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ALASKA REMOTE GENERATOR RELIABILITY AND PROTECTION ACT

FEBRUARY 25, 2019.—Ordered to be printed

Mr. BARRASSO, from the Committee on Environment and Public Works, submitted the following

R E P O R T

[To accompany S. 163]

[Including cost estimate of the Congressional Budget Office]

The Committee on Environment and Public Works, to which was referred the bill (S. 163) to prevent catastrophic failure or shutdown of remote diesel power engines due to emission control devices, and for other purposes, having considered the same, reports favorably thereon without amendment and recommends that the bill do pass.

GENERAL STATEMENT AND BACKGROUND

Of the more than 200 remote Alaskan villages, a majority are powered either primarily by diesel generators or by back-up diesel generators where renewable energy is available. Because these generators are not linked to a major road or highway system, diesel generators in these remote villages rely on fuel that must be barged in at high cost—up to $10 per gallon in some areas. Many of these isolated communities are located in Arctic and Sub-Arctic climates. These diesel generators provide vital heat and light that is necessary for human health, safety, and basic necessities. During fall, winter, and spring, temperatures can fall below freezing and daylight is limited. Many villages rely on generators that are between 10 and 30 years old and are looking to purchase new generators to improve efficiency and reduce the maintenance costs associated with worn out engines.

The Environmental Protection Agency (EPA) has recognized "that the circumstances in remote Alaska required special rules."[1] Under EPA's New Source Performance Standards for compression ignition internal combustion engines (CI ICE) (i.e., diesel generators), EPA gives special considerations for "remote areas of Alaska."[2] Under 40 CFR 60.4216, remote areas of Alaska can use stationary CI ICE that are certified to marine engine standards rather than land-based non-road engines. In addition, stationary CI ICE in remote areas of Alaska do not need to meet Tier 4 nitrogen oxide (NO_X) emission standards that require an after-treatment NO_X pollution control device, in particular selective catalytic reduction (SCR) technology, because of the difficulties associated with using these devices in extreme cold and remote areas. Tier 4 particulate matter (PM) emission requirements are also not required for remote Alaskan stationary CI ICE that are older than model year 2014. However, all non-emergency stationary CI ICE in remote areas of Alaska that are model year 2014 or later must either be certified to meet Tier 4 PM emissions standards or must "meet the applicable requirements for [particulate matter (PM)] in §§ 60.4201 and 60.4204 or install a PM emission control device that achieves PM emission reductions of 85 percent, or 60 percent for engines with a displacement of greater than or equal to 30 liters per cylinder, compared to engine-out emissions." This requirement in effect mandates the installation of after-treatment PM control devices such as Diesel Particulate Filters (DPFs) on model year 2014 and newer engines.

Based on recent information from EPA and Alaska state officials, there are credible reports that Tier 4 CI ICE emission control technologies for PM emissions—as well as Tier 4 NO_X emissions controls—are having difficulties working in remote areas of Alaska. Similar to SCR technology, the extreme weather and remoteness of some Alaskan villages do not allow DPFs to perform as intended. The few CI ICE in remote areas of Alaska that have DPFs have shown a decrease in reliability of these engines as well as their fuel efficiency, an increase in maintenance requirements and an increase in maintenance costs.

The additional cost of maintaining a DPF can affect a remote area's economic and public health. If anything goes wrong with the DPF, the generator shuts down. Only a factory-trained service technician with the proper codes can fix the problem. In remote Alaska, these technicians are at least one to two days of travel time away, which adds to delays and costs. Especially in the fall and winter, further repair delays are likely because weather or extreme cold can shut down airplane access for multiple days or weeks. If a failure in the powerhouse occurs during one of these times, the village could suffer significant damage to its infrastructure or circumstances that could lead to the potential loss of life.

The marine industry was able to avoid the DPF restrictions under that industry's EPA standards specifically because DPF systems are expensive and unreliable. Generators in rural Alaska did not receive the same type of exemption despite requests.[3] As a re-

[1] 80 Fed. Reg. 68808, 68811 (Nov. 6, 2015).
[2] 81 Fed. Reg. 44212, 44215 (July 7, 2016).
[3] *Id.* at 44217 (citing comments of the Alaska Energy Authority (Dec. 21, 2015), *available at* https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0866-0019).

sult, remote Alaskan villages that want to replace old CI ICE must find engines that are model year 2013 or older to get around the Tier 4 PM requirement. Not surprisingly, villages are having a hard time finding these older engines.

S. 163 addresses these concerns and allows CI ICE in remote areas of Alaska to meet existing Tier 3 standards without the need to install additional PM control devices. Narrow in scope, S. 163 addresses only those diesel fuel generators located in remote Alaska to ensure that EPA standards for CI ICE in these areas do not decrease reliability, increase costs, or threaten people's health and welfare. The legislation, as amended, also requires EPA, in consultation with the Department of Energy, to provide Congress with policy options to help the people living in remote areas of Alaska have affordable and reliable energy while also addressing air emissions.

