



November 26, 2008

Hand Delivery

Air and Radiation Docket and Information Center
Environmental Protection Agency
EPA West Building, Room 3334
Mail Code: 2822T
1301 Constitution Avenue, N.W.
Washington, D.C. 20004

**Re: Docket No. EPA-HQ-OAR-2008-0318
Regulating Greenhouse Gas Emissions under the Clean Air Act
Advanced Notice of Proposed Rulemaking**

The Large Public Power Council (LPPC) is pleased to submit the following comments in response to an advanced notice of proposed rulemaking that the U.S. Environmental Protection Agency (EPA) issued on possible regulation of greenhouse gas (GHG) emissions under the Clean Air Act (Act or CAA).¹ These comments begin with a brief introduction of LPPC and our commitment to reducing GHG emissions nationwide, and then follow with substantive comments on key policy and technical issues raised by the ANPR.

I. Overview of the LPPC commitment on climate change.

LPPC is an association of 23 of the largest public power systems in the United States. LPPC members directly or indirectly provide reliable, affordably priced electricity to most of the 40 million customers served by public power. We own and operate over 75,000 megawatts of generation and approximately 34,000 circuit miles of transmission lines. LPPC member utilities and public power agencies are located in states and territories representing every region of the country. In addition, member

¹ *Regulating Greenhouse Gas Emissions under the Clean Air Act*, 73 Fed. Reg. 44,354 (July 30, 2008).



utilities own and operate a diverse portfolio of fossil, nuclear, hydropower, and other renewable energy sources that reflect the national energy mix.

LPPC members are committed to reducing their greenhouse gas emissions, and ramping up their renewable generation, as rapidly as is feasible consistent with their obligation to provide reliable and affordable electric service to their communities. LPPC believes that federal climate change policy should be broad-based and comprehensive, and should include accelerated technology development, energy efficiency, use of renewable resources, nuclear energy, and advanced coal technologies, and should be based on the following specific principles:

- be designed to slow, stop, and reverse the increase in U.S. GHG emissions,
- set emission targets that recognize the limitations of currently available technology and provide reasonable transition periods to avoid undue cost impacts on consumers,
- be economy-wide, not impose a disproportionate burden on any sector of the economy, and assign a compliance burden to each sector that is consistent with that sector's contribution to GHG emissions,
- include cost containment features, such as safety valve, offsets, and banking and borrowing, and
- include a robust technology development and deployment component

However, LPPC is concerned that the CAA is not the most appropriate vehicle to achieve these objectives for effectively regulating GHG emissions. As discussed below, the current CAA regulatory framework is not effective in controlling CO₂ and other greenhouse gases that have a long atmospheric lifetime, involve global transport, and where local emission levels are not correlated to local impacts. In addition, GHG regulation under current CAA authorities may result in gaps of coverage and preclude the use of flexible mechanisms for reducing GHG emissions from mobile and stationary sources in the least-cost manner. Furthermore, EPA is likely to encounter a wide range of legal, policy and practical problems if the Agency attempts to regulate GHG emissions under existing CAA programs. One major concern is the apparent statutory requirement to regulate small sources of GHG emissions, including municipal office buildings, schools and other such small sources owned and operated by city, local and state governments. For these reasons, LPPC believes that a flexible, market-based **legislative** solution is preferable to any GHG regulatory program that EPA could develop under existing CAA authorities. In the event EPA has no choice but to regulate GHG emissions under the CAA, EPA should only do so in a manner that minimizes administrative complexity and economic disruption.



II. EPA is correct to defer any rulemaking activities until after it assesses the significant legal and practical consequences of regulating GHG emissions.

