Factsheet: Key Changes to the Clean Power Plan



The following describes changes between the proposed and final Clean Power Plan rules:

1. Timelines and consequences

The new plan requires compliance by 2032 (formerly 2030). EPA also published step-wise compliance "glide paths" that phase in emissions performance rates over three time periods: 2022-24, 2025-27 and 2028-29.

- States may define their own steps but must show compliance with an overall interim goal over 2022-29.
- States must show compliance with the final goal over 2030-32.

If states do not file a plan by the deadline, EPA will enforce a federal plan to limit emission from the affected power plants through a cap and trade system – either through a mass-based cap on power sector emissions within a state or a rate-based cap that allows trading amongst utilities. EPA will finalize the federal plan by 2016.

2. Credit for Early Action on Energy Efficiency and Renewable Energy

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 1MWh of avoided generation.

3. Source-specific CO2 Emissions Rates

In the final rule, EPA places the regulatory burden on power plants, establishing one uniform national CO_2 emission performance rate for coal and oil powered units, and another uniform national rate for natural gas combined cycle units. These rates were set by applying the three Best System of Emission Reduction (BSER – see below) building blocks to fossil fuel powered plants within each of the country's three main regional electricity interconnects, averaging the achieved emissions rates for each plant type, and applying the most achievable regional rates to all units of that type nationally.

4. Changes in Best System of Emission Reduction (BSER) Building Blocks

EPA modified three building blocks and removed demand-side energy efficiency from its emissions rate goal calculations to better reflect technical capabilities and market forecasts. As a result of these adjustments, state emissions performance goals fall within a narrower range.

- <u>Building block 1</u>: Improved power plant efficiency. 2.1% to 4.3% heat rate improvement (formerly 6%).
- <u>Building block 2</u>: Shifting generation from higher-emitting coal to lower-emitting natural gas power plants. Assumes that natural gas plants can run at 75% of their "net summer capacity" (formerly 70% of "nameplate capacity"). This change should better reflect real operating conditions.
- <u>Building block 3</u>: Shifting generation to zero-emitting generation sources. Emissions rate calculations do not include existing or under-construction nuclear power or utility-scale renewable energy generation. The final analysis includes more use of new renewable energy than the original proposal, taking into

account recent and projected future reductions in the cost of clean energy technology. New, under construction, or upgrades to nuclear generation can be incorporated into state plans.

• <u>Building block 4</u>: Demand-side energy efficiency. This building block was not used in calculations for the final rule. However, energy efficiency may be included in State Measures Plans.

5. Reliability

- States must consider electrical reliability when developing plans.
- States may amend plans due to reliability concerns if needed.
- The plan includes a safety valve to exempt reliability-critical plants from CO₂ emissions constraints in the case of extraordinary circumstances.

6. State Plan Changes

- States may submit either an "emissions standards" plan that sets requirements for affected power plants, or a "state measures" plan that may include a mixture of source-specific requirements, state policies and demand-side programs. State measures plans must include backstop federally enforceable standards, such as EPA's model rule (see below).
- States may comply based on an emissions rate-based goal, a mass-based goal, or a mass-based + new source complement goal, which streamlines integration with regulations for new power plants. EPA calculated mass-based interim and final emissions targets and new source complements for states. Note that mass-based goals may be more conducive to an emissions trading approach.
- States must define their interim step milestones and demonstrate how the state will achieve the milestones and the interim goal and final goal.
- States may submit independent plans or multi-state plans. Multi-state plans (or other prior agreements) are not required to participate in an emission credit trading market.
- Along with the final Clean Power Plan regulations, EPA proposed model rules for a mass-based and a ratebased cap-and-trade program for states to use or consider.
- States must demonstrate active engagement with the public, particularly low income, minority, and tribal communities, in developing their plans.

			Proposed CPP		Final CPP	
State	Goal Type	2012 Emissions	2030 Goal	Percent Change	2030 Goal	Percent Change
Maryland	Rate	1,870	1,187	-37%	1,287	-31.2%
	Mass	20,171,027	n/a	n/a	14,347,628	-28.9%
Virginia	Rate	1,297	810	-38%	934	-28.0%
	Mass	27,365,439	n/a	n/a	27,433,111	0.2%

State CO2 Emissions Performance Goals in the COG Region

(Rate based goals displayed in pounds CO₂/MWh/year. Mass goals displayed in short tons CO₂)

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