

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

March 23, 1994

MEMORANDUM FOR: John T. Larkins, Executive Director

Advisory Committee on Reactor Safeguards

FROM:

Brian K. Grimes, Director

Division of Operating Reactor Support Office of Nuclear Reactor Regulation

SUBJECT:

FORWARDING OF PROPOSED NRC GENERIC LETTER REGARDING REMOVAL OF ACCELERATED TESTING AND SPECIAL REPORTING REQUIREMENTS FOR

EMERGENCY DIESEL GENERATORS FROM PLANT TECHNICAL

SPECIFICATIONS

On February 25, 1994, the NRR staff transmitted the subject proposed NRC generic letter to the Committee to Review Generic Requirements (CRGR) for final review and comment. The CRGR Chairman informed the NRR staff on March 15, 1994, that no further CRGR review was required. Enclosed is the memorandum to the CRGR with the proposed generic letter for your review as requested. Enclosure 2 to the CRGR memorandum is a Red-line/Strike-out copy of the proposed generic letter that identifies the changes that were made.

This proposed generic letter was initially reviewed by the CRGR in meeting number 246 on August 12, 1993, and was transmitted to the Advisory Committee on Reactor Safeguards (ACRS) on August 12, 1993. The draft generic letter was then published for public comment in the Federal Register (58 FR 44387) on August 20, 1993.

The NRR staff met with the ACRS on September 9, 1993 to discuss the proposed generic letter. Comments were included in an ACRS letter to the Chairman on September 22, 1993. The staff addressed its response to the ACRS comments in a letter to the ACRS from the Executive Director for Operations on October 29, 1993. The ACRS expressed continued concern with the use of "trigger values" in a subsequent letter to the Chairman on December 14, 1993. To bring this matter to a close, the Commission agreed (Secy-94-001) with the staff proposal to revise Regulatory Guide (RG) 1.160 to delete all language pertaining to "trigger values" in relation to emergency diesel generator performance. Based on this proposed change to RG 1.160, the staff modified the generic letter.

Contact: Nancy E. Campbell, NRR

(301)-504-2836

003032

JDHRS INFOCTR X RD-7-2A X O+M-7 CRGR

9404190362 940323 PDR ACRS PDR

RETURN TO REGULATORY CENTRAL FILES

The NRR staff also made changes to the draft generic letter as a result of the review of the comments received in response to the Federal Register notice.

This proposed generic letter is sponsored by Brian W. Sheron, Director, Division of Engineering with the assistance of Brian K. Grimes, Director, Division of Operating Reactor Support.

Please let us know if ACRS wishes further discussions with the NRR staff on the proposed generic letter.

Original signed by Brian K. Grimes Brian K. Grimes, Director Division of Operating Reactor Support Office of Nuclear Reactor Regulation

Enclosure:

Memorandum from Frank J. Miraglia to Edward L. Jordan, dated February 25, 1994

DISTRIBUTION w/enclosure A. Thadami L. Reyes F. Miraglia Central file PDR

BKGrimes, NRR AGody, Sr., NRR BJShelton, IRM

MFLee, ACRS

RPSavio, ACRS HNPastis, NRR

DCoe, ACRS

WReckley, NRR

OMChopra, NRR

CHBerlinger, NRR

BWSheron, NRR

NECampbell, NRR TDunning, NRR

CIGrimes, NRR

AJKugler, NRR

DORS R/F OGCB R/F

*See Previous Concurrence

Office	OGCB/DORS/NRR*	AC:OGCB/DORS/NRR*	D; DORS/NBR
Name	NECampbell	AJKugler	BKGrünes
Date	03/10/94	03/18/94	03/23/94

DOCUMENT NAME: G:\NANCY\ACRS.MEM

The NRR staff also made changes to the draft generic letter as a result of the review of the comments received in response to the <u>Federal Register</u> notice.

This proposed generic letter is sponsored by Brian W. Sheron, Director, Division of Engineering with the assistance of Brian K. Grimes, Director, Division of Operating Reactor Support.

Brian K. Grimes, Director

Division of Operating Reactor Support Office of Nuclear Reactor Regulation

Enclosure: Memorandum from Frank J. Miraglia to Edward L. Jordan, dated February 25, 1994



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001 February 25, 1994

MEMORANDUM FOR: Edward L. Jordan, Chairman

Committee to Review Generic Requirements

FROM:

Frank J. Miraglia, Deputy Director Office of Nuclear Reactor Regulation

SUBJECT:

REDUEST FOR FINAL ENDORSEMENT ON THE PROPOSED GENERIC LETTER TITLED "REMOVAL OF ACCELERATED TESTING AND SPECIAL REPORTING REQUIREMENTS FOR EMERGENCY DIESEL GENERATORS" WITHOUT FORMAL

REVIEW

The Office of Nuclear Reactor Regulation (NRR) requests that the Committee to Review Generic Requirements (CRGR) give final endorsement to the subject proposed generic letter. The staff met with the CRGR to review the proposed generic letter on July 27, 1993. In the memorandum, "Minutes of CRGR Meeting Number 246," of August 12, 1993, to the Executive Director for Operations, the CRGR recommended in favor of issuing the proposed generic letter. On August 20, 1993, the NRC published in the Federal Register for public comment the proposed generic letter. The comment period expired on September 30, 1993. Following final CRGR endorsement, the proposed generic letter will be forwarded to the Commission, via an information paper, prior to issuance.

The staff met with the Advisory Committee on Reactor Safeguards (ACRS) on September 9, 1993 to discuss the proposed generic letter. Comments were included in an ACRS letter of September 22, 1993, to the Chairman. The staff addressed its response to the ACRS comments in a letter of October 29, 1993, to the ACRS from the Executive Director for Operations (EDO). The ACRS expressed its continued concern with the use of "trigger values" in a subsequent letter of December 14, 1993, to the Chairman. To bring this matter to a close, the Commission approved (COMSECY-94-001) the staff proposal to revise Regulatory Guide (RG) 1.160 to delete all language pertaining to EDG performance and "trigger values." Based on this proposed change to RG 1.160, the staff modified the guidance in the generic letter accordingly. The ACRS has requested that the final version of the generic letter be forwarded for their review.

NRR believes that formal CRGR review of the proposed generic letter is not warranted because the changes to the generic letter and its enclosures are relatively minor, are consistent with the basis upon which the CRGR endorsed the issuance of the generic letter for comment, and are consistent with the Commission's approval of the staff proposal to resolve ACRS concerns by changes to RG 1.160. Enclosure 1 is the proposed generic letter as revised by the staff in response to comments received. Enclosure 2 is Red-line/ Strike-out copy that identifies the changes made to the generic letter.

Contacts: Tom Dunning, 504-1189

Om Chopra, 504-3265

9403210016

- 2 - February 25, 1994 Edward L. Jordan Enclosure 3 describes the resolution of comments. Comments were received from 10 utilities, the Cooper-Bessemer Owners Group, the EMD-PS Owners Group, and the Nuclear Management and Resources Council (NUMARC). Six utilities endorsed NUMARC's comments on the generic letter with two of the six providing additional comments. Two utilities concurred with NUMARC on the benefits of removal of the accelerated testing and special reporting requirements for emergency diesel generators with one of the two providing additional comments. Two utilities provided comments without reference to NUMARC's comments. The staff made changes to the generic letter to address these comments and comments received from the ACRS. The Office of the General Counsel reviewed the proposed generic letter and has no legal objection. The generic letter is sponsored by Brian Grimes, Director, Division of Operating Reactor Support and M. Wayne Hodges, Acting Director, Division of Engineering. Frank Moragia Frank J. Miragria, Deputy Director Office of Nuclear Reactor Regulation Enclosures: As stated cc w/enclosures: G. A. Arlotto, NMSS W. F. Kane, RI J. E. Moore, OGC B. W. Sheron, RES J. H. Conran, AEOD



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

TO:

ALL HOLDERS OF OPERATING LICENSES FOR NUCLEAR POWER REACTORS

SUBJECT: REMOVAL OF ACCELERATED TESTING AND SPECIAL REPORTING REQUIREMENTS

FOR EMERGENCY DIESEL GENERATORS (GENERIC LETTER 94-)

The U.S. Nuclear Regulatory Commission (NRC) is issuing this generic letter to advise licensees that they may request a license amendment to remove accelerated testing and special reporting requirements for emergency diesel generators (EDGs) from plant technical specifications (TS). The NRC developed this line-item TS improvement in response to the Commission decision on SECY-93-044, "Resolution of Generic Safety Issue B-56, 'Diesel Generator Reliability'." Enclosure 1 is the guidance on preparing the amendment request and Enclosure 2 is the model TS for this change.

