



# EPA's Clean Power Plan: Overview

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- Proposal Basics
- Purpose
- Legal Basis
- BSER “Building Blocks”
- Proposed Rule Requirements



- Name
  - Formal: “Carbon Pollution Emission Guidelines for Existing Stationary Sources; Electric Utility Generating Units”
  - Informal: EPA’s Clean Power Plan (CPP)
- Docket ID No. EPA–HQ–OAR–2013–0602
- Publication:
  - 72 Fed. Reg. 34830
  - June 18, 2014

- **Comments**
  - Due by October 16, 2014
  - Submission methods
    - Email to [A-and-R-Docket@epa.gov](mailto:A-and-R-Docket@epa.gov); reference docket ID in subject line
    - Online docket:  
<http://www.regulations.gov/#!docketDetail;D=EPA-HQ-OAR-2013-0602> (copy and paste; direct link from PDF does not work)
    - Others specified in proposal
- Final promulgation (scheduled): June 2015
- Website: <http://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule>

- “This rule, as proposed, would continue progress already underway to lower the carbon intensity of power generation in the United States. Lower carbon intensity means fewer emissions of CO<sub>2</sub>....”
- “Nationwide, by 2030, this rule would achieve CO<sub>2</sub> emission reductions from the power sector of approximately 30 percent from CO<sub>2</sub> emission levels in 2005.” (President’s goal)
  - Estimate of impact; not how rule measures compliance
  - 2005 is a common point of reference, not the baseline for assessing emission reductions. Baseline = 2012.

- Clean Air Act § 111: Standards of Performance for New Stationary Sources (NSPS)
- Section 111(b) requires EPA to:
  - List categories of stationary sources that EPA finds cause, or contribute significantly to, “air pollution which may reasonably be anticipated to endanger public health or welfare.”
  - Promulgate “standards of performance” for emissions of air pollutants from *new* sources in the listed categories

- Standard of Performance: § 111(a)(1) defines as a standard which
  - Reflects the emission limitation achievable from the “***best system of emission reduction***” (BSER) that
  - Taking cost, non-air quality environmental impacts and energy requirements into account
  - “the Administrator determines has been adequately demonstrated.”

- Section 111(d)
  - Requires EPA on adopting an NSPS to establish a procedure for regulating existing sources that would be subject to the NSPS if they were new.
  - The procedure:
    - Must be similar to the procedure for submitting state implementation plans.
    - Must require states to submit a plan that “establishes *standards for performance*” for covered existing sources.
  - Only applies to certain pollutants. Whether GHGs are covered is disputed.

- Section 111(d) (cont'd)
  - If a state fails to submit a 111(d) plan or EPA disapproves a submitted plan, EPA must establish a plan for the state (similar to FIP under 110(c)).
- NSPS Proposals
  - January 8, 2014 for GHG emissions from new power generators. Final expected in January 2015.
  - June 18, 2014 for modified and reconstructed power generators. Final expected June 2015.

- Proposed BSER is based on “strategies currently being used by states and companies to reduce CO<sub>2</sub> emissions.”
- Strategies include:
  - Measures to reduce the CO<sub>2</sub> *emissions rate* of individual generating units.
  - Measures to reduce the *use* of fossil-fuel fired generating units.

- EPA identified 4 “Building Blocks” (BB) as BSER:
  - BB1: Reduce carbon intensity of generation from coal-fired units through heat-rate improvements.
  - BB2: Shift generation from coal-fired and oil- and gas-fired steam turbines to natural-gas fired combined cycle (NGCC) units.
  - BB3: Increase reliance on renewable energy generation, which has zero CO<sub>2</sub> emissions.
  - BB4: Reduce demand for fossil-fuel fired generation by improving energy efficiency of electricity consumers.

- Rate-Based Goal
  - EPA
    - Established specific set of 4 building blocks reflecting “reasonable rather than maximum possible implementation levels”
    - For each state, calculated an emission rate in 2030 that reflects achievement of this specific set
  - The emission rate is the weighted average rate in lbs CO<sub>2</sub>/MWh expected to be achieved by covered generating units through application of the specific set of building blocks

- Rate-Based Goal (cont'd)
  - Proposal establishes this rate as a state’s rate-based goal
  - Also establishes an “interim goal” consisting of the average rate to be achieved from 2020-2029

- Rate-Based Goal (cont'd)
  - State is responsible for meeting goals, but may do so through
    - A different combination of building blocks than EPA assumed (theoretically)
    - Measures not identified as BSER, e.g.
      - ❖ Increased hydropower
      - ❖ Biomass combustion
      - ❖ New nuclear or NGCC

- Plan submission
  - June 30, 2016
  - May be extended through filing of “initial submittal” to
    - June 30, 2017 for single-state plan
    - June 30, 2018 for multi-state plan
- Multi-state plans allowed
- Not applicable to EGUs on Indian land; separate proposal coming

- **Applicability: Electric Generating Units (EGU), defined as**
  - Fossil-fuel fired
  - Steam generating unit, integrated gasification combined cycle (IGCC) or stationary combustion turbine
  - Constructed to supply more than 1/3 of potential electric output and more than 219,000 MWh net electric output to a utility distribution system

- Plan elements
  - Demonstrate achievement of rate-based goal;
    - May be translated into a mass-based goal (i.e. tons CO<sub>2</sub>/year)
    - Existing renewable energy measures count. Other measures count only if they occur after proposal date (6/18/2014)
  - Include emission standards for any “affected entity” (EGU or any other entity with obligations under program)

- Plan elements (cont'd)
  - Quantifiable, verifiable, non-duplicative, permanent and enforceable standards
  - Milestones
  - If multi-state: weighted average rate-based or mass-based standard reflecting individual state goals