U.S. \_\_\_(2022). The major questions doctrine dictates “a clear statement is necessary for a court to conclude that Congress intended to delegate authority of this breadth to regulate a fundamental sector of the economy.”<sup>2</sup> There is no “clear congressional authorization” for the Agency to point to with respect to this rule. As Principal Deputy Assistant Administrator for the Office of Air and Radiation Joe Goffman has stated, nothing since the ruling in *West Virginia v. EPA* has conferred upon the EPA any new authority to require generation shifting as the best system of emission reduction, as EPA seeks to do under this proposal.<sup>3</sup>

## **The Best System of Emission Reduction in the Proposed Rule Is Not Adequately Demonstrated as Required by the Clean Air Act.**

There are fundamental flaws within the proposal, including sweeping claims about the future availability of the proposed emissions control technologies that are considered the best systems

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<sup>1</sup> *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*, 88 Fed. Reg. 33,240 (May 23, 2023) (hereinafter “Clean Power Plan 2.0”).

<sup>2</sup> *West Virginia v. EPA*, 597 U.S. \_\_\_(2022) (internal quotation marks removed).

<sup>3</sup> Hearing on the Nomination of Joseph Goffman to be Assistant Administrator for Air and Radiation of the Environmental Protection Agency 118 Cong. \_\_\_(Mar. 1, 2023) (Response to Questions for the Record of Joseph Goffman: “In *West Virginia v. EPA*, the Supreme Court held that EPA did not have the authority to adopt generation-shifting as the best system of emission reduction (‘BSER’) as part of its emission guidelines for power plant greenhouse gas emissions under Clean Air Act section 111(d). The Inflation Reduction Act did not include provisions addressing EPA’s authority to adopt generation shifting as the BSER under Clean Air Act section 111.”)

of emission reduction. Under Section 111 of the Clean Air Act, the best system of emission reduction is required by the law to be “adequately demonstrated.”<sup>4</sup> This proposal, however, assumes adoption of control technologies – including the use of carbon capture and sequestration (CCS) and low greenhouse-gas hydrogen (hereinafter “clean hydrogen”) – that are still nascent and have not yet been adequately demonstrated. In fact, Congress recognized the lack of demonstrated capacity of these technologies by directing the Department of Energy to fund multiple carbon capture *demonstration* projects, large-scale carbon capture pilot projects, and regional hydrogen hubs as part of the Infrastructure Investment and Jobs Act.<sup>5</sup> Congress’s recent provision of billions in funding for research, development, and demonstration for these technologies demonstrates the technologies are not adequately demonstrated and not sufficiently mature for use in regulatory mandates such as best system of emission reduction.

By requiring the best system of emission reduction for coal plants to install and operate CCS technology at a 90-percent carbon dioxide capture rate by 2030, the EPA is effectively requiring these plants to shut down. Prior to public release, the proposed rule was also arbitrarily changed by the White House to require coal plants to capture carbon dioxide even more quickly than what was originally proposed by the Agency – a clearly political move meant to accelerate the retirement of coal plants.<sup>6</sup> When the EPA sent the rule to the White House for review, the Agency did not include any requirements for existing natural gas plants, which were seemingly added by the White House’s Office of Climate Policy.<sup>7</sup> Career EPA staff did not include this indefensible addition in the original proposal. The rushed addition of a separate generation source into the proposal essentially mimicked the requirements proposed for new natural gas plants, regardless of the feasibility of these control technologies for existing plants.

Today, CCS is not commercially operational for any coal or natural gas plant in the United States and, even with the 45Q tax credit, CCS is not viable at commercial scale yet. The Agency cites five “successful applications” of carbon capture for fossil-fuel fired power plants in the proposal—one located in Canada, one proposed in Scotland, and three located in the United States.<sup>8</sup> Of the projects cited in the proposal, *none* would meet the EPA’s requirement in the proposal for 90 percent of emissions to be captured. In fact, the two successful applications on domestic coal plants that the EPA cites *are closing* and the Agency readily admits the referenced natural gas plant is no longer capturing carbon dioxide off the slipstream. Even Special Presidential Envoy for Climate John Kerry recently stated, “But we don’t have that at-scale yet. And we can’t sit here and just pretend we’re going to automatically have something we don’t have today. Because we might not. It might not work.”<sup>9</sup>

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<sup>4</sup> Clean Air Act § 111(a)(1), 42 USC § 7411(a)(1).