In Option 4 of SECY-93-044, the staff recommended that licensees adopt the accelerated testing provisions of the improved Standard Technical Specifications with an option to relocate accelerated testing requirements for EDGs from the TS to the maintenance program after the maintenance rule goes into effect. However, after further consideration, the staff has concluded that it is not necessary to await the effective date of the maintenance rule to remove the associated TS requirements nor is it necessary to relocate accelerated testing requirements to the maintenance program. Licensees may now implement the provisions of the maintenance rule for EDGs, including the applicable regulatory guidance which will provide a program to assure EDG performance. Therefore, the requirements for accelerated testing of individual EDGs would no longer exist.

Licensees may request the removal of the TS provisions for accelerated testing and special reporting requirements for EDGs at this time. However, when requesting this license amendment, licensees must commit to implement within 90 days of the issuance of the license amendment a maintenance program for monitoring and maintaining EDG performance consistent with the provisions of Section 50.65 of Title 10 of the Code of Federal Regulations (10 CFR 50.65), "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," and the guidance (as applicable to EDGs) of Regulatory Guide (RG) 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." The NRC staff developed RG 1.160 to provide guidance for complying with the provisions of 10 CFR 50.65.

Some licensees do not have TS requirements for accelerated testing of EDGs and reporting each EDG failure to the NRC, but may have made a docketed commitment to such actions. In such cases, licensees may request relief from a docketed commitment for accelerated testing and special reporting requirements for EDGs. Such requests should be made on the basis of implementation of the provisions of the maintenance rule and associated regulatory guidance (as applicable to EDGs) within 90 days of NRC granting relief from a docketed commitment.

Licensees that plan to adopt this line-item TS improvement are encouraged to propose TS changes that are consistent with the enclosed guidance in Enclosures 1 and 2. Licensees that plan to request relief from a docketed commitment to accelerated testing of EDGs and special reporting of EDG failures are encouraged to propose such requests consistent with the guidance in Enclosure 1.

Licensee action to propose TS changes or relief from a docketed commitment under the guidance of this generic letter is voluntary. Therefore, such action is not a backfit under the provisions of 10 CFR 50.109. As such, the staff did not perform a backfit analysis.

The voluntary information collections contained in this request are covered by the Office of Management and Budget clearance number 3150-0011, which expires June 30, 1994. The public reporting burden for this voluntary collection of information is estimated to average 40 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this voluntary collection of information, including suggestions for reducing this burden, to the Information and Records Management Branch (MNBB-7714), U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-3019, (3150-0011), Office of Management and Budget, Washington, D.C. 20503.

Compliance with the following request for information is voluntary. The information would assist NRC in evaluating the cost of complying with this generic letter:

- (1) the licensee staff time and costs to prepare the amendment request
- (2) an estimate of the long-term costs or savings accruing from this TS change

If you have any questions about this matter, please contact one of the technical contacts listed below or the appropriate Office of Nuclear Reactor Regulation project manager.

Sincerely,

(later) Acting Associate Director for Projects Office of Nuclear Reactor Regulation

Enclosures: See page 3 Enclosures:

Guidance on Preparing the Amendment Request
 Model TS for Change
 List of Recently Issued NRC Generic Letters

Technical contacts: Om Chopra, NRR

(301) 504-3265

Tom Dunning, NRR (301) 504-1189

Licensees that plan to adopt this line-item TS improvement are encouraged to propose TS changes that are consistent with the enclosed guidance in Enclosures 1 and 2. Licensees that plan to request relief from a docketed commitment to accelerated testing of EDGs and special reporting of EDG failures are encouraged to propose such requests consistent with the guidance in Enclosure 1. NRC project managers will perform the review to assure that the amendment or relief requests conform to this guidance.

Licensee action to propose TS changes or relief from docketed commitments under the guidance of this generic letter is voluntary. Therefore, such action is not a backfit under the provisions of 10 CFR 50.109. As such, the staff did not perform a backfit analysis.

This generic letter contains voluntary information collection requirements that are subject to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). These voluntary requirements were approved by the Office of Management and Budget, approval number 3150-0011, which expires June 30, 1994.

The public reporting burden for this voluntary collection of information is estimated to average 40 person-hours per licensee response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for further reducing reporting burden, to the Information and Records Management Branch (MNBB-7714), U.S. Nuclear Regulatory Commission, Washington, DC 20555; and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-3019, (3150-0011), Office of Management and Budget, Washington, DC 20503.

Compliance with the following request for information is voluntary. The information would assist NRC in evaluating the cost of complying with this generic letter:

- (1) the licensee staff time and costs to prepare the amendment request
- (2) an estimate of the long-term costs or savings accruing from this TS change

If you have any questions about this matter, please contact one of the technical contacts listed below or the appropriate Office of Nuclear Reactor Regulation project manager.

Sincerely,

(later) Acting Associate Director for Projects Office of Nuclear Reactor Regulation

Enclosures: See attached Document Name: G:\SHARED\EDGTS2.GL *SEE PREVIOUS CONCURRENCES C/OTSB:DORS C/OGCB:DORS C/EELB:DE A/D/DE:NRR EELB:DE SC/EELB:DE GHMarcus CHBerlinger MWHodges OChop a:nkw DFThatcher CIGrimes / /93 / /93 / /93 / /93 / /93 / /93 OGC D/DORS:NRR ADT:NRR A/ADP:NRR PDIV-2 WTRussell STreby WDReckley -BKGrimes (later) / /93 / /93 / /93 / /93 / /93 OFFICIAL RECORD COPY

GUIDANCE FOR IMPLEMENTING A LINE-ITEM TECHNICAL SPECIFICATION (TS)
IMPROVEMENT TO REMOVE ACCELERATED TESTING AND SPECIAL REPORTING
REQUIREMENTS FOR EMERGENCY DIESEL GENERATORS (EDGs)
FROM PLANT TECHNICAL SPECIFICATIONS OR
FROM DOCKETED COMMITMENTS

Background

As part of the resolution of Generic Safety Issue (GSI) B-56, "Diesel Generator Reliability," the staff of the U.S. Nuclear Regulatory Commission (NRC) recommended Option 4 in SECY-93-044, "Resolution of Generic Safety Issue 8-56, 'Diesel Generator Reliability'." The Commission approved Option 4 on March 25, 1993. In Option 4, the NRC staff recommended (in part) that licensees be allowed to voluntarly adopt the accelerated testing provisions of the improved Standard Technical Specifications; and upon a determination that the maintenance program confroms to the applicable guidance, the accelerated testing requirements for the EDGs could be relocated from the TS to the maintenance program when the maintenance rule goes into effect in 1996. However, after further consideration, the staff has concluded that it is not necessary to await the effective date of the maintenance rule to remove the associated TS requirements nor is it necessary to relocate accelerated testing requirements to the maintenance program. Licensees may now implement the provisions of the maintenance rule for EDGs, including the applicable regulatory guidance, which will provide a program to assure EDG performance. The elements of this program will include the performance of a detailed root cause analysis of individual EDG failures, effective corrective actions taken in response to individual EDG failures, and implementation of EDG preventive maintenance consistent with the maintenance rule.

The staff has concluded that licensees may also propose TS changes to remove special reporting requirements for EDGs from their plant TS. Licensees may also request relief from a docketed commitment for accelerated testing of EDGs and reporting each EDG failure to the NRC. Licensees would continue to comply with the provisions of 10 CFR 50.72 and 50.73 to notify NRC and report EDG failures. With this TS change or NRC relief from a docketed commitment to such actions, requirements for accelerated testing of EDGs would no longer exist.

The staff approval of this option would be contingent upon a commitment to implement, within 90 days of a license amendment, or NRC granting relief from a docketed commitment, a maintenance program for monitoring and maintaining EDG performance in accordance with the provisions of 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," and the guidance contained in Regulatory Guide (RG) 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." The fulfillment of this commitment need not necessarily result in a new or separate EDG maintenance program but rather could be implemented by modification of existing maintenance program requirements that include EDGs.

Discussion

The NRC staff developed RG 1.160 to provide flexibility for licensees to structure their maintenance program based on the risk significance of the structures, systems, and components that are within the scope of the maintenance rule. This guide endorses a Nuclear Utility Management and Resources Council (NUMARC) guideline which gives methods acceptable to the NRC staff for complying with the provisions of the maintenance rule (10 CFR 50.65).

