

Clean Power Plan

The proposed existing power plant carbon regulations

Cibo Energy and Environmental Committee Meeting

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Presentation Overview

- Two parts –
 - **Discuss the Clean Power Plan Proposed Rule**
 - Heads up on process
 - **Implications of recent court decision – HCCA v. USFS**
 - The social cost of carbon protocol - Interagency Working Group on Social Cost of Carbon, Technical Support Document (February 2010)

Proposed Rule

On June 2, 2014 EPA proposed the Clean Power Plan (CPP) with the goal of reducing CO₂ emissions from existing power plants by 30% of 2005 levels by 2030

Comments due by October 16, 2014.

Docket ID - EPA-HQ-OAR-2013-0602...

Understanding the CPP

- Broadest application of 111(d) to-date.
 - Section 111(d) - standards of performance are required for existing sources if two criteria are met: (1) a category of sources is determined to require NSPS; and (2) the regulated pollutant is neither a HAP nor a criteria pollutant.
- Power plants
- Intensity-based (lb/MWh)
- Flexibility to states (SIP)
- Challenges in integrating proposed rule with existing programs

Reducing CO₂ through SIPs

EPA proposed:

“...state-specific rate-based goals for carbon dioxide emissions from the power sector, as well as guidelines for states to follow in developing plans to achieve the state-specific goals”

Two key parts: goals and guidelines to develop plans

- Goals are intensity-based (lb/MWh)
- States are asked to take a systematic approach in developing plans, incorporating direct controls, demand-side measures, etc.

Development of State Goals and Definitions

BSER = Best System of Emission Reduction

- BSER are used to set guidelines for states to achieve reductions under that system
- BSER does take into account costs, non-AQ related impacts, and energy requirements

“Affected EGU”:

- *Built on or before 8 January 2014*
- *A steam generating, IGCC, or combustion turbine with a baseload rating of > 73MW (250 MMBtu/hr) and supplying 1/3 or more of its output to the grid.*

BSER and Building Blocks

“Building Blocks” are used to develop BSER and future state plans

1. Fossil Fuel combustion efficiencies at affected EGUs
2. Use more “lower-emitting” power facilities (*i.e.*, use more combined cycle NG facilities when possible)
3. Use more zero and low-emitting power sources (*i.e.*, expand renewables and pair them with alternative fuels, including nuclear)
4. More efficient use of electricity (*i.e.*, demand-side measures)

EPA’s proposed BSER combines all four building blocks

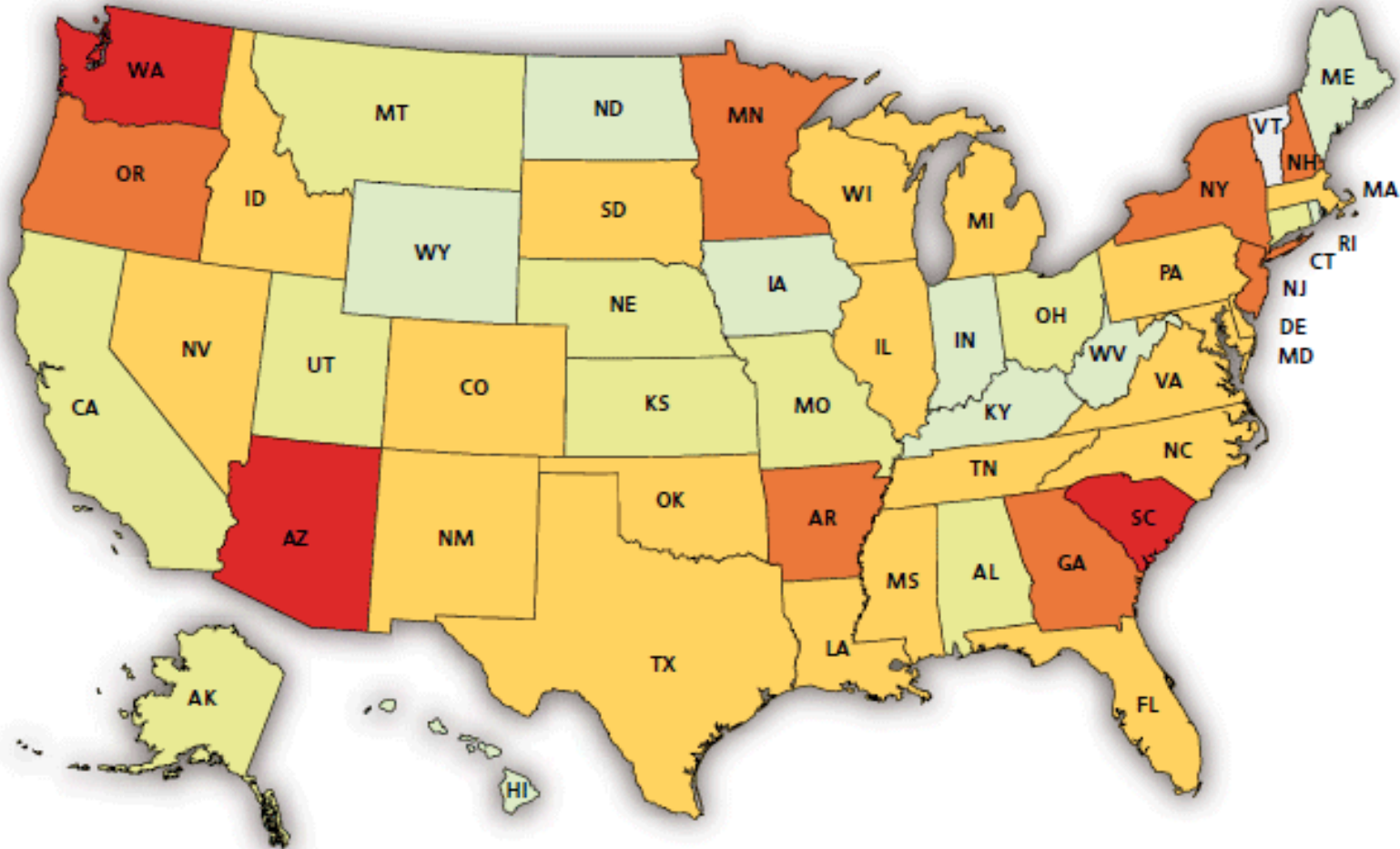
Goals Developed for Each State

EPA has stated the following:

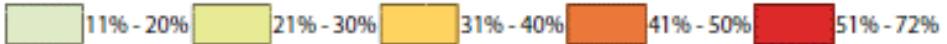
- Proposed goals based on “a consistent national formula and calculated using specific information about the state or its region’s individual power profile”
- Goals took into account existing/already announced changes to generation fleet (such as coal-fired generation already scheduled to retire)
- No mass-based reductions are proposed: just intensity-based. While states can choose to convert their state goals in their state-specific plans to a mass-based limit, the EPA targets are to achieve intensity-based power generation goals.

Goals by State

EPA's proposed carbon emissions rates for existing power plants (lbs/MWh)



Percent change (2012-2030)



Current State Programs Addressing GHG

- Five General Categories:
 - Renewable Portfolio Standards (RPS) and end-use efficiency programs demand-side management,
 - Averaging rate-based standard across facility, source category, state, or region,
 - Planned retirements of coal generation (codified in Colorado)
 - Utility-only markets,
 - Markets that include source categories in addition to utilities.

Development of State Plans

States need to determine emission performance levels equivalent to the CO₂ goals and develop a SIP:

- Command and Control (unit by unit)
- Averaging (fleet-wide, statewide...)
- Cap-and-Trade (statewide, regional...)

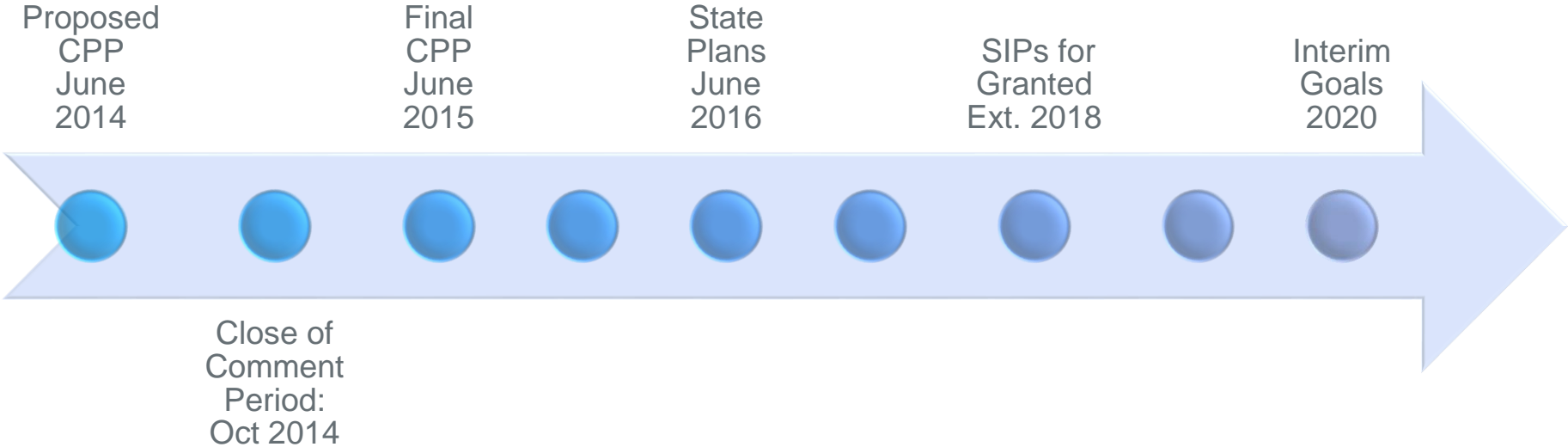
States are encouraged to propose individual and collaborative measures, combining specific measures and strategies both within their state and in partnership with neighboring states.

Short term: what do our members do now...

Comment, Strategize and Implement:

- What happens to power generators will come around to industrials
- Comment period end on October 16, 2014
- Develop strategies to comply with current regulatory impacts (Boiler MACT, SO₂ standards, PM_{2.5} guidance, etc.) with an eye on possible benefits to opt-in to a state plan.
- Work with state or regional groups to integrate existing programs and maximize benefit.

The CPP Timeline



Discussion

Questions, Comments, Discussion

Implications of Court Decision - HCCA v. USFS

- US District Court (Colorado)
- Civil Action - High Country Conservation Advocates v. US Forest Service
- Issue – Adequacy of NEPA GHG social impact due to expansion of coal mining as a result of the Colorado Roadless Rule (access road construction)
- Decision – FEIS failed to adequately quantify GHG emissions (connected action), and quantify the social impacts of the GHG emissions.
- The social cost of carbon protocol - **Interagency Working Group on Social Cost of Carbon, Technical Support Document (February 2010)**

Implication for GHG BACT

- Plaintiff claimed that there is “no tool” for quantifying the social cost of carbon,
- The Court corrected the plaintiff and identified the **Interagency Working Group on Social Cost of Carbon, Technical Support Document**,
 - Once a tool for rule-making, now potentially required for impact assessment and permitting?
- This creates a link to GHG BACT.....if the tool is available, then use it.

Discussion

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