

CAIR Replacement Rule
Discussions between SESARM and EPA
April 13, 2009

I. Introduction

On Monday, April 13, 2009, EPA held a call with the southeastern states and some of the local agencies comprising Southeastern States Air Resource Managers (SESARM) and Metro 4 respectively to discuss the CAIR replacement rule. The summary that follows covers the key issues discussed during the call. More detailed notes, including a list of all participants in the call, are being prepared.

II. EPA Opening Comments

Sam Napolitano, CAMD, began with a short introduction, explaining that EPA was beginning the process of creating a replacement rule for CAIR. The Agency is reviewing all options, setting up analyses, and preparing technical models. The goal is to finalize a replacement rule within two years.

The primary objectives are to help states comply with the NAAQS and to reduce interstate transport. Therefore, EPA has decided that it would be best to start working with states and other stakeholders immediately. EPA would like to hear from the states about what type of replacement rule would most help them meet air quality requirements. Sam stressed that this is the beginning of a dialogue process, and that EPA intends to continue these types of discussions throughout the rule development process.

This is a chance for the states to talk to the key EPA staff that will actually develop and write the rules, as well as the OGC attorneys assigned to the rule development. Sam stressed that EPA is interested in hearing the states' thoughts and concerns. Everything is on the table as EPA puts together ideas for the new Assistant Administrator for Air and Radiation, who should arrive within the next couple of weeks.

Tim Smith, OAQPS, asked that speakers identify themselves as notes of the meeting are being prepared and will be distributed to all participants on the call. Sam noted that should any of the participants have additional points to make following the discussion they should attach an addendum to the notes of the call. Sonja Rodman, OGC, added that the notes and any addenda would eventually be placed in the docket for the new rule.

III. Discussion of Core Issues

John Hornback, SESARM, noted that SESARM had no predetermined points to make and suggested the Topic Guide that EPA provided.

1. Baseline

Sam Napolitano first established how EPA determined the baseline for 2010 for CAIR. EPA modeled who would be out of attainment of the 1997 NAAQS before considering CAIR controls, and then determined which states from upwind areas were contributing above defined thresholds. Those states became the CAIR region. 2010 aligned with SIP compliance dates and was far enough out to allow for installation of controls. As part of the baseline, EPA considered NSR settlements, the NO_x Budget Program, and state control initiatives such as the North Carolina Clean Smokestacks program and other northeastern state laws. In addition, EPA accounted for the phase-in of mobile source controls. Sam said EPA recognizes this is not the only way to establish a baseline and is contemplating which year it should choose and the rationale for doing so. At this juncture EPA is also seeking input from states.

Tim Smith said that some participants in previous calls had requested that EPA use the most recent year 2007-08 as the baseline, indicating that they are wary of uncertainties in choosing a future year. However, others suggested a future year because of anticipated developments.

John Hornback asked if there were implications of a set baseline year that would require states to be obligated to rework inventories for their SIPs, or would they be able to proceed to meet their obligations while recognizing CAIR as a tool toward this end. Tim thought the latter would more likely be the case. John then noted that there had been considerable repeat modeling and inventory for regional haze and ozone/fine particle purposes, and that states will not have the luxury of funding to do additional runs in the next phase of SIP work. He indicated that he would like to understand what implications any CAIR replacement rule might have for what inventories to run and model assumptions to make. John also said that he wanted to be sure that EPA had the most recent available data so that all parties are on the same page. He noted that SESARM has some of the most current and best information they have ever had, with regional inventories up to 2012 which they would share with EPA.

Chris Howard, Alabama DEM, noted that CAIR had been equal to BART and RACT for SO₂ and NO_x and suggested the same for the replacement program because those programs were already on the ground. Tim noted that there are two questions with regard to BART and RACT: (1) When doing baseline future projections in absence of the CAIR replacement rule, what should EPA assume is in place for BART or RACT? (2) Once requirements are developed based on section 110(a)(2)(D), should EPA attempt to evaluate whether this satisfies BART or RACT?

Sam indicated that one idea is to use a year that has already occurred based on inventory for the projection. Tom Ballou, Virginia DEQ, and Jimmy Johnston, Georgia EPD, raised the EIA growth projections and the simplified method used by the eastern U.S. state collaborative based on state-by-state growth. They noted that this was very transparent for future projections, and that it did not necessarily capture all controls. Sam noted that this had not been presented to EPA as an option, but that LADCO had indicated to EPA that this is how they are proceeding.

