



## THE ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

AUG - 1 2014

Mr. Mark Kresowik  
Deputy Director, Eastern Region  
Sierra Club  
50 F Street, NW, Eighth Floor  
Washington, D.C. 20001

Dear Mr. Kresowik:

I wish to inform you of the outcome of the U.S. Environmental Protection Agency's reconsideration of the final rule, "National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines; New Source Performance Standards for Stationary Internal Combustion Engines" (RICE NESHAP/ICE NSPS) (78 FR 6674; January 30, 2013) with respect to three issues for which the EPA requested comment on September 5, 2013. Following promulgation of the January 30, 2013, final rule, the EPA received three petitions for reconsideration pursuant to section 307(d)(7)(B) of the Clean Air Act. The EPA received a petition dated March 29, 2013, from Calpine Corporation and PSEG Power LLC; a petition dated April 1, 2013, from the Delaware Department of Natural Resources and Environmental Control (DE DNREC); and a petition dated April 1, 2013, from Clean Air Council, Citizens for Pennsylvania's Future, Conservation Law Foundation, Environmental Defense Fund, Natural Resources Defense Council, Pace Energy and Climate Center, Sierra Club and West Harlem Environmental Action Inc. (Clean Air Council *et al.*). On September 5, 2013, the EPA announced reconsideration of and requested public comment on the following three issues raised in the petitions for reconsideration:

- Timing for compliance with the ultra-low-sulfur diesel (ULSD) fuel requirement for emergency compression ignition (CI) engines that operate or are contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) [emergency demand response] and (iii) [deviations of voltage or frequency of 5 percent or more], or that operate for the purpose specified in 40 CFR 63.6640(f)(4)(ii) [local system reliability].
- Timing and required information for the reporting requirement for emergency engines that operate or are contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii), or that operate for the purpose specified in 40 CFR 63.6640(f)(4)(ii), and the timing and required information for the analogous reporting requirements in the ICE NSPS.
- Conditions in 40 CFR 63.6640(f)(4)(ii) for operation for up to 50 hours per year in non-emergency situations as part of a financial arrangement with another entity.

The petitions for reconsideration indicated that the public lacked an opportunity to comment on these provisions. Although the EPA added these provisions in response to public comments on the proposal, the EPA granted reconsideration of these provisions to provide an opportunity for public comment. The EPA received 33 public comments on the notice of reconsideration. After careful consideration of the

petitions for reconsideration and the public comments received on the notice of reconsideration, the EPA has decided not to propose any changes to the regulations on these three issues. Following is a discussion of the EPA's final decision on each issue. A summary of the public comments received on the September 5, 2013, notice of reconsideration and the EPA's responses to those comments is enclosed (see "Response to Comments Document") and can be found in the rulemaking docket at docket number EPA-HQ-OAR-2008-0708.

#### Timing for Compliance with the ULSD Fuel Requirement for Emergency Engines

The January 30, 2013, final amendments to the RICE NESHAP included a provision requiring existing stationary emergency CI RICE with a site rating of more than 100 brake horsepower (HP) and a displacement of less than 30 liters per cylinder that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii), or that operate for the purpose specified in 40 CFR 63.6640(f)(4)(ii), to use ULSD fuel beginning January 1, 2015, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted. The EPA added this fuel requirement in the January 30, 2013, final amendments to the RICE NESHAP and gave sources until January 2015 to meet the requirement. The EPA provided sources until January 2015 to comply to ensure that sources had sufficient lead time to implement the new requirements and make any physical adjustments to engines (including fuel seals) and other facilities like tanks or other containment structures, as well as any needed adjustments to contracts and other business activities, that may be necessitated by these new requirements.

The petitions for reconsideration from the DE DNREC and Clean Air Council *et al.* requested that the requirement to use ULSD fuel for certain emergency engines take effect immediately. The DE DNREC indicated in the petition that ULSD is already widely available and is likely the only diesel fuel available in most areas. The petition for reconsideration from Clean Air Council *et al.* disagreed with the EPA that significant lead time is needed for facilities to come into compliance with the ULSD fuel requirement and indicated that the EPA had offered no evidence that adjustments would be necessary to operate engines on ULSD. The petition for reconsideration from DE DNREC also expressed concern with the provision allowing depletion of non-ULSD fuel purchased prior to January 2015 and Clean Air Council *et al.* recommended that the EPA only allow the depletion of any non-ULSD that was purchased prior to the date a reconsideration is proposed.

