



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

The Honorable Henry A. Waxman
Chairman
Committee on Oversight and Government Reform
U.S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

Thank you for the opportunity to respond to questions for the record that followed a November 8, 2007 hearing on the Environmental Protection Agency's (EPA's) approval of new power plants. I hope this information will be useful to you and the members of the Committee.

If you have any further questions, please contact me or your staff may contact Josh Lewis in my office at 202-564-2095.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris Bliley", written over a horizontal line.

Christopher P. Bliley
Associate Administrator

Enclosure

Questions for EPA Administrator Stephen Johnson for the Hearing Record
Hearing on EPA Approval of New Power Plants
November 8, 2007, Committee on Oversight and Government Reform

1. In *Massachusetts v. EPA*, the Supreme Court overturned the Administration's position that greenhouse gases are not pollutants under the Clean Air Act and that therefore EPA has no authority to regulate emissions of greenhouse gases. You stated in your testimony that EPA is "evaluating the potential effects of the Supreme Court decision on a variety of Clean Air Act programs, including stationary source programs." Do you agree that this Supreme Court decision has potentially broad and significant impacts on a variety of Clean Air Act provisions? If not, why not?

Response: As EPA has noted on several occasions, the Supreme Court decision has the potential to impact a variety of Clean Air Act sections and programs, which is why the Agency is moving forward in a careful and deliberate manner.

2. Do you agree that the Court's recognition that greenhouse gases are air pollutants requires EPA to consider whether and how CAA Title I provisions, such as section 165, may apply with respect to greenhouse gases?

Response: EPA agrees that the Agency is required to consider whether and how CAA Title I provision may apply with respect to greenhouse gases, given the Court's recognition that greenhouse gases are air pollutants.

3. In light of the important legal and policy issues raised by the Supreme Court's decision, will you commit to request the State of Nevada, which is acting as the federal government's agent as the permitting authority for the White Pine plant, either to reopen the comment period or accept late comments on the White Pine proposed permit decision, to enable commenters to address the effect of the Supreme Court's decision in *Massachusetts v. EPA*, which was issued after the comment period closed, on the permit decision?

Response: We do not consider it necessary for the Nevada Department of Environmental Protection to reopen the public comment period in order to consider late comments on the effect of the Supreme Court's decision. EPA Region 9 will recommend that the NDEP accept and respond to all significant comments concerning the Supreme Court's ruling in *Massachusetts v. EPA* to the extent practicable.

4. In your responses to questions at the hearing, you indicated that you had not looked at the statistics on the quantity of carbon dioxide emissions that would occur if the Desert Rock and White Pine plants were built. This is surprising, as the effect of these plants on global warming is a primary focus of the Committee's ongoing investigation and the hearing. Based on the projected emissions quantities

estimated by others, the lifetime emissions from these two plants together would offset the 1.3 billion tons of greenhouse gas emissions avoided through EPA's major voluntary climate programs (Energy Star, the methane program, the Green Power Partnership, the Combined Heat and Power Partnership, and the high GWP gas programs) since President Bush took office.

a. Before you directly permit or allow to be permitted any plant with global warming impacts of this scale, will you, as EPA Administrator, commit to examine each plant's contribution to global warming if it were built? If not, why not?

b. Will you commit to take such contribution into account to the fullest extent allowed under the Clean Air Act in any future permit decision? If not, why not?

c. Will you commit to urge or require states with SIP-approved permit programs to take each proposed source's potential contribution to global warming into account to the fullest extent allowed under the Clean Air Act in any future permit decision? If not, why not?

Response: We recognize the importance of addressing the global challenge of climate change. The Agency continues to work on developing an overall strategy to most effectively address emissions of greenhouse gases. We believe that an overall strategy provides the best mechanism for assessing and addressing the full range of potential effects of GHG emissions.

As a general matter, EPA uses established standards or criteria to judge whether a permit should be issued, conditioned or denied on the basis of such impacts. Without such guideposts for greenhouse gas emissions, any action to delay, condition, or deny permits based on the potential effects of those emissions raises significant issues. We will continue to take a case-by-case approach to permitting decisions so that we can determine the proper course of action in the absence of the usual analytical guideposts for making permitting decisions. I am committed to ensuring that the Agency is appropriately reviewing pending permit applications and comments before issuing any final permits.

