



OFFICE OF AIR AND RADIATION

WASHINGTON, D.C. 20460

January 23, 2026

Amanda Garcia
304 53rd Ave. N
Nashville, TN 37209
VIA FX: agarcia@selc.org

Re: Freedom of Information Act Request 2026-EPA-01932 Final Response

Dear Ms. Garcia:

This letter concerns the above-referenced FOIA request, received by the U.S. Environmental Protection Agency (EPA or Agency) on Dec. 29, 2025, in which you requested:

"...Any final "Petition to Eliminate the Disparate Treatment of Portable Combustion Turbines Compared to Portable Reciprocating Internal Combustion Engines" submitted to EPA by COMET or by any other person or entity."

The Office of Air and Radiation (OAR) has concluded its search for records responsive to your request and has determined that the final petition may be released in full. The Agency has released these responsive records through FOIAXpress. There is no cost for this request.

This letter concludes our response to your request. You may appeal this determination in writing within 90 calendar days from the date of this letter by one of the following methods:

1. Visit EPA's FOIA submission website (<https://foiaproductaccessportal.epa.gov/>), sign into your account by clicking *Sign-In*, and select *Submit Appeal*;
2. U.S. Mail sent to the following address: National FOIA Office, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue NW (2310A), Washington, DC 20460;
or
3. Overnight delivery service to National FOIA Office, U.S. Environmental Protection Agency, 1200 Pennsylvania NW, Room 7309C, Washington, DC 20460.

The Agency will not consider appeals received after the 90-calendar-day limit. Appeals received after 5:00 p.m. EST will be considered received on the next business day. The appeal should include the FOIA tracking number listed above. For quickest possible handling, the appeal letter, and its envelope, if applicable, should be marked "Freedom of Information Act Appeal."

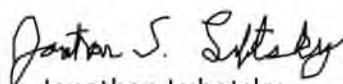
Additionally, you may seek dispute resolution services from EPA's FOIA Public Liaison at hq.foia@epa.gov or (202) 566-1667, or from the Office of Government Information Services (OGIS). You may contact OGIS in any of the following ways: email, ogis@nara.gov; telephone, (202) 741-5770 or (877) 684-6448; facsimile (202) 741-5769; or by mail at:

Office of Government Information Services
National Archives and Records Administration, Room 2510
8601 Adelphi Road, College Park, MD 20740-6001

For all media inquiries, please contact press@epa.gov

We appreciate your interest in the EPA and our mission to protect public health and the environment. Should you choose to appeal this determination, please be sure to fully address all factors required by EPA's FOIA Regulations, located at 40 C.F.R., Part 2.104.

Sincerely,



Jonathan Lubetsky

Regulatory Process and Transparency Division Director
Office of Air Program Support



THE COALITION OF MOBILE ELECTRIC TURBINE USERS

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Jersey Village, Texas 77040
Tel. 337.224.2945
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CERTIFIED MAIL

December 8, 2025

The Honorable Lee Zeldin
Administrator
U.S. Environmental Protection Agency
Office of the Administrator, Mail Code 1101A
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Re: Petition to Eliminate the Disparate Treatment of Portable Combustion Turbines
Compared to Portable Reciprocating Internal Combustion Engines

Dear Administrator Zeldin:

The Coalition of Mobile Electric Turbine Users ("COMET") files this petition pursuant to Section 553(e) of the Administrative Procedure Act and Sections 111, 112, 213 and 216 of the Clean Air Act to classify portable internal combustion turbine engines ("portable combustion turbines") as nonroad engines under the Clean Air Act and its implementing regulations. Portable combustion turbines would be nonroad engines under Section 216 of the Clean Air Act but for the EPA's rules arbitrarily refusing an exemption from 40 C.F.R. §1068.30(2)(ii) (nonroad engines) for turbines which they grant for reciprocating engines.

Granting this petition would immediately make more temporary power generation capacity available across the United States, facilitating AI, construction, industrial, mining projects and facilitating emergency response by eliminating stationary source permitting for short term use. As EPA has recognized, the stationary source permitting process often takes longer than the need for generation. Granting the petition could also lead to substantial reductions in air pollution as portable combustion turbines in many cases emit less and have more favorable dispersion characteristics than portable RICE. Details of these benefits and proposed language for EPA's consideration are set forth in the attached petition.

COMET and the undersigned supporters of this petition respectfully request that the EPA give this petition prompt attention so help repower American industry.

Respectfully submitted,

Eric L. Hiser, Air Counsel
COMET

We, the undersigned, support this petition to eliminate the disparate treatment of portable combustion turbines as stationary sources subject to permitting when portable reciprocating internal combustion engines are not subject to such requirements. We support the ability to choose which technology best meets our needs so long as environmental requirements are met. The petition, which creates that flexibility while requiring portable turbines to demonstrate the same emissions performance as stationary engines of the same type and age, deserves EPA's prompt consideration.

Turbine Manufacturers:

Baker Hughes
Mitsubishi Power Aero
Siemens Energy

Turbine Operators:

Life Cycle Power
PPG Energy
Solaris Energy Infrastructure
Williams

Data Center User:

QTS

Associations:

Environment Committee, Arizona Chamber of Commerce & Industry
Permian Basin Petroleum Association

December 8, 2025



Petition to the
United States Environmental Protection Agency

Classification of Portable Internal Combustion Turbines
As Nonroad Engines under the Clean Air Act

With

Conforming Changes to the New Source Performance Standards (Part 60),
National Emission Standards for Hazardous Air Pollutants (Part 63), and
General Compliance Provisions for Highway, Stationary, and Nonroad Programs (Part 1068)

Submitted
December 8, 2025

INTRODUCTION

The Coalition of Mobile Electric Turbine Users (COMET), a group of manufacturers, lessors and users of natural gas and distillate-fired combustion turbines, petitions the Administrator to adopt new rules and guidance allowing portable internal combustion turbines to be used as nonroad engines whenever portable reciprocating internal combustion engines are authorized to be used as nonroad engines. As President Trump recognized on January 20, 2025, when he declared a National Energy Emergency, current electric generating capacity is “far too inadequate to meet our Nation’s needs.” The Declaration directed the heads of agencies, including the Administrator, to “identify and exercise any ... lawful authorities they may possess, to facilitate the ... siting ... and generation of domestic energy resources.” By freeing portable combustion turbines to move freely in within the United States on the same basis as reciprocating internal combustion engines, the Administrator will immediately make additional generating resources available to utilities, industrial consumers and communities that are faced with imminent shortfalls in available electric grid capacity. The economy will benefit in two ways: first, the rapid availability of portable turbines themselves; and second, the release of multiple reciprocating internal combustion engines where a single portable combustion turbine may replace ten or more reciprocating engines. The environment will benefit as well, as in many cases a combustion turbine will achieve lower emissions than the multiple reciprocating internal combustion engines. Because this step would address the Energy Emergency, is consistent with the Administration’s priorities, and benefits the environment, the Administrator should take prompt steps to revise the NSPS and NESHAP definitions to allow this flexibility.

This petition provides a reasoned justification for the Administrator's action with proposed regulatory language.

STATEMENT OF PROBLEM AND NEED FOR SOLUTION

As the President stated in his Energy Emergency declaration, the United States needs more flexible, clean electric power to build American industry and enable American energy dominance. These needs are particularly acute in the Northeast, the Washington DC area, and the West Coast. In these areas, more electric power is needed for artificial intelligence (AI) data centers, construction projects, exploration for oil/gas/minerals, drilling and fracking oil wells, mine drilling/dewatering/hoists in remote areas, temporary power for new industry and data centers when utility connections are delaying startup of critical facilities. Electric utilities are finding themselves resource starved to meet growing demand while

maintaining capacity to meet anticipated peak demands. Portable combustion turbines may also better meet emergency situations caused by grid disruption.

Portable combustion turbines, which are a form of internal combustion engine, can help meet these needs. Like their smaller reciprocating internal combustion engine (RICE) counterparts, portable combustion turbines can be driven to a site, connected to a natural gas or distillate supply, and provide power, sometimes within hours and usually within a week. This flexibility enables power to be delivered when needed, protecting construction schedules and providing valuable flexibility when disruptions occur in the bulk energy system, such as scheduling delays, wildfires, or more system issues like delayed transmission approvals and build out.

Portable combustion turbines can provide this power in an efficient, environmentally protective fashion. The newer aeroderivative and other innovative portable turbine designs can provide substantial power (from 1 to 50 MW) with relatively low emissions compared to RICE engines, alone or in combination, delivering the same amount of energy. Similarly, road weight limitations limit portable RICE to ~3.5 MW per unit, requiring numbers of engines and space bordering on absurd; portable combustion turbines can reach nearly ten times the power output at comparable weight and are more flexible about fuel type. Portable combustion turbines thus have sufficient generation capability to create possibilities for grid support or supplementation when the bulk energy grid is damaged or overwhelmed in areas.

