WOLF CREEK
NUCLEAR OPERATING CORPORATION

Richard N. Johannes
Chief Administrative Officer

July 29, 1994

CO 94-0010

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Station P1-137
Washington, D. C. 20555

Subject: Docket No. 50-482: Revision to Technical Specification 3/4.8.1, "Electrical Power Systems - A.C. Sources"

Gentlemen:

This letter transmits an application for amendment to Facility Operating License No. NPF-42 for Wolf Creek Generating Station. This license amendment request proposes revising Technical Specification 3/4.8.1, "Electrical Power Systems - A.C. Sources," and its associated Bases to achieve an overall improvement in emergency diesel generator reliability and availability. Specifically, it is being proposed that the guidance of Regulatory Guide 1.9, Revision 3, Generic Letter 93-05, and Generic Letter 94-01 be adopted. Also, several surveillance requirements would be revised or eliminated and the emergency diesel generator fuel oil surveillance requirements would be addressed as an administrative program. Descriptions of the Diesel Fuel Oil Testing Program and the Emergency Diesel Generator Reliability Program would be added to Section 6 of the technical specifications to ensure that administrative controls are in place in order to maintain emergency diesel generator reliability and availability. These proposed changes are consistent, in part, with recent NRC guidance concerning emergency diesel generator surveillance requirements.

Attachment I provides a safety evaluation including a description of the proposed changes. Attachment II provides a no significant hazards consideration determination and Attachment III provides an environmental impact determination. The specific changes to the technical specification proposed by this request are provided in Attachment IV. Pages 2 through 19 of Attachment IV provide the marked-up pages of the technical specification and pages 20 through 33 provided the technical specification pages with the proposed changes incorporated.

In accordance with 10 CFR 50.91, a copy of this application, with attachments, is being provided to the designated Kansas State official. This proposed revision to the Wolf Creek Generating Station technical specifications will be fully implemented within 90 days of formal Nuclear Regulatory Commission approval.

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If you have any questions concerning this matter, please contact me at (316) 364-8831, extension 4001, or Mr. Richard D. Flannigan, at extension 4500.

Very truly yours,

Richard N. Johannes

Richard N. Johannes

RNJ/jra

Attachments I - Safety Evaluation
II - No Significant Hazards Consideration Determination
III - Environmental Impact Determination
IV - Proposed Technical Specification Change

cc: G. W. Allen (KDHE), w/a
L. J. Callan (NRC), w/a
M. A. Miller (NRC), w/a
W. D. Reckley (NRC), w/a
J. F. Ringwald (NRC), w/a

STATE OF KANSAS)
) SS
COUNTY OF COFFEY)

Richard N. Johannes, of lawful age, being first duly sworn upon oath says that he is Chief Administrative Officer of Wolf Creek Nuclear Operating Corporation; that he has read the foregoing document and knows the content thereof; that he has executed that same for and on behalf of said Corporation with full power and authority to do so; and that the facts therein stated are true and correct to the best of his knowledge, information and belief.

By Richard N. Johannes
Richard N. Johannes
Chief Administrative Officer

SUBSCRIBED and sworn to before me this 29 day of July, 1994.

Marlene Deaconson
Notary Public

Expiration Date 8-4-94

ATTACHMENT I

SAFETY EVALUATION

Safety Evaluation

Background

The proposed changes to Technical Specification 3/4.8.1 described in this license amendment request are based upon, in part, the guidance of Generic Letter 94-01, "Removal of Accelerated Testing and Special Reporting Requirements for Emergency Diesel Generators From Plant Technical Specifications," Generic Letter 93-05, "Line-Item Technical Specifications Improvements to Reduce Surveillance Requirements for Testing During Power Operation," Regulatory Guide 1.9, "Selection, Design, Qualification, and Testing of Emergency Diesel Generator Units Used as Class 1E Onsite Electrical Power Systems at Nuclear Power Plants," Revision 3, and NUREG-1431, "Standard Technical Specifications - Westinghouse Plants." Also, the guidance of NUMARC 87-00, "Guidelines and Technical Bases for NUMARC Initiatives Addressing Station Blackout at Light Water Reactors," Revision 1, and Regulatory Guide 1.160 has been adopted to formulate a comprehensive Emergency Diesel Generator Reliability Program. The proposed technical specification changes are an integral part of this reliability program.

A short description for each of the aforementioned guidance documents is provided below.

Generic Letter 94-01, "Removal of Accelerated Testing and Special Reporting Requirements for Emergency Diesel Generators From Plant Technical Specifications," was issued on May 31, 1994, to advise licensees that they may request a license amendment to remove accelerated testing and special reporting requirements for emergency diesel generators from plant technical specifications. This generic letter stated that in order to implement the recommendations of the generic letter licensees must commit to implement within 90 days a maintenance program for monitoring and maintaining diesel generator performance consistent with the provisions of 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," and the guidance of Regulatory Guide 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants."

