Factsheet: The Clean Power Plan

METROPOLITAN WASHINGTON
Council of Governments

On August 3, 2015, EPA announced the final Clean Power Plan rule. The Plan requires carbon dioxide (CO_2) emissions reductions from existing coal, oil and natural gas power plants in 47 states, including Virginia and Maryland. The District of Columbia has no power plants covered under the rule.

1. Emissions Impacts

Power plants are the largest source of CO_2 emissions in the United States, making up roughly one-third of all domestic greenhouse gas emissions. When the Clean Power Plan is fully in place in 2030:

- Carbon pollution from power plants will be 32 percent below 2005 levels,
- NOx emissions from power plants will be 72 percent below 2005 levels, and
- SO_2 emissions from power plants will be 90 percent below 2005 levels.

2. Climate and Health Benefits

In addition to helping protect from the impacts of climate change, compliance with the Plan will reduce other harmful air pollution, and improve public health. EPA estimates that the Clean Power Plan has public health and climate benefits will be worth from $34 billion to $54 billion per year by 2030, compared to EPA's estimated costs of $8.4 billion. Public health benefits include preventing up to 3,600 premature deaths, 90,000 asthma attacks in children, and 1,700 heart attacks per year by 2030.

3. Emissions Limits

In the final rule, EPA places emissions limits directly on power plants. EPA established uniform national CO_2 emission performance rates for coal, oil and natural gas combined cycle units. EPA rolled up these performance rates into state-wide emissions rate goals (in pounds of CO_2 per MWh produced), and converted this to a mass-based goal (in short tons of CO_2). States may comply based on either the emissions rate goal or the mass goal.

Consistent with section 111(d) of the Clean Air Act, emissions rate goals were determined by looking at the "best system of emissions reduction" (BSER), which EPA determined to include three building blocks:

1. Improve the efficiency (heat rate) of coal-fired power plants,
2. Shift generation from coal to natural gas plants,
3. Shift generation from fossil fuel plants to new zero-emitting energy sources (including renewables and nuclear).

4. State Plans

States may use the measures and approaches they prefer as long as plans achieve the emissions goals. States may submit independent plans or multi-state plans. Multi-state plans are not required to, but may participate in an emission credit trading market. States may submit either:

- Emission Standards Plan: source-specific requirements for all affected power plants, or
- State Measures Plan: may include a mixture of federally enforceable source-specific requirements and non-federally enforceable measures implemented by the state (such as renewable portfolio standards, energy efficiency programs, or emissions trading).

5. Public Engagement and Reliability Requirements
   - States must demonstrate active engagement with the public – particularly low-income, minority, and tribal communities – while formulating their plans.
   - States must consider reliability when developing their plans, and can amend their plans if reliability challenges arise.
   - The Plan includes a safety valve to exempt reliability-critical plants from CO_2 emissions constraints in the case of extraordinary circumstances.

6. Timeline
   - September 2013: EPA proposed CO_2 standards for new sources (regulated under Clean Air Act §111b).
   - June 2014: EPA proposed the Clean Power Plan CO_2 standards for existing sources (under Clean Air Act §111d).
   - August 2015: EPA announced final Clean Power Plan regulations.
   - September 2016: State plans (or extension requests) are due. States may receive up to a 2-year extension.
   - 2022 - 2032: States demonstrate compliance with interim and final emissions guidelines.

7. Incentivizing Clean Energy and Early Action

   The newly created Clean Energy Incentive Program (CEIP) is a voluntary program that will reward early investments in demand-side energy efficiency and renewable energy initiatives that achieve emissions reductions in 2020-2021.
   - Wind or solar projects will receive 1 credit for 1 MWh of generation.
   - Energy efficiency projects in low-income communities will receive 2 credits for 1 MWh of avoided generation.

8. Proposed Federal Plan and Model Rule

   Along with the final regulations, EPA proposed a federal implementation plan that would apply if states do not submit a plan by the deadline, and model rules for mass-based and rate-based cap-and-trade programs for states to consider.
   - The proposed Federal Plan would enforce emissions limits on the affected power plants, either through a mass-based cap on power sector emissions within a state or a rate-based cap that allows trading amongst utilities.
   - EPA is accepting comments for 90 days and will finalize the federal plan and model rules by 2016.

9. Legal Challenges

   Several states and a variety of industry groups have vowed to challenge the rule in court. Some legal experts believe the final version of the Clean Power Plan is better positioned to hold up in court than the original proposal. The additional two years for compliance and phased-in targets also make it more unlikely that a stay would be granted to pause the rule's implementation pending court decision.

Source: http://www2.epa.gov/cleanpowerplan/clean-power-plan-existing-power-plants