

# Worldwide Pollution Control Association

WPCA-Entergy  
“Increasing Energy Efficiency of Existing Units” Seminar  
January 22, 2014

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# Clean Air Act Section 111(d): Existing Source Performance Standards

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WPCA/Entergy Seminar  
January 22, 2014*

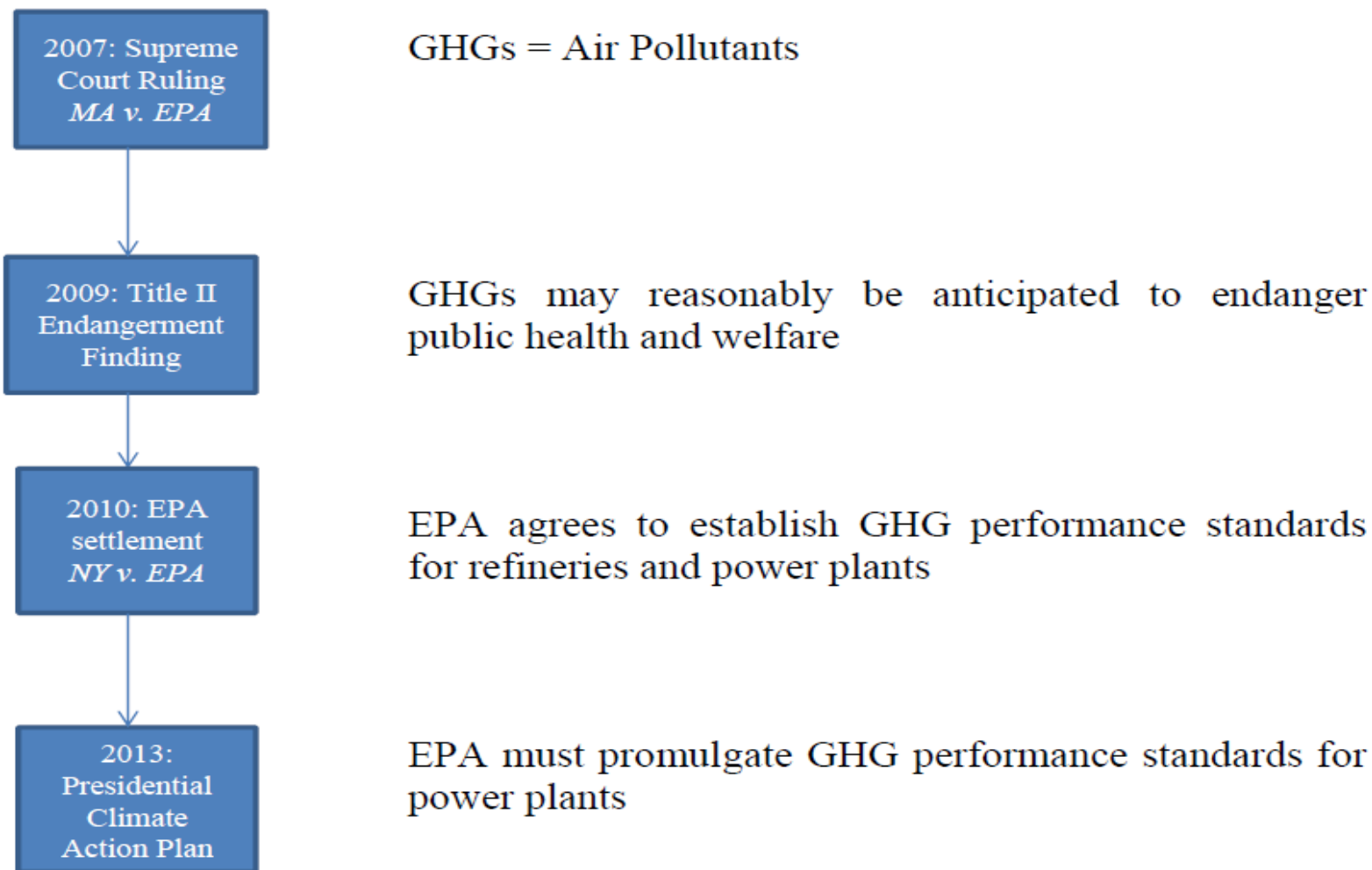
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# Key Drivers of Existing Source Standards

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## Presidential Climate Action Plan

- **Regulation of GHG Emissions**
  - NSPS and ESPS standards prioritized
  - \$8 billion in loan guarantees for innovation
  - Renewable energy initiatives on federal property
  
- **Adaptation & Preparation**
  - Infrastructure hardening and study
  - Agricultural science; forest/rangeland restoration
  
- **International Efforts**
  - Multilateral and bi-lateral agreements
  - Stop most US funding for new coal plants abroad



# Key Drivers of Existing Source Standards

## Presidential Climate Action Plan

- **Standards for "Future Power Plants"**
  - EPA proposed NSPS on Apr. 13, 2012
  - EPA re-proposed NSPS on Sept. 20, 2013
  - EPA must finalize NSPS in a "timely fashion"
  
- **Standards for "Modified, Reconstructed, and Existing Power Plants"**
  - EPA must issue "standards, regulations, or guidelines"
  - EPA directed to use authority under Sections 111(b) and 111(d)
  - EPA to "build on State efforts to move toward a cleaner power sector"

# Key Drivers of Existing Source Standards

## Section 111(b)

- Applies to "new" sources within a source category
- Requires EPA to establish "Federal standards of performance"

## Section 111(d)

- Applies to existing sources within a source category
- Requires EPA to: establish a procedure for States to submit a plan to EPA that is "satisfactory"
- Requires States to: (1) establish standards of performance and (2) to implement and enforce such standards

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# Section 111(d) Implementation



# Key Drivers of Existing Source Standards

## Section 111(d): Step 1

- EPA establishes guidelines to guide States in developing a plan for setting performance standards and implementing Section 111(d)

## Section 111(d): Step 2

- States establish performance standards and implementation/enforcement mechanisms
- States draft and submit plan to EPA for approval

# Implementation of Section 111(d)

- **Key Issue: Scope of EPA Authority Under Section 111(d)**
  - Section 111(d) requires EPA to promulgate "a procedure similar to that provided under section 7410" of this title
  - EPA has interpreted Section 111(d) to allow the Agency to issue substantive guidelines for states to follow in developing SIPs, but not a national standard
  - EPA cannot regulate beyond "covered sources," but in past Section 111(d) rulemakings States permitted to depart from EPA guidelines
  - Federal Implementation Plan likely to be limited to requiring actions by covered sources

# Implementation of Section 111(d)

- **Key Issue: "Best System of Emissions Reductions"**
  - Standard of Performance Means: Standard that reflects the degree of emission limitation achievable through the application of the best system of emission reduction which the Administrator determines has been adequately demonstrated
  
  - Must take into account:
    1. Cost of achieving reductions
    2. Any nonair quality health and environmental impacts
    3. Energy requirements
    4. \*The remaining useful life of an existing source

# Implementation of Section 111(d)

## Source-Based Approach

Least flexible, but potentially least stringent and quickest SIP process

### "Inside The Fence"

- **Unit specific actions**
  - heat-rate improvements, unit operating limitations, emissions averaging, fuel switching, retirement
- **Bubbling of emissions at generating station**

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## System-Based Approach

Most flexible, but potentially more stringent and longer SIP process

### "Outside The Fence"

- **Inter-plant trading**
  - trading within a single owners fleet within a state, across units within a state, across states
- **Actions not occurring at generating units**
  - actions that displace or lower output at covered units, such as renewable portfolio standards, conservation investments, transmission and related wires upgrades, uprates of non-affected units, offsets.

