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U.S. Environmental Protection Agency
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1200 Pennsylvania Ave., NW
Washington, DC 20460
Attn: Docket ID No. EPA-HQ-OAR-2013-0602
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Re: Proposed Carbon Emission Guidelines for Existing Stationary Sources: Electric Utility
Generating Units – 79 Fed. Reg. No. 117 (Wednesday, June 18, 2014)

Docket ID No.: EPA-HQ-OAR-2013-0602

Dear Administrator McCarthy:

On June 2, 2014, the U.S. Environmental Protection Agency ("EPA") proposed new standards of performance for emissions of carbon dioxide for existing fossil fuel-fired electric generating units ("EGUs"). These standards, entitled "*Carbon Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units*" (hereinafter "Proposed Rule") were published in the Federal Register on June 18, 2014 (79 FR 117). The deadline for public comments is December 1, 2014. The Alabama Public Service Commission ("APSC") appreciates the opportunity to file comments in this proceeding, as the issues we raise are critically important to the citizens we serve and more than justify careful consideration by the EPA in light of the consequences the Proposed Rule would have on them.

The APSC regulates essential utility services throughout many parts of Alabama, including the electric utility service provided by Alabama Power Company. As a regulatory body, we are responsible for balancing the interests of our regulated utilities with those of the consuming public, with the ultimate goal being the provision of reliable service at rates that are

fair and reasonable. As part of this balance, we also consider the fact that our regulated electric utility is under a legal duty to serve its retail electric customers. To that end, the APSC must necessarily consider the impacts of the standards being proposed, including how those standards may influence future pollution control investments, plant retirements, investments in new generation, system reliability, customer rates and other actions undertaken by the utility subject to our jurisdiction.¹

On June 18, 2014, the Attorney General of Alabama, Luther Strange, appeared before the Senate Committee on Environment & Public Works, Subcommittee on Clean Air and Nuclear Safety to participate in the Subcommittee's hearing entitled "Climate Change: The Need to Act Now." At this hearing, Attorney General Strange provided general comments reflecting Alabama's continuing concern with this Administration's approach to environmental regulation. In particular, Attorney General Strange remonstrated against the EPA's proposed carbon pollution standard for existing power plants, noting the extreme economic consequences of such an oppressive rule and the EPA's lack of authority to even issue such a rule. Attorney General Strange further argued that the EPA's most recent proposal was yet another attempt by the Federal Government to usurp authorities properly delegated to the States.² The APSC agrees with Attorney General Strange and the following comments echo many of his arguments.

1. The Proposed Rule Extends Beyond Environmental Regulation and Illegally Displaces the States' Traditional Authority over Retail Electricity Markets

To be clear, Congress did not intend for the Clean Air Act to bestow upon the EPA powers so pervasive as to swallow the States' traditional authority over retail electricity markets within its borders. States traditionally have jurisdiction over the approval of the construction of new generation facilities and the policies related to fuel choices and energy efficiency. In Alabama, the APSC has the authority to approve or disapprove the construction of electricity production facilities by a utility.³ Some states have passed laws that require a certain mix of fuel sources for electricity generation. States also have the authority to develop policies regarding retail electricity, including energy efficiency programs. The Proposed Rule undermines State authority and extends into policy areas well outside the Clean Air Act. Specifically, the Proposed Rule's emission goals are calculated using building blocks that are based on policy choices that fall squarely within State Authority.

¹ For this same reason, the National Association of Regulatory Utility Commissioners ("NARUC") has urged state utility regulators to engage with EPA on this issue. See *Resolution on the Role of State Regulatory Policies in the Development of Federal Environmental Regulations*, NARUC Board of Directors, Feb. 16, 2011.

² On August 25, 2014, Attorney General Strange joined with 12 other state attorneys general requesting EPA withdraw the Proposed Rule as a result of the agency's failure to adhere to make available information upon which the rule was predicated, as required by law. See Request for Withdrawal, available at <http://www.ago.wv.gov/pressroom/Documents/Section%20307%20Letter%20%28August%2025%2c%202014%29.pdf>.

³ Ala. Code § 37-4-28.

As one example, the emissions goals are calculated with the assumption that the APSC would approve the construction of new generation facilities. But, the EPA does not have the authority to dictate the standard of review for the APSC in making this decision. This criteria is set by the Alabama Legislature.⁴ In the process to approve construction, the APSC considers the benefits of the new facility to service reliability and the costs to the rate payers. However, under the EPA's Proposed Rule, the APSC could approve construction only if doing so comported with the EPA's Clean Power Plan.

