



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 60

[EPA-HQ-OAR-2013-0602; FRL-9919-07-OAR]

RIN 2060-AR33

Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units

AGENCY: Environmental Protection Agency.

ACTION: Notice; additional information regarding the translation of emission rate-based CO₂ goals to mass-based equivalents.

SUMMARY: The Environmental Protection Agency (EPA) is issuing this notice in support of the proposed rule, "Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units," published on June 18, 2014 and the supplemental proposal, "Carbon Pollution Emission Guidelines: Existing Stationary Sources in Indian Country and U.S.

Territories; Multi-jurisdictional Partnerships," issued on October 28, 2014, to provide further discussion of potential approaches for translating the emission rate-based carbon dioxide (CO₂) goals that the EPA has proposed for each affected jurisdiction to an equivalent mass-based metric.

DATES: Comments on the proposed rule published on June 18, 2014, along with the additional information presented in this notice, must be received on or before December 1, 2014.

ADDRESSES: Comments. Submit your comments, identified by Docket

ID No. EPA-HQ-OAR-2013-0602, by one of the following methods:

Federal eRulemaking portal: <http://www.regulations.gov>.

Follow the online instructions for submitting comments.

Email: A-and-R-Docket@epa.gov. Include Docket ID No. EPA-HQ-OAR-2013-0602 in the subject line of the message.

Facsimile: (202) 566-9744. Include Docket ID No. EPA-HQ-OAR-2013-0602 on the cover page.

Mail: Environmental Protection Agency, EPA Docket Center (EPA/DC), Mail code 28221T, Attn: Docket ID No. EPA-HQ-OAR-2013-0602, 1200 Pennsylvania Ave., NW, Washington, DC 20460.

Hand/Courier Delivery: EPA Docket Center, Room 3334, EPA WJC West Building, 1301 Constitution Ave., NW, Washington, DC, 20004, Attn: Docket ID No. EPA-HQ-OAR-2013-0602. Such deliveries are accepted only during the Docket Center's normal hours of operation (8:30 a.m. to 4:30 p.m., Monday through Friday, excluding federal holidays), and special arrangements should be made for deliveries of boxed information.

Instructions: All submissions must include the agency name and Docket ID No. (EPA-HQ-OAR-2013-0602). The EPA's policy is to include all comments received without change, including any personal information provided, in the public docket, available online at <http://www.regulations.gov>, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is

restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through <http://www.regulations.gov> or email. Send or deliver information identified as CBI only to the following address: Mr. Roberto Morales, OAQPS Document Control Officer (C404-02), Office of Air Quality Planning and Standards, U.S. EPA, Research Triangle Park, North Carolina 27711, Attention Docket ID No. EPA-HQ-OAR-2013-0602. Clearly mark the part or all of the information that you claim to be CBI. For CBI information on a disk or CD-ROM that you mail to the EPA, mark the outside of the disk or CD-ROM as CBI and then identify electronically within the disk or CD-ROM the specific information you claim as CBI. In addition to one complete version of the comment that includes information claimed as CBI, you must submit a copy of the comment that does not contain the information claimed as CBI for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

The EPA requests that you also submit a separate copy of your comments to the contact person identified below (see **FOR FURTHER INFORMATION CONTACT**). If the comment includes information you consider to be CBI or otherwise protected, you should send a copy of the comment that does not contain the information claimed as CBI or otherwise protected.

The <http://www.regulations.gov> website is an "anonymous access" system, which means the EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to the EPA without going through <http://www.regulations.gov>, your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, the EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If the EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, the EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption and be free of any defects or viruses.

Docket: All documents in the docket are listed in the <http://www.regulations.gov> index. Although listed in the index, some information is not publicly available (e.g., CBI or other information whose disclosure is restricted by statute). Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in <http://www.regulations.gov> or in hard copy at the EPA Docket Center, EPA WJC West Building, Room 3334, 1301 Constitution

Ave., NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding federal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Air Docket is (202) 566-1742. Visit the EPA Docket Center homepage at <http://www.epa.gov/epahome/dockets.htm> for additional information about the EPA's public docket.

In addition to being available in the docket, an electronic copy of this notice will be available on the World Wide Web (WWW). Following signature, a copy of this notice will be posted at the following address: <http://www2.epa.gov/cleanpowerplan/>.

FOR FURTHER INFORMATION CONTACT: Ms. Amy Vasu, Sector Policies and Programs Division (D205-01), U.S. EPA, Research Triangle Park, NC 27711; telephone number (919) 541-0107, facsimile number (919) 541-4991; email address: vasu.amy@epa.gov or Ms. Lisa Conner, Sector Policies and Programs Division (D205-01), U.S. EPA, Research Triangle Park, NC 27711; telephone number (919) 541-5060, facsimile number (919) 541-4991; email address: conner.lisa@epa.gov.

