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Agency

Clean Power Plan: Supplemental Proposal for Power Plants in Indian Country and U.S. Territories

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Agenda

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- Determination of the Best System of Emission Reduction
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Clean Power Plan Supplemental Proposal

- Under Clean Air Act (CAA) section 111(d), EPA issued the Clean Power Plan supplemental proposal on October 28
- EPA is proposing emission guidelines for U.S. territories and areas of Indian country to follow in developing plans to address greenhouse gas emissions from existing fossil fuel-fired electric generating units (EGUs)
- Supplemental proposal has two main elements:
  - Rate-based goals for carbon dioxide (CO_2) emissions from the power sector specific to each area of Indian country and U.S. territory that has affected EGUs
  - Guidelines for these areas to follow in developing plans to achieve the area-specific goals
- Supplemental proposal relies on approach used in June 2014 Clean Power Plan proposal

Why is EPA Proposing the Clean Power Plan?

- CO_2 is a potent greenhouse gas (GHG) that contributes to climate change
- CO_2 is the primary GHG pollutant, accounting for nearly 75% of global GHG emissions and 82% of GHG emissions across the country
- GHG pollution is causing potentially rapid, damaging and long-lasting changes in our climate that can have a range of severe negative effects on human health and the environment
- May 2014 report of the National Climate Assessment concluded that climate change impacts are already manifesting themselves and imposing losses and costs; report documents increases in extreme weather and climate events in recent decades, damage and disruption to infrastructure and agriculture, and projects continued increases in impacts across a wide range of communities, sectors, and ecosystems
- By 2030, the Clean Power Plan would achieve CO_2 emission reductions from the power sector of approximately 30 percent from CO_2 emission levels in 2005 and also reduce emissions of other air pollutants, including SO_2, NOx and directly emitted $PM_{2.5}$, from the electric power industry
- EPA projects that, in 2030, the significant reductions in the harmful carbon pollution and in other air pollution, to which the Clean Power Plan would lead, would result in net climate and health benefits of $48 billion to $82 billion

General Overview

- Proposal sets an interim (2020-2029) and final goal (2030) for affected EGUs in each area to reduce carbon pollution
- EPA is not prescribing measures these areas need to implement to meet the goal
- Areas have flexibility to choose what goes into their plan – how and when to get the necessary reductions, provided the goals are met in established timeframe
  - Option to translate rate-based goal to mass equivalent
  - Choose what works best in an area, tailored to its needs and policy objectives
  - Opportunity to build on existing energy efficiency and renewable energy programs
  - Option to work with other areas through multi-jurisdictional plans
  - Fits into existing utility electricity sector planning processes

Affected EGUs in Indian Country and Territories

Indian Country

- Four affected power plants located in Indian country:
  - South Point Energy Center on Fort Mojave tribal lands within Arizona
  - Four Corners Power Plant on Navajo tribal lands within New Mexico
  - Navajo Generating Station on Navajo tribal lands within Arizona
  - Bonanza Power Plant on Ute tribal lands within Utah

U.S. Territories

- Six affected power plants in Puerto Rico and two in Guam
- Two potentially affected EGUs in U.S. Virgin Islands, however, they are not currently in operation and have not operated for several years, so EPA is not proposing a goal
- No affected EGUs identified in American Samoa or Northern Mariana Islands, so EPA is not proposing a goal

Determination of the Best System of Emission Reduction

- To set goals for each area, EPA first determined the Best System of Emission Reduction (BSER)
- Because the power sector is interconnected, EPA determined that a set of 4 types of measures, or “building blocks,” together are the best system to reduce carbon pollution from fossil fuel-fired power plants
- BSER is made up of 4 building blocks:
  - (1) measures to make coal plants more efficient (e.g., heat rate improvements)
  - (2) increased use of high efficiency, natural gas combined cycle (NGCC) units (e.g., redispatch)
  - (3) generating electricity from low- or zero-emitting facilities
  - (4) demand-side energy efficiency
- After determining the BSER, EPA set the goals based on application of the BSER to each area

Proposed Goals for Territories

Proposed Goals (adjusted output-weighted-average lb CO_2/net MWh)

Area	Goal Using Approach A for BB3		Goal Using Approach B for BB3		Goal Using Alternative Approach for BB3	
	Interim Goal	Final Goal	Interim Goal	Final Goal	Interim Goal	Final Goal
Guam	1,733	1,586	1,708	1,556	1,733	1,586
Puerto Rico	1,470	1,413	1,459	1,399	1,452	1,397

- Notes:
  - No adjustments from building block 1 or 2 for Guam
  - Requesting comment on potential for sufficient LNG capacity in Puerto Rico
  - Co-proposing two options for application of building block 3 and taking comment on an alternative approach
  - Requesting comment on projected retail electricity sales growth for territories (used for building block 4)

Proposed Goals for Areas of Indian Country

Proposed Goals (adjusted output-weighted-average lb CO_2/net MWh)

Area	Goal Using Approach A for BB3	
	Interim Goal	Final Goal
Lands of the Fort Mojave Tribe	856	855
Lands of the Navajo Nation	1,991	1,989
Lands of the Ute Tribe of the Uintah and Ouray Reservation	2,000	1,988

