

The Future and Financing of Power Sector Pollution Controls

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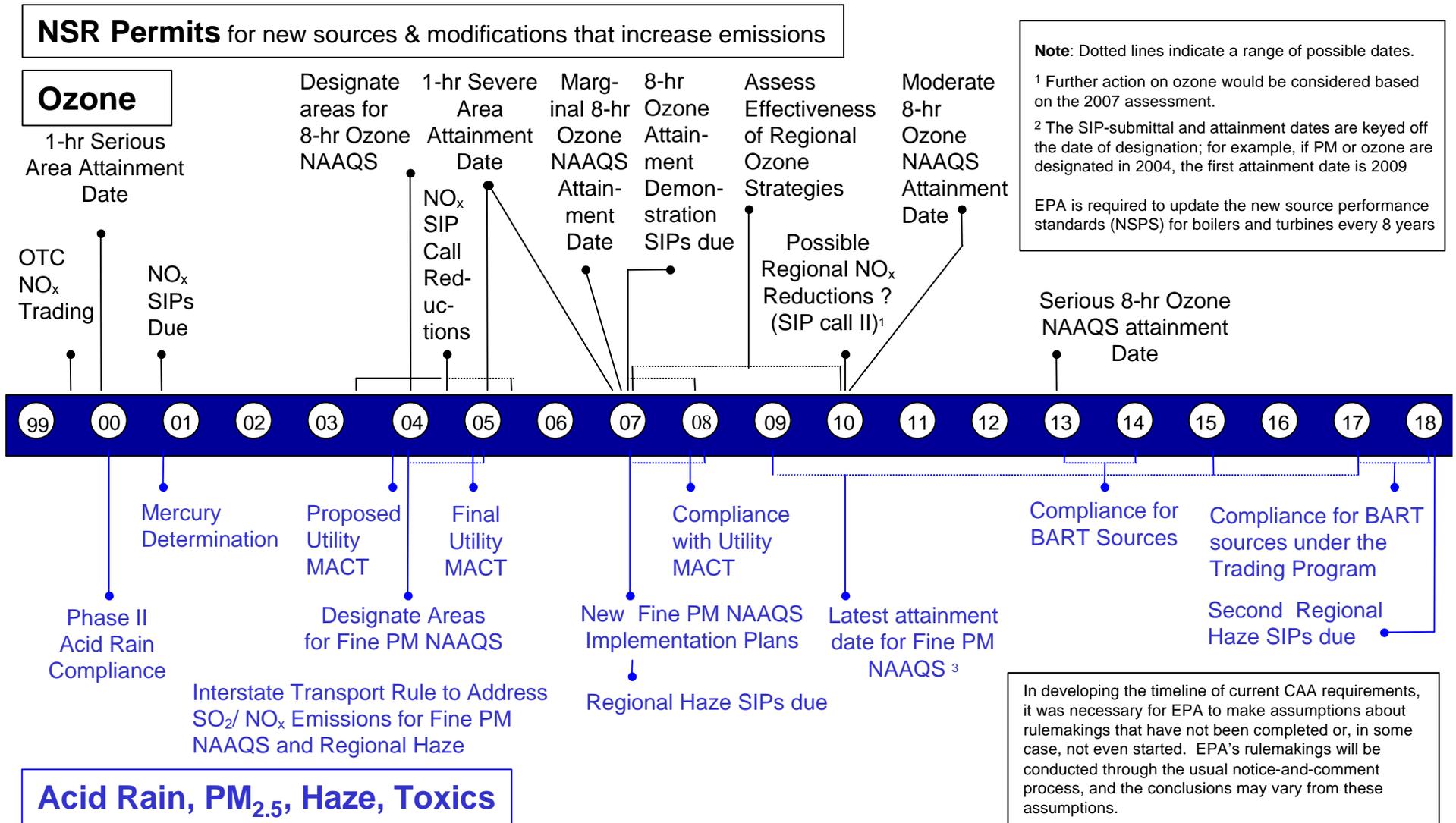
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Progress of Clean Air Act Implementation

- Air quality has improved, but problems remain
- Emissions from power generation remain a major cause of:
 - health-impacting fine particles and ozone
 - regional haze
 - acid rain
 - eutrophication
 - mercury
- Power plants remain a major source of cost-effective reductions
 - EPA is continuing to take major steps to reduce fine particle and NO_x emissions from on-road and off-road mobile sources

Power Industry Faces Complex Set of Requirements



EPA's Current Clean Air Act Focus

- Continued reductions under the Acid Rain Program
- NO_x SIP Call
- MACT for mercury and other Hazardous Air Pollutants
- NSR cases and proposed changes
- Transport rule to reduce fine particle and ozone concentrations
- Designation of nonattainment areas:
 - Fine particles
 - Ozone

Future Controls Likely to Lead to Substantial Capital Investments

- NO_x Controls:
 - Selective Catalytic Reduction (SCR)
 - Selective NonCatalytic Reduction (SNCR)
- SO₂ Controls:
 - Flue Gas Desulfurization: Scrubbers
- NSR Settlements and Actions:
 - SCRs and Scrubbers (maybe improved Electrostatic Precipitators)
- Transport Rule:
 - SCR and Scrubbers

...Timing and Amount of Controls Uncertain...