5. Has EPA calculated the CO2 emissions from Desert Rock and White Pine in terms of the total annual CO2 emissions and the pounds of CO2 per MWh?

a. If not, why not?

b. If yes, please provide those numbers for each plant.

Response: EPA Region 9 has not calculated the CO2 emissions from Desert Rock or White Pine. The Draft Environmental Impact Statements prepared for Desert Rock and White Pine estimated annual CO2 emissions. The Draft EIS for the Desert Rock facility relied on an EPA emissions factor from AP-42 and estimated that Desert Rock will emit

12.7 million tons per year of CO₂. The Draft EIS prepared for White Pine relied on an emissions factor from EPA's Climate Leaders Program and estimated that White Pine will emit 20.1 million tons of CO₂ annually.

6. The current and threatened future effects of global warming recognized by the IPCC include, among others, sea level rise, loss of glaciers, reduced snowpack, increased drought, changes in precipitation, increases in the severity and extent of forest fires, increases in hurricane intensity, property damage, loss of species habitat, extinction of species, loss of coral reefs, effects on agriculture, expansion in the range of disease vectors, increases in air pollution, and harm to human health.

a. Has EPA independently analyzed the full range of potential effects of the contribution to global warming from the Desert Rock and White Pine plants, if they are built?

Response: Power plants are required by law to calculate and report CO₂ emissions under section 821 of the Clean Air Act Amendments of 1990 and regulations at 40 CFR Part 75. There is discretion in the review process to calculate and understand the greenhouse gas profile of new sources. However, while EPA can project CO₂ emissions in tons over the projected life of a particular project based in part on assumptions concerning the plant's operating parameters, we lack, and the general climate change research community lacks, the tools and methods to credibly quantify the specific end-point impacts listed above due to the CO₂ emissions from an individual power plant.

b. Does anything in the Clean Air Act prohibit EPA from conducting such an analysis?

Response: Nothing in the Clean Air Act precludes EPA or State evaluation of the potential effects of emissions on global climate change. It is a separate issue as to whether any such evaluation is required.

c. If you have not conducted such an analysis, will you commit to do so, and require the State of Nevada to do so, prior to the issuance of a permit to either plant?

d. If not, why not?

Response:

As explained above, current modeling tools and methods do not permit us to credibly estimate the full range of specific endpoint impacts listed above due to the CO₂ emissions of an individual power plant.

e. To the extent that other federal agencies have a role to play in any of this analysis (e.g., the Fish and Wildlife Service and the National Oceanic and Atmospheric Administration for species impacts and the Park Service for impacts on National

Parks), will you commit to ensure that such agencies' views are fully considered prior to issuance of any permit by EPA or a delegated state program? If not, why not?

Response: EPA complies with the requirements of the Clean Air Act (CAA), the Endangered Species Act and any other applicable statutes. Furthermore, it is standard practice that we consider the views of other federal agencies in our permitting decisions provided they are submitted in a timely manner.

7. In 2006, EPA revised the New Source Performance Standards (NSPS) for utility boilers and declined to regulate CO₂ in that rulemaking. In September 2007, the DC Circuit remanded this decision to the Agency.

a. When will EPA issue a proposed rule responding to the remand?

b. When will EPA issue a final rule responding to the remand?

c. If EPA has no schedule for responding to the remand, why not?

Response: At this time the Agency is evaluating its options for responding to the remand as part of its overall consideration of greenhouse gas regulation under the Clean Air Act. Since a decision to control GHG emissions as part of a NSPS would impact other Clean Air Act programs with potentially far-reaching implications for many industrial sectors, it is vitally important that we consider our approach to GHG control from this broader perspective.

8. In April 2007, EPA issued a proposed rule revising the NSPS for refineries. In that rulemaking, commenters asserted that EPA must regulate CO₂ and methane emissions from refineries. EPA is under a deadline in a consent decree to issue the final rule by April 30, 2008.

a. Will you have formulated an “overall strategy” for addressing greenhouse gas emissions from stationary sources prior to April 30, 2008?

Response:

EPA is making progress in evaluating the availability and potential use of various Clean Air Act authorities for greenhouse gas mitigation efforts, including the NSPS program. The Agency is continuing to collect information to evaluate the scope of sources potentially affected; the flexibility, reasonableness, and effectiveness of potential options for regulation under each authority; and the potential implications of each decision, including the interrelationships between different parts of the Act. For example, we have compiled publicly available data on potential greenhouse gas emissions across industrial sectors; evaluated the use of surrogate data to predict potential CO₂ emissions; identified

a range of general greenhouse gas mitigation options; and begun to examine the applicability of these mitigation options in specific industries.