As another example, the emissions goals are calculated with the assumption that the State will change its policy concerning the mix of fuel sources for electricity generation. The EPA, an environmental regulator, does not have the statutory authority to dictate State policy regarding the fuel mix. Without action by Congress, this authority belongs to the Alabama Legislature or with the APSC as delegated by the Legislature.

As a third example, the emissions goals include the development of demand side energy efficiency programs. The fourth building block is particularly egregious because energy efficiency programs are fundamentally State programs. When considering energy efficiency programs, unlike the EPA, the States and the APSC consider the costs, including how any proposed program may shift costs to other customer classes. The District of Columbia Circuit recently held that the Federal Energy Regulatory Commission cannot regulate areas of the electricity market left by the Federal Power Act to the States, such as regulation of the retail market.⁵ Yet, through the Proposed Rule, EPA is asserting authority over the retail market in a manner that not even FERC can do lawfully.

By setting guidelines based on building blocks that are clearly "outside the fence-line" of the affected source, the EPA is asserting authority Congress has not given it; authority that is beyond environmental protection and the Clean Air Act. In doing so, the EPA is setting goals that effectively dictate State energy policy in spite of the State's longstanding oversight in this area. By limiting emissions guidelines pursuant to Section 111(d) to the affected source, Congress limited the EPA to the role of environmental protection. Congress did not intend for the EPA to dictate energy policy as the EPA is doing with this Proposed Rule.

2. The Proposed Rule Will Impose Significant Cost Impacts on Customers

Separate and apart from the Proposed Rule's encroachment on state authority, the APSC is very concerned about the significant cost impacts that the Proposed Rule stands to impose.⁶

⁴ *See Id.*

⁵ *Electric Power Supply Association v. FERC*, 753 F.3d 216, 225 (D.C. Cir 2014).

⁶ According to a report issued by the U.S. Chamber of Commerce on May 28, the EPA's Section 111 proposals to limit greenhouse gas emissions from new and existing power plants will be the costliest rules ever. The Chamber's report, produced by consultant IHS, explains that these two rules will cost the country \$478 billion in 2012 dollars in new power plant construction, energy efficiency and other related compliance expenses. *See Assessing the Impact of Potential New Carbon Regulations in the United States*, pp. 4, 34, available at http://www.energyxxi.org/sites/default/files/file-tool/Assessing_the_Impact_of_Potential_New_Carbon_Regulations_in_the_United_States.pdf. Compliance costs for the two rules will be \$28.1 billion per year during the study period through 2030, nearly triple the cost of the current title holder for most expensive rule, the Mercury and Air Toxics Standards, which the report said, citing EPA testimony to Congress in 2012, is expected to cost \$9.6 billion per year. *See id.* at 4.

First and foremost, customers will be straddled with the high costs of meeting the EPA’s carbon emission reductions through implementation of the EPA’s “building block” strategy. Because the APSC’s regulated utility, Alabama Power Company, has already implemented the more cost-effective projects under three of the four menu items (uneconomic dispatch being the one exception), compliance with the EPA’s guidelines necessarily will require additional spending to secure generation capacity or to adopt energy efficiency programs that were not determined by the utility to be in the best interests of customers.⁷ Electricity prices inevitably will rise.

Customers can also expect electricity prices to increase due to various other impacts associated with implementing the proposed carbon rules. For instance, some utilities may elect early retirement for certain coal-fired generators rather than invest more capital in a facility that has a short remaining life. In turn, system reserve margins will be lowered in the short-term which may place upward pressure on the purchase power markets. If so, this will result in higher costs for customers. An additional concern with early retirement of generating units is the remaining book balance of the unit. To the extent such a balance remains, customers will be responsible for the payment of it as well. And for those units that are retired early, they must now be replaced sooner than would have otherwise occurred. The capital outlay associated with replacing these units will be more costly to customers the sooner such outlays are required.

The proposed timing of the Proposed Rule’s requirements only exacerbates these concerns. Significant investment and efforts will be required to lower a state’s carbon emissions to such a level in 2020 that a compliant average over the 2020-2029 period is feasible. With affected utilities throughout the Southeast facing this same prospect, the pressure on energy, fuel and other commodity prices can only be expected to rise, while an already stretched craft labor market is asked to try to accomplish even more. In light of the foregoing, the APSC is encouraged by the EPA’s October 28, 2014 notice of data availability (“NODA”), in which it solicited feedback on, among other items, “compliance trajectory or glide path of emission reductions from 2020 to 2029.”⁸ As discussed above, there are aspects to the Proposed Rule that can only be cured by a wholesale reconsideration of the agency’s approach to carbon. A practical approach to implementation must embrace the feasibility of compliance, however, and the NODA is a step in the right direction.

