## Law Office of Daniel M. Galpern, Esq.

Aug. 8, 2023

Michael S. Regan, Administrator
U.S. Environmental Protection Agency
EPA Docket Center
Attention Docket ID No: EPA-HQ-OAR-2023-0072

Submitted electronically via https://www.regulations.gov

Dear Administrator Regan,

I submit this comment on behalf of <u>James E. Hansen</u>, <u>Donn J. Viviani</u>, <u>Climate Science</u>, <u>Awareness and Solutions</u>, <u>Inc.</u>, and <u>Climate Protection and Restoration Initiative</u>, concerning EPA's 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 (88 FR 33,240, May 23, 2023).

Our principal concern is that by this Proposal, but without acknowledging its dramatic turn, you appear to be abandoning the Biden Administration's commitment to secure "a carbon pollution-free electricity sector *no later than* 2035." *Executive Order 14008* of January 27, 2021 (emphasis added).

That carbon pollution-free electricity sector goal is a centerpiece of the US near-term commitment under the Paris Agreement to the United Nations Framework Convention on Climate Change. *The United States' Nationally Determined Contribution: Reducing Greenhouse Gases in the United States: A 2030 Emissions Target* (April 21, 2021). As well, it is critical to our long-term international pledge. *The Long-Term Strategy of the United States: Pathways to Net-Zero Greenhouse Gas Emissions by 2050*, Fig. ES-1 at 4 (November 2021) (US State Department characterizing the goal of 100% clean electricity by 2035 as "critical to support decarbonization in the electricity sector, which will in turn help the U.S. reach its 2030 and 2050 goals in combination with broad electrification of end uses").

We regard the functional abandonment of the 100% clean electricity by 2035 goal, therefore, to be at best a highly regrettable development.

Viviani previously submitted his own comment, EPA-HQ-OAR-2023-0072-0260, and for him this comment is additional to his earlier comment.

Furthermore, EPA's own regulatory impact analysis (RIA) accompanying the Proposal indicates that over the key 14-year horizon of 2028 to 2042, it will yield  $CO_2$  emissions reductions over baseline that is "less than U.S. power plants currently emit in just one year."

Thus, according to that RIA, under EPA's Proposal, power sector *emissions reductions* by 2035 are projected to be scarcely more than the reductions anticipated in declining baseline emissions. RIA Table 3-5 (572 MMT annual  $CO_2$  emissions anticipated from US electrical generating units (EGUs) in 2035 under the EPA Proposal versus 608MMT  $CO_2$  under the baseline scenario).<sup>3</sup>

In its proposed rule, EPA outlines some, though by no means all, of the urgent major social and environmental risks stemming from continued unabated  $CO_2$  emissions – risking the imposition, upon our progeny, of "a world that looks very different from today and from the conditions in which human civilization has developed. *EPA Proposal* at 12.

In that appropriate context, then, beyond its abandonment of a key US commitment, the Proposal's impact on EGU emissions is so puny as to be scarcely credible. It requires us, therefore, to dispute EPA's statement that the Proposal's "proposed standards and guidelines" would, if finalized, "significantly decrease GHG emissions from fossil fuel-fired EGUs and the associated harms to human health and welfare." *RIA* at ES-2. To the contrary, it will not.

Certain changes to the Proposal, therefore, are clearly warranted. Accordingly, we incorporate Professor Robert Howarth's recommendations, from EPA-HQ-OAR-2023-0072-0107\_attachment\_1, that EPA:

- 1. Abandon its Proposal to let coal plants off the hook from needing to comply with best system of emissions reduction (BSER) level emissions controls simply because those utilities commit to retiring the plants by 2040. All coal plants should be required to apply rigorous BSER- equivalent controls by 2030, or retire by that year.
  - Coal plants are a critical target for a simple reason: According to <u>EPA's analysis</u> of the national GHG inventory, while coal plants now account for only about 20% of national electricity supply they produce almost 60% of electric sector emissions.
- 2. Ensure that "the same 2030 deadline for existing coal-fired plants be applied to both existing and new plants powered by natural gas."

The observation is that of Dan Lashof in his review article entitled *EPA's Proposed Rules for Power Plant Emissions: 6 Key Questions, Answered*, World Resources Institute (May 12, 2023).

