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Re: Information Quality Act Correction Request Regarding EPA's 2009 GHG Endangerment Finding

The Competitive Enterprise Institute (CEI) submits this request for correction under the Information Quality Act (IQA), 114 Stat. 2763, section 515, as implemented through EPA and Office of Management and Budget (OMB) guidelines. These guidelines were expanded by OMB in a [memorandum](#) issued on April 24, 2019.

Under OMB's new requirements, **"agencies will not take more than 120 days to respond to an RFC without the concurrence of the party that requested the request for correction."** For this reason, we expect a response to this request for correction (RFC) within 120 days. In addition, the new OMB guidelines require that, "The agency response should contain a point-by-point response to any data quality arguments contained in the RFC and should refer to a peer review that directly considered the issue being raised, if available." Furthermore, "Agencies should share draft responses to RFCs and appeals with OMB prior to release to the requestor for assessment of compliance with the above norms." Thus, responses to correction requests now need to be reviewed in advance by OMB sufficiently in advance of the 120-day deadline.

We ask EPA to determine that its 2009 GHG Endangerment Finding and supporting Technical Support Document (TSD) do not meet the requirements of the Information Quality Act. As discussed at the end of this document, EPA's Inspector General found many of these deficiencies in a 2011 report to the agency. EPA's response to those findings was inadequate, and those inadequacies are even more obvious in light of OMB's latest guidelines.

Despite this, the 2009 GHG Endangerment Finding and TSD are still being distributed and relied upon by EPA and as such are subject to correction requests under the IQA. *See, e.g.,* <https://www.epa.gov/ghgemissions/endangerment-and-cause-or-contribute-findings-greenhouse-gases-under-clean-air-act>. For the reasons described below, the deficiencies should be corrected,

and EPA should cease distributing its Endangerment Finding and TSD until they have gone through the proper peer review process.

The 2009 GHG Endangerment Finding Is a Highly Influential Scientific Assessment

When EPA issued its 2009 GHG Endangerment Finding, it failed to explain whether it or the accompanying the TSD were “highly influential scientific assessments” (HISA) or whether instead they merely contained “influential scientific information”. As is shown below, both documents are properly viewed as HISAs. This triggers a number of Information Quality requirements that EPA failed to follow.

The 2009 GHG Endangerment Finding is a scientific assessment.

In the 2009 Endangerment Finding and TSD, EPA evaluated the current state of the science in making its determination; for this reason, these documents are clearly scientific assessments. According to OMB’s [*Final Information Quality Bulletin for Peer Review*](#), 70 FR 2664 (2005), (“OMB 2005 Final Memo”), “The term ‘scientific assessment’ means an evaluation of a body of scientific or technical knowledge, which typically synthesizes multiple factual inputs, data, models, assumptions, and/ or applies best professional judgment to bridge uncertainties in the available information. These assessments include, but are not limited to, **state-of-science reports**; ... weight-of-evidence analyses; meta-analyses; health, safety, or ecological risk assessments.” *Id.* at 2666 (emphasis added).

This characterization of the Endangerment Finding and TSD was ironically supported by EPA itself; in 2010, it stated that it “did not passively and uncritically accept a scientific judgment or conclusion supplied to it by outsiders.” [*EPA’s Response to the Petitions to Reconsider the Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202\(a\) of the Clean Air Act*](#), 75 FR 49555, 49581 (2010). Instead, it admitted that it “evaluated all of the scientific information before it, determined the current state of the science on greenhouse gases ... and the degree of scientific consensus on this science.” *Id.* In short, EPA produced a report on the “state of the science on greenhouse gases”, and such “state-of-science reports” are scientific assessments and must comply with the OMB rules for such assessments.

The 2009 GHG Endangerment Finding has been highly influential.

The OMB 2005 Final Memo defines a “highly influential scientific assessment” (HISA) as those scientific assessments which “(i) Could have a potential impact of more than \$500 million in any year, or (ii) Is novel, controversial, or precedent-setting or has significant interagency interest.” 70 FR 2671.

Many of the regulations issued based on the 2009 GHG Endangerment Finding had more than a \$500 million potential impact and as such it must be considered a HISA. To take but one instance, the “Clean Power” Plan, based on the 2009 GHG Endangerment Finding, was estimated by EPA to cost \$2.5 billion in compliance costs in 2020, \$3.0 billion in 2025, and \$8.4 billion in 2030. The Clean Power Plan relied upon the 2009 GHG Endangerment Finding.

[Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units](#), 80 FR 64661, 64679 (2015). These costs far exceed the \$500 million threshold for a HISA. In the Medium/Heavy Duty GHG Emission rules, EPA estimated it would cost \$6.5 billion in Vehicle Program Costs in 2040 and \$7.5 billion in 2050 (both using 2013 dollars). [Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles-Phase 2](#), 81 FR 73478, 73482 (2016). The Light-Duty car emission costs are no better. EPA estimated \$2 billion in annual technology costs for cars in 2017 (in 2010 dollars). [2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards](#), 77 FR 62623, 62920 (2012). Those costs increase to \$27 billion in 2050 (undiscounted 2010 dollars). *Id.* Many other similar regulatory actions relying upon the Endangerment Finding have costs exceeding \$500 million.

The 2009 GHG Endangerment Finding was also novel, controversial, and precedent-setting; as such, it is a HISA on that basis as well. That there have been more than a dozen petitions for reconsideration by various organizations shows how controversial this decision was and continues to be. [75 FR 49555](#) (denial of ten petitions in 2010); <https://bit.ly/2PYW7ed> (pending petition of the Competitive Enterprise Institute and the Science and Environmental Policy Project); <https://bit.ly/2HbAiFz> (pending petition of the Concerned Household Electricity Consumers Council); <https://bit.ly/2PWrf16> (pending petition of the Texas Public Policy Foundation). As to its novel nature, never before had EPA issued an Endangerment Finding under the Clean Air Act for a greenhouse gas. And as to its precedent-setting nature, EPA used the 2009 GHG Endangerment Finding as precedent in its 2015 point source assessment of electric generating units. 80 FR 64509, 64517. The inter-agency interests are also massive, given the duty of NHTSA and other agencies to regulate in other areas involving GHGs, such as CAFE.

EPA's failure to properly apply OMB Information Quality standards led to a variety of problems with the peer review process, all in violation of the IQA. These violations include:

- 1) EPA did not consider allowing the public, including scientific and professional societies, to nominate potential reviewers.** Per Section III, part 3(a), of OMB 2005 Final Memo, "Agencies shall consider requesting that the public, including scientific and professional societies, nominate potential reviewers." 70 FR 2675. That was not done by EPA for the 2009 Endangerment Finding. The EPA Inspector General report, discussed below on pages 6-7, stated that "the Agency did not consider asking the public to nominate reviewers." But EPA utilized an entirely internal process with no consideration given to outside nomination of peer reviewers.

The OMB 2005 Final Memo requires that, "The group of reviewers shall be sufficiently broad and diverse to fairly represent the relevant scientific and technical perspectives and fields of knowledge." However, with respect to the Endangerment Finding, all of the peer reviewers were federal employees rather than a "broad and diverse" group. No member of the public, including any private sector scientist, engineer or other profession, was on

the peer review panel. This is the likely result of a process that excludes such individuals in the selection of who the peer reviewers are, as occurred here.

- 2) **The peer review panel had a substantial conflict of interest because it was largely reviewing its own work.** Under Section III, part 3(b), of the OMB 2005 Final Memo, the agency is responsible for making sure the peer review panel has no conflicts of interest in evaluating the material it reviews. 70 FR 2676. But for the 2009 Endangerment Finding, the individuals selected for the peer review panel by EPA had leading roles in developing the assessment reports cited in that document. For instance, Susan Solomon was the Co-Chair of the IPCC AR4 Working Group I relied upon by EPA. Another example is Virginia Burkett, who both was an author on IPCC AR4 WGII and the USGCRP report relied upon by the 2009 Endangerment Finding TSD. They were effectively asked to judge their own work.

This approach is contrary to EPA's own procedures at the time. "Since it would probably result in a perceived, if not real, conflict of interest, the group that is generating the work product usually cannot conduct or perform the peer review of its own work product." EPA, Agency Peer Review Handbook, 3rd Edition, pg. 37, <https://bit.ly/2W3oTQF> (a newer version of the report was issued in 2015, but the 3rd edition was used at the time). The handbook notes that a conflict of interest exists "when their professional standing and status or the significance of their principal area of work might be affected by the outcome of the peer review." *Id.* at 64. Likewise, the National Academy of Sciences' policy on conflict of interests notes "an individual should not serve as a member of a committee with respect to an activity in which a critical review and evaluation of the individual's own work, or that of his or her immediate employer, is the central purpose of the activity, because that would constitute a conflict of interest." National Academy of Sciences, Conflict of Interest Policy, <http://www.nationalacademies.org/coi/>. The relationship between the peer reviewers and the authorities that the 2009 Endangerment Finding claimed to "most heavily rely upon" are shown in Attachment A.

- 3) **The peer review panel was not sufficiently independent as it contained an EPA employee.** Under Section III, part 3(c), of the OMB 2005 Final Memo, "the agency—or entity selecting the reviewers—shall bar participation of scientists employed by the sponsoring agency unless the reviewer is employed only for the purpose of conducting the peer review (i.e., special government employees)." 70 FR 2676. One of the 12 peer reviewers for the 2009 GHG Endangerment Finding was an employee of EPA and was not hired just for peer review, which clearly violates this requirement.
- 4) **The public was not allowed to participate in the peer review process.** Under Section III, part 5, of the OMB 2005 Final Memo:

Whenever feasible and appropriate, the agency shall make the draft scientific assessment available to the public for comment at the same time it is submitted for peer review (or during the peer review process) and sponsor a public meeting

where oral presentations on scientific issues can be made to the peer reviewers by interested members of the public. When employing a public comment process as part of the peer review, the agency shall, whenever practical, provide peer reviewers with access to public comments that address significant scientific or technical issues.

70 FR 2676.

This simply was not done by EPA. EPA never allowed the public to participate in the peer review process. EPA did not allow the draft scientific assessment to be available to the public when it was submitted for peer review. EPA did not sponsor a public meeting or make public comments on the draft available to the peer reviewers. It didn't even try to comply with the OMB guidelines in this area.

In fact, the peer review panel's questions and responses have never been made public. This is despite the OMB 2005 Final Memo, which states: "When peer review of government reports is considered, the case for transparency is stronger, particularly when the report addresses an issue with significant ramifications for the public and private sectors." 70 FR 2670.

- 5) **No Peer Review Report was prepared.** The OMB 2005 Final Memo states "Section III(6) requires that agencies instruct reviewers to prepare a peer review report that describes the nature and scope of their review and their findings and conclusions." 70 FR 2672. No peer review report was done, nor was the panel instructed to create such a report by EPA, as required to do by OMB guidelines.
- 6) **EPA failed to certify how it was complying with the IQA.** Section VII of the OMB 2005 Final Memo requires an agency to include in the administrative record a certification explaining how the agency complied with the OMB IQA peer review requirements. 70 FR 2673. EPA failed to do so, and as such did not provide an opportunity for the public to comment on whether the method used by the agency was sufficient.
- 7) **EPA did not state how the underlying information supporting the Endangerment Finding met the requirements of the OMB Information Quality Bulletin for Peer Review.** Under the OMB 2005 Final Memo, and as emphasized in the OMB guidelines issued on April 24, 2019, "When using scientific information, including third-party data or models, to support their policies, agencies must ensure compliance with the requirements of OMB's Information Quality Bulletin for Peer Review." EPA failed to explain why the use of the data and models of the IPCC, NRC, and USGCRP meet the requirements of the OMB Information Quality Bulletin. EPA just assumed that its peer review procedures are adequate, while the guidelines only presume that NAS peer review procedures are adequate.
- 8) **IPCC peer review is not adequate to satisfy OMB guidelines on conflict of interest requirements to be used.** As noted above, the new OMB guidelines require that "When

using scientific information, including third-party data or models, to support their policies, agencies must ensure compliance with the requirements of OMB's Information Quality Bulletin for Peer Review.” The OMB 2005 Final Memo, in Section II part (3)(b), on conflicts of interest require that “in selecting peer reviewers who are not government employees, adopt or adapt the National Academy of Sciences policy for committee selection with respect to evaluating the potential for conflicts.”

The National Academy of Sciences policy for committee selection requires that: at the time of appointment, each committee member is required to list all professional, consulting, and financial connections, as well as to describe pertinent intellectual positions and public statements by filling out a confidential form, ‘Background Information and Confidential Conflict of Interest Disclosure.’ The committee appointment is not finalized until the institution completes a review of information regarding potential conflicts of interest and bias.