To this end, the APSC is concerned that the EPA has not given sufficient consideration to the cumulative effects of its actions over the last several years. Indeed, the combined effects of

The report also finds that the average household will lose a total of \$3,400 in real disposable income over the period analyzed by the report. The impacts will be most strongly felt in the Midwest and Southeast, both of which depend on coal to fuel much of their power generation portfolios. These areas will together pay about half of the compliance costs from the new rules, the report said. *See id.* at 7, 38, 46.

The report further details that between 2014 and 2030, EPA rules limiting carbon dioxide and other greenhouse gas emissions will annually cost the economy an average of \$51 billion in gross domestic product and 224,000 jobs. *See id.* at 37.

⁷ As a routine matter, Alabama Power continuously evaluates ways to improve the efficiency of its electric system and selects those options that are most cost-effective for its customers. This ongoing analysis includes implementing the most economical heat rate improvement projects, conducting annual reviews of economic dispatch data and protocol, improving system efficiency through line loss mitigation efforts, and enhancing end-use efficiencies through customer awareness programs, energy audits and time-of-use rates.

⁸ *Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units*, Notice of Data Availability, 79 Fed.Reg. 64543, 64544 (Oct. 30, 2014).

the multiple actions taken, including the Mercury and Air Toxics Standards (“MATS”) rule and revisions to the various National Ambient Air Quality Standards (“NAAQS”), are already placing an enormous burden on Alabama residents.

For instance, Alabama Power has invested approximately \$3.3 billion in equipment and infrastructure necessary to meet environmental compliance obligations imposed by the EPA, with \$2.7 billion being invested since 2005. In 2005, Alabama Power’s customers were paying approximately \$33.0 million per year towards the EPA’s environmental rules and regulations but now, due to the EPA’s continuous onslaught of new and revised rules, Alabama Power’s customers are responsible for a \$477.3 million annual environmental price tag. To make matters worse, Alabama Power currently has another \$1.0 billion of projects under construction to meet the EPA’s recently promulgated MATS rule. These projects, which include two baghouses (fabric filters) estimated to cost between \$350-\$400 million each, will have a large impact on customer bills upon completion.

While the environmental compliance cost impacts from 2005 to 2014 have been staggering, estimates show these amounts will be pale in comparison to what the EPA has currently pending and/or proposed. For example, the amounts cited above do not include any compliance costs associated with the EPA’s future re-proposed Cross State Air Pollution Rule (CSAPR), the EPA’s most recently promulgated Clean Water Act § 316(b) Water Intake Structure rule, the EPA’s pending Coal Combustion By-Products rule, the EPA’s pending Greenhouse Gas rule for new facilities, the EPA’s proposed Greenhouse Gas rule for existing facilities, the EPA’s proposed Effluent Guidelines rule, or future revisions to EPA’s NAAQS.

In spite of the enormous consequences, the APSC is not aware of any meaningful analysis undertaken by the EPA as to the cumulative cost impacts resulting from implementation of, and compliance with, the suite of pending and issued rules affecting electric utility generating units. Considering that the proposed carbon restrictions currently being advanced by the EPA now appear to be shaping up as a comprehensive approach affecting every coal-fired generating unit in the nation (whether new, modified or existing), the APSC believes the need for a cumulative analysis is particularly justified.⁹ Thus, just as regulated utilities consider all the cost impacts as they forecast and implement long-term resource planning decisions, the APSC believes it is of significant importance for the EPA to perform a comprehensive cost analysis as well. This analysis cannot merely examine each Proposed Rule in isolation, but instead should consider the cumulative cost impacts of all such proposals and, to the extent not done so already, the finalized rules still being implemented. In this regard, we believe it is important for the consuming public to be advised of the potential rate impacts associated with implementing the full suite of the EPA’s recently proposed and newly issued regulations.¹⁰

⁹ On a related point, the APSC is troubled by the apparent unwillingness of EPA to examine the potential loss or shifts in employment that may occur as a result of the Proposed Rule. *See Murray Energy Corp.*, Order Denying Motion, CV-5:14-CV-39 (N.D. W. Va. Sept. 19, 2014).

¹⁰ In our view, the EPA should not shy away from evaluating the combined impacts of its regulatory actions. In 2012, White House Office of Information and Regulatory Affairs Administrator Cass Sunstein issued a memorandum to the heads of federal agencies that outlined the details of new guidance on consideration of “cumulative impacts” of regulations. In the memo, Administrator Sunstein said agencies should take active steps to take account of the cumulative effects of new and existing rules and identify opportunities to harmonize and streamline multiple rules. Simply, the goals of this effort should be to “simplify requirements on the public and private sectors; to ensure against unjustified, redundant, or excessive requirements; and ultimately to increase the net benefits of regulations.”