EPA has issued the ANPR in response to the decision by the U.S. Supreme Court in *Massachusetts v. EPA*,² a case involving a legal challenge to an EPA refusal to regulate GHG emissions from mobile sources under section 202(a)(1) of the Act. In *Massachusetts*, the Court made two key rulings. The first is that greenhouse gases are “air pollutants” that EPA currently has the legal authority to regulate under the CAA. The second is that the Act requires the regulation of tailpipe GHG emissions from mobile sources only if EPA makes a formal “endangerment” finding under section 202(a)(1) of the CAA. To put in other words, the Act does not authorize such regulation until EPA makes an affirmative finding that GHG emissions from mobile sources cause or contribute to air pollution that “may be reasonably anticipated to endanger public health or welfare.”³ Notably, the Supreme Court recognized that EPA may decline to adopt tailpipe standards for GHG emissions if the Agency determines that either GHG emissions do not pose an endangerment under criteria of section 202(a)(1), or if EPA provides a reasonable explanation as to why EPA should not exercise its discretion to make an affirmative endangerment finding at this time.

LPPC agrees with EPA’s decision to issue the ANPR, instead of moving forward with an endangerment finding and proposed rule to regulate GHG emissions from mobile sources. The immediate initiation of such rulemaking actions is not required in response to the Supreme Court’s decision in *Massachusetts*. EPA is not under any specific court order to do so. Rather, the Court has remanded this matter to EPA for further consideration and, in so doing, has expressly recognized the Agency’s “significant latitude as to the manner, timing, content, and coordination of its regulations with those of other agencies.”⁴ In addition, careful deliberation and evaluation of the legal and policy ramifications is critical given the magnitude, complexity and the significant practical consequences of regulating GHG emissions under existing CAA programs. As EPA recognizes in the ANPR, an affirmative decision to regulate GHG emissions could likely compel EPA to regulate mobile and stationary sources under a wide-range of CAA programs. In many cases, CAA regulation of these sources poses many difficult legal, policy and technical issues that are outlined in the ANPR. The enormity of this regulatory challenge is clearly reflected by the fact that the 161-page ANPR seeks legal, policy and technical input on about 400 separate issues related to the regulation of GHG emissions under the CAA. LPPC supports EPA’s decision not to move forward with any GHG rulemaking activity until after the Agency gathers additional information through the ANPR and completes comprehensive assessment of the legal and policy ramifications of regulating GHG emissions under existing CAA authorities.

² 549 U.S. 497 (2007).

³ Section 202(a)(1) of the CAA.

⁴ 549 U.S. at 502.



III. The CAA is not an appropriate vehicle to regulate GHG emissions.

The ANPR does an excellent job of describing the many difficulties and inefficiencies of regulating GHG emissions pursuant to existing CAA authorities. Notable examples identified by EPA include the following: GHG regulation under current CAA authorities may result in gaps of coverage and preclude the use of flexible cap-and-trade mechanisms for reducing GHG emissions from mobile and stationary sources in the least-cost manner. Another major concern is the apparent statutory requirement to regulate small sources of GHG emissions, including municipal office buildings, schools and other such small sources owned and operated by city, local and state governments. LPPC agrees with this assessment that the CAA would prove to be an ineffective tool for regulating GHG emissions. The discussion below provides further explanation of why this is the case.

a. Greenhouse gases are not well-suited for regulation under the CAA.

The CAA works best for those air pollutants where the local communities reap the air quality and other environmental benefits of their air pollution control investments. This close correspondence between control costs and environmental benefits for local communities is much less straightforward with greenhouse gases that are inherently long-lived in the atmosphere and global in nature.

This close-correspondence is best illustrated by the federal-state partnership that the CAA establishes to achieve the air quality goals and objectives for criteria air pollutants. EPA, for example, sets the national ambient air quality standards (NAAQS or air quality standards) under CAA section 107 and states are primarily responsible for achieving those federal air quality standards through state implementation plans (SIPs) under CAA section 110. To date, EPA has set NAAQS for those air pollutants having local and regional air quality impacts for relatively short, discrete time periods. States therefore developed SIP strategies that achieve immediate air quality improvements on a local and regional basis.

This regulatory framework is not well suited for regulating CO₂ and other greenhouse gases that have a long atmospheric lifetime and involve global transport. Notably, GHG emissions from the United States contribute to only a portion of the total global atmospheric loadings. Other countries, including fast-growing nations like China and India, also are major contributors to global loadings of GHG emissions. This means that there is virtually nothing that a state could do to reduce global GHG loadings. In fact, even if the entire United States were to eliminate all of its GHG emissions, global atmospheric concentrations would continue to increase due to their long atmospheric lifetime and the increased loadings from other countries.

