



Multi-Pollutant Workgroup Update

Power Plants, Peaking Units and ICI Boilers



OTC Annual Meeting

June 6, 2006



Topics Covered

- Background
- Status of “CAIR Plus”
 - Power plants and other sources
- Tougher than CAIR power plant effort
 - State collaborative
 - Status of CAIR Plus model rule
- Peaking Units
- Industrial, Commercial and Institutional (ICI) Boilers

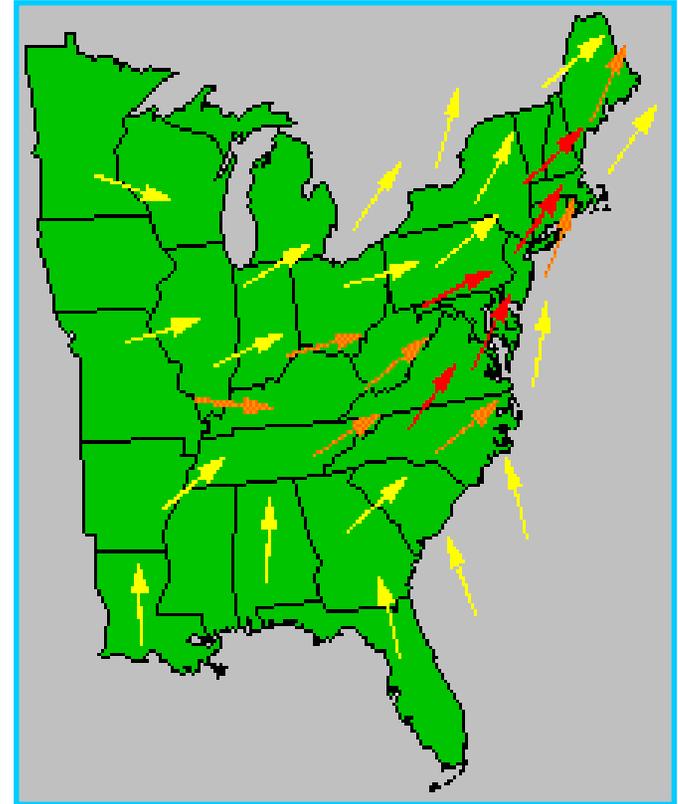




Background

Multi-Pollutant Actions

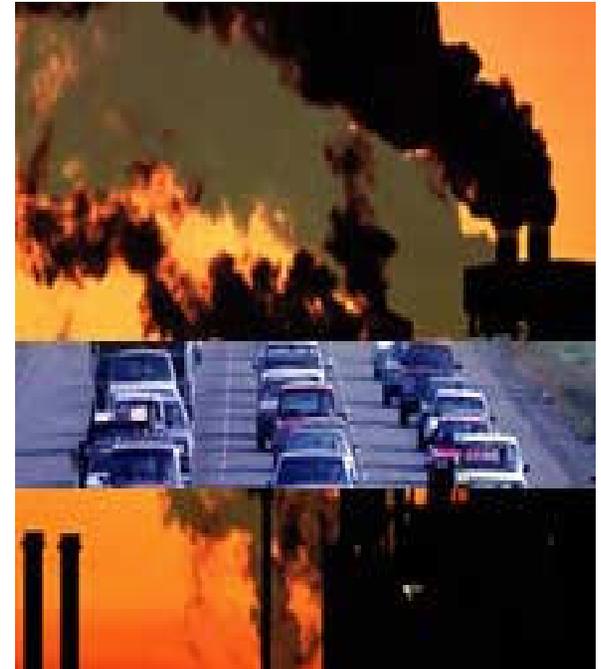
- March 4, 2003
 - Statement of Principles re: Air Pollutant Emissions
- September 24, 2003
 - Resolution on Electric Generating Unit (EGU) emissions
- January 27, 2004:
 - Multipollutant Position approved.
- November 10, 2004:
 - Charge to SAS Committee on Multipollutant Control
- June 8, 2005:
 - Resolution on program development





The June 2005 Resolution

- Key concepts:
 - Develop a regional multipollutant program
 - Work with other states outside of the Ozone Transport Region (OTR)
 - Include power plants and other sources
 - For EGUs
 - Build from EPA's Clean Air Interstate Rule (CAIR)





The State Collaborative

- Small group of OTC Commissioners began meeting with a small group of Commissioners from the Midwest in the late 2005
- The “State Collaborative” now includes about 22 states and continues to meet routinely
- Goal is to identify, and work in partnership on, regional control programs to help address air pollution transport and issues of mutual concern
 - Ozone, fine particulate and haze





The June 2005 Resolution

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Super-Regional Control Measures

- Measures being considered
 - First out of the blocks:
 - Consumer products (including gas cans)
 - Paints (AIM)
 - Chip reflash
 - Diesel retrofit
 - Still in the works:
 - EGUs
 - Industrial, commercial and institutional (ICI) boilers
 - Regional fuel
 - Others ...