During the public comment period for this generic letter, the staff met with the Advisory Committee for Reactor Safeguards (ACRS). As a consequence of continuing ACRS concerns on the use of trigger values, included in a NUMARC guideline, the NRC staff will modify RG 1.160 by removing the language on the use of trigger values for monitoring EDG performance. However, the staff intends to retain in RG 1.160 the discussion on NRC's expectations that licensees would (1) establish performance criteria for both emergency diesel generator reliability and unavailability, under paragraph (a)(2) of the maintenance rule, (2) perform appropriate root cause determination and corrective action following a single maintenance-preventable failure, and (3) establish goals and monitor subsequent EDG performance under paragraph (a)(1) of the maintenance rule if any performance criterion is not met or a second EDG maintenance-preventable failure occurs.

In addition to the focus on paragraphs (a)(1) and (2) of the maintenance rule as addressed in the NRC's expectations on implementing the guidance of RG 1.160, paragraph (a)(3) of the maintenance rule must also be met and requires (in part) that licensees make adjustments where necessary to ensure that the objective of preventing failures through maintenance is appropriately balanced against the objective of minimizing unavailability due to monitoring or preventive maintenance.

Therefore, a commitment to implement the maintenance rule consistent with the guidance of RG 1.160 as applicable for EDGs is a commitment to (1) implement the endorsed NUMARC guideline, 93-01, with the exception of the reference to NUMARC 87-00 on the use of trigger values and (2) fulfill the NRC staff expectations discussed in RG 1.160. Should licensees wish to propose an alternative to implementing the guidance of RG 1.160, to demonstrate compliance with the maintenance rule for EDGs, the NRC staff will consider such proposals.

The NRC staff finds that a commitment to implement a maintenance program for monitoring and maintaining EDG performance in accordance with the provisions of the maintenance rule and consistent with the guidance of RG 1.160 would provide a basis for the staff to approve a licensee request to remove the

NUMARC 93-01, "Industry Guidelines for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," May 1993.

²Appendix D of NUMARC 87-00, Revision 1, "Guidelines and Technical Bases for NUMARC Initiatives Addressing Station Blackout at LWRs," August 1991.

accelerated testing and special reporting requirements for EDGs from their plant TS. This commitment would also provide the basis for the staff to approve requests for relief from a docketed commitment to accelerated testing of EDGs and reporting each EDG failure. Licensees must commit to implementing within 90 days of the issuance of the license amendment or commitment relief the provisions of 10 CFR 50.65 and guidance of RG 1.160 for EDGs when requesting the removal of the EDG accelerated testing and special reporting requirements from their plant TS or docketed commitment. The elimination of accelerated testing requirements for EDGs closes the matter of triggers and testing for "problem diesels."

Enclosure 2 includes model EDG technical specifications which address these TS changes.

MODEL STANDARD TECHNICAL SPECIFICATIONS FOR REMOVING ACCELERATED TESTING AND SPECIAL REPORTING REQUIREMENTS FOR EDGs

Revisions to TS 4.8.1.1.2 (Changes are shown in bold typeface.)

4.8.1.1.2 Each diesel generator shall be demonstrated OPERABLE:

- a. At least once per 31 days on a STAGGERED TEST BASIS by:
 - 1) through 7) no change.

(Removes the reference to TS Table 4..8.1.1.2-1 for the test schedule.)

Revisions to Table 4.8.1.1.2-1 (Changes are shown in bold typeface.)

TABLE 4.8.1.1.2-1 DIESEL GENERATOR TEST SCHEDULE

(Not used)

(Removes accelerated testing requirements for EDG's which were based on the number of failures in the last 20 and 100 valid tests.)

Revisions to TS 4.8.1.1.3, "Reports" (Changes are shown in bold typeface.)

4.8.1.1.3 Reports (Not used)

(10 CFR 50.72 and 50.73 address the remaining regulatory requirements for licensees to notify NRC and report individual EDG failures.)



NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

TO:

ALL HOLDERS OF OPERATING LICENSES FOR NUCLEAR POWER REACTORS

SUBJECT:

REMOVAL OF ACCELERATED TESTING AND SPECIAL REPORTING REQUIREMENTS FOR EMERGENCY DIESEL GENERATORS FROM PLANT TECHNICAL

SPECIFICATIONS (GENERIC LETTER 94-)

The U.S. Nuclear Regulatory Commission (NRC) is issuing this generic letter to advise licensees that they may request a license amendment to remove accelerated testing and special reporting requirements for emergency diesel generators (EDGs) from plant technical specifications (TS). The NRC developed this line-item TS improvement in response to the Commission decision on SECY-93-044, "Resolution of Generic Safety Issue B-56, 'Diesel Generator Reliability'." Enclosure 1 is the guidance on preparing the amendment request and Enclosure 2 is the model TS for this change.

In Option 4 of SECY-93-044, the staff recommended that licensees adopt the accelerated testing provisions of the improved Standard Technical Specifications with an option to relocate accelerated testing requirements for EDGs from the TS to the maintenance program after the maintenance rule goes into effect. However, after further consideration, the staff has concluded that it is not necessary to await the effective date of the maintenance rule to remove the associated TS requirements nor is it necessary to relocate accelerated testing requirements to the maintenance program. Licensees may now implement the provisions of the maintenance rule for EDGs, including the applicable regulatory staff guidance which will provide a program to assure EDG performance. Therefore, the requirements for accelerated testing of individual EDGs would no longer exist.

Licensees may request the removal of the TS provisions for accelerated testing and special reporting requirements for EDGs at this time. However, when requesting this license amendment, licensees must commit to implement within the next 90 days of the issuance of the license amendment a maintenance program for monitoring and maintaining EDG performance consistent with the provisions of Section 50.65 of Title 10 of the Code of Federal Regulations (10 CFR 50.65), "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," and the guidance (as applicable to EDGs) of Regulatory Guide (RG) 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." The NRC staff developed RG 1.160 to provide guidance for complying with the provisions of 10 CFR 50.65.

Some licensees do not have TS requirements for accelerated testing of EDGs and reporting each EDG failure to the NRC, but may have made a docketed commitment to such actions. In such cases, licensees may request relief from a docketed commitment for accelerated testing and special reporting requirements for EDGs. Such requests should be made on the basis of implementation of the provisions of the maintenance rule and associated regulatory guidance (as applicable to EDGs) within 90 days of NRC granting relief from a docketed commitment.

Licensees that plan to adopt this line-item TS improvement are encouraged to propose TS changes that are consistent with the enclosed guidance in Enclosures 1 and 2. Licensees that plan to request relief from a docketed commitment to accelerated testing of EDGs and special reporting of EDG failures are encouraged to propose such requests consistent with the guidance in Enclosure 1. NRC project managers will perform the review to assure that the amendment requests conform to this guidance.

Licensee action to propose TS changes or relief from a docketed commitment under the guidance of this generic letter is voluntary. Therefore, such action is not a backfit under the provisions of 10 CFR 50.109. As such, the staff will did not perform a backfit analysis.

This generic letter contains voluntary information collection requirements that are subject to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). These voluntary requirements were approved by the Office of Management and Budget, approval number 3150 0011, which expires June 30, 1994.

The public reporting burden for this voluntary collection of information is estimated to average 40 person hours per licensee response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for further reducing reporting burden, to the Information and Records Management Branch (MNBB 7714), U.S. Nuclear Regulatory Commission, Washington, DC 20555; and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB 3019, (3150 0011), Office of Management and Budget, Washington, DC 20503.

The voluntary information collections contained in this request are covered by the Office of Management and Budget clearance number 3150-0011, which expires June 30, 1994. The public reporting burden for this voluntary collection of information is estimated to average 40 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this voluntary collection of information, including suggestions for reducing this burden to the Information and Records Management Branch (MNBB-7714), U.S. Nu. lear Regulatory Commission, Washington, D.C. 20555, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-3019, (3150-0011), Office of Management and Budget, Washington, D.C. 20503.