For these reasons, any action to regulate GHG emissions should ultimately be linked to international actions by all major-emitting nations. “Domestic only” regulation



– whether imposed pursuant to the CAA or future federal climate change legislation – is only a partial solution to curb global loadings of GHG emissions. The CAA works well for those air pollutants where the local communities reap the air quality and other benefits of their pollution control investments. This correspondence between control costs and environmental benefits is much less straightforward with greenhouse gases that are inherently long-lived and global in nature. GHG emissions reductions in our local communities cannot alone protect against global climate change, but rather hinge on the implementation of a coordinated effort of the United States and other major GHG-emitting nations.

b. Higher volumes of CO₂ emissions make CAA regulation more difficult.

Another fundamental concern is that CO₂ is emitted in much higher volumes from a larger universe of sources, as compared to other criteria pollutants. Annual CO₂ emissions in the United States are almost twenty times the U.S. emissions of the six existing criteria air pollutants combined. In addition, minor sources of the other criteria pollutants will likely emit enough CO₂ emissions to be classified as “major” stationary sources given that CO₂ is emitted in far greater quantities by a much wider range of sources. This will increase the number of stationary sources regulated under various air regulatory and permitting programs – most notably New Source Review (NSR) and the Title V operating permitting programs.

The major source thresholds are established by statute. Furthermore, the statute does not provide any explicit authority for EPA or states to exempt major sources of CO₂ emissions from applicable CAA regulations. This means that regulating CO₂ under the CAA will drastically expand the Agency’s regulatory focus and use of resources. Sources triggering onerous NSR and Title V permitting regulation for their CO₂ emissions would most likely include municipal office buildings, schools, and other small sources owned and operated by city, local and state governments, as well as apartment buildings, hotels and motels, restaurants, large retail stores, and warehouses. Under current major source thresholds, the number of sources regulated under the NSR and Title V operating programs would dramatically increase. Our concerns about permitting repercussions are confirmed by EPA in the ANPR. Specifically, EPA estimates that number to increase from around 15,000-16,000, to about 550,000.⁵

The resulting consequence of this expansion would be that at least over ½ million major sources (and perhaps many more) would need to navigate the very complicated NSR permitting rules and have to apply for NSR permits in those cases where the source undertakes a non-routine change that results in an emissions increase in GHGs. Although

⁵ Although extremely high, the EPA estimate could prove to be conservative based on other recent estimates of the impacts of regulating GHG emissions on the NSR and Title V permitting. See U.S. Chamber of Commerce, *A Regulatory Burden: The Compliance Dimension of Regulating CO₂ as a Pollutant* (estimating over a million businesses will be subject to NSR and Title V permitting regulations for the first time). A copy of the U.S. Chamber of Commerce report is available at the following web link: <http://www.uschamber.com/environment>.



Title V regulation is not as onerous as NSR, it is still a resource-intensive process. In the ANPR, EPA concedes that “[t]he sheer volume of new permits would heavily strain the resources of state and local Title V permit programs.” Permitting authorities are required to take final action on all Title V operating permits within 18 months of receipt. In addition, the Act provides the opportunity for citizens to object to the issuance of Title V operating permits if applicable CO₂ requirements were not included in the permit. It is therefore conceivable that activist groups could file challenges every single Title V permit without “adequate CO₂ regulatory requirement” in an effort to compel CO₂ regulation of major sources nationwide.

As discussed below in the final section of our comments, if EPA is compelled to regulate GHG emissions under these permitting programs, the Agency should not do so until the Agency determines how to avoid regulating these small sources of GHG emissions under these programs.

c. An endangerment finding could lead to an unmanageable cascade of CAA regulation of CO₂ and other GHG emissions.

As a result of the Supreme Court’s decision in *Massachusetts*, EPA is now faced with the decision on whether to make an affirmative endangerment finding for motor vehicles under CAA section 202(a)(1). LPPC is not taking any position on whether or how EPA should proceed on the merits of an endangerment finding. However, we are concerned with the CAA regulatory ramifications that are likely to result from an affirmative finding that GHG emissions from any class of new motor vehicles or engines cause “endangerment” under section 202(a)(1) of the Act. Although such an endangerment finding would be limited to motor vehicles, we are concerned that such a finding will inevitably lead to a cascade of CAA regulation for a diverse and broad array of emissions sources.

