March 29, 2013

By Hand Delivery and Email

The Honorable Bob Perciasepe, Acting Administrator and Deputy Administrator U.S. Environmental Protection Agency Office of the Administrator Ariel Rios Building, Room 3000 1200 Pennsylvania Avenue NW Washington, DC 20460

Re: Petition for Administrative Reconsideration of the Final Rule – National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines

Dear Mr. Perciasepe:

Please find enclosed a Petition for Reconsideration of the Final Rule, National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines, 78 Fed. Reg. 6674 (Jan. 30, 2013).

Please acknowledge receipt of this petition by date-stamping the enclosed return copy and returning it in the enclosed self-addressed envelope. Thank you.

Sincerely,

/<u>s/ Kevin Poloncarz</u> Kevin Poloncarz /s/ David W. DeBruin David W. DeBruin

cc: Melanie King Lorie Schmidt

Enclosures

BEFORE THE ADMINISTRATOR UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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In the Matter of the Final Rule:

National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines EPA Docket No. EPA-HQ-OAR-2008-0708

PETITION FOR RECONSIDERATION

Pursuant to Section 307(d)(7)(B) of the Clean Air Act (hereinafter, the "Act" or "CAA"), 42 U.S.C. § 7607(d)(7)(B), Calpine Corporation ("Calpine") and PSEG Power LLC ("PSEG") (collectively, the "Petitioners") hereby petition the Administrator of the United States Environmental Protection Agency ("EPA") to reconsider the National Emission Standards for Hazardous Air Pollutants ("NESHAP") for Reciprocating Internal Combustion Engines ("RICE"), 78 Fed. Reg. 6674 (Jan. 30, 2013) (the "Final Rule").

I. SUMMARY

As described in detail below, the Petitioners request that EPA reconsider the following portions of the Final Rule:

- <u>40 CFR § 63.6640(f)(4)(ii)</u>: The 50-hour exemption for existing emergency RICE at area sources of hazardous air pollutants ("HAPs") to be operated for local system reliability purposes.
- <u>40 CFR §§ 63.6604(b), (c)</u>: The Ultra Low Sulfur Diesel ("ULSD") fuel use requirement for emergency engines larger than 100 horsepower ("HP") that participate in emergency demand response ("DR") programs or operate for local system reliability purposes, which requirement starts in 2015.
- <u>40 CFR § 63.6650(h)</u>: The reporting requirement for emergency engines larger than 100 HP that participate in emergency DR programs or operate for local system reliability purposes, which requirement starts in 2015.
- <u>40 CFR §§ 63.6640(f)(2)(ii)</u>, (iii): The 100-hour emergency DR exemption for emergency engines, which is supported, if at all, exclusively by evidence that post-dated the close of the public comment period and by EPA's erroneous conclusion that it would result in no increase in operations of emergency RICE and no greater emissions impacts.

According to CAA section 307(d)(7)(B), EPA must convene a proceeding for reconsideration of these provisions of the Final Rule because (1) the grounds for Petitioners' objections arose after

the period for public comment (but within the time specified for judicial review) and (2) the Petitioners' objections are of central relevance to the outcome of the Final Rule.

II. BACKGROUND

The 2004¹ and 2008² versions of the RICE NESHAP did not regulate existing emergency engines less than or equal to 500 HP located at major sources of HAP and existing emergency engines located at area sources of HAP.³ However, in 2010, EPA finalized health-protective amendments to the RICE NESHAP which only exempted existing stationary RICE from the emissions control requirements of 40 CFR Part 63, Subpart ZZZZ (i.e., the generally applicable RICE NESHAP requirements) if they were operated as emergency engines.⁴ The exemption for emergency engine operations was limited to (1) 50 hours per year for non-emergency operations (which did not include peak-shaving or economic DR operations) and (2) 15 hours per year as part of an emergency DR program.⁵

EnerNOC, Inc. ("EnerNOC") and other DR aggregators petitioned EPA to reconsider the 2010 final rule amending the RICE NESHAP, specifically requesting that the 15-hour allowance for emergency DR participation available to emergency RICE be increased to "a maximum of 60 hours per year or the minimum hours required by Independent System Operator tariff."⁶ In response to EnerNOC's petition for reconsideration and pursuant to an associated settlement agreement, EPA proposed a revision to the RICE NESHAP on June 7, 2012 (the "Proposed Rule").⁷

The Proposed Rule would have expanded the number of hours that all unregulated RICE could be used in emergency DR programs from 15 to 100 hours per year when there was an Energy Emergency Alert Level 2 ("EEA Level 2") event or a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.⁸ The Proposed Rule also would have created a new exemption for RICE at area sources of HAP to operate for up to 50 hours per year in peak shaving programs (i.e., "non-emergency" DR programs) prior to April 16, 2017.⁹

Calpine and PSEG submitted detailed comments on the Proposed Rule. Petitioners' concerns with the Proposed Rule and, now, the Final Rule emanate from their demonstrated commitment to advancing EPA's efforts to reduce emissions from the power sector, as demonstrated most recently by their intervention in support of EPA in defending two of the most important rules it

¹ See 69 Fed. Reg. 33474 (June 15, 2004).

² See 73 Fed. Reg. 3568 (Jan. 18, 2008).

 $^{^{3}}$ A major source of HAP emits either (1) 10 tons of any one HAP per year or (2) 25 tons of all HAPs per year. An area source of HAP emits HAP below these thresholds.

⁴ See 75 Fed. Reg. 9648 (Mar. 3, 2010).

⁵ 40 CFR § 63.6640(f) (2010 version of RICE NESHAP).

⁶ EnerNOC et al., Petition for Reconsideration, EPA-HQ-OGC-2011-1030-0003, at 2 (2010).