Generic Letter 93-05, "Line-Item Technical Specifications Improvements to Reduce Surveillance Requirements for Testing During Power Operation," was issued on September 27, 1993, to provide guidance to licensees in preparing a license amendment request to implement line-item technical specifications improvements concerning the reduction in the amount of testing that the technical specifications require during power operation. These line-item technical specifications are based upon the recommendations of a study that included a comprehensive examination of surveillance requirements and is reported in NUREG-1366, "Improvements to Technical Specifications Surveillance Requirements."

Regulatory Guide 1.9, "Selection, Design, Qualification, and Testing of Emergency Diesel Generator Units Used as Class 1E Onsite Electric Power Systems at Nuclear Power Plants," Revision 3, was issued as part of the resolution of Generic Safety Issue B-56, "EDG Reliability." This regulatory guide integrates the guidance previously contained in Regulatory Guide 1.9, Revision 2, Regulatory Guide 1.108, "Periodic Testing of Diesel Generator Units Used as Onsite Electric Power Systems at Nuclear Power Plants," and Generic Letter 84-15, "Proposed Staff Actions to Improve and Maintain Diesel Generator Reliability."

NUREG-1431, "Standard Technical Specifications - Westinghouse Plants," contains improved Standard Technical Specifications for Westinghouse plants and documents the positions of the Nuclear Regulatory Commission based on the Westinghouse Owners Group's proposed Standard Technical Specifications. The improved Standard Technical Specifications were developed based on the criteria in the interim Commission Policy Statement on Technical Specification Improvements for Nuclear Power Reactors, dated February 6, 1987.

NUMARC 87-00, "Guidelines and Technical Bases for NUMARC Initiatives Addressing Station Blackout at Light Water Reactors," Revision 1, presents all generic guidance developed for meeting the requirements of the station blackout rule, 10 CFR 50.63. It includes appendices that provide guidance relative to emergency diesel generator reliability programs and equipment operability. In particular, Appendix D provides a methodology for effective monitoring and maintaining emergency diesel generator reliability.

Regulatory Guide 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," was developed to provide guidance for complying with the provisions of 10 CFR 50.65.

Evaluation

This section of the license amendment request describes each of the proposed changes to the technical specifications and the justification for each proposed change. Revised technical specification numbers are provided in parentheses next to the current technical specification numbers, where applicable. Also, a table has been included that provides a cross reference of the current technical specification numbers to the revised technical specification numbers with a brief description of the proposed change.

Current Technical Specification Number	Proposed Technical Specification Changes	Revised Technical Specification Number
Index Page XI	Deletes reference to Table 4.8-1	----------
3.8.1.1, Action a	Implements the guidance of Generic Letter 93-05 and NUREG-1366	----------
3.8.1.1, Action b	Implements the guidance of Generic Letter 93-05 and NUREG-1366	----------
3.8.1.1, Action c	Implements the guidance of Generic Letter 93-05 and NUREG-1366	----------
3.8.1.1, Action e	Implements the guidance of Generic Letter 93-05 and NUREG-1366	----------
4.8.1.1.2a	Implements the guidance of Generic Letter 94-01	----------
4.8.1.1.2a.4	Implements the guidance of Regulatory Guide 1.9, Revision 3 and NUREG-1431	----------
4.8.1.1.2a.5	Implements the guidance of Regulatory Guide 1.9, Revision 3 and NUREG-1431	----------
4.8.1.1.2b	Deleted	----------
4.8.1.1.2c	Deleted	----------
4.8.1.1.2d	Deleted per NUREG-1431	----------
4.8.1.1.2e	Deleted per NUREG-1431	----------
4.8.1.1.2f	Implements the guidance of Regulatory Guide 1.9, Revision 3 and NUREG-1431	4.8.1.1.2b
4.8.1.1.2g	No Change	4.8.1.1.2c
4.8.1.1.2g.1	Deleted per Regulatory Guide 1.9, Revision 3	----------
4.8.1.1.2g.2	Deleted	----------
4.8.1.1.2g.3	Combines Full-Load and Single-Load Rejection Test Acceptance Criteria	4.8.1.1.2c.1
4.8.1.1.2g.4	Reformatted to be consistent with NUREG-1431	4.8.1.1.2c.2
4.8.1.1.2g.5	Reformatted to be consistent with NUREG-1431	4.8.1.1.2c.3
4.8.1.1.2g.6	Reformatted to be consistent with NUREG-1431/Portions relocated to 4.8.1.1.2c.5	4.8.1.1.2c.4
----------	Contains portions relocated from 4.8.1.1.2g.6	4.8.1.1.2c.5
4.8.1.1.2g.7	Implements guidance of Regulatory Guide 1.9, Revision 3/Deletes Overload Test and Hot Restart Test	4.8.1.1.2c.6
4.8.1.1.2g.8	Deleted per Regulatory Guide 1.9, Revision 3 and NUREG-1431	----------
4.8.1.1.2g.9	Reformatted to be consistent with NUREG-1431	4.8.1.1.2c.7
4.8.1.1.2g.10	No Change	4.8.1.1.2c.8
4.8.1.1.2g.11	No Change	4.8.1.1.2c.9
4.8.1.1.2g.12	No Change	4.8.1.1.2c.10
4.8.1.1.2h	Reformatted to be consistent with NUREG-1431	4.8.1.1.2d
4.8.1.1.2i	Reformatted to be consistent with NUREG-1431	4.8.1.1.2e
4.8.1.1.3	Deleted per guidance of Generic Letter 94-01	----------
Table 4.8-1	Deleted per guidance of Generic Letter 94-01	----------
4.8.1.2	Deletes reference to Technical Specification 4.8.1.1.3	----------
Bases 3/4.8	Expands descriptions of Surveillance Requirements and Action Statements	Bases 3/4.8
----------	Adds description of Diesel Fuel Oil Testing Program	6.8.4g
----------	Adds description of Emergency Diesel Generator Reliability Program	6.8.4h