<sup>5</sup> Infrastructure Investment and Jobs Act, Pub. L. 117-58, Title III, Subtitles A and B, 135 Stat. 986-1015 (Nov. 15, 2021).

<sup>6</sup> Benjamin Storrow & Scott Waldman, *White House pressed EPA to toughen power plant rule*, POLITICO (May 17, 2023), available at <https://www.politico.com/news/2023/05/17/white-house-epa-climate-rule-00097283>.

<sup>7</sup> *Id.*

<sup>8</sup> These facilities are: SaskPower’s Boundary Dam in Canada, AES’s Warrior Run, AES’s Shady Point, Bellingham Energy Center, and the Proposed Peterhead Power Station in Scotland.

<sup>9</sup> Ellen Knickmeyer, *Kerry challenges oil industry to prove its promised tech rescue for climate-wrecking emissions*, Associated Press (May 16, 2023), <https://fox2now.com/news/business/ap-business/kerry-challenges-oil-industry-to-prove-its-promised-tech-rescue-for-climate-wrecking-emissions/>.

In addition to the cost and feasibility of the capture technology itself, CCS is not adequately demonstrated when considering the lightning-fast capacity buildout of related infrastructure needed to deploy CCS at the scale of the proposal by the timeline the proposal would require. In the proposal, EPA assumes any coal plants still operating in 2040 will be able to install technology and the associated infrastructure to have carbon capture operational by 2030. It is doubtful that all engineering and design work could be completed and the necessary permits issued by 2030. For example, the EPA’s record on approving Class VI wells is all but nonexistent, with the two prior examples taking approximately six years each to issue. The Agency has not directly approved a single Class VI well to store carbon dioxide since the Obama Administration, and there are more than 70 applications pending.<sup>10</sup> In responses to written questions submitted for the *Congressional Record*, EPA Assistant Administrator Radhika Fox stated the *goal* is to make a Class VI permit determination within 24 months of an administratively complete application. A permit determination cannot be made until a project already has a full and complete application, a geological site to store the carbon dioxide, and even then, a facility operator would still have to undergo the construction to actually build out the necessary infrastructure to transport the carbon dioxide. In addition to permitting for the capture and storage facilities themselves, the buildout of the requisite pipelines would be even more daunting due to federal and state permitting issues and the likelihood of litigation. The EPA acknowledges the required build out of carbon dioxide pipelines would be “in line with the historical maximum deployment of natural gas transmission pipelines.”<sup>11</sup> The EPA has been slow to approve primacy over the Class VI program for states, despite congressional direction to accelerate that process, which in any event would not alleviate these other regulatory issues related to CCS facilities and pipelines.

Requiring the use of clean hydrogen as the best system of emission reduction for natural gas plants is similarly unlawful and based on implausible assumptions. The clean hydrogen definition that the EPA proposes is the most emission-constrained version of hydrogen: that produced *only* by renewable energy-powered electrolysis. That definition is tied to the Internal Revenue Code’s section 45V tax credit for the production of clean hydrogen, which Congress has neither authorized nor directed for use in environmental regulation. The Treasury Department has yet to even release its final guidance on how to qualify for this tax credit.<sup>12</sup> As America’s Clean Power CEO Jason Grumet noted, “This is a conversation about an industry that does not yet exist, [but] that we all have great ambitions for.”<sup>13</sup> Despite the nascent status of the technology, the EPA is proposing for baseload natural gas plants to use 96-percent clean hydrogen co-firing for natural gas plants by 2038. The EPA acknowledges that a “viable hydrogen infrastructure requires that hydrogen be able to be delivered from where it is produced to the point of end use, such as an industrial facility, power generator, or fueling station.”<sup>14</sup> This

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<sup>10</sup> See generally U.S. Evtl. Prot. Agency, *Class VI Wells Permitted by EPA*, <https://www.epa.gov/uic/class-vi-wells-permitted-epa> (last visited July 17, 2023).  
88 Fed. Reg. at 33,369.