Larry George, Florida DEP, said that Florida had committed CAIR controls into its SIP through the use of permits. He noted some states have SIP rules, while others use permits, and they should be given credit in any baseline for those reductions on the ground.

Sheila Holman, North Carolina DENR, asked that when EPA selects the baseline it use nothing earlier than the earliest downwind attainment date. For example, 2012 would be the evaluation year under the 1997 NAAQS.

2. Significant Contribution

Sonja Rodman said that significant contribution was a big area to address, with many options for the replacement rule. For CAIR, EPA established significant contribution through a two step process. EPA first conducted air quality modeling to determine which states should be included in the region and then looked at the cost-effectiveness of controls to determine significant contribution. EPA established regional caps and developed the state budgets for each pollutant involved. The D.C. Circuit Court ruled that EPA had failed to quantify individual state significant contributions and thus also did not require the specific state to eliminate its significant contribution. As EPA develops the new rule it is considering alternate ways to define significant contribution. The Agency welcomes suggestions.

Sheila Holman recommended that cost not play a role given the court's ruling. She and Sonja discussed issues and technical difficulties relating to one possible approach -- establishing a threshold, identifying states that contribute above that threshold, and then defining their significant contribution as all emissions above that threshold. Sheila noted that going beyond what was needed would help states achieve more stringent standards. Sonja replied that EPA cannot legally require states to do more than what is established as necessary to eliminate their significant contribution.

Jimmy Johnston commented that the court upheld the thresholds based on one percent of NAAQS and he was curious as to how those were developed. He said the numbers were critical to the entire process. Sonja replied that, in CAIR, these thresholds were not used to define what portion of the contribution was significant. In other words, EPA did not say that all emissions above the threshold constitute the state's significant contribution. Instead, EPA determined the level of control achievable by the application of highly-cost-effective controls and developed state budgets. The court questioned this part of EPA's analysis. EPA must now find a way to quantify individual state contributions and must decide on a full or partial remedy.

John Hornback emphasized that there must be a sound basis for what is contained in the SIPs. The solution also must be legally sustainable. John stressed that EPA should not seek to reduce emissions just for the sake of doing so, but must do so based on concrete analysis.

Joe Kahn, Florida DEP, proposed controlling the level floor, like BART expanded, so there is some minimum level of control. He proposed a reduced geographic scope for the program, as large cross-border impacts were poorly controlled. He suggested mandating controls on a state level. He thought a state like Florida might possibly be excluded from CAIR as it may have sufficient controls. Sonja replied, however, that even states with reduced emissions will not necessarily be excluded.

John suggested that CAIR not become multiple programs, but be one program that covers everything and in a timely manner. It would help SIP development if EPA were to address all

standards and not just the 1997 NAAQS. He also noted that it would be less costly to do so in one phase, rather than going back after setting narrowly constructed CAIR controls based just on the 1997 standards. Chris Howard recommended addressing any standard finalized at this point and also to allow time for implementation programs to work, as CAIR would have eventually fixed most of their attainment problems.

The Mississippi DEQ representative agreed with considering the 2006 and 2008 NAAQS. Sheila Holman said that with regard to new standards EPA should focus on developing a rule expeditiously that can hold up in litigation.

3. Remedies

Tim Smith explained that under section 110(a)(2)(D) there was a three year deadline from when the standard is published. He noted that for a state to address that issue in isolation is very difficult, although the Clean Air Act suggests that should be done and the state should have knowledge of what the upwind solution is going to be. If a state has not submitted under the 2006 NAAQS, EPA can approach it with a SIP call or a FIP. He said there was a lot to piece together and EPA cannot address every attainment date standard, and therefore must first establish what is most rational. Once an appropriate framework is developed for significant contribution, the next step is to find a way to remedy that significant contribution. Tim noted that there was some desire for a strictly performance-based standard, while others suggest incorporating emissions trading as part of the solution. He asked participants how EPA might structure the remedy. He noted that there were benefits to trading, given the lowest common denominator effect, and that trading provides an economic incentive. He indicated that a minimum performance standard with some trading was an option.

Sheila Holman supported unrestricted intrastate trading. She also suggested for interstate trading that a downwind state could request a source-specific limitation if it dramatically affected attainment. She noted that the main concern with interstate trading is that it is difficult to know where controls would be added, and she suggested an evaluation of every trade. Chris Howard indicated that Alabama preferred unrestricted interstate trading.