SUPPLEMENTARY INFORMATION:

Organization of This Document. The information presented in this notice is organized as follows:

- I. Background
- A. Proposed Rule
- B. Purpose of the Notice

II. Additional Information on the Translation of Emission Rate-based CO₂ Goals to Mass-based Equivalents

I. Background

A. Proposed Rule

On June 18, 2014, under the authority of Clean Air Act (CAA) section 111(d), the EPA proposed emission guidelines for states to follow in developing plans to address greenhouse gas (GHG) emissions from existing fossil fuel-fired electric generating units (EGUs) (79 FR 34830). On October 28, 2014, the EPA also issued a supplemental proposal, "Carbon Pollution Emission Guidelines: Existing Stationary Sources in Indian Country and U.S. Territories; Multi-jurisdictional Partnerships" (79 FR 65481).

One of the main elements of the proposals is the establishment of emission rate-based CO₂ goals. To set these goals, the EPA analyzed practical and affordable strategies that states and utilities are already using to lower carbon pollution from the power sector. These strategies are incorporated into what the proposal describes as building blocks that comprise the best system of emission reduction (BSER).¹ These strategies, which are already being deployed by states and companies across the country, include

¹ CAA sections 111(d)(1) and (a)(1) direct the EPA to define BSER as the basis for state plans to reduce CO₂ from the affected sources.

improvements in efficiency at carbon-intensive power plants; programs that enhance generation from, and spur private investments in, low emitting and renewable power sources; as well as programs that help homes and businesses use electricity more efficiently. The EPA has proposed goals for each state, area of Indian country and U.S. territory with affected EGUs, as a carbon intensity rate, in terms of CO₂ per megawatt-hour generated. In calculating the emission rate-based goal, the EPA also took into consideration the area's fuel mix, electricity market and numerous other factors. Thus, each goal reflects the unique conditions of each state, area of Indian country and U.S. territory. The proposed rule also provides flexibility by authorizing each implementing authority to demonstrate achievement of the goal using a mass-based metric that is equivalent to its emission rate-based CO₂ goal. With the proposed rule issued on June 18, 2014, the EPA issued a TSD that demonstrates one potential way to translate the rate-based goal to a mass-based equivalent.

B. Purpose of the Notice

Upon issuance of the proposed rule, the EPA continued the extensive outreach effort to stakeholders and members of the public that the EPA had engaged in for many months preceding the proposal. This outreach has provided opportunities for all

jurisdictions with affected entities - both individually and in regional groups - as well as numerous industry groups and non-governmental organizations, to meet with the EPA and ask clarifying questions about, and give initial reactions to, the proposed components, requirements and timing of the rulemaking. This outreach has included individual meetings; attendance at conferences; webinars; conference calls; and other communications, during which the EPA has responded to hundreds of clarifying questions about the proposal and received numerous initial reactions in both oral and written form. This engagement has been designed to facilitate a better understanding of the rule by stakeholders so that they could provide more informed substantive comments for the EPA to consider for the final rule, as well as allow the EPA to consider stakeholders' initial reactions.

During these discussions, many of the states, in particular, emphasized the importance of having more information and clarity on how the proposed rate-based goals could potentially be translated to a mass-based equivalent metric. Some states requested additional information about how they might calculate a mass-based equivalent metric, while other states requested that the EPA calculate and provide presumptive mass-based equivalent metrics.

The purpose of this notice is to share additional

information regarding potential methods for determining the mass that is equivalent to the emission rate-based CO₂ goal that the EPA has proposed. With this notice, the EPA is also making available a TSD that provides detailed information to further inform and assist implementing authorities and stakeholders in understanding the proposal. This notice is consistent with the methodologies used to define BSER in the June 18, 2014, proposal and October 28, 2014 supplemental proposal and does not reflect any type of response to the comments that we have received to date. Readers should also note that the TSD, and the illustrative numbers presented therein, are based on the emission rate-based goals as proposed; any calculations of mass equivalents would naturally yield different results if the emission rate-based goals themselves were to change in the course of developing the final rule.

II. Additional Information on the Translation of Emission Rate-based CO₂ Goals to Mass-based Equivalents

In the proposed rule published on June 18, 2014, the EPA proposed a set of state-specific emission rate-based CO₂ goals (in pounds of CO₂ per megawatt-hour of electricity generated). In addition, the EPA issued emission rate-based CO₂ goals for areas of Indian country and U.S. territories with affected EGUs in a supplemental proposal on October 28, 2014. The proposals

authorized each implementing authority to translate the form of the emission rate-based goal to a mass-based form (i.e., goals expressed in terms of total tons of CO₂ per year from affected sources), as long as the translated goal achieves the equivalent in stringency. Today's notice provides additional detail, and describes two potential methodologies for this translation. Today's notice is accompanied by a TSD titled "Translation of the Clean Power Plan Emission Rate-Based CO₂ Goals to Mass-Based Equivalents," which has been placed in the docket for the rule (Docket ID No. EPA-HQ-OAR-2013-0602). For purposes of illustrating two methodologies for potential use in making rate-to-mass translations, today's notice and accompanying TSD identify two sets of mass-based values for each state, area of Indian country and U.S. territory with affected EGUs that could be considered equivalent to the proposed rate-based goals, as discussed below: One that is based on historical emissions from existing sources, and a second that is based on historical emissions from existing sources and projected emissions that would result from demand growth that is reflected in generation at both existing and new sources in the event that an implementing authority may want to include new sources of generation in its compliance approach. Illustrative values for each state, area of Indian country and U.S. territory with

affected EGUs (along with the underlying data) for each method are also presented in the TSD.