Despite their ability to help meet the Nation's energy needs and good environmental performance, portable combustion turbines are disadvantaged relative to less efficient RICE by discriminatory regulatory treatment. In 40 CFR 1068.30, EPA defines a "nonroad engine" as follows:

Nonroad engine means:

- (1) Except as discussed in paragraph (2) of this definition, a nonroad engine is an internal combustion engine that meets any of the following criteria:
 - (i) It is (or will be) used in or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers).

(ii) It is (or will be) used in or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers).

(iii) By itself or in or on a piece of equipment, it is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.

(2) An internal combustion engine is not a nonroad engine if it meets any of the following criteria:

(i) The engine is used to propel a motor vehicle, an aircraft, or equipment used solely for competition.

(ii) The engine is regulated under 40 CFR part 60, (or otherwise regulated by a federal New Source Performance Standard promulgated under section 111 of the Clean Air Act (42 U.S.C. 7411)). Note that this criterion does not apply for engines meeting any of the criteria of paragraph (1) of this definition that are voluntarily certified under 40 CFR part 60.

(iii) The engine otherwise included in paragraph (1)(iii) of this definition remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. For any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced, include the time period of both engines in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year. See § 1068.31 for provisions that apply if the engine is removed from the location.

40 CFR 1068.30 *Nonroad engine*.

NSPS Subpart IIII and JJJJ and NESHAP Subpart ZZZZ define a stationary internal combustion engine as follows:

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle, aircraft, or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

40 CFR 60.4219 *Stationary internal combustion engine* (NSPS Subpart IIII); 40 CFR 60.4248 (NSPS Subpart JJJJ; same); 40 CFR 63.6675 (NESHAP Subpart ZZZZ; same but without last sentence). Thus, for RICE, the EPA has historically excluded from stationary source regulation if they are self-propelled, intended to operate while being propelled, or portable if they remain in the same location for less than 12 months.

For combustion turbines, however, the EPA has taken a more cramped approach. In NSPS Subpart GG, it defines all combustion turbines as “stationary” unless the turbine is “self propelled,” even if “mounted on a vehicle for portability.” See 40 CFR 60.331(a). Similarly, in NSPS Subpart KKKK and NESHAP Subpart YYYY, the EPA moved closer to treating combustion turbines in parity with RICE: “Stationary means that the combustion turbine is not self propelled or intended to be propelled while performing its function,” but retained the clause “It may, however, be mounted on a vehicle for portability.” 40 CFR 60.4420; 40 C.F.R. 63.6175. As the EPA has recognized, these definitions appear to prohibit portable combustion turbines from being treated as nonroad engines like their RICE equivalents both by specific inclusion and by failing to carve out the requirement in 40 CFR 1068.30 *Nonroad engine* (2)(ii). See, e.g., EPA, “Review of New Source Performance Standards for Stationary Combustion Turbines and Stationary Gas Turbines,” 89 Fed. Reg. 101306, 101345 (Dec. 13, 2024).

This disparate treatment significantly hampers the deployment of portable combustion turbines to meet temporary energy needs. Because portable combustion turbines are a “stationary source” under the regulatory framework, they trigger state stationary source permitting programs for installation that portable RICE do not. As the EPA itself has recognized, “the permitting itself could take longer than the need for temporary generation.” 89 Fed. Reg. at 101345. The Administration could quickly advance its energy agenda and improve construction scheduling on many significant infrastructure projects, including AI projects, by adjusting the combustion turbine NSPS and NESHAP standards to exclude portable and temporary combustion turbines. Removing the current disparity in

treatment will enable portable combustion turbines to boost American output at lower economic and environmental cost

One of the encumbrances to the Great American Comeback is lack of power to undertake construction and potentially further delays while line power connections are negotiated and constructed, assuming that line power is available. Portable combustion turbines and RICE can help alleviate the economic burden this imposes. Particularly now, with lead times on new RICE engines and combustion turbines orders reaching unprecedented levels, all available units should be used to serve load in the near term. Allowing portable combustion turbines to be classed as nonroad engines allows agile deployment, avoids wasted/idle time for needed units, and avoids unnecessary permitting delays for temporary projects.

For these reasons, the Coalition requests that the Administrator undertake this deregulatory action. An explanation of the applicable legal authority and justification for this request follows.

LEGAL AUTHORITY

A. The Administrator has the authority to recognize a “nonroad turbine” engine category for portable turbines.

The Administrator has the authority under the Clean Air Act to control harmful air pollutants through authority to establish federal standards of performance. This includes the listing of and revisions to definitions in the New Source Performance Standards (NSPS) under Section 111; National Emission Standards for Hazardous Air Pollutants (NESHAP) under Section 112; motor vehicles standards under Section 201; nonroad engine and vehicle standards under Section 213; and urban bus standards under Section 215. The Act also grants the Administrator discretion to choose the best program to regulate internal combustion engines, including turbines, that can be viewed as either stationary, onroad or nonroad. See, e.g., Clean Air Act (CAA) § 216(10)-(11); 42 U.S.C. 7411, 7412, 7521, 7547, 7550 & 7554.

The Administrator has authority “from time to time...revise” the list of categories of stationary sources. *Id.* Similar authority exists under Section 112. *Id.* § 7412(c)(1). Finally, as noted above, the Administrator may exercise discretion in whether to regulate internal combustion engines as nonroad engines or stationary sources. *Id.* 7550(10). There is nothing in the Act that makes the Administrator’s choice a one-time election and, in fact,

the Act generally contemplates that the Administrator will exercise continuing discretion to reflect evolution in technology over time.

B. The Administrative Procedure Act (APA) authorizes this petition for rulemaking.

The APA requires that “each agency shall give an interested person the right to petition for the issuance, amendment, or repeal of a rule.” 5 U.S.C. § 553(e). The APA further stipulates that agencies must respond to petitions “within a reasonable time” and give petitioners “prompt notice” when a petition is denied in whole or in part, along with “a brief statement of the grounds for denial” (5 U.S.C. § 555(b) and (e)).

EXERCISE OF ADMINISTRATOR’S AUTHORITY IS JUSTIFIED

Exercise of the Administrator’s authority under the Clean Air Act is warranted because this exercise advances the policy of the United States as set forth in current Executive Orders and Presidential Memoranda.

A. Executive Orders Directly Encouraging This Request

Executive Order No. 14156, “Declaring a National Energy Emergency”

In Executive Order 14156, the President declared that there is a National Energy Emergency, citing the need for “a reliable, diversified, and affordable supply of energy to drive our Nation’s manufacturing, transportation, agriculture and defense industries, and to sustain the basics of modern life and military preparedness.” EO 14156, sec. 1. The President cited “an increasingly unreliable grid” as requiring “swift and decisive action” and that unless addressed, “this situation will dramatically deteriorate in the near future due to a high demand for energy and natural resources to power the next generation of technology.” *Id.* The proposed petition provides an almost immediate way to expand electric generating capacity, including for high technology facilities under consideration, until the bulk electric grid can catch up. In Section 2, the President directed the heads of executive departments and agencies, including the Administrator, to “exercise any lawful authorities they may possess, to facilitate the identification, ... siting, ... and generation of domestic energy resources.” This petition represents a concrete and immediate step that the Administrator can take to fulfill these directives.

Executive Order No. 14262, “Strengthening the Reliability and Security of the United States Electric Grid”

In Executive Order No. 14262, the President found that there an “increase in demand, coupled with existing capacity challenges,” which is “plac[ing] a significant strain on our Nation’s electric grid” and that the “lack of reliability in the electric grid puts the national and economic security of the American people at risk.” EO 14262, sec. 1. Section 2 directs that “all available power generation resources” should be used. Section 3 then directs the Secretary of Energy to provide for emergency orders when there are temporary disruptions. Unless there are available resources, temporary emergency orders will not assist. Making larger portable combustion turbines available as nonroad engines and hence not subject to the stationary source permitting program would make substantial additional flexible generating resources available to utilities and electric reliability organizations facing such power disruptions. The EPA, Department of Energy, and portable combustion turbine providers could then work together to preaccredit portable combustion turbines for use should an emergency situation arise. The petition thus advances the Administration’s goals and provides for an effective way to provide redress to the American people if the grid is damaged by providing a source of significant portable power that could be moved directly to the area of need.

Executive Order No. 14267, “Reducing Anti-Competitive Regulatory Barriers”

In Executive Order No. 14267, the President directed that “federal regulations should not predetermine economic winners and losers,” yet the current disparate treatment of portable combustion turbines compared to portable RICE clearly operates to exclude portable combustion turbines from the market. EO 14267, Section 1. Section 1 directs that such regulatory barriers “should be eliminated.” *Id.* The Administrator should identify this disparate treatment as a regulatory barrier that “limit[s] competition between competing entities” and “distorts” the operating of the free market. The Administrator should then repeal the disparity by extending to portable combustion turbines the same treatment as nonroad engines that is provided to portable RICE.