I. Index Page XI

A. Description of Proposed Change

This proposed change would delete the reference to Table 4.8-1. Table 4.8-1 specifies the frequency of testing based on the number of failure during the last 20 valid tests of each emergency diesel generator.

B. Justification

Reference Technical Specification 4.8.1.1.2a.

II. Technical Specification 3.8.1.1, Action a

A. Description of Proposed Change

This action statement currently provides the actions to be taken with one offsite circuit of the required A.C. electrical power sources inoperable. Specifically, this action statement requires, in part, that if either emergency diesel generator of the required A.C. electrical power sources has not been successfully tested within the past 24 hours, Technical Specification 4.8.1.1.2a.4 must be performed separately for that emergency diesel generator within 24 hours to demonstrate its operability. Note "*" for this action statement states that the automatic start and sequence loading of an emergency diesel generator satisfies the testing requirements of Technical Specification 4.8.1.1.2a.4 for this action statement. It is being proposed that this portion of Action a and its associated note be deleted.

B. Justification

This proposed change is consistent with the guidance of Generic Letter 93-05 and NUREG-1366 which allow the deletion of requirements for alternate testing that requires testing of emergency diesel generators and other unrelated systems not associated with an inoperable train or subsystem (other than an inoperable emergency diesel generator). Note "*" can be deleted since an emergency diesel generator is no longer required to be tested as part of this action statement. These proposed changes are also consistent with Technical Specification 3.8.1, Action A, from NUREG-1431 and are compatible with plant operating experience.

III. Technical Specification 3.8.1.1, Action b

A. Description of Proposed Change

This action statement currently provides the actions to be taken with one emergency diesel generator of the required A.C. electrical power sources inoperable. Specifically, this action statement requires, in part, the demonstration of the operability of the remaining operable emergency diesel generator by performing Technical Specification 4.8.1.1.2a.4 within 24 hours. Note "**" for this action statement states that this test is required to be completed regardless of when the inoperable emergency diesel generator is restored to operable status unless the emergency diesel generator was declared inoperable to do

preplanned preventative maintenance, testing, or maintenance to correct a condition which, if left uncorrected, would not affect the operability of the emergency diesel generator. It is being proposed that the requirement to test the remaining operable emergency diesel generator when one emergency diesel generator is inoperable be limited to those situations where the cause for inoperability could not be conclusively demonstrated. This will preclude the potential for common mode failures. Also, in addition to the current exceptions stated in Note "**", the test would not be required to be accomplished if the emergency diesel generator was declared inoperable due to an inoperable support system or an independently testable component. When a test is required, it would be required to be performed within 8 hours of having determined that the emergency diesel generator is inoperable instead of the current time requirement of 24 hours.

B. Justification

This proposed change is consistent with the guidance of Generic Letter 93-05 and NUREG-1366 which recommend that when an emergency diesel generator is inoperable (not including a support system or independently testable component), the other emergency diesel generator should be tested only once and within 8 hours unless the absence of any potential common mode failure can be demonstrated. This proposed change is also consistent, in part, with Technical Specification 3.8.1, Action B, from NUREG-1431 and is compatible with plant operating experience.

IV. Technical Specification 3.8.1.1, Action c

A. Description of Proposed Change

This action statement currently provides the actions to be taken with one offsite circuit and one emergency diesel generator of the required A.C. electrical power sources inoperable. Specifically, this action statement requires, in part, the demonstration of the operability of the remaining operable emergency diesel generator by performing Technical Specification 4.8.1.1.2a.4 within 8 hