

40 CFR 60 Subpart GG - Rule Interpretation Memos

- ! [Determination of applicable requirements when exempt from NOx emission limits](#) [October 25, 1996]
- ! [Determination of whether water and steam injection are the same](#) [October 23, 1996]
- ! [Meaning of NOx exemption stated in §60.332\(j\)](#) [October 16, 1996]
- ! [Determination of the applicable requirements when exempt from NOx emission limits](#) [October 16, 1996]
- ! [Determination of whether the construction date for a turbine is the date of manufacture or installation - Retired](#) [February 15, 2002]
- ! [Typographical error in citation §60.334\(c\)\(3\) - RETIRED](#) [October 16, 1996]
- ! [Typographical error in citation §60.335\(f\)\(1\) - RETIRED](#)
- ! [Applicability of 40 CFR 60, Subpart GG to Industrial Turbines with a heat input at peak load greater than 100MMBtu/hr.](#) [April 24, 2001]
- ! [Clarification of “commences construction” for stationary turbines.](#) [February 15, 2002]

Last Modified: February 15, 2002

Rule Interpretation Summary Form

REQUEST:

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| Rule/Regulation Citation(s): | Federal Rule: <input checked="" type="checkbox"/> State Regulation: <input type="checkbox"/> |
| 40 CFR 60, Subpart GG | Description: Standards of Performance for Stationary Gas Turbines |
| Interpretation Request: | |
| Determination of applicability of nitrogen oxides (NO _x) monitoring requirements under Title 40 Code of Federal Regulations, Part 60 (40 CFR 60), Subpart GG when exempted from NO _x emission standards of Subpart GG. | |

DETERMINATION:

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| Summary of Request: |
| The Operating Permits Division (OPD) requested comment on the requirements associated with 40 CFR, Section (§) 60.330, Subpart GG, <i>Standards of Performance for Stationary Gas Turbines</i> , Exemptions §60.332. The OPD also requested comment on monitoring when the water/steam injection is exempted for maintaining NO _x control. |
| Determination: |
| Paragraph 60.334, Monitoring of operations, lists two special monitoring conditions required of exempt gas turbines: |
| <ol style="list-style-type: none"> 1. Gas turbines which use steam or water injection for NO_x control are exempt when weather conditions cause the water emissions to become a traffic hazard, §60.332(f). When this condition arises the operator must notify the Administrator quarterly of the existing ambient conditions, and the date and time the injection system was deactivated and reactivated, §60.334(c)(3). (Note: §60.334[c][3] references exemption §60.332[g] which appears to be a typographical error and the correct reference should be §60.332[f].) This exemption does not exempt the operator from monitoring the fuel consumption and fuel/water ratio as required by §60.334(a) during the periods when water/steam injection for NO_x control is exempted. Since there is a continuous monitor for fuel consumption and water/fuel ratio it should create no hardship for the fuel/water monitor to register water. 2. Applicable stationary gas turbines whose primary fuel is natural gas and are firing on emergency fuel are exempt, §60.332(k). During the period this exemption is in effect, the operator must include, in the report required by §60.7(c), "...for each period, the type, reasons, and duration of the firing of the emergency fuel...", §60.334(c)(4). |

Rule Interpretation Summary Form

REQUEST:

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| Rule/Regulation Citation(s): | Federal Rule: <u> X </u> State Regulation: <u> __ </u> |
| 40 CFR 60, Subpart GG | Description: Standards of Performance for Stationary Gas Turbines |
| Interpretation Request: | |
| Determination of whether water injection and steam injection are considered different NO _x control methods under Title 40 Code of Federal Regulations, Part 60 (40 CFR 60), Subpart GG, or if the terms are used interchangeably. | |

DETERMINATION:

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| Summary of Request: |
| The Operating Permits Division requested to determine if there is a difference between <i>water and steam injection</i> as the terms are used throughout this regulation. |
| Determination: |
| After review by the Rule Interpretation Team, the team concurred with the following determination made by the Engineering Services Section (ESS): The terms <i>water injection</i> and <i>water or steam injection</i> is used interchangeably in this regulation and can be considered as having the same meaning. The ESS has conferred with the U.S. Environmental Protection Agency, Region 6, and they concurred with ESS's opinion regarding this issue. |

Rule Interpretation Summary Form

REQUEST:

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| Rule/Regulation Citation(s): | Federal Rule: <u> X </u> State Regulation: <u> __ </u> |
| 40 CFR 60, Subpart GG | Description: Standards of Performance for Stationary Gas Turbines |
| Interpretation Request: | |
| Determination of the meaning of the exemption stated in Title 40 Code of Federal Regulations, Section (§) 60.332(j) (40 CFR 60.332[j]). | |

DETERMINATION:

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| Summary of Request: |
| The Operating Permits Division requested clarification on the intent of the exemption in New Source Performance Standard, Subpart GG, §60.332(j), and an explanation of why a facility built between October 3, 1977 and January 27, 1982 with a heat input greater than 100 MMBtu/hr, and is not an electric utility, is exempted. |
| Determination: |
| After review by the Rule Interpretation Team, the team concurred with the following determination made by the Engineering Services Section: When this regulation was promulgated in 1977, it did not cover non-utility stationary gas turbines greater than 100 MMBtu/hour. Section 60.332(j) was added to Subpart GG January 27, 1982 as a result of an industry petition for a proposal to reconsider nitrogen oxide (NO _x) limits on large industrial units. This proposal resulted in the §60.332(j) exemption which specifically exempted units constructed, modified or reconstructed during the period October 3, 1977 to January 27, 1982 for the NO _x emission standards. Units are grandfathered during this time period and are not subject to NO _x emission limits. |

Rule Interpretation Summary Form

REQUEST:

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| Rule/Regulation Citation(s): | Federal Rule: <u> X </u> State Regulation: <u> __ </u> |
| 40 CFR 60, Subpart GG | Description: Standards of Performance for Stationary Gas Turbines |
| Interpretation Request: | |
| <p>This question was generated by the Rule Interpretation Team on June 24, 1996, regarding New Source Performance Standards (NSPS), Subpart GG applicable requirements with respect to nitrogen oxide (NO_x) when an exemption from the NO_x requirements in Section (§)60.332(a) was implemented.</p> <p>What are the applicable requirements (i.e., monitoring, recordkeeping, testing, and reporting) in §60.334 and §60.335 for NO_x when claiming an exemption under §60.332? Note: Please delineate each exemption (e.g., §60.332[e], [f], etc.) and its requirements?</p> | |

DETERMINATION:

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| Summary of Request: |
| <p>This question was generated by the Rule Interpretation Team on June 24, 1996 regarding NSPS, Subpart GG applicable requirements with respect to NO_x when an exemption from the NO_x requirements in §60.332(a) was implemented.</p> <p>What are the applicable requirements (i.e., monitoring, recordkeeping, testing, and reporting) in §60.334 and §60.335 for NO_x when claiming an exemption under §60.332? Note: Please delineate each exemption (e.g., §60.332(e), (f), etc.) and its requirements?</p> |
| Determination: |
| <p>The NSPS, Subpart GG, §60.330 <i>Applicability and Designation of Affected Facility</i> determines if a facility is subject to the rules. Section 60.332 <i>Standard for Nitrogen Oxides</i>, defines the NO_x standards for facilities subject to Subpart GG. Paragraph 60.332(a) specifies the NO_x emission limits while paragraphs 60.332(b), (c), and (d) describe applicability for the emission limitations stated in paragraph (a). Exceptions for facilities not required to meet the defined NO_x emission limits are provided in paragraphs (e), (f), (g), (h), (i), (j), (k), and (l) of §60.332. The applicable monitoring, recordkeeping, testing, and reporting requirements relating to NO_x (or nitrogen content in the fuel) in §60.334 and §60.335, for facilities claiming an exemption under §60.332 are as follows:</p> <p>Exemptions §60.332(e), (g), (h), (i), (j), (l) all have <u>no</u> monitoring, recordkeeping, testing, and reporting requirements.</p> <p>Exemption §60.332(f) has the following reporting requirement. It is as follows: §60.334(c)(3)</p> <p>Exemption §60.332(k) has the following reporting requirement. It is as follows: §60.334(c)(4)</p> |

**Retired/Replaced as a result of new rule interpretation
60GG.009 based on letter from John Hepola , U.S. EPA Region 6
(October 28, 1998).**

Last Modified; March 4, 2002

Retired as a result of amendments to 40 CFR Part 60, Subpart GG adopted on 10/17/2000 (Federal Register, Volume 65, pg. 61744

Last Modified: October 17, 2000

Retired as a result of amendments to 40 CFR Part 60, Subpart GG adopted on 10/17/2000 (Federal Register, Volume 65, pg. 61744