B. Executive Orders Indirectly Addressed by This Petition

In addition, this requested action supports initiatives directed by the following Executive Orders and Presidential Memoranda:

- **Executive Order No. 14154, *Unleashing American Energy*.** Section 2.(f) calls for agencies “to safeguard the American people’s freedom to choose from a variety of goods and appliances to promote market competition and innovation within the manufacturing and appliance industries.” The proposed petition would give American consumers and builders a choice between portable combustion turbines and RICE, allowing them to choose the option best suited for their needs.
- **Executive Order No. 14192, *Unleashing Prosperity Through Deregulation*.** Section 1 states that it is the policy of the Administration “to significantly reduce the private expenditures required to comply with Federal regulations to secure America’s economic prosperity and National security and the highest possible quality of life for each citizen.” The proposed petition would reduce burdens on the use of portable combustion turbines to facilitate construction and temporary power to new facilities, improving construction and providing more jobs. The effect of the petition is also deregulatory and would assist the EPA in repealing prior burdensome regulations, consistent with the policy outlined in Section 3.
- **Executive Order No. 14241, *Immediate Measures to Increase American Mineral production*.** The petition would immediately advance the goals of Executive Order by allowing portable combustion turbines to provide nonroad engine power to mine and mineral development projects. Many of these projects are located in remote areas and need access to power. In many cases, the power demand requires prohibitive number of RICE and can more efficiently and with less environmental impact by larger portable combustion turbines. The portable combustion turbines can then serve as a bridge until line power can be supplied.

C. The Petition Advances the Administrator’s “Powering the Great American Comeback” Initiative

On February 4, 2025, EPA Administrator Zeldin announced the “Powering the Great American Comeback” initiative. That initiative set forth how the EPA will be undertaking its mission while energizing the greatness of America’s economy. The Petition aligns with this initiative.

- **Pillar 1: *Clean Air, Land, and Water for Every American*.** The Petition would allow temporary energy needs to be met by a cleaner, more efficient source of power for many operations than the currently mandated RICE. Companies should have the ability to choose the best option – portable combustion turbine or RICE – for their

individual needs. Many would choose the portable turbine option as it has lower emissions on a g/kWh basis and requires less land disturbance.

- **Pillar 2: Restore American Energy Dominance.** While portable turbines alone will not restore American energy dominance, they facilitate the construction of new facilities, operations at mines and mineral facilities and oil fields that lead to energy dominance. They can also provide an important backstop when grid power cannot be arranged in time to support facilities.
- **Pillar 3: Permitting Reform, Cooperative Federalism, and Cross-Agency Partnership.** Many state agencies would be support being relieved of the need to issue stationary source permits for temporary portable combustion turbine locations, a step that they are required to take due to the EPA's insistence that all portable turbines are "stationary sources" requiring permits.
- **Pillar 4: Make the United States the Artificial Intelligence Capital of the World.** It is undisputed that artificial intelligence needs additional data center support to fully develop. Data center development is held back in many areas of the country, but particularly in the Virginia corridor, West Coast, New England and Pacific Northwest by a lack of available grid power. Portable combustion turbines provide a way to bring these facilities on-line earlier while grid power is being built out to meet their needs.

The Petition advances all pillars of the EPA's "Powering the Great American Comeback" Initiative.

NONROAD COMBUSTION TURBINES ARE ENVIRONMENTALLY COMPARABLE OR PREFERABLE IN CERTAIN APPLICATIONS

In this size range, turbines can generate more power for a given tonnage of equipment or number of truck deliveries, which bears significant operational advantages for a variety of temporary power generation projects. It should be noted that one type of such a temporary generation project could be to serve an emergency grid support need to address storm damage, downed power lines, breakdowns of other power generation, and so forth. The larger space requirements and lower capacities of RICE power generation cannot as fully or as rapidly meet those needs as portable gas turbines. If portable combustion turbines are always to be subject to site-specific stationary source permitting requirements, the lead time and effort required for stationary permitting makes them nearly useless for such emergency grid support projects. Gas turbines and RICE engines are functionally equivalent; they use internal combustion processes to convert hydrocarbon fuels to shaft

power that can be used to do work such as producing electricity. Such disparate treatment would be warranted only if gas turbines had significant environmental disadvantages relative to RICE that only Clean Air Act Title I permitting could appropriately mitigate.

The comparison indicates that there is no pressing environmental or public health reason that RICE are preferable to gas turbines as the prime mover for temporary electricity generation projects. Rather, gas turbines are cleaner than RICE in most regards, and in the limited cases where RICE may have a narrow advantage, the margin is not especially large. Aside from the advantage in mass emissions, portable gas turbines have better pollutant dispersion characteristics than RICE, making them safer for the areas and neighborhoods in which they operate, and they have distinct operational capabilities that help meet temporary and emergency needs more efficiently. The differentiating factors between RICE and gas turbines for such projects are detailed further below.

A. Logistical Benefits of Portable Gas Turbines

The increased power density of gas turbines compared to RICE is an advantage to a variety of uses and project types. As an example, for drilling and hydraulic fracturing of oil and natural gas wells, operations commonly require 30-60 megawatts (MW) for 6-8 weeks. These large power demands normally cannot be met by grid supplies, as it is not practical or efficient to provision such large power connections to individual drilling sites that may be at remote locations and that may only have such large power demands at their initial construction or once every 5-10 years. To meet this power requirement, typically 15-30 RICE engines in the 2 MW size class are mobilized to the well. These engines are connected as a team to generate the required power. Additional equipment is required to configure the engines to work together and synchronize the frequency of their AC power output. One (1) RICE capable of generating 2 MW will fit on one (1) oversized load tractor trailer requiring significant truck travel to deliver an adequate number of RICE engines to the project site. Alternatively, the same project need could be met with 1-2 portable gas turbines that can be transported on 4-8 trucks, as opposed to the 30+ trucks required to transport and configure the RICE. Once at the project site, turbines can deliver the required power using a smaller operational footprint and with less operational complexity due to the smaller number of pieces of equipment to operate and to achieve AC power frequency synchronization.

B. Emissions Dispersion

As previously mentioned, for a given generation of RICE engines or gas turbines, mass emissions of air pollutants are comparable or slightly better for gas turbines. However, the two release their emissions differently. RICE produce narrow, concentrated exhaust plumes, whereas turbines emit wider, more dilute exhaust plumes. Gas turbine exhausts inherently contain a lot of excess (unburned) air. This excess air dilutes the exhaust emissions. In the same way that it is safe to work around an open bottle of bleach or ammonia, but not safe to directly smell the open end of the bottle, the dilute plume is safer to be around than a concentrated plume.

Pollutant dispersion from larger sources works similarly to the bottle analogy. After minimizing the emissions generated, the goal is to disperse the emissions to safe concentrations before a person could be exposed to the hazard of a concentrated plume. Both RICE and gas turbines operate at high temperatures, and their exhausts are hot enough to benefit from buoyancy (the exhaust air naturally tends to rise, like an imaginary hot air balloon). However, the narrow plume and lower flow rate from RICE units results in a plume that tends to start cooling and mixing with ambient air shortly after leaving the stack. Once mixing begins, the plume cools and loses its buoyancy, increasing the potential for turbulent winds to bring it to ground level where someone could breathe it before it is fully diluted. In contrast, the wide plume and higher exhaust volume from turbines make their plumes more stable, which helps the emissions to rise higher and disperse more effectively. As a result, ground level impacts are minimized. If a turbine plume eventually reaches ground level, it will tend to reach the ground farther downwind and in a more-diluted state than a RICE plume.

From an air quality standpoint, pollution control is not only about reducing emissions at the source but also about how those emissions interact with the surrounding environment. A broader, more diluted plume is generally preferable, as it reduces pollutant concentrations before they reach ground level where humans could breathe the exhaust. Therefore, there is no air dispersion rationale for considering a bank of RICE units safer or more protective of ambient air quality standards than an equivalent gas turbine. Turbines may offer a dispersion advantage due to their greater plume buoyancy and stability. All else being equal, turbines are likely safer to their local area or neighborhood than RICE engines generating the same amount of power.

C. Emissions of Traditional Air Pollutants

To evaluate the degree to which the two internal combustion technologies are environmentally comparable, Trinity Consultants prepared a generalized comparison of the two technologies for a hypothetical temporary power generation project. Expected emissions from both RICE engines and gas turbines were paired for various combinations of fuel type and era of equipment manufacture. The comparison evaluates generalized estimates of RICE and gas turbine emissions prepared using publicly available emission data from US EPA's "AP-42" emission factor compilation and the various Federal emission standards applicable to stationary and mobile RICE and gas turbines. Comparisons for each era were chosen as most representative of the power generation equipment being manufactured in that era that could be used today for portable, temporary power generation projects in the 5-60 MW range. Fuels evaluated were limited to natural gas and the current #2 distillate fuel oil standard widely available in the United States, which is NRLM diesel fuel (maximum 15 ppm sulfur content). In order to ensure consistency in analysis between various emission factor and common emission limit sources, this analysis is limited to filterable particulate matter (PM), as the test methods specified in the relevant NSPS standards only address filterable particulate matter.