Clear Skies Offers a More Efficient, Effective Path

- Compared to the current Clean Air Act, Clear Skies will use a proven approach that is effective and flexible to:
 - Provide needed certainty about environmental controls to industry, government officials, and citizens
 - Preserve fuel diversity in electricity generation
 - Provide better environmental and human health results sooner
 - Protect consumers against increases in electricity rates

The Clear Skies Path to Environmental Protection

- Clear Skies streamlines cumbersome requirements and substantially reduces the regulatory burdens on states
 - Clear Skies would retain the health-based programs under the Clean Air Act while strengthening a proven, mandatory market-based approach and reducing reliance on complex, less efficient requirements.
- Clear Skies maintains energy diversity, energy security, and continuing the trend of lower electricity prices
 - Clear Skies would deliver certainty and efficiency, achieving environmental protection while supporting economic growth.
- Clear Skies provides dramatic benefits for public health
 - Every year, beginning with passage and growing to approximately \$93 billion by 2020.
 - Every year, beginning with passage and reaching tens of millions of dollars in saved health care costs from reduced hospitalizations and emergency room visits alone.
- Clear Skies makes great strides to help the environment
 - Clear Skies would improve visibility in national parks and wilderness areas; reduce nitrogen loads to the Chesapeake Bay and other waters along the East and Gulf Coasts; help lakes, streams, & forests recover from acid rain damage; and reduce mercury in the environment.

Clear Skies Sets a Firm Timeline for Emission Reductions

2004: The NO_x SIP call (summertime NO_x cap in 19 Eastern States + D.C.)

2004

The existing Title IV SO₂ cap and trade program provides a mechanism and an incentive to begin reductions upon enactment of Clear Skies years before regulatory action under the current Act.

2008: Clear Skies NO_x Phase I (2.1 million ton annual cap assigned to two Zones with trading programs)

2008

2010: Clear Skies Hg Phase I (26 ton annual cap with a national trading program)

2010

2010: SO₂ Phase I (4.5 million ton annual cap with a national trading program)

2018: Clear Skies NO_x Phase II (1.7 million ton annual cap assigned to two Zones with trading programs)

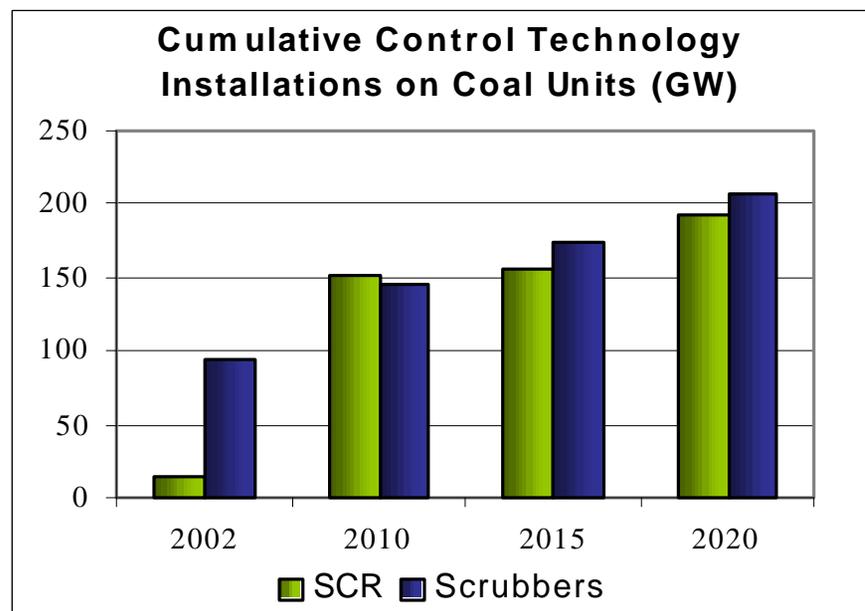
2018

2018: Clear Skies Hg Phase II (15 ton annual cap with a national trading program)

2018: Clear Skies SO₂ Phase II (3.0 million ton annual cap with a national trading program)

Clear Skies' Design Limits Financial Impacts and Encourages Multi-Pollutant Technologies

- Caps and timing allow for steady implementation, encourage multi-pollutant technologies, and facilitate financing of necessary pollution control investments
 - Of the \$124 billion of projected capital requirements for generation units over the 2005-2020 period, only \$28 billion will be for pollution controls.
 - Over half of the incremental capital costs of Clear Skies are after 2010.
- Generation portfolio would not dramatically change
 - In 2020, 44% of all electricity generation would still come from coal.
 - No coal plants would retire due to Clear Skies.
 - The certainty and planning horizon would allow the power industry to build and bring on-line new clean coal plants.