As we indicated above, we are committed to developing a sound strategy for addressing greenhouse gas emissions. In developing that strategy, we have come to appreciate the complexity and interrelationship of potential approaches to greenhouse gas regulation under the Clean Air Act, and the resulting importance of developing a sound overall strategy. In this regard, as we gather information to identify the potential universe of affected facilities if GHGs are regulated under the Act, we recognize that thresholds used for the Prevention of Significant Deterioration (PSD) determinations may greatly increase the number of facilities subject to New Source Review. For example, using a 250-ton per year threshold, facilities that could be covered during new construction and major modification include large apartment buildings, schools, hospitals and retail stores, or potentially large entertainment venues. In addition, for many combustion sources, some of the most effective mechanisms for mitigating GHGs, such as carbon capture and sequestration, need significant study and development before they could be implemented in a regulatory framework.

In view of these potential effects of CAA regulation, we believe it is vitally important to have an overall strategy in place to help guide regulatory decision-making. While we continue to make progress in developing a strategy, I cannot now commit to having a fully articulated strategy in place by a certain date.

b. Will EPA include a full analysis of the global warming effects of refinery greenhouse gas emissions in the technical documents supporting the final NSPS rule? If not, what would be your justification for refusing to consider such effects?

Response: As indicated in our answer to the first part of this question, the Agency is collecting information about potential greenhouse gas emissions from various industrial sectors, including refineries. Under the United Nations Framework Convention on Climate Change, EPA develops the annual U.S. inventory of greenhouse gases. We have included in that inventory our estimate of the greenhouse gas emissions from the refinery sector. We plan to include that information in the rulemaking record for the final refinery NSPS. As we explained in our answer to question 6.a., the modeling tools currently available are not adequate to credibly quantify the impact of an amount of greenhouse gas emissions on the climate change endpoint impacts listed in question 6.

9. EPA is under a deadline in a consent decree to issue a proposed rule to establish an NSPS for the Portland cement sector by May 31, 2008, and to issue the final rule by May 31, 2009. Portland cement manufacturing produces large quantities of greenhouse gas emissions, and it is to be expected that commenters will assert that EPA is required to set limits on those emissions in this rulemaking.

a. Will you have formulated an "overall strategy" for addressing greenhouse gas emissions from stationary sources prior to May 31, 2008?

Response: Please see our answer to 8.a. above.

b. Will EPA include a full analysis of the global warming effects of Portland cement greenhouse gas emissions in the technical documents supporting the proposed NSPS rule? If not, what would be your justification for refusing to consider such effects?

Response: As in the case of refinery greenhouse gas emissions, we plan to include the information we have on Portland cement greenhouse gas emissions in the rulemaking record for the cement NSPS, but available models cannot at this time credibly quantify the potential impact of those emissions on specific climate change endpoint impacts.

10. In your oral testimony, you stated: "we're working very diligently for developing an overall strategy for addressing greenhouse gas emissions, given the Supreme Court decision under Massachusetts v. EPA under the Clean Air Act, and that includes stationary sources." It has now been eight months since the Supreme Court decision. There are a number of pending permitting actions and regulatory actions facing the agency regarding greenhouse gas emissions from stationary sources.

a. Have you finalized any aspect of your "overall strategy for addressing greenhouse gas emissions?" If so, please describe that aspect of your strategy.

b. Have you taken or are you working on any action pursuant to an "overall strategy for addressing greenhouse gas emissions?" If so, please describe that action or actions.

c. When will you finalize the portion of an "overall strategy for addressing greenhouse gas emissions" that addresses stationary sources?

d. In the absence of an "overall strategy for addressing greenhouse gas emissions that addresses stationary sources" are you taking any measures to assure that any permit or regulatory decision with the potential to affect greenhouse gas emissions from a stationary source or sources takes those effects into account? If so, please describe. If not, why not?

Response: We have not finalized any aspect of our overall strategy at this time. For a description of our progress in developing a strategy and how we will approach permitting and regulatory decisions in the meantime, please see our answer to questions 8.a. and 4.c. above.

