



March 8, 2019

Mr. Andrew Wheeler  
Acting Administrator  
U.S. Environmental Protection Agency (EPA)  
Attention: Docket ID No. EPA-HQ-OAR-2013-0495  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

Subject: Technical Comments on EPA's "Review of Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units," Docket No. EPA-HQ-OAR-2013-0495

Dear Acting Administrator Wheeler:

The Wisconsin Department of Natural Resources (WDNR) is submitting these comments on EPA's proposed amendments to the final 2015 rulemaking titled "Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units (EGUs)." These amendments were proposed on December 20, 2018 (83 FR 65424). Among other changes, the EPA proposes to amend its previous determination that the best system of emission reduction (BSER) for newly constructed coal-fired steam generating units (i.e., EGUs) is partial carbon capture and storage (CCS). Instead, the EPA proposes to find that the BSER for this source category is the most efficient demonstrated steam cycle in combination with the best operating practices. WDNR is submitting comments on this and other proposed changes, as described below.

Wisconsin has commented extensively on this issue in response to several previous EPA proposals. Where appropriate, those earlier state comments have been referenced and cited.

#### New Source Performance Standards

- 1. The BSER for new coal-fired steam EGUs should be revised to be based on the most efficient demonstrated steam cycle, as EPA proposes in these amendments.**

*EPA proposes to revise the BSER for new coal-fired EGUs to be the most efficient demonstrated steam cycle (i.e., supercritical steam conditions for large EGUs and subcritical steam conditions for small EGUs) in combination with the best operating practices, instead of partial carbon capture and sequestration (CCS). EPA states the primary reason for this proposed revision as the high costs and limited geographic availability of CCS.*

EPA should finalize its determination of BSER for coal-fired EGUs based on the most efficient demonstrated steam cycle, instead of partial CCS. As WDNR has previously commented to EPA, CCS has not been proven feasible or cost-effective for all EGUs and therefore should not be considered BSER.<sup>1,2</sup>

**2. Biomass fuels should not be regulated if co-fired with fossil fuel and should be creditable towards meeting the fossil fuel new source standards.**

*EPA's final 2015 rule regulates new EGUs combusting biomass fuels any time fossil fuels comprise more than 10 percent of the heat input to the unit. EPA is not proposing any revisions to this applicability requirement.*

The WDNR reiterates its comment on the 2014 proposed rule that biomass CO<sub>2</sub> emissions should not be regulated under new source CO<sub>2</sub> emission standards, regardless of what portion is fired with coal or other fossil fuels.<sup>3</sup> EPA should instead provide credit from the use of biomass fuels towards meeting any fossil fuel CO<sub>2</sub> emission limitation.

Modified Source Performance Standards

**1. EPA should issue a separate proposed rule on a potential BSER and performance standard for EGUs that undertake "small" modifications, before finalizing any requirements for those units.**

*EPA requests comment on whether to establish unit-specific "best demonstrated" emission requirements for units making small modifications (i.e., 10% or less increase in Lb/hr CO<sub>2</sub>). These units are exempt from the current rule, but EPA is taking comment on whether to apply unit-specific "best demonstrated" emission requirements similar to those in the current rule for units making large modifications (i.e., more than 10% increase in Lb/hr CO<sub>2</sub>).*

EPA's proposed revisions do not propose any specific requirements for units making small modifications; instead, EPA is soliciting comments on if it is appropriate to do so and what the potential requirements may be. If EPA determines that it is appropriate to establish requirements for these units, it must first make a specific proposal so that states and other stakeholders have a chance to review and comment on that proposal and any proposed requirements.

When considering if requirements for units making small modifications should be established, EPA should consider WDNR's October 2014 comments on the proposed rule – as well as comments 2 through 4 below – regarding large modifications, as these comments would apply to small modifications as well.<sup>4</sup>

<sup>1</sup> See Wisconsin's comments, "New Source Performance Standards (NSPS) for Greenhouse Gas Emissions from Stationary Sources: Electric Utility Steam Generating Units" (Wisconsin's NSPS Comments). Submitted jointly by WDNR and Public Service Commission of Wisconsin (PSCW) to Docket ID No. EPA-HQ-OAR-213-0495 on May 6, 2014. See Comments 1 through 3.