Compliance with the following request for information is purely-voluntary. The information would assist NRC in evaluating the cost of complying with this generic letter:

- (1) the licensee staff time and costs to prepare the amendment request
- (2) an estimate of the long-term costs or savings accruing from this TS change

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(later) Acting Associate Director for Projects Office of Nuclear Reactor Regulation

Enclosures: See attachedpage 3

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Compliance with the following request for information is $\frac{purely}{purely}$ voluntary. The information would assist NRC in evaluating the cost of complying with this generic letter:

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Sincerely,

(later) Acting Associate Director for Projects Office of Nuclear Reactor Regulation

Enclosures: See attached Document Name: G:\SHARED\EDGTS2.GL *SEE PREVIOUS CONCURRENCES C/OTSB:DORS C/OGCB:DORS C/EELB:DE A/D/DE:NRR SC/EELB:DE EELB:DE GHMarcus CHBerlinger JTWiggins MWHodges DFThatcher CIGrimes OChopra:nkw / /93 / /93 / /93 / /93 / /93 ADT:NRR A/ADP:NRR D/DORS:NRR OGC PDIV-2 BKGrimes LJCallan(later) WTRussell WDReckley STreby / /93 / /93 / /93 / /93 / /93 OFFICIAL RECORD COPY

Enclosures:

Guidance on Preparing the Amendment Request
 Model TS for Change
 List of Recently Issued NRC Generic Letters

Technical contacts: Om Chopra, NRR (301) 504-3265

Tom Dunning, NRR (301) 504-1189

GUIDANCE FOR IMPLEMENTING A LINE-ITEM TECHNICAL SPECIFICATION (TS)
IMPROVEMENT TO REMOVE ACCELERATED TESTING AND SPECIAL REPORTING
REQUIREMENTS FOR EMERGENCY DIESEL GENERATORS (EDGs)
FROM PLANT TECHNICAL SPECIFICATIONS OR
FROM DOCKETED COMMITMENTS

Background

As part of the resolution of Generic Safety Issue (GSI) B-56, "Diesel Generator Reliability," the staff of the U.S. Nuclear Regulatory Commissio (NRC) recommended Option 4 in SECY-93-044, "Resolution of Generic Safety Issue B-56, 'Diesel Generator Reliability'." The Commission approved Option 4 on March 25, 1993. In Option 4, the NRC staff recommended (in part) that licensees be allowed to voluntarly adopt the accelerated testing provisions of the improved Standard Technical Specifications (STS) with an option to relocate; and upon a determination that the maintenance program confroms to the applicable guidance, the accelerated testing requirements for the EDGs could be relocated from the TS to the maintenance program when the maintenance rule goes into effect in 1996. However, after further consideration, the staff has concluded that it is not necessary to await the effective date of the maintenance rule to remove the associated TS requirements nor is it necessary to relocate accelerated testing requirements to the maintenance program. Licensees may now implement the provisions of the maintenance rule for EDGs, including staff the applicable regulatory guidance, which will provide a program to assure EDG performance. The elements of this program will include the performance of a detailed root cause analysis of individual EDG failures, effective corrective actions taken in response to individual EDG failures, and implementation of EDG preventive maintenance consistent with the maintenance rule.

The staff has concluded that licensees may also propose TS changes to remove special reporting requirements for EDGs from their plant TS. Licensees may also request relief from a docketed commitment for accelerated testing of EDGs and reporting each EDG failure to the NRC. Licensees would continue to comply with the provisions of 10 CFR 50.72 and 50.73 to notify NRC and report EDG failures. With this TS change or NRC relief from a docketed commitment to such actions, requirements for accelerated testing of EDGs would no longer exist.

The staff approval of this option would be contingent upon a licensee commitment to implement, within 90 days of a license amendment, or NRC granting relief from a docketed commitment, a maintenance program for monitoring and maintaining EDG performance in accordance with the provisions of 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," and the guidance contained in Regulatory Guide (RG) 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." The fulfillment of this commitment need not necessarily result in a new or separate EDG maintenance program but rather could be implemented by modification of existing maintenance program requirements that include EDGs.

Discussion

The NRC staff developed RG 1.160 to provide flexibility for licensees to structure their maintenance program based on the risk significance of the structures, systems, and components that are within the scope of the maintenance rule. This guide endorses the a Nuclear Utility Management and Resources Council (NUMARC) guideline 93 01, "Industry Guidelines for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," which gives methods acceptable to the NRC staff for complying with the provisions of the maintenance rule (10 CFR 50.65). This guide, which offers guidance that licensees could follow to assure EDG performance, states that "The emergency diesel generator reliability performance criteria or goals selected for implementing the intent of 10 CFR 50.63 for coping with station blackout could be monitored through the use of the triggers2 and the monitoring methods described in Appendix D of NUMARC 87 00, Revision 1, "Guidelines and Technical Bases for NUMARC Initiatives Addressing Station Blackout at LWRs," August 1991 fexcept for triogers and testing for "problem diesels" as described in paragraph D.2.4.4 of NUMARC 87 00, which will be addressed separately by the NRC). An acceptable unavailability goal could be to have fewer hours unavailable (on a rolling 1 year basis) than the number of hours established as acceptable by the licensee."

During the public comment period for this generic letter, the staff met with the Advisory Committee for Reactor Safeguards (ACRS). As a consequence of continuing ACRS concerns on the use of trigger values, included in a NUMARC guideline, the NRC staff will modify RG 1.160 by removing the language on the use of trigger values for monitoring EDG performance. However, the staff intends to retain in RG 1.160 the discussion on NRC's expectations that licensees would (1) establish performance criteria for both emergency diesel generator reliability and unavailability, under paragraph (a)(2) of the maintenance rule, (2) perform appropriate root cause determination and corrective action following a single maintenance-preventable failure, and (3) establish goals and monitor subsequent EDG performance under paragraph (a)(1) of the maintenance rule if any performance criterion is not met or a second EDG maintenance-preventable failure occurs.

In addition to the focus on paragraphs (a)(1) and (2) of the maintenance rule as addressed in the NRC's expectations on implementing the guidance of RG 1.160, paragraph (a)(3) of the maintenance rule must also be met and requires (in part) that licensees make adjustments where necessary to ensure that the objective of preventing failures through maintenance is appropriately balanced against the objective of minimizing unavailability due to monitoring or preventive maintenance.

Therefore, a commitment to implement the maintenance rule consistent with the

NUMARC 93-01, "Industry Guidelines for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," May 1993.

²Appendix D of NUMARC 87-00, Revision 1, "Guidelines and Technical Bases for NUMARC Initiatives Addressing Station Blackout at LWRs," August 1991.

guidance of RG 1.160 as applicable for EDGs is a commitment to (1) implement the endorsed NUMARC guideline, 93-01, with the exception of the reference to NUMARC 87-00 on the use of trigger values and (2) fulfill the NRC staff expectations discussed in RG 1.160. Should licensees wish to propose an alternative to implementing the guidance of RG 1.160, to demonstrate compliance with the maintenance rule for EDGs, the NRC staff will consider such proposals.

The NRC staff finds that a licensees' commitments to implement a maintenance program for monitoring and maintaining EDG performance in accordance with the provisions of the maintenance rule and consistent with the guidance of RG 1.160 would provide a basis for the staff to approve a licensees' requests to remove the accelerated testing and special reporting requirements for EDGs from their plant TS. This commitment would also provide the basis for the staff to approve requests for relief from a docketed commitment to accelerated testing of EDGs and reporting each EDG failure. Licensees must commit to implementing within 90 days of the issuance of the license amendment or commitment relief the provisions of 10 CFR 50.65 and guidance of RG 1.160 for EDGs when requesting the removal of the EDG accelerated testing and special reporting requirements from their plant TS or docketed commitment. These actions are intended to The elimination of accelerated testing requirements for EDGs closes the matter of triggers and testing for "problem diesels."

Enclosure 2 includes model EDG technical specifications which address these TS changes.

MODEL STANDARD TECHNICAL SPECIFICATIONS FOR REMOVING ACCELERATED TESTING AND SPECIAL REPORTING REQUIREMENTS FOR EDGs

Revisions to TS 4.8.1.1.2 (Changes are shown-highlighted in bold typeface.)

- 4.8.1.1.2 Each diesel generator shall be demonstrated OPERABLE:
- a. At least once per 31 days on a STAGGERED TEST BASIS by:
 - 1) through 7) no change.

(Removes the reference to TS Table 4..8.1.1.2-1 for the test schedule.)

Revisions to Table 4.8.1.1.2-1 (Changes are shown-highlighted in bold typeface.)

TABLE 4.8.1.1.2-1 DIESEL GENERATOR TEST SCHEDULE

(Not used)

(Removes accelerated testing requirements for EDG's which were based on the number of failures in the last 20 and 100 valid tests.)

Revisions to TS 4.8.1.1.3, "Reports" (Changes are shown highlighted in bold typeface.)

4.8.1.1.3 Reports (Not used)

(10 CFR 50.72 and 50.73 address the remaining regulatory requirements for licensees to notify NRC and report individual EDG failures.)