That difference in emissions reductions gets even punier by the end of the modeled period: 458 MMT annual CO<sub>2</sub> emissions anticipated from US electrical generating units (EGUs) in 2040 under the EPA Proposal versus 481MMT CO<sub>2</sub> under the baseline scenario.

- 3. Impose the same, or more highly stringent emissions controls on natural gas plants regardless of their size or intermittency.<sup>4</sup>
- 4. Ensure that captured carbon dioxide is permanently stored, require a financial bond to enforce that permanence, and ensure the captured CO<sub>2</sub> to satisfy imposed BSER controls are not used for enhanced oil recovery.

These changes, if adopted, would serve to somewhat tighten the stringency of the current Proposal.

## Furthermore:

5. EPA's identification of CCS at 90% emissions reduction efficiency as the BSER for EGUs is conservative. Record evidence in the file from the Air and Radiation Office indicates that "solvent-based post-combustion CO<sub>2</sub> capture technologies are capable of achieving even higher CO<sub>2</sub> removal rates beyond 95 percent on low-purity streams representative of fossil-fueled combustion." *Greenhouse Gas Mitigation Measures: Carbon Capture and Storage for Combustion Turbines, Technical Support Document*, EPA-HQ-OAR-2023-0072-0058 at 14.

Accordingly, we urge a stiffening of EPA guidelines to compel CO<sub>2</sub> emissions control at a rate of 95% or higher.<sup>5</sup>

We hasten to add, here, our recognition that the present Proposal does not reflect EPA's preferred option. That is, the Agency clearly felt pressed to develop a new Proposal to address EGU pollution in the aftermath of the Supreme Court's crimped view of Clean Air Act §111 in its *West Virginia* decision. But the current Proposal's weaknesses are not fully attributable to EPA's attempted conservative reading of the Supreme Court tea leaves. Rather they reside, in part, we think, with the Agency's failure to consider the potential utility of other statutes and other approaches, including those that would target the continuing availability or supply of fossil fuels for the purpose of electricity generation or otherwise.<sup>6</sup>

In this we also agree with, and incorporate by reference, a recommendation from the New York Attorney General's office, EPA-HQ-OAR-2023-0072-0127, that virtually all gas-power plants, including peakers down to 15 megawatts (and, perhaps smaller) should be required to capture and ensure permanent storage of their  $CO_2$  emissions, or rapidly phase out their use of fossil fuels.

We also concur with Professor Howarth that "Power Plant rules [should] specify net carbon dioxide capture rates . . . and not simply the gross capture" since CCS efforts themselves take a substantial amount of energy. If powered by fossil energy, then -- and not nuclear or renewable energy -- the ensuing  $CO_2$  emissions must be accounted for with respect to the EGU's overall compliance with its emissions limitation requirement.

See, in particular, Brian Prest, *Partners, Not Rivals: The Power of Parallel Supply-Side and Demand-Side Climate Policy*, Resources for the Future (April 2022).

Finally, we offer two comments on EPA's Proposal "that States . . . be permitted to include trading and averaging as compliance measures for affected EGUs in their State plans, so long as those plans demonstrate equivalence to the stringency that would result if each affected EGU was individually achieving its standard of performance." EPA Proposal at 132.

First, we urge that any such guidance preclude offsets in such state trading programs. Particularly in light of our fast approach to various climate tipping points of no return, and mounting evidence that we have reached <u>a new climate frontier</u>, there is limited time for strapped states to waste in the monitoring and verification of inherently questionable emissions offset schemes.

Second, as an alternative to trading and averaging programs, we urge EPA to allow states to comply with rigorous carbon fee programs – again, "so long as plans demonstrate equivalence to the stringency that would result if each affected EGU was individually achieving its standard of performance." To ensure that any such state fee or tax is adequate to ensure an EGU's use of BSER-level or higher controls, EPA should determine the fee or tax rate "equivalent to the marginal abatement cost imposed by the BSER on a covered source category."

Thank you for considering our comments.

Respectfully,

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Eisenberg, Wara, Morris, Darby, Minor, *A State Tax Approach to Regulating Greenhouse Gases Under the Clean Air Act*, <u>Brookings</u> (May 22, 2014) at 12.

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