



Air and Radiation Docket and Information Center
Environmental Protection Agency
Mailcode: 6102T
1200 Pennsylvania Ave., NW.
Washington, DC 20460

**RE: Docket ID No. EPA-HQ-OAR-2008-0708
Comments on *National Emission Standards for Hazardous Air Pollutants for
Reciprocating Internal Combustion Engines; Proposed Rule***

To Whom It May Concern:

With this submittal, The National Telecommunications Safety Panel is providing the United States Environmental Protection Agency (EPA) with comments on the proposed National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (proposed RICE NESHAP), as published in the *Federal Register* on March 5, 2009 (Volume 74, Number 42). As amended in the *Federal Register* on April 14, 2009 (Volume 74, Number 70), comments must be received by the EPA on or before June 3, 2009.

The [National Telecommunications Safety Panel \(NTSP\)](#)¹ is a consortium of telecommunications environmental, health and safety professionals dedicated to promoting employee safety and health, preventing accidents and promoting environmental responsibility throughout the telecommunications industry. The NTSP strives to provide constructive input in the development and promulgation of environmental, health and safety standards and guidelines that affect the varied businesses within the telecommunications industry. As such, the panel maintains an active advocacy role, providing comments and recommendations to federal and state agencies where issues concern the Telecommunications industry. The comments submitted herein are from the NTSP and do not supersede comments filed by individual companies which may have filed different and/or additional comments.

Summary

NTSP believes that existing stationary emergency RICE should continue to be subject to limited requirements, under the RICE NESHAP standards promulgated on January 18, 2008, §63.6590(b)(3) (i.e., a stationary RICE which is an existing emergency stationary RICE does not have to meet the requirements of 40 CFR 63 Subpart ZZZZ and of 40 CFR 63 Subpart A, and no initial notification is necessary). This comment is based on the limited operation of emergency generators, which, according to EPA estimates, are operated about 50 hours per year on average. The telecommunications industry has maintenance procedures in place that are similar to those listed in the proposed RICE NESHAP, so the requirements in the proposed RICE NESHAP would only place an additional administrative burden on owners and operators of emergency engines, with no reduction in emissions of Hazardous Air Pollutants (HAPs).

In addition, NTSP would like to provide comments regarding six key issues with respect to stationary emergency RICE located at area sources:

¹ NTSP Member companies participating in the comments provided are Sprint Nextel Corporation, Alcatel-Lucent, Embarq, Windstream Communications, Inc., Verizon Communications, AT&T, and Qwest.



1. The need for clarification regarding performance testing requirements for emergency RICE > 500 hp located at area sources,
2. Concerns regarding the proposed numerical emission limit on emergency RICE > 500 hp (CI and SI engines): questionable value of such a standard and use of emission data which is not representative of the engines being regulated to develop the numerical emission limit,
3. Questionable value of regulating emergency RICE $50 \geq \text{HP} \leq 500$, located at area source, under this rule,
4. Response to EPA's request for comment on management practices;
5. Need for record retention location flexibility, and
6. Expansion of emergency use to include participation in emergency demand response programs.

Specific Comments on the Proposed RICE NESHAP

1. Need for clarification regarding performance testing requirements:

The preamble to the proposed RICE NESHAP states that “[o]wners and operators of existing stationary RICE subject to numerical emission standards and that are located at area sources, as shown in Table 2 of this preamble, must conduct an initial performance test to demonstrate that they are achieving the required emission standards.” However, the preamble to the proposed RICE NESHAP also states that owners and operators of “existing stationary emergency RICE located at major sources do not have to conduct any performance testing.” These statements appear to indicate that existing emergency compression ignition (CI) and spark ignition (SI) engines > 500 hp located at area sources must conduct an initial performance test, while the same engines located at major sources would be exempt from an initial performance test. NTSP is aware that several parties have communicated with Mr. Jaime Pagan and Ms. Melanie King of EPA, and received clarification it was not the EPA's intent to require initial performance tests for emergency engines at area sources. Thus, if a numerical standard is retained for these engines, NTSP requests that EPA clarify in the promulgated RICE NESHAP that initial performance tests are not required for existing emergency CI or SI engines > 500 hp located at area sources.

