The 111(d) Proposal: State Options and Responses - What State Legislators and Staff Should Know

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Overview

- Under Clean Air Act (CAA) Section 111(d) each state, with assistance from EPA, develops “standards of performance” for existing stationary sources and an implementation plan to achieve those standards.

- “Standard of performance” is “the degree of emission limitation achievable through the application of the best system of emission reduction [BSER] [...] (taking into account the cost of achieving such reduction)” 40 CFR §60.21(e).

- **EPA establishes a goal for every state**
  - Based on a consistent national formula, calculated with state and regional specific information.
  - EPA identified four sets of measures – or “building blocks” – that together make up the best system for reducing carbon pollution.

- **States Choose How to Meet their Goals**
CO₂ EMISSION RATE REDUCTION TARGETS

State targets range from 215 - 1,783 lb-CO₂/MWh
<table>
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<th>Building Block</th>
<th>Strategy EPA Used to Calculate the State Goal</th>
<th>Maximum Flexibility: Examples of State Compliance Measures</th>
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<tr>
<td>1. Make fossil fuel-fired power plants more efficient</td>
<td>Efficiency Improvements</td>
<td>Efficiency improvements Co-firing or switching to natural gas Coal retirements Retrofit CCS (e.g., WA Parish in Texas)</td>
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<td>2. Use lower-emitting power sources more</td>
<td>Dispatch changes to existing natural gas combined cycle (CC)</td>
<td>Dispatch changes to existing natural gas CC</td>
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<td>4. Use electricity more efficiently</td>
<td>Demand-side energy efficiency programs</td>
<td>Demand-side energy efficiency programs Transmission efficiency improvements Energy storage</td>
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Power plants are the largest source of carbon pollution in the U.S., accounting for roughly one-third of all domestic greenhouse gas emissions.

U.S. GREENHOUSE GAS POLLUTION INCLUDES:

- **CARBON DIOXIDE (CO2)** 82%
  - Enters the atmosphere through burning fossil fuels (coal, natural gas, and oil), solid waste, trees and wood products, and also as a result of certain chemical reactions (e.g., manufacture of cement).

- **FLUORINATED GASES** 3%
  - Hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride are synthetic, powerful greenhouse gases that are emitted from a variety of industrial processes.

- **NITROUS OXIDE (N2O)** 6%
  - Emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.

- **METHANE (CH4)** 9%
  - Emitted during the production and transport of coal, natural gas, and oil as well as from landfills.

TOTAL U.S. GREENHOUSE GAS EMISSIONS BY ECONOMIC SECTOR IN 2012:

- 32% ELECTRICITY
- 28% TRANSPORTATION
- 20% INDUSTRY
- 10% AGRICULTURE
- 10% COMMERCIAL & RESIDENTIAL
- 3% FLUORINATED GASES
- 82% CARBON DIOXIDE (CO2)

SOURCE: EPA
End Goal - Nationwide reduction of CO2 emissions from the power sector by approximately 30% from 2005 levels by 2030

- Proposed Guidelines: June 2014
- End of comment period: December 2014
  - 3+ million public comments
- Final Guidelines: Summer of 2015 (expected)
- State Plans due: Summer of 2016 (expected)
- Proposed timing of extensions to submit a complete plan, if justified and supported:
  - Individual state plans: a one-year extension – summer of 2017
  - Multi-state plans: a two-year extension (summer of 2018); would submit a progress report during summer of 2017
Views from DC and the States

At the federal level:

- Likely most significant element of Obama’s climate legacy
- “Five years ago, I pledged America would reduce our carbon emissions in the range of 17 percent below 2005 levels by the year 2020. America will meet that target.” – President Obama at U.N. Climate Change Summit in New York, Sep. 2014
- “One of the main focuses of the White House right now is to make sure that the administration is coordinated, so that the entire breadth of the climate action plan can be basically realized before the president leaves office” – EPA Administrator McCarthy, March 2015
- Call for temporary halt – House Energy and Commerce Committee working on legislation to delay Clean Power Plan implementation

At the state level:

- Diversity among & within states – comments from Governors, AGs, PUCs, secretaries of energy & environment
- As of April 20, 2015 – legislatures in 31 states introduced 78 bills or resolutions related to the Clean Power Plan and power plants carbon dioxide emissions regulations
State Reactions to EPA Regulations: 2015 Bills
As of April 20, 2015

LEGEND
- Enacted legislation
- Introduced legislation
- Combination of enacted legislation and introduced legislation

Source: NCSL
State Reactions to EPA Regulations: 2015 Resolutions
As of April 20, 2015

LEGEND

- Green: Adopted resolution
- Light Green: Introduced resolution
- Dark Green: Combination of legislation adopted and introduced resolutions

Source: NCSL
Reality can be so complex that equally valid observations from differing perspectives can appear to be contradictory.
"It’s funny how two intelligent people can have such opposite interpretations of the tax code!"
Legal Challenges

**CAA 42 U.S.C. §7411:**
- EPA cannot regulate any air pollutant emitted from a source category that is already regulated under CAA §112 – stationary power plants are already regulated
- EPA’s methodology fails
  (1) to establish that its proposed BSER meets CAA legal requisites
    - EPA cannot use an “outside-the-fence” approach to regulate facilities outside the regulated source category, i.e. limiting power plant emissions by using more renewable energy is impermissibly “outside the fence”
  (2) to show how the building blocks taken together demonstrate that the standard would be adequately demonstrated and achievable
    - Under CAA §111(d) standards of performance for existing sources must be achievable by these sources

**Constitutional challenges:**
- Fifth Amendment’s due process and takings clauses – retroactive rule that strands investments
- Tenth Amendment and federalism concerns – states, not EPA, are granted the authority to set standard under CAA §111(d) & intrusion of the federal government into areas of states’ decision making power

**In the Courts:**
- Murray Energy Corp., West Virginia v. EPA, 14-1146, U.S. Court of Appeals, District of Columbia
  - Preamble statements constitute final agency action
"This really is an innovative approach, but I'm afraid we can't consider it. It's never been done before."
Responses to Legal Challenges

- **EPA’s legal authority**
  - EPA is required to curb dangerous carbon pollution & regulate greenhouse gases under the CAA
  - Section 112 exclusion in Section 111(d)
    - In 1990, the House and the Senate passed arguably different versions of the amendment to the CAA and the two versions were never reconciled
    - EPA has consistently construed this Section 112 exclusion in Section 111(d) to pertain to air pollutants, not entire source categories
    - Only the same pollutants from the same source cannot be regulated under both Sections 112 and 111(d)

- **EPA’s “outside the fence” approach** - nothing in Section 111 limits EPA to considering measures implemented at the source itself
  - The term “best system of emission reduction” points toward a broader perspective
  - EPA included system-based measures in its 1995 standard for existing municipal waste combustors (MWCs)
  - A system-based approach fits the power sector even better than it fit MWCs – power interdependent grid-linked system

- **Flexibility** - shield from a challenge under the Tenth Amendment
  - EPA’s proposal would afford maximum flexibility to the states in meeting their share of emissions reductions
  - Only if a state fails to send EPA a satisfactory plan – or any plan at all – will EPA step in with its own plan
“The Clean Power Plan is not, as its opponents argue, an unprecedented approach that risks economic calamity [...] Instead, it is just another example of EPA doing its job to ensure that polluters account for the cost of their pollution in a manner that will result in substantial net economic benefits to the public” Richard L. Revesz, the Lawrence King Professor of Law and Dean Emeritus at the New York University School of Law