Due to the mandatory CAA requirements, EPA has limited discretion not to regulate pursuant to many CAA programs. The CAA, for example, contains very similar endangerment test for triggering regulation. This similar endangerment language can be found in section 108 for establishing NAAQS, section 111 for setting New Source Performance Standards (NSPS), section 112 for regulating hazardous air pollutants, section 115 for regulation of international air pollution, section 211 for regulation of transportation fuels, section 213 for regulation of non-road engines and vehicles, and section 231 for aircraft regulation. NSR and Title V operating permitting requirements are potentially triggered the moment CO₂ becomes a regulated pollutant under the CAA.

An EPA finding of endangerment for motor vehicle emissions, therefore, could lead to CAA regulation of virtually all sources of GHG emissions across the entire economy. EPA confirms this viewpoint in the ANPR with the statement: “The CAA provides broad authority to combat air pollution. Cars, trucks, construction equipment, air planes, and ships, as well as a broad range of electric generation, industrial,



commercial and other facilities, are subject to various CAA programs.”⁶ Moving forward with such a vast regulatory effort would be unprecedented, not only for the CAA but any other federal environmental statute. Notably, EPA does not limit the focus of the ANPR to an evaluation of methods for regulating GHG emissions from few major source categories to which CAA programs may apply. Rather, the ANPR contains an extensive discussion of possible design standards, operational requirements and other novel regulatory options that could apply to a vast array of stationary and mobile sources, both large and small.

Finally, a limited implementation of selected CAA programs and requirements poses considerable legal and regulatory risks to industry. Such a narrow approach will require EPA to develop novel legal theories to avoid regulation of GHG emissions on sources (such as government buildings, apartment buildings, schools and hospitals) that have never been regulated under major CAA programs. The development and legal defense of excluding these small sources not only imposes considerable burdens on EPA and could have unintended regulatory repercussions for the efficient administration of these air regulatory programs.

d. Methods for controlling GHG emissions differ from traditional pollution control methods and techniques.

The methods for reducing GHG emissions are significantly different from the methods used for controlling current CAA-regulated air pollutants. Most of these other air pollutants can be controlled by add-on pollution control technologies that are attached to the smokestack or tailpipe and that work by removing the pollutants from the exhaust stream. Such back-end control devices have not yet been developed or commercially demonstrated for the most prevalent greenhouse gases. In the case of fossil-fuel-fired power plants, technologies for carbon dioxide capture and storage are many years away from commercial deployment. Instead, reductions in CO₂ emissions for a decade or more will largely depend on how the United States generates and uses energy. Only much later can we realistically rely on add-control devices to begin removing CO₂ from the exhaust gases.

The CAA does not mesh well with this new regulatory paradigm of regulating how we produce and use energy. The CAA requirements and programs primarily place the regulatory focus at the point of combustion (or at the point that the flue gas is generated) to force emission controls. Moreover, existing CAA authorities do not authorize in many cases to shift the point of regulation to other stages in the production and use of energy.

⁶ 73 *Fed. Reg.* at 44,417.



IV. A flexible, market-based legislative solution is preferable to GHG regulatory program that EPA could developed under existing CAA authorities.

LPPC recognizes that the development of federal GHG regulation will continue to be an important priority for the nation. Both the Senate and House are now actively evaluating and debating the elements of a comprehensive federal program for reducing GHG emissions nationwide. President-elect Obama also has announced his support for federal legislation that establishes an economy-wide, cap-and-trade program for limiting GHG emissions. Furthermore, EPA is facing increased pressure to regulate GHG emissions under the CAA in the aftermath of the Supreme Court's decision. In addition to the pending mobile source rulemaking matter remanded by the Supreme Court in *Massachusetts*, EPA now faces seven additional petitions requesting that EPA undertake rulemakings to regulate a wide array of mobile sources and fuels under Title II of the Act. Similarly, EPA has pending several lawsuits that are seeking to compel EPA to adopt NSPS limits for certain major source categories under section 111.⁷ Finally, the issue of whether "best available control technology" (BACT) emissions limits for CO₂ should be imposed has been raised in several recent legal challenges to NSR permits for new coal-fired power plants, including one legal challenge in which the EPA's Environmental Appeals Board recently remanded a NSR permit on the issue of whether a permit limit must include a BACT limit for CO₂.⁸

