



# Sumter Electric Membership Corporation

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A Touchstone Energy® Cooperative 

November 25, 2014

**U.S. Environmental Protection Agency  
Office of Air and Radiation**

**Submitted Electronically to [A-and-R-Docket@epa.gov](mailto:A-and-R-Docket@epa.gov) Docket ID No. EPA-HQ-OAR-2013-0602**

**Subject: Comments on Environmental Protection Agency's (EPA's) Proposed Carbon Pollution Emission Guidelines for Existing Sources from Sumter Electric Membership Corporation, Americus, Georgia**

## **I. Introduction**

Sumter Electric Membership Corporation (Sumter EMC) is a Georgia Electric Membership Corporation operating as a not-for-profit electric cooperative. Sumter EMC provides electric power distribution service to more than 20,000 customers in 11 counties in southwest Georgia, one of the most economically depressed areas of the country.

Sumter EMC is a member of the National Rural Electric Cooperative Association (NRECA) located in Arlington, Virginia and a member of Oglethorpe Power Corporation (OPC) located in Tucker, Georgia. We are pleased to comment on the EPA's proposal for Carbon Pollution Emission Guidelines for Existing Stationary Sources in the Electric Utility Generating Units category, 79 Fed. Reg. 34,830 (June 18, 2014) (hereinafter the "Proposed Rule"). Sumter EMC agrees with the comments and is in full support of the recommendations submitted by both OPC and NRECA in this rulemaking.

## **II. Background:**

As part of the Administration's effort to reduce CO<sub>2</sub> emissions, EPA has proposed three rulemakings under the authority of Section 111 of the Clean Air Act. Two of these rules address new sources, or sources that are considered new because they are modified or reconstructed, under the authority of Section 111(b). On June 18, 2014, EPA issued the Section 111(d) existing source rule, which poses the greatest risk of imposing harmful costs and requirements on rural electric cooperatives.

EPA's aggressive approach in interpreting both the statute and its own longstanding regulations makes the rule illegal and unachievable for numerous legal and technical reasons. For the reasons outlined below and by reference in the detailed comments submitted by NRECA, we urge EPA either to abandon the rule as beyond its legal authority or to substantially revise it to comply with the law recognizing the technical and policy limitations.

**Comments on the Statute and the Proposed Section 111(d) Existing Source Emission Guidelines:**

Section 111 of the Clean Air Act requires that "standards of performance" be set for stationary sources of certain non-hazardous air pollutants. Such standards are to be based on the "best system of emission reduction" (BSER) which must be adequately demonstrated and take into account the cost of achieving such reduction and any non-air quality health and environmental impact and energy requirements. Unlike new sources where EPA sets the standards of performance itself, the requirement for existing sources **limits** EPA to establishing the "procedures" under which *the individual States* (1) submit plans that establish standards of performance for existing sources within the State; and (2) apply those standards of performance to specific sources after taking into consideration "among other factors, the remaining useful life of the existing source...." Under longstanding EPA regulations, these factors include (1) unreasonable cost of control resulting from plant age, location, or basic process design; (2) physical impossibility of installing necessary control equipment; and (3) other factors specific to the facility or class of facilities that make application of a less stringent standard or final compliance time significantly more reasonable. EPA failed to follow this approach and leaves states with little choice but to adhere strictly to EPA's proposed guidance if they hope to comply.

**1. EPA lacks statutory authority to issue the rule.**

First, the statutory language of Section 111(d) is a product of differing House and Senate versions. Under the Senate version, unless a particular air pollutant emitted by existing sources was regulated by one of several other listed Clean Air Act provisions, existing sources emitting that pollutant could be regulated under Section 111(d). In contrast, the House version prohibits existing sources from being regulated under Section 111(d) if the existing sources are regulated under Section 112.

Under prevailing rules of legislative construction and case law regarding harmonization of conflicting statutory provisions, the House provision controls. Effective in 2012, EPA already regulates coal-fired power plants under Section 112 air toxics authority in the Mercury and Air Toxics Standard. Therefore, EPA has no authority to regulate existing coal-fired power plants a second time under Section 111(d).

Second, Section 111(d) requires EPA to issue a valid *new source performance standard* under Section 111(b) before issuing an existing source standard. Based on flaws in the proposed NSPS and modified/reconstructed source standard, it is doubtful that either of the provisions will be lawfully finalized. Therefore, EPA has not satisfied this prerequisite to issue the Section 111(d) rule.