2. Concerns regarding the proposed numerical emission limit on emergency RICE > 500 hp (CI and SI engines). NTSP's concerns regarding the proposed numerical emission limit on emergency RICE > 500 hp are twofold.

- **First, we question the value of imposing a numerical standard on these emergency CI & SI engines.**

It appears that it is EPA's position that a properly maintained existing engine will meet the CO emission limit of 40 ppmvd at 15% O₂, and that compliance can be assumed by owners and operators of properly maintained engines. Based on the previously referenced communication with EPA, EPA has indicated it does not intend to require emergency engines to demonstrate compliance with the rule via initial performance testing. While the EPA has stated that initial and ongoing compliance will only need to be demonstrated through management practices, NTSP is concerned that state and/or local regulatory agencies would require that sources demonstrate compliance with the numerical limits proposed in the RICE NESHAP, including performance testing. If an engine were unable to demonstrate compliance with the numerical standard



aftertreatment controls would be required. As indicated in the data available in the docket (*Above-the-Floor Determination for Stationary RICE*, Docket ID No. EPA-HQ-OAR-2008-0708-0017), aftertreatment controls are not cost effective for emergency CI engines, with an estimated cost of up to \$3.7 million per ton of HAP reduced even if there were concerns about emergency RICE > 500 hp meeting the emission standards. In addition, this estimated cost per ton may be underestimated, as the catalyst aftertreatment technology requires elevated temperatures, and emergency generators often operate for short periods of time and may not reach the temperatures required for the oxidation of HAPs. Therefore, NTSP is concerned that if a numerical limit is included in the standard for emergency engines, owners and operators of these engines may be required by local regulatory agencies to demonstrate compliance via performance testing and potentially install aftertreatment controls, at a significant cost to industry with negligible environmental benefit.

Because of these concerns, NTSP requests that the numerical limit be eliminated for these engines. In addition, NTSP requests that these engines be exempted from the rule based on the owners and operators ability to demonstrate they are following the engine manufacturer's emission related O&M requirements. If EPA is unwilling to provide a full exemption from the rule for these engines, NTSP recommends that the numerical limit be replaced with management practices, consistent with those proposed for emergency CI < 500 hp

- **Our second concern regarding the proposed numerical emission limit on emergency RICE > 500 hp relates to the use of emission data which is not representative of the engines being regulated to develop the numerical emission limit for CI engines > 500hp.**

Table 2d to Subpart ZZZZ of Part 63 – *Requirements for Existing Stationary RICE Located at an Area Source of HAP Emissions* establishes a numerical emission limit of 40 ppmvd or less at 15% O₂ for emergency compression ignition (CI) engines > 500 hp. For emergency CI engines, EPA indicates in the preamble to the RICE NESHAP that this GACT limit is based on the same emissions controls as those discussed for major sources. In reviewing the data available in the docket (*Subcategorization and MACT Floor Determination for Stationary Reciprocating Internal Combustion Engines ≤500 HP at Major Sources*, Docket ID No. EPA-HQ-OAR-2008-0708-0006), as well as the Emissions Database, it appears that the 40 ppmvd emission limit was based on 10 tests, and that all tests were conducted on one make and model of engine (Caterpillar, Model No. 3508) over a 3-day period in 1999. The data further indicates that the engines tested were located in a Research & Development Laboratory at Colorado State University.

NTSP believes that the data used to establish the emission limit for emergency CI engines > 500 hp is not representative of existing engines of various makes, models and ages in operation throughout the United States. According to the engine population data presented in the impacts document included in the docket (*Impacts Associated with NESHAP for Existing Stationary RICE*, Docket No. EPA-HQ-OAR-2008-0798-0028) the promulgated rule would impose this limit on more than 50,000 CI engines. Basing a numerical emission limit on such a small, non-representative sample jeopardizes the accuracy of any assumptions made about the operational conditions or performance of the regulated population as well as the accuracy of any cost of compliance estimates, and leads to the overall underestimation of the impact of the rule.

