

September 10, 2009

Connecticut	The Honorable Lisa P. Jackson, Administrator U.S. Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue, NW
Delaware	Mail Code 1101A Washington, DC 20460
District of Columbia	Dear Administrator Jackson:
Maine	On September 2, 2009, 17 states within the Ozone Transport Commission (OTC) and the Lake Michigan Area Directors Consortium (LADCO) submitted a letter to you containing recommendations for the
Maryland	Environmental Protection Agency (EPA) to consider as it develops a replacement rule for the Clean Air Interstate Rule (CAIR replacement). The
Massachusetts	OTC and LADCO States reached consensus on many critical issues, including the creation of a three-step framework to address the requirement of section 110(a)(2)(D) of the Clean Air Act (CAA). Building on the OTC and
New Hampshire	LADCO consensus, this letter provides EPA with additional recommendations related to several aspects of the joint OTC-LADCO letter of September 2 <sup>nd</sup>
New Jersey	based on OTC's 15 years of experience addressing the scientific phenomenon of air pollutant transport and its impact on public health.
New York	Achieving the ozone and PM <sub>2.5</sub> National Ambient Air Quality Standards (NAAQS) is a challenge and widespread regional reductions are a very important piece in the solution to this puzzle. The U.S. Court of Appeals
Pennsylvania	for the District of Columbia Circuit found that CAIR failed in at least two important ways: (1) it did not ensure sufficient reductions from each state;
Rhode Island	and (2) the schedule did not mesh with the attainment deadlines. The additional recommendations OTC is providing are intended to address both issues. By combining regional and state caps, electricity generating unit
Vermont	(EGU) emission reductions will be achieved cost-effectively throughout the region while ensuring that each State's emissions are reduced significantly.
Virginia	To the extent possible, given labor and supply constraints, emissions reductions need to occur three years prior to the attainment deadlines in order to provide the maximum benefit in a timely manner.
Anna Garcia Executive Director	OTC recognizes that the attainment deadlines for the 75 ppb ozone NAAQS, or a more stringent ozone NAAQS, will be a function of the yet to be

444 N. Capitol St. NW Suite 638 Washington, DC 20001 (202) 508-3840 FAX (202) 508-3841 e-mail: ozone@otcair.org OTC recognizes that the attainment deadlines for the 75 ppb ozone NAAQS, or a more stringent ozone NAAQS, will be a function of the yet to be adopted nonattainment classification levels. OTC further suggests that EPA's rules also address a longer time period, including between 2017 and about 2025, to address longer-term air quality improvement needs and the very substantial emission reductions necessary to attain and maintain the air quality standards.

OTC appreciates the efforts put forth by EPA to work with all interested stakeholders in developing a CAIR replacement rule based on sound science. OTC further acknowledges that air pollutant transport within the OTC region is a significant issue that EPA should also address. The CAIR replacement rule should also recognize that our planning processes continue to evolve in the face of ever-tightening standards and newly uncovered air quality concerns, such as the impact of peaking unit emissions on high electricity demand days (HEDD). As such, OTC recommends that EPA propose measures to address HEDD emissions in the CAIR replacement rule.

Our recommendations are provided below in three parts. OTC considers these recommendations feasible, practicable and operable within the framework of the existing Clean Air Act, all of which facilitate a rapid adoption process as directed by the D.C. Circuit Court of Appeals in remanding CAIR. The CAIR replacement rule offers an opportunity for transformational change over incremental improvement. Providing regulatory certainty to America's electric generating sector promotes transformational change through business decisions that support our air quality goals. A summary of the technical analyses conducted by the OTC States and provided as support documentation for the recommendations provided in this letter and the September 2, 2009 letter is attached to support these recommendations.

## A. Achievable EGU Limitations

The OTC States recommend that EPA consider a comprehensive, multi-layered, hybrid approach for obtaining further reductions from EGUs. This hybrid approach combines state and regional caps with phased-in performance standards to cost-effectively reduce nitrogen oxide (NOx) and sulfur dioxide (SO<sub>2</sub>) emissions. The components of this strategy (enforceable conditions, state-by-state reductions, regional trading caps/program and phased performance standards), should coordinate with each other and other EGU control initiatives such as federal MACT standards and greenhouse gas reduction programs.