National Academies, Getting to Know the Committee Process, pg. 6, https://sites.nationalacademies.org/cs/groups/dbassesite/documents/webpage/dbasse_086051.pdf.

No such information or form is required from members of the IPCC peer review committees. As such, the IPCC does not meet the OMB requirements for peer review selection for conflicts of interest and cannot be directly relied upon under the IQA as EPA did in this case. When questioned about this by the IG, EPA admitted that “IPCC procedures do not explicitly contain ‘conflict of interest’ language.” IG Report pg. 70. While EPA said it was not aware of any conflicts of interest affecting the quality of IPCC reports, the OMB requirements ensure such problems do not occur in the first place by requiring the safeguards used by the National Academy of Sciences. As there is not appropriate conflict of interest protection in the IPCC procedures, under the OMB guidelines, an EPA peer review panel would have to evaluate the scientific basis of IPCC’s conclusions.

The failures by EPA to do a proper peer review as required by the OMB and EPA guidelines for the 2009 GHG Endangerment Finding undermine the quality of the information disseminated by EPA.

EPA’s Inspector General Concluded EPA Failed to Follow IQA Guidelines

Less than two years after EPA issued its Endangerment Finding, the EPA Inspector General did an independent evaluation of whether EPA properly followed OMB peer review guidelines. He found that EPA had failed to do so. According to the Inspector General: “We interpreted OMB’s guidance to indicate that the TSD was a highly influential scientific assessment. EPA’s peer review did not meet all OMB requirements for such documents.” [*Procedural Review of EPA’s Greenhouse Gases Endangerment Finding Data Quality Processes*](#), Report No. 11-P-0702, pg. 13 (September 26, 2011). The EPA Inspector General found, among others, that:

- As to OMB requirements for peer reviewers with “broad and diverse” views, the IG noted that “all were federal employees and all had leading roles in developing the assessment reports cited in the TSD.” IG Report pg. 67.
- An EPA employee was on the peer review panel, which is an explicit violation of the OMB requirements.
- “[P]ublic opportunity to comment on a document is not public participation in the peer review” (IG Report pg. 68) and the failure of EPA to provide public input into the peer review process violates OMB requirements.
- There was no peer review report, contrary to OMB requirements. IG Report pg. 69.
- The EPA process did not even meet the requirements of an influential scientific information due to the lack of a peer review record, peer review report, EPA response to peer reviewers, and approval of such a response. IG Report pg. 83.

Despite the IG’s documentation of these and other errors, EPA refused to correct them. It claimed the 2009 Endangerment Finding was not a scientific assessment on the dubious ground that it relied entirely upon the conclusions made by the IPCC and other outside sources. But even if such state-of-science reports rely on outside sources, they are still considered scientific assessments by OMB. This is because of the judgment that EPA must exercise in its use of them; it must decide which outside sources to rely upon, and how much weight to give to each of those sources.

It is time that EPA correct the Information Quality Act errors that the Inspector General identified.

EPA Should Stop Disseminating the Endangerment Finding Until a Valid Peer Review Process Is Completed

The Information Quality Act guidelines require an agency to follow the proper peer review process before a scientific assessment can be disseminated. No valid peer review process was done for the 2009 GHG Endangerment Finding. Until such a peer review process is validly completed, under the OMB guidelines, EPA should stop disseminating this scientific assessment.

Given the failure of that finding to be properly peer-reviewed, the only way for EPA to disseminate it is with the disclaimer “This information is distributed solely for the purpose of pre-dissemination peer review under applicable information quality guidelines. It has not been formally disseminated by [the agency]. It does not represent and should not be construed to represent any agency determination or policy.” OMB Final Guidelines, Section I, Part 3, 70 FR 2674. This disclaimer obviously would not be appropriate to the current 2009 GHG Endangerment Finding, and, as such, dissemination should end.

EPA should then restart the process of peer reviewing the 2009 GHG Endangerment Finding. Lastly, EPA will have to reconsider the findings of the 2009 GHG in light of this new peer review process, taking into account objections and problems raised by the peer reviewers and the public.

By withdrawing the Endangerment Finding and then restarting the peer review process for it, EPA can ensure that there is confidence in the quality of the information being disseminated.