3. Questionable value of regulating emergency RICE $50 \geq \text{HP} \leq 500$, located at area sources, under this rule

The air quality benefit gained by regulating smaller engines which burn less fuel and therefore emit less HAPS is minimal. EPA proposes to impose management practices on these engines and estimates the associated costs to be minimal. However, the mere inclusion of these engines



under this rule will trigger much higher costs at the state and potentially local level. Some state rules are written such that they require any equipment subject to a MACT standard to obtain a permit regardless of how small that equipment might be.

The air quality benefit realized from regulating these smaller sources is outweighed by the burden placed on area sources where a small engine may be their only equipment, and the administrative burden placed on state agencies to administer permit programs for the large number of sources that otherwise would not be regulated. Therefore, NTSP recommends the Emergency RICE $50 \geq \text{HP} \leq 500$ at area sources be exempted from this rule.

4. Response to EPA's request for comment on management practices

EPA has asked for comments on the management practices and requested input on additional maintenance requirements, if any, that may be needed for some of the engine subcategories. NTSP member companies own or operate more than 30,000 stationary RICE in different subcategories at area sources in all 50 states. Based on our experience with these engines, NTSP would like to comment that the management practices in Table 2d to Subpart ZZZZ of Part 63 – *Requirements for Existing Stationary RICE Located at an Area Source of HAP Emissions* are consistent with proper maintenance of engines, and that the management practices in the proposed RICE NESHAP are sufficient to ensure that the engines are properly maintained. However, NTSP would like to reiterate its recommendation that emergency RICE be exempted from this rule for the previously stated reasons.

In addition, there is some inconsistency between §63.6625(e) of the proposed rule and the referenced Table 2d. §63.6625(e) of the proposed RICE NESHAP states:

(e) If you own or operate an existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions, an existing stationary emergency RICE, or an existing stationary RICE located at an area source of HAP emissions not subject to any numerical emission standards shown in Table 2d to this subpart, you must operate and maintain the stationary RICE and aftertreatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Table 2d of the proposed rule explicitly outlines maintenance requirements for engines, but does not include the provisions in §63.6625(e) relating to manufacturer or owner/operator maintenance plans. In order to avoid confusion and ensure that the rule is consistent, NTSP recommends that the following clause be included in §63.6625(e):

*... you must operate and maintain the stationary RICE and aftertreatment control device (if any) according to **the maintenance schedule in Table 2d**, or you must operate and maintain the stationary RICE ...*

Similarly, NTSP recommends that a clause be added to Table 2d indicating that as an alternative to the proposed schedules, owners and operators can maintain the stationary RICE according to the manufacturer's emission-related written instructions or develop their own maintenance plan.

5. Need for Record Retention Location Flexibility

§63.6660(c) of the RICE NESHAP states that:



You must keep each record readily accessible in hard copy or electronic form on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You can keep the records off-site for the remaining 3 years.

While this requirement was appropriate for major sources of HAPs, an on-site location for records is impracticable for many area sources. Many of the sites owned and operated by telecommunications companies are unmanned and do not have any practical storage area on-site for maintaining records. Therefore, NTSP requests that a clause be added to §63.6660(c) to allow for records to be maintained at an off-site location for engines located at area sources of HAPs.

6. Expansion of emergency use to include participation in emergency demand response programs

The proposed RICE NESHAP in 40 CFR 63.6640(f), states:

If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. Emergency stationary RICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.

Emergency demand response programs have been developed by the many utilities and Independent System Operators that manage the electric grid throughout the United States. These emergency demand response programs are rarely called, and when they are called, they are initiated by the transmission system operators to prevent brownouts and blackouts due to insufficient supply of power to the grid. Owners and operators of emergency generators participating in emergency demand response programs do not supply power to the grid; all power is used at the individual facility. Owners and operators of emergency generators reduce load at times of emergency peak load on the grid. Limiting the use of Demand Response will be counter productive to the very goals the EPA seeks. Eliminating the last line of defense for utilities and Independent System Operators will result in greater frequency of rolling blackouts in which case all emergency use engines are engaged because of a loss of power. Therefore, constraints on the utilization of Demand Response will result in the production of more, not less, Hazardous Air Pollutants.