⁷ See 77 Fed. Reg. 33812 (June 7, 2012).

⁸ *Id.* at 33838 (Proposed Rule § 63.6640(f)(2)).

⁹ *Id.* (Proposed Rule § 63.6640(f)(4)(i)).

has ever issued to reduce the impacts to air quality from the generation of electricity, the Cross-State Air Pollution Rule ("CSAPR") and the Mercury and Air Toxics Standards ("MATS").¹⁰ The Final Rule represents a significant departure from EPA's efforts in this respect and would jeopardize some of the improvements in air quality to be obtained through implementation of CSAPR and MATS.

Several aspects of the Final Rule and its rationale also represent significant departures from the Proposed Rule or, alternatively, are supported solely by evidence that was introduced after the close of the public comment period:

- 1. Regarding the 50-hour non-emergency DR exemption, EPA further limited the timeframe for when RICE at area sources of HAP can participate in peak shaving programs¹¹, while also establishing a new exemption whereby area RICE can operate for up to 50 hours per year if all of the following conditions are met: (1) The engine is dispatched by the local balancing authority or distribution system operator; (2) the dispatch is intended to mitigate local transmission and/or distribution limitations; (3) the dispatch follows reliability, emergency operation or similar protocols; (4) the power is provided only to the facility itself or to support the local transmission and distribution system; and, (5) the owner or operator identifies and records, among other things, the entity that dispatches the engine. 40 CFR § 63.6640(f)(4)(ii).
- 2. Starting on January 1, 2015, emergency engines larger than 100 HP will be required to use ULSD if they operate or are contractually obligated to be available for more than 15 hours per year (up to a maximum of 100 hours per year) for emergency DR, or if they operate for local system reliability. 40 CFR §§ 63.6604(b), (c).¹² The Proposed Rule did not require emergency engines to use ULSD in any circumstances.
- 3. Entities with 100 HP or larger engines that operate, or are contractually obligated to be available, for more than 15 hours per year (up to a maximum of 100 hours per year) for emergency DR purposes, or that operate for local system reliability purposes, must report (1) the location of the engines and (2) dates and times the engines operate for emergency DR or local system reliability to EPA annually, beginning with the 2015 calendar year. 40 CFR § 63.6650(h). The Proposed Rule did not require emergency RICE operators to report the location or operational statistics of their engines.

¹⁰ *EME Homer City Generation, L.P. v. EPA*, 696 F.3d 7 (D.C. Cir. 2012), *reh'g en banc denied* (Jan. 24, 2013); *White Stallion Energy Center v. EPA*, No. 12-1100 (D.C. Cir.); *White Stallion Energy Center v. EPA*, No. 12-1272 (D.C. Cir.) (held in abeyance Sep. 12, 2012). Petitioners note that their interests in promoting the environmental and health protections afforded by the Clean Air Act are more than coincidental to their business strategies and financial interests. Rather, Petitioners' interests in advancing health-protective rules designed to reduce emissions from the power sector are integral to their respective missions, goals and business strategies.

¹¹ 40 CFR § 63.6640(f)(4)(i).

¹² These sections explicitly refer to "diesel fuel that meets the requirements in 40 CFR § 80.510(b) for nonroad diesel fuel". For ease of reference, this petition uses the term ULSD to refer to diesel fuel that meets the requirements in 40 CFR § 80.510(b) for nonroad diesel fuel.

- 4. The Final Rule does not alter the number of hours per year (i.e., 100 hours) that emergency engines can participate in emergency DR programs, which is limited to EEA Level 2 events and 5% deviations from standard voltage or frequency. 40 CFR §§ 63.6640(f)(2)(ii), (iii). However, the Petitioners highlight that no record evidence adequately supported EPA's position regarding the system-wide emissions impacts of the emergency DR exemption. The only evidence that might now support EPA's position in this regard was introduced after the close of the public comment period for the Proposed Rule.
- 5. Finally, upon promulgating the Final Rule, EPA articulated its view for the first time that the Final Rule would result in no increase in the number of hours emergency RICE could be operated for emergency DR because the May 2013 compliance date had not yet occurred.

III. ISSUES FOR RECONSIDERATION

Under the Act's administrative reconsideration provision, "[i]f the person raising an objection [to a final rule] can demonstrate to [EPA] that it was impracticable to raise such objection within such time or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule, [EPA] *shall* convene a proceeding for reconsideration of the rule and provide the same procedural rights as would have been afforded had the information been available at the time the rule was proposed." 42 U.S.C. § 7607(d)(7)(B) (emphasis added). Accordingly, if Petitioners can demonstrate to EPA's satisfaction that both the temporal and central relevance requirements are fulfilled, then EPA must reconsider the Final Rule.

Each of the following aspects of the Final Rule provides an independent reason for EPA to grant this petition for reconsideration and revise the Final Rule to better protect air quality and public health.

A. <u>The New 50-Hour Non-emergency Use Exemption for RICE At Area Sources Of</u> <u>HAP Is Unduly Permissive</u>

EPA must reconsider the Final Rule with respect to the newly inserted section regarding the permissibility of operating RICE at area sources of HAP (i.e., area RICE) when dispatched by the local system operator.

In deciding to limit the availability of the peak shaving exemption to May 3, 2014 in the Final Rule (as opposed to the Proposed Rule's sunset date of April 16, 2017), EPA stated that "operation for peak shaving and load management does not fairly come under the definition of emergency use... Given that the EPA has promulgated less stringent requirements for emergency engines, for reasons specifically related to the emergency use of such engines, the EPA must ensure that the uses of these engines fairly comport with emergency use, and that uses of these engines do not migrate into general uses, particularly uses to increase non-emergency generating

capacity."¹³ Accordingly, EPA found it appropriate to further limit the time period in which emergency RICE could operate in peak shaving programs.