Sonja Rodman said that participants should look at the modeling done after CAIR began. The predictions about where reductions would occur were very accurate. Sam Napolitano noted that in fact the predictions were better than could have been imagined. He said that he would distribute maps EPA has developed that show these results. Sheila replied that when trying to predict attainment, sources were not willing to state where controls would go. She asked for some sort of compliance plan to help states if interstate trading is to be allowed.

Tom Ballou suggested a combination of the two, with a minimum performance standard with certain size sources, and an underlying trading program for sources that outperform, or for those below, the unit threshold. He advised that there be some leeway in limits. He also raised the question of how to redesignate an area with increasing emissions.

4. Coverage and Timing

Sam opened the discussion on coverage and timing by asking the opinion of participants as to seasonal versus year-round controls. John Hornback replied that it seemed simpler to have only year round controls, although it was more expensive. He asked if there were any legalities involved, whether it was justified state-by-state or season-by-season.

Sonja replied that there were a variety of Clean Air Act authorities. Under section 110(a)(2)(D) EPA has the authority to define what states need to do to control significant contribution for each NAAQS and to decide which pollutants contribute to downwind air quality problems. John said he was not sure it was that simple. He noted that if there was no attainment problem and no source of emissions that needs year-round controls, they had no authority to implement year-round.

Sam noted that it should be assumed that what EPA requires is necessary, and that it does so not simply because benefits outweigh the costs -- it must be tied to the statute. However, when CAIR was first being developed, EPA proposed only a year-round NO_x program. OTC was worried that the economics of control could lead to seasonal concerns, and asked EPA to put the summer season in place. Sam also noted that many ozone problems are in July and August, triggered by high electric demand in the daytime. He asked if there should be an additional remedy for high electric demand days. He noted that New Jersey had special controls in place, and questioned whether EPA should also address the issue. The Northeast states have noticed that the power sector in their region often responds to increased demand by turning to peaking plants that use high-emitting diesel jet engines. Tom Ballou stated that the D.C. area was also experiencing this. Small turbines, labeled emergency generators, have been operated during high demand, resulting in a small sector of combustion sources not covered by CAIR.

Jimmy Johnston noted that whatever the compliance deadlines, states need sufficient time for construction and outages in order to install controls.

5. Other

Tim Smith noted the concerns with maintenance areas and what it means to interfere with maintenance. The court has asked EPA to define this. John Hornback replied that although the state collaborative is attempting to address this there currently is no consensus. Sheila Holman said she would like to see maintenance determined using a regional historic variability test, or a site-specific criterion. Sheila also raised the question of funding for a trading program. Sam responded that this issue was outside the rulemaking process, and would be a grant discussion.

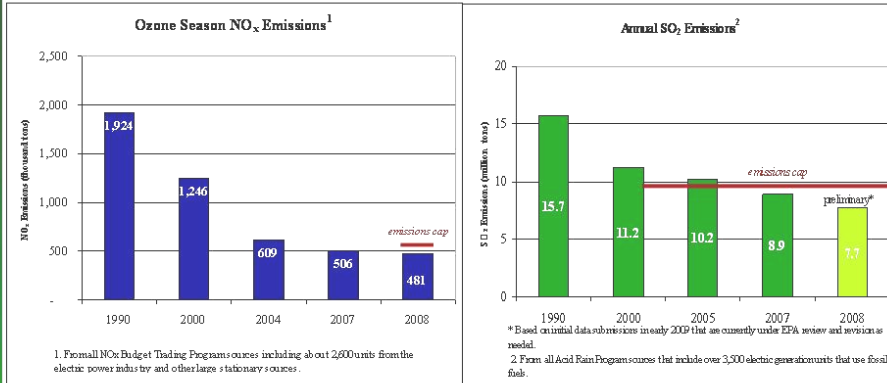
V. Conclusion

Sam Napolitano thanked everyone for participating in the call and said that once the notes of the call were transcribed they would be distributed to all participants. He stressed that this was the beginning of a dialogue. When this series has concluded, EPA will meet again with the states to report on what EPA has heard from all of the groups. This will allow them to react and respond, and to continue the general dialogue.