After careful consideration of the issues raised with respect to timing of the ULSD requirement in the petitions for reconsideration and the public comments received on the September 5, 2013, notice of reconsideration, the EPA has decided not to propose any changes to the requirements related to timing of the ULSD requirements. Commenters indicated that a number of facilities are not currently using ULSD and will need lead time to comply with the ULSD requirement. Information from the Energy Information Administration (EIA)<sup>1</sup> also indicated that a significant percentage of diesel fuel being purchased is not ULSD; the public comments did not provide any specific information to contradict the EIA data. The EPA notes that the record demonstrates that adjustments for ULSD may be necessary. According to the memo in the rulemaking docket, "Summary of Ultra Low Sulfur Diesel Issues with Stationary Internal Combustion Engines" (document number EPA-HQ-OAR-2008-0708-0003), experience with the transition to ULSD for mobile CI engines showed that differences in the aromatic content of ULSD may require replacement of gaskets and seals to prevent fuel-system leaks. Commenters also noted that fuel additives and accelerated preventive maintenance may be necessary to

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<sup>1</sup> U.S. Energy Information Administration. Distillate Fuel Oil and Kerosene Sales by End Use. Available at [http://www.eia.gov/dnav/pet/pet\\_cons\\_821use\\_dcu\\_nus\\_a.htm](http://www.eia.gov/dnav/pet/pet_cons_821use_dcu_nus_a.htm).

address any differences in the lubricity of ULSD. Commenters indicated that lead time is also necessary so that facilities can also make adjustments to fuel purchase contracts.<sup>2</sup> Thus, the record reflects that the lead time provided is appropriate for facilities to come into compliance with the ULSD requirement. In addition, as noted by public commenters, if facilities do not have the ability to use up existing fuel, they will have to drain their tanks and dispose of the non-ULSD fuel in some manner, or operate their engines beyond normal practice to use up their existing supply. These options are not desirable from an environmental or cost perspective. For further discussion of this issue, please see the enclosed response to comments.

#### Timing and Required Information for the Reporting Requirement for Emergency Engines

The January 30, 2013, final rule added a new provision to the RICE NESHAP that requires stationary emergency RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that operate or are contractually obligated to be available for more than 15 hours per year (up to a maximum of 100 hours per year) for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii), or that operate for the purpose specified in 40 CFR 63.6640(f)(4)(ii), to report the following information annually to the EPA, with the first report covering operations during 2015 due in March 2016:

- company name and address where the engine is located;
- date of the report and beginning and ending dates of the reporting period;
- engine site rating and model year;
- latitude and longitude of the engine in decimal degrees reported to the fifth decimal place;
- hours operated for emergency demand response and deviations of voltage or frequency of 5 percent or greater below standard, including the date, start time and end time for engine operation for those purposes;
- number of hours the engine is contractually obligated to be available for emergency demand response and deviations of voltage or frequency of 5 percent or greater below standard; and
- hours spent for operation for local system reliability, including the date, start time and end time for engine operation for that purpose, the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
- If there were no deviations from the fuel requirements, if any, that apply to the engine, a statement that there were no deviations from the fuel requirements during the reporting period.
- If there were deviations from the fuel requirements that apply to the engine, if any, information on the number, duration and cause of deviations, and the corrective action taken.

A similar reporting requirement was also added to the ICE NSPS. The petition for reconsideration from Clean Air Council *et al.* recommended that the NESHAP be revised such that the reporting period begin immediately, and initial annual reports are submitted in early 2014. Alternatively, Clean Air Council *et al.* requested that if the first report is not submitted until 2016, as the current rule provides, the report should include information on 2013 and 2014 operations in addition to the information for 2015 that is already required by the rule. Clean Air Council *et al.* also requested that the report include the type and amount of diesel fuel used in the engine and asserted that collecting this information would enhance the EPA's ability to assess the health impacts of the emissions from the engines.

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<sup>2</sup> See for example document number EPA-HQ-OAR-2008-0708-1532.