• ECO spouts are self-venting, stop fuel flow automatically and shut automatically



EGUs

- General consensus that going beyond CAIR will be needed to allow certain areas to meet the ozone and fine particulate standards
 - OTC and LADCO modeling
- One of many strategies being considered - but still on the plate
- Discussions seem to be moving towards
 - tougher for NO_x, less tough for SO₂
- Current “rates” under discussion
 - NO_x = .125 in 2009 and .08 in 2015
 - CAIR = .15 and .13
 - SO₂ = .41 in 2010 and .28 in 2015
 - CAIR = .51 and .37





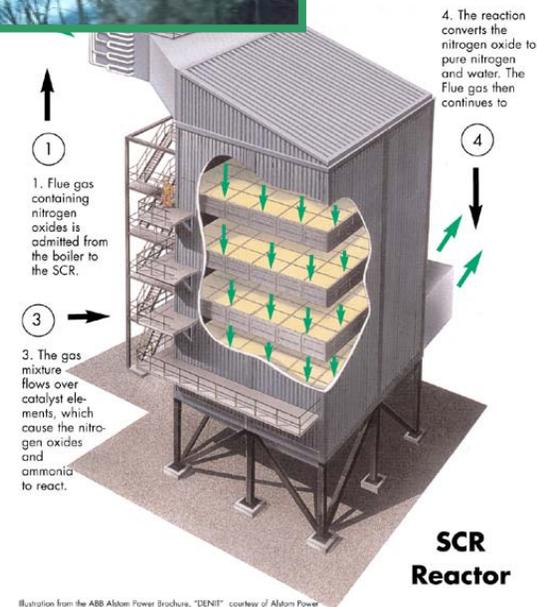
The June 2005 Resolution

- Key concepts:
 - Develop a regional multipollutant program
 - Work with other states outside of the Ozone Transport Region
 - Include power plants and other sources

– **For EGUs, Build from EPA's Clean Air Interstate Rule (CAIR)**



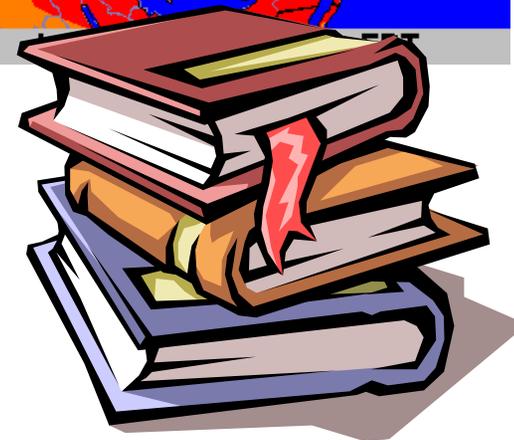
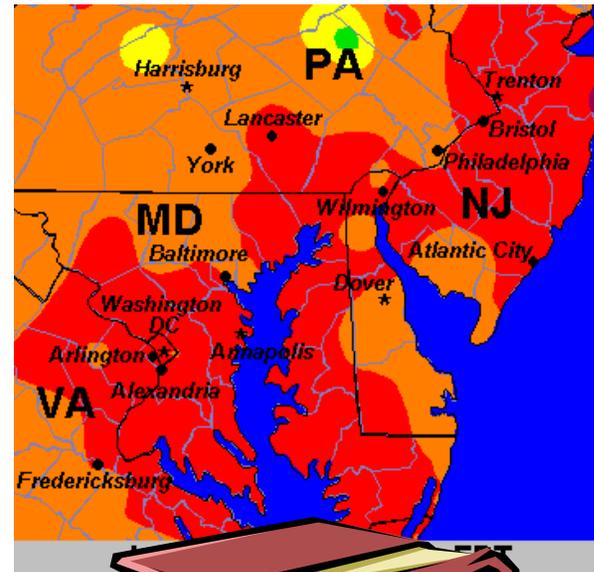
2. Ammonia is added to the flue gas.