<sup>12</sup> See Dept. of the Treasury and Internal Review Service, Request for Comments on Credits for Clean Hydrogen and Clean Fuel Production, available at <https://www.irs.gov/pub/irs-drop/n-22-58.pdf>.

<sup>13</sup> Mark A. Bloomfield, *A Conversation with Jason Grumet, American Clean Power Association CEO*, American Council for Capital Formation (June 2, 2023), <https://accf.org/2023/06/02/a-conversation-with-jason-grumet-american-clean-power-association-ceo/>

<sup>14</sup> U.S. Evtl. Prot. Agency, Office of Air and Radiation, Hydrogen in Combustion Turbine Electric Generating Units Technical Support Document at 24 (May 23, 2023).

type of infrastructure is not available and will face years to decades of permitting and investment before it could be even built, further indicating that this technology has not been adequately demonstrated.

Beyond the EPA's fundamental flaws in its projections for the technology, it has included unrealistic assumptions about the cost of hydrogen to make the rule appear less expensive. In modeling released just last month, the EPA estimates that clean hydrogen will be available at a delivered price of \$0.50 per kilogram.<sup>15</sup> According to the International Energy Agency (IEA), the average cost of producing clean hydrogen today is "USD 3.5-7.5/kg" which drops to "around USD 1.5-3.5/kg in 2030 and USD 1-2.5/kg in 2050."<sup>16</sup> While EPA claims this \$0.50 per kilogram includes the cost of transportation, the IEA states, "[I] long-distance transport of hydrogen, however, is difficult and costly because of its low energy density, and can add around USD 1-3/kg of hydrogen to its price."<sup>17</sup>

### **The Proposed Rule Requires Fuel Switching Counter to *West Virginia v. EPA*.**

In direct conflict with *West Virginia v. EPA*, this proposal requires generation shifting from fossil-fuel power to other types of energy. While the Agency falsely claims this does not run afoul of the Supreme Court's decision, it is undeniable the proposal would require generation shifting that the Court has definitively found Congress has never granted EPA the authority to require under the Clean Air Act.

The rule proposes to mandate coal and natural gas to "co-fire" with other types of energy, including requiring base load natural gas turbines to co-fire with 30-percent clean hydrogen in 2032. These plants would be required to ramp up to 96-percent co-firing of clean hydrogen by 2038 – a scant six years to fundamentally change their energy source. Even at 30-percent co-firing, this is shifting electricity generation from natural gas as a fuel to hydrogen. For coal-fired power plants that continue to operate beyond 2032 but plan to close before 2040, the Agency is demanding 40-percent natural gas co-firing. A best system of emission reduction option for power plants to curb operations and only provide peaking power as a way to avoid installing expensive, nascent technology is yet another form of generation shifting. Requiring plants to run less often does not lower the demand for electricity. Those megawatts will be needed, whether or not the EPA has chosen arbitrary limits on how often they can run. Coal plants that the EPA assumes will operate at capacity factors as low as 10-percent will not be economically viable and forced to retire.

### **The Proposed Rule Reflects Rushed Decision-making that is Arbitrary and Capricious and Subverts Public Participation.**

The underlying model that the EPA has used to justify this proposal is also faulty, arbitrary, and opaque. The model, called the Integrated Planning Model (IPM), is downplaying the overall

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<sup>15</sup> 88 Fed. Reg. at 33,365.

<sup>16</sup> International Energy Agency, *Net Zero by 2050 A Roadmap for the Global Energy Sector* 110 [https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9d0c-10b13d840027/NetZeroBy2050-ARoadmapfortheGlobalEnergySector\\_CORR.pdf](https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9d0c-10b13d840027/NetZeroBy2050-ARoadmapfortheGlobalEnergySector_CORR.pdf).