Viewed in this context, the nation is at an important crossroads for regulating GHG emissions. One option is for EPA to regulate GHG emissions on a piecemeal basis pursuant to existing CAA programs and legal authorities. The other option is to regulate GHG emissions pursuant a flexible, nationwide, market-based program. LPPC believes the latter is preferable. Such new federal legislation can better achieve the environmental goals and do so in an efficient and coordinated manner that minimizes adverse impacts on the economy.

V. EPA should minimize administrative complexity and economic disruption if GHG regulation becomes necessary under the CAA.

As discussed above in Section IV, LPPC recognizes that court action could force EPA to begin regulating GHG emissions under existing CAA authorities. If this should occur and EPA has no choice but to move forward with such GHG regulation under the CAA, EPA should do so in a manner that minimizes administrative complexity and economic disruption. To this end, LPPC has developed a few, simple guiding principles for EPA to keep in mind in evaluating its legal options for regulating GHG emissions under the CAA. These guiding principles include the following:

⁷ EPA provides a comprehensive overview of pending lawsuits to compel CAA regulation in the preamble of the ANPR. *See* 73 Fed. Reg. at 44,399.

⁸ *In re: Deseret Power Electric Cooperative*. While the EAB did not specifically rule on whether CO₂ limits must be included in the Deseret PSD permit, the opinion requires the EPA Region, as the permitting authority, to reconsider whether to impose CO₂ BACT limits on the unit and to develop an adequate record for its decision.



Avoid regulation under the most unworkable and ineffective programs. Certain CAA programs are especially unworkable and ineffective for regulating GHG emissions. One notable example (as discussed above) is the NAAQS option, whereby EPA sets NAAQS for greenhouse gases and requires states to develop SIP control measures for achieving air quality goals that they could never meet given the greenhouse gases are global air pollutants and climate change is a global problem that requires a global solution. Another inappropriate regulatory option is the regulation of GHG emissions as hazardous air pollutants (HAPs) under section 112 of the Act. Regulating CO₂ as a HAP, for example, would require EPA to set very stringent “technology” standards that would not allow for consideration of technical feasibility or cost in setting the minimum control levels. In addition, these technology standards would apply to units exceeding very low annual emissions levels (10 tons of any one greenhouse gas, or 25 tons in combination) and require compliance without any flexibility by averaging emissions across multiple facilities.

Avoid regulatory and economic disruptions through reasonable phase-in policies. EPA should not require immediate implementation of the NSR and Title V operating permit requirements if EPA is compelled to regulate GHG emissions under these permitting programs. Most importantly, EPA should not proceed with GHG regulation under these permitting programs until the Agency determines how to avoid regulating these small sources of GHG emissions – which appears to be administratively unworkable. Moreover, EPA should delay implementation for a reasonable time period so that it can develop federal policy guidance for implementing permitting requirements for CO₂ and other GHG emissions. The failure to do so will likely result in inconsistent permitting policies from state to state, excessive litigation, and unnecessary permitting delays of important new source projects and existing source construction projects. In addition, this extra time is necessary to provide states with the opportunity to adopt any rule changes or new permitting requirements that EPA may develop for efficient implementation of the federal permitting requirements for GHG emissions.