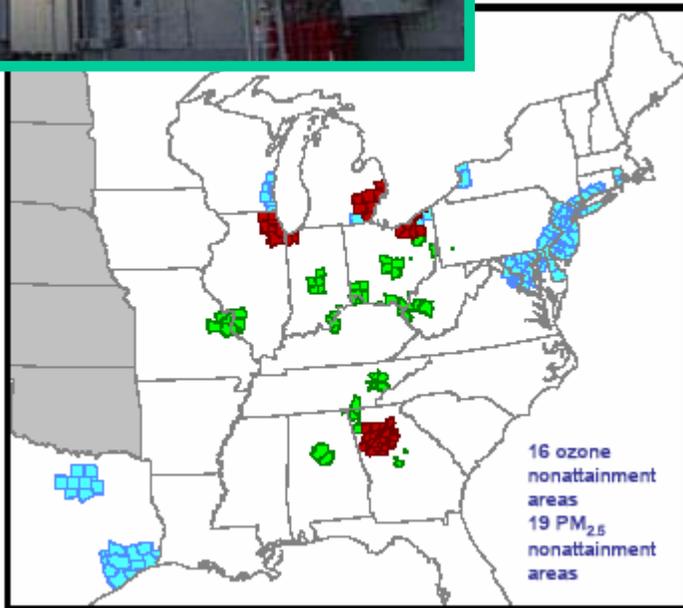


Developing CAIR Plus

- Key themes
 - Consider other measures
 - Build from EPA's CAIR model rule
 - Borrow from STAPPA/ALAPCO effort
 - Meet CAIR submittal deadlines
 - If more time is needed to finalize agreement within the State Collaborative ...
 - Build in a transition to CAIR Plus later
 - Keep it simple



Is CAIR Enough?

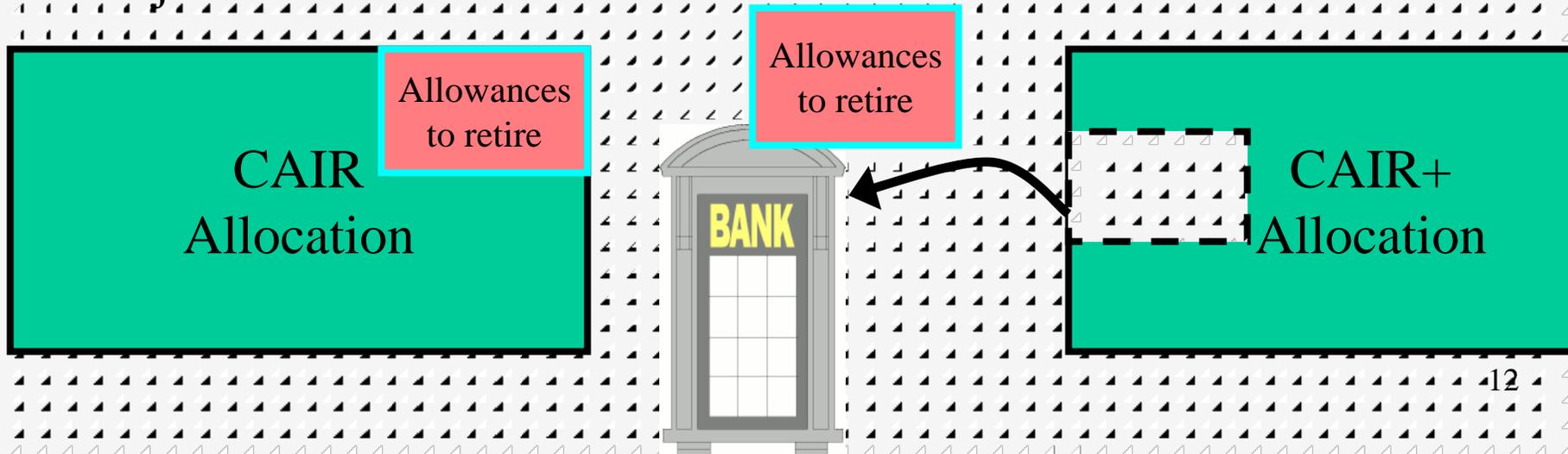


- Working with EPA and the State Collaborative on this issue
- Step 1 – Using modeling, see if ozone and fine particle standards can be met with
 - Existing control (OTB/OTW) programs
 - CAIR, and
 - New measures (in OTR and across a super-region)
- Step 2 – Add CAIR Plus
- Modeling is not complete, but seems to indicate that we will need to go to step 2