In general, the data support the conclusion that for such power generation, given any given era of equipment manufacture and fuel choice, gas turbines have air pollutant emissions comparable to or better than emissions of RICE engines. Details of this evaluation are included in Appendix 1. Highlights of this evaluation, including the eras considered, fuels considered, and significant differences in emissions, are summarized below in Tables 1 and 2. These emissions are estimated for a project with 35 MW electric power demand and 7,300 total run hours.

Table 1: Distillate Oil (Diesel Fuel) Emissions Comparison

Era of Manufacture	Emissions Data Sources		Turbine Emissions Advantage (tons per project)					
	RICE Engine	Gas Turbine	NOx	CO	PM	SO2	VOC	HCHO
1977-1999	AP-42 1993	AP-42 1971	3,335	900	-50	-1	66	0
2000-2005	40 CFR 89 Tier 1	AP-42 2000	6,507	9,881	448	0	1,127	0
2006-2013	40 CFR 89 Tier 2	AP-42 2000	3,509	3,030	153	0	277	0
2014-present	40 CFR 1039 Tier 4	AP-42 2000	121	3,030	20	0	254	0

NSPS KKKK limits shown for turbine NOx as these are higher than AP-42 2000 NOx estimates for distillate oil.

The original Part 89 standards identified here have been relocated from Part 89 to Appendix I to 40 CFR Part 1039.

Table 2: Natural Gas Emissions Comparison

Era of Manufacture	Emissions Data Sources		Turbine Emissions Advantage (tons per project)					
	RICE Engine	Gas Turbine	NOx	CO	PM	SO2	VOC	HCHO
1977-1999	AP-42 2000: 2-Stroke	AP-42 1971	3,023	277	-8	-1	77	62
2000-2004	AP-42 2000: 4-Stroke	AP-42 1971	4,058	199	-8	-1	75	59
2005-2006	40 CFR 1048 Tier 1	AP-42 2000	2,342	36,617	2	-1	144	59
2006-present	40 CFR 1048 Tier 2	AP-42 2000	1,434	3,117	2	-1	100	5

NSPS KKKK for turbine NOx is within 10% of AP-42 2000. Tier 2 assumes 90% control of HCHO by oxidation catalyst.

AP-42 1971 turbine data did not include formaldehyde data; substituting AP-42 2000.

The PM emissions from diesel RICE are considered diesel particulate matter (DPM), which is highly potent as a carcinogenic and acute air toxic, and is increasingly being treated as a distinct pollutant from ordinary PM. In evaluating the emissions differences when burning distillate (diesel) fuel, it should be noted that gas turbine PM emissions are not only lower, they are zero when considering which PM emissions are of the highly toxic DPM variety.

D. Other Factors

The heat rate values in Table 3 below represent the amount of fuel energy, measured in British thermal units (Btu), required to generate one kilowatt-hour (kWh) of electricity for each combination of fuel and internal combustion technology. A lower heat rate indicates

greater efficiency, as less fuel is needed to produce the same amount of power. RICE are more efficient than turbines, requiring less fuel per kWh across both natural gas and distillate oil.

Table 3: Heat Rate Comparison

Type of Fuel	2023 Heat Rate (Btu per electrical kWh)	
	Turbine	RICE
Natural Gas	11,010	8,900
Distillate Oil (Diesel)	13,088	10,506

Source: US Department of Energy, Energy Information Administration, EIA-860 and EIA-923 survey averages for power produced in the US in 2023, found at https://www.eia.gov/electricity/annual/table.php?f=eapa_08_02.html on 4/28/2025.

Greenhouse gas (GHG) emissions from RICE and turbines are largely a function of the type and amount of fuel burned, rather than the engine type itself. While engine efficiency affects how much fuel is needed to produce electricity, the GHG emissions per unit of fuel are comparable. Therefore, when comparing GHG impacts, the choice of fuel (natural gas versus diesel) is a more significant factor than whether a RICE or gas turbine is used.

EQUITY CONSIDERATIONS

As noted in the opening, the EPA's current regulatory approach creates inequitable disparities between portable combustion turbine and RICE regulation. These disparities are most apparent in the application of NSPS, NESHAP, and preconstruction permitting programs.

Portable combustion turbines are regulated as stationary sources under NSPS Subparts KKKK or GG. As such, these units are subject to extensive monitoring, recordkeeping, and compliance obligations. However, nonroad RICE used for the same purpose are exempt from NSPS standards altogether per 40 CFR 60.4200(e) and 40 CFR 60.4230(f).

This disparity also extends to NESHAP regulation. Portable combustion turbines, even when mounted on trailers or used temporarily, are regulated under Subpart YYYY when located at major sources, which imposes stringent emissions limits, monitoring, and control technology requirements on stationary combustion turbines. See 40 CFR 63.6085(a) (applying to turbines “mounted on a vehicle for portability or transportability”).

However, under 40 CFR § 63.6585(a), NESHAP Subpart ZZZZ, the standard for stationary RICE, does not apply to nonroad engines.

Similarly, portable combustion turbines may be considered a new major stationary source under PSD or NNSR based on their potential emissions and location. When thresholds for major NSR are not met, portable combustion turbines are often subject to minor NSR permitting in many jurisdictions. Whether major or minor, these permitting programs require preconstruction approval and can involve BACT or LAER determinations, air quality modeling, and public notice. These processes introduce significant cost, delay, and uncertainty. As EPA noted in the Subpart KKKKa proposal, sometimes the delay may be greater than the need.

By contrast, a trailer-mounted RICE providing the same power for the same duration is generally exempt from pre-construction approvals, including PSD, NNSR, and minor NSR, due to its regulatory status as a nonroad engine. This disparity imposes a structural disadvantage on cleaner technologies solely because they do not fall within the nonroad exemption.

Leveling the playing field would not only correct a regulatory inconsistency but also create conditions that support technological innovation and investment in cleaner, more efficient power solutions. Capital-intensive industries evaluating portable power options are sensitive to permitting risk and regulatory complexity. Because newer, lower-emitting technologies like turbines face higher compliance costs and permitting delays, industry often favors older, dirtier, but more easily permitted alternatives. This decreases demand for advanced technologies and discourages manufacturers from investing in improvements.

A more equitable legal structure that regulates portable combustion turbines as well as portable RICE as nonroad engines would reduce this friction and send a clear market signal that investment in cleaner, more efficient portable power is viable, scalable, and supported by federal policy. This is critical to modernizing industrial operations, strengthening grid support infrastructure, and achieving cost-effective emissions reductions without compromising reliability.

PROPOSED REVISIONS TO RULE LANGUAGE

The regulatory framework to support the category of “portable” combustion turbines requires minimal changes to currently applicable combustion turbine NSPS and NESHAP

standards. Generally, each standard will require expanding the existing exclusion for mobile turbines to portable temporary turbines. The proposed exclusion relies on the existing Part 1068 definition of “nonroad engine.” Nonroad (or portable) combustion turbines would be required to meet the applicable NSPS or NESHAP emission standards and operating limitations established for the analogous stationary combustion turbine but have modified testing and compliance conditions more appropriate to portable units that will move. Owners and operators of this new category of portable combustion turbines must explicitly allocate who will be responsible for testing and compliance. In addition, operators will be required to demonstrate operation in compliance with the Part 1068 nonroad engine criteria (i.e., not operated more than 12 months in a single location). Petitioners believe that this framework will ensure operation consistent with existing NSPS and NESHAP emission levels while allowing the flexibility to move the portable units more easily to the places of greatest need.

Proposed regulatory language is found in Attachment 1.

Conclusion

COMET believes that expanding use of portable combustion turbines will greatly ease the energy environment, boost the United States competitiveness and provide needed power and flexibility in the event of grid disruption at equivalent or lower environmental impact than other alternatives.

Please feel free to reach out to COMET if you have any questions about this proposal. We would be delighted to meet with EPA representatives to discuss the benefits that flow from this regulatory change and answer any questions that you may have. Please feel free to contact any of the following COMET representatives:

Geoff Bland, Chair of the Steering Committee
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Petition to the U.S. Environmental Protection Agency
Classification of Portable and Temporary Combustion Turbines as Non-Road Engines
Submitted December 8, 2025
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On behalf of the Coalition of Mobile Electric Turbine Users.

Respectfully submitted,



for Geoff Bland
Chair of Steering Committee
COMET

ATTACHMENT 1 PROPOSED REGULATORY LANGUAGE

The following language proposes the necessary regulatory changes:

40 C.F.R. Part 60, Subpart GG - Standards of Performance for Stationary Gas Turbines

§ 60.331 - Definitions

Stationary gas turbine means any simple cycle gas turbine, regenerative cycle gas turbine or any gas turbine portion of a combined cycle steam/electric generating system, that is not self-propelled, that is intended to be propelled while performing its function, or that is portable. A stationary gas turbine differs from a portable gas turbine in that a stationary gas turbine is not a non-road engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii)), and is not used to propel a motor vehicle or a vehicle used solely for competition.