RESPONSE TO ACRS AND PUBLIC COMMENTS ON PROPOSED GENERIC LETTER ON REMOVAL OF ACCELERATED TESTING AND SPECIAL REPORTING REQUIREMENTS FOR EMERGENCY DIESEL GENERATORS FROM PLANT TECHNICAL SPECIFICATIONS

In a letter of September 22, 1993, to the Chairman, the Advisory Committee on Reactor Safety reiterated its strong opposition to the use of trigger values for monitoring EDG performance against EDG target reliability levels that was expressed on the draft version of RG 1.160. The staff addressed its response to the ACRS comments in a letter of October 29, 1993, from James M. Taylor, Executive Director for Operations to J. Ernest Wilkins, Jr., Chairman, ACRS.

In a subsequent letter to the Chairman, of December 14, 1993, the ACRS made the following comments:

"On several occasions we have written you about the staff devotion to 'trigger values' in its effort to assure emergency diesel generator reliability in the context of the rule on Station Blackout. We have said that the concept is statistically flawed, and in our last letter that it is categorically impossible to demonstrate the reliability of EDGs using these methods.

The attached response by the EDO seems to acknowledge the error, but states that the staff intends to make changes only in the Generic Letter, but not the Regulatory Guide, because everyone knows the procedure is wrong. We find that a curious and unsatisfactory response. The EDO can doubtless outlast us, but that is hardly a proper remedy for the mathematical error.

The EDO's response appears to suggest that the desire for mathematical rectitude is an unnecessary decoration in nuclear regulation. We disagree."

NRC Staff Response to ACRS Comments

On January 18, 1994, the Commission agreed with the staff proposal made in response to the ACRS comments to revise Regulatory Guide 1.160 to delete all language pertaining to emergency diesel performance and trigger values. The impact of this decision is that the NRC staff no longer endorses the use of trigger values for determining whether EDG performance goals are met. Therefore, the staff will change the Regulatory Position of RG 1.160 to remove the endorsement of the example in NUMARC 93-01, Section 12.2.4, which states that monitoring under paragraph (a)(1) of the maintenance rule, 10 CFR 50.65, could be achieved by the use of exceedance trigger values. Trigger values are referenced and described in Appendix D of NUMARC 87-00, Revision 1, dated August 1991, "Guidelines and Technical Bases for NUMARC Initiatives Addressing Station Blackout at Light Water Reactors." Otherwise, the Regulatory Position of RG 1.160 will retain the NRC staff endorsement of methods of NUMARC 93-01 for complying with the provisions of the maintenance rule.

Also, the staff will change the Discussion Section of RG 1.160, to remove the discussion stating that trigger values could be used for monitoring

EDG reliability performance criteria or goals as required to satisfy the provisions of the maintenance rule or for implementing the intent of the station blackout rule, 10 CFR 50.63.

However, the staff intends to retain the discussion in RG 1.160 on NRC's expectations that licensees would (1) establish performance criteria for both emergency diesel generator reliability and unavailability, under 10 CFR 50.65(a)(2), (2) perform appropriate root cause determination and corrective action following a single maintenance-preventable failure, and (3) establish goals and monitor subsequent EDG performance under 10 CFR 50.65(a)(1) if any performance criterion is not met or a second EDG maintenance-preventable failure occurs.

The staff modified the generic letter to reflect the Commission decision on the staff proposal to modify RG 1.160 and to clarify the intent of a licensee commitment to the guidance of RG 1.160 for implementing the provisions of the maintenance rule for EDGs.

In a letter of September 27, 1993, Dave Morey, Vice President of the Farley Project, Southern Nuclear Operation Company, expressed total agreement with the NUMARC comments on the proposed generic letter.

In a letter of September 27, 1993, M. L. Bowling, Manager of Nuclear Licensing and Programs, Virginia Electric and Power Company, expressed strong support for the generic letter, support for the NUMARC comments, and made the following comment:

"The proposed generic letter references in several places the NRC staff recommendation for the adoption of accelerated testing requirements in the improved Standard Technical Specifications and the testing of 'problem diesels' in NUMARC 87-00, Revision 1. These multiple references, although appropriate background and discussion material, may be easily misconstrued due to their appearance of being in conflict with the actual intent of the proposed generic letter which is to delete the specific accelerated testing requirements. For clarity, we recommend that the generic letter contain a clear statement that the intent of the generic letter is not only to remove the accelerated testing requirements from the Technical Specifications but also to eliminate the requirements entirely."

NRC Staff Response to This Comment

The staff revised the generic letter and Enclosure 1 to clarify that requirements for accelerated testing will no longer exist following their removal from technical specifications.

In a letter of September 29, 1993, William H. Rasin, Vice President and Director of the Technical Division, Nuclear Management and Resources Council, expressed support for the generic letter for NUMARC and made five comments on the Background Section in Enclosure 1 to the generic letter:

First Comment

"The proposed generic letter discusses Option 4 of SECY 93-044 as an 'option' to relocate accelerated testing from technical specifications

(TS) to licensee programs for implementation of the Maintenance Rule, 10 CFR 50.65. It also indicates that the NRC believes it appropriate for utility licensees to implement provisions of the Maintenance Rule in advance of the July 10, 1996 implementation date by an earlier commitment to the rule and its associated regulatory guide. Such a commitment would serve as a basis to grant the line-item improvement for removal of accelerated testing and associated reporting from technical specifications. We believe that complete elimination is appropriate, as opposed to relocating the noted TS requirements. To simply relocate these requirements such that they become an integral part of a program required for implementation of a regulation is inappropriate and inconsistent with the performance-based and risk-based concepts that are fundamental to the intent of the Maintenance Rule. The NRC should clarify that elimination of accelerated testing requirements is the clear intent."

NRC Staff Response to First Comment

As stated in response to the comment from Virginia Electric Power Company, the staff revised the generic letter and Enclosure 1 to clarify that requirements for accelerated testing will no longer exist following their removal from technical specifications.

Second Comment

"We concur with the NRC's recommendation that licensees commit to implement a program for monitoring and maintaining EDG reliability consistent with the provisions of the Maintenance Rule. However, we do not concur with the additional recommendation that utility licensees commit to a regulatory guide since it is inappropriate and unnecessary given the fact that a regulation exists and the regulation, not the regulatory guide, is controlling. Therefore, we recommend that the portion of the generic letter related to a commitment to the regulatory guide be deleted. The generic letter should clearly state that a program consistent with the industry guidance that is endorsed by the regulatory guide is acceptable to the NRC staff. The industry guideline endorsed by the NRC does not recommend that separate maintenance programs be implemented to comply with the Maintenance Rule. Rather, the guideline stresses that if existing maintenance programs are effective and performance is acceptable, there is no need to create a separate, additional program. We also recommend the generic letter clearly state that a separate program is not required to implement the suggested improvements."

NRC Staff Response to Second Comment

The NRC issues regulatory guides to indicate one means acceptable to the staff for complying with regulatory requirements. Therefore, the staff is willing to accept a licensee commitment to the guidance of RG 1.160 for emergency diesel generators (EDGs) as a basis to conclude that the maintenance program for EDGs is in compliance with the rule. This action is consistent with the Commission's decision on the resolution of Generic Safety Issue (GSI) B-56, 'Diesel Generator Reliability.'

Should licensees wish to propose an alternative approach to demonstrate compliance with the provisions of the maintenance rule for EDGs, the staff would be willing to consider proposals for such alternatives. The staff revised the generic letter to state this. Also, the staff revised the generic letter to state that these commitments need not result in a new or separate EDG maintenance program and licensees may implement these commitments by modifying an existing maintenance program for EDGs.

Third Comment

"We believe additional provisions should be made to allow utility licensees who do not have accelerated testing requirements in technical specifications to change docketed commitments to such testing and associated reporting. We suggest the following:

Licensees may also process changes to docketed commitments in order to eliminate EDG accelerated testing and associated special reporting requirements, on the basis of a commitment to implement a program for monitoring and maintaining EDG performance in accordance with the provisions of the Maintenance Rule, 10 CFR 50.65.

In both instances, the programs that licensees implement under the generic letter for monitoring and maintaining EDG performance will be integrated into the licensee's implementation of the Maintenance Rule upon its effective date of July 10, 1996."

NRC Staff Response to Third Comment

The staff revised the generic letter to state that the staff would accept changes to a docketed commitment to accelerated EDG testing and special reporting of EDG failures on the basis of a licensee commitment to implement the provisions of the maintenance rule, and applicable regulatory guidance for EDGs, as necessary for the removal of these requirements from plant technical specifications.

