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United States Senate

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

WASHINGTON, DC 20510-6175

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October 31, 2011

The Honorable Lisa Jackson
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Dear Administrator Jackson:

I am seeking information regarding the Environmental Protection Agency's (EPA) adherence to the Data Quality Act (DQA) in the proposed emission control requirements for hazardous air pollutants from coal- and oil-fired electric generating units (Utility MACT). Recently, the EPA Office of Inspector General (EPA IG) determined that EPA did not properly follow DQA and peer-review requirements for highly influential scientific assessments, and otherwise failed to follow internal procedure, in rulemaking for the Agency's Greenhouse Gases Endangerment Finding. I am concerned that the Utility MACT, likewise, does not satisfy Office of Management and Budget (OMB) and EPA DQA requirements. A review of the regulatory docket for Utility MACT has uncovered no documentation related to the DQA or peer review requirements.

The DQA requires OMB to provide policy and procedural guidance to Federal agencies for ensuring and maximizing the quality of information disseminated by Federal agencies. Pursuant to this authority, OMB issued the *Final Information Quality Bulletin for Peer Review*, which mandates peer review for most "influential" scientific assessments produced by an agency and sets forth even more rigorous standards for those scientific assessments deemed "highly influential." Highly influential scientific assessments are those that have a potential impact of \$500 million or more on the U.S. economy, or are novel, controversial, precedence-setting or have significant interagency interest. EPA's Peer Review Policy also provides that major scientifically- and technically-based work products, including scientific, engineering, economic, or statistical documents, related to Agency decisions should be peer-reviewed. Indeed, EPA's Science Policy Council recommends careful procedural detail in the *Peer Review Handbook*, warning that inattention to any element of peer review can nullify the peer review attempt. I question whether EPA, once again, has failed to meet its own high peer-review standards in promulgating the Utility MACT. I see no public record of it.

According to the Utility MACT preamble, EPA decided to submit Technical Support Documents entitled the *National-Scale Mercury Risk Assessment Supporting the Appropriate and Necessary Finding for Coal- and Oil- Fired Electric Generating Units*

(Mercury Risk Assessment) and *Non-Mercury HAP Case Studies Supporting the Appropriate and Necessary Finding for Coal- and Oil-Fired Electric Generating Units* (Non-Mercury Case Studies) for peer review. This was a well-founded decision as EPA relies on these studies to support the Agency's determination that regulation of mercury and non-mercury hazardous air pollutants is required under the Clean Air Act. However, EPA peer-review processes for these important studies are inadequate, and even non-existent.

The Mercury Risk Assessment has been criticized by commenters for incoherence and conflicting data. Indeed, the Science Advisory Board's Mercury Panel (SAB Panel), in its September 29, 2011, peer review of the Mercury Risk Assessment said that it could not evaluate the Mercury Risk Assessment because important elements and methods were "missing or poorly explained." The SAB Panel was forced to conduct multiple in-person meetings and conference calls with EPA to gain sufficient understanding of the Mercury Risk Assessment. Ultimately, the SAB Panel qualified its support of the Mercury Risk Assessment's design on "our recommendations [being] fully considered in the revision of the assessment."

However, EPA has not committed to incorporating fully peer review recommendations in support documentation before finalizing the Utility MACT. Instead, EPA has only said it would expedite publication of Utility MACT peer reviews and any EPA responses before issuing a final rule. EPA claimed such was necessary to meet a November 16th deadline. Even though the court recently extended that date to December 16th, EPA has yet to indicate whether the Agency will work to include peer review suggestions into the Utility MACT's scientific assessments.

Regardless, it is unclear how the Mercury Risk Assessment can be redrafted to include SAB Panel Recommendations in time for OMB to conduct a full 60 day interagency review under E.O. 12866. This truncated "peer review" predicates the Mercury Risk Assessment's scientific validity on EPA's capacity to rewrite the Assessment to include all 82 of the SAB Panel's recommendations in mere weeks. Assuming EPA accomplishes what is a herculean task for any bureaucracy, the results cannot be substantiated unless the SAB Panel has an opportunity to review the revised Mercury Risk Assessment. To date, it appears EPA has not done so, nor intends to do so. According to EPA's own policy, then, the Agency's procedural failures here nullify the Mercury Risk Assessment's peer review.