40 C.F.R. Part 60, Subpart KKKK – Standards of Performance for Stationary Combustion Turbines (that commenced construction, modification or reconstruction after February 18, 2005)

§ 60.4420 - Definitions

Stationary combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), heat recovery system, and any ancillary components and sub-components comprising any simple cycle stationary combustion turbine, any regenerative/recuperative cycle stationary combustion turbine, any combined cycle combustion turbine, and any combined heat and power combustion turbine based system. Stationary means that the combustion turbine is not self propelled, ~~or not~~ intended to be propelled while performing its function. It may, however, be mounted on a vehicle for portability and is not portable. A stationary combustion turbine differs from a portable combustion turbine in that a stationary combustion turbine is not a non-road engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii)), and is not used to propel a motor vehicle or a vehicle used solely for competition.

40 C.F.R. Part 63, Subpart YYYY – National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines

40 CFR 63.6085(a) – Am I subject to this subpart?

Stationary combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle stationary combustion turbine, any regenerative/recuperative cycle stationary combustion turbine, the combustion turbine portion of any stationary cogeneration cycle combustion system, or the combustion turbine portion of any stationary combined cycle steam/electric generating system. Stationary means that the combustion turbine is not self propelled, or not intended to be propelled while performing its function, and not portable although it may be mounted on a vehicle for portability or transportability. A stationary combustion turbine differs from a portable combustion turbine in that a stationary combustion turbine is not a non-road engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii)), and is not used to propel a motor vehicle or a vehicle used solely for competition. Stationary combustion turbines covered by this subpart include simple cycle stationary combustion turbines, regenerative/recuperative cycle stationary combustion turbines, cogeneration cycle stationary combustion turbines, and combined cycle stationary combustion turbines. Stationary combustion turbines subject to this subpart do not include turbines located at a research or laboratory facility, if research is conducted on the turbine itself and the turbine is not being used to power other applications at the research or laboratory facility.

63.6175 (definition)

Stationary combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle stationary combustion turbine, any regenerative/recuperative cycle stationary combustion turbine, the combustion turbine portion of any stationary cogeneration cycle combustion system, or the combustion turbine portion of any stationary combined cycle steam/electric generating system. Stationary means that the combustion turbine is not self propelled, ~~not~~ or intended to be propelled while performing its function, ~~or not portable~~. A stationary combustion turbine differs from a portable combustion turbine in that a stationary combustion turbine is not a non-road engine as

defined at 40 CFR 1068.30 (excluding paragraph (2)(ii)), and is not used to propel a motor vehicle or a vehicle used solely for competition. Stationary combustion turbines do not include turbines located at a research or laboratory facility, if research is conducted on the turbine itself and the turbine is not being used to power other applications at the research or laboratory facility.

In addition to the proposed revisions to NSPS Subparts GG, KKKK and NESHAP Subpart YYYYY, the EPA would need to revise the applicability of proposed NSPS Subpart KKKKa similarly.

The EPA should also introduce a new Part 1032, Control of Air Pollution from Portable Combustion Turbine Engines. The purpose of this part is to ensure that portable combustion turbines meet emissions equivalent to the relevant NSPS, NESHAP or mobile source standard unless the EPA chooses to promulgate a more specific standard for such units.

[New] Part 1032 Control of Air Pollution from Portable Combustion Turbine Engines

1032.1	What is the purpose of Part 1032?
1032.2	Applicability
1032.4	Designation of portable combustion turbines
1032.6	Assignment of portable combustion turbines to sites
1032.10	Emissions limitations applicable to portable combustion turbines
1032.15	General requirements for complying with this part
1032.20	Testing requirements for portable turbines
1032.30	Requirements applicable to turbine owners
1032.35	Requirements applicable to turbine operators
1032.40	Requirements applicable to site owners/operators
1032.50	Definitions

§ 1032.1 What is the purpose of Part 1032

Part 1032 establishes emissions limitations and operating limitations for air pollutant emissions from portable combustion turbine, and requirements to demonstrate initial and continuous compliance with the emission and operating limitations.

§ 1032.2. Applicability

This part applies to portable combustion turbine engines on and after [effective date of publication in the *Federal Register*.] Emission standards apply as described in section 1032.10.

- (a) Except as provided in paragraph (b) of this section, the regulations of this part apply to portable combustion turbines defined in section 1032.50 if the owner of the engine elects to certify it as a portable combustion turbine engine in accordance with section 1032.4.
- (b) The requirements of this part do not apply to the following combustion turbines unless a portable combustion turbine declaration has been made under section 1032.4:
 - (1) Aircraft engines regulated under part 1031.
 - (2) Self-propelled combustion turbines or combustion turbines intended to be propelled while performing its function.
 - (3) Any stationary combustion turbine subject to regulation under NSPS Subparts GG or KKKK [or KKKKa, if after finalization].
 - (4) Any stationary combustion turbine subject to regulation under NESHAP Subpart YYYYY.

1032.4 Designation of Portable Combustion Turbines.

- (a) A turbine owner may classify a nonroad combustion turbine as a portable combustion turbine when the following conditions are met:
 - (1) The turbine engine meets the definition of a *portable combustion turbine* in section 1032.50.
 - (2) The turbine engine is not installed at a site but is in a shop, warehouse or storage yard under the turbine owner's control.
 - (3) The turbine owner has determined the emission standards and portable combustion turbine class under Section 1032.10 applicable to the turbine or that it is an exempt combustion turbine engine.
 - (4) The turbine owner has completed the minimum qualification testing under Section 1032.10 and determined that the portable combustion turbine complies with the applicable standard at the low, medium and high points on the range and the overall average.

- (5) The turbine owner has installed (or confirmed the prior installation of) a nonresettable hour meter on the turbine engine
 - (6) The turbine owner has installed (or confirmed the prior installation of) a continuous monitoring system or device to record fuel consumption on the turbine engine.
 - (7) The turbine owner has placed a unique turbine owner identification mark on the turbine.
- (b) If the conditions of section 1032.4(a)(1) through (7) are met, the turbine owner may execute a portable combustion turbine declaration, which must state:
- (1) The turbine owner's identifier for that turbine.
 - (2) The turbine make, model, and serial number.
 - (3) The applicable section 1032.10 portable combustion turbine class.
 - (4) Identification of the operating range, including the high, mid and low points for testing purposes.
 - (5) The date, no earlier than the declaration date and no later than the first day of the next calendar month, that the turbine engine becomes subject to Part 1032 as a portable combustion turbine.
 - (6) The declaration must be signed and dated by a duly authorized representative of the turbine owner. The turbine owner's identifier listed in the declaration must be affixed to the turbine engine.
- (c) Once the portable combustion turbine declaration takes effect, the turbine engine is subject to the requirements of part 1032 in lieu of parts 60, 63 or 1031 until the portable combustion turbine no longer meets the definition of a portable combustion turbine in section 1032.50 or the turbine owner revokes the declaration at a time when the portable combustion turbine is in the turbine owner's physical possession.

§ 1032.6 Assignment of Portable Combustion Turbines to a Site

- (a) A turbine owner may assign a portable combustion turbine to a site by executing a portable combustion turbine site assignment agreement. A site assignment agreement must:
- (1) Identify the turbine owner, including name, address, and contact information.
 - (2) Identify the turbine operator, including name, address, and contact information.
- A turbine operator may be the turbine owner, the site owner or operator, or a third party.

- (3) List the turbine owner's identifier for each portable combustion turbine assigned to the site.
- (4) Include a statement whether it is the responsibility of the turbine owner or the turbine operator to conduct periodic testing required under subsection (b) of section 1032.20 and, if the turbine operator, the turbine operation shall provide a copy of the test results to the turbine owner.
- (5) Include a statement of whether it is the responsibility of the turbine owner or the turbine operator to conduct site testing required under subsection (c) of section 1032.20 and their responsibility promptly to provide such information to the turbine owner, turbine operator and site owner/operator.
- (6) Include a statement whether it is the responsibility of the turbine owner or the turbine operator to undertake corrective action if the periodic testing or site testing does not demonstrate compliance with the applicable emissions limitations in section 1032.20.
- (7) Include a statement by the turbine operator that:
 - (i) It will operate each covered turbine in accordance with section 1032.15 and the turbine owner's operating specifications and only adjust those settings authorized for adjustment.
 - (ii) It will maintain records of fuel type, quantity, and fuel sulfur content for each covered turbine.
 - (iii) It will record the calendar date and the number of operating hours on the nonresettable hour meter when a covered turbine is installed or removed from a location at the site and report those dates and hours to the turbine owner and the site owner/operator.
 - (iv) It will report to the site owner/operator hours of operation and emissions by the fifth working day of each month for the prior month's portable combustion turbine(s) operation at the site.
 - (v) It will fulfill any responsibilities falling to it under paragraphs (a)(4) through (6) indicated as being the responsibility of the turbine operator.
- (8) Include a statement by the site owner/operator that the turbine and turbine operator are business invitees who are granted access to maintain and operate the turbines and that the site owner will not interfere with the operation or maintenance of the covered turbines.
- (b) In addition to the items included in subsection (a), the site assignment agreement must include as attachments:
 - (1) A copy of the portable combustion turbine declaration for each covered turbine.