# Implementation of Section 111(d)

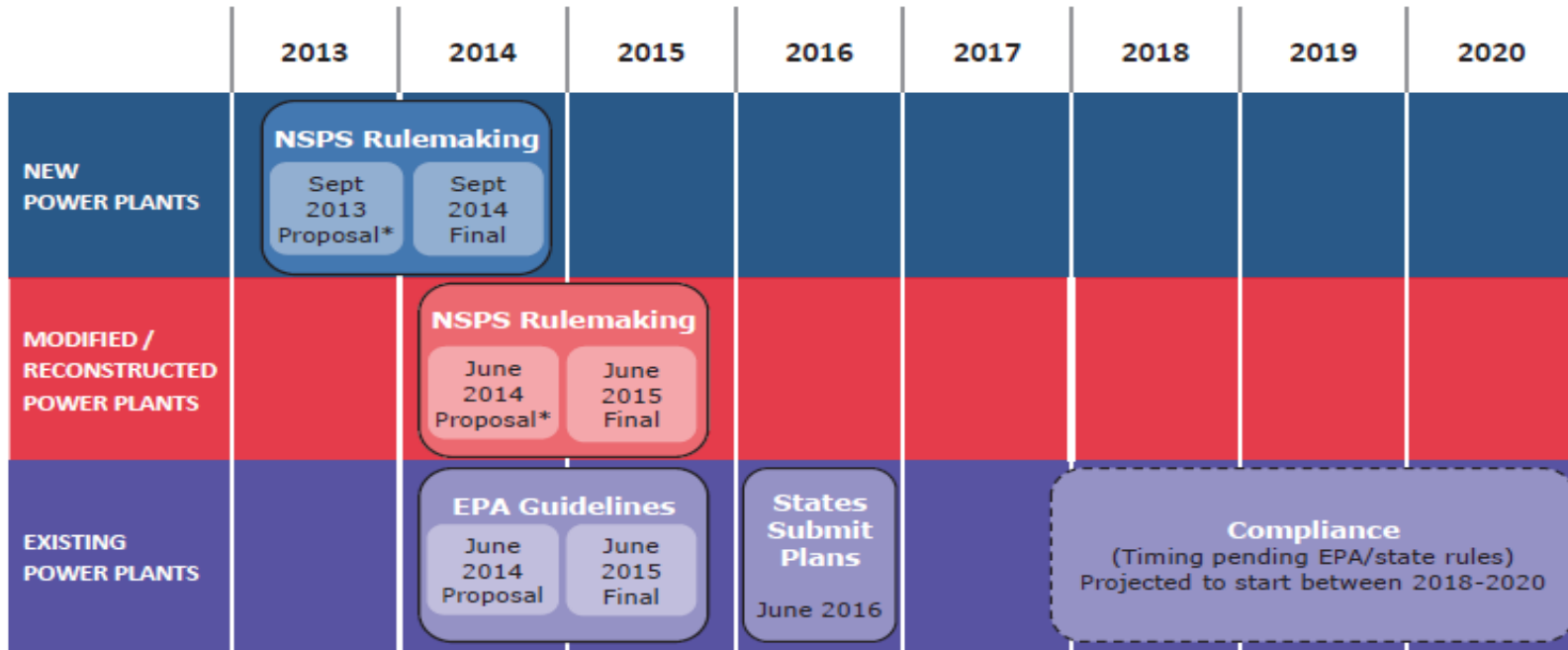
- **Key Issue: Criteria for Approving SIPs**
  - States are charged with determining BSEER for existing sources, but it is unclear what degree of authority EPA has to second guess State determinations
  - EPA has previously stated that a SIP may allow application of less stringent emissions standards and/or longer compliance schedules due to:
    - 1) Unreasonable cost of control resulting from plant age, location, or basic process design;
    - (2) Physical impossibility of installing necessary control equipment; and
    - (3) Other factors specific to the facility (or class of facilities) that make application of a less stringent standard or final compliance time significantly more reasonable
  - EPA approval or disapproval of a SIP likely to be challenged in "local" Federal Circuit Court of Appeals rather than the D.C. Circuit

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# Implementation Timeline

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## PROJECTED TIMELINE OF POWER PLANT GREENHOUSE GAS REGULATIONS



\*Effective upon promulgation  
 NSPS: New Source Performance Standard

Source: Dates from June 25, 2013 Presidential Memorandum – Power Sector Carbon Pollution Standards; and projected from regulations under section 111 of the Clean Air Act.

# Implementation Timeline

- **Key Issue: One year to submit SIP to EPA**
  - EPA is instructed to require States to submit SIPs "no later than June 30, 2016" -- just one year after EPA issues the final guidelines
  - Even if States have maximum authority to implement Section 111(d), may not have the time to complete review and submit plan, much less develop more complex, flexible options
- **Key Issue: Endangerment finding for power plants**
  - *Utility Air Regulatory Group v. EPA*
  - On February 24, 2014, the Supreme Court will hear arguments challenging EPA's determination that its Title II Endangerment Finding triggered CAA requirements for stationary sources -- like power plants
  - EPA could be required to make an endangerment finding specifically for stationary sources before regulating GHGs from power plants



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Questions?

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