# CAIR Replacement Rule Discussions between the Electric Power Generation Industry and EPA April 17, 2009

#### I. Introduction

On Friday, April 17, 2009, EPA met with the Edison Electric Institute (EEI) and other electric power generation associations and companies to discuss the CAIR replacement rule. The following summary covers the key issues discussed during the call. Appendix A is a list of participants that attended the meeting at EEI's office. Additional individuals participated by Webinar and conference call. Copies of several presentations and other handouts distributed at the meeting can be found at the end of these notes.

#### **II. EEI Opening Remarks**

John Kinsman, EEI, began the session by thanking EPA for meeting with the power generation interests, and indicated that EEI was pleased to serve as host and to have planned the meeting with the assistance of the American Public Power Association (APPA), Electric Power Supply Association (EPSA), Large Public Power Council (LPPC), Midwest Ozone Group (MOG), National Mining Association (NMA), National Rural Electric Cooperative Association (NRECA), Utility Air Regulatory Group (UARG), and United Mine Workers of America (UMWA). Kinsman asked that in-person attendees use the microphones for all discussion and include their name and affiliation before each remark. Dan Chartier, EEI, explained the workings of the webinar portion of the meeting.

Kinsman noted the importance of the CAIR rule and said that EPA did an excellent job in the original CAIR proceeding by recognizing real world circumstances, setting aggressive but attainable emission reduction requirements, and allowing flexibility and thus cost-effectiveness. There will be a greater challenge with the remand rule given potential constraints levied by the D.C. Circuit Court of Appeals. EPA should attempt to mesh the schedule for new  $SO_2$  and  $NO_x$  emission reduction requirements with the policy-making schedule for other crucial national decisions regarding greenhouse gases, renewable energy strategies, and energy efficiency standards. Large amounts of  $SO_2$  and  $NO_x$  emission controls forced on a very aggressive timeline may become stranded as the nation moves to a new electric power future.

EPA should allow flexibility to the extent possible, including emissions trading. The Agency should not force command-and-control reductions on small peaking or load-following units. EPA should consider cost and cost-effectiveness; limits on emissions trading will in effect increase the cost of compliance. Current economic conditions are especially challenging for electricity generators, given the large expenditures needed for transmission, distribution, new generation, new efficiency efforts, smart grid, plug-in hybrid infrastructure, and environmental controls.

#### **III. EPA Opening Remarks**

Sam Napolitano, CAMD, and Bill Harnett, OAQPS, spoke on behalf of EPA. Napolitano m noted that EPA would produce a written account of the meeting, as it is doing for other stakeholder meetings. Harnett emphasized that one key goal of the rulemaking will be to finalize a rule that will not be overturned in court. Napolitano presented slides showing preliminary 2008 national Title IV SO<sub>2</sub> emissions and eastern U.S. NO<sub>x</sub> Budget Control Program ozone season NO<sub>x</sub> emissions. The preliminary 2008 SO<sub>2</sub> emissions of 7.7 million tons are substantially below emissions of 8.9 million tons of SO<sub>2</sub> in 2007.

Kinsman asked EPA to discuss highlights of its other stakeholder meetings. Harnett responded that states have asked EPA to keep the remand rule schedule in synch with the schedules for meeting ozone and particulate matter NAAQS. Environmental groups suggested that EPA should consider new ozone and particulate matter NAAQS. They also stressed that EPA should jointly look at SO<sub>2</sub>, NO<sub>x</sub>, hazardous air pollutants, and carbon for the power industry, and provide an integrated approach with significant emission reductions across the industry.

John Quinn, Constellation Energy, asked whether EPA will ask Congress to codify the CAIR trading system. Napolitano responded that at this time EPA staff are collecting information and analyzing options to present to the new Assistant Administrator for Air and Radiation, who should start soon. EPA management, working with others in the Administration, can then decide how the Agency will proceed. At this stage, EPA will provide Congress with technical assistance as requested, but it is not asking for Congress to take any specific course of action.

#### IV. Presentations in the Morning Session

#### A. Bill Bumpers, Baker Botts L.L.P., representing Entergy Corporation

#### 1. Presentation Overview

- Entergy supports emissions trading;
- Entergy believes the D.C. Circuit Court of Appeals decision does not allow EPA much latitude in responding on the NO<sub>x</sub> fuel factor adjustment;
- EPA should produce a direct final rule and resolve this particular issue because the computational response is straightforward and does not affect other decisions; and
- EPA should act quickly to avoid lawsuits.

#### 2. Discussion

Napolitano noted that the Agency is sensitive to the  $NO_x$  fuel factor situation. CAMD has released a letter to Designated Representatives indicating that it is unclear what will happen with the annual  $NO_x$  allowance market after 2009/2010. EPA is working to resolve this matter.