- (2) A copy of the turbine owner's operating specifications developed pursuant to section 1032.20(a)(3) for each covered turbine.
- (c) At the conclusion of the site assignment agreement, the turbine operator will:
 - (1) Arrange to return the portable combustion turbines covered by the site assignment agreement to the turbine owner, along with copies of the hours of operation, maintenance records, and any periodic or site testing data.
 - (2) Provide copies of the location, dates, hours of operation, total emissions, by month, and fuel records for each covered turbine to the site owner/operator.

§ 1032.10 Emission Limitations Applicable to Portable Combustion Turbines

- (a) A portable combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 million Btu) per hour, based on the lower heating value of the fuel fired and which commenced construction, modification or reconstruction before February 18, 2005, must meet the emissions standards set forth in 40 C.F.R. Part 60, Subpart GG that would be applicable to it if it were a stationary gas combustion turbine. Such turbines shall be classed as "GG-equivalent turbines."
- (b) A portable combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 million Btu) per hour, based on the lower heating value of the fuel fired and which commenced construction, modification, or reconstruction on or after February 18, 2005, must meet the emission standards set forth in 40 C.F.R. Part 60, Subpart KKKK that would be applicable to it if it were a stationary gas combustion turbine. Such turbines shall be classed as "KKKK-equivalent turbines."
- (c) A portable combustion turbine meeting the definition of an aircraft engine under Part 1031 prior to its declaration as a portable combustion turbine shall meet the emission standards applicable to its type and model year as set forth in Part 1031. Such turbines shall be classed as "1031-equivalent turbines."
- (d) *[[Upon NSPS Subpart KKKKa final rule] A portable combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 million Btu) per hour, based on the lower heating value of the fuel fired and which commenced construction, modification, or reconstruction on or after December 13, 2024, must meet the emission standards set forth in 40 C.F.R. Part 60, Subpart KKKKa that would be applicable to it if it were a stationary gas combustion turbine. Such turbines shall be classed as "KKKKa-equivalent turbines."]*

§ 1032.15 General Requirements for Complying with this Part

- (a) The turbine operator must operate and maintain each portable combustion turbine and associated air pollution control equipment and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown and malfunction.
- (b) It shall be a violation of this requirement to operate a portable combustion turbine inconsistent with the turbine owner's operating instructions set forth in the portable combustion turbine assignment agreement.

§ 1032.20 Testing Requirements for Portable Combustion Turbines.

- (a) *Qualification testing.* Prior to executing a portable combustion turbine declaration pursuant to section 1032.4, the turbine owner shall:
 - (1) Determine the operating range and the high, mid and low points;
 - (2) Conduct a performance test of the turbine engine in accordance with the applicable requirements of Part 60, Subpart GG or KKKK [or KKKKa after final rule], as applicable, with the following revisions:
 - (i) The test will consist of three, one-hour runs on each fuel that the operating specifications under paragraph (a)(3) will allow. One run shall be conducted while the turbine engine is operating within 10% of the high point; one run shall be conducted while the turbine engine is operating within 10% of the mid point; and one run shall be conducted while the turbine engine is operating within 10% of the low point.
 - (ii) A qualification test is passed for a fuel if the turbine engine meets the applicable Part 60, Subpart GG or KKKK [or KKKKa after final rule] or Part 1031 emissions limitation at each of the high, mid and low point runs and averaged across all three runs.
 - (iii) The test report must identify any controls or operating parameters important to the turbine engine's emissions performance and the conditions that must be maintained.
 - (3) The turbine owner must prepare turbine owner operating specifications ("operating specifications") that specify allowable fuels (including any required quality requirements) and provide guidance on the controls and operating parameters important to the turbine engine's performance and the conditions that must be maintained by the turbine operator.

- (i) Records of these specifications must be maintained in the portable combustion turbine file.
 - (ii) Records must be kept of fuel sulfur content of fuel used during testing. Tariff or similar documentation may be used for gaseous fuel supplies. Liquid fuel sulfur content shall be established by vendor certifications or sampling for each delivery.
 - (iii) The specifications established in paragraph (a)(3) may not be changed except as provided in paragraph (a)(4) of this section.
- (4) The turbine owner may revise operating specification based upon updated information but any change must be supported by testing meeting the requirements of paragraph (a)(3) of this section.
- (b) *Periodic testing.* The turbine owner or turbine operator must test each portable emission turbine once every three calendar years or every 8,760 operating hours, whichever comes first. The periodic test shall meet the requirements of subsection (a) except that the test runs shall be one hour each within 10% of each of the three operating range test points (high, mid, and low).
 - (1) Records of the periodic testing shall be provided to the turbine owner and must be maintained in the turbine owner's portable combustion turbine file for that covered turbine.
 - (2) Repeat testing may be postponed to avoid the need to connect and start up the unit solely for emission testing based on reaching the three year deadline. Following a testing postponement caused by the unit being out of operation, the test must be conducted within 144 unit operating hours.
 - (3) Periodic testing will be conducted on each fuel listed in the declaration. Repeat testing for a given fuel may be postponed based on the lack of fuel availability at the unit's current location or the lack of having operated on that fuel since the previous test. Following a fuel-specific testing postponement, the test must be conducted within 144 unit operating hours of resuming operation on the postponed fuel.
 - (4) If the turbine operator is not the turbine owner, the turbine operator shall maintain copies of the periodic testing for five years.
- (c) *Site-specific configuration check.* Each time a portable combustion turbine is assigned to a new site, the turbine owner or operator shall check the turbine's site-specific emissions concentration prior to beginning commercial operation. The check shall be conducted using a calibrated portable emissions concentration analyzer in accordance with ATSM D6522 for at least 10 minutes per load within 10%

of each of the three operating range test points. If the unit's exhaust concentration falls within 10% of the concentration observed during the most recent test under subsections (a) or (b) or is calculated to comply with the nitrogen oxide standard at each point, the turbine may start commercial operation at the site. If the portable combustion turbine does fall within the 10% window at one or more load points, the turbine operator may adjust adjustable settings set forth in the turbine owner's specifications to bring the turbine into compliance with the prior sentence. If the turbine operator cannot achieve compliance using the adjustable settings, then the turbine operator must take the turbine out of service until it is repaired or a replacement portable combustion turbine is supplied that passes the site testing.

- (1) Records of the site testing shall be provided to the turbine owner and to the site owner/operator.
- (2) Records of the site testing shall be maintained with the portable combustion turbine while it remains on site.

§ 1032.30 Compliance Requirements Applicable to Portable Combustion Turbine Owners

- (a) The turbine owner is responsible for correctly preparing the portable combustion turbine declaration pursuant to section 1032.4. The turbine owner shall maintain a copy of the declaration for the life of the portable combustion turbine and for five years after the turbine is destroyed, sold, or converted to stationary service.
- (b) The turbine owner is responsible for preparing the portable combustion turbine specifications pursuant to section 1032.20 and periodically updating them after any major maintenance. Operating specifications may be revalidated at any time by conducting a qualifying test with the new specifications. The turbine owner shall maintain a copy of each set of specifications at all times it is in effect and for five years after it is superseded. The records shall include the test data supporting the specifications.
- (c) The turbine owner is responsible for preparing the site assignment agreement required by section 1032.15 and providing copies of the site assignment agreement and portable turbine declaration for each covered turbine to the turbine operator and site owner/operator and a copy of the operating specifications for each covered turbine to the turbine operator.
- (d) The turbine owner shall maintain an operating file for each portable combustion turbine it owns. The file shall include:
 - (1) The portable combustion turbine declaration form.

- (2) The current operating specifications under section 1032.20.
- (3) A log stating for each time a portable combustion turbine is moved:
 - (i) The date and location where the portable combustion turbine was moved.
 - (ii) An identification of the site operating agreement under which it operated.
 - (iii) The operating hours on the nonresettable hour meter
 - (iv) The fuel(s) to be used at the site and location(s).
 - (v) In addition, the log shall record each time a periodic test under section 1032.20(b) is conducted, whether the turbine passed, and when the next periodic test is due.
- (4) A copy of the initial qualification test under section 1032.20(a) and any repeat tests for purposes of adjusting operating specifications pursuant to section 1032.20(a)(4).
- (5) A copy of each periodic test under section 1032.20(b) within the last five years.
- (6) A copy of any site-specific configuration check under section 1032.20(c) within the last five years.
- (7) Maintenance records for the turbine.
- (e) Except as provided in a site assignment agreement pursuant to section 1032.15, a turbine owner is responsible for a portable combustion turbine's compliance with the applicable emissions standards in section 1032.10 and for testing the turbine to demonstrate compliance in accordance with section 1032.20 on the required schedule.