Don't impose NSPS limits for which compliance is likely to trigger onerous NSR permitting requirements. In the ANPR, EPA identified the NSPS program as a promising option for immediately and effectively regulating the major source categories of GHG emissions. Specifically, CAA section 111 authorizes EPA to adopt performance standards that directly apply to new sources and emissions guidelines that states would implement for existing sources. The NSPS limits for both new and existing sources shall be based on the best demonstrated technology – which is likely to be some type of energy-efficiency improvements for many source categories, including fossil-fueled electric generating units. Unfortunately, setting NSPS limits based on improved efficiency does not mesh well with the current NSR program. In the past, EPA has typically viewed any project to improve plant efficiency as a “non-routine” change that is likely to result in an emissions increase and thereby trigger the onerous NSR permitting requirements. Such a regulatory outcome of a future NSPS program for limiting GHG emissions is totally impractical and infeasible to implement. LPPC therefore urges EPA



to set NSPS limits that can be achieved without undertaking efficiency upgrade projects that might trigger NSR. The best way to achieve this end for is EPA to provide an express NSR exclusion for any sources that undertakes efficiency upgrade projects in order to comply with the future NSPS limits for GHG emissions. Such an outcome can be achieved by EPA classifying these efficiency upgrade projects as physical or operational changes that do not trigger NSR.

EPA also suggests a “phase-in” approach for NSPS that is not authorized under the statute. This phased approach would set NSPS limits for affected electric generating units in phase 1 and fuel switching, clean coal technologies, and geologic sequestration of the CO₂ emissions (CCS) in phase 2. Such an approach is inconsistent with the statutory requirement that the NSPS limit be based on “best demonstrated technology” and, as a result, EPA cannot set a standard on technologies that are not demonstrated and commercially available. Much work needs to be done to develop these emerging clean coal and CCS technologies and demonstrate that they can reduce CO₂ emissions in a reliable and cost-effective manner. In addition, LPPC objects to setting a NSPS on fuel switching. Fuel switching is not a technology (as defined under section 111) but rather a redefinition of the source. Furthermore, any NSPS mandate to switch from coal to natural gas does not appear to be a sound energy policy even if it were authorized under the statute.

Avoid reliance on untested or questionable legal theories. EPA theorizes in the ANPR that it could implement unit-specific NSPS limits through a flexible cap-and-trade regime.⁹ The use of such flexible market-based mechanism is called into serious question by the D.C. Circuit’s recent decision that invalidated the Clean Air Interstate Rule.¹⁰ Specifically, court’s decision is important reminder that EPA may be vulnerable to legal challenge to adopt cap-and-trade programs in those cases where the statute does not provide clear legal authority to do so. EPA reliance on untested or questionable legal theories would have unpredictable results and lead to greater regulatory uncertainty, due increased litigation risks.

⁹ Specifically, EPA asserts that a cap-and-trade program for GHGs would satisfy the definition of a “standard of performance” for purposes of the NSPS program even though the CAA does not explicitly authorize the use of trading for NSPS. Fed. Reg. at 439-440

¹⁰ Specifically, a strict reading of the CAA carried the day in North Carolina v. EPA, 531 F.3d 896 (D.C. Cir 2008), in which the court of appeals vacated EPA’s CAIR program. Although this was not a section 111 case, the Court’s decision is nonetheless relevant because it found that the plain meaning of section 110 of the CAA SIPs foreclosed a regional cap-and-trade program under CAIR. The Court focused in particular on section 110’s requirement that SIPs prohibit sources “within the State” from “contributing significantly to nonattainment in any other State.” North Carolina, 531 F.3d at 907-08. The D.C. Circuit reasoned that because regional emissions trading might allow some states to maintain or increase their emissions, CAIR could not guarantee that sources “within” a state would cease contributing significantly to nonattainment in other States. EPA’s policy arguments proved unavailing against the Court’s textual analysis, as did its emphasis that CAIR would comply with the statute by using regional abatement to achieve attainment in each State. This reading of §110 calls into question whether EPA could implement a cap-and-trade program under §111 when the terms of that section appear to call for source-specific and “continuous” emissions reductions.



Focus on CAA regulation of mobile sources and transportation fuels. Title II of the CAA authorizes EPA to establish federal emissions requirements for mobile sources and transportation fuels. Since the form of these requirements are fairly straightforward to implement at the federal level, it would make sense for EPA to evaluate first the Title II regulatory options for limiting GHG emissions from mobile sources and transportation fuels.

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LPPC appreciates this opportunity to comment and looks forward to continue working with the Agency on this important environmental matter.

Sincerely,

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and
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