Sonja Rodman, OGC, explained that EPA cannot say that it will respond to the  $NO_x$  fuel factor issue in the manner Bill Bumpers proposes. She added that EPA is concerned about its ability to use cost in determining significant contribution and, thus, state budgets.

Peter Glaser, NMA, indicated that not everyone endorses the approach suggested by Bill Bumpers.

Theresa Pugh, APPA, asked for clarification regarding to whom EPA sent the letter regarding annual  $NO_x$  allowances. Napolitano replied that the letter was sent to Designated Representatives and is posted on the EPA CAMD website.

Norm Fichthorn, Hunton & Williams L.L.P., representing UARG, asked Rodman to discuss further EPA's views regarding consideration of costs. Rodman stated that the court decision is very complicated and more a minefield than a roadmap. The NO<sub>x</sub> SIP Call decision (*Michigan v. EPA*) holds that EPA can consider cost but one underlying theme in the CAIR decision (*North Carolina v. EPA*) is the Court's discomfort with the way EPA relied on cost in the CAIR analyses.

Ray Butts, Florida Power & Light, expressed support for Bumper's suggestion for a direct final rule on the  $NO_x$  fuel factor issue. He also urged EPA to provide guidance to states that had adopted regulations on this part of the rule.

Brian Trower, Ames (IA) Electric Department, asked if the current CAIR would be in place in 2010. Sonja said that it would and explained that EPA has indicated it will take approximately two years to finalize a replacement rule. Thus, it is unlikely a final replacement rule would be issued in 2010.

#### B. Stephen Fotis, Van Ness Feldman, representing LPPC

#### 1. Presentation Overview

- Move as quickly as possible to craft a simple resolution;
- Many aspects of the original rule are "salvageable";
- Do not prohibit emissions trading; and
- Conduct modeling relating trading to significant contribution.

#### 2. Discussion

Gene Trisko, UMWA, stated that *Michigan v. EPA* supports consideration of cost-effectiveness and withstood the court's scrutiny in *North Carolina v. EPA*. In terms of developing a rule that will withstand legal challenges, it is more likely that consensus can be reached on cost effectiveness than on environmental effectiveness.

Rodman replied that parts of the cost effectiveness analysis were challenged in oral argument by counsel for petitioners that challenged EPA's use of the  $NO_x$  fuel factor adjustment (Entergy and FPL). Bumpers said that he supports Trisko's statement and that the  $NO_x$  fuel factor petitioners (Entergy and FPL) did not oppose the cost-effectiveness test, but rather addressed EPA's method of applying the cost-effectiveness test in the context of the  $NO_x$  fuel factor issue.

Farzie Shelton, Lakeland Electric, asked about new modeling given the now lower emissions of  $SO_2$  and  $NO_x$  compared to the original rule. Harnett replied that numerous factors such as baseline year and controls in place require a new look.

#### C. Mike Cashin, Minnesota Power

#### 1. Presentation Overview

#### (a) Minnesota Status

- October 31, 2008 administrative agreement granting stay of CAIR;
- EPA will determine through rulemaking whether Minnesota should be in CAIR;
- EPA has not yet published the Minnesota stay in the Federal Register; and
- Minnesota sources should not be compelled to make further CAIR compliance expenditures until EPA resolves this issue.

#### (b) Baseline

- Using 2015 as air quality modeled reference year for revised rule allows for consideration of utility control retrofit measures under construction;
- Possible to retain 2010 reference year for non-attainment modeling;
- However, a 2010 baseline would likely overstate emissions relative to 2015;
- Inventory and modeling should reflect most recently available, quality-controlled resources; and
- Use 2015 as first compliance year in CAIR replacement rule.

#### (c) Significant Contribution

- Correlation between air quality models and ground level air quality monitor results should limit significance level used to include a state in CAIR replacement rule;
- CAIR TSD NO<sub>x</sub> model results vs. monitors demonstrated variability at over +/- 10 percent of the annual PM<sub>2.5</sub> NAAQS standard;
- EPA already established CAIR significance levels much more stringent than supported by EPA's correlation analysis; and
- Retain current CAIR significance levels for revised CAIR replacement rule until correlation analysis can justify a change.

#### (d) Significant Contribution Remedies

- Court concerned that sources near nonattainment areas could buy allowances, leaving significant contribution issues unresolved;
- Independent of CAIR replacement rule, continue to require local source reductions in nonattainment areas in accordance with the Clean Air Act (CAA);
- Allow intrastate trading; and
- States able to demonstrate elimination of significant contribution should be able to leave program upon filing an accepted emission control maintenance plan.

#### (e) Coverage and Timing Issues

- Eliminate significant contribution to nonattainment from upwind states;
- CAA provisions for addressing local nonattainment should dominate local emission reduction requirements;
- Significance level rather than NAAQS stringency is key to determining whether state should be in program;
- Determination of significant contributions will drive control requirements more than relative stringency of NAAQS; and
- Revisions of NAAQS should primarily impact local control measures imposed under CAA nonattainment requirements.

#### (f) Allowance Allocation Equity

• Sources should be allocated allowances at no cost;

- Remedy allocation equity concerns raised by the court;
- Attainment state sources that are "well controlled" should at minimum receive allowances sufficient to support operations without requiring allowance purchases;
- Nonattainment area sources should receive allowances needed to support compliance from residual emissions, post control retrofits that meet "highly costeffective" control criteria; and
- Consider diminishing returns (cost-effectiveness) of emission control retrofits on units in attainment area states when establishing allowance allocations.

#### **B.** Discussion

Fotis asked about the geographic scope of CAIR and whether it could change. Harnett replied that there could be changes, but that whatever criteria EPA uses to decide scope would be applied even-handedly among states. Rodman added that significant contribution and interference with maintenance both must be addressed.

Reid Clemmer, PPL, suggested that just as Title IV ratcheted down SO<sub>2</sub> based on 2.5 and 1.2 lb/mmBtu emission rates, CAIR could continue with something like 0.6 lb/mmBtu for allocating allowances.

#### V. Presentations in the Afternoon Session

#### A. David Flannery, Jackson Kelly PLLC, representing MOG

#### 1. Presentation Overview

#### (a) Scope

- Regional, limited to addressing regional transport, which states cannot do alone;
- Use state SIP process to resolve any residual non-attainment issues;
- Preserve as much of original CAIR as possible, consistent with court decision;
   and
- Addressing newer NAAQS is important for states, but MOG reluctant to suggest that replacement CAIR rule do so.

#### (b) Relationship to other Programs

Allow covered sources to satisfy BART and RACT requirements by participating;
 and

• Eliminate any possible basis for section 126 petitions.

#### (c) Cost-Effectiveness

- Highly cost-effective and account for adverse economic impacts on sources; and
- Consider cost and availability of capital required to install controls.

#### (d) Trading

- Use IPM and other models to assess viability of different types of trading programs intrastate trading, ISO trading, and CAIR regional trading;
- Compare modeled results with those from a no-trading scenario; and
- Select broadest trading program that can satisfy the court.

#### (e) Allowance Allocations

- Need to develop new system for allocations given rejection of Title IV;
- Unsure exactly how to develop new allocation methodology, but should seek public comments on how to develop alternative allocation methodology; and
- Allocations should not be auctioned.

#### (f) Modeling

- Must validate state emission inventories; EPA should indicate types of controls that can be assumed;
- Assess both 2007 and 2008 and establish base year. 2005 used in recent modeling and questions being raised about meteorological relevance of 2008. May need to combine 2007 and 2008 data;
- Take advantage of recent scientific development in biogenics;
- Stakeholder group should agree on MET data;
- Domain size should be consistent among modelers;
- MOG has a modeling contractor; other RPOs also modeling. Given expense and difficulty, results should be shared and coordinated under EPA's leadership;
- Review and revise boundary conditions as necessary;

- Pick nonattainment deadline years. 2012 and 2015 suggested, also 2018;
- Pick maintenance year. 2025 suggested; and
- Use stakeholder process to explain which dates should be used and why.

#### 2. Discussion

Napolitano asked how many members MOG represents. Flannery replied that MOG represents over 90,000 megawatts of generating capacity, with members including First Energy, EON, Duke, City of Springfield, Illinois, and others. Napolitano sought and received clarification that MOG represents both municipal and investor-owned utilities.

#### 2. Dan Cunningham, PSEG

#### 1. Presentation Overview

- Develop CAIR replacement/transport rule that achieves significant progress towards the most "rule-concurrent" defined NAAQS, facilitates cost effective compliance, and will survive legal scrutiny;
- Make every effort to create market-based cap and trade program;
- Trading program alone might not satisfy court, but leveraging market will drive deeper, far more cost-effective, reductions;
- Once caps have been established, EPA can work with states to address any residual nonattainment issues;
- Develop a CAIR replacement rule, based on existing Acid Rain Program, to include EGUs and other industrial sources. Consider obtaining a targeted amendment to the Clean Air Act that would allow EPA to change the retirement ratio for the purpose of reducing the cap;
- Court-imposed limitations may be an issue and legislative amendment may be required to allow for changes in retirement ratios;
- Building program from scratch would disrupt marketplace; and
- Use of distant, future year baseline will create legal uncertainty.

#### 2. Discussion

Power sector attendees also expressed concern about using predicted data to create the baseline and recommended that EPA create a baseline using monitored data. They suggested that EPA might use other data to help inform the Agency during the creation of the baseline.