<sup>2</sup> See "Comments on EPA's Proposed Rule 'Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units; Revisions to Emission Guideline Implementing Regulations; Revisions to New Source Review Program'" (Wisconsin's ACE comments). Submitted by WDNR to Docket ID No. EPA-HQ-OAR-2017-0355 on Oct. 31, 2018. See Comment 3.

<sup>3</sup> Wisconsin's NSPS Comments, see Comment 4. Note also that Wisconsin made a similar comment on EPA's proposed Affordable Clean Energy rule (see Wisconsin's ACE Comments, Comment 11).

<sup>4</sup> See Wisconsin's comments, "State of Wisconsin Comments Regarding EPA's Proposed Carbon Pollution Standards for Modified and Reconstructed EGUs" (Wisconsin's Modified Comments). Submitted by WDNR to Docket ID No. EPA-HQ-OAR-2013-0603 on Oct. 16, 2014. See Comments 2, 4 and 5.

**2. In setting the BSER limit, utilities should be allowed to use a period of years to establish the best historical annual emission rate, instead of the “best one year” identified by EPA.**

*The current rule provides that an EGU that undertakes a large modification is required to meet a unit-specific CO<sub>2</sub> emission limit determined by that unit's best demonstrated historical performance (i.e., the best annual performance during the years from 2002 to the time of the modification). EPA is not proposing any revisions to this requirement for large modifications.*

WDNR reiterates its comment on the 2014 proposed rule that the BSER standard should not be the best historical annual emissions rate, since this does not factor in variables that can affect a unit's performance and CO<sub>2</sub> emissions, such as load, fuel quality, and temperature.<sup>5</sup> Instead, EPA should allow a 3 to 5 consecutive year averaging period to account for these variables.

**3. The “most stringent” emission standards for modified coal-fired units should be revised as proposed by EPA in these amendments.**

*EPA proposes to revise the “most stringent” emission standards for modified coal-fired units with a heat input rating of greater than 2,000 mmBtu/hr – from 1,900 Lb CO<sub>2</sub>/MWh-net to 2,070 Lb CO<sub>2</sub>/MWh-net (or 1,900 Lb CO<sub>2</sub>/MWh-gross). EPA also proposes to revise the “most stringent” emission standards for modified coal-fired units with a heat input rating of 2,000 mmBtu/hr or less – from 2,100 Lb CO<sub>2</sub>/MWh-net to 2,160 Lb CO<sub>2</sub>/MWh-net (or 2,000 Lb CO<sub>2</sub>/MWh-gross) for units.*

EPA should finalize its proposed revisions to the “most stringent” emission standards for modified coal-fired units. The proposed revisions are more consistent with what modern units are achieving in practice, as WDNR noted in its comments on the 2014 proposed rule.<sup>6</sup>

**4. EPA should exempt from this rule any efficiency improvement projects EGUs make to comply with a final rule issued under Section 111(d).**

Existing EGUs may make efficiency improvements to comply with greenhouse gas standards promulgated by EPA under CAA Section 111(d) (e.g., the Affordable Clean Energy rule) that would result in an increase in hourly CO<sub>2</sub> emissions. If that occurs, EPA should exempt these projects from the requirements of this proposed rule, especially if EPA establishes standards in this rule for units making small modifications.

Thank you for the opportunity to comment on this proposal. Please contact David Bizot of my staff at (608) 267-7543 or at [David.Bizot@wisconsin.gov](mailto:David.Bizot@wisconsin.gov) if there are any questions concerning these comments.

Sincerely,



Gail E. Good  
Director  
Air Management Program

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<sup>5</sup> Wisconsin's Modified Comments, see Comment 2.

<sup>6</sup> Wisconsin's Modified Comments, see Comment 4.