Last Modified: October 17, 2000

Air Rule Interpretation Summary Form

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| Code Number | 60GG.008 |
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| Applicability of 40 CFR, Subpart GG to Industrial Turbines with a heat input at peak load greater than 100MMBtu/hr. | April 24, 2001 |
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| Rule/Regulation Citation(s): | Federal Rule: <u>X</u> State Regulation: <u> </u> |
| | Description: |
| 40 C.F.R. Part 60, Subpart GG, § 60.332 | Standards of Performance for Stationary Gas Turbines |
| Interpretation Request: | |
| Are industrial gas turbines that have a heat input at peak load greater than 100 MMBtu/hr and a manufacturer's rated base load at ISO conditions greater than 30 MW subject to the standards for nitrogen oxide contained in Title 40 Code of Federal Regulations (C.F.R.) § 60.332? If not, does 40 C.F.R. Part 60, Subpart GG still apply to these large industrial gas turbines? | |
| Determination: | |
| Industrial gas turbines with a heat input at peak load greater than 100 MMBtu/hr and a manufacturer's rated base load at ISO conditions greater than 30 MW are <u>not</u> subject to either 40 C.F.R. §§ 60.332(a)(1) or (2). | |
| The industrial gas turbine with a heat input at peak load greater than 100 MMBtu/hr and a manufacturer's rated base load at ISO conditions greater than 30 MW is subject to 40 C.F.R. Part 60, Subpart GG. Specifically, industrial gas turbines with a heat input at peak load greater than 100 MMBtu/hr and a manufacturer's rated base load at ISO conditions greater than 30 MW are subject to the one of the two standards for sulfur dioxide contained in 40 C.F.R. § 60.333. | |

Bibliography:

Title 40 C.F.R. Part 60, Subpart GG (1999).

44 Fed. Reg. 52,799 (Sept. 10, 1979).

47 Fed. Reg. 3,767 (Jan. 27, 1982).

Please note, in the event that an external customer feels that this rule interpretation is in error or a source of information has been overlooked which would change the determination, a request for reconsideration may be submitted. Requests must be submitted on a Reconsideration Process Form which is available at the TNRCC's homepage: <http://www.tnrcc.state.tx.us/air/opd/rimhmpg.htm>, or from any of the air rule interpretation team members.

Air Rule Interpretation Summary Form

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| Code Number | 60GG.009 |
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|---|-------------------|
| Clarification of “commences construction” for stationary turbines | February 15, 2002 |
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| Rule/Regulation Citation(s): | Federal Rule: <u> X </u> State Regulation: <u> </u> |
| 40 CFR Part 60, Subpart GG § 60.330(b) | Description: Subpart GG - Standards of Performance for Stationary Gas Turbines |
| Interpretation Request: | |
| Under Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60) § 60.330(b), is the date when a facility “commences construction” determined by the date the turbine was originally manufactured, the date when the turbine is installed at a site, or other related dates? | |
| Determination: | |
| <p>The date construction commenced is interpreted to mean the <u>earlier</u> of: (a) the date the turbine was originally built by the manufacturer; or (b) the date upon which a contractual obligation, such as a construction contract or a purchase order, is entered into by both affected parties. For purposes of 40 CFR Part 60, Subpart GG, the term “construction” refers to the original manufacturing of the turbine, not subsequent installation of the turbine at a process site, or relocation of the turbine from one site to another. The manufacturer of the turbine is the owner/operator of the turbine until the turbine is sold.</p> <p>Following are some specific examples of the application of this determination:</p> <p>If a turbine was ordered or otherwise put under contract before it was manufactured, the date construction commenced is the date when the purchase order or contract was enacted.</p> <p>If a turbine was manufactured prior to any purchase order or contract, the date construction commenced is the date of original manufacture.</p> <p>Relocation of a turbine which commenced construction prior to October 3, 1977 does not trigger 40 CFR Part 60, Subpart GG applicability, unless the turbine is modified (see 40 CFR § 60.2 and § 60.14) or reconstructed (40 CFR § 60.15).</p> <p>If an existing turbine is replaced by another turbine, which commenced construction prior to October 3, 1977, 40 CFR Part 60, Subpart GG does not apply to the replacement turbine unless the replacement turbine is modified or reconstructed after October 3, 1977.</p> | |

Bibliography:

40 CFR 60, Subpart GG (2000). [July 1, 2000]

Letter from John Hepola, U.S. EPA Region 6, to Jeffrey P. Greif, TNRCC Engineering Services Team (Oct. 28, 1998).

U.S. Environmental Protection Agency Determination Detail, Control Number: GG06. [Dec. 29, 1980]

U.S. Environmental Protection Agency Determination Detail, Control Number: 0000110. [Mar. 4, 1999]