§ 1032.35 Responsibilities of the Turbine Operator for compliance

- (a) The turbine operator may only operate turbines at a site for which a site assignment agreement signed by the turbine owner, turbine operator and site owner/operator is in effect.
- (b) The turbine operator will operate each covered turbine in accordance with section 1032.15 and the turbine owner's operating specifications and only adjust those settings authorized for adjustment.
- (c) The turbine operator will maintain records of maintenance on each covered turbine.
- (d) The turbine operator will maintain records of fuel type, quantity, and fuel sulfur content for each covered turbine. Tariff or similar documentation may be used for gaseous fuel supplies. Liquid fuel sulfur content shall be established by vendor certification or sampling for each delivery.

- (e) The turbine operator will record the calendar date and the number of operating hours on the nonresettable hour meter when a covered turbine is installed or removed from a location at the site and report those dates and hours to the turbine owner and the site owner/operator.
- (f) The turbine operator will report to the site owner/operator hours of operation and emissions by the fifth working day of each month for the prior month's portable combustion turbine(s) operation at the site.
- (g) If the site assignment agreement indicates that the turbine operator is responsible for periodic or site testing and corrective action under section 1032.20, the turbine operator shall complete such testing, undertake corrective action, file reports and maintain records as required.
- (h) The turbine operator will notify the turbine owner and the site owner/operator 30 days prior to the date that a portable combustion turbine will remain at the same location at a site for 12 consecutive months.
- (i) At the end of the site assignment agreement, the turbine operator will transfer the portable combustion turbines back to the turbine owner, together with all records required by this section. The turbine operator will provide a copy of the records maintained under subsection (e) and the site test records to the site owner/operator.
- (j) The turbine owner may serve as the turbine operator.

§ 1032.40 Responsibilities of the Site Owner/Operator

- (a) The site owner/operator must sign any site assignment agreement for it to become effective.
- (b) The site owner/operator is responsible for locating where each portable combustion turbine will go in consultation with the turbine operator.
- (c) The site owner/operator is responsible for the consequences should a portable combustion turbine remain at a single location at a site for 12 consecutive months, including liability for any missed permitting, compliance testing, monitoring, recordkeeping and reporting. A site owner/operator can avoid this liability by ensuring that any turbine either leaves site or changes locations within the meaning of section 1032.50 before 12 consecutive months pass.
 - (1) If, for reasons beyond the site owner/operator's control, the portable combustion turbine will remain on site beyond the start of the twelfth consecutive month, the site owner/operator and the turbine operator may jointly lock out the turbine while the turbine operator prepares to move the turbine off-

site or to another location. So long as the turbine remains locked out, no time accrues against the 12 consecutive month clock but if the turbine subsequently is operated in the same location, then all time from the date of lockout until the date the turbine leaves the location at the site will be considered in assessing the turbine's portable status.

- (2) The site owner/operator promptly must notify the turbine owner and turbine operator, if different, that a portable combustion turbine no longer qualifies as a portable combustion turbine if the requirements of this subsection are triggered.
- (d) The site owner/operator must maintain a copy of the site assignment agreement, the portable combustion turbine declaration for each turbine, and dates of portable combustion turbine installation at each location at its site provided by the turbine operator during and for five years after the termination of the site assignment agreement. The site owner/operator shall also maintain the emissions data provided by the turbine operator during and for five years after the termination of the site assignment agreement.

§ 1032.50 Definitions

- (c) Definitions. The following definitions apply for purposes of this part.

Exempt combustion turbine engine means a portable combustion turbine that has a heat input rate of less than 10 MMBtu/hour.

Nonroad combustion turbine means a turbine engine that meets the definition of nonroad engine in section 1068.30, except that the provisions in subsection (2)(ii) of that definition shall not apply.

Operating range means the range of operating conditions at which the portable combustion turbine will produce usable electric energy or work energy. The high point of the operating range is the point where maximum electric or work energy is generated. The low point of the operating range is the point at which the minimum load can be sustained

Portable combustion turbine means

- (1) Except as discussed in paragraph (2) of this definition, a portable combustion turbine is a nonroad combustion turbine that is portable or transportable,

meaning designed to be and capable of being carried or moved from one location to another repetitively. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer or platform.

(2) A turbine engine is not a portable combustion turbine if it meets any of the following criteria:

(i) The turbine engine is used to propel a motor vehicle, an aircraft, or equipment used solely for competition.

(ii) The turbine engine is regulated under 40 CFR part 60, (or otherwise regulated by a federal New Source Performance Standard promulgated under section 111 of the Clean Air Act (42 U.S.C. 7411)). Note that this criterion does not apply to turbine engines meeting any of the criteria of paragraph (1) of this definition that are covered by a portable combustion turbine declaration pursuant to section 1032.4 of this part.

(iii) The turbine engine otherwise included in paragraph (1) of this definition remains or will remain at a location for more than 12 consecutive months or a shorter period of time for a turbine engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. For any turbine engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced, include the time period of both engines in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (*i.e.*, at least two years) and that operates at that single location approximately three months (or more) each year. See § 1068.31 for provisions that apply if the engine is removed from the location.

Site is any place where a portable combustion turbine is installed for the purpose of generating electricity or producing mechanical work. Site does not include shops, warehouses or storage yards where portable combustion turbines are stored when not in use. A location where a portable combustion turbine is tested to demonstrate compliance

is not a site unless the turbine is producing electricity for use or mechanical energy for use other than running the test.

Site owner/operator means any person who operates a stationary source where a portable combustion turbine is used.

Turbine engine means anything commercially known as a turbine engine or any collection of assembled engine components that is substantially similar to engines commercially known as turbine engines that uses internal combustion principles. For example, a jet engine or a stationary combustion turbine are a turbine engine. Turbines that rely on external combustion such as steam engines are not turbine engines.

Turbine operator means any person who operates a portable combustion turbine. This may be the turbine owner, the site owner or site operator. A person operates a turbine if they make day-to-day decisions about whether and how to run the portable combustion turbine. [add compliance provision?]

Turbine owner mean any person who owns a portable combustion turbine engine. Last, Part 1068 will need to be amended to recognize the new Portable Combustion Turbine engine category.

PART 1068—GENERAL COMPLIANCE PROVISIONS FOR HIGHWAY, STATIONARY, AND NONROAD PROGRAMS

40 CFR § 1068.1 – Does this part apply to me?

- (a) The provisions of this part apply to everyone with respect to the engine and equipment categories as described in this paragraph (a). The provisions of this part apply to everyone, including owners, operators, parts manufacturers, and persons performing maintenance. Where we identify an engine category, the provisions of this part also apply with respect to the equipment using such engines. This part applies to different engine and equipment categories as follows:

- (16) This part applies to nonroad combustion turbines we regulate under 40 CFR part 1032 to the extent and in the manner specified in 40 CFR part 1032.

ATTACHMENT 2

SUPPORTING EMISSION CALCULATIONS

RICE Emissions Calculations

1. Published Emission Factors
2. Normalized Emission Factors in lb/MMBtu
3. RICE Emissions @ 255,500 MW-hour project total

RICE Emission Calculations

1. Published Emission Factors

Emission Factors								
Source	NOx	CO	FilterableP M	SO2 (lb/MMBtu) ²	VOC	HCHO (lb/MMBtu) ⁴	Units	Comment
NG: 2-Stroke Lean Burn Engine	3.17	0.39	0.01	0.00	0.12	0.06	lb/MMBtu	AP-42 3.2 Table 3.2-1 (01/1995)
Diesel: Tier 0 Compression Ignition (Uncontrolled)	3.10	0.81	0.01	0.00	0.10	0.00	lb/MMBtu	AP-42 Ch. 3.4 (10/1996)
NG: 4-Stroke Lean Burn Engine	4.08	0.32	0.01	0.00	0.12	0.05	lb/MMBtu	AP-42 3.2 Table 3.2-2 (01/1995)
Diesel: Tier 1 Compression Ignition (>560kW) ^{3,5}	9.20	11.40	0.54	0.00	1.30	0.00	g/KW-hr	40 CFR § 1039 Appendix I Table 1 (06/2021)
NG: Tier 1 Spark Ignition ^{1,5}	4.00	50.00	0.01	0.00	0.20	0.05	g/KW-hr	EPA-420-B-16-023 (03/2016)
Diesel: Tier 2 Compression Ignition (>560kW) ^{1,3,5}	6.40	3.50	0.20	0.00	0.32	0.00	g/KW-hr	40 CFR § 1039 Appendix I Table 2 (06/2021)
NG: Tier 2 Spark Ignition ^{1,5}	2.70	4.40	0.01	0.00	0.14	0.05	g/KW-hr	EPA-420-B-16-023 (03/2016)
Diesel: Tier 4 Compression Ignition (Generator Sets) ^{3,5}	0.67	3.50	0.03	0.00	0.19	0.00	g/KW-hr	40 CFR § 1039.101 Table 1 (06/2021)

