



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7  
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KANSAS CITY, KANSAS 66101

Mr. Floyd Gilzow  
Director of Member Relations and Public Affairs  
Missouri Public Utility Alliance  
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Columbia, MO 65203

RE: 40 CFR Part 63 National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines; Final Rule Dated March 3, 2010

Dear Mr. Gilzow:

Thank you for inquiry. EPA Region 7 understands that the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Compression Ignition (CI) Reciprocating Internal Combustion Engines (RICE) will potentially pose many requirements for local municipal power operations in Missouri along with Iowa, Kansas, and Nebraska. The NESHAP for RICE has and will continue to produce many questions. Being promulgated in multiple parts since 2004, incorporating several definitions, and coinciding with New Source Performance Standards (NSPS) for engines, EPA shares Missouri Public Utility Alliance's (MPUA) concern and appreciation for all compliance costs associated with the amended NESHAP for RICE. We look forward to working with MPUA and other municipal organizations to best spread understanding and requirements of the rule.

Your August 6, 2010 letter to John Dupree at EPA's Office of Enforcement and Compliance Assurance (OECA) was seeking clarification on six issues. Clarification on newly promulgated NESHAP, NSPS, other standards are delegated to be answered at the Regional level of EPA until a state or local permitting authority adopts the rule. The following answers to your questions come from EPA Region 7's best understanding the RICE NESHAP using rule language and EPA policy and guidance. Further clarification from OECA can be provided in the case that Region 7's guidance does not suffice MPUA.

Issue 1.

The rule appears to be clear that an engine categorized for emergency use only is not permitted to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. However, electricity is often generated during the process of running the engine for maintenance or reliability testing which is an authorized activity for an emergency engine. What may the owner of the engine legally do with the power that is generated during this process? May the electricity be fed back into the owner's electric distribution system for sale to its citizen customers?

Response: According to §63.6640(f)(3) in the NESHAP, facilities may operate their emergency engines for the purpose of maintenance checks and readiness testing for 100 hours per year. An owner of an emergency engine could hook their engine up to the grid as part of that checking and testing. The owner cannot hook up to the grid during testing and provide electricity to the grid under a financial incentive and still be considered an emergency engine as stated in the definition of Emergency Stationary RICE in the rule. If the owner is solely being reimbursed for the checking and testing as part of a contractual agreement and recommended by federal, state, local governments, manufacturer, vendor, insurance company, or regional transmission organization to be ready for emergency demand response, then the engine could still be considered an emergency engine. More information on the contract would be needed for EPA Region 7 to further clarify applicability.

It is important to note, that the rule clearly specifies in the definition of Emergency Stationary RICE there is no way for an engine to provide power for peak shaving and still be considered emergency.

#### Issue 2.

The primary purpose of emergency back-up generators is to provide power to its customers when the normal supplier is unable to provide electricity to the municipal utility. However at the same time, the rule prohibits generation "*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*". Some Missouri municipal utilities within the past few years have had to run these power plants in excess of two weeks on one occasion when an ice storm destroyed transmission lines crossing the Mississippi River into the town. Would the phrase "*a financial arrangement with another entity*" include service agreements with municipal customers? In other words, if the power plant is operated during a time that would meet the qualifications of an emergency, can the municipality receive payment for the generated electricity at the same rates they would have charged customers during normal operations?

Response: Regarding the scenario you propose, it is possible for a company to have a financial arrangement to produce power strictly for emergency situations. See EPA's *Response to Comments for RICE NESHAP* Response 6.1.1 "...EPA believes this type of operation as described would be considered emergency use and has revised the definition of emergency engine to make clear that financial arrangements *limited solely* [emphasis added] to the provision of emergency power from one entity to other entities does not exclude engines from being emergency engines. As long as the engine operates only for emergency use and testing and maintenance as allowed, the engine would remain classified as an emergency engine and would not be subject to requirements that apply to non-emergency engines."

In addition, please refer to the last sentence in §63.6640(f)(4).

#### Issue 3.

It is clear that an emergency generator can be used "*when power from the local utility... is interrupted*" leaving the impression that all power coming into the community must be lost before Emergency RICE can be used. First is it the position of EPA that emergency generators can only be used under the conditions spelled out in this rule whenever all power is lost to the community?

Second, there are times when electric power suppliers are not able to sustain voltage on the transmission lines at a level where attached devices either can function, or can function without causing damage to motors, circuits, controls, etc. While power has not been interrupted, usable power that doesn't damage equipment has been interrupted. Would a situation where the regular electric power supplier is incapable of providing power at appropriate voltage levels, and when the local utility has no control over the voltage levels coming to their distribution system, permit a local municipality to utilize its emergency generators to maintain voltage at normal commercial levels and still remain in compliance with this rule?

Response: First, as you stated, the definition of Emergency stationary RICE states any RICE dedicated for emergency situations like when power from a local utility is "interrupted" may be considered an emergency engine. Unfortunately, EPA has not provided formal guidance on what "interrupted" means. Region 7's interpretation does not assume that all power to a community must be lost before the local utility service is considered interrupted, allowing emergency operation to begin. Also, as clarified under the rule, true emergency operation is unlimited.

Second, the situation you describe appears to be in the rule itself under §63.6640(f)(4) where the rule states "... except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level." So, an engine could operate in this fashion for up to 15 hours per year and still be considered emergency. Whether or not the engine will still remain in compliance would depend on the owner/operator meeting the rule requirements for the engine as designated.

