

March 18, 2019

Via: [Http://www.regulations.gov](http://www.regulations.gov)

Re: Docket ID No. EPA-HQ-OAR-2013-0495; Review of Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units; 83 FR 65424

**Comments of the COMPETITIVE ENTERPRISE INSTITUTE and
the SCIENCE and ENVIRONMENTAL POLICY PROJECT**

The Competitive Enterprise Institute (CEI) and the Science and Environmental Policy Project (SEPP) hereby file these comments in this proceeding in connection with their pending Petition for Rulemaking in Connection with EPA's 2009 Endangerment Finding. The CEI-SEPP petition, which was filed in 2017, is attached hereto and can also be found [here](#).¹

In its Affordable Clean Energy (ACE) Proposed Rule, EPA stated that its Endangerment Finding "continues to provide the requisite predicate for applicability of [Clean Air Act] section 111(d). Any comments on the issues discussed in this subsection would be more appropriately addressed to the docket on EPA's intended forthcoming proposal with regard to the new source rule." 83 FR 44746, 44751-52 (2018).

EPA's New Source Performance Standards proposal, in turn, stated the following: "The EPA is proposing to retain the statutory interpretations and record determinations described in this paragraph. Nonetheless, the EPA is aware that various stakeholders have in the past made arguments opposing our views on these points, and the Agency sees value to allowing them to comment on these views in this rulemaking. Accordingly, the Agency will consider comments on the correctness of the EPA's interpretations and determinations and whether there are alternative interpretations that may be permissible, either as a general matter or specifically as applied to GHG emissions." 83 FR 65424, 65432 n.25 (Dec. 20, 2018).

SEPP and CEI are two of the stakeholders apparently referenced in this passage. We filed our petition in 2017, contending that EPA should commence a new rulemaking on the subject of its 2009 finding. The grounds for our petition were the following: 1) there had been no statistically significant atmospheric warming despite a continued increase in atmospheric CO₂ levels; 2) changes in global temperatures in recent decades were far from unusual; 3) new balloon and satellite data showed that the atmosphere was far less sensitive to CO₂ forcing than the climate models had predicted; and 4) there was mounting evidence that EPA's greenhouse gas rules

¹ <https://cei.org/sites/default/files/CEI%20Petition%20for%20Rulemaking%20on%20Endangerment%202017%20corrected.pdf>.

would have no discernible climate impact. For these reasons, there was a need to reexamine both the three lines of evidence for EPA's Endangerment Finding as well as its underlying rationale.

Our petition is still pending before EPA, and we hereby take this opportunity to provide new evidence for why the agency should proceed with this petition and with similar petitions pending before it. We submit that the papers below, published since the time we first filed our petition, significantly add to the basis for our petition.

Brian C. Ancell, Allison Bogusz, Matthew J. Lauridsen, & Christian J. Nauert, *Seeding Chaos: The Dire Consequences of Numerical Noise in NWP Perturbation Experiments*, Bulletin of the American Meteorological Society (April 19, 2018),

<https://journals.ametsoc.org/doi/10.1175/BAMS-D-17-0129.1>.

This article examines the effects of “noise” (that is, small random data modifications) in the atmospheric models. It finds that small variations in initial conditions cause rapid changes throughout the models at a rate “well above the propagation speed of any known physical process.” These unrealistic changes can significantly contaminate experimental results, giving the false impression of realistic physical processes.

Bernhard Bereiter, Sarah Shackleton, Daniel Baggenstos, Kenji Kawamura & Jeff Severinghaus, *Mean global ocean temperatures during the last glacial transition*, Nature (Jan. 3, 2018),

<https://www.nature.com/articles/nature25152>.

This paper presents a new way to measure historical ocean temperatures by examining various noble gases, such as argon, krypton, and xenon, that are released by the ocean as it warms. Previous estimation of ocean temperature was based on organisms that were also subject to a variety of other biological factors, causing a large degree of uncertainty. New results show that the ocean has only warmed 0.1 °C over the past 50 years. This undermines the idea of “hidden heat” in the oceans, and the claims of increased hurricane intensity caused by increased ocean temperatures.

John R. Christy, Roy W. Spencer, William D. Braswell & Robert Junod, *Examination of space-based bulk atmospheric temperatures used in climate Research*, International Journal of Remote Sensing (June 5, 2017), <https://www.tandfonline.com/doi/full/10.1080/01431161.2018.1444293>.

This paper recognized a spurious warming in the temperature record of NOAA satellite's (NOAA-12 and NOAA-14). Once the spurious warming is removed, four separate satellite records show the tropical temperature trend is less than half that of the IPCC climate model simulations relied upon by EPA. These satellite records are highly correlated to other atmospheric temperature data in weather balloons, unlike the IPCC models used by the EPA.

