



March 17, 2015

United States Environmental Protection Agency  
EPA Docket Center  
Mailcode 28221T  
1200 Pennsylvania Ave., N.W.  
Washington, DC 20460

**ATTENTION: Docket No. EPA-HQ-OAR-2008-0699**

**Comments of the American Coalition for Clean Coal Electricity  
On National Ambient Air Quality Standards for Ozone:  
Proposed Rule 79 Fed. Reg. 75,234 (December 17, 2014)**

Dear Sir or Madam:

On December 17, 2014, the United States Environmental Protection Agency ("EPA" or "Agency") published proposed revisions to the National Ambient Air Quality Standards ("NAAQS" or "standards") for ozone. These are the comments of the American Coalition for Clean Coal Electricity ("ACCCE") on EPA's proposal to increase the stringency of the 8-hour primary (health-based) ozone standard from its current level of 0.075 parts per million (ppm) to between 0.070 ppm and 0.065 ppm. In addition, EPA seeks comment on either retaining the current 0.075 ppm primary standard or reducing the standard to as low as 0.060 ppm. EPA is also proposing to increase the stringency of the secondary (welfare-based) standard by making it the same as the revised primary standard.

ACCCE is a national trade organization whose members are involved in producing electricity from coal.<sup>1</sup> Coal-fired power plants (as well as gas-

fired and oil-fired power plants) produce nitrogen oxides (NO<sub>x</sub>) emissions, which are a precursor to ozone, the focus of this proposal. Therefore, ACCCE and its members have a direct and substantial interest in the proposed rule.

ACCCE and its members support responsible efforts to improve air quality and protect public health and the environment. The coal-fired electricity generating industry has spent \$125 billion, through 2014, on emissions controls, and projects spending another \$20 billion through 2016.<sup>2</sup> These controls have resulted in a reduction in emissions of sulfur dioxide, nitrogen oxides, and particulate matter of nearly 90 percent per kilowatt-hour since 1970.<sup>3</sup>

However, ACCCE has a number of major concerns with the proposal and urges EPA to retain the current ozone standard. In addition to our comments, ACCCE is joining the comments of a group of trade associations (the U.S. Chamber of Commerce, et.al.) and is a member of the Utility Air Regulatory Group (UARG) and the Midwest Ozone Group (MOG). ACCCE supports and incorporates the U.S. Chamber of Commerce, et.al, UARG, and MOG comments by reference herein.

This proposed revision of the ozone standard will increase electricity prices, on top of increases caused by other EPA regulations. At the same time, declining real household incomes coupled with increasing energy costs are harming the 60 million American families with low and middle incomes. These families, who spend an estimated 20 percent of their after-tax incomes on energy, have seen their real after-tax incomes decline by 22 percent since 2001, while their estimated total energy costs have increased by 27 percent in real terms.<sup>4</sup>

ACCCE is troubled about the impact of this rule on an increasingly-strained electricity system. Over 72,000 megawatts (MW) of coal-fired electric generating capacity in 41 states have already announced retirement or conversion; most of these have been attributed to EPA

policies.<sup>5</sup> We estimate that an additional 30,000 MW to 60,000 MW of coal-fired capacity is at risk of retirement under this proposal, heightening widespread concerns about electric reliability that have been raised in the context of other EPA rules, especially EPA's proposed Clean Power Plan.<sup>6</sup>

We believe this proposal -- in concert with the Clean Power Plan and other Administration policies -- is part of a foolish strategy to phase out the use of affordable fossil fuels in this country through Executive Branch actions. While many of these actions may be overturned in court, their cumulative impacts on the American people and the U.S. economy are a major concern.

EPA has just begun to implement its current ozone standard of 0.075 ppm, which was promulgated in 2008. Furthermore, the levels EPA is considering can be exceeded by background levels of ozone, yet the Agency does not properly consider that fact in its proposal. As explained in depth in other comments that ACCCE supports, scientific evidence does not support increasing the stringency of the ozone standard. In addition, even EPA's understated cost of the ozone proposal would exceed the Agency's projected ozone benefits. The following paragraphs explain why EPA should retain the 0.075 ppm ozone standard.