<sup>17</sup> *Id.*

costs of the proposed rule and makes stunning assumptions that do not align with reality or the regulations EPA is currently promulgating. In addition to the assumptions about prices of hydrogen described above, the EPA’s model assumptions do not account for the new electricity load that will be needed because of additional rules pushing for increased electricity demand being promulgated by the Agency, including the new tailpipe standards that expect 67 percent of new light-duty vehicles sold will be battery electric by model year 2032. By using this model, the EPA is assuming, without adequate—or really any—facts or evidence, the costs will be “negligible.” Similarly, the IPM assumes that new renewable resources and transmission assets will be constructed and providing electrons to the grid essentially instantaneously and at no cost, which flies in the face of the realities of the permitting process and basic economics.

Making matters worse with respect to public scrutiny of the IPM modeling for this proposal, the EPA provided updated modeling in July without notice or additional time for comments. Prior reasonable requests for a 60-day comment period extensions were denied.<sup>18</sup> Without an extension in the current comment period, the American people and regulated community will not have adequate time to review and comment on the proposal including the updated modeling, which fundamentally changes the EPA’s predictions for its implementation. This appears to be a willful attempt to subvert the notice and comment requirements of the Administrative Procedure Act.

### **The Proposed Rule Will Negatively Impact Electric Reliability Across the Country.**

Finally, we have serious concerns about our electric reliability if the proposed rule is finalized resulting in shut downs of the affordable, reliable baseload electricity powering our nation. This proposed rule will drastically increase costs and reduce electricity supplies. These effects will not only be borne by the regulated community, but by every American, manufacturer, and small business that relies on the electricity grid. Federal Energy Regulatory Commissioners, as well as the Chief Executive Officers of the North American Electric Reliability Corporation, the Regional Transmission Organization PJM, and one of America’s largest electric cooperatives all warned about increasing risks to the stability of the electric grids in the United States and agree that we are heading towards a reliability crisis that will be exacerbated by policy-driven plant retirements.<sup>19</sup> As you know, the power plants being targeted by this rule are not only having to comply with this regulation. They are also being targeted by the agency’s overarching power plant strategy, called the Electric Generating Unit (EGU) Strategy, as a way to shutter fossil-fuel power plants and bolster President Biden’s climate goals. If the proposed Clean Power Plan 2.0 is finalized along with the rest of the EGU Strategy, our country will face a crisis in electricity

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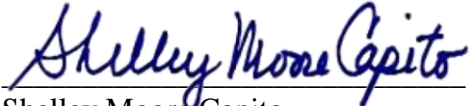
<sup>18</sup> Letter from Senators Capito, Cramer, Marshall, Barrasso, Sullivan, Graham, Daines, Risch, Hoeven, Britt, Boozman, Lummis, Tuberville, Cornyn, Lee, Lankford, Fischer, Schmitt, Cassidy, Crapo, Ricketts, Vance, Budd, Tillis, Wicker, Rounds, T. Scott, and Cruz to Administrator Michael S. Regan Requesting 60 Day Extension of Comment Period on Clean Power Plan 2.0 Proposal (June 8, 2023); *see also* 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 Extension of Comment Period, 88 Fed. Reg. 39,390 (June 16, 2023).

<sup>19</sup> *Full Committee Hearing to Conduct Oversight of FERC Before the US Senate Committee on Energy and Natural Resources*, 118<sup>th</sup> Cong. (May 4, 2023) (Testimony of Comm’r James Danly); *Full Committee Hearing to Examine the Reliability and Resiliency of Electric Services in the U.S. in Light of Recent Reliability Assessments and Alerts, Before the US Senate Committee on Energy and Natural Resources*, 118<sup>th</sup> Cong. (June 1, 2023).

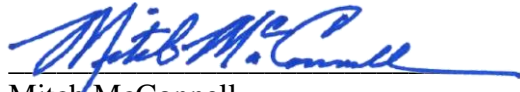
supply that will dwarf the regional outages that we have seen in California, Texas, and New England in recent years.

We request the EPA expeditiously withdraw this unlawful proposal.