Responding to Napolitano's question about the year that should be used, Cunningham suggested 2012.

Flannery noted that MOG has been looking at 2012 and 2015, which are clearly within the range of years that need to be examined. However, it is unclear by which year sources would need to be controlled.

Napolitano asked Flannery to discuss capital considerations further. Flannery noted that it is difficult for utilities to get the necessary capital because the money supply is tighter. Thus, it is a lot harder for projects to go forward. Harnett asked whether capital concerns were driven more by a lack of availability or by the higher cost of capital.

Robbie Laborde, Cleco, asked what other source categories had been suggested to EPA for inclusion in the replacement CAIR program. Harnett replied that industrial boilers and cement kilns had been suggested, and that EPA had considered these sources during the original CAIR rulemaking process but had decided not to include them.

William Slade, Con Edison Co. of New York, indicated that not all agree that industrial boilers should be included, and he urged EPA to take a careful look at the cost and difficulty of installing controls on industrial boilers.

#### C. Norm Fichthorn, Hunton & Williams L.L.P., representing UARG

#### 1. Presentation Overview

#### (a) Procedural Issues

- Issue ANPR so stakeholders and other interested parties can submit comments earlier; and
- Allow stakeholders and public to review modeling plans and analyses.

#### (b) Framework for Analysis

- Use established two-step analysis for significant contribution to nonattainment:
  - 1. Determine air quality contributions to identify states to be covered; and
  - 2. Apply "highly cost-effective" test to determine state emissions budgets. As part of the highly cost-effective test, evaluate feasibility and availability of controls and cost of finance. May have to apply the cost-effectiveness analysis on a state-by-state rather than region wide basis, or modify regional results as appropriate to account for individual state circumstances.
- Analyze interference with maintenance using same two-step framework. Perhaps consider modeling years that are further out than those used for significant contribution to nonattainment.

#### (c) Principles for Air Quality Analysis

- Use established "current-monitored-plus-future-modeled" test for nonattainment;
- Use most current and accurate emissions inventory. Both before and after EPA's
  issuance of proposed rule, states and sources should be able to review, comment
  on, and provide corrections to emissions data and modeling results, including any
  results from IPM if that model is used;
- Modeling must meet model performance criteria, and compliance with those criteria should be documented in transparent model studies; and
- Do not attempt to address possible future NAAQS that have not been promulgated.

#### (d) Principles for Highly Cost-Effective Analysis and Remedy

- Emissions budgets should reflect trade-off between tons and trading. Program that allows less scope for trading should also require smaller reductions because lack of or restrictions on trading drive up cost of reductions, meaning that fewer reductions can be deemed highly cost-effective;
- Emissions budgets should reflect trade-off between tons and timing. More ambitious compliance dates must be coupled with smaller emissions reduction targets because a faster compliance schedule means that fewer emissions can be deemed highly cost-effective;
- Flexibility is necessary in addressing whether and how to align a CAIR
  replacement rule's compliance dates with NAAQS attainment dates. For
  example, compliance years cannot possibly match all conceivable attainment
  dates for NAAQS, especially if EPA addresses 2006 and 2008 NAAQS. As with
  original CAIR rule, more than one phase of compliance may be required;
- States must retain discretion in deciding how to achieve emission budgets. States should, for example, be able to allow, at a minimum, intrastate trading;
- EPA should propose for public comment back-up federal implementation plan (FIP), which states that do not want to adopt, or fail to adopt, a SIP could use to satisfy program requirements; and
- Sufficient time is required for transition to new program. UARG does not believe compliance before 2015 would be possible.

#### 2. Discussion

EPA clarified that the current CAIR rule would probably be in effect in the period between when the replacement rule is promulgated (probably in 2011) and the first compliance date for the replacement rule.

Jim Ketcham-Colwill, OAR, noted that the court seemed to question the use of one analytical method for determining inclusion in the CAIR region and a second, different method for determining the required reductions. The court seems to be concerned that the actual remedy was not directly connected to the determination of whether a state was in the program.

Fotis agreed that additional time would be needed for a transition especially before a more stringent phase of controls came into effect. He also clarified that there could be a process allowing for earlier transition to the new program without having to wait until the first compliance date. Fichthorn noted that his comments were focused on implementation of additional control requirements, i.e., the timing for sources to achieve compliance with any more stringent emissions reduction requirements that may be imposed by a replacement rule.

Tim Smith, OAQPS, asked what trading restrictions could be used to ensure that the replacement program satisfied the court decision. Fichthorn replied that UARG did not have any specific proposals at this time, but he suggested that EPA keep the issue open. Other parties have made a number of different proposals, and UARG hopes that EPA will look at all the potential options. In addition, he noted, it is clear that the court decision in no way limited states' ability to have trading programs on an intrastate basis.