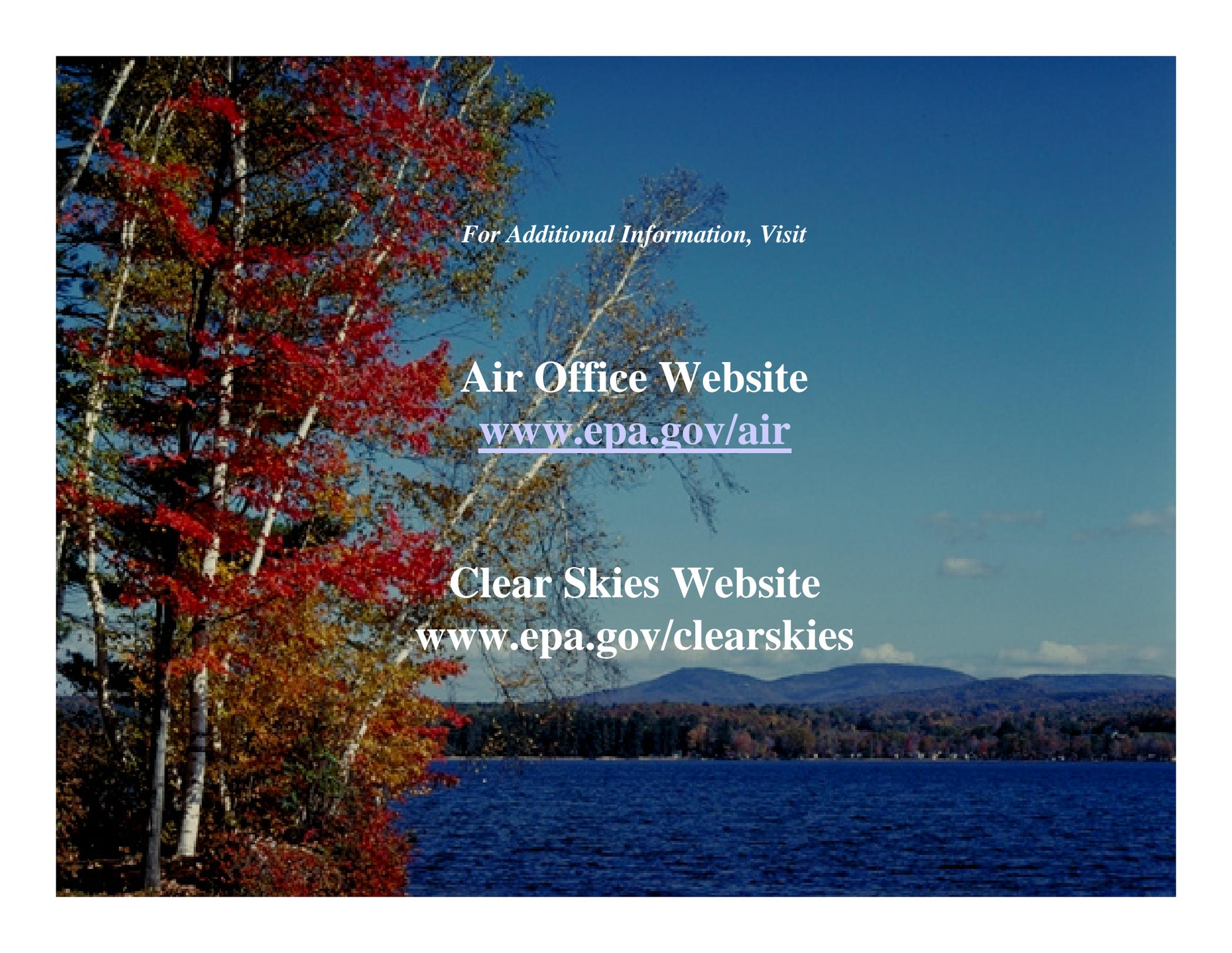


The Outlook for Multi-Pollutant Legislation

- Enactment of multi-pollutant legislation has many advantages to all stakeholders:
 - Immediate and long-term health and environmental benefits
 - Less burden on State and local governments
 - Lower costs for industry and consumers
- The 108th Congress has a unique opportunity to reduce the electric power industry's emissions and improve the cost-effectiveness of environmental policy.
- The Administration is committed to working with Congress to pass multi-pollutant legislation.

With or Without New Legislation, EPA and States Should Work Together on Power Industry Compliance

- EPA appreciates that states have and can provide innovative ways to finance environmental controls
 - Several States require pass through of necessary pollution controls into the rate base
 - Other States have developed new approaches to covering pollution control costs. A very good recent example: North Carolina Clean Smokestacks Act
- EPA has begun working with NASEO, ECOS, and STAPPA to develop and share information regarding how we can assist the power industry in meeting Clean Air Act obligations
 - Appreciate NASEO's role in getting this effort underway
 - Look forward to future collaboration



For Additional Information, Visit

Air Office Website

www.epa.gov/air

Clear Skies Website

www.epa.gov/clearskies