**2. EPA has overstepped its legal authority in the joint federal-state process for establishing existing source standards of performance.**

EPA has no statutory authority to define the “best system of emission reduction” in a way that goes “outside the fence” of a generating unit in ways that go beyond the technological or operational improvements that can be made at that individual source. For decades, EPA has acknowledged and abided by this interpretation of BSER in its longstanding regulations and prior standards. By requiring utilities to employ measures such as re-dispatch to other types of generation, adopt renewable energy sources and require consumers to reduce their demand for electricity through energy efficiency measures, EPA has ranged far beyond its statutory authority.

Second, regardless of its apparent disregard for the definition of BSER, EPA's authority under Section 111(d) is limited to determining what systems of emission reduction have been adequately demonstrated. The States have the primary role of establishing, based on EPA-determined BSER guidance, the actual standards of performance that will apply to individual sources in their borders. In each of these case-by-case decisions, the state must consider source-specific factors including the remaining useful life of each source, the reasonableness of the associated costs, and physical and technical feasibility of control. This process is consistent with the plain language of the statute and the EPA's own longstanding regulations. Again, EPA's proposal ignores the statute by setting fixed limits for the States rather than limiting their involvement to that of reviewing state plans to ensure they comply with the Act.

**3. EPA's "power grab" undermines States' authority and will disproportionately impact small utilities such as cooperatives.**

There is a multitude of problems caused when EPA usurps the States' proper role of determining where and how to establish individual source emission limits, especially for the cooperatives. EPA established four "building blocks" that represent their interpretation of BSER. These include: 1) heat rate efficiency improvements of 6 percent, 2) a 70% capacity factor for existing natural gas combined cycle units to displace coal-fired capacity, 3) additional renewable requirements and treatment of nuclear power generation, and 4) a nationwide 1.5 percent annual end-use energy efficiency improvement. While the actual reduction goals vary considerably from state to state, these requirements are binding and give states little leeway in how they could achieve EPA's goals.

If EPA should go ahead with this rule as proposed, the limited generation portfolio of rural electric cooperatives, the heavy reliance of many cooperatives on coal-fired generation, and other practical realities limit cooperatives' ability to either cost-effectively implement or technically achieve many of the limits in EPA's building blocks.

As NRECA details in their comments, EPA has significant flaws in each of the building blocks that undermine their legitimacy in establishing goals that the states can achieve. To remedy this flaw, EPA will need to reassess what is achievable under each Building Block for each state and recalculate the goals accordingly. This will help mitigate some of the challenges faced by cooperatives and other utilities with EPA's proposed limits.

**4. The emission reduction targets EPA has set are unattainable.**

There are significant policy and technical impediments that make implementation of this proposal impractical and likely impossible. Starting with the exclusive role of the Federal Energy Regulatory Commission (FERC) in determining how energy is dispatched, the proposed rule impermissibly requires States to regulate dispatch in contravention of FERC authority. Next is the inability of the States to regulate based upon environmental rather than economic dispatch when such decisions are controlled by regional transmission organizations and independent system operators whose boundaries are not contiguous with state borders. Further there is the potential impact of the rule on the reliability of the supply of electricity.

Lastly, there are numerous faulty assumptions on which each of the Building Blocks is based. These faulty assumptions include such critical issues as limitations on source efficiency improvements, natural gas availability and existing natural gas generation capacity, shortages of transmission infrastructure for required additional renewable generation, arbitrary treatment of nuclear power, and the unrealistic assumptions regarding future potential reduction in electricity demand based on energy efficiency programs.

**5. The rule is unworkable, given the timeframe EPA proposes.**

Even if all the other issues are resolved in EPA's favor, the rule is unworkable given the timeframes that EPA has set for compliance. First, the time frames EPA proposes are absurdly short, particularly given the complexity of the tasks EPA has assigned the States. Recognizing this complexity, EPA should give the States at least five years to develop a state implementation plan ("SIP") for a single State and seven years to develop a multi-state SIP, rather than the maximum of two and three years, respectively, that EPA has proposed. The Agency should also provide an extra three years for developing any SIP upon a demonstration of reasonable progress toward development of a SIP. Second, EPA should allow the States to adopt compliance deadlines that are based on the remaining useful lives of each of the designated existing facilities. Third, given the extensive legal, regulatory, and physical changes that must occur first, EPA should give the States until 2035 to achieve compliance with any emission reduction targets, and EPA must abandon the interim targets it has proposed, as it will be impossible for States to meet those.