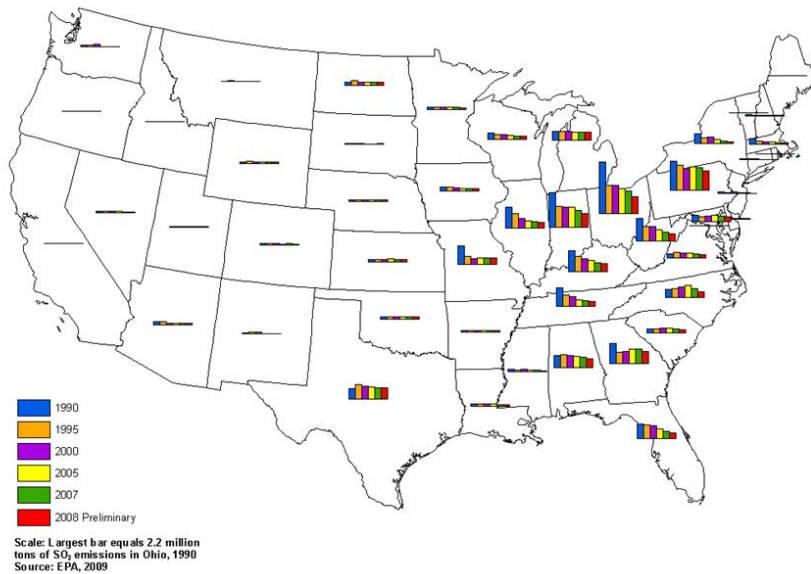
John Hornback thanked EPA for the opportunity to share ideas and expressed appreciation that EPA was keeping SESARM informed as it moves forward in developing the CAIR replacement rule.



Progress under the Acid Rain, NO_x Budget Trading, and CAIR Programs

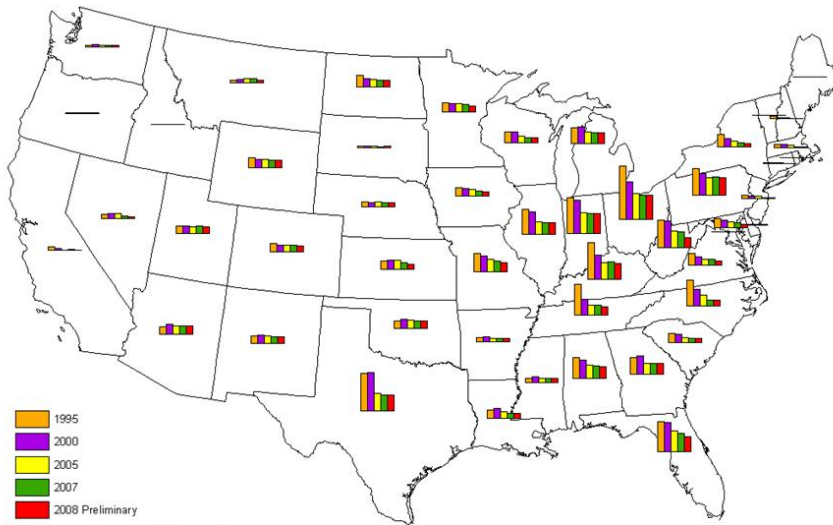


State-by-State Annual SO₂ Emission Levels for Acid Rain Program Sources, 1990-2008





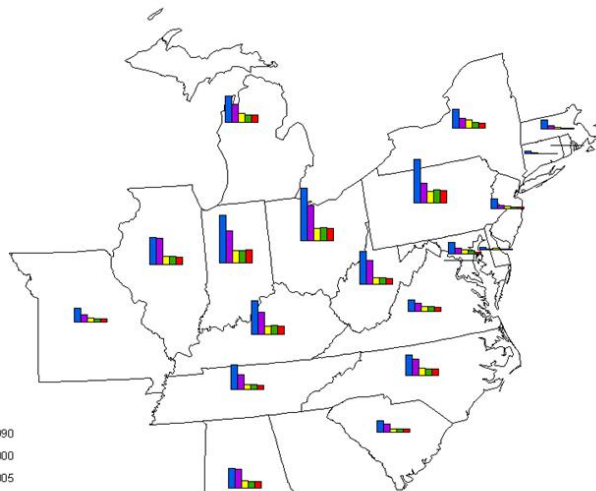
State-by-State Annual NO_x Emission Levels for Acid Rain Program Sources, 1995-2008



Scale: Largest bar equals 529 thousand tons of NO_x emissions in Ohio, 1995
Source: EPA, 2009



State-by-State Ozone Season NO_x Emission Levels for NO_x Budget Trading Program Sources, 1990-2008



Scale: Largest bar equals 241 thousand tons of NO_x emissions in Ohio, 1990
Source: EPA, 2009