- Notes:
  - No adjustments from building block 1 for Fort Mojave lands
  - No adjustments from building block 2
  - Proposing one option for application of building block 3 and taking comment on alternatives
  - Requesting comment on projected retail electricity sales growth for Indian country (used for building block 4)

Implementation Plan Guidelines

- Areas of Indian country with affected EGUs:
  - Tribes may seek authority to implement 111(d) plans
  - Pursuant to the Tribal Authority Rule, if tribes do not seek and obtain the authority to establish a plan, EPA must promulgate such federal plan provisions as are necessary or appropriate
  - EPA is not proposing a determination regarding any tribe's eligibility to develop a plan or whether a federal plan is necessary or appropriate
- Territories:
  - Same guidelines and timing for implementation plans as proposed for states
- Areas without affected EGUs (e.g., other tribal areas, Vermont, D.C., Canada):
  - Taking comment on allowing state or multi-jurisdictional plans to include demand side energy efficiency, renewable energy, and new units located in areas without affected EGUs

Timing for Plan Submittals

- Initial or complete plans must be submitted by June 30, 2016, with the option to use a two-step process for submitting final plans if more time is needed
  - Individual plans would be eligible for a one-year extension to June 30, 2017
  - Multi-jurisdictional plans would be eligible for a two-year extension to June 30, 2018, and would need to submit a progress report in the interim by June 30, 2017
  - If a jurisdiction needs more time to submit a complete plan, it must make an initial submittal by June 30, 2016, in lieu of a complete plan
- Once a complete plan is submitted, EPA will review the plan and make a determination, within 12 months, to approve or disapprove the plan

Summary of Required Plan Components

- Identification of affected entities (affected EGUs and other responsible parties)
- Description of plan approach and geographic scope
- Identification of area's emission performance level
- Demonstration that plan is projected to achieve emission performance level
- Identification of milestones
- Identification of corrective measures
- Identification of emission standards and any other measures
- Demonstration that each emission standard is quantifiable, non-duplicative, permanent, verifiable, and enforceable (recognizing non-traditional nature of some potentially affected entities)
- Identification of monitoring, reporting, and recordkeeping requirements
- Description of reporting
- Certification of hearing on plan
- Supporting material

Evaluating the Sufficiency of Plans

- EPA will evaluate the sufficiency of each plan based on the plan addressing twelve plan components and on four general criteria to determine whether a plan is "satisfactory" under CAA section 111(d)(2)(A)

- Four general criteria:
  1. A plan must contain enforceable measures that reduce EGU CO_2 emissions from affected EGUs
  2. Measures in the plan must be projected to achieve emission performance equivalent to or better than the applicable area-specific CO_2 goal on a timeline equivalent to that in the emission guidelines
  3. EGU CO_2 emission performance under the plan must be quantifiable and verifiable
  4. The plan must include a process for reporting of plan implementation (at the level of the affected entity), CO_2 emission performance outcomes, and, if necessary, implementation of corrective measures

Clean Power Plan Toolbox

http://www2.epa.gov/cleanpowerplantoolbox

Goal: Provide centralized, streamlined information to assist with plan development and submittal

Currently:

- Links to proposal and technical support documents
- Federal resources to assist areas in evaluating plan approaches
- Information on current state, tribal, and territory policies and programs

After the rule is finalized:

- Additional information areas will need to include in their plans
  - Checklist
  - Tools, if appropriate

This is a dynamic resource that will be updated periodically, and we are soliciting informal feedback on additional information that would be helpful; stakeholders can provide comments through the website

Impacts of the Supplemental Proposal

- Indian country: no additional costs, emission reductions or benefits
  - Navajo: if converted to mass-based equivalent, expected to comply without additional actions beyond shutdowns already occurring due to Regional Haze
  - Ute and Fort Mojave: costs, reductions and benefits already included in June proposal
- Territories:
  - Costs savings of $350 million in 2030, including reduced fuel expenditures from energy efficiency programs and re-dispatch
  - CO_2 reductions of 3.1 million tons in 2030; also reductions of SO_2, NOx, and $PM_{2.5}$
  - Monetized climate benefits of $170 million in 2030
  - Quantified net climate benefits of $520 million in 2030
  - Unable to quantify health co-benefits in the territories because the benefit-per-ton values used in the June proposal are only appropriate for areas within the continental U.S.

Public Input

- Prior to proposal, EPA met with stakeholders in Puerto Rico and Guam and held consultations with tribes
- Public hearing on November 19, 2014:
  - Held at the Phoenix, AZ Convention Center
  - More information and online registration form: http://www2.epa.gov/carbon-pollution-standards/forms/public-hearing-clean-power-plan-supplemental-proposed-rule
- Public comments will be accepted through December 19, 2014
  - Comments should be identified by Docket ID No. EPA-HQ-OAR-2013-0602
  - Instructions for submitting comments are in the Federal Register notice, and also available online at this link: http://www2.epa.gov/carbon-pollution-standards/how-comment-clean-power-plan-supplemental-proposed-rule
  - Link to Federal Register notice: http://www.gpo.gov/fdsys/pkg/FR-2014-11-04/pdf/2014-26112.pdf