Sincerely,

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Attachment A

Attachment A: Relationship of Peer Reviewers to References Upon Which EPA Relied Most Heavily for its 2009 Endangerment Finding

Virginia Burkett	<p>Author of IPCC AR4 WGII</p> <p>Reviewer of NRC Potential Impacts of Climate Change on U.S. Transportation (2008)</p> <p>Author of USGCRP Global Climate Change Impacts in the United States (2009)</p> <p>Author of CCSP SAP 2.1: Scenarios of GHG Emissions and Atmospheric Concentrations (2007)</p> <p>Author of CCSP SAP 3.1: Climate Change Models (2008)</p> <p>Author of CCSP SAP 4.1: Coastal Sensitivity to Sea Level Rise (2009)</p> <p>Lead Author of SAP 4.7: Impacts of Climate Change and Variability on Transportation Systems (2008)</p>
William Emanuel	<p>Reviewer of IPCC AR4 WGII</p>
Anthony Janetos;	<p>Lead Author of IPCC AR4 WGII</p> <p>Author of NRC Potential Impacts of Climate Change on U.S. Transportation (2008)</p> <p>Author of USGCRP Global Climate Change Impacts in the United States (2009)</p> <p>Provided guidance and support for CCSP SAP 4.2: Thresholds of Change in Ecosystems (2009)</p> <p>Lead Author of CCSP SAP 4.3: Agriculture, Land Resources, Water Resources, and Biodiversity (2008)</p> <p>Reviewer for CCSP SAP 4.7: Impacts of Climate Change and Variability on Transportation Systems (2008)</p>
Thomas Karl;	<p>Reviewer of IPCC AR4 WGI</p> <p>Author of NRC Climate Change Science: An Analysis of some Key Questions (2001)</p> <p>Author of NRC Potential Impacts of Climate Change on U.S. Transportation (2008)</p> <p>Co-Chair and Editor-in-Chief of USGCRP Global Climate Change Impacts in the United States (2009)</p> <p>Author, Editor, and Executive Team of CCSP SAP 1.1: Temperature Trends in the Lower Atmosphere (2006)</p> <p>Co-Chair of CCSP SAP 3.3: Weather and Climate Extremes in a Changing Climate (2008)</p> <p>Reviewer for CCSP SAP 4.7: Impacts of Climate Change and Variability on Transportation Systems (2008)</p>
Gavin Schmidt	<p>Reviewer of IPCC AR4 WGI</p> <p>Reviewer of CCSP SAP 1.2: Past Climate Variability and Change in the Arctic and at High Latitudes (2009)</p> <p>Reviewer of CCSP SAP 3.4: Abrupt Climate Change (2008)</p>

Susan Solomon;	Co-Chair, IPCC WGI Reviewer of NRC Climate Change Science: An Analysis of some Key Questions (2001) Reviewer of USGCRP Global Climate Change Impacts in the United States (2009) Reviewer of CCSP SAP 2.3: Aerosol Properties and Climate Impacts (2009) Reviewer of CCSP SAP 2.4: Trends in Ozone-Depleting Substances (2008)
Thomas Wilbanks	Lead Author of AR4 WGII Author of USGCRP Global Climate Change Impacts in the United States (2009) Author of CCSP SAP 4.5: Effects on Energy Production and Use (2007) Lead Author of CCSP SAP 4.6: Analyses of the Effects of Global Change on Human Health (2008)
Phil DeCola	Executive Office/Liason for Global Climate Change Impacts in the United States (2009) NASA Representative for the CCSP SAP 2.1: Scenarios of GHG Emissions and Atmospheric Concentrations (2007) Author of CCSP SAP 2.3: Aerosol Properties and Climate Impacts (2009) Led the initial discussions that resulted in the inclusion of SAP 2.4: Trends in Ozone-Depleting Substances (2008)
Linda Joyce	Reviewer to CCSP SAP 4.2: Thresholds of Change in Ecosystems (2009)
Anne Grambsch, EPA Employee	Lead Author of CCSP SAP 4.6: Analyses of the Effects of Global Change on Human Health (2008)
Jerry Hatfield;	Principal Author EPA Impacts of Global Change on Regional U.S. Air Quality (2009) Author of USGCRP Global Climate Change Impacts in the United States (2009) Author of CCSP SAP 4.3: Agriculture, Land Resources, Water Resources, and Biodiversity (2008)
Michael McGeehin	Author of CCSP SAP 4.6: Analyses of the Effects of Global Change on Human Health (2008)