Following a review of the information provided in the petitions for reconsideration and the public comments on the September 5, 2013, notice, the EPA has determined that it will not make any changes to the regulations for this issue. It would not be reasonable to amend the regulations now to require the 2016 report to include information on 2013 and 2014 operations because facilities have not been put on notice that they should have collected such information. Commenters noted that the compilation and submittal of data for each site can be burdensome, complicated and time-consuming, and sufficient lead time is essential to allow utilities to institute the necessary infrastructure to record the required data and to compile the information to submit electronically to the EPA. In addition, as noted in the January 30, 2013, final rule and the September 5, 2013, notice of reconsideration, the EPA needs time to develop the electronic reporting tool that facilities will use to report the information required by the regulations and stakeholders will use to view the submitted information. Also, as noted in the September 5, 2013, notice of reconsideration and request for public comment, a requirement to report the type and amount of diesel fuel used in an engine would be highly burdensome for facilities. The majority of commenters agreed with the EPA that a requirement to report the type and amount of fuel used would be very burdensome. As noted by the commenters, the sulfur content of the fuel in the tanks would be changing over time as the existing higher sulfur fuel is replaced with ULSD, and a facility would have to periodically sample its fuel tanks to determine the current sulfur content of the fuel. Facilities would likely need to install equipment such as fuel-flow meters to determine the amount of diesel fuel used in their engines. Facilities would also have to develop new procedures for periodic sampling of the fuel in the tanks and establish new contracts with laboratories to have the samples analyzed. One commenter indicated that for many facilities, the collective cost for sampling, laboratory analyses and flow meters could be a substantial portion of their existing budget. Further, facilities are already required to keep records of emergency and non-emergency hours of operation (40 CFR 63.6655(f)), and such records can be used to estimate emissions impacts. Any additional benefit from also requiring reporting of the type and amount of fuel used is not justified in light of the additional burden requiring such reporting would impose. The commenters who indicated that the information should be reported did not provide any evidence to refute the EPA's position that such a requirement would be unduly burdensome for facilities. For further discussion of this issue, please see the enclosed response to comments.

#### Criteria for Operation for up to 50 Hours per Year for Non-Emergency Situations

The January 30, 2013, final amendments specified that emergency engines can be used for up to 50 hours per calendar year in non-emergency situations to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

- the engine is located at an area source of hazardous air pollutants (HAP);
- the engine is dispatched by the local balancing authority or local transmission and distribution system operator;
- the dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region;
- the dispatch follows reliability, emergency operation or similar protocols that follow specific North American Electric Reliability Corporation (NERC), regional, state, public utility commission or local standards or guidelines;
- the power is provided only to the facility itself or to support the local transmission and distribution system; and

- the owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine.

The petitions for reconsideration from Clean Air Council *et al.* and from Calpine and PSEG expressed concern that the conditions specified in the final rule for operation for up to 50 hours per year in non-emergency situations to supply power as part of a financial arrangement with another entity were too indistinct and expansive and would be difficult to enforce, which could lead to engines operating when there is no discernible threat to the grid. The petition from Calpine and PSEG expressed concern that the final rule did not provide any guidance for determining whether the dispatch of an engine is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region. The petition from Clean Air Council *et al.* recommended that the EPA more clearly delineate the situations under which the engines could run to ensure that the engines are only dispatched during genuine grid emergencies, while still allowing local grid operators to address legitimate reliability concerns.

After consideration of the information provided in the petitions for reconsideration and the public comments on the September 5, 2013, notice of reconsideration, the EPA has decided not to propose any changes to the regulations for this issue. Dating back to the original RICE NESHAP in 2004, the EPA has a long history of regulating emergency engines as a separate subcategory in the NESHAP and NSPS for stationary engines and establishing different standards for emergency engines. The EPA has done so based on significant considerations, including, for area sources of HAP, the high cost of add-on controls, concerns that emergency engines may not operate long enough for a catalyst to reach the temperature needed to reduce emissions, the impracticability of operating the engine to test emissions when the engines operate so infrequently and at unpredictable times, the need for these engines to be operated with little time for startup and the possibility that add-on controls could inhibit the ability of emergency engines to accomplish their time-critical functions. The commenters who indicated that the 50-hour provision for limited operation for engines at area sources of HAP should be removed did not present any information to show that the considerations would not apply to emergency engines used in very limited circumstances when the local transmission and distribution system operator has determined that there are conditions that could lead to a blackout for the local area.