**States have just begun to implement the 2008 ozone standard.**

EPA last revised the ozone standard in 2008, setting the primary standard at 0.075 ppm and the secondary standard at the same level. This standard has yet to be fully implemented. EPA Administrator Gina McCarthy recently stated before the Senate Environment and Public Works Committee that "we are in the early stages of implementing" the 2008 standard.<sup>7</sup>

The final rule implementing the 2008 standard appeared in the Federal Register on March 6, less than two weeks ago.<sup>8</sup> This rule lays out in detail the requirements for State Implementation Plans (SIPs) and timelines for

SIP submittal by the states. It requires SIPs to be submitted (depending on the severity of an area's nonattainment status) in either the summer of 2015 or the summer of 2016.<sup>9</sup> The final rule also revokes the 1997 ozone standard and lays out requirements for transitioning areas to the new 2008 standard.<sup>10</sup> States are now developing SIPs designed to meet required attainment dates for the 2008 standard ranging from 2015 for marginal areas to 2018 for moderate areas, 2021 for serious areas, and beyond that for severe and extreme areas.<sup>11</sup> It would be a substantial waste of administrative effort and taxpayer dollars to impose yet another ozone standard on top of this while states are still developing plans to meet the current standard. EPA should give the 2008 standard time to be implemented and assess the impacts of doing so before adopting another revision.

**EPA is considering a revised ozone standard that can be exceeded by background ozone concentrations.** EPA states that background levels of ozone are those that occur in the U.S. due to events other than human activities in this country.<sup>12</sup> This background ozone is formed from ozone precursors emitted in other countries and by natural sources. EPA acknowledges in the proposal that it can consider the feasibility of a standard in relation to background levels: "The EPA may consider proximity to background levels as a factor in the decision whether and how to revise the NAAQS when considering levels within the range of reasonable values supported by the air quality criteria and judgments of the Administrator. *ATA III*, 283 F.3d at 379."<sup>13</sup> If the proposed standard exceeds background levels due to natural sources and emissions from other countries, then the proposed standard is not feasible.

EPA concedes that ozone levels can exceed the current 0.075 ppm standard at certain high-elevation locations in the U.S. West.<sup>14</sup> Furthermore, as detailed in UARG's comments, background levels can make a significant contribution to ozone concentrations at both western

and eastern locations.<sup>15</sup> The Clean Air Act requires states to develop SIPs that specify how the NAAQS “will be attained and maintained.”<sup>16</sup> States cannot be expected to attain an ozone standard whose exceedance is caused by natural or foreign sources. The ozone levels EPA is proposing are not feasible to attain in all areas due to background concentrations. EPA should therefore not reduce the ozone standard below its current 0.075 ppm level.

**Science does not support a more stringent ozone standard.** A decision to increase the stringency of a NAAQS is only justified when the scientific evidence shows that the existing standard is less stringent than necessary. As stated in the comments of UARG and others, the science EPA cites does not differ substantially from the evidence the Agency relied upon in previous reviews of the ozone standard and therefore does not justify increasing the stringency of the ozone standard beyond 0.075 ppm.<sup>17</sup>

EPA relies heavily on human exposure studies to justify a reduction in the primary ozone standard.<sup>18</sup> However, a proper interpretation of the studies EPA cites shows that the current standard provides adequate protection for sensitive populations.<sup>19</sup>

EPA appropriately places less weight on epidemiological studies. However, as noted by UARG and Gradient, the studies EPA cites suffer from a number of weaknesses, including the fact that the majority of the studies were conducted in areas that did not attain the current ozone standard. Even EPA admits in its proposal that these studies do not indicate the current ozone standard is inadequate: “[T]he available U.S. and Canadian epidemiologic studies evaluating long-term ambient O<sub>3</sub> concentration metrics have not been conducted in locations likely to have met the current 8-hour O<sub>3</sub> standard during the study period ... Therefore, although these studies contribute to understanding of health effects ... consideration of study area air quality *does not inform* consideration of the

extent to which those health effects may be occurring in locations that *meet* the current standard.”<sup>20</sup>

Additionally, the UARG and Gradient comments demonstrate that EPA should retain the secondary standard in its current form. The science of ozone welfare effects is too uncertain and inconclusive to justify changing the secondary standard at this time. As EPA acknowledges in the proposed rule, “[t]he current body of O<sub>3</sub> welfare effects evidence *confirms the conclusions* reached in the last review on the nature of O<sub>3</sub>-induced welfare effects.”<sup>21</sup> While EPA cites studies of impacts on trees, crops, and foliage in an attempt to justify increasing the stringency of the standard, UARG and Gradient show that these studies are subject to substantial uncertainty and do not demonstrate that lowering the secondary standard will provide meaningful welfare protection beyond the current standard.<sup>22</sup> Therefore, EPA should retain the current secondary standard.

**The cost of the proposed standard outweighs its ozone benefits.** EPA has understated the cost of the proposed ozone standard and has overstated its benefits. EPA’s analysis of the costs of the proposal in the Regulatory Impact Analysis (RIA) understates its costs in at least four areas. First, EPA admits that it did not include the costs to the economy as a whole in its RIA analysis.<sup>23</sup> (This is a typical shortcoming of EPA regulatory impact analyses.) As demonstrated in a recent analysis by NERA Economic Consulting, those costs would be substantial, including:

- A reduction in GDP of \$140 billion each year, or \$1.7 trillion from 2017 to 2040;
- A loss of 1.4 million job equivalents per year; and
- An average cost of \$830 per year to each U.S. household in the form of lost consumption.<sup>24</sup>

Second, EPA made deliberate choices in its economic analysis that reduced the cost estimates, such as providing costs for the year 2025, even though virtually all areas except California would have attainment

deadlines before that date, and therefore most costs of complying with the current standard would have already been incurred by 2025.<sup>25</sup> Third, EPA assumed that its proposed Clean Power Plan will be finalized and implemented as proposed, and that the ozone precursor reductions due to the CPP will occur prior to 2025.<sup>26</sup> It is unclear, at the least, whether the CPP will be finalized as proposed, will be implemented by the states as contemplated by EPA, or will survive judicial review. If the CPP is not implemented in the manner EPA envisions, or is overturned in court, a greater number of coal-fired power plants may be subject to retirement or the installation of expensive emissions control equipment, which would increase the cost of meeting a more stringent ozone standard. Finally, EPA assumes that the cost of “unknown controls,” which make up a large portion of the controls EPA projects will be needed to achieve a revised standard, will be the same as the cost of controls which are known and are currently being used. All of these factors together mean that EPA has underestimated the cost of the proposal.

EPA has also overestimated the benefits of the ozone proposal. The majority of the benefits EPA attributes to the revised ozone standard are not related to ozone at all, but to reductions in fine particulate matter (PM<sub>2.5</sub>). EPA separately sets and implements NAAQS for PM<sub>2.5</sub> that, by definition, protect public health from PM<sub>2.5</sub> in ambient air with an adequate margin of safety.<sup>27</sup> As stated in recent testimony before the House Oversight and Government Reform Committee, it is inappropriate to use reductions in PM<sub>2.5</sub>, an already regulated pollutant, to justify revising the ozone standard. In fact, EPA’s projected ozone-only benefits from a revised standard would *never* match even EPA’s understated costs.<sup>28</sup>

**Conclusion** EPA should retain the current primary and secondary ozone standards. EPA and the states have just begun to implement the 2008 primary ozone standard. EPA has not taken into proper consideration the effect of background ozone. The scientific evidence

does not justify revising the standard. Lastly, the costs of the proposal exceed its benefits.

Sincerely,

/s/

Paul Bailey

Senior Vice President, Federal Affairs and Policy

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<sup>1</sup> A list of ACCCE Board members is provided in Appendix 1.

<sup>2</sup> Energy Ventures Analysis, Inc., *Coal-Fired Power Investment in Air Pollution Controls*, October 2013.

<sup>3</sup> EIA, *Monthly Energy Review*, February 2014, Table 7.1; *Electric Power Monthly*, March 2014; U.S. EPA, *National Emissions Inventory*, Air Pollutant Emissions Trends Data, 1970-2013, Fuel Combustion Electric Utilities (for PM); and (for SO<sub>2</sub> and NO<sub>x</sub>) EPA Air Markets Program data.

<sup>4</sup> Eugene Trisko, *Energy Cost Impacts on American Families, 2001-2014*, February 2014.

<sup>5</sup> ACCCE, *Coal Unit Shutdowns*, January 25, 2015.

<sup>6</sup> See, e.g., *North American Electric Reliability Corporation, Potential Reliability Impacts of EPA's Proposed Clean Power Plan: Initial Reliability Review*, November 2014; Brown, Nicholas A., President & CEO, Southwest Power Pool, Inc., letter to Gina McCarthy, October 9, 2014; Bear, John R., President & CEO Midcontinent Independent System Operator, Inc., letter to the Honorable Gina McCarthy, November 25, 2014.

<sup>7</sup> Gina McCarthy, Testimony before the Senate Environment and Public Works Committee hearing entitled "Oversight Hearing: Examining the President's budget request for the U.S. Environmental Protection Agency," March 4, 2015.

<sup>8</sup> 80 Fed. Reg. 12,264 (March 6, 2015).

<sup>9</sup> 80 Fed. Reg. 12,266 (stating that SIPs for moderate areas are due three years after the July 20, 2012 effective date of nonattainment designations, and SIPs for serious and higher areas are due four years after that date).

<sup>10</sup> 80 Fed. Reg. 12,301.

<sup>11</sup> 80 Fed. Reg. 12,268.

<sup>12</sup> 79 Fed. Reg. at 75,242-3 (December 17, 2014).

<sup>13</sup> 79 Fed. Reg. at 75,242-43.



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<sup>14</sup> *Id.*

<sup>15</sup> *Comments of the Utility Air Regulatory Group on the National Ambient Air Quality Standards for Ozone; Proposed Rule 79 Fed. Reg. 75,234 (Dec. 17, 2014), (March 17, 2014) (“UARG”).*

<sup>16</sup> Clean Air Act § 107(a) (emphasis added).

<sup>17</sup> UARG and Goodman, Julie E., Gradient, “Comments on the National Ambient Air Quality Standards for Ozone Proposed Rule; 79 Fed. Reg. 75,234; Docket ID No. EPA-HQ-OAR-2008-0699,” March 16, 2105 (“Gradient”).

<sup>18</sup> 79 Fed. Reg. 75,288.

<sup>19</sup> UARG, Gradient.

<sup>20</sup> 79 Fed. Reg. 75,282 (emphasis added).

<sup>21</sup> 79 Fed. Reg. 75,314 (emphasis added).

<sup>22</sup> UARG, Gradient.

<sup>23</sup> U.S. EPA, Regulatory Impact Analysis of the Proposed Revisions to the National Ambient Air Quality Standards for Ground-Level Ozone, November 2014, pages 7-37-38.

<sup>24</sup> NERA Economic Consulting, *Economic Impacts of a 65 ppb National Ambient Air Quality Standard for Ozone*, February 2015.

<sup>25</sup> UARG.

<sup>26</sup> *Id.*

<sup>27</sup> Clean Air Act § 109(b)(1).

<sup>28</sup> *Prepared Statement of Anne E. Smith, Ph.D. at a Hearing on Impacts of U.S. Environmental Protection Agency Regulations by the Committee on Oversight and Government Reform, United States House of Representatives, Washington, DC, February 26, 2015.*



Alliance Coal, LLC	Joy Global Incorporated
Alpha Natural Resources	LG&E and KU Energy, LLC
AMEREN Corporation	Murray Energy Corporation
American Electric Power	Natural Resource Partners, L.P.
Arch Coal, Incorporated	Norfolk Southern Corporation
Arkansas Electric Cooperative Corporation	Oglethorpe Power Corporation
Associated Electric Cooperative	Patriot Coal
Basin Electric Power Cooperative	Peabody Energy Corporation
Berwind Natural Resource Corporation	Prairie State Generating Company, LLC
BNSF Railway Company	Southern Company
Buckeye Power, Incorporated	Sunflower Electric Power Corporation
Caterpillar Incorporated	Tri-State Generation & Transmission Assn.
CONSOL Energy Inc.	Union Pacific Railroad
Crouse Corporation	Western Fuels Association
CSX Corporation	Western Fuels Colorado
Drummond Company, Incorporated	

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