Napolitano asked why 2015 had been suggested as the earliest possible compliance date. Fichthorn replied that CAIR was finalized in 2005 and that compliance was required about three-and-a-half years later, beginning in January 2009 for NOx. The same timeframe built upon an early-2011 final CAIR replacement rule (EPA's projected date for final rulemaking action) does not permit an emission-control compliance date for sources that is earlier than 2015. Fichthorn clarified that 2015 was not a proposed effective date for a new rule but rather the earliest possible compliance date that could be considered.

John McManus, American Electric Power, agreed with Norm and mentioned that EGUs were already planning to get reductions for 2015. He also mentioned concerns with the availability of capital and with future regulatory changes. Regulations dealing with fly ash and carbon are being looked at along with other issues like renewable portfolio requirements. With all the new regulations in the pipeline it is important that EPA keep capital requirements in mind and the Agency should be cautious in approach and timing.

Bumpers suggested that the court was more concerned that the modeling did not show clearly enough that reductions would happen than it was with trading as a concept. He suggested that EPA try implementing a rule based on modeling and then require each state to subsequently demonstrate that the reductions were happening as the modeling had predicted. If the reductions were not close enough to the modeled results a state could be required to implement further SIP reductions. This would allow EPA to avoid imposing state budgets that specifically reflect levels of reductions that would eliminate significant contribution.

In response to questions, Napolitano explained that EPA had started some preliminary analytical work but did not have any of it to share. No major decisions have been made on technical details and nothing is firm. Rather staff is trying to set up analyses and get the groundwork laid for when the new Assistant Administrator arrives.

Napolitano was then asked about how the response to section 126 petitions would work in conjunction with the anticipated two-year CAIR revision rulemaking schedule. He replied that, although the court did not impose a specific time limit for EPA's response to North Carolina's section 126 petition, EPA is working to determine how to move forward and understands the time-sensitive nature of the issue.

Delaware's more recent petition is a different situation, and EPA will be engaging in conversations with Delaware to attempt to resolve the issues raised in the petition.

Lou Pocalujka, Consumers Energy, suggested that EPA should pay close attention to the baseline year for the emissions inventory. He suggested that technical discussions on which emissions inventory to use have included arguments that the 2008 emissions inventory might be unrepresentative, due to a temporary economic downturn. In Michigan, these emission reductions are not temporary. They are looking at reductions due to permanent shutdowns of major sources, which are not coming back. Calendar year 2009 is likely to be worse. A 2007 emissions inventory would be unrepresentative. EPA is urged to use an emissions inventory that is representative of current emissions.

#### **VI. Concluding Remarks**

Harnett explained that coordinating with the Assistant Administrator for Air and Radiation is important. However, the D.C. Circuit Court's mandate and remand are premised, at least in part, on EPA's representations to the court that a CAIR replacement rule would take about two years to finish. Depending on timing considerations, EPA staff might turn, as necessary, to EPA Administrator Lisa Jackson for decisions.

Napolitano thanked everyone for their suggestions and participation.

# PRESENTATIONS AND HANDOUTS

PSEG Services Corporation 80 Park Plaza, Newark, NJ 07102

Edison Electric Institute (EEI) April 17, 2009, Discussion Meeting with EPA

Subject: CAIR Replacement Rule: <u>PSEG discussion points</u>

As EPA considers it options in responding to the court's decision in NC v. EPA, PSEG would encourage the Agency to establish a "transport" rule that will (1) achieve substantial progress toward the national air quality standards for PM and ozone, (2) stand up to legal scrutiny, and (3) facilitate cost-effective compliance.

EPA should make every effort to rely on a market-based, cap-and-trade approach to minimize the contributions from transported air pollution. It may not be appropriate to rely on a trading program alone to address all incidents of significant contribution, but given the economic advantages, it should certainly play a central role.

Once the overall NOx and SO<sub>2</sub> emissions caps have been established, EPA and the states can work to address any residual emissions that might be contributing to nonattainment.

In implementing a NOx cap-and-trade program, EPA should include power plants and other major industrial sources to facilitate cost-effective compliance. We suggest it was a mistake to exclude industrial boilers from the CAIR rule, given that they were included in the NOx SIP call.

Building off the existing SO<sub>2</sub> trading program would be the most efficient method for reducing future SO<sub>2</sub> emissions. However, recognizing the limitations imposed by the court decision, consider the possibility to obtain a targeted amendment to the Clean Air Act that would allow EPA to change the retirement ratio for the purpose of reducing the cap. Companies have purchased or sold future vintage allowances. Starting a program from scratch would be very disruptive to the market.

