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November 24, 2014

A-and-R-Docket@epa.gov

Administrator Gina McCarthy
Office of the Administrator 1101A
Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

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

Office of Information and Regulatory Affairs, OMB
Attn: Desk Officer for the EPA
725 17th St. NW
Washington, DC 20503

Re: EPA-HQ-OAR-2013-0602 – Proposed Rule – Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units

Dear Administrator McCarthy:

Leadership for the Alaska Senate Majority has reviewed the proposed rule under the authority of the Clean Air Act ("CAA") section 111(d) and provide the following comments:[1]

[1] See https://www.federalregister.gov/articles/2014/06/18/2014-13726/carbon-pollution-emission-guidelines-for-existing-stationary-sources-electric-utility-generating. The proposed rule shall apply to all fossil-fuel plants, including coal, diesel, gas, and naphtha, greater than 25 megawatts ("MW") in Alaska. Exceptions shall include plants on military installations, and the plant on the University of Alaska Fairbanks ("UAF") Campus.

I. Alaska Must Be Exempt from the Proposed Rule, or, Alternatively, the EPA Deadlines Must Be Extended Five Years As Affected Coal-Fired Electric Generating Units ("EGUs") Are Already, in Good Faith, Proactively Attempting to Meet Proposed EPA Standards

Alaska must be exempt from the proposed rule. As discussed below, the state does not have the infrastructure, interconnectedness, transmission capacity, or population to offset losses associated with any alleged "environmental gains" envisioned by the EPA. Leadership continues to object to any proposed rule which yields negative economic consequences to already burdened ratepayers.

In the event Alaska is not exempt from the rule, we, alternatively, look for "across-the-board" reasonable extensions of five years for proposed timeframes on affected coal-fired EGUs. The purpose of this letter is to focus on the alternative ability of Alaska coal-fired EGUs to address proposed standards in the rule and educate the EPA as to measures already taken. Some potential compliance problems also arise.

Noteworthy: The proposed rule requires Alaska to reduce its CO_2 emissions rate from some existing fossil fuel plants to meet Alaska-specific standards (in pounds per MWh) starting in 2020. The final rate shall be for 2030 and beyond. The EPA also calculated "Option 2" standards (which are less stringent emission rate reductions that must be met by 2025 instead of 2030). For the purposes of these comments, the focus shall be on the 2030 deadline.[2] Regardless of whether the final deadline is 2025 or 2030, in either scenario, the state (if there is not an outright exemption from the rule rule) should be allowed additional time (five years) for Alaska-based coal-fired EGUs to meet expected CO_2 reduction thresholds.

A. Analysis of EPA's Building Blocks

The state is required to meet the standards based on four primary building blocks. Each block is designed to help lower CO_2 emissions into the atmosphere. The blocks include: (1) requiring coal plant efficiencies; (2) displacing coal-fired generation and increasing generation from natural gas; (3) substituting generation at affected electric generation units with expanded low-or zero carbon generation (i.e. renewables); (4) using demand-side energy efficiency measures. [3]

For Alaska, the building block reduction is as follows: [4]

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[2] The details on "Option 1" and "Option 2" are found at: http://www2.epa.gov/sites/production/files/2014-05/documents/20140602proposal-cleanpowerplan.pdf.

[3] See https://www.federalregister.gov/articles/2014/06/18/2014-13726/carbon-pollution-emission-guidelines-for-existing-stationary-sources-electric-utility-generating.

[4] *See* U.S. Environmental Protection Agency, *Technical Support Document ("TSD") for the Clean Air Act, Section 111(d) Emission Guidelines for Existing Power Plants: Goal Computation, Appendix 5. See also* http://www.c2es.org/federal/executive/epa/carbon-pollution-standards-map.

State	**Emissions Rate of Power System, including zero-carbon generation (lbs CO2 / MWh) (2012**	**Block 1 (Coal-plant Efficiency)**	**Adding Block 2 (Natural Gas Fuel Switching)**	**Adding Block 3 (Renewable and Nuclear Generation)**	**Final Target by Adding Block 4 (Demand-side Energy Efficiency)**	**Total Emissions Reduction Target by 2030**
Alaska	1351	1340	1237	1191	1003	25.8%

An important point arises:

- The initial rate-based emission is derived from 2012 CO_2 emissions from Alaska's existing EGUs. Emissions from Healy Unit 2 are not considered because the plant was not operational in 2012. Since Healy 2 would increase the proposed initial fossil fuel rate in lbs/MHh, the initial emission rate is inaccurately low.

Regardless, affected EGUs, including Alaskan-based utilities (particularly in the Interior, such as Golden Valley Electrical Association ("GVEA")), have been proactive in already addressing some of the issues found in the proposed rule change. Some of the changes can realistically made. Other changes face challenges because of cost or infrastructure issues.

Because of the proactive attempts by EGUs, many question the need for the EPA to move forward with the rule-making process.

The proactive attempts by EGUs include, (as categorized by the EPA's proposed building blocks):

1. Block 1 – Coal Plant Efficiency

GVEA has communicated with the EPA and implemented some "best practices" equipment upgrades/activities at Healy Unit 1 & 2.[5] "Best practice" options may include, but are not limited to, condenser cleaning, boiler feed pump rebuilds, air heater and duct leakage control, turbine overhauls, condenser improvement, and pulverizer maintenance.

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[5] *See In the Matter of Investigating the Potential Impacts of the United States Environmental Protection Agency's Proposed Clean Air Act Section 111(d) Rule Establishing Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units*, GVEA's October 16, 2014 Response to I-14-007(1) from the Regulatory Commission of Alaska at page 2.

2. Block 2 – Natural Gas Fuel Switching

GVEA is giving consideration to receiving natural gas combined cycle generation from South-central Alaska to replace some coal-fired generation assets.

In addition, as natural gas production expands in Cook Inlet (and, potentially, on the North Slope), the state has continued to review low-cost alternatives for interior communities for heat and power generation. One such alternative is the Interior Energy Project ("IEP").

The IEP attempts to bring low-cost natural gas to the Fairbanks North Star Borough ("FNSB"). The intent, is to have "anchor customers," including GVEA (to build "economies of scale"), thereby lowering fuel and electrical costs throughout the borough.

There are concerns however.

Projected costs for the IEP may range from $16 to $25/MMBtu and may be one-third more expensive than coal.[6] Whether natural gas comes to the FNSB from the North Slope or Cook Inlet may merit further review (as advocates debate the issue, particularly as it pertains to cost differences).

If the IEP is delayed, there is a real probability that buying potential "stop-gap" natural gas powered electricity from South-central may cost more than coal-fired electrical generation in the Interior. This probability, aligned with previous sunk-costs for GVEA, may create a potential adverse economic effect to Interior ratepayers.

3. Block 3 - Renewable and Nuclear Generation

Although there is no nuclear power in Alaska, the state is giving serious consideration to renewable energy. The Susitna-Watana dam (though perhaps years away because of state fiscal constraints and transmission capacity issues) will provide long-term power to thousands of people across Alaska. The project will generate 2,800,000 megawatt hours (MWh) of annual energy (or 50 percent of the current electric demand on the Railbelt).

Susitna-Watana includes construction of a dam, reservoir, and related facilities on the Susitna River. To minimize disruption to salmon migration, the project will be 184 river miles from the Cook Inlet, 87 river miles beyond Talkeetna, and 22 to 32 river miles above Devils Canyon.

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[6] Northern Economics, Inc., *Fairbanks North Star Borough Gas Distribution System Analysis*, Prepared for the Fairbanks North Star Borough, FNSB Project Number: 11-PWDPRJ-02, June 29, 2012.

Coal, by all accounts, is the cheapest form of energy in Interior Alaska (which is already burdened with high energy costs). High costs occur because of sustained low temperatures in the winter, transportation costs, etc.

Construction of transmission lines (connecting the Railbelt transmission system) would need to occur.

However, like with most large projects, there are ongoing concerns with Susitna-Watana.

Many wonder whether cost thresholds can be met (during times where the state may face, potentially, years of constricted budgets). Historically, because of expense, "phased-funding" has occurred with Susitna-Watana. Whether ongoing "phased-funding" continues will likely be the subject of debate in the forthcoming months.

4. Block 4 – Demand-Side Energy Efficiency

Demand-side Energy efficiency programs have been operating in Alaska for decades. For most in Interior Alaska, members have already implemented cost effective measures. The high cost of energy in general is already a major driver in reducing electricity consumption.

One potential question arises: Who bears the costs for implementing demand-side energy efficiency programs?

In some cases, the utilities bear the majority of the costs for programs it cannot offer for free. The services provided must be reasonably priced for members (which, depending on the circumstances, may have to pay 20% of the audit costs). However, a potential problem arises. Certain members may not have the resources to avail themselves of the services. If so, the cost will have to be absorbed by the utility and may further get passed along to the rest of the ratepayers.

II. Presumptive Savings and CO_2 Reductions May Not Apply to Alaska

The majority of Rule 111(d) presumes levels of cooperation with neighboring states. Each state's approach will depend on its regulatory structure, renewable resource base, level of interstate power flows (relative to its load), and other factors affecting costs and options for emission reduction.

In those instances of interstate cooperation, transmission systems may be connected to multiple, varied generation units (including natural gas, hydro, and nuclear). Transmission assets in the "lower 48" can and will connect millions of people.

Alaska is different. Alaska is an "island" for connectivity and transmission purposes. As a result, unlike most of the United States, Alaska (if not granted an exemption) will require a stand-alone implementation plan. [7]

Noteworthy: EPA's projected national compliance cost savings under the proposed rule have little relevance to the "Alaska analysis." In the absence of multi-state opportunities and regional cooperation, Alaska-specific cost savings may not occur as anticipated by the EPA.

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[7] Other "lower-48" states may submit multi-state plans because of their proximity to neighboring connection and generation assets. In 2015, once a final rule is crafted, Alaska will have until June 2016 to submit an initial state implementation plan. The plan shall be a stand-alone plan and shall be finalized by June 2017.

The ultimate cost to Alaska will likely depend on the CO_2 abatement cost curve and the mixture of CO_2 reduction measures. If the EPA's assumed emissions reductions, based on the Best System of Emissions Reductions ("BSER") are large, but few low-cost abatement opportunities exist, then potential compliance could be quite costly.

On the other hand: If there are more low-cost options than the EPA assumed, then the costs of compliance may be less.

The concern is that Alaska, which has a limited grid-system, (primarily on the Railbelt) will have few low-cost abatement opportunities, particularly in the Interior where coal-fired generation is more common.[8]

Sincerely,

Senator Charlie Huggins

Senator John Coghill

Senator Lesil McGuire

Senator Kevin Meyer

cc: Governor Sean Parnell
Senator Lisa Murkowski
Senator Mark Begich
Congressman Don Young
Alaska Attorney General Michael Geraghty

[8] Additionally, many are concerned about the adverse economic effect the rule may have on coal producers like Usibelli Coal Mine in Healy. Usibelli's market is overwhelmingly from "in-state demand." Should demand decrease, what are the consequences to the community of Healy? What adverse effects occur to the Alaska Railroad? Many share the view that Rule 111(d) would financially damage those interests.