Whereas the Mercury Risk Assessment's peer review is incomplete, EPA has yet to even seek peer review for the Non-Mercury Case Studies. Despite determining in the Utility MACT preamble that the Non-Mercury Case Studies required peer review, EPA has not placed any such peer review in the Utility MACT docket or elsewhere. Such is troubling given fundamental flaws identified by commenters on the Non-Mercury Case Studies, including incorrect emissions estimates, incorrect stack data, improper assumptions that units run 100% of the time, and dispersion modeling that is biased towards over-predicting downwind effect. Indeed, the National Rural Electric

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Cooperatives Association called the study “nothing more than a rough synthetic attempt at ascertaining individual risk information.”¹ These problems combine with the absence of peer review to render the Non-Mercury Case Studies devoid of any scientific credibility.

EPA’s failure to properly accredit the risk analysis underlying the Utility MACT, at best, runs afoul of both OMB and EPA requirements under the DQA. In fact, EPA’s improper “peer review” of these critical studies threatens to undermine the basis on which EPA claims that Utility MACT regulations are “necessary and appropriate” under the Clean Air Act. Without further scientific backing, EPA apparently expects the courts to simply take the Agency’s word that the regulations are “necessary and appropriate.”

While EPA claims to have attempted peer review for the Utility MACT’s qualitative risk analysis, these measures were entirely ignored in other vital technical support documents. The Utility MACT’s *Assessment of the Feasibility of Retrofits for the Toxics Rule* (Feasibility Assessment) makes important conclusions regarding Utility MACT compliance options that were not subject to peer review. Specifically, the Feasibility Assessment contains the highly controversial presumption that Dry Sorbent Injection (DSI) technology can be widely deployed as a pollution control technology to comply with Utility MACT requirements.² Some have noted the potential consequence arising from such assumptions, and I will be asking in a separate letter that the Agency provide information concerning assumptions related to the use of DSI.³ Because the Feasibility Assessment is both novel and controversial, and has a potential impact of \$500 million or more, it cannot be considered anything but a highly influential scientific assessment under OMB’s guidelines. Therefore, under both OMB and EPA DQA and peer review policies, the Feasibility Assessment should have been peer reviewed.

EPA did not conduct peer review on the Feasibility Assessment. However, such review would have almost certainly taken issue with the scientific foundation upon which EPA bases its DSI presumptions. Particularly, EPA utilized a three-week trial study conducted by a leading sorbent producer to determine DSI sulfur dioxide and hydrochloric acid removal rates. This is not only problematic due to the study’s limited general applicability to DSI, but also because EPA depends on data from a corporation

¹ National Rural Electric Cooperative Association, *Comments on National Emission Standards for Hazardous Air Pollutants From Coal- and Oil-Fired Electric Utility Steam Generating Units*, Document No. EPA-HQ-OAR-2009-0234-17689 (August 4, 2011).

² *Id.* (“The proposed [hydrochloride (HCl)] limits are based on several questionable assumptions. Available information does not support the contention that dry-sorbent injection . . . technology can achieve the levels of reduction necessary on EGUs using high chlorine eastern bituminous coals to meet the proposed MACT HCl limits.”).

³ Gabriel Nelson, *Fate of Old Coal Plants May Hinge on New Toxic-Cutting Technology*, *New York Times* (April 13, 2011) (concluding that the number of coal plant retirements due to the Utility MACT will depend on whether the Feasibility Assessment’s assumptions about DSI are correct.).

that stands to benefit financially from Utility MACT to predicate the feasibility of Utility MACT compliance. The Feasibility Assessment is yet another example of EPA's failure to base its assessments on sound scientific procedure as required by law.

For these reasons, I am concerned that EPA has, as in the case of the Endangerment Finding, failed to follow OMB and internal guidelines under the DQA in the Utility MACT rulemaking process. The lack of scientific credibility in the Utility MACT's scientific assessments undermines EPA conclusions about risk upon which the Utility MACT is based, as well as EPA's assurances that controls exist for compliance with the Utility MACT. Therefore, I request the following information in order to determine whether EPA has complied with the DQA in promulgating the Utility MACT:

1. Does EPA believe that peer review is vital to the scientific integrity of the information the Agency relies on for major rulemakings? Does EPA believe that the Mercury Risk Assessment and Non-Mercury Case Studies are highly influential scientific assessments, as defined by the OMB, requiring peer review? Why, then, has EPA truncated the peer review process for the Mercury Risk Assessment and not published any peer review for the Non-Mercury Case Studies? Does EPA believe that it has complied with the President's call for scientific integrity in Agency policy-making?
2. Does EPA intend to complete peer review of the Non-Mercury Case Studies, as the Agency said it would do in the Utility MACT preamble? To what scientific panel has EPA assigned the Non-Mercury Case Studies' peer review? Given the short period before EPA intends to finalize the Utility MACT, how could such peer review be useful if not produced in sufficient time to inform the Non-Mercury Case Studies before finalization? Will the public have an opportunity to comment on any peer review conducted on the Non-Mercury Case Studies?
3. What procedure has EPA undergone to ensure that conflict of interest and the appearance of a lack of impartiality concerns are being addressed? Will or has EPA published a list of the peer reviewers and their affiliations? Will EPA examine if potential appearance problems such as public statements or published articles advocating a particular scientific outcome or contracts for research with EPA exist?
4. Has EPA revised the Mercury Risk Assessment to incorporate all SAB Panel recommendations? If not, how can EPA claim the Mercury Risk Assessment has been peer reviewed if the approval of that peer review was based on including SAB Panel's revisions in the final Mercury Risk Assessment? Will EPA provide the SAB Panel an opportunity to review a revised version of the Mercury Risk Assessment? If not, how can the public be assured that the SAB Panel's recommendations were sufficiently incorporated so as to make the Mercury Risk Assessment properly peer reviewed?

5. How does EPA reconcile the Mercury Risk Assessment's and Non-Mercury Case Studies' haphazard peer review procedure with the EPA *Peer Review Handbook's* admonishment that attention be given to each element of peer review? Explain why EPA's failure to comply with the *Peer Review Handbook's* requirements should not lead to the nullification of any peer review conducted for the Mercury Risk Assessment and Non-Mercury Case Studies.
6. Does EPA believe it can proceed with Utility MACT finalization if the rule's risk analysis is not properly peer reviewed? If so, how can the Utility MACT be legally substantiated without a sound scientific basis to support EPA's contention that Utility MACT regulations are appropriate and necessary?
7. Given the importance and controversial nature of the Feasibility Assessment's DSI and other pollution control assumptions, why did the EPA not submit the Feasibility Assessment to peer review? Does EPA believe that EPA's feasibility determinations are based on a sound scientific basis sufficient for use in developing MACT standards?
8. Please explain how EPA determined that the Feasibility Assessment was not a highly influential scientific assessment.
9. Please explain how EPA believes it is scientifically sound to predicate assumptions in the Feasibility Assessment on data from companies that stand to benefit from the Utility MACT. Does EPA believe that such methods would be approved by peer review? If so, please cite examples where peer review has allowed the use of potentially highly biased data.
10. What quality assurance and quality control steps did EPA take to ensure that data collected from Utility MACT Information Collection Requests (ICR) is of sound quality? Please explain why EPA believes ICR data need not be peer reviewed.
11. Another integral component to EPA's DQA compliance regime is the Agency's Quality System. In order to assure EPA met its own Quality System requirements, please provide the following documents:
 - a. The names of each Quality Assurance Manager (QAM) who has reported on any data collected for the Utility MACT, as well as each QAM report associated with the Utility MACT.
 - b. Quality Management Plans for each organization involved in the Utility MACT.
 - c. All Quality Assurance Annual Report and Work Plans for every year any organization contributed the Utility MACT.

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d. Any Quality Assurance Project Plans concerning data created or gathered for the Utility MACT.

12. Did EPA assign the Utility MACT tier one status under the Agency's *Action Development Process: Guidance for EPA Staff on Developing Quality Action*? If so, please provide the analytic blueprint for the Utility MACT required of tier one actions. Please explain how EPA followed each procedural guideline in that action development process. In addition, explain any deviation from these procedural guidelines.

13. Please provide any documents created, cited, or in any way replied upon to answer the above questions.

I would appreciate your prompt attention to these requests. Unfortunately, my experience has been that the Agency is largely non-responsive to requests for information. Given the potential the Utility MACT rule has to cause blackouts and significant economic hardship, I hope you will devote your personal attention to this request. If the Agency has short-circuited its own peer review process, as it did with the Endangerment Finding for greenhouse gasses, this Committee and the public, deserve to know before the rule goes final. As such, I would appreciate your response by November 15, 2011.

In the event you do not respond to said deadline, you should be aware that I will pursue all means necessary to procure said information. This includes a request to the EPA's Investigator General to conduct an investigation into the matter.

Sincerely,



James M. Inhofe
Ranking Member
Committee on Environment and Public Works

Cc: Bill Daley, White House Chief of Staff
Cass Sunstein, Administrator, Office of Information and Regulatory Affairs
Arthur A. Elkins, Jr., Inspector General, Environmental Protection Agency