In terms of establishing a baseline for determining a state's contribution to nonattainment, we would be concerned with the Agency using a distant future year baseline because the assumptions would become more-and-more speculative leaving the rule vulnerable to legal challenge. For example, predicting the SO<sub>2</sub> reductions that might result from a future MACT standard for mercury would place the Agency on shaky legal ground.

We recognize the challenges that the Agency faces in trying to navigate the court the decision. We don't envy your task, but we look to be helpful and responsive to the Agency as you develop your response.

If you have any questions on these discussion points, please call me

Daniel Cunningham (973) 430-6307 Daniel.Cunningham2@PSEG.com



#### EPA Public Input about CAIR Replacement Rule Minnesota Power (ALLETE) Key Points April 17, 2009

Contact: Michael Cashin, 218-355-3339

Minnesota Status. On October 31, 2008 the Environmental Protection Agency (EPA) issued a letter to Minnesota Power indicating its intention to publish in the Federal Register a rule amending the Clean Air Interstate Rule (CAIR) to stay the effectiveness of the rule with respect to sources located in the State of Minnesota. The administrative stay was to remain in effect until such time as EPA determines through a rulemaking under the Clean Air Act whether Minnesota should be included in the CAIR region for fine particulate matter. The stay has not yet been issued, creating great uncertainty for sources within Minnesota. Minnesota sources should not be compelled to make further expenditures to address CAIR compliance until EPA has resolved the Minnesota issues as directed by the U.S. Court of Appeals for the District of Columbia. Minnesota Power encourages EPA to expeditiously publish the rule staying CAIR as to Minnesota sources.

**Baseline.** Minnesota Power (MP) suggests that EPA assess significant contributions to nonattainment referencing modeling projected for 2015. The original CAIR initiated utility actions for control retrofits that targeted a more stringent emission cap in 2015. Utilities that subsequently provided for emission controls in anticipation of CAIR requirements should have the benefit of such controls given consideration in significant contribution to nonattainment modeling assessments. Nonattainment contribution modeling could retain the previous 2010 reference year, but much is in transition, likely resulting in a 2010 baseline overstating the impacts of utility emissions relative to a 2015 outlook.

**Significant Contribution Issues.** On several occasions Minnesota Power submitted comments to EPA that there appeared to be modeling deficiencies in CAIR. MP noted how both the CMAQ and REMSAD models overstated the impact of  $NO_x$  on  $PM_{2.5}$  compared to IMPROVE Monitor and STN Particulate Monitor Observations, as was indicated in EPA's technical support documentation. For higher  $NO_x$  concentrations modeling results and monitor results deviated by  $\pm$ 0 ug/m³, which is over ten percent of the annual  $PM_{2.5}$  standard. Similar deviations were evident for ozone modeling results vs. monitor measurements. MP does not consider it reasonable that a State's significant contribution to nonattainment be based on modeled contributions any less than the 90<sup>th</sup> percentile correlation between computer models and monitor results. However, EPA has already established CAIR significance values at lower levels than would be supported by EPA's correlation analysis. Consequently, MP suggests that EPA retain the current CAIR analysis, State significant contribution levels of 2 ppb ozone and 0.20 ug/m³ annual  $PM_{2.5}$  until which time EPA can demonstrate through correlation analysis justification for different significant contribution values. MP also notes that electric utility emissions are the primary target for control by the CAIR replacement rule, so it is suggested that EPA consider

establishing significant contributions from a state assigning EPA's significant contribution levels to modeled, CAIR controlled source emissions only. Air quality models and emission inventories used by EPA for significant contribution modeling should reflect the most recent, quality controlled resources available to EPA to help assure EPA methods are best suited to accurately and equitably support achievement of air quality improvement goals.

**Significant Contribution Remedies.** The DC Circuit Court of Appeals identified how sources near a nonattainment state might continue to make a significant contribution to nonattainment if such sources were allowed to buy emission allowances allocated to distant sources. EPA modeling also established that close proximity sources both within the nonattainment state and in nearby states, including sources not subject to CAIR controls (e.g. transportation emissions) dominated local nonattainment contributions. In some cases, emissions within the nonattainment state were of sufficient magnitude to interfere with local attainment, regardless of out of state source reductions. MP suggests that EPA allow states the option to implement in-state trading to meet CAIR replacement rule state emission reduction targets while continuing to require local source reductions in nonattainment areas in accordance with the Clean Air Act.

Coverage and Timing Issues. EPA inquires whether the CAIR replacement rule should address the 1997, 2006 or 2008 NAAQS. MP notes that the primary issue for the CAIR replacement rule is to address reduction of the interstate transport of emissions that are making a significant contribution to nonattainment. The disposition of states subject to CAIR replacement rule controls should be dominated by their significant contribution to nonattainment analysis and related significant contribution levels. Consequently, the determination of a state's significant contribution to nonattainment will drive control requirements more so than the relative stringency of the NAAQS being applied. In turn, Clean Air Act provisions that require local source emission reductions in nonattainment areas should adequately address coverage and timing issues, leaving the CAIR replacement rule to focus on elimination of a state's significant contribution to a neighboring state's nonattainment with the NAAQS.