At the same time, EPA established a new, potentially capacious exemption for the dispatch of area RICE as part of a financial arrangement with another entity. The 50-hour non-emergency use exemption can now be used when "(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator[;] (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region[;] (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines[;] (D) The power is provided only to the facility itself or to support the local transmission and distribution system[; and,] (E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine..." 40 CFR § 63.6640(f)(4)(ii).

However, the Final Rule does not define what it means for an emergency engine to be "dispatched by" the local system operator; what parameters are placed on "reliability...protocols"; or, what it means to require that power is provided "to support the local transmission and distribution system." The Final Rule also fails to provide any guidance for how either the local transmission and distribution system operator or EPA can determine whether any particular dispatch of RICE is or was "intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region." Indeed, by introducing intent into the determination of whether the section 63.6640(f)(4)(ii) allowance applies and using such an attenuated formulation of the conditions that such dispatch is intended to mitigate-local transmission or distribution constraints that *could* result in voltage collapse or overloads, which could result in interruption of power in a localized area-EPA appears to have opened up the exemption to circumstances where the threat to the electricity grid is so remote as to be indiscernible. Given the indefinite nature of these conditions and their attenuated relationship to any actual power loss, EPA may, at the very least, find it challenging to enforce against potential abuse of the exemption.

Thus, despite imposing several criteria upon the exemption, these criteria are so indistinct as to contradict EPA's rationale for not finalizing the proposed peak shaving allowance through 2017, i.e., to prevent exempt emergency engines from migrating into general uses. Accordingly, the new exemption, which has no sunset date, will authorize even greater usage of RICE in non-emergency situations than the Proposed Rule's limited exemption for peak shaving. The Petitioners would have strongly disputed the permissibility of including section 63.6640(f)(4)(ii) as part of the non-emergency use exemption for emergency RICE if it were part of the Proposed Rule.

¹³ EPA, Response to Public Comments on Proposed Amendments to National Emission Standards for Hazardous Air Pollutants for Existing Stationary Reciprocating Internal Combustion Engines and New Source Performance Standards for Stationary Internal Combustion Engines, at 113-14 (Jan. 14, 2013), *available at*: <u>http://www.epa.gov/ttnatw01/rice/20130114ReconsiderationComments.pdf</u> (hereinafter, "RTC").

For these reasons, Petitioners object to section 63.6640(f)(4)(ii) of the Final Rule because it provides an expansive exemption for area RICE to operate for non-emergency uses and, unlike the peak shaving exemption, does not contain a self-limiting termination date. In light of the significant negative health impacts associated with the operation of uncontrolled diesel-fired engines¹⁴ and EPA's concession that it does not know how many exempt engines operate, for how long, and where they are located¹⁵, EPA needs to take a second look at section 63.6640(f)(4)(ii).

The preconditions for granting a petition for reconsideration are satisfied in this case. First, the grounds for Petitioners' objection arose after the period for public comment had terminated because EPA created section 63.6640(f)(4)(ii) out of whole cloth: there is no previous version of this exemption, or direct analogue to it, in the Proposed Rule that the petitioners could have commented on during the public comment period on the Proposed Rule.¹⁶

Second, Petitioners' objection is of central relevance to the outcome of the rule because (1) the reworking of the exemption for non-emergency use of area RICE is one of the only aspects of the Final Rule in which, apparently, EPA would argue that it has acceded to the demands of power producers, public health advocates, and environmental organizations with respect to the exemptions provided for emergency RICE¹⁷; (2) the subject of emergency RICE consumed a substantial portion of the record; and, (3) Petitioners' objection provides substantial support for the argument that the Final Rule should be revised.¹⁸

¹⁷ RTC at 109 (stating that "EPA has considered all of the comments, and agrees with the commenters who indicated that it would not be appropriate to include a limited temporary provision for peak shaving.").

¹⁴ See, e.g., Calpine Comments, EPA-HQ-OAR-2008-0708-1134, at 6-14; PSEG Comments, EPA-HQ-OAR-2008-0708-0961, at 7-10.

¹⁵ RTC at 125 (stating that "[i]n terms of comments about lacking a thorough inventory of engines that are used in emergency DR and peak shaving programs, the EPA agrees and acknowledges that there is little known about the number of and location of these engines"); RTC at 142 (conceding that "EPA cannot speculate on the impacts when the number of engines participating in these programs is unknown and the EPA does not know how often the engines will be run").

¹⁶ The fact that a final rule may vary from a proposal does not automatically void the final rule. *See Rybachek v. EPA*, 904 F.2d 1276, 1288 (9th Cir. 1990) (stating that a new requirement in a final rule does not violate the due process rights of a person participating in such a rulemaking if the new requirement "was in character with the original proposal and a logical outgrowth of the notice and comments received"). However, while the "logical outgrowth" framework annunciated in *Rybachek* may serve as a useful referent, it is not controlling here because the CAA defines a specific, unique standard for determining whether EPA must grant a petition for reconsideration of a final rule promulgated pursuant to the Act. For purposes of satisfying the temporal requirement under CAA section 307(d)(7)(B), Petitioners must merely demonstrate that "it was impracticable to raise [our] objection within [the] time [for public comment] or [] the grounds for such objection arose after the period for public comment (but within the time specified for judicial review)." In this case, EPA finalized a wholly new exemption for non-emergency operations associated with dispatch for local system reliability, which was reflected nowhere within the Proposed Rule. Accordingly, because EPA inserted section 63.6640(f)(4)(ii) in the Final Rule with no antecedent in the Proposed Rule, the grounds for Petitioners' objection to this new section materialized after the close of the public comment period and it is irrelevant whether or not the new section was a logical outgrowth of the Proposed Rule.