A national strategy for EGUs should be implemented in phases. The first phase should combine federally enforceable NOx and SO<sub>2</sub> reductions from each state with a regional trading program. A later phase should include performance standards to achieve continuing reductions from the EGU sector over the course of the regulatory time frame for implementation of the 2008 ozone and 2006 PM<sub>2.5</sub> NAAQS.

Timing is essential to meet attainment obligations. Three years of data are needed to demonstrate attainment; therefore reductions are needed three years prior to the attainment deadline. While we recognize that full implementation of all controls may not be achieved in that time frame, it is essential that enforceable mechanisms be provided to lock in controls that are achievable. The OTC-LADCO submission reflects the participating states' agreement on state-specific caps that would be applicable no later than 2017. Years prior to 2017 may be critical for many states to demonstrate attainment with the applicable NAAQS. The OTC States seek to work with EPA to develop mechanisms for achieving interim reductions in the 2012-16 time period, including the possibility of interim state-specific caps in addition to a regional cap-and-trade program.

Since CAIR was not sufficient for attaining and maintaining the 1997 ozone NAAQS, EPA will need to make the limits in the CAIR replacement rule stricter to enable compliance with the recently revised ozone and PM NAAQS and any tighter standards that EPA enacts after reconsideration of those standards. The state caps are also necessary to ensure that each State contributes fully to the needed reductions.

Specifically, the OTC States propose that EPA include phased state-by-state reductions, complementary regional emission trading caps as early as possible (but no later than 2014), and performance standards as follows:

## 1. <u>State-by-State Reductions</u>

The September 2, 2009 letter recommends the implementation of state caps by no later than 2017 that reflect the emission rates that would be achieved through installation of SCR and FGD controls on all coal-fired EGUs of 100 MW or larger in all significantly contributing states. In addition, the participating states recommend in that letter a number of interim measures including operation and optimization of all controls currently in place or being installed to meet other requirements, and installation and operation of all feasible, low capital cost NOx controls such as selective non-catalytic reduction (SNCR) and low NOx burners (LNB) not currently installed or in use on existing EGUs on a unit basis by 2015.

The OTC States recommend that EPA analyze and determine the stateby-state reductions needed prior to 2017 in order to address CAA Section 110(a)(2)(D) requirements to address interstate transport from EGUs within the NAAQS timeframe. The OTC States see interim state-by-state reductions prior to 2017 as a key part of addressing the Court of Appeals concerns over what is needed to satisfy the requirements of CAA Section 110(a)(2)(D).

## 2. Regional Trading Programs for NOx and SO<sub>2</sub>.

As explained in the September 2, 2009 submission, the second key element of the OTC-LADCO agreed framework for a CAIR replacement rule is the implementation of regional trading programs for both NOx and SO<sub>2</sub>, to complement the state-by-state caps described above. The OTC States recommend that EPA consider the following in developing the regional caps:

- The new regional caps should be implemented as early as possible and set at a level that will drive deeper regional NOx and SO<sub>2</sub> reductions than the regional reductions that would result from the implementation of the state-by-state caps by themselves. This pairing of state-by-state caps with an aggressive regional trading program will guarantee specific reductions in each state while also using market forces to further reduce regional emissions at lowest cost.
- OTC's analysis (attached) and the analysis that EPA recently prepared for Senator Carper show that stringent regional trading caps for NOx and SO<sub>2</sub>, implemented as early as possible (but no later than 2014), would provide significant public health benefits that substantially outweigh the costs.
- Banking and inter-state trading would continue to be allowed in the regional trading program.

• To be creditable under Section 110(a)(2)(D), controls installed in response to the regional trading program should be made federally enforceable through an appropriate mechanism.

## 3. Performance Standards

We understand that EPA is also considering a hybrid approach in its CAIR replacement rule involving regional emissions trading and unit-specific performance standards (cite: July 9, 2009, testimony by R. McCarthy before the Subcommittee on Clean Air and Nuclear Safety, Committee on Environment and Public Works, U.S. Senate).