**Other.** MP notes that equitable allocation of SO<sub>2</sub> and NO<sub>x</sub> allowances was a key issue that was brought before the Court and that helped lead to the need for EPA to establish a CAIR replacement rule. MP emphasizes that EPA should continue to provide for a free allocation of allowances to emission sources based on their historic emissions, but also notes that facilities that have provided for lower emissions through controls operation, control retrofits or fuel switching should have assurance that they are not disadvantaged in allowance allocations relative to sources that have historically high emission rates. Consequently, EPA should establish allowance allocations that give consideration to local nonattainment status within a state as well as the emissions performance for sources determined to be significantly contributing to nonattainment in other states. At a minimum, sources in upwind states that are "well controlled" should receive an emission allowance allocation sufficient to assure that they are not compelled to buy allowances released from local nonattainment area sources that are retrofitting controls as required under the Clean Air Act.

# Minnesota Power (ALLETE) Key Points

EPA CAIR Replacement Rule April 17, 2009 Mike Cashin, 218-355-3339

## Minnesota Status, CAIR RR

- Oct. 31 Administrative Agreement, EPA and MP
  - Stay of CAIR in effect until EPA determines through rulemaking under the CAA whether Minnesota should be included in CAIR
- EPA has not yet published the Minnesota stay in the Federal Register
- MN sources should not be compelled to make further CAIR compliance expenditures until EPA has resolved MN issues as directed by the US Court of Appeals for District of Columbia

# Baseline, CAIR RR

- 2015 air quality modeled reference year for the CAIR RR allows original CAIR initiated utility control retrofit measures under construction to receive consideration for significant contribution to nonattainment analysis.
  - 2010 reference year is crossed over during the CAIR Phase 1 implementation under the stay. "Outdated"
- Inventory and modeling should reflect most recently available, quality controlled resources.
- EPA should also establish 2015 as the target year for the next phase of new controls under the CAIR Replacement Rule

## Significant Contribution, CAIR RR

- Correlation between air quality models and ground level air quality monitor results should limit the significance level used to subject a State to the CAIR RR.
- CAIR TSD NOx model results vs. monitors demonstrated variability at over +/- 10% of the annual PM<sub>2.5</sub> NAAQS standard.
- EPA already established CAIR significance levels much more stringent than supported by EPA's correlation analysis.

 EPA should retain the current CAIR significance levels for the CAIR RR until which time correlation analysis can justify a change.

# Significant Contribution Remedies, CAIR RR

- The DC Circuit Court of Appeals identified concerns where sources near nonattainment areas could buy allowances from distant sources, not resolving their significant contribution to nonattainment.
- EPA should continue to require local source reductions in nonattainment areas in accordance with the Clean Air Act independent of the CAIR RR
- EPA should allow States subject to the CAIR RR the option for intrastate trading of allowances to meet their CAIR RR state target.
- States determined to be significant contributors to nonattainment under the CAIR RR
  analysis that later demonstrate they have eliminated their significant contribution to
  nonattainment should be able to petition out of the CAIR RR upon filing of an
  accepted emission control maintenance plan.

# Coverage and Timing Issues, CAIR RR

- The focus of the CAIR RR should be to eliminate the significant contribution to nonattainment from upwind states.
- The CAA provisions for addressing local nonattainment should dominate local emission reduction requirements, not the CAIR RR.
- The significance level dominates determination of states subject to CAIR RR controls, not the NAAQS stringency.
- EPA revision of NAAQS standards should primarily impact local control measures imposed under the CAA nonattainment area requirements.

# Other: Allowance Allocation Equity CAIR RR

- All allowances should be allocated at no cost to the emission sources subject to compliance with allowances.
- The DC Circuit Court of Appeals identified allowance allocation equity concerns for EPA action under the CAIR remand that EPA should remedy with the CAIR RR.
- Attainment state sources that are "well controlled" should at minimum receive allowances sufficient to support operations without requiring allowance purchases.
- Nonattainment area sources should receive allowances needed to support compliance from residual emissions, post control retrofits that meet "highly cost effective" control criteria.

• Diminishing returns (cost effectiveness) of emission control retrofits on units in attainment area states should receive consideration when establishing allowance allocations.