Ben Houlton, Scott Morford, & Randy Dahlgren, *Convergent evidence for widespread rock nitrogen sources in Earth's surface environment*, Science (Apr. 6, 2018),

<http://science.sciencemag.org/content/360/6384/58>.

This paper challenges the prior view of plant growth in high CO₂ atmosphere and the ability of plants to absorb CO₂. Previously, it was believed that the limited quantity of nitrogen in the soil limited potential plant growth and eventually limited plants' ability to

absorb CO₂. But it now appears that vast quantities of nitrogen in bedrock allow plants to absorb more CO₂ than had previously been expected.

Nicholas Lewis & Judith Curry, *The Impact of Recent Forcing and Ocean Heat Uptake Data on Estimates of Climate Sensitivity*, *Journal of Climate* (July 3, 2018), <https://journals.ametsoc.org/doi/10.1175/JCLI-D-17-0667.1>.

This paper estimates the average expected increase in surface temperature due to a doubling of CO₂ to be 1.66°C. In contrast, the IPCC AR4 [claimed](#) “climate sensitivity is likely to be in the range of 2 to 4.5°C with a best estimate of about 3°C.” According to the paper, the “climate models [used by the EPA] are inconsistent with observed warming during the historical period.”

Ross McKittrick & John Christy, *A Test of the Tropical 200- to 300-hPa Warming Rate in Climate Models*, *Earth and Space Science* (July 6, 2018), <https://doi.org/10.1029/2018EA000401>.

This paper on tropical atmospheric temperature trends shows “that all models warm more rapidly than observations and in the majority of individual cases the discrepancy is statistically significant.” The models used in this paper were both the CHIMP3 models, used by EPA in its Endangerment Finding, and the CHIMP5 models used by the IPCC in AR5. In other words, the models used by EPA do not match real life observations concerning tropical temperatures and this deviation from reality is statistically significant. The paper states: “Comparing observed trends to those predicted by models over the past 60 years reveals a clear and significant tendency on the part of models to overstate warming” and “[a]ll 102 CMIP5 model runs warm faster than observations.”

Henrik Svensmark, Martin Enghoff, Nir Shaviv, & Jacob Svensmark, *Increased ionization supports growth of aerosols into cloud condensation nuclei*, *Nature Communications* (Dec. 19, 2017), <https://www.nature.com/articles/s41467-017-02082-2>.

This paper demonstrates that cosmic rays increase the cloud-condensing nuclei that cause clouds to form. Clouds change the albedo of the earth and are one of the least understood aspects of climate. The IPCC AR4 that EPA relied upon did not include any forcing due to cosmic rays. In its words, “Together with the lack of a proven physical mechanism and the plausibility of other causal factors affecting changes in cloud cover, this makes the association between galactic cosmic ray-induced changes in aerosol and cloud formation controversial.” But because cosmic ray-induced cloud formation has now been demonstrated, this undermines the models and historical climate patterns relied upon by EPA. The paper concludes that “ion-induced condensation should be incorporated into global aerosol models, to fully test the atmospheric implications.”

James P. Wallace III, John R. Christy & Joseph S. D’Aleo, *On the Existence of a “Tropical Hot Spot” & the Validity of EPA’s CO₂ Endangerment Finding*, Abridged Research Report, 2d ed. (April 2017), <https://thsresearch.files.wordpress.com/2017/04/ef-data-research-report-second-editionfinal041717-1.pdf>

This paper examines the temperature record after taking into account various natural factors including solar activity, volcanic activity, and oceanic activity (e.g., El Niño). The paper concludes that “the Global Warming that has occurred over the period 1959 to date

can be quite easily explained by Natural Factor impacts alone.” It contends that these findings invalidate the conclusions of EPA’s Endangerment Finding, stating that “the analysis results invalidate each of the Three Lines of Evidence in [EPA’s] CO2 Endangerment Finding.”

James P. Wallace III, Joseph S. D’Aleo & Craig D. Idso, *On the Validity of NOAA, NASA and Hadley CRU Global Average Surface Temperature Data & the Validity of EPA’s CO2 Endangerment Finding*, Abridged Research Report (June 2017), <https://thsresearch.files.wordpress.com/2017/05/ef-gast-data-research-report-062817.pdf>.

This paper analyzes the Global Average Surface Temperature (“GAST”) data produced by NOAA, NASA and Hadley CRU. It finds that each new version of GAST has increased the warming trend over the entire history of the data. These changes have thus created a spurious increase in historical warming and have invalidly removed cyclical patterns from the historic record. The paper concludes that the GAST records produced by NOAA, NASA and Hadley CRU are “totally inconsistent with published and credible U.S. and other temperature data.” Because “GAST data set validity is a necessary condition for EPA’s GHG/CO2 Endangerment Finding, it too is invalidated by these research findings.”

For the foregoing reasons, in addition to those set forth in our 2017 petition, EPA should commence a new proceeding to reexamine its 2009 Endangerment Finding.

Sincerely,

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