3. Reliability and Fuel Diversity

A fundamental goal of the APSC is to strike a reasonable balance between affordable and reliable electricity for Alabama consumers. While the APSC does not regulate reliability in the manner that federal agencies like FERC and NERC do, we are nonetheless attentive to the ability of our regulated utility to maintain a reliable supply of electricity to the customers it serves. With this in mind, the recent report by NERC regarding the potential reliability impacts of the Proposed Rule is disconcerting.¹¹ Among other things, the report noted that the number of unit retirements estimated by the Proposed Rule may be conservative, which would create a reliability challenge as industry struggled to develop sufficient replacement generation. The report also observed that additional infrastructure (both transmission and gas pipeline) would be required to support the shift to natural gas-fired and variable energy resources, and that anticipated changes in the resource mix could create new reliability challenges that alter the nature of power flows on the system.¹²

Historically, the state's retail electricity suppliers have maintained an affordable, reliable supply of electricity by maintaining a balanced mix of generation resources. These resources include hydro, coal, natural gas, nuclear, and renewables. Additionally, the state's electric providers have also implemented demand response measures, such as energy efficiency and conservation, when such measures have proven to be cost-effective.

In our view, the EPA's Proposed Rule effectively handcuffs existing coal-fired generation resources, despite the fact that these base-load units have provided reliable, cost-effective electricity to consumers in Alabama, and nationally, for many decades. In so doing, the Proposed Rule stands to weaken the country's generation portfolio and significantly impact the future cost of electricity. Just as important, and as the NERC report observes, the proposed standard may impact the reliability of our nation's electric system and, as a result, customers will be forced to pay more for a product that is less reliable. Indeed, a recent study by IHS Energy suggested that U.S. power prices could skyrocket if the diversity of the nation's generation supply mix continues to decline.¹³

Administrator Sunstein also added a few areas where agencies should try to improve, including early consultation and close engagement with affected stakeholders, harmonizing regulatory requirements, reducing administrative costs, avoiding unnecessary or inconsistent requirements, specific consideration of the cumulative effects of regulations on small businesses and startups, and careful consideration of the analysis of costs and benefits. (SNL Energy, *EPA Pushing for Cumulative Impact Analysis of West Coast Terminal Projects*. See Memorandum for the Heads of Executive Departments and Agencies, March 20, 2012, available at <http://www.whitehouse.gov/sites/default/files/omb/assets/inforeg/cumulative-effects-guidance.pdf>.)

¹¹ See *Potential Reliability Impacts of EPA's Proposed Clean Power Plan*, NERC (Nov. 2014), available at http://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/Potential_Reliability_Impacts_of_EPA_Proposed_CPP_Final.pdf.

¹² See *id.*, p. 2.

¹³ In a separate analysis entitled *The Value of U.S. Power Supply Diversity*, consultant IHS concluded that a less diverse U.S. power supply would make power prices higher and more varied and force a costly adjustment process for U.S. consumers and businesses. According to an industry report on the study, IHS found that a comparison of the generation mix between 2010-2012 and a reduced diversity mix over the same period yielded average wholesale power prices approximately 75% high and retail prices approximately 25% higher. See Esther Whieldon, "Study: Power prices will skyrocket if generation diversity continues to decay," SNL (July 24, 2014).

As the EPA is well aware, fuel diversity unquestionably contributes to the production of low-cost, domestic energy, which in turn promotes affordable electricity rates, energy independence and security. Maintaining fuel diversity within the generation supply portfolio will continue to allow system operators to respond to changing fuel prices by running lower-cost resources. In disregarding such fundamental practices, the EPA's Proposed Rule will constrain the fuel options available to electric suppliers and, thereby, impose an unnecessary cost risk on customers by forcing electric suppliers to rely on natural gas as the predominant fuel choice. This risk is particularly acute given the historic price volatility of natural gas.¹⁴

A recent example is the cold weather events that struck much of the eastern half of the nation in January 2014, causing increased demand and therefore, natural gas prices to spike.¹⁵ The impact to Alabama was muted somewhat, not only due to the aforementioned fuel diversity that consumers benefit from, but also widespread electric heating in the state. (Notwithstanding this diversity, the state still found itself among those suffering from propane shortages.) It is difficult to imagine that Alabama consumers would have been spared some of this price volatility in the absence of the fuel and energy supply diversity utilized by Alabama electric suppliers. Certainly, the EPA must recognize that such a paradigm shift in fuel resources will increase costs to consumers, and will exacerbate the price risk described above, by forcing the electricity industry to depend more and more on natural gas-fired generation.¹⁶