# MIDWEST OZONE GROUP Preliminary Comments on the CAIR Replacement Rule April 17, 2009

David M. Flannery Jackson Kelly PLLC Charleston, West Virginia

# Scope

- Limit to regional transport
- Use state SIP process to resolve residual non-attainment
- Preserve as much of initial CAIR rule, as possible, consistent with Court decision

# Relationship to Other Programs

- For covered sources, CAIR should be structured in a way that:
- allows BART and RACT to be satisfied through CAIR compliance and
- eliminates any possible basis for §126 petitions

### Cost Effectiveness

- CAIR controls:
- should be "highly cost effective"
- account for adverse economic impact on sources
- account for the lack of availability of capital

# **Trading**

- Examination of various trading options
- intrastate trading
- ISO trading
- CAIR region trading
  - Comparison to no trading scenario
  - Evaluate IPM and alternative approaches to assessing policy alternatives
  - Select broadest possible trading program

## Allowance Allocations

- Develop a new system of allocations (given rejection of Title IV)
- Seek public comment on alternative allocation methods
- Allocations should not be auctioned

# Modeling

- Validate state emission inventories
- Establish the base year (assess both 2007 and 2008)
- A stakeholder group should agree on MET data
- Domain size should be consistent among modelers

# Modeling (continued)

- Encourage use of best science in air quality and biogenics models
- Review boundary conditions and revise as appropriate
- Select representative future years most relevant to nonattainment deadlines (2012, 2015, other?)
- Select the year to be examined for maintenance (2025)

# CAIR Remand Issues: Principles that Should Guide EPA's Upcoming Rulemaking

# The Perspective of the Utility Air Regulatory Group

April 17, 2009 Norman W. Fichthorn Hunton & Williams LLP

#### **Procedural Issues**

- EPA should issue an Advance Notice of Proposed Rulemaking
- EPA should allow stakeholder and public review of modeling plans and analyses

#### Substantive Issues

- Framework for Analysis
  - >EPA should use the established two-step analysis for significant contribution:
- (1) Determine air quality contributions to identify states to be covered by the rule; then
- (2) Apply the "highly cost-effective" test to determine state emission budgets
  - ➤ The "interference with maintenance" analysis should also follow the basic two-step framework

#### Substantive Issues

- Principles for the Air Quality Analysis
  - >EPA should use the "current-monitored-plus-future-modeled" test for nonattainment
  - >EPA should use the most current, accurate emission inventory
  - > Modeling must meet model performance criteria
  - >EPA should not address possible future NAAQS

#### Substantive Issues

- Principles for the "Highly Cost-Effective" Analysis and Determination of the Remedy
  - > Emission budgets should reflect the trade-off between tons and trading
  - >Emission budgets should reflect the trade-off between tons and timing
  - > Flexibility will be needed in aligning compliance dates with attainment dates

#### Substantive Issues

- Principles for the "Highly Cost-Effective" Analysis and Determination of the Remedy (cont'd)
  - ➤ States must retain discretion in deciding how to achieve emission budgets
  - >EPA should propose a "back-up" federal implementation plan for public comment
  - >Adequate time for transition to a new program is needed

CAIR REPLACEMENT RULE DISCUSSION WITH EPA ATTENDING IN PERSON			
NAME	LAST NAME	COMPANY NAME	
John	McManus	American Electric Power	
David	Arthur	Calpine	
William	Slade	Con Edison Co. of NY	
John	Quinn	Constellation	
Lou	Pocalujka	Consumers Energy	
Lenny	Dupuis	Dominion	
Heather	Eades	Dominion	
Daniel	Chartier	Edison Electric Institute	
John	Kinsman	Edison Electric Institute	
Chuck	Barlow	Entergy	
Bill	Bumpers	Entergy (Baker Botts)	
Bruce	Alexander	Exelon	
Michael	Krancer	Exelon	
Ray	Butts	FPL	
John	Hampf	FPL	
Stephen	Fotis	Large Public Power Council (Van Ness Feldman)	
Usha	Turner	Luminant	
Sara	Orr	Midwest Generation (Latham & Watkins)	
Michael	Cashin	Minnesota Power	
William	Butler	Mirant	
David	Flannery	Midwest Ozone Group (Jackson Kelly)	
Ben	Brandes	National Mining Association	
Peter	Glaser	National Mining Association (Troutman Sanders)	
Rae	Cronmiller	National Rural Electric Cooperative Association	
Verne	Shortelle	NRG	
Reid	Clemmer	PPL	
Daniel	Cunningham	PSEG	
John	Shimshock	Reliant	
John	Jansen	Southern Company	
Norm	Fichthorn	Utility Air Regulatory Group (Hunton & Williams)	
Eugene	Trisko	United Mine Workers of America	
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Dwight	Alpern	EPA	
Kevin	Culligan	EPA	
Bill	Harnett	EPA	

Jim	Ketcham-Colwill	EPA
Sam	Napolitano	EPA
Sonja	Rodman	EPA
Tim	Smith	EPA
Gabrielle	Stevens	EPA
Meg	Victor	EPA