In the proposed rule, the EPA intended to afford a considerable amount of flexibility in choosing the types of programs and measures needed to meet the goals established by the rulemaking. An important proposed element of this flexibility is allowing each implementing authority to demonstrate compliance with its interim and final rate-based goals established in the proposal, or to establish equivalent mass-based metrics for purposes of demonstrating compliance with the provisions of the rule. The agency recognizes that implementing authorities can use a mix of measures and programs to meet their goals regardless of which form of the standard they choose to use to demonstrate compliance in the state plan, including both programs that use mass-based metrics, as well as measures that use rate-based measures. State plans submitted to the EPA will be required either to (i) demonstrate that their programs and measures meet the rate-based goals established by the rulemaking, or (ii) if they choose to translate the rate-based goals into mass-based equivalents, demonstrate achievement of the goals using the mass-based metrics.²

² Note that the metric for compliance is independent from the approaches that implementing authorities may adopt to achieve them. For example, a state could potentially adopt a mass-based program that achieves a rate-based goal,

In section VII of the preamble to the June 18, 2014 proposed rule, the EPA provides basic considerations necessary to translate the emission rate-based CO₂ goals into mass-based equivalents, for state plan purposes (79 FR 34897). The EPA also included in the docket for the rule a TSD titled "Projecting EGU CO₂ Emission Performance in State Plans," that discusses the considerations, data and technical approaches that can be considered when converting the emission rate-based CO₂ goals into a mass-based equivalent metric, and focuses on one potential approach that implementing authorities could employ. The basic methodology presented in these documents is for the implementing authority to project for a given period the amount of generation by affected entities; to determine the amount of tons of CO₂ that would be emitted by affected EGUS; and to assure that the ratio of affected EGU emissions to affected entity generation is equivalent to the emissions performance of the rate-based goal.

The data, assumptions and methodological choices used for the estimation of generation by affected entities are of central importance for translation to a mass-based metric.³ For instance, uncertainties about future demand, the future inventory of EGUs

or adopt rate-based standards and/or other measures and demonstrate that they have met the goal using a mass-based metric.

³ Some stakeholders have observed that addressing potential translation to a mass equivalent could incorporate generation from "affected entities" that include generators beyond "affected EGUs." The proposal invited comment on how generation across "affected entities" (including at "affected EGUs") should be considered when calculating mass equivalents.

and the relative amounts of generation among EGUs in light of, for example, fuel costs can influence the translation to a mass-based equivalent.

In response to requests by states, we are issuing this notice and the TSD, "Translation of the Clean Power Plan Emission Rate-Based CO₂ Goals to Mass-Based Equivalents," to present information about potential methods for translating the rate-based goals to mass-based equivalents. The TSD presents two additional possible methods for calculating mass-based equivalent metrics, the underlying data and shows the mass-based equivalent metric. The first method, based on historical data, produces mass-based equivalent metrics that apply to existing affected EGUs only. The second method, based on a combination of historical data and a projection of future electric demand, produces mass-based equivalent metrics that are inclusive of new fossil fuel-fired sources, in light of the fact that the rule takes comment on the inclusion of new, fossil fuel-fired sources as a component of state plans. As the starting point for these calculations, we use the proposed emission rate-based CO₂ goals set forth in the rulemaking. Also, to maintain consistency with the proposed rule, the calculations contain the same generation data used in setting the rate-based goals (i.e., 2012 eGRID data for historical generation, and Annual Energy Outlook 2013 for

regional growth estimates) to project future levels of generation⁴.

The EPA is providing this additional information to states, U.S. territories, tribes, and other stakeholders to provide a better understanding of the proposed rule. It should be reiterated that the mass-based equivalent metrics presented in the TSD are not required mass-based emission limits that implementing authorities must meet; rather, they are illustrations of two potential options that implementing authorities may choose to adopt if they choose to use a mass-based form of the emission rate-based goal. The EPA presents them to provide stakeholders a better understanding of the methodology and mass outcomes associated with two possible ways of calculating mass-based equivalent metrics.

Dated: November 6, 2014.

Janet G. McCabe, Acting Assistant Administrator,
Office of Air and Radiation.

⁴ The Agency has received comments from some states about the accuracy of the 2012 data, as well as whether we should use more than a single year of data to determine the rate-based goals. We are reviewing all comments, information, and requests for data corrections received to date and will continue reviewing stakeholder input submitted to the docket by the close of the public comment period. Any changes to the emission rate-based goals and underlying data will be reflected in the final rule.

[FR Doc. 2014-26900 Filed 11/12/2014 at 8:45 am; Publication
Date: 11/13/2014]