Fourth Comment

"The NRC staff is currently developing a Maintenance Rule inspection module that will be published for public comment in mid-1994 with pilot inspections planned in late 1994 and early 1995. With regard to the commitment recommended by this generic letter, any inspections of utility licensee programs for monitoring and maintaining EDG performance should be conducted in a manner consistent with the inspection module."

NRC Staff Response to Fourth Comment

The staff does not intend to develop inspection guidance specifically for licensee commitments to the maintenance rule and regulatory guidance for EDGs that would differ from that under development for the maintenance rule. It is unlikely that any inspections for compliance to licensee commitments would precede the planned pilot inspections for the maintenance rule. The time difference between the implementation of those commitments and the broader application of the maintenance rule is small.

However, if NRC conducts any inspections for that purpose, they will be consistent with the inspection module under development.

Fifth Comment

"The discussion in the generic letter of elements of a program to assure EDG performance is useful and we concur with the NRC's recommendations regarding root cause analysis, effective corrective actions, etc. It is beneficial to stress these elements in terms of individual EDG failures. Therefore, we recommend that the term 'individual' be added to those areas discussing EDG failure, e.g., '..root cause analysis of individual EDG failures, effective corrective actions taken in response to individual EDG failures...'

NRC Staff Response to Fifth Comment

The staff revised Enclosures I and 2 to the generic letter to clarify that individual EDG failures are the object of the discussion.

NUMARC made one comment on the "Discussion" section in Enclosure 1 to the generic letter:

Sixth Comment

"We offer similar comments as noted above relative to the recommendation for a commitment to a regulatory guide. We support the statement that actions taken by licensees in seeking these improvements indeed brings to closure the matter of testing of 'problem diesels.'"

NRC Staff Response to Sixth Comment

The staff revised this section of the generic letter to be consistent with revisions made in response to the previous NUMARC comments on the "Background" section of Enclosure 1 to the generic letter.

NUMARC made one comment on the model Standard Technical Specification in Enclosure 2 to the generic letter:

Seventh Comment

"We offer similar comments to those noted above regarding emphasis on individual EDG failures."

NRC Staff Response to Seventh Comment

The staff revised Enclosure 2 to the generic letter as noted in the staff response to the fifth comment above, to indicate that the technical specification section on reports, that is removed, addresses requirements for reporting individual EDG failures.

In a letter of September 29, 1993, Tim Chan, Chairperson, EMD-PS Owners Group, expressed the agreement of the EMD-PS Owners Group with the direction of the proposed generic letter and made the following comment:

"Since the acceptable diesel generator reliability program is based on the NUMARC 87-00 Appendix D as identified in the Discussion Section of the Proposed Generic Letter, the proper commitment would be to the above NUMARC document. The program to meet the Maintenance Rule requirement is being developed by the Owners Group and, implementing it before 1996 would be premature. On the other hand, the removal of the accelerated test requirement from our respective members' technical specifications would greatly enhance the reliability of the emergency diesel generators. Therefore, the EMD-PS Owners Group recommends that a diesel generator reliability program based on the NUMARC 87-00 Appendix D should replace the Maintenance Rule as the requirements for the removal of the Technical Specification provisions for accelerated testing and special reporting requirement at this time."

NRC Staff Response to This Comment

The proposed generic letter quoted the guidance in RG 1.160 that refers to Appendix D of NUMARC 87-00 that licensees could follow to ensure EDG performance. However, as noted in the staff response to ACRS comments, the NRC staff no longer endorses the use of trigger values as a means to monitor EDG performance. Therefore, to avoid any misunderstanding, the staff revised the generic letter to remove the reference to Appendix D of NUMARC 87-00. A licensee commitment to Appendix D of NUMARC 87-00 would not be an acceptable alternative as the sole basis for demonstrating compliance with the provisions of the maintenance rule. Furthermore, a licensee commitment to Appendix D of NUMARC 87-00 would be a commitment to its provisions for accelerated testing of EDGs, addressed in paragraph D.2.4.4, which is contrary to the intent of the generic letter to remove these requirements.

The scope of licensee commitments to allow the removal of accelerated testing and special reporting requirements for EDGs from technical specifications is broader than just the scope of the NUMARC guidelines on an EDG reliability program in Appendix D of NUMARC 87-00. The staff approach is consistent with the Commission's decision on the staff's proposed resolution of the GSI B-56 as stated in the generic letter and, therefore, the staff did not modify the generic letter as suggested.

In a letter of September 29, 1993, J. T. Beckman, Jr., Vice President of Nuclear, Hatch Project, Georgia Power, expressed total agreement with the NUMARC comments.

In a letter of September 29, 1993, E. E. Fitzpatrick, Vice President, Indiana Michigan Power Company, concurred with NUMARC that this proposal is a constructive approach at maintaining and monitoring emergency diesel generator reliability, while ensuring appropriate application of resources, and encouraged NRC to expedite issuance of the generic letter in final form.

In a letter of September 29, 1993, Richard A. Bernier, Palo Verde Nuclear Generating Station, Arizona Public Service Company, made eight comments:

First Comment

"Licensees should not be required to commit to Regulatory Guide 1.160. To achieve the intent of this proposed Generic Letter, all that is required is that Licensees monitor EDG performance in accordance with the Maintenance Rule (10 CFR 50.65). This can be accomplished without committing to every section of Regulatory Guide 1.160."

NRC Staff Response to First Comment

As stated in the NRC staff response to the second set of ACRS comments, the Commission agreed with the staff proposal to modify RG 1.160 to remove all discussion on EDG performance and triggers values. Therefore, a commitment to implement the maintenance rule consistent with the guidance of RG 1.160 as applicable for EDGs is a commitment to implement the endorsed NUMARC guideline, NUMARC 93-01, with the exception of the reference to NUMARC 87-00 on the use of trigger values.

However, as stated in the response to the second set of ACRS comments, the staff intends to retain in RG 1.160 the discussion on the NRC staff expectations that licensees would establish performance criteria for EDG reliability and unavailability under the provisions of paragraph (a)(2) of the maintenance rule. Furthermore, should licensees decide to not fulfill these expectations as part of their commitment to implement the guidance of RG 1.160, the NRC staff expects that licensees would propose an alternative approach for compliance with the maintenance rule. Therefore, the staff revised the generic letter to clarify the intent of a licensee commitment to RG 1.160 consistent these expectations and with the Commission approval of its proposal to modify RG 1.160.

As noted in the staff response to the second NUMARC comment, the staff revised the generic letter to state that should licensees wish to propose an alternative approach for a commitment to RG 1.160 to demonstrate compliance with the maintenance rule, the NRC staff is willing to consider such proposals.

Second Comment

"The Generic Letter should indicate that the Licensee must implement the Maintenance Rule requirements for EDG within 90 days of the NRC issuance of the Technical Specification Amendment removing EDG accelerated testing and specific reporting requirements."

NRC Staff Response to Second Comment

The staff revised the generic letter and Enclosure 1 to consistently state the effective date for implementing the commitments as 90 days following the completion of the licensing action. This licensing action may be either issuing a license amendment or providing relief from a prior docketed commitment to accelerated testing and special reporting requirements for EDGs.

Third Comment

"The Generic Letter should indicate that the Licensees commit to: monitoring EDG reliability and availability performance; categorizing the EDGs in Maintenance Rule (a)(1) or (a)(2) based on EDG performance; and periodically assessing EDG performance in accordance with the Rule."

NRC Staff Response to Third Comment

The generic letter requires a licensee commitment to implement the provisions of the maintenance rule for EDGs. The suggestion to add these three items as licensee commitments to the generic letter is redundant with the requirement for a licensee commitment to implement the provisions of the maintenance rule itself. Thus, the suggestion does not materially change or clarify the scope of what is required by that commitment. Therefore, the staff did not modify the generic letter to include the suggested modifications.

Fourth Comment

"Specific guidance for monitoring EDG availability is already stated in the proposed Generic Letter and is acceptable."

ANC Staff Response to Fourth Comment

The staff response to the first Arizona Public Service Company comment addresses the changes made to the generic letter to clarify the intent of a commitment to RG 1.160 and NRC staff expectations for monitoring EDG availability.

Fifth Comment

"The proposed Generic Letter endorses NUMARC 87-00 as the appropriate guidance for monitoring EDG reliability. This endorsement should clearly indicate the acceptability of committing to monitoring EDG performance as prescribed in Regulatory Guide 1.9, Revision 3, which is similar to NUMARC 87-00, Appendix D."