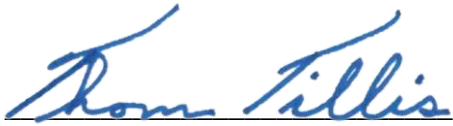
Sincerely,



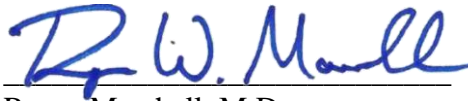
Shelley Moore Capito  
Ranking Member  
Environment & Public Works Committee



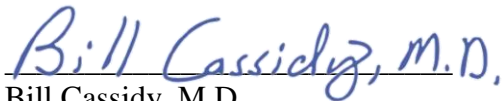
Mitch McConnell  
United States Senator, Republican Leader



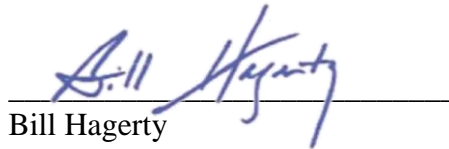
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United States Senator



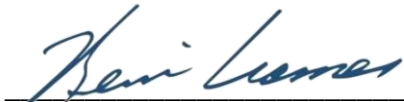
Roger Marshall, M.D.  
United States Senator



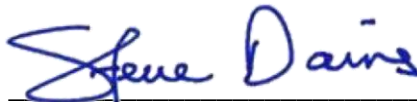
Bill Cassidy, M.D.  
United States Senator



Bill Hagerty  
United States Senator



Kevin Cramer  
United States Senator



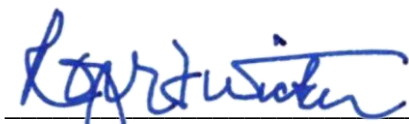
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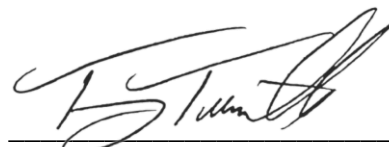
Pete Ricketts  
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John Barrasso, M.D.  
United States Senator



Roger F. Wicker  
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Tommy Tuberville  
United States Senator



Tom Cotton  
United States Senator



Cynthia M. Lummis  
United States Senator



Joni K. Ernst  
United States Senator



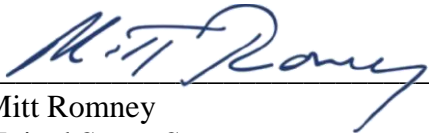
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United States Senator



Katie Boyd Britt  
United States Senator



JD Vance  
United States Senator



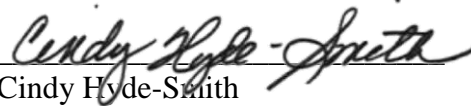
Mitt Romney  
United States Senator



Ted Budd  
United States Senator



Mike Crapo  
United States Senator



Cindy Hyde-Smith  
United States Senator



Marsha Blackburn  
United States Senator



Rick Scott  
United States Senator



Michael S. Lee  
United States Senator



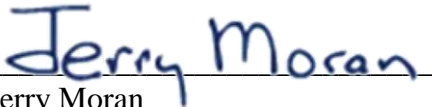
Deb Fischer  
United States Senator



Lindsey O. Graham  
United States Senator



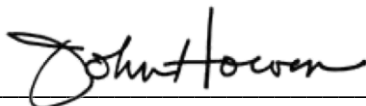
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United States Senator



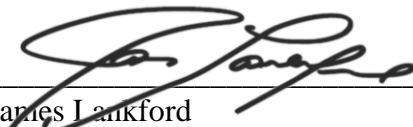
Jerry Moran  
United States Senator



Dan Sullivan  
United States Senator



John Hoeven  
United States Senator



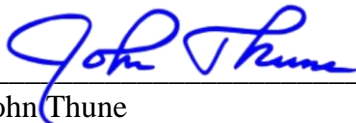
James Lankford  
United States Senator



John Boozman  
United States Senator



Mike Braun  
United States Senator



John Thune  
United States Senator



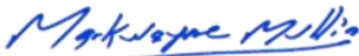
Ted Cruz  
United States Senator



Marco Rubio  
United States Senator



Todd Young  
United States Senator



Markwayne Mullin  
United States Senator