The OTC States request that EPA work with the states to develop and phase in unit-specific performance standards that owners of fossil fuel-fired units should comply with between 2017 and 2025, or earlier if EPA's technical analysis demonstrates that an earlier date is reasonable. Performance standards should either be output-based or transition to output-based standards to reward efficiency. Such performance standards will give regulatory certainty to EGU owners and encourage transformational change in the energy market. In developing these performance standards:

- EPA should consider fuels, types and sizes of EGUs, the timing of other requirements included in this and the September 2, 2009 letter, cost-effectiveness and the pollution control equipment already in place on the existing fleet of EGUs.
- EPA should phase-in the performance standards to maximize efficiency and minimize costs to affected sources. For example:
  - The performance standards for coal-fired units greater than 100 MW should be coordinated with the state-by-state caps that are recommended for no later than 2017.
  - The performance standards for units subject to the upcoming federal MACT requirements should be coordinated with the MACT requirements.
- In later phases (2020 to 2025), the performance standards should be coordinated with greenhouse gas reduction programs and other energy efficiency initiatives and be output-based.
- OTC's analysis (attached) shows that performance standards on larger fossil-fuel fired EGUs (based on a 30-day rolling average) are feasible and should be implemented on an aggressive timeframe (as early as 2017).
- EPA should consider including incentives (e.g., alternative compliance schedules not to exceed three years), to promote the repowering or replacement of existing units.
- After the adoption and implementation of performance standards, EPA should evaluate the feasibility of eliminating the state-by-state caps.

B. State-led Planning Process

The OTC States recommend that the state-led planning effort include all significantly contributing states (i.e., 1% of the NAAQS or greater impact) unless each state in the affected nonattainment area chooses to reduce the number of states involved.

- The OTC believes that this is the most appropriate way to identify those states that are required to participate in the state-led planning process as model performance (related to long-range transport) varies from one nonattainment area to another and the meteorology that affects some nonattainment areas is very complex.
- The states in the nonattainment area would use monitoring data, modeling and other information on ozone transport, meteorology, emissions, control programs, geography and chemistry to decide which significantly contributing states, if any, should be excused from the state-led planning process.
- Two scenarios are outlined below:
  - If the states in a nonattainment area have technical data that show that the state-led planning process for that area should be limited to just three or four states, that would be appropriate.
  - If the states in a nonattainment area are subject to highly complex transport patterns, it is most likely necessary to include all significantly contributing states in the state-led planning process.
- The OTC believes that the most appropriate way to address transport is through a suite of aggressive national programs to reduce NOx, VOC and SO<sub>2</sub> emissions from EGUs, other stationary sources, area sources and off-road and on-road mobile sources and that the role of the state-led planning process should be secondary.
- The OTC continues to have serious concerns over model performance related to long-range, aloft transport. It is critical for EPA to establish and implement performance criteria related to aloft transport to ensure that the process for identifying significantly contributing states is credible.
- As indicated in the September 2, 2009 joint letter, additional controls may be required where needed.
- C. Eliminating Significant Contribution

The OTC States recommend that under the state-led attainment planning process, both the upwind states and EPA remain accountable to address contributions to downwind areas' nonattainment of both the ozone and  $PM_{2.5}$  NAAQS by the relevant attainment dates, without designing any new "off-ramp" that avoids direct and timely action to reduce emissions that are in violation of CAA Section 110(a)(2)(D).

In addition to a program of controls for EGUs, OTC also urges EPA to address interstate transport through the development and implementation of national rules in

2012 or as early as feasible for additional controls on non-EGU sources, as supported in prior statements of the OTC to EPA. (See, e.g., Statement on the Need for National Rulemaking and Implementation of Ozone Control Measures, November 14, 2007).

In acting on these recommendations, EPA can use the CAIR replacement rule to provide regulatory certainty to the EGU sector, which will enable business decisions that will move us many steps toward improved air quality and a more efficient electricity generating sector. We look forward to talking with you further about our recommendations for the CAIR replacement rule, and working with your staff as you expeditiously develop this important air quality and public health program.

Sincerely,

Connecticut

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Massachusetts

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Enclosures

District of Columbia

Maryland

New Hampshire