The emergency demand response programs are only instituted in cases of true emergencies. A



number of states have modified the regulatory definition of an emergency to allow for participation in emergency demand response. The following are three examples of this type of emergency demand response programs.

- In New England, the demand response program for emergency engines is only implemented once ISO-New England declares Operating Procedure 4, Action 12. Since the program was initiated in 2002, there have only been three days on which ISO-New England requested action in Connecticut, and only one of those days was action requested for all of New England. States covered by the ISO-New England demand response program have modified their definitions of emergency to allow participation in emergency demand response:
 - Connecticut – Effective January 1, 2005, the definition of emergency in RCSA 22a-174-22 has been modified to allow the use of emergency engines when ISO-NE declares OP 4, Action 12.
 - Massachusetts – Effective September 23, 2005, the definition of emergency in 310 CMR 7.03(10)(a)(4) and 7.26(41) includes the use of engines when ISO-NE declares OP 4, Action 12.
 - Vermont – Effective January 5, 2007, Vermont's emergency operation policy was amended to allow operation of emergency engines when ISO-NE declares OP 4 or 7.
 - Rhode Island – Effective May 15, 2007, the definition of emergency in Air Pollution Control Regulation No. 9 and 43 includes the use of engines when ISO-NE declares OP 4, Action 12.
 - New Hampshire – Effective April 2, 2008, the definition of emergency in Env-A 101.661 includes the use of engines when ISO-NE declares OP 4, Action 12.
 - Maine – The DEP has been modifying permits on a case-by-case basis to allow engines to operate when ISO-NE declares OP 4.
- In the mid-Atlantic region, the Emergency Load Response Program (ELRP) is activated according to the procedures in the PJM Manual 13 Emergency Operations for a PJM Declared Emergency. In the past five years, the ELRP has only been activated five times for a total of 20 hours.
- In Texas, ERCOT's Emergency Interruptible Load Service (EILS) Program is activated just before the electric grid is expected to fail. The EILS is integrated into ERCOT's Electrical Emergency Curtailment Plan and is activated during a Stage 3 emergency (i.e., used to prevent blackouts by using emergency generators to power facilities, lessening the need for power from the grid). The EILS Program is designed for a maximum of six dispatches per year with a maximum of 24 hours per year.

In addition to the states mentioned above, several other states are allowing emergency engines to participate in emergency Demand Response through other mechanisms such as registrations, permits or permit by rule.

While participants in emergency demand response programs are compensated whether or not their engines are called, emergency demand response programs should not be confused with economic demand response programs (e.g., peak shaving). Emergency demand response programs are initiated by the transmission system operators when the threat of power outages is imminent and are critical to maintaining available power during periods of extreme load on the electric power infrastructure. The imminent threat of power outages are unplanned events and are out of the control of emergency engine owners or operators.



Based on the discussion above, NTSP believes participation in emergency demand response programs is consistent with the definition of emergency stationary RICE. Therefore, NTSP requests that the language in 40 CFR 63.6640(f), as well as the definition of emergency stationary RICE, be clarified such that participation in emergency demand response programs is considered emergency use. NTSP recommends that EPA's definition of emergency include the following to account for emergency DR events.

Emergency generator does not include a load-shaving unit or peaking power production unit, but does include the operation of an emergency generator during periods in which the Regional Transmission Organization or other local or regional entity responsible for maintaining reliability of electrical operations directs the implementation of emergency demand response procedures

The National Telecommunications Safety Panel wishes to thank EPA for the opportunity to comment on the proposed RICE NESHAP. If you have any questions about the information included in these comments or we may be of further assistance in this matter, please feel free to contact me.

Sincerely,

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