NRC Staff Response to Fifth Comment

As stated in the staff response to the second set of ACRS comments, the Commission approved the staff proposal to modify RG 1.160 such that the NRC staff no longer endorses the use of trigger values as addressed by NUMARC-87-00 for monitoring EDG performance.

RG 1.9 defines a number of tests for EDGs that are generally required by technical specifications to monitor and verify the performance of EDGs. However, the conduct of tests alone does not assure the reliability of the EDGs, but rather the actions that are taken when such tests demonstrate the failure of the EDGs to perform their function. Hence, a commitment to RG 1.9 would not serve the same purpose for monitoring and maintaining the performance of EDGs as a commitment to the maintenance rule.

Sixth Comment

"Licensees should commit to evaluating acceptable EDG system reliability if the system does not have a 'double exceedance trigger' (50 and 100 tests) as specified in NUMARC 87-00. This is more definitive and would alleviate any confusion as to whether the EDG should be placed in the Maintenance Rule (a)(1) category if only one trigger is exceeded. The NRC has previously endorsed this approach in NUMARC 87-00, Revision 1."

NRC Staff Response to Sixth Comment

The staff has revised the generic letter as stated in the response to the first Arizona Public Service Company comment to state that the NRC staff no longer endorses the use of trigger values for monitoring EDG performance.

Seventh Comment

"Details of the Maintenance Rule periodic assessment for EDGs should be developed by each plant as part of the Maintenance Rule implementation."

NRC Staff Response to Seventh Comment

Licensees would develop the details for periodic assessment for EDGs for each plant under the provisions of the maintenance rule as part of their commitment to early implementation of the rule for EDGs. The staff assumes that the intent of this comment is that this action should not be necessary until the date for the full implementation of the rule, July 10, 1996. The staff does not find that this is an acceptable basis to delay implementing the rule as the basis for the removal of the accelerated testing and special reporting requirements for EDGs.

Eighth Comment

"The 'Problem Diesel' issue should not be addressed by this Generic Letter. The proposed Generic Letter sends two different messages regarding 'Problem Diesels.' One phrase is '(except for triggers and testing for 'problem diesels' as described in paragraph D2.4.4 of NUMARC 87-00, which will be addressed separately by the NRC).' This statement conflicts with a later statement that 'These actions are intended to close the matter of triggers and testing for 'problem diesels.' The 'Problem Diesel' issue should be addressed by each Licensee as part of their Maintenance Rule implementation (i.e., goal setting)."

NRC Staff Response to Eighth Comment

The staff removed referenced material on problem diesels from the generic letter. The generic letter clearly states that implementing its actions removes all requirements for accelerated testing of EDGs and that this action closes the matter of triggers and testing for "problem diesels.".

In a letter of September 29, 1993, R.W. Prunty, Manager, Generic Licensing Section, Carolina Power and Light Company, concurred with the concept of the

proposal and also endorsed and concurred with the NUMARC comments on the proposed generic letter.

In a letter of September 30, 1993, Neil Thibodaux, Chairman, Technical Committee, Cooper-Bessemer Owners Group (CBOG), expressed the agreement of the seven member utilities within the CBOG with the potential benefit of eliminating accelerated testing of EDGs at their nuclear power plants. The letter makes seven comments:

First Comment

"In particular, the CBOG recommends that all references to Regulatory Guide 1.160 be removed from the Generic Letter and its Enclosure 1. Presently there is significant uncertainty associated with interpretation of that new Reg Guide and its scope is much broader than EDG performance, hence a reluctance by most CBOG member utilities to commit to its current guidance. Further, we believe there are other valid approaches to monitor EDG performance and implement the removal of EDG accelerated testing from plant Technical Specifications or other licensing commitments."

NRC Staff Response to First Comment

The staff response to the second NUMARC comment addresses the staff position on the need for a commitment to RG 1.160 or proposing some other alternative to demonstrate compliance with the maintenance rule.

Second Comment

"Proposed Generic Letter, Page 1, Second Paragraph, Last Sentence: The last sentence reads 'Licensees may now implement the provisions of the maintenance rule for EDGs, including staff guidance, which will provide a program to assure EDG performance.' The meaning of the phrase 'including staff guidance,' is vague and not defined at this point in the proposed generic letter. Delete the phrase 'including staff guidance' from this sentence."

NRC Staff Response to Second Comment

The staff retains the need for a licensee commitment to the guidance provided in RG 1.160 on compliance with the provisions of the maintenance rule. The staff modified the sentence in question to clarify that it is the applicable regulatory guidance rather than staff guidance on implementing the maintenance rule.

Third Comment

"Proposed Generic Letter, Page 1, Third Paragraph, First Sentence: The first sentence of the paragraph begins 'Licensees may request the removal of the TS provisions for accelerated testing...' We note that some nuclear power plants have different or additional, licensing basis documents or commitments other than plant Technical specifications that cause a utility to implement accelerated testing of EDGs. Revise the Generic Letter and Enclosure 1, throughout, to provide for, and clearly

state consideration of other licensing basis documents or commitments as being included in the scope of the Generic Letter. Further, the Generic Letter and Enclosure should clarify that when the acronym 'TS' is used it also applies to other licensing commitments related to EDG accelerated testing." (NRC Staff Note: Subsequently, this comment was referenced with respect to Enclosure 1, Page 1, Background, First Paragraph, Fourth Sentence.)

NRC Staff Response to Third Comment

The staff changed the generic letter and Enclosure 1 to clarify that licensees may request relief from a docketed commitment, including any stated in licensing basis documents, for accelerated testing and reporting of EDG failures. This request would be made on the same basis as provided for the removal of such requirements from plant TS. The staff changed the generic letter to state that all conditions for removing the TS requirements also apply to a licensee request for relief from a docketed commitment to such requirements.

Fourth Comment

*Proposed Generic Letter, Page 1, Third Paragraph, Second Sentence: The second sentence states in part '...licensees must commit to implement within 90 days a maintenance program...' This sentence is not clear as to when the maintenance program must be in place. The guidance provided in Enclosure 1, Page 2, Second Paragraph is more specific and clear about when the maintenance program must be implemented, i.e., 'within 90 days of the issuance of the license amendment.' Revise the Generic Letter to read the same as Enclosure 1, i.e., '... licensees must commit to implementing within 90 days of issuance of the license amendment, the provisions of 10 CFR 50.65...' (NRC Staff Note: Subsequently, this comment was referenced with respect to Enclosure 1, Page 1, Background, Third Paragraph.)

NRC Staff Response to Fourth Comment

The staff changed the generic letter and Enclosure 1 to consistently state the requirement for the commitment on implementing the provisions of the maintenance rule for EDGs as within 90 days of the issuance of the license amendment. If the licensing action results in the staff acceptance of relief from a previously docketed commitment on accelerated testing or reporting failures of EDGs, the commitment on implementing the provisions of the maintenance rule would be effective within 90 days of the issuance of the license amendment granting relief from the docketed commitment.

Fifth Comment

"Proposed Generic Letter, Page 1 Third Paragraph, Second Sentence: This sentence states that licensees not commit to implementing a maintenance program for monitoring and maintaining EDGs performance consistent with 10 CFR 50.56 the 'Maintenance ite', and the guidance of Regulatory Guide 1.160. For the purpose of achieving the intent of the Generic Letter, all that should be required is that licensees monitor EDG performance in accordance with 10 CFR 50.65. As was evidenced at recent NUMARC

Maintenance Rule Workshops and the Advisory Committee on Reactor Safety (ACRS) meeting on September 10, 1993, there is considerable discussion within the industry and the USNRC as to the interpretation of numerous terms and recommendations contained in Reg Guide 1.160 and NUMARC 93-01. We consider it is premature to expect utilities to commit to compliance with the entire Reg Guide that is still so open to interpretation. Delete all references to Reg Guide 1.160 in the Generic Letter and its Enclosure." (NRC Staff Note: Subsequently, this comment was referenced with respect to Enclosure 1, Page 1, Background, Third Paragraph.)

NRC Staff Response to Fifth Comment

The staff response to the second NUMARC comment provides the response to the comment that licensees should not be required to commit to RG 1.160. However, as noted in the staff response to the first Arizona Public Service Company comment, the staff modified the generic letter to clarify the intent of a licensee commitment to RG 1.160.