¹⁸ See EPA, Response to Clean Air Taskforce, World Wildlife Fund, National Wildlife Federation, and Friends of the Earth's Petitions for Reconsideration of The Renewable Fuel Standards (RFS2), at 2, *available at*: <u>http://www.epa.gov/otaq/fuels/renewablefuels/rfs-response-to-petitions-02-17-11.pdf</u>.

Therefore, EPA must reconsider section 63.6640(f)(4)(ii).

B. <u>The New Requirement That Emergency RICE Relied Upon For DR Or Local</u> <u>System Reliability Must Use ULSD Is Not Supported By An Adequate MACT Or</u> <u>GACT Analysis</u>

EPA must also reconsider the Final Rule with regards to the newly inserted sections pertaining to the requirement that emergency engines relied upon for DR or local system reliability use ULSD. While Petitioners acknowledge the health-protective benefits of this requirement, its belated addition to the suite of work practice standards generally imposed upon the broader category of emergency RICE reflects EPA's failure to appropriately establish the maximum achievable control technology ("MACT") or the generally available control technology ("GACT") for this distinct subcategory in the first place.

Starting on January 1, 2015, existing emergency engines larger than 100 HP will be required to use ULSD if they operate or are contractually obligated to be available for more than 15 hours per year "for the purposes specified in § 63.6640(f)(2)(ii) and (iii) [i.e., emergency DR] or...§ 63.6640(f)(4)(ii) [i.e., local system reliability operations]." 40 CFR § 63.6604(b).¹⁹

EPA contends that it "has appropriately set MACT...for these engines based on the requirements of the CAA...The EPA is not exempting any sources in the source category from regulation and has established work or management practice standards for emergency engines, and in addition, is requiring the use of ULSD for engines contracting to be available for emergency DR beyond the preexisting 15 hrs/yr."²⁰ EPA seems to be arguing that, in so doing, it has chosen to apply a work practice standard pursuant to CAA section $112(h)^{21}$ instead of a MACT emission standard pursuant to sections 112(d)(2) and (3).

For existing major sources of HAP, emissions standards cannot "be less stringent, and may be more stringent than... the average emission limitation achieved by the best performing 12 percent of the existing sources (for which [EPA] has emissions information)..."²² EPA can only apply work practice standards, in lieu of an emission limit, to major sources of HAP if it is not feasible to prescribe an emissions limit (i.e., the application of measurement methodology to a particular class of sources is not practicable due to technological and economic limitations).²³

²³ Id. § 7607(h).

¹⁹ See also 40 CFR §§ 63.6604(c) (applying the same requirement with respect to *new* emergency engines larger than 500 HP).

²⁰ RTC at 89.

²¹ "For purposes of this section, if it is not feasible in the judgment of the Administrator to prescribe or enforce an emission standard for control of a hazardous air pollutant or pollutants, the Administrator may, in lieu thereof, promulgate a design, equipment, work practice, or operational standard, or combination thereof, which in the Administrator's judgment is consistent with the provisions of subsection (d) or (f) of this section..." 42 U.S.C. § 7607(h)(1). In turn, "...the phrase 'not feasible to prescribe or enforce an emission standard' means any situation in which the Administrator determines that...the application of measurement methodology to a particular class of sources is not practicable due to technological and economic limitations." *Id.* § 7607(h)(2)(B).

²² 42 U.S.C. § 7607(d)(3)(A).

Petitioners acknowledge and appreciate the health-protective benefits of requiring emergency RICE participating in DR to use ULSD. Petitioners object, however, to EPA's addition of this requirement in the Final Rule because this decision was not supported by an appropriate MACT or GACT analysis. First, the only analysis that EPA could have relied upon to decide that work practice standards were appropriate in lieu of emissions standards was based on emergency engines that operated in true emergency situations (i.e., loss of power).²⁴ EPA must demonstrate that application of work practice standards to this new subset of emergency engines that participate in DR programs, which is in addition to operation during true emergency situations, is appropriate and justified. Moreover, dusting off an analysis conducted for the broader source category of emergency RICE and then adding another work practice standard, as EPA has done here, does not satisfy EPA's obligations to establish MACT and GACT for emergency RICE used for DR or local system reliability purposes.

Finally, it was not until publication of the Final Rule that EPA clarified that it was, in fact, establishing MACT and GACT for a distinct subcategory—emergency RICE contracted for availability in DR programs for more than 15 hours per year or used for local system reliability purposes—and was requiring use of ULSD and other work practices to satisfy MACT and GACT for this subcategory. Previously, as evidenced by Petitioners' comments,²⁵ EPA had appeared to carve-out a broad exemption from otherwise applicable MACT or GACT requirements for "emergency" RICE participating in "emergency" DR programs.²⁶

Pursuant to CAA section 307(d)(7)(B), EPA must reconsider 40 CFR §§ 63.6604(b)-(c) because (1) it was impracticable to raise Petitioners' objections to the ULSD requirements as sufficient to meet MACT or GACT within the public comment period, as these requirements were inserted into the Final Rule after the close of the public comment period²⁷ and (2) the objections to such

²⁴ RTC at 85; *see also* "MACT Floor Determination for Existing Stationary Non-Emergency CI RICE Less Than 100 HP and Existing Stationary Emergency CI RICE Located at Major Sources and GACT for Existing Stationary CI RICE Located at Area Sources", EPA-HQ-OAR-2008-0708-0327, at 4 (Feb. 15, 2010) ("For existing stationary CI emergency engines located at major sources, EPA determined it is not feasible to prescribe or enforce an emission standard because the application of measurement methodology to this class of engine is impracticable due to the technological and economic limitations.").