Basic CAIR Plus Implementation Concept

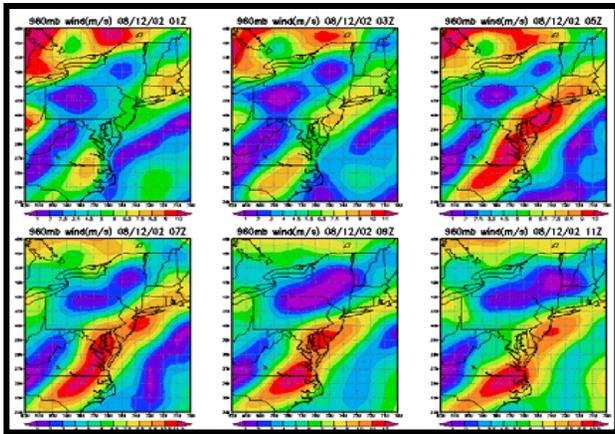
- Start from NO_x and SO₂ tons allocated per CAIR
- Develop approaches for “retiring” a percentage of this allocation to ensure attainment
- Implement CAIR Plus with adjusted allocations





How Do We Retire Allowances?

Different Approaches Needed For NO_x and SO₂

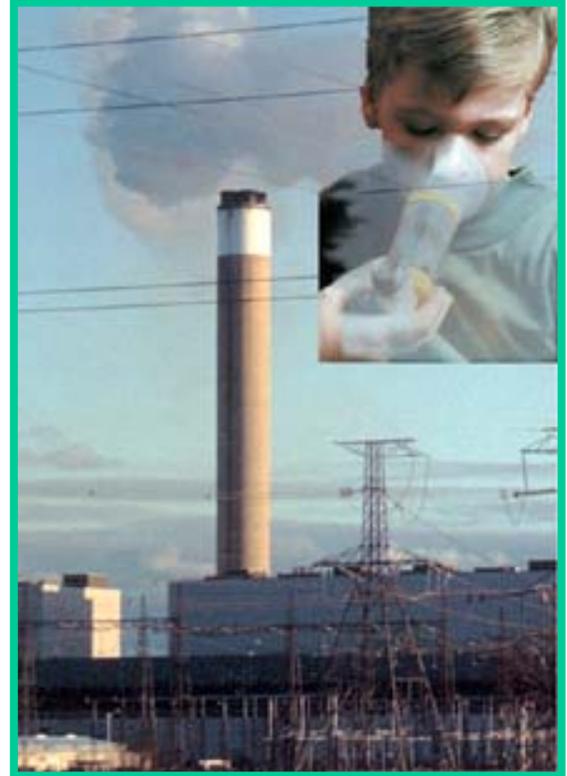


- CAIR uses slightly different regulatory mechanisms for NO_x and SO₂
- NO_x builds off of the NO_x SIP Call
 - States allocate to sources
- SO₂ builds off of the Title IV (Acid Rain) requirements
 - EPA allocates to sources



Retiring SO₂ Allowances

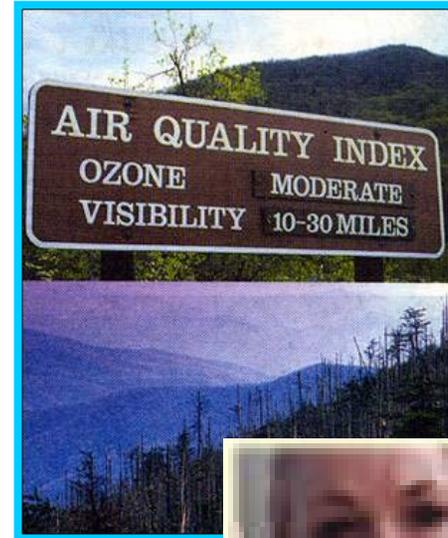
- States set up a general state retirement account that allows for retirements outside of the CAIR program
- In state rules
 - Outside of the CAIR program
 - Sources are required to transfer a percentage of EPA allocated SO₂ allowances into a state retirement account before they are used
- Based on EPA and Connecticut concepts





Retiring NO_x Allowances

- Could mimic SO₂ approach
 - Outside of the CAIR program
 - States set up a retirement account
 - Sources are required to transfer a percentage of EPA allocated NO_x allowances into a state retirement account before they are used
 - Consistent approaches for SO₂ and NO_x
- Or ...