1. For NMHC+NOx assume 95% NOx and 5% NMHC

2. % sulfur in fuel for CI engine= 0.0015%

3. All SO2 from AP42 Table 3.4-1

4. All HCHO from AP42 Table 3.4-3

5. No VOC listing, assumed NMHC is equivalent to VOC

RICE Emission Calculations

2. Normalized Emission Factors in lb/MMBtu

Source	Pollutants (lb/MMBtu)						Comment
	NOx	CO	Filterable PM	SO2	VOC	HCHO	
NG: 2-Stroke Lean Burn Engine	3.17	0.39	0.01	0.0006	0.12	5.52E-02	AP-42 3.2 Table 3.2-1 (01/1995)
Diesel: Tier 0 Compression Ignition (Uncontrolled)	3.10	0.81	0.01	0.0015	0.10	7.89E-05	AP-42 (1993) Table 3.4-1, 3.4-3, 3.4-5 (10/1996)
NG: 4-Stroke Lean Burn Engine	4.08	0.32	0.01	0.0006	0.12	5.28E-02	AP-42 3.2 Table 3.2-2 (01/1995)
Diesel: Tier 1 Compression Ignition (>560kW)	5.94	7.37	0.35	0.0015	0.84	7.89E-05	40 CFR § 1039 Appendix I Table 1 (06/2021)
NG: Tier 1 Spark Ignition	2.46	32.31	0.01	0.0006	0.13	5.28E-02	EPA-420-B-16-023 (03/2016)
Diesel: Tier 2 Compression Ignition (>560kW)	3.93	2.26	0.13	0.0015	0.21	7.89E-05	40 CFR § 1039 Appendix I Table 2 (06/2021)
NG: Tier 2 Spark Ignition	1.66	2.84	0.01	0.0006	0.09	5.28E-02	EPA-420-B-16-023 (03/2016)
Diesel: Tier 4 Compression Ignition (Generator Sets)	0.43	2.26	0.03	0.0015	0.19	7.89E-05	40 CFR § 1039.101 Table 1 (06/2021)

RICE Heat Rates	MMBtu/	
	Btu/KWh	MWh
Natural Gas	8,900	8.9
Diesel	10,506	10.506

Provided in EIA 860 Table 8.2 Average Tested Heat Rates by Prime Mover and Energy Source, 2023

RICE Emission Calculations

3. RICE Emissions @ 255,500 MW-hour project total

Pollutants (U.S. tons)							
Source	NOx	CO	PM	SO2	VOC	HCHO	Comment
NG: 2-Stroke Lean Burn Spark Ignition	3,604	439	11.27	0.67	136.4	62.76	
Diesel: Tier 0 Compression Ignition	4,161	1,087	10.74	2.03	134.2	0.11	
NG: 4-Stroke Lean Burn Engine	4,639	360	11.27	0.67	134.2	60.03	
Diesel: Tier 1 Compression Ignition	7,978	9,886	468.30	2.03	1,127.4	0.11	
NG: Tier 1 Spark Ignition	2,792	36,732	11.27	0.67	146.9	60.03	
Diesel: Tier 2 Compression Ignition (>560kW)	5,273	3,035	173.44	2.03	277.5	0.11	
NG: Tier 2 Spark Ignition	1,884	3,232	11.27	0.67	102.9	6.00	Assumes 90% control of HCHO achieved by oxidation catalyst
Diesel: Tier 4 Compression Ignition (Generator Sets)	581	3,035	40.26	2.03	255.0	0.11	

There was no Tier 3 for CI engines in this size range.

Scope	35	MW(e)
	7,300	hrs
	255,500	MW-hr(e)

Turbine Emissions Calculations

1. Published Emission Factors
2. Normalized Emission Factors in lb/MMBtu
3. Turbine Emissions @ 255,500 MW-hour project total

Turbine Emission Calculations

1. Published Emission Factors

Pollutants									Comment
Source	NOx	CO	Filterable PM	SO2	VOC	Pb	HCHO	Units	
NG: AP-42 4th Edition Original	413	115	14	1.41	42	-	-	lb/10 ⁶ ft ³	Table 3.1-2 Original 1971 Population (09/1985)
Diesel: AP-42 4th Edition Original	67.8	15.4	5	0.21	5.57	-	-	lb/10 ³ gal	Table 3.1-2 Original 1971 Population (09/1985)
NG: NSPS GG 35MWh	0.0075	-	-	Obsolete	-	-	-	% by vol	% by volume NSPS GG (09/1979)
NG: (AP-42 4th Edition)	0.44	0.11	0.0193	0.00141	0.024	-	-	lb/MMBtu	Table 3.1-1 (09/1985)
Diesel: (AP-42 4th Edition)	0.698	0.048	0.038	0.00152	0.017	5.8E-05	-	lb/MMBtu	Table 3.1-1 (09/1985)
NG: (AP-42 5th Edition)	0.32	0.082	0.0066	0.00141	0.0021	-	0.00071	lb/MMBtu	Tables 3.1-1, 3.1-2a, and 3.1-3 (01/1995)
Diesel: (AP-42 5th Edition)	0.88	0.0033	0.012	0.00152	0.00040	1.4E-05	0.00028	lb/MMBtu	Tables 3.1-1, 3.1-2a, and 3.1-4 (01/1995)
NG: (NSPS KKKK)	1.2	-	-	-	-	-	-	lb/MWh	50-850 MMBtu Table 1 (07/2006)
Diesel: (NSPS KKKK)	3.6	-	-	-	-	-	-	lb/MWh	50-850 MMBtu Table 1 (07/2006)

Turbine Heat Rates	MMBtu/	
	Btu/kWh	MWh
Natural Gas	11,010	11.01
Distillate	13,088	13.088

Provided in EIA 860 Table 8.2 Average Tested Heat Rates by Prime Mover and Energy Source, 2023

Turbine Emission Calculations

2. Normalized Emission Factors in lb/MMBtu

Pollutants										
Source	NOx	CO	Filterable PM	SO2	VOC	Pb	HCHO	Units	Comment	
NG: AP-42 4th Edition Original ¹	0.413	0.115	0.014	0.0014	0.042	-	-	lb/MMBtu	Table 3.1-2 Original 1971 Population (09/1985)	
Diesel: AP-42 4th Edition Original ²	0.494	0.112	0.036	0.0015	0.041	-	-	lb/MMBtu	Table 3.1-2 Original 1971 Population (09/1985)	
NG: NSPS GG 35MWh ^{3,4}	0.34	-	-	Obsolete	-	-	-	lb/MMBtu	% by volume NSPS GG (09/1979)	
NG: (AP-42 4th Edition)	0.44	0.11	0.0193	0.0014	0.024	-	-	lb/MMBtu	Table 3.1-1 (09/1985)	
Diesel: (AP-42 4th Edition)	0.698	0.048	0.038	0.0015	0.017	5.8E-05	-	lb/MMBtu	Table 3.1-1 (09/1985)	
NG: (AP-42 5th Edition)	0.32	0.082	0.0066	0.0014	0.0021	-	0.00071	lb/MMBtu	Tables 3.1-1, 3.1-2a, and 3.1-3 (01/1995)	
Diesel: (AP-42 5th Edition)	0.88	0.0033	0.012	0.0015	0.000401	1.4E-05	0.00028	lb/MMBtu	Tables 3.1-1, 3.1-2a, and 3.1-4 (01/1995)	
NG: (NSPS KKKK) ⁵	0.109	-	-	-	-	-	-	lb/MMBtu	50-850 MMBtu Table 1 (07/2006)	
Diesel: (NSPS KKKK) ⁵	0.275	-	-	-	-	-	-	lb/MMBtu	50-850 MMBtu Table 1 (07/2006)	

1. Assuming 1,000 Btu/scf
2. Provided by EIA "Energy Conversion Calculators" 1 gallon of Diesel Fuel = 137,381 Btu
3. Equation provided in NSPS GG for conversion to PPM
4. Equation provided in EPA Method 19-1 for PPM to lb/MMBtu conversion
5. Converted using heat rates below

Turbine Heat Rates	Btu/kWh	MMBtu/
		MWh
Natural Gas	11,010	11.01
Distillate	13,088	13.088

Provided in EIA 860 Table 8.2 Average Tested Heat Rates by Prime Mover and Energy Source, 2023

Turbine Emission Calculations

3. Turbine Emissions @ 255,500 MW-hour project total

Pollutants (U.S. tons)						
Source	NOx	CO	Filterable PM	SO2	VOC	HCHO
NG: AP-42 4th Edition Original	581	162	19.69	1.98	59.07	-
Diesel: AP-42 4th Edition Original	825	187	60.85	2.56	67.79	-
NG: NSPS GG Limits	482	-	-	Obsolete	-	-
NG: (AP-42 4th Edition)	619	155	27.15	1.98	33.76	-
Diesel: (AP-42 4th Edition)	1,167	80	63.54	2.53	28.42	-
NG: (AP-42 5th Edition)	450	115	9.28	1.98	2.95	1.00
Diesel: (AP-42 5th Edition)	1,471	6	20.06	2.53	0.67	0.02
NG: (NSPS KKKK)	153	-	-	-	-	-
Diesel: (NSPS KKKK)	460	-	-	-	-	-

Scope	35	MW(e)
	7,300	hr
	255,500	MW(e)