²⁵ See PSEG Comments at 12-13 (arguing that "EPA cannot simply deviate from this statutory standard [Section 112] by electing to exempt certain categories or subcategories from regulation"). Petitioners do not seek reconsideration of the arguments raised in their respective comments, but rather object to EPA's promulgation after the close of the public comment period of a new work practice standard for emergency RICE participating in DR programs or used for local system reliability purposes, without performing a comprehensive MACT or GACT analysis.

²⁶ See RTC at 48 ("contrary to some commenters' terminology, emergency engines are not exempt from national standards. Those in the source category are not required to put on aftertreatment, but are subject to generally available control technology (GACT) or other standards.").

 $^{^{27}}$ See note 16 supra. Even if the ULSD provision were a "logical outgrowth" of comments received on the Proposed Rule (see, e.g., RTC at 65), that conclusion is simply not germane to whether Petitioners have demonstrated, per section 307(d)(7)(B), that the grounds for Petitioners' objection arose after the period for public comment. EPA inserted sections 63.6604(b)-(c) in the Final Rule with no antecedent in the Proposed Rule and therefore the temporal requirement for seeking reconsideration is satisfied.

requirements are of central relevance to the outcome of the Final Rule because Petitioners' objections provide substantial support for the argument that the Final Rule should be revised.²⁸

C. <u>The New Reporting Requirement For Emergency RICE Is Insufficient To Curb</u> Potential Abuse Of The Section 63.6640(f) Exemptions

EPA must reconsider the Final Rule due to the newly inserted sections regarding reporting obligations for emergency RICE relied upon for DR or local system reliability purposes. While Petitioners acknowledge this as a step in the right direction, the new requirement is unlikely either to provide useful information in a meaningful timeframe or to prevent abuse of the exemptions provided for emergency DR and local system reliability operations.

Section 63.6650(h) requires that, starting with the 2015 calendar year, entities with engines larger than 100 HP that operate, or are contractually obligated to be available, for more than 15 hours per year "for the purposes specified in § 63.6640(f)(2)(ii) and (iii) [i.e., emergency DR] or...§ 63.6640(f)(4)(ii) [i.e., local system reliability operations]" submit an annual report that contains, *inter alia*, the location of the emergency engine; the "[h]ours operated for the purposes specified in § 63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purpose specified in § 63.6640(f)(2)(ii) and (iii)"; and, the "[h]ours spent for operation for the purpose specified in § 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6650(h). EPA stated that it formulated the new reporting requirement because it "acknowledged that it has limited information about the whereabouts of engines used for emergency DR purposes and how many engines are used for this purpose."

Petitioners object to section 63.6650(h) because it inadequately ensures accurate and comprehensive reporting of the operation of emergency RICE for DR or local system reliability. Section 63.6650(h) only requires emergency engine operators to report the operational statistics of their engines with respect to use "for the purposes specified in" sections 63.6640(f)(2)(ii), (f)(2)(ii), (f)(4)(ii). The Final Rule does *not* require reporting of engine operations pursuant to 63.6640(f)(2)(i) for maintenance and readiness testing.³¹ The risk is that an emergency engine operator could operate for DR or local system reliability and later fail to report such operations accurately, relying instead upon the maintenance and testing time allotment in section 63.6640(f)(2)(i) to mask the full extent of such DR and local system reliability operations. Indeed, EPA itself concluded that operation for maintenance and testing often coincided with

²⁸ See note 18 supra.

²⁹ "The report must also identify the entity that dispatched the engine [pursuant to section 63.6640(f)(4)(ii)] and the situation that necessitated the dispatch of the engine." 40 CFR § 63.6650(h)(1)(vii).

³⁰ RTC at 159.

³¹ See 40 CFR § 63.6640(f)(2)(i) ("Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.").

operation for emergency DR.³² This may even be truer with respect to the non-emergency operations now authorized for local reliability purposes, given that such operations can presumably be scheduled based on projected grid conditions, in lieu of purchasing power from other sources.

Accordingly, the Final Rule's new reporting requirement is insufficient to prevent abuse of the exemptions provided to emergency RICE and does not assure that EPA or the states will receive an accurate summary of emergency engines' operations pursuant to such exemptions. This deficiency could possibly be resolved by amending the Final Rule to make clear that all operations for purposes of emergency DR, peak shaving, and local system reliability which coincide with testing and maintenance activities will be reported and counted against the limitations on DR, peak shaving, and local system reliability operations.

However, even if EPA amends the reporting requirement to clarify its scope, the reporting requirement is an inadequate response to the problem that Petitioners and many other commenters raised; i.e., EPA's failure to know where and how frequently emergency RICE are operated as part of DR programs precludes EPA from assessing the Final Rule's impacts on air quality and public health.³³ EPA contends that information obtained through implementation of this reporting requirement will allow EPA, along with state and local agencies, to assess the health impacts associated with such operations and will assist states in the development of State Implementation Plans ("SIPs"),³⁴ which EPA suggests are better suited to addressing the emissions impacts from area RICE.³⁵ However, this information will not be available for several years; before then, cities and states will be burdened by the increased emissions of both HAPs and criteria pollutants resulting from operation of uncontrolled emergency RICE for DR and local reliability purposes, which can only frustrate their attainment of the NAAQS and will undoubtedly worsen the impacts of HAPs upon urban populations.³⁶ Thus, any opportunity for states or local agencies to utilize such information to avoid these impacts is illusory.

EPA must reconsider section 63.6650(h). It was impracticable for Petitioners to raise their objection to the reporting requirement within the public comment period because the requirement was not included in the Proposed Rule.³⁷ Further, the Petitioners' objection to this requirement is of central relevance to the outcome of the Final Rule because it demonstrates that the Final

³² *See* RTC at 31.

³³ See note 15 supra; RTC at 159 ("The EPA has acknowledged that it has limited information about the whereabouts of engines used for emergency DR purposes and how many engines are used for this purpose.").

³⁴ See id. at 136.

³⁵ *Id.* at 183.

³⁶ See, e.g., Calpine Comments, EPA-HQ-OAR-2008-0708-1134, at 9, note 27, 11-13.

 $^{^{37}}$ See note 16 supra. Even if the reporting requirement were a "logical outgrowth" of comments received on the Proposed Rule (see, e.g., RTC at 263-64), that conclusion is not germane to whether Petitioners have adequately demonstrated that the grounds for their instant objection arose after the period for public comment, as required by section 307(d)(7)(B). Section 63.6650(h) was not included in the Proposed Rule and therefore the grounds for reconsideration are satisfied.

Rule should be revised.³⁸ Accordingly, Petitioners have satisfied the requirements of section 307(d)(7)(B) of the Act and EPA should grant this petition.

D. <u>EPA Lacks Record Evidence To Support Its Position Regarding The System-wide</u> <u>Emissions Impacts Of The Final Rule</u>

EPA must reconsider the Final Rule because EPA fails to adequately justify its view on the system-wide emissions impacts of the Final Rule. The evidence, if any, that EPA apparently relies on for its position post-dated the close of the public comment period.

The impacts on power sector emissions as a whole resulting from the proposed exemption for emergency DR operations in sections 63.6640(f)(2)(ii)-(iii) was one of the most significant points of contention on the Proposed Rule. For instance, the PJM Independent Market Monitor argued that "RICE generators are not competitive with coal when economically dispatched and therefore RICE generators will not displace coal-fired generating units in energy markets. RICE generators may displace other resources... includ[ing] natural gas-fired combustion turbines and conservation-based DR.... Affording such uses a special benefit through an exception to pollution rules would simply mean an increase in pollution compared to the alternative, with no positive benefits on markets."³⁹

Additionally, Calpine included with its comments a detailed report produced by the Analysis Group, which finds that "the successful participation of RICE-backed DR in regional capacity markets increases generation from coal and other fossil-fuel resources, and increases emissions of carbon dioxide (CO2), nitrogen oxides (NOx), sulfur dioxide (SO2), and mercury (Hg), relative to the same capacity needs being met by alternative market resources [i.e., combined cycle natural gas plants and wind energy, which are the most likely resources to clear capacity market auctions in the event that unregulated DR RICE is unavailable for bidding into capacity markets]."⁴⁰

EPA failed to change the text of sections 63.6640(f)(2)(ii)-(iii) despite the reasoned analysis of power producers, public health advocates, and environmental organization commenters that such an expansive exemption for emergency RICE participating in emergency DR would be detrimental to air quality. In justifying its failure to adjust the emergency DR exemption in light of strong evidence that such an exemption would lead to more, not less, air pollution, EPA responded that "there is no guarantee that this would be the case [i.e., that DR RICE would most likely be replaced with electricity from cleaner generating resources], and as noted by other commenters, the generation could in fact come from coal fired spinning reserves." *See* RTC at 47.

³⁸ See note 18 supra.

³⁹ PJM Independent Market Monitor Comments, EPA-HQ-OAR-2008-0708-1124, at 5.

⁴⁰ See Calpine Comments, EPA–HQ–OAR–2008–0708-1134, at 14-15; see also appended report Analysis Group, "Reliability and Emission Impacts of Stationary Engine-Backed Demand Response in Regional Power Markets", at 3 (Aug. 2012). Petitioners are not seeking reconsideration of the arguments presented by their respective comments, but seek reconsideration with respect to EPA's reliance upon evidence submitted after the close of the public comment period as the basis for its decision.

However, to support the response quoted above, EPA cites a report (NERA Economic Consulting, "Evaluation of the Calpine Report on the Reliability and Emission Impacts of RICE-Based DR in PJM" (Oct. 10, 2012)) that was not produced until after the close of the public comment period and not posted on the Regulations.gov portal until January 15, 2013, one day after the Final Rule was released in its pre-publication version.

Petitioners object to EPA's reliance on the NERA report for its position regarding the systemwide emissions impacts of the Final Rule because it is analytically weak. The NERA report assumes that coal-fired spinning reserves would be the marginal resource to replace uncontrolled emergency RICE in capacity markets. However, given historically low natural gas prices⁴¹ and stricter regulation of coal-fired power plants⁴², cleaner generating resources⁴³ would more likely be the successful bidders in capacity market auctions in the event that DR RICE was unavailable (or had to place higher bids to internalize the costs of emissions controls), *not* coal-fired spinning reserves.⁴⁴

Petitioners urge EPA to reconsider sections 63.6640(f)(2)(ii), (iii) and the evidence underlying these provisions. The NERA report was released after the close of the public comment period on the Proposed Rule and, therefore, it was impracticable for Petitioners to raise their objection to EPA's reliance on this evidence. Further, the Petitioners' objection to this report is of central relevance to the outcome of the Final Rule because EPA lacks substantial record evidence⁴⁵ to

⁴³ For instance, combined-cycle natural gas plants and wind resources comprise the energy sources in the interconnection queue in the PJM market. *See* Analysis Group, "Reliability and Emission Impacts of Stationary Engine-Backed Demand Response in Regional Power Markets", at 15-16.