**EPA’s recent wins:**

- April 2014 – The U.S. Court of Appeals for the District of Columbia Circuit said EPA acted reasonably in promulgating its 2012 Mercury and Air Toxics (MATS) rule
  - The first federal limit on the amount of these types of toxic air pollutants - nearly every aspect of the regulations was challenged
  - Power plants have already started to make the necessary changes to comply with the rule
- Also in April 2014 – The Supreme Court upheld the Cross-State Air Pollution Rule (CSAPR) rule regulate air pollutants crossing state lines
  - EPA maintains authority to regulate nitrogen and sulfur emissions from coal plants that crosses state lines
  - 28 states in the East, Midwest, and South must cut back on sulfur and nitrogen emissions from coal-fired power plants that “contribute significantly” to air problems in other states
- The Supreme Court upheld EPA’s powers to regulate greenhouse gases (GHGs) under the CAA three times
  - In 2007, *Massachusetts v. EPA* – GHGs are "air pollutants" under the CAA and EPA has to come to a science based conclusion as to whether GHG pollution causes or contributes to an endangerment of public health and welfare
  - In 2014, *Utility Air Regulatory Group v. EPA* – the more than 100 lawsuits challenging EPA’s prior round of greenhouse gas regulations culminated in a Supreme Court decision that left them all standing, except for one provision (tailoring rule) that applied to only three percent of stationary source emissions
    - In all of these cases, the Supreme Court cast aside vigorous objections to the scientific findings that human activities are contributing to climate change, and reaffirmed EPA’s authority.
Some critics, including Senate Majority Leader Mitch McConnell, argue that states should opt out of the regulatory process and refuse to submit a plan. The movement’s slogan is “Just Say No”

States may wish to consider possible consequences if EPA adopts a mandatory Federal Implementation Plan (FIP) for that state instead

- EPA plans to release a draft FIP this summer

- At least in the short term, a state's ratepayers could fare worse under a FIP than under a state-crafted compliance plan
  - States are more familiar with pollution sources in their jurisdiction and have better information about their operations and reduction opportunities
  - EPA is not as well positioned to identify and adopt a mix of responsive measures that would minimize costs
  - States working harder, earlier will likely realize more flexibilities and savings, including limited or broad interstate trading further reducing burden and cost
State Plans and Enforceability

There are two main compliance options, and a possible third, from which states can choose when drafting 111(d) state-plans

(1) **Direct Emission Limit Approach**
- Electric Generating Units (EGUs) would be responsible for achieving the entire performance standards, with affected EGUs subject to federally enforceable requirements

(2) **Portfolio Approach**
- State plan would include emission limits for affected EGUs along with other enforceable measures that reduce CO2 emissions from affected EGUs
- Obligations on non-EGU entities would still be federally enforceable through incorporation into the federally approved state plan – both the emission limits imposed on EGUs and the additional measures would be enforceable by the federal government
- EPA noted that “a plan that assigns responsibility to affected entities other than affected EGUs may be more challenging to implement and enforce than a plan with requirements assigned only to affected EGUs”

(3) **A “State Commitment” Approach – very questionable**
- State requirements for entities other than affected EGUs would not be components of the state plan – not federally enforceable
- Instead, “the state plan would include an enforceable commitment by the state itself to implement state-enforceable (but not federally enforceable) measures that would achieve a specified portion of the required emission performance level on behalf of affected EGUs”
- **Doubts about this approach remain**
Long tradition - multi-state compliance approaches have reduced air emissions under the CAA (e.g. the Ozone Transport Region trading program for nitrogen oxides (NOx), the NOx Budget Trading Program under the NOx SIP call, etc.)

CO2 is particularly well suited for regulation under a broad regional or multi-state trading system because CO2 does not have localized effects.

Expanding the number of potential reduction opportunities, multi-state compliance programs can reduce overall program costs by capturing the most cost-effective emission reductions.

- Generators operating in multiple states might reduce compliance costs by taking advantage of the lowest-cost reduction opportunities across their generating fleet.
- A multi-state compliance program provides greater flexibility to the electric system.
- A multi-state compliance program may reduce market distortions resulting from a patchwork of individual state programs – the electric system and markets operate across state borders.
- It may be more cost-effective to reduce generation from a power plant in one state, and increase generation from a more efficient plant in another state.
- A multi-state compliance program may reduce the administrative costs of the program – states can pool their resources.
Good Resources

- Bipartisan Policy Center - http://bipartisanpolicy.org/
- EPA’s Website - http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule
- Center for the New Energy Economy - http://cnee.colostate.edu/
- Nicholas Institute, Duke University, Climate & Energy – http://nicholasinstitute.duke.edu/climate
- ACOEL Memo on CAA Section 111 - https://www.dropbox.com/s/t231ej0orvl5x5o/Legal%20Background%20on%20CAA%20111%28d%29.pdf