CSAPR Stay Lifted – Implications for Connecticut Sources

David B. Conroy
Air Programs Branch
EPA Region 1

CT SIPRAC
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Clean Air Act requires states to address emissions that “contribute significantly” to nonattainment or “interfere with maintenance” of NAAQS in downwind states.

March 2005 - EPA issued Clean Air Interstate Rule (CAIR) covering 27 eastern states and DC. CAIR used a cap & trade program to reduce SO$_2$ and NO$_x$ emissions from power plants to meet 1997 annual and 24-hour fine particle (PM$_{2.5}$) and 1997 8-hour ozone NAAQS.

States were required to submit State Implementation Plans (SIPs) to EPA demonstrating compliance with their applicable SO$_2$ and NO$_x$ EGU budgets.
States Covered by CAIR

- States not covered by CAIR
- States controlled for fine particles (annual SO₂ and NOₓ)
- States controlled for both fine particles (annual SO₂ and NOₓ) and ozone (ozone season NOₓ)
- States controlled for ozone (ozone season NOₓ)
CAIR Challenged in US Court of Appeals for DC Circuit

- July 2008 – Court issued decision to vacate CAIR
- Dec 2008 – Court amended decision and remanded CAIR without vacatur
  - Required EPA to promulgate replacement rules to CAIR, consistent with the Court's July 2008 ruling
  - Left CAIR in effect until replacement rule was promulgated
- July 2011 – EPA issued CSAPR to replace CAIR.
  - Required 28 states to reduce $SO_2$ and $NO_X$ emissions
States Covered by CSAPR

• Cross-State Air Pollution Rule includes separate requirements for:
  • Annual $SO_2$ reductions
  • Annual $NO_x$ reductions
  • Ozone-season $NO_x$ reductions

*This map includes states covered in the supplemental notice of proposed rulemaking.
CSAPR Challenged in US Court of Appeals for DC Circuit

- Dec 2011 – D.C. Circuit issued order staying CSAPR pending judicial review. Left CAIR in effect
- April 2014 – Supreme Court issued decision reversing D.C. Circuit decision and remanded case back to D.C. Circuit
- June 26, 2014 – EPA filed motion requesting D.C. Circuit to lift stay of CSAPR and move compliance deadlines by 3 years so CSAPR implementation can begin on Jan (or May) 1, 2015
- Oct 24, 2014 – D.C. Circuit granted motion to lift stay
- Feb 2015 – Petitioners opposed to lift of stay will present oral arguments. In the meantime, EPA is moving ahead with implementation
Cross State Air Pollution Rule (CSAPR)

- CSAPR focuses on attainment/maintenance of 1997 Ozone and 1997 & 2006 PM$_{2.5}$ NAAQS
- CSAPR was intended to cover emissions in 2012 and beyond, but 2012 & 2013 allowances will now be “revintaged” to 2015 & 2016
- CSAPR will be implemented through a federal rule
- CSAPR establishes new allowances for all programs
  - No carryover of Acid Rain Program, NO$_X$ SIP Call/ NO$_X$ Budget Trading Program (NBP), or CAIR allowances
CSAPR Implementation

- Dec 2014 – CSAPR FIP replaces CAIR
- By Jan 1, 2015, EPA will issue supplemental rule (NODA) to add 3 years to initial dates.
- Jan 1, 2015 – Phase 1 of rule will begin; Phase 2 will begin in 2017. Monitoring certification deadline moved to 2015; assurance provisions apply in 2017
- States have until April 1, 2015 to submit 2016 allocations, and have option (not requirement) to develop SIPs and modify allocation process
CAIR and CSAPR in New England

- CT and MA were included in ozone-season CAIR program, but not in CSAPR, because air quality modeling shows they no longer contribute significantly to nonattainment of the 1997 ozone or 1997 & 2006 PM NAAQS in other states.

- CT CAIR rule (RCSA Sec. 22a-174-22c) was approved by EPA in the CT SIP on Jan 24, 2008 (73 FR 4105).

- MA CAIR rule (310 CMR 7.32) was approved by EPA in the MA SIP on Dec 3, 2007 (72 FR 67854).
CT’s Reliance on CAIR in its SIP

- Reductions from CAIR are relied on by CT for a number of air quality obligations:
  - Regional Haze Plan (relied on CAIR as part of alternative BART strategy)
  - Ozone SIPs for the 1997 ozone NAAQS for both the Greater CT and CT portion of NYC Nonattainment areas
    - Reasonable Further Progress plans
    - Ozone Attainment Plans
    - Ozone infrastructure SIP (relied on CAIR for transport elements)
CT Options for Maintaining CAIR Reductions

- **Intrastate NO\(_X\) trading program**
  - This was originally proposed by CT DEEP in Dec 2011 (RCSA Sec. 22a-174-22d “Post-2011 CT Ozone Season NO\(_X\) Budget Program”)
  - Was going to have an Ozone Season NO\(_X\) budget of 2,691 tons, the same as CAIR
  - Before the CSAPR stay in 2011, EPA was poised to make modifications to EPA trading system and run a CT Intrastate Trading program.
    - Total actual ozone season emissions well below CAIR Budget, so other options may be preferable
Connecticut CAIR NOx Emissions

CT Ozone Season NOx Budget

Ozone Season NOx (tons)

<table>
<thead>
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<th>Year</th>
<th>NOx Emissions</th>
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<tr>
<td>2009</td>
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<td>2011</td>
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<td>2013</td>
<td>579.0</td>
</tr>
<tr>
<td>2014</td>
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CT Options for Maintaining CAIR Reductions (con’t)

- Enforceable ozone season emission limits on all CAIR units
  - This could be done through new or revised regulations, and/or updated permits.
  - Focus should be on steam generators and combustion turbines since they have the biggest gap between actuals vs. allowables.
  - Could be done in conjunction with upcoming NOx RACT rule revisions
  - Could be implemented through NOx Trading Orders
2013 Connecticut CAIR NOx Emissions by Unit Type

- **Boiler**: 12 units, 7 active
  - 2013 OS Actual Emissions: 255.5 tons
  - 2013 CAIR Allowances: 691 tons
  - OS Permit Allowable: 10,289 tons

- **Combined Cycle**: 9 units
  - 2013 OS Actual Emissions: 202.1 tons
  - 2013 CAIR Allowances: 1,600 tons
  - OS Permit Allowable: 373 tons

- **Combustion Turbine**: 47 units
  - 2013 OS Actual Emissions: 33.7 tons
  - 2013 CAIR Allowances: 35 tons
  - OS Permit Allowable: 2,111 tons

- **Non EGU**: 8 units, 4 active
  - 2013 OS Actual Emissions: 87.7 tons
  - 2013 CAIR Allowances: 365 tons
  - OS Permit Allowable: 667 tons
CT SIPS that may need amending after CSAPR replaces CAIR

- CT CAIR rule (RCSA Sec. 22a-174-22c)
- RACT SIP for the 2008 ozone standard
- Regional Haze SIP
  - CAIR is one component of Alternative to BART strategy
  - 5 year progress report, due Nov 18, 2014
- Ozone infrastructure SIPS
  - For the 1997 ozone standard - relied on CAIR for transport elements
  - For the 2008 ozone standard – transport elements have not yet been submitted
QUESTIONS OR COMMENTS