11. If carbon dioxide is a pollutant subject to regulation under the Clean Air Act, this triggers applicability of the new source review requirements for major sources located in clean air areas under section 165. Some have raised concerns that in the absence of specific threshold levels for CO2 emissions established by EPA, the new

source review requirements would apply if a new or modified major source were to increase CO₂ emissions by any quantity.

a. Is EPA working on a rule to establish significance thresholds for emissions of CO₂ under section 165. If not, why not?

b. When will EPA issue a proposed rule to establish significance thresholds for emissions of CO₂ under section 165? When will EPA issue a final rule?

Response: EPA is in the midst of evaluating the potential effects of the Supreme Court's decision on the mobile and stationary provisions of the Clean Air Act. This work includes an assessment of the implications of the interplay between any mobile or stationary source rule that regulates GHGs and the Prevention of Significant Deterioration (PSD) program under section 165 of the Clean Air Act. CO₂ is different because of its global nature and because the quantity released is generally larger than for regulated pollutants. As mentioned in our response to question 8.a., the potential universe of affected facilities would be different than with currently regulated pollutants. As part of that assessment, we are considering, within the framework of our overall climate strategy, whether (and if so, when and how) to proceed regarding any rulemaking to establish PSD significance thresholds for emissions of greenhouse gases.

12. The Bali Roadmap agreed to by the United States and the other parties to the UN Framework Convention on Climate Change last week "[r]ecogniz[ed] that "deep cuts in global emissions will be required to achieve the ultimate objective of the Convention and emphasiz[ed] the urgency to address climate change as indicated in the Fourth Assessment Report of the Intergovernmental, Panel on Climate Change." The IPCC identified the need for developed countries to reduce emissions by 25-40% by 2020 to avoid exceeding atmospheric greenhouse gas concentrations of 450 ppm CO₂-equivalent.

a. Do you agree that it will it be more difficult and costly to achieve reductions on the scale identified as necessary by the IPCC if new coal-fired plants are built without controls?

Response:

The question implies that the Bali Roadmap and IPCC identified a specific CO₂-equivalent ppm target when many different scenarios and targets have been evaluated through the IPCC process. Moreover, the Bali Roadmap also provides emphasis on the need for development and dissemination of technology to address climate change.

It is evident from the Agency's review and reporting responsibilities under the Framework Convention on Climate Change that many sectors of the economy emit greenhouse gases. In developing an overall strategy for addressing greenhouse gas emissions, we are compiling and assessing information about available and potential control strategies for various sectors. At this point in time, it is not evident what set of

strategies would be more or less difficult or costly to employ for achieving a particular level of reductions. Further, any assessment must also consider the need for affordable, reliable, and domestically secure energy generation and appropriate ways to promote greenhouse gas reductions. In this area as with other sectors of the economy, programs aimed at the development of technology are essential to long-term progress.

b. Will you take this concern into account in each future permit action and in developing your overall strategy for addressing stationary sources? If not, why not?"

Response: Please see my answers to questions 4.c. and 12.a.

13. With the potential addition of six new coal units in the 17th Texas Congressional District alone, there are serious concerns about the cumulative impact on air quality and public health in Central Texas. Representative Edwards believes that we must determine the cumulative environmental effect that these proposed coal plants would have on Central Texas and state as a whole. In his view, it would be inadequate to just review the impact of each plant individually. The Texas Prevention of Significant Deterioration (PSD) State Implementation Plan (SIP), under which the Texas Commission on Environmental Quality (TCEQ issues permits to power plants, was approved by EPA to be consistent with the federal requirements of the Clean Air Act. In Texas, the PSD program requires air quality impacts from an individual facility and other facilities that impact the same area to be considered in the permitting process. How will EPA ensure that a cumulative analysis of emissions from existing and new sources will be performed?

Response: The PSD permit program requires a proposed source to include in their source impact analysis the effects of its new emissions and the emissions from other existing sources in the area where the source would locate. For such purpose, an "existing" source generally includes any source that has received a permit but is not yet operating. In addition, EPA guidance recommends that the new source's analysis include emissions that would result from sources whose complete application was submitted as of thirty days prior to the date the proposed source files its PSD application. In cases where several sources are "planning" to construct in an area, it is not mandatory for a proposed source to include in its source impact analysis emissions from any potential source that has not yet applied for a permit. Some States may elect to do a cumulative analysis of all such sources simultaneously. EPA is aware of the situation in Texas and has reviewed the preliminary permits for several potential sources. We intend to continue such reviews as part of our responsibility for program oversight to ensure that the PSD program is implemented in accordance with the national requirements.