⁴⁴ The likelihood that cleaner generating sources, rather than coal-fired spinning reserves, would be deployed in the absence of increased participation of emergency RICE in PJM's DR program is only affirmed by the PJM Independent Market Monitor's recent State of the Market Report. *See* Joseph Bowring, Monitoring Analytics, Presentation regarding 2012 State of the Market Report for PJM, at 28, 29, 43, 44 and 54 (Mar. 25, 2013), *available at:* <u>http://www.monitoringanalytics.com/reports/Presentations/2013/IMM MC 2012 SOM PJM 20130325.pdf</u> (illustrating a marked decrease in generation by coal-fired resources and a marked increase in generation by gas-fired resources between 2011 and 2012 and significant projected retirements of additional coal resources in 2013 and also showing, for 2012, net revenues for new entry combined cycle gas-fired generation plants as already exceeding levelized fixed costs in some portions of PJM while new entry coal plant net revenues comprise less than 25% of levelized fixed costs throughout the entire PJM footprint).

⁴⁵ The only apparent support in the record for EPA's position regarding the system-wide emissions impacts of the RICE NESHAP is when EPA states that, "[a]nother commenter (1142) in its comments on the proposed rule referred to the EPA's Synapse study, which indicated that there would be a net benefit in air quality in having quick start resources such as emergency generators for emergency DR available, reducing reliance on spinning reserves." RTC at 80; *see also id.* at 124. The "Synapse study" is produced by Synapse Energy Economics, Inc., and it is entitled "Modeling Demand Response and Air Emissions in New England". The Synapse study was published in 2003 and, therefore, is poor evidence for which marginal resources will be bid into capacity markets and dispatched in 2013 and future years, given the rapidly evolving economic and regulatory terrain that affects the power sector. *See, e.g.*, notes 41-42 and accompanying text. Indeed, as EPA itself stated in responding to another commenter who relied on the *very same Synapse study* for a different proposition, "the report the commenter refers to very clearly indicates that the findings of the study are specific to New England and should not be extrapolated to other areas. Also, the study conducted was for that particular point in time and not for current conditions." RTC at 140.

⁴¹ See U.S. Energy Information Administration – Natural Gas Prices, <u>http://www.eia.gov/dnav/ng/ng_pri_sum_dcu_nus_m.htm</u>.

⁴² See, e.g., National Emission Standards for Hazardous Air Pollutants From Coal and Oil-Fired Electric Utility Steam Generating Units, 77 Fed. Reg. 9304 (Feb. 16, 2012).

support the exemption for emergency RICE to participate in DR programs.⁴⁶ Accordingly, EPA should reconsider the Final Rule.

E. <u>EPA's Position That Operation Of Emergency RICE Will Not Increase As A</u> <u>Result Of The Final Rule Is Unsupportable</u>

Upon promulgating the Final Rule, EPA dismissed arguments that the Final Rule would result in increased reliance upon emergency RICE in DR programs and, as a consequence, increased emissions. EPA contended that because the 2013 compliance date had not yet occurred, there were no existing limitations on operation of emergency RICE in DR programs.⁴⁷ Thus, in EPA's view, promulgation of the Final Rule would not allow any increase, relative to a baseline of no limitations on the operation of emergency RICE in DR programs. This position, articulated for the first time upon publication of the Final Rule, is wholly unsupportable and misses the point: The appropriate baseline for comparison was not and should not have been historic operations in 2012 and prior years, but operation in 2013 and beyond in accordance with the limitations that would soon come into and remain in effect, had EPA not finalized its proposal and thereby authorized an increase in operation of emergency RICE in DR programs from 15 to 100 hours per year.⁴⁸

Had EPA previously articulated its view that the 15-hour limitation scheduled to come into effect was of no consequence, Petitioners would have objected and made clear that the appropriate baseline for EPA's consideration of the impacts of its instant decision was not historic operations, but operations as they would occur pursuant to the 2010 RICE NESHAP amendments.

Under the 2010 amendments to the RICE NESHAP, affected emergency RICE were required to comply with the 15-hour limitation on operation for emergency DR by May 3, 2013. Accordingly, DR aggregators and RICE operators bidding into the PJM's Base Residual Auction in May 2010 (for the delivery year running from June 1, 2013 to May 31, 2014), May 2011 (for the delivery year running June 1, 2014- May 31, 2015) and May 2012 (for the delivery year running from June 1, 2015) through May 31, 2016), should have bid their resources into the auction upon the assumption that they would only be authorized to operate for up to 15 hours per year for DR purposes (unless they were gambling on the outcome of the EnerNOC litigation and ensuing rulemaking). While EPA might suggest it is agnostic to the effect its rules have on

⁴⁶ See note 18 supra.

⁴⁷ See RTC at 126 ("Prior to the 2013 compliance date, there were no limits on operation for existing emergency engines. The existing RICE NESHAP promulgated in 2010, as amended by these final amendments, will for the first time establish requirements for such engines, limiting their hours of operation in certain situations such as emergency DR. Commenters do not provide significant evidence that the hours of use for engines used for emergency DR will expand by large multiples at the same time that EPA is beginning to regulate such hours of use.").

⁴⁸ While the 2013 compliance date had not yet occurred, neither EPA's reconsideration of the 2010 amendments, nor its Consent Decree agreeing to propose revisions thereto, stayed the effect of the 15-hour limitation on participation in emergency DR for emergency RICE.

energy and capacity markets such as the PJM's Base Residual Auction,⁴⁹ under the Final Rule, many more resources can be bid into such markets and, as a consequence, will likely be dispatched to meet demand. As the PJM Market Monitor made clear in its comments and public testimony, the more a system operator relies upon these resources to assure adequate capacity, the more likely they are to be dispatched to meet actual demand.⁵⁰ In addition, very recently, PJM also published projections for the dispatch of all DR resources, which forecast that such dispatch will be several times greater than historical dispatch.⁵¹ Accordingly, EPA's conclusion that the Final Rule will result in no increase in dispatch of emergency RICE for emergency DR and no increase in emissions above what was previously estimated is without merit.