**6. EPA should provide an exemption from New Source Review.**

To the extent the rule requires units to undertake heat-rate improvements, those projects should be exempt from additional review under the statute's New Source Review (NSR) program. It makes little sense to require such review where the very purpose of the heat-rate improvement is to *reduce* emissions.

**7. The Proposed Rule would constitute a regulatory taking for which compensation would be required.**

Finally, because the proposal as it stands would likely result in the premature closure of existing power plants, the proposal's requirements amount to a regulatory taking requiring compensation because of the premature closures and uneconomic curtailment it will require.

**8. The Proposal will have a negligible and probably undetectable impact on atmospheric CO<sub>2</sub> concentrations.**

The Proposal will have a negligible effect on climate change or global emissions of CO<sub>2</sub>. EPA states that the purpose of the rule is to “continue progress already underway to lower the carbon intensity of power generation in the United States.” While the Agency makes the case that climate change exists and is affecting the United States, EPA does not even attempt to claim that the rule will have any impact on climate change. EPA states that the Proposal will reduce CO<sub>2</sub> emissions, but does not assert that those CO<sub>2</sub> emission reductions will actually accomplish anything in terms of climate change mitigation. The rule covers only a portion of the power generation sector in a single country - emissions representing less than 5% of global greenhouse gas emissions. And the rule would reduce only a portion of the emissions of that sector. EPA estimates that the rule would result in a reduction in CO<sub>2</sub> emissions of about 555 million tons of CO<sub>2</sub> in 2030 for the Option 1 State Compliance Approach. The U.S. Energy Information Administration in their “International Energy Outlook 2013” projected total global CO<sub>2</sub> emissions in 2030 to be approximately 41,500 million tons of CO<sub>2</sub>. Therefore, assuming full compliance with the rule as proposed, the reduction would be about 1.3% of total global CO<sub>2</sub> emissions in the year 2030, which will have a negligible and probably undetectable impact on atmospheric CO<sub>2</sub> concentrations. If the purported rationale of the Proposal is to address climate change, but the rule would not in fact do anything to mitigate climate change, EPA should either discard the Proposal entirely as being unfounded, or be more forthcoming about the real reasons for this action.

**9. The Proposal Punishes Georgia, Its Citizens, Oglethorpe Power and the Other Co-Owners of Plant Vogtle**

In the Proposal, EPA determines that as part of BSER, building block 3 includes the projected amounts of generation available by completing all nuclear units currently under construction. EPA proposes to include “under construction” nuclear generation in the denominator of its formula for calculating state CO<sub>2</sub> emission rate goals.

The Proposal violates the CAA, betrays national energy and environmental objectives and EPA's own policy goals in promulgating this rule and completely ignores State law. If EPA finalizes the Proposal “as-is,” without necessary revision, its action would be arbitrary and capricious rulemaking, in derogation of Federal law. It unfairly (and inexplicably) penalizes the three states that have proactively acted – at great expense - to reduce future CO<sub>2</sub> emissions by undertaking to construct and operate the first new nuclear generation in thirty years.

The Proposal penalizes the three states – Georgia, Tennessee and South Carolina – who, years ago, took the lead in developing new, zero-emitting EGUs using this very expensive technology. For reasons unexplained in the Proposal, the generation projected from these units – *which emit no CO<sub>2</sub>* – provide a substantial part of the justification for *tightening* the CO<sub>2</sub> standards for the three States where these units are being constructed (by placing their generation in the denominator in the above formula), far beyond what those goals would be had such construction not been undertaken. The Proposal includes “under construction” nuclear in the computation of the interim and final goals for the three states, thereby lowering their goals substantially. Georgia’s 2030 goal with under construction nuclear – 834 lb/MWh – is 14% lower than its target would be without such inclusion - 972 lb/MWh. South Carolina (22%) and Tennessee (14%) are similarly affected. Placing Georgia’s goal in perspective with the surrounding southeastern states that have not stepped forward to build new nuclear generation, EPA is requiring a 44% reduction from the State’s 2012 baseline by 2030; if under construction nuclear were removed from Georgia’s 2030 goal, EPA would still be requiring an almost 40% reduction from the 2012 baseline for compliance. This compares to a generation-weighted average reduction requirement of only 36% for the six southeastern states that do not have under construction nuclear generation in their future energy mix. Thus, even without including under construction nuclear, Georgia’s goal is more stringent – which means that more investment will be required – than all of the other southeastern states that have not recently acted to add new nuclear capacity. It also means that EPA is requiring renewable energy and energy efficiency targets for Georgia equivalent to those for states that did not invest in new nuclear capacity.

Counterintuitively, when under construction nuclear – a zero emitting technology - is added to the State’s reduction requirements, however, Georgia’s additional required carbon reductions – and thus its required investment – soar in relation to these other surrounding states. These disproportionate burdens – which must be borne by Georgia’s citizens – could result in much higher electricity costs than surrounding states, weakening Georgia’s competitive position vis-à-vis such states for future economic development.

Contrary to EPA’s statements in the Proposal that there are no state policies to support development of new nuclear units, the Georgia Environmental Protection Division (“EPD”), in a September 16<sup>th</sup> comment letter, discussed Georgia’s 2006 State Energy Strategy, which specifically called out advanced nuclear reactors (like the type being installed at Plant Vogtle) as one priority for further development in Georgia to meet future energy needs. Supporting resolutions were adopted by both the Georgia House and Senate in the 2006 legislative session.

Therefore, as EPD points out, Georgia consciously chose to invest its resources in nuclear power in reliance on (i) State policies favoring nuclear power and (ii) expectations of future federal regulation of carbon emissions. No later than 2008, the Federal Government (*i.e.*, Congress and the President) signaled that laws to reduce CO<sub>2</sub> emissions were imminent and that, as discussed above, one way to address such concerns was the construction of Vogtle Units 3 and 4.

When the Vogtle expansion was under consideration, a key concern was the effect future federal carbon regulations and/or statutes might have on fossil operations and the need to pursue further emission-free electric generation capacity.

The Proposal also conflicts with itself, and Agency policy, in the sense that the reason for it – namely, to reduce emissions of CO<sub>2</sub> – supports exactly the opposite treatment of under construction units (*i.e.*, non-inclusion of under construction nuclear in the state goals), so as to reward those few states that proactively invested in nuclear generation that reduces carbon emissions. In a rule unquestionably created solely to lower carbon emissions, it makes no sense for the Agency to punish the few states, their citizens (ratepayers, cooperative members and municipal residents) and the nuclear unit owners and operators that are leading the way in the licensing and building of zero carbon-emitting generation.

Constructing large, non-carbon emitting resources is exactly the kind of behavior this rule – if crafted correctly – should strongly encourage. At Plant Vogtle, the investment - estimated to ultimately be around \$14 billion with approximately \$4.5 billion being borne by Oglethorpe Power Corporation – is significant. Other states who might have been considering also stepping forward to develop this zero-emitting generation are no doubt breathing collective sighs of relief that they chose not to act and, thus, were not penalized for constructing clean generation like the three states that did. Meanwhile, Georgia, Tennessee and South Carolina are left to ponder why new nuclear construction is being penalized rather than rewarded. The Proposal should be revised to reward those who acted early.

EPA should correct this inequity before finalizing the Proposal. Under construction nuclear generation should not be included in calculating state goals. States, their citizens and their utilities who are leading the way in reducing carbon emissions should be allowed to take full credit for non-emitting nuclear generation in complying with any state or utility-specific performance standards promulgated pursuant to this rule.



**Sumter EMC**

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**III. Conclusion:**

EPA's rule, if implemented as currently proposed, will:

- Increase the cost of electric power
- Compromise the reliability of electric power generation and distribution
- Set goals which are unattainable with today's technology
- Penalize states who have been proactive in constructing zero-emissions nuclear power generation facilities
- Have a disproportionately negative impact on the poorest Americans, who already spend most of their disposable income for energy
- Send American jobs being overseas and compromise our global competitiveness
- Have *no significant impact* on the reduction of global carbon dioxide concentrations

In light of the adverse economic implications and the futility of its effectiveness to materially impact global carbon dioxide concentrations, we urge EPA either to abandon the rule as beyond its legal authority or to substantially revise it to comply with the law recognizing the technical and policy limitations.

We appreciate this opportunity to comment.

Sincerely,



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