OBJECTIVES OF THE LEGISLATION

Current Tier 4 PM emission control technologies have difficulty performing adequately in remote areas of Alaska. S. 163 directs the EPA Administrator to revise 40 CFR 60.4216(c).

SECTION-BY-SECTION ANALYSIS

Section 1. Short title

This Act may be cited as the "Alaska Remote Generator Reliability and Protection Act."

Section 2. Revision of regulations required

This section changes the standards under 40 CFR 60.4216(c) from Tier 4 PM standards to Tier 3 PM standards. The section also instructs the Environmental Protection Agency, in consultation with the Department of Energy, to submit a report assessing options for the Federal Government to meet the energy needs of remote areas in the state of Alaska in an affordable and reliable manner while addressing air emissions.

LEGISLATIVE HISTORY

On January 16, 2019, Senator Sullivan introduced S. 163, the Alaska Remote Generator Reliability and Protection Act, with Senator Murkowski as an original cosponsor. The bill was referred to the Senate Committee on Environment and Public Works.

The text of S. 163 is identical to the text of S. 1934, Alaska Remote Generator Reliability and Protection Act, which passed the Senate during the 115th Congress. Senator Sullivan introduced S. 1934 on October 5, 2017. Senator Murkowski was a cosponsor. The EPW Committee's Subcommittee on Clean Air and Nuclear Safety held a hearing on S. 1934 on November 14, 2017. The EPW Committee reported S. 1934, as amended, by voice vote on September 18, 2018. The Senate passed the reported legislation by unanimous consent on December 4, 2018.

HEARINGS

A legislative hearing was not held on S. 163. As explained above, a legislative hearing was held on S. 1934 on November 14, 2017 during the 115th Congress.

ROLLCALL VOTES

On February 5, 2019, the Committee on Environment and Public Works met to consider S. 163. S. 163 was ordered favorably reported without amendment by voice vote. No roll call votes were taken.

REGULATORY IMPACT STATEMENT

In compliance with section 11(b) of rule XXVI of the Standing Rules of the Senate, the committee makes evaluation of the regulatory impact of the reported bill.

The bill does not create any additional regulatory burdens, nor will it cause any adverse impact on the personal privacy of individuals.

MANDATES ASSESSMENT

In compliance with the Unfunded Mandates Reform Act of 1995 (Public Law 104–4), the committee finds that S. 163 would impose no Federal intergovernmental unfunded mandates on State, local, or tribal governments.

S. 163 contains no intergovernmental mandates as defined in the Unfunded Mandates Reform Act (UMRA). The bill contains no new private-sector mandates as defined in UMRA.

COST OF LEGISLATION

Section 403 of the Congressional Budget and Impoundment Control Act requires that a statement of the cost of the reported bill, prepared by the Congressional Budget Office, be included in the report. That statement follows:

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, DC, February 12, 2019.

Hon. JOHN BARRASSO,
Chairman, Committee on Environment and Public Works,
U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for S. 163, the Alaska Remote Generator Reliability and Protection Act.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Stephen Rabent, who can be reached at 226–2860.

Sincerely,

KEITH HALL,
Director.

Enclosure.

S. 163, Alaska Remote Generator Reliability and Protection Act
As reported by the Senate Committee on Environment and Public Works on February 5, 2019

Millions of Dollars	Direct Spending	Revenues	Net Deficit Effect	Spending Subject to Appropriation
2019	0	0	0	*
2019-2024	0	0	0	*
2019-2029	0	0	0	n.a.

Pay-as-you-go procedures apply?	No	Mandate Effects	
Increases on-budget deficits in any of the four consecutive 10-year periods beginning in 2030?	No	Contains intergovernmental mandate?	No
		Contains private-sector mandate?	No

n.a. = not applicable; * = between zero and $500,000.

S. 163 would require the Environmental Protection Agency (EPA) to revise regulations for certain internal combustion engines used in remote areas of Alaska to allow those engines to emit higher levels of particulate matter compared to current standards. The bill also would require EPA to report to the Congress on options for the federal government to assist remote areas in Alaska with meeting their energy needs in an affordable and reliable manner.

Using information from EPA about current activities related to emissions standards for those engines, CBO estimates that the costs of implementing the bill would be less than $500,000. That amount includes costs for personnel and contracts required to develop and issue a proposal, to receive and respond to public comments, to issue a final rule for the revision, and to produce the report required by the bill.

The CBO staff contact for this estimate is Stephen Rabent. The estimate was reviewed by H. Samuel Papenfuss, Deputy Assistant Director for Budget Analysis.

CHANGES IN EXISTING LAW

Section 12 of rule XXVI of the Standing Rules of the Senate requires the committee to publish changes in existing law made by the bill as reported. Passage of this bill will make no changes to existing law.

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