Issue 4.

The term "Emergency" is generally defined as a sudden, unplanned and unforeseen event. However there are times when transmission is terminated on a planned basis, for instance to conduct maintenance on the transmission lines themselves. While the event outlined above which precipitates the loss of power is not an emergency, the lack of power from a sole supplier creates the same conditions in the community as if the transmission lines had been lost during conventional emergency events. The loss of power itself will create emergency conditions in the community since this service termination will be measured in minutes and hours rather than in seconds. Does the event described allow a local community to operate an Emergency RICE to meet local community needs until such time as the transmission line is capable of meeting local needs? Or is this the use for which the rule allocates up to 50 hours per year (less any time allocated to an RTO Demand Response System) for non-emergency events.

Response: To remain consistent among all affected industry and regulators, EPA must use the definition of Emergency Stationary RICE and the operational limitations as stated in the rule. EPA does not doubt

the general definition of emergency but has to use the promulgated definitions when making determinations. Where you disagree with portions of a rule, we ask that you comment during the appropriate public comment period to resolve the issue.

In general, as alluded to in the definition of Emergency Stationary RICE, emergency engines cannot be relied on for capacity in electric networks because they would then be considered a peaking or peak shaving unit. If a utility that provides power to a town has to go down for a scheduled planned outage, which is not an emergency, then the capacity to supplant that lost energy would not be considered emergency.

The rule allocates 50 hours per year where emergency engines can be used for non-emergency situations as long as the emergency engine is not peak shaving or hooking up to the grid under a financial arrangement. Your situation describes hooking up to a grid (not for testing or emergency use), so the engine would not be considered emergency.

Issue 5.

Units that will be ran as Non-Emergency RICE units are required to secure an initial certification as part of compliance with this rule. In order to demonstrate that the unit including required emission controls meets the requirements for reductions of emissions, emission readings with and without the emission control device will be conducted. Permit limits on these units have historically been based on fleet averages and have not been subject to individual compliance testing. In the course of certifying these engines for operation, actual emissions from individual units may vary from those projected. What direction either verbally or through guidance documents is USEPA or EPA Region 7 providing to state regulators or EPA inspectors about deviations from projected emissions which may provide preliminary indication that the unit has been emitting in excess of existing air permits?

Response: All numerical emission standards under the rule are either based on a percentage reduction or part per million (ppm) standards on an individual engine by engine basis. Historical, projected, and fleet average emissions are not part of the numerical emission standards of this rulemaking. The standards are present time and on a unit by unit basis. If an owner/operator is trying to meet a percent reduction standard in the rule, they will have to assure compliance with a performance test measuring concentrations before and after the control device as the testing standard applies.

Lisa Lund, EPA's Director of Office of Compliance, provided guidance to EPA regions June 4, 2010 on enforcing area source rules in her "Issuance of the Area Source Rule Implementation Guidance" memorandum, which is publicly available at EPA's web site at:  
<http://www.epa.gov/compliance/resources/policies/monitoring/caa/areasource.pdf>.

EPA Region 7 is not aware of any other guidance and has not provided additional guidance to states or inspectors.

Issue 6.

The rule references a CI-RICE engine which appears to be classified as a nonemergency limited use engine.

*Owners and operators of existing stationary nonemergency CI RICE that are greater than 500 HP and located at area sources and are limited use stationary RICE must conduct an initial performance test and must test every 8,760 hours of operation or 5 years, whichever comes first, to demonstrate that they are achieving the required emission standards.*


(Emphasis added)

However a review of the definition section does not appear to address this concept. It is unclear from the rule what conditions must be met for a nonemergency stationary CI RICE to be categorized as "limited use". We understand that an emergency engine can provide some limited use as a conventional generator subject to a 50 hour annual limit, but that is an emergency CI RICE engine. What is a non-emergency limited use engine and what are the parameters for its lawful use under this rule?

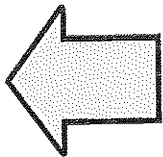
Response: Limited use stationary RICE is defined in §63.6675 of subpart ZZZZ as "Limited use stationary RICE means any stationary RICE that operates less than 100 hours per year." The only difference in the requirements applicable to existing limited use non-emergency CI engines greater than 500 HP located at area sources of HAP versus existing non-limited use non-emergency CI engines greater than 500 HP located at area sources of HAP is in the frequency of subsequent performance testing and the submittal of compliance reports. Limited use non-emergency CI engines greater than 500 HP at area sources must conduct subsequent performance testing every 5 years (versus every 3 years or 8,760 hours for non-limited use non-emergency engines) and must submit annual compliance reports (versus semi-annual compliance reports required for non-limited use non-emergency engines). The emission standards and operating limitations are the same for limited use and non-limited use existing non-emergency CI engines greater than 500 HP at area sources.

Thank you again for your inquiry. For further information on the RICE NESHAP, please visit <http://www.epa.gov/ttn/atw/rice/ricepg.html>. There you will find EPA's *Response to Comments for RICE NESHAP* as referenced in this response, rule history, fact sheets, and further guidance. Also, you may contact Eric Sturm at 913.551.7377 or [sturm.eric@epa.gov](mailto:sturm.eric@epa.gov) if you have other questions.

Sincerely

  
for Becky Weber  
Director

Air and Waste Management Division



cc: Kyra Moore  
Missouri Department of Natural Resources