Additionally, in supporting its contention that the Final Rule would not result in a demonstrable increase in participation of emergency RICE in DR programs, EPA relied upon evidence submitted by EnerNOC in December 2012, after the close of the public comment period, which suggested that, currently, backup generators comprise 23 percent (%) of all DR resources within PJM.⁵² Notwithstanding that this evidence itself indicated that the percentage of backup generators had increased to 23% from the 14% previously reported by PJM in May 2012 (an increase which could very well reflect a more than 60% rise in capacity attributable to backup generators within PJM's DR program), EPA relied upon this one statistic to conclude that "there is no evidence that a large percentage of emergency engines even participate in such programs."⁵³ Contrarily, Petitioners and several other commenters submitted extensive evidence that diesel backup generators comprised a substantial portion of all DR resources in both PJM and other regions and that the dispatch of these engines for such purposes was only likely to increase in the future.⁵⁴ Further, the PJM data submitted by EnerNOC in support of its claim that only 23% of all DR is comprised of backup generation was based on only a 71% response rate to

⁴⁹ See, e.g., RTC at 60 (stating that "[d]ecisions about what units to allow to be bid into the capacity market and relied on for reliability are not under the EPA's purview and should be left to the entities that are responsible for maintaining the reliability of the electric grid").

⁵⁰ See EPA, Public Hearing on Proposed Rule: National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines; New Source Performance Standards for Stationary Internal Combustion Engines, Docket ID No. EPA–HQ–OAR–2008–0708-0944, at 115 (July 10, 2012) (testimony of Joseph Bowring, President, Monitoring Analytics). Dr. Bowring, the PJM Market Monitor, also states that "[a]s the amount of demand side, which is involved in the market goes up, …the probability of actually requiring it to interrupt also goes up." *Id.*

⁵¹ See PJM, "Expected Demand Resource Calls in 2013/14, 2014/15, 2015/16" (Mar. 26, 2013), available at: http://www.pjm.com/~/media/documents/reports/20130326-pjm-future-expectations-for-emergency-demand-response-events.ashx.

⁵² RTC at 126 (noting "updates to data submitted by EnerNOC" received by EPA on December 21, 2012).

⁵³ Id.

⁵⁴ PJM Independent Market Monitor Comments, EPA-HQ-OAR-2008-0708-1124, at 7 (stating that "[a]llowing an exemption in the NESHAP RICE rule for RICE generators located behind the meter impedes or delays its replacement by cleaner alternatives. Such a preference would have the unintended consequence of providing incentives to displace clean conservation-based DR with uncontrolled diesel generation.").

PJM reported as of December 18, 2012, thus leaving almost 30% of all PJM Demand Response resources still unaccounted for at that time.⁵⁵

In sum, EPA relied upon evidence submitted and a rationale it developed after the close of the public comment period to support its contention that the Final Rule would not result in increased participation of diesel RICE in DR programs and, as a consequence, an increase in emissions above what was previously estimated. Additionally, EPA's contentions in this respect are of central relevance to the outcome of the Final Rule. For these reasons, EPA must convene a reconsideration proceeding to reconsider how the Final Rule's increased allowance for operation of emergency RICE in emergency DR programs will result in increased operation of emergency RICE for such purposes (relative to the 2010 RICE NESHAP and its more limited allowance of only 15 hours per year for participation in DR programs) and, as a consequence, more significant emissions impacts than EPA assumed upon promulgating either the 2010 amendments or the 2013 Final Rule.

IV. RELIEF REQUESTED

Pursuant to 42 U.S.C. § 7607(d)(7)(B), the Petitioners hereby request that EPA reconsider the portions of the Final Rule and its supporting rationale described above and make the following revisions to the RICE NESHAP:

- <u>40 CFR § 63.6640(f)(4)(ii)</u>: The 50-hour exemption relating to local system reliability operations for existing emergency RICE should be further circumscribed, so as to prevent such operations from migrating into non-emergency operation.
- <u>40 CFR §§ 63.6604(b), (c)</u>: The ULSD fuel use requirement for emergency engines participating in emergency DR programs or operated for local reliability purposes should be supported by a thorough MACT or GACT analysis.
- <u>40 CFR § 63.6650(h)</u>: The reporting requirement for emergency engines participating in emergency DR programs or operated for local reliability purposes should be clarified and strengthened to prevent operations for DR and local system reliability from being masked as maintenance and testing.
- <u>40 CFR §§ 63.6640(f)(2)(ii), (iii)</u>: EPA should reopen the record so that stakeholders can comment on EPA's reliance on the NERA report in dismissing the system-wide emissions impacts that will result from expansion of the emergency DR exemption for emergency engines. EPA should also reopen the record so that stakeholders can comment on its conclusion that, because the May 2013 compliance date had not yet arrived under the 2010 RICE NESHAP, the increase in the number of hours that emergency RICE are allowed to operate in DR programs under the Final Rule—from 15 to 100 hours per year—has no emissions impact. If the 100-hour allowance for

⁵⁵ See PJM, "Enhance DR Information," Presentation to PJM Demand Response Subcommittee, at 1, 3 (Dec. 18, 2012), *available at*: <u>http://www.pjm.com/~/media/committees-groups/subcommittees/drs/20121218/20121218-item-05-enhanced-dr-information.ashx</u> (showing "[a]bout 71% response rate" "as of date of October 19, 2012" and reporting "Before and After updates" for category of "BackUp Gen" of "14% vs. 23%").

participation in DR cannot be supported in the wake of conducting a reconsideration of the evidence concerning the resulting direct and system-wide emissions impacts, then the allowance should be reduced or rescinded.

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Respectfully Submitted,

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