NO_x State Attainment Reserve

Because States Allocate NO_x

- Inside the CAIR program
 - States set up an attainment (retirement) reserve
 - States allocate portion of allowances to the attainment reserve prior to allocating to sources.
- Appears to be within states' powers under the CAIR framework
- Fairly simple
 - Straight forward accounting
 - Reductions up front





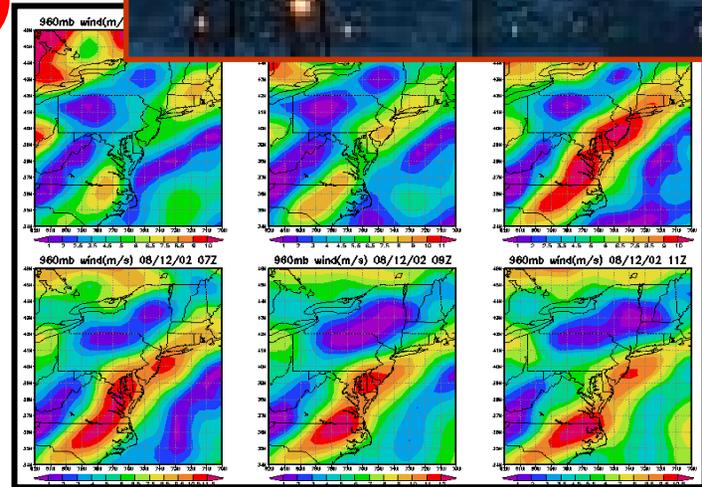
SO₂ Backstop – Separate Program



- Retirement concept for SO₂ (used in CAIR) is being challenged
- Also developing a separate CAIR Plus interstate trading program that would supplement CAIR.
 - Building from existing NY intrastate trading program
- No need for NO_x backstop

Key Dates

- Continue to work with Collaborative on basic policy issues
- Prepare to submit CAIR or CAIR Plus SIPs by **March 2007**
 - Full CAIR Plus SIPs if policy process is complete
 - CAIR SIPs that can easily be transitioned to CAIR Plus SIPs if not





Next Steps

- Model rule language for November 2006 OTC meeting
- More detailed input from stakeholders
- Continue to work with Collaborative states
- Continue to work with EPA





Other Issues

- Two other issues linked to CAIR Plus effort
- Peaking units
 - Run mostly on the hottest days of the summer
- Industrial, Commercial and Institutional (ICI) Boilers
 - Large manufacturers, schools, government operations



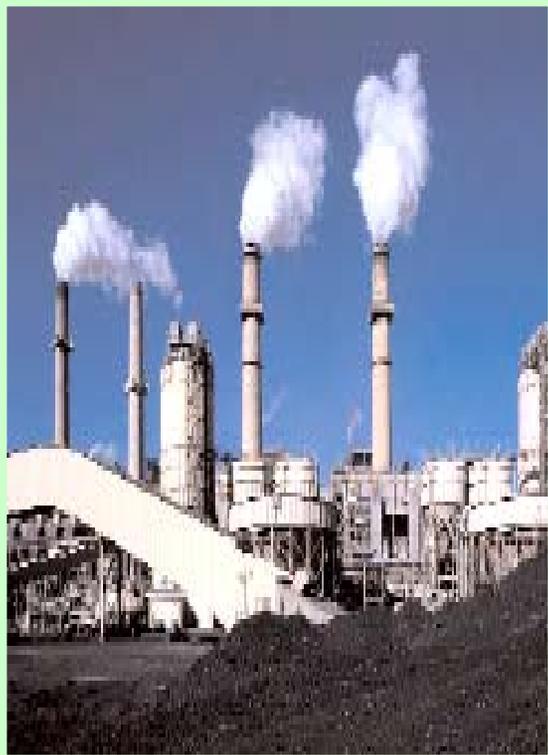
Current Thinking

- Peaking Units

- May be significant contributor to peak day ozone
 - More later from NJ
- Considering a voluntary effort with generators and ISOs to cut peak day NO_x emissions by 2010

- ICI Boilers

- Potential reductions are significant
 - More from Control Measure WG later
- Current approach sets performance standards that can be met by:
 - Adding specific controls on site, or
 - Purchasing CAIR allowances



Wrap-Up

- State Collaborative process has been very successful
- Modeling seems to indicate that even after all of the other new measures are implemented that a tougher than CAIR program will be needed
- Ready to move ahead with CAIR Plus regulations and SIPs to meet upcoming CAIR deadlines
- Work on Peaking Units and ICI Boilers continues

