

UTILITY MACT – IMPACT AND COMPLIANCE STRATEGY

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September 9, 2010



Where We Are

- EPA working on MACT standards for all HAPs under CAA §112(d)
- Consent decree: EPA to propose rule by March 16, 2011, final rule by November 16, 2011
- Existing units not subject to §112(j) MACT hammer
- New units need to obtain case-by-case MACT limits: §112(g)
- State mercury emission limits remain in place if they were promulgated under State law (20 states)
- \$97 million ICR completed September 4

MACT: CAA Section 112(d)

- New sources must adopt at minimum “the **emission control that is achieved in practice** by the best controlled similar source, as determined by the Administrator.”
- Existing sources (with certain exceptions) must adopt emission controls equal to the “average emission limitation achieved by the **best performing 12 percent** of the existing sources.”

MACT: Compliance Dates

- Normal MACT timing: 3 years after final rule effective date – 112(i)(3)(A)
- EPA Administrator (or State approved Program) can grant 1 year extension if more time “necessary for the installation of controls” – 112(i)(3)(B)
- Presidential exemption: not more than 2 years if President finds 1) technology to implement standard is not available and 2) in national security interests to do so. Additional 1 year extensions available – 112(i)(4)

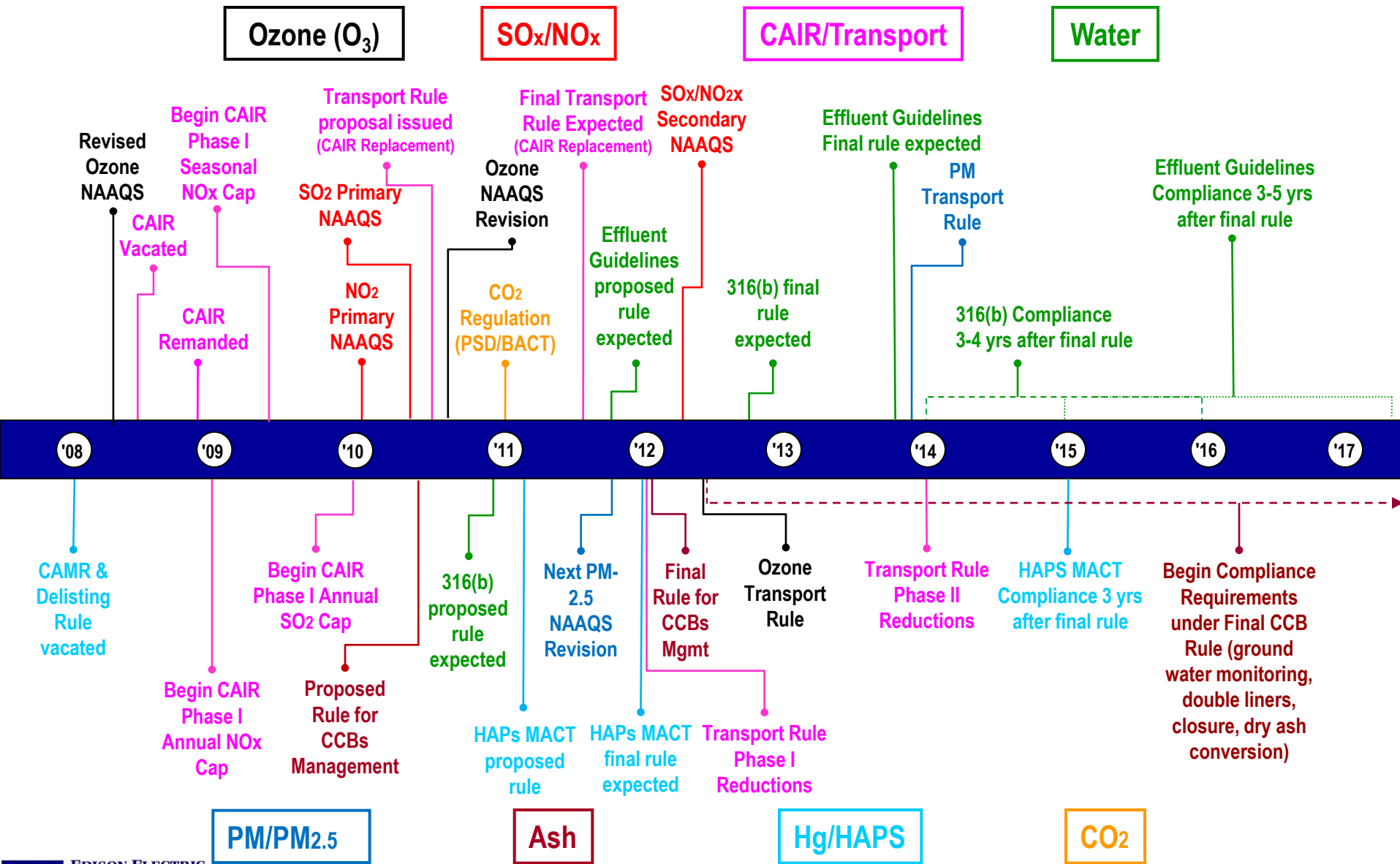
MACT Rulemaking: Issues

- What HAPs will be included: surrogates?
- With multiple HAPs, what is “best performing unit(s)”
 - “Franken-plant” approach
- Subcategorization: “achieved” vs. “achievable”
- Monitoring concerns
 - demonstrating compliance with very low emission limits
- Inclusion of variability, non-detects in setting MACT limits
- Alternative % reduction limits; alternative health-based limits for non-carcinogens

Prelude: Industrial Boiler MACT

- MACT = FF + carbon injection + wet FGD + good combustion practices
- 11 subcategories of boilers, process heaters based on design of the various types of units
- Establishes limits for:
 - Mercury
 - Dioxin
 - PM (surrogate for non-mercury metals)
 - HCl (surrogate for acid gases)
 - CO (surrogate for non-dioxin organic air toxics)
- Limits based on fuel type for PM, HCl, Hg; by fuel type, boiler design for CO, dioxin

Possible Timeline for Environmental Regulatory Requirements for the Utility Industry



Industry Challenges

- Minimize economic impacts to consumers
- Continue environmental improvements
- Maintain system reliability
- Maintain fuel diversity options
- Obtain access to capital and cost recovery
- Negotiate myriad political landscapes

Industry's Predicament

- Have to comply with pending EPA regulations on air (SO₂, NO_x, HAPs, etc.), water, and coal ash on or around 2015
 - Will require retrofit, retirement or replacement of substantial portion of existing coal fleet in short period of time
 - Could impact reliability; need to assess feasibility; regional differences
- Could cost up to \$200 billion/year by 2015
 - Industry already has capital expenditures of \$80 billion annually
 - Can it be raised? At what cost?
- Need carbon policy or face possibility of stranding investments
 - Dramatically changes economic outlook and impacts on coal fleet
 - Implementation of EPA regulation of stationary sources begins in 2011
 - Regulation is less certain than legislation; litigation likely
- Need to resolve to help smooth the transition of current coal fleet
 - Need planning and investment certainty to meet future demand; ensure industry can meet regulations while maintaining system reliability

The Next 10 Years Are Critical

- Need better coordination within EPA on air, water and waste rules; carbon too
- EPA coordination with sister agencies
- New technologies need to be encouraged (and funded), and phased in logically
- Implementation schedule must factor in material and labor needs, retrofit windows
- Need to expedite consideration of permits