Sixth Comment

"Enclosure 1, Page 2, <u>Discussion</u>, First Paragraph, Second Sentence: This sentence notes that NUMARC 93-01 is endorsed by Reg Guide 1.160 and provides methods acceptable to USNRC staff for complying with 10 CFR 50.65. For the purposes of achieving the intent of the Generic Letter, all that should be required is that licensees monitor EDG performance in accordance with 10 CFR 50.65. As was evidenced at recent NUMARC Maintenance Rule Workshops and the Advisory Committee on Reactor Safety (ACRS) meeting on September 10, 1993, there is considerable discussion within the industry and the USNRC as to the interpretation of numerous terms and recommendations contained in Reg Guide 1.160 and NUMARC 93-01. We consider it premature to expect utilities to commit to compliance with the entire Reg Guide that is still so open to interpretation.

Licensees commitment to implementation of 10 CFR 50.65 can be achieved by other means than commitment to Reg Guide 1.160. Licensees could commit to:

- monitoring EDG <u>reliability</u> performance in accordance with Reg Guide 1.9, Rev 3,
- categorization of EDGs as required by 10 CFR 50.65 paragraphs a(1) and a(2) based on EDG performance, and
- performing periodic assessments of EDG performance in accordance with 10 CFR 50.65.

Specific guidance for monitoring EDG <u>availability</u> is adequately stated in the last sentence of the first discussion paragraph of the Enclosure. Delete all references to commitment to Reg Guide 1.160 as the 'acceptable' means of complying with 10 CFR 50.65."

NRC Staff Response to Sixth Comment

The staff response to the fifth Arizona Public Service Company comment states that a commitment to RG 1.9 would not serve the same purpose as a commitment to the guidance of RG 1.160 on implementation of the provisions of the maintenance rule. The suggestion that licensees commit to implement actions that are required by the maintenance rule as a means to confirm their implementation of the rule is a circular argument. A commitment to implement a requirement is not demonstrated by additional commitments to satisfy those same requirements.

Seventh Comment

"Enclosure 1, Page 2, <u>Discussion</u>, First Paragraph, Third Sentence: This sentence ends with the parenthetical phrase '(except for triggers and testing for 'problem diesel' as described in Paragraph D.2.4.4 of NUMARC 87-00, which will be addressed separately by the NRC).' It is not clear what is meant by this phrase, nor is it evident when or how the NRC staff is planning to separately address 'problem diesels.' Further, the parenthetical phrase is inconsistent with the last sentence of the second paragraph which states, 'These actions are intended to close the matter of triggers and testing for 'problem diesel.' The parenthetical phrase also appears inconsistent with Footnote 2 which acknowledges the impracticality of demonstrating by statistical analysis the attainment of high reliability of EDGs. Delete the entire parenthetical phrase."

NRC Staff Response to Seventh Comment

As indicated in response to the first Arizona Public Service Company comment, the Commission accepted the staff proposal to remove all language in RG 1.160 as it pertains to EDG performance and trigger-values. Likewise, the generic letter was changed accordingly, as noted in the response to that comment. The generic letter was revised to state that the elimination of accelerated testing requirements for EDGs closes the matter of triggers and testing for "problem diesels."

In a letter of September 30, 1993, R.G. Byram, Senior Vice President of Nuclear, Pennsylvania Power & Light Company, expressed support for this proposed line item improvement, fully endorsed those general comments made on behalf of the industry by NUMARC, and endorsed the more specific comments submitted by the Cooper-Bessemer Owners Group.

In a letter of September 30, 1993, Bruce S. Schofield, Manager, Nuclear Licensing and Regulatory Affairs, Tennessee Valley Authority, supported the comments on this proposed generic letter made by NUMARC, agreed that this effort reflects a positive and reasonable approach to the issue of accelerated testing of EDGs, and provided the following comment:

"The removal of the accelerated test requirement from the technical specifications would greatly enhance the reliability of the emergency diesel generators. However, an acceptable diesel generator reliability program is based on NUMARC 87-00 Appendix D (as identified in the discussion section of the proposed generic letter), any commitments to implement a program for EDG reliability should be made to the NUMARC

document. The program to meet the Maintenance Rule requirement is being developed by TVA. Any attempt to address commitments under its scope before the 1996 implementation date would be premature.

Therefore, TVA recommends the diesel generator reliability program be based upon a commitment to NUMARC 87-00 Appendix D instead of the Maintenance Rule and this commitment be the basis for the removal of the Technical Specification provisions for accelerated testing and special reporting requirement."

NRC Staff Response to This Comment

The Commission, in response to the staff recommendations for the resolution of generic issue B-56 on EDG reliability, established the scope of the required licensee commitment as indicated in the staff response to the EMD-PS Owners Group comment.

In a letter of September 30, 1993, William J. Cahill, Jr., Group Vice President, TU Electric, expressed that the proposed GL provides a significant technical specification line-item improvement allowing replacement of the EDG accelerated testing requirements with a performance based program focussed on maintaining and monitoring EDG reliability and made three comments:

First Comment

"The Generic Letter should clearly state that the intent is for the complete elimination of the EDG accelerated testing requirements. Relocation of the requirements to a program implementing a regulation is not appropriate or consistent with the performance-based /risk-based concepts fundamental to the intent of the Maintenance Rule. A footnote states that this comment applies to Draft GL Supplementary Information and Enclosure 1."

NRC Staff Response to First Comment

As indicated in the staff response to the first NUMARC comment, the staff changed the generic letter and Enclosure 1 to state that with the removal of accelerated testing requirements from the technical specifications such requirements will no longer exit.

Staff note: The <u>Federal Register</u> notice soliciting public comments identified the proposed generic letter and its Enclosures 1 and 2 as supplementary information to the notice. The draft GL does not have a section titled "Supplementary Information."

Second Comment

"TU Electric suggests to delete the requirement to commit to the Regulatory Guide 1.160 since the commitment is to the regulation; however it should be stated that a program consistent with industry guidance endorsed by the regulatory guide is acceptable to the NRC Staff. The industry guideline endorsed by the NRC indicates that there is no need to create a separate maintenance program to comply with the Maintenance Rule

if the existing maintenance programs are effective and performance acceptable.

As stated above, the proposed Generic Letter under 'Supplementary Information' identifies that the implementation period is to start from the date of 'Request of a License Amendment', while under 'Enclosure 1 Discussion' of the proposed Generic Letter, the implementation period is to commence from the date of 'Issuance of License Amendment.' TU Electric suggests the implementation period for monitoring and maintaining EDG performance, should be changed to 180 days form the date of issuance of license amendment to assure adequate time for implementation of this maintenance program. A footnote states that these comments apply to Draft GL Supplementary Information and Enclosure 1."

NRC Staff Response to Second Comment

The staff response to the second NUMARC comment addresses the staff response to the suggestion to remove the requirement for a licensee commitment to comply with the guidance of RG 1.160. The staff changed the generic letter to state that a licensee commitment to implement a maintenance program for monitoring and maintaining EDG performance, as specified, need not necessarily result in the creation of a separate program but may be implemented by changing an existing maintenance program.

The recommendation to delay implementation of monitoring and maintaining EDG performance consistent with the guidance of the generic letter is rejected by the staff since the staff position on this matter will be known by licensees for a minimum of 6 months before any license amendment is issued on this matter. Thus, licensees have more than sufficient time to prepare to implement the provisions of the maintenance rule and related regulatory guidance before the licensee must implement those requirements.

Third Comment

"The Generic Letter should address the elements of the program in terms of individual EDG failures. TU Electric suggests to add individual while discussing EDG failures, for example, "... root cause analysis of individual EDG failures, effective corrective actions taken in response to individual failures..." A footnote states that this comment applies to Draft GL Enclosures 1 and 2."

NRC Staff Response to Third Comment

The staff changed the generic letter and Enclosures 1 and 2 to clarify the discussion related to individual EDG failures as noted in the staff response to the fifth NUMARC comment.

In a letter of September 30, 1993, Neil S. Carns, President and Chief Executive Officer, Wolf Creek Nuclear Operating Corporation, expressed full support of the NUMARC position that the proposed generic letter offers a significant and appropriate line-item improvement in plant technical specifications and reinforces industry and NRC activities in implementing performance-based and risk-based approaches to the regulatory process, such as

would best be provided by compliance with the maintenance rule. Mr. Carns also states that the generic letter is constructive and beneficial in ensuring the appropriate application of resources and attention to utility licensee programs focused on maintaining and monitoring EDGs reliability. He recognizes the NRC's efforts in this regard toward eliminating unnecessary and overly burdensome regulations and states that this effort utilizes sound regulatory principles, and is consistent with the NUMARC "Industrywide Initiative."