

Legal Perspectives on Using Section 111(d) to Regulate Existing Power Plants' Carbon Emissions

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Goal: A flexible approach designed to fit the power system under 111(d).

- Achieve significant CO₂ emissions reductions.
- At reasonable costs by encouraging all cost-effective reduction options including:
 - Source-specific emission reductions plus shifting dispatch to cleaner sources (including renewables, low-emitting generation), transmission efficiency, end-use energy efficiency.
- Respect 111(d)'s state-based structure, with flexibility to fit with electric system structure.
- Enhance regulatory certainty.

So, may EPA:

- Establish the minimum performance standards that state plans must meet?
- Set “system-based” standards that allow covered sources within the state to comply using a range of tools?
- Allow states to join multi-state groups or trade credits between state?

Tentative answers:

EPA to set regulations establishing a SIP-like procedure under which:

- “each State shall submit to the Administrator a plan which (A) establishes standards of performance for any existing source ... to which a standard of performance would apply if such existing source were a new source.” 111(d)(1)
- Administrator approves “satisfactory” plans and establishes Federal plans where states do not submit “satisfactory” plans. 111(d)(2)
- EPA issued Emissions Guideline regulations in 1975.

Does 111(d) have substantive requirements?

- A plan is not “satisfactory” unless it includes valid “standards of performance.”
 - Standard of performance means “a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction ...) the Administrator determines has been adequately demonstrated.” 111(a)(1)
 - Similar definition in Emissions Guideline regulations. 40 C.F.R. 60.21(e), 60.22(b)(5).

So the Emissions Guideline serve as:

- **Template for approvable plans**: Signals that EPA will approve a state plan that adopts the standard and compliance provisions as set forth in the Guideline.
- **Advance notice of federal plan**: If a state fails to submit a satisfactory plan, EPA would implement a federal plan based on the template.

Emission Guideline can reasonably define a “system-based” standard:

- That each covered source may meet on its own;
- That two or more covered sources may meet by averaging their emission rates; or
- That a covered source may meet by acquiring qualifying credits from eligible activities within the electric system (including non-emitting generation and demand-side energy saving) that displace emissions from covered sources.

Emissions Guideline can fairly differentiate among states:

- Given 111(d)'s state-by-state implementation structure, EPA can reasonably allow states different starting points.
 - The Guideline could base standards a formula that recognizes the power plant mix each state starts with.
 - The formula could start from the average emission rate of the fossil-fueled power plants in each state in a common baseline period.
 - The standard would require percentage improvements from each state's starting point.

Emissions Guideline can build in flexibility:

- Standard level would be based on flexible compliance options.
- States may choose to allow averaging and crediting within the state.
- Two or more states may agree to allow averaging and crediting between them.

Emissions Guideline also serves as the yardstick for alternative plans:

- The Guideline would also be the yardstick to evaluate state plans of different design – e.g., a plan that limits power sector mass emissions. EPA could approve the plan if the state demonstrates power sector emissions will not exceed those expected under the template.
- States could adopt alternate plans that achieve same or better emissions.
 - Assuming an “emission-rate” standard, states might opt for equivalent “mass-based” plans.
 - Other options (e.g., Colorado).

What about “remaining useful life”?

- 111(d) says states may consider sources’ “remaining useful life” when setting performance standards.
- EPA’s existing regulations interpret that as a variance provision, on the assumption of “source-based” standards.
- A “system-based” standard already accounts for high-cost sources in setting stringency, and already gives states and plant operators flexible compliance options.
- So, a variance provision would be “double-dipping.”