4. Economic Considerations

According to the Alabama Department of Commerce, from 2001 – 2011 approximately 4,224 international and domestic companies have invested approximately \$33.6 billion in capital for new and expanded facilities, resulting in the creation of 189,171 new jobs for Alabama. Many of these industries cited low electric rates and high electric service reliability as a consideration for locating in Alabama. This consideration carries even greater weight with

¹⁴ See U.S. Energy Information Administration, Henry Hub Natural Gas Spot Price 1997-2014, *available at* <http://www.eia.gov/dnav/ng/hist/rngwhhdm.htm>.

¹⁵ Patrick Woodcock, Director of the Governor's Energy Office for the State of Maine, alluded to his state as the proverbial "canary in the coal mine" of the Northeast during a Platts Northeast Power and Gas Markets Conference in New York City held on May 30, 2014. Mr. Woodcock further stated that the lack of access to affordable natural gas is contributing to a state economic crisis. He was quoted as saying, "I cannot accept that we will stand idly as the Maine economy collapses." He further stated, "And I use those words deliberately: We are in a real situation; [there is] a crisis in the Maine economy."

¹⁶ According to recent data released by the Energy Information Administration (EIA), the past year saw the biggest increase in residential power prices since 2009. In New England, the price of electricity is a staggering 12% higher than it was this time last year. At an average national price of 12.3¢ per kilowatt-hour, eight of the nine census regions of the U.S. are in the midst of price spikes. Customers in New England and the mid-Atlantic are feeling the sharpest blows, with price increases of about 12% and 7%, respectively. See U.S. Energy Information Administration, Residential electricity prices are rising, *available at* <http://www.eia.gov/todayinenergy/detail.cfm?id=17791&src=email>. EIA blames a sharp rise in wholesale power prices and constraints on the natural gas market as the leading culprits. With an increased reliance on natural gas, power suppliers in the Northeast are finding that placing too many of their eggs in one basket is becoming costly. In the Southeast, Southwest, and Midwest, where fuel sourcing is more diverse, price increases were more modest, at between 2% and 4%. Excerpt taken from a Partnership for Affordable Energy blog dated September 4, 2014. See U.S. Energy Information Administration, Northeast and Mid-Atlantic power prices react to winter freeze and natural gas constraints, *available at* <http://www.eia.gov/todayinenergy/detail.cfm?id=14671>.

industrial customers because electricity is often the largest component of their operating costs and has the ability to significantly affect the viability of their business. As an example, the electricity component typically represents 60 – 75 percent of the direct operating costs for some of Alabama’s largest industry, such as air separation plants and caustic chlorine operations. For this reason, industrial customers are extremely sensitive to a change in the price of electricity. It then stands to reason that the higher electricity prices caused by the Proposed Rule will significantly diminish U.S. industrial production and will lead to a cascading negative impact on the U.S. economy—an outcome projected by the IHS studies noted earlier in these comments.

In Alabama, the manufacturing industry has proven to be extremely valuable in that it contributes significantly to our economy. In 2010, the state’s manufacturing sector provided approximately 236,000 direct jobs in Alabama and created many more indirect jobs as well. Moreover, the manufacturing industry produced more than \$13 billion in exports to the world economy, that is, nearly 85% of all exports in Alabama.¹⁷

In recognizing the importance of the U.S. economy, the APSC strongly encourages the EPA to seriously consider the impact that its proposed carbon pollution standard will have on industry and businesses as they are faced with the decision to locate, expand and/or remain in Alabama and, more importantly, the United States. We further ask for policies and regulations that will facilitate competitively-priced electricity, which in turn will support the U.S. and Alabama manufacturing industries.

An additional economic concern of the APSC is that the EPA’s proposal will cause a further shift away from coal-fired generation, resulting in a decrease of Alabama coal production. In light of the fact that the coal mining industry is very important to Alabama’s economy and employs more than 4,484 workers,¹⁸ the EPA’s Proposed Rule is very alarming to the APSC. In 2013, mining companies had more layoffs in the state of Alabama than any other industry.¹⁹ Moreover, the United Mine Workers Association has estimated that this rule will result in 187,000 direct and indirect job losses in the utility, rail, and coal industries by 2020, and income losses from these sectors of \$208 billion between 2015 and 2035.²⁰

Not only does the coal industry support many direct jobs in Alabama, it also supports many other businesses that provide ancillary services to the mining industry, creating even more jobs for Alabamians. Some of these related businesses include railway transportation companies, trucking companies and manufacturers of mining equipment. If the EPA moves forward with its proposed carbon standard, many of these indirect jobs are at risk as well.²¹

¹⁷ See Semoon Chang, PhD, “The Importance of the Manufacturing Industry to the Alabama Economy and the Role of Electricity,” November 2011, *available at* <http://aiecenenergy.org/137/>.

¹⁸ http://www.alcoal.com/coal_industry.html. The number 4,484 workers include both metallurgical coal and steam coal production.

¹⁹ Birmingham Business Journal, February 21, 2014, *available at* <http://www.bizjournals.com/birmingham/subscriber-only/2014/02/21/largest-layoffs.html>.

²⁰ See Statement of Eugene M. Trisko, on behalf of United Mine Workers of America, AFL-CIO, *available at* <http://environmental.pasenategop.com/files/2014/06/Trisko-Testimony.pdf>.

²¹ As an example, CSX Corporation recently furloughed about 280 employees and put about 100 locomotives into storage. Chief Executive Michael Ward characterized this action as a "surgical" response to a big downturn in demand for coal from electric utilities.

In short, the negative consequences of the Proposed Rule on the U.S. coal industry²² and related sectors will do nothing to promote a recovery of our state's or our nation's economy, but will only make matters worse. Before finalizing any carbon standard, the APSC strongly encourages the EPA to perform a job impact analysis, particularly as to the effect the Proposed Rule could have on related industry, to assist in weighing the costs and benefits of the proposed regulation.

5. Other Legal Infirmities of the Proposed Rule

In light of the impacts that the Proposed Rule will have on our citizens through higher electricity costs and associated disruptions to the economy, the APSC is greatly troubled by the numerous legal issues surrounding the Proposed Rule. As discussed at the outset, the assumption by EPA of powers that Congress has expressly left to the states is, on its own, a gross overreach that demands correction. But with respect to the Clean Air Act itself, the Proposed Rule strays in the APSC's view significantly from what law allows.

A. The Clean Air Act prohibits the regulation of electric generating units under Section 111(d).

The APSC agrees with Attorney General Strange and West Virginia Attorney General Patrick Morrissey²³ that Section 111(d) of the Clean Air Act expressly prohibits the EPA from regulating any air pollutant emitted from an existing source category that is already regulated under Section 112. Section 111(d) states that standards of performance may be established for a source of an air pollutant if that source is not already regulated under Section 112 of the Clean Air Act.²⁴ The EPA has imposed extensive regulations on existing power plants pursuant to Section 112, thereby precluding regulation of those sources under section 111(d).

B. Section 111(d) prohibits the EPA from setting standards based on “beyond the fence-line” solutions.

EPA's Proposed Rule illegally expands the meaning of “source for any air pollutant” to include the entire state electricity grid, well beyond the fence-line of the facility which emits the pollutant. EPA's view differs significantly from the clear language of the Clean Air Act which refers to “standards of performance for any existing *source* for any air pollutant.”²⁵ Further,

²² From its near-term peak of 93,700 in the fourth quarter of 2011, average coal mine employment dropped 17.1% to 77,639 by the end of the fourth quarter of 2013. The U.S. EPA's air emissions regulations have played the largest part in the downsizing of coal production and employment, particularly the immediate impact of the EPA's Mercury and Air Toxics Standards, together with the impending Greenhouse Gas New Source Performance Standards for new and existing facilities. SNL.com. US Coal Mine Employment Continues to Plummet with No Bottom in Sight. February 13, 2014.

²³ See Letter from Hon. Patrick Morrissey, Attorney General of the State of West Virginia to Hon. Gina McCarthy, Administrator, U.S. Environmental Protection Agency, Re: EPA's Asserted Authority Under Section 111(d) of the Clean Air Act to Regulate CO₂ Emissions from Existing Coal-Fired Power Plants (June 6, 2014).

²⁴ Clean Air Act § 111(d)(1)(A)(i).

²⁵ Clean Air Act § 111(d)(1) (emphasis added).

Section 111(a) defines “stationary source” as “any building, structure, facility, or installation which emits or may emit any air pollutant.” The clear meaning of these provisions is that the standards of performance must be based on the emission reductions from individual plants.²⁶ EPA’s “beyond the fence-line” approach to setting emission goals is not consistent with the clear meaning of Section 111(d). The EPA “has no authority to rewrite the statute in this fashion.”²⁷

In addition to contradicting the clear meaning of the Clean Air Act, setting guidelines based on “beyond the fence-line” solutions does not give the states flexibility as purported in the Proposed Rule.²⁸ By setting guidelines that consider a wide range of “beyond the fence-line” solutions, the EPA is forcing the States to craft a solution that involves at least some of these options. Giving the States the ability to meet the standards using a “beyond the fence-line” approach does not offer flexibility when EPA has crafted the goals by utilizing all of these options. The Clean Air Act does not give the EPA this flexibility in establishing the standards.

It belies the clear meaning of the Clean Air Act that EPA could set the standards for existing sources based on the development of new sources of energy such as construction of renewable generation. These guidelines are just a disguise for the real goal of shutting down certain plants. Pollution guidelines should be limited to emissions limitations that are achievable at a particular plant. The EPA stretches reason by interpreting “best system of emission reduction” to include the construction of new and separate facilities.²⁹

EPA’s proposed guidelines are, for the most part, based on potential reductions achievable “beyond the fence-line.” This approach to setting 111(d) standards is inconsistent with the Clean Air Act and is in direct violation of D.C. Circuit’s holding in *ASARCO v. EPA*.

C. The Proposed Rule is unlawful because the guidelines will not be achievable at many facilities.

The Clean Air Act defines standards of performance as “a standard for emissions of air pollutants which reflects the degree of emission limitation *achievable* through application of the best system of emission reduction which... the Administrator determines has been adequately demonstrated.”³⁰ One-size-fits-all heat rate improvements, as utilized in Building Block 1, will not be achievable at many existing electric generators. Specifically, electric generating units that are already highly efficient will not be able to further enhance their efficiency to achieve this standard. Therefore, the proposed guidelines are unlawful because the heat rate improvements are not achievable at many of the more efficient generating facilities.

²⁶ See *ASARCO v. EPA*, 578 F.2d 319, 327-328 (D.C. Cir. 1978) (holding that Section 111(d) standards must be emission control obligations that can be applied to “a single building, structure, facility, or installation--the unit prescribed in the statute” and that EPA cannot expand the standard to include “a combination of such units”).

²⁷ See *id.*

²⁸ See Proposed Rule at 16.

²⁹ See Clean Air Act § 111(a)(1)

³⁰ 42 U.S.C. § 7411(a) (emphasis added).

D. Existing power plants may only be regulated to a standard of performance under section 111(d) [that] would apply if such existing source were a new source.

Under section 111(d)(1) of the Clean Air Act, “the Administrator shall prescribe regulations which shall establish a procedure similar to that provided by section 110 under which each State shall submit to the Administrator a plan which (A) establishes standards of performance for any existing source for any air pollutant ... (ii) to which a standard of performance under this section would apply if such existing source were a new source”³¹ In short, the EPA may only regulate existing sources of pollution under section 111(d) if there is also a rule that applies to new sources under section 111(b).

To satisfy the prerequisite set forth in section 111(d)(1), the EPA, in January 2014, proposed a rule that would limit carbon dioxide emissions from new power plants. The Proposed Rule requires companies building new coal-fired power plants to install some form of carbon capture and storage (CCS) technology to meet the EPA’s proposed GHG standard for new sources. The EPA’s reliance on CCS technology as the best system of emission reduction is fraught with problems.

First and foremost, CCS technology is largely regarded as neither economically viable nor adequately demonstrated. Even the White House’s Office of Management and Budget has doubts about the CCS mandate, saying the technology “has not been deployed at scale in commercial power plants” and has costs risks due to “significant selection bias,” given that it factors in projects that have benefited from significant government funding and other subsidies.³² Indeed, most CCS projects, which are in various stages of development, have received federal incentives or benefitted from by-product sales (such as captured CO₂ for enhanced oil recovery). Without federal incentives and other revenue streams, high costs are challenging to CCS development. In fact, the three CCS demonstrations located in the U.S. and used to support EPA’s carbon pollution standard all received federal dollars. In addition, we understand that one of those examples – the Kemper County facility, which is being constructed in the neighboring state of Mississippi – possesses unique, site-specific considerations that favored its development and construction, but which are not necessarily replicable in other areas of the country. Even so, the cost to construct that facility has exceeded estimates and the projected final cost is significantly greater, in terms of \$/kw, than what the EPA is estimating in the Proposed Rule.³³

In addition to the foregoing, the APSC has first-hand knowledge of CCS technology in that it follows one major CCS research demonstration project taking place near Mobile, Alabama at Alabama Power’s Plant Barry, a coal-fired power plant. This project is not commercial scale. Rather, a small amount of flue gas from one unit at Plant Barry (equivalent to the amount produced when generating 25 MW of electricity) is diverted from the plant and captured for storage.³⁴ Currently, the project has captured 100,000 tons of CO₂ and is injecting it into a saline

³¹ Clean Air Act § 111(d)(1).