As discussed in the January 30, 2013, final rule, the provision for operation for up to 50 hours is intended for situations where the local transmission and distribution system operator has determined that there are conditions that could lead to a blackout for the local area. Information provided to the EPA<sup>3</sup> indicated that rural distribution lines are not configured in a typical grid pattern, but instead have distribution lines that can run well over 50 miles from a substation and regularly extend 15 miles or longer. According to the information submitted to the EPA, during periods of exceptionally heavy stress within the region or sub-region, electricity from regional power generators may not be available because of transmission constraints, and, in many cases, there may be only one transmission line that feeds the rural distribution system and no alternative means to transmit power into the local system. The EPA added the provision for operation of emergency engines for up to 50 hours per year to support local system reliability to recognize these unique challenges faced by the local transmission and distribution system operators in rural areas. The majority of public commenters on the September 5, 2013, notice of reconsideration agreed that the provision is appropriate. Commenters noted that regional transmission organizations (RTOs), or transmission providers in areas without RTOs, monitor their systems

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<sup>3</sup> Document number EPA-HQ-OAR-2008-0708-1056.

continuously, but they do not necessarily track small, localized concerns, and it is at those levels that state and local regulatory agencies and load-serving utilities have always played crucial roles in both setting standards and maintaining reliable supply to customers. Commenters stated that the EPA has created a set of requirements that appropriately recognizes that those responsibilities are often divided in different ways depending on the location and configuration of individual systems. For example, one commenter noted that there are differences between the way the grid is monitored in a rural, highly dispersed system, such as the electric and transmission system in Kansas, and the more redundant grids in New Jersey or Delaware. The commenter indicated that in Kansas there are many small communities served by very long transmission lines, and the local transmission provider may not continuously monitor the voltage situation in each of those small towns, as is done for the bulk power system. Commenters stated that rural electric cooperatives could face blackouts if the regulations lacked contingencies under which engines could be operated to support local system reliability. Commenters indicated that, in rural areas such as Kansas, communities rely on small, local generation units, including stationary RICE, to maintain the transmission voltages necessary to provide reliable electric service during unusual events such as weather contingencies. According to the commenters, it would not be feasible to build larger or more redundant transmission lines or to site power plants locally to alleviate transmission constraints for small communities served by very long transmission lines.

Some commenters were concerned that the current criteria are too indistinct and that owners/operators would use the provision to operate engines in situations where electric reliability is not actually threatened. However, as other commenters noted, the rule clearly indicates that the dispatch must follow reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. See 40 CFR 63.6640(f)(4)(ii)(C) [“The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines”] and 63.6640(f)(4)(ii)(E) [“The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine.”]. Thus, the current regulations already require that operation must be pursuant to established, verifiable standards or guidelines, and the owner/operator must document the entity that dispatched the engine and the specific standard or guideline that was followed. While some commenters believe the EPA should specify the circumstances for dispatch more exactly, the EPA believes that, given the varied circumstances that may lead to potential voltage collapse or line overloads, attempting to specify exactly what circumstances may lead to use of this provision may be counterproductive. The EPA believes that it is important to ensure that dispatch be available to avoid potential voltage collapse or line overloads and does not believe it is appropriate for the language to be so restrictive that it would preclude effective dispatch. The EPA believes that the existing language already indicates that this provision should only be used where electric reliability is threatened. The EPA and the state or local air-pollution-control agencies that are implementing and enforcing the rule will be able to verify whether the engines operated in situations where reliability was threatened. For example, a commenter indicated that the Electric Reliability Council of Texas (ERCOT), the sole balancing authority and transmission operator for Texas, specifically defines “dispatch” and has detailed rules on when and how a resource is dispatched. The implementing and enforcing authority for a unit dispatched in Texas could use the facility’s records to verify whether the dispatch followed the ERCOT standards. In addition, the reporting requirements of the final rule allow the EPA to receive information regarding the use of these engines for local reliability; the EPA can monitor whether the circumstances for use of this provision need to be further clarified in the future. For further discussion of this issue, please see the enclosed response to comments.

We thank you for raising these issues and appreciate your comments and interest in this matter.

Sincerely,



Gina McCarthy

Enclosure