³²Jonathan Crawford, “Federal agencies highly critical of EPA’s carbon capture mandate in review process,” SNL, January 10, 2014.

³³In Docket No. 2013-UA-0189, the Mississippi PSC stated that “The Kemper Project continues to face concerns and uncertainties related to cost, schedule and operational availability.” See Matthew Bandyk, “Miss. PSC wants Southern IGCC running before declaring prudence.” SNL August 05, 2014.

³⁴ See Southeast Regional Carbon Sequestration Partnership, http://www.secarbon.org/index.php?page_id=8.

formation 9,000 feet below ground surface in the Citronelle Oil Field (which is owned and operated by Denbury Resources).³⁵ This project has received financial support from the Department of Energy.

While the Plant Barry project has proven successful relative to its goals, it has not demonstrated a standardized CCS technology capable of being applied at all coal-fired power plants. This is true because location is very important to the successful implementation of CCS technology - particularly the site's geological attributes. Even so, there is limited geologic understanding and mapping on a national scale, which are essential pieces to injection and underground storage of CO₂. Indeed, proven CO₂ storage, with sequestration, has happened in a small number of locations.³⁶ The CCS demonstration at Plant Barry has also confirmed the economic challenges facing widespread CCS at the present time. To be sure, significant additional capital is required to initially build carbon capture facilities due to their technical complexities and could increase the price of electricity an astounding 70 or 80 percent.³⁷

Research and development, like that being done at Plant Barry, are the first of many steps in a long process toward possibly employing some form of CCS technology on a wide-scale basis. However, we still need more answers. It will take several years to increase the scale of these and similar projects, monitor the results of various storage facilities and then evaluate the successes and failures before industry can conclude if CCS technology is a viable solution for reducing global carbon emissions.

For the reasons stated above, the EPA's Proposed Rule under Section 111(b) for new sources likely will not survive legal scrutiny. Upon being stricken, the Proposed Rule under 111(d) for existing sources will be unenforceable.

Eventually, CCS may accomplish the cost-effective reduction and/or capture of carbon emissions and satisfy the governing standards of the Clean Air Act for deeming the technology the "best system of emission reduction." In the meantime, the APSC urges the EPA to support ongoing research and development efforts in CCS while avoiding a forced transition to commercially unproven technologies. Such an approach will most assuredly raise electricity rates on families and businesses in Alabama and throughout the country.

6. Conclusion

The links between affordable energy and economic growth are inextricable. Affordable energy, as we all know, is a vital necessity for every residence and business alike, and is the cornerstone to a vibrant U.S. economy. Coal, as part of a balanced mix of generation resources, has and continues to be readily available to support affordable and reliable electricity over many

³⁵ See Citronelle Fact Sheet: Carbon Dioxide Capture and Storage Project, Carbon Capture & Sequestration Technologies at MIT, *available at* <http://sequestration.mit.edu/tools/projects/citronelle.html>.

³⁶ Once captured, carbon storage presents its own unique technical and economic issues. This aspect of CCS must be considered separately as it depends not only on the viability of technical applications but on regulatory developments – such as property rights and environmental permitting – and also local geological conditions.

³⁷ See Anthony Adragna, CO₂ Capture Could Raise Wholesale Energy Price 80 Percent, Bloomberg February 12, 2014, *available at* <http://www.bloomberg.com/news/2014-02-12/co2-capture-could-raise-wholesale-energy-price-80-percent.html>.

years to come. In addition, the low cost and dependability of coal is vital to reducing energy poverty and moving the U.S. closer to energy independence. However, if the EPA follows through with its proposed carbon rule for existing facilities and removes coal from our nation's energy portfolio, such steps will most likely have devastating consequences.

With this in mind, the APSC strongly encourages the EPA to avoid energy policies where the costs and risks are real and substantial while the benefits are not. Furthermore, we urge the EPA to use a more reasonable and tempered approach in developing its final rule. In doing so, the EPA should assure the consuming public that good and quantifiable benefits will clearly offset the anticipated costs of the proposed standard. The EPA's arguments for its Proposed Rule should not be grounded in societal benefits that the average person and business will never realize.

If you have any questions or need additional information, please contact the undersigned at 334-242-5200 or John Free at: john.free@psc.alabama.gov.

Sincerely,

/s/John A. Garner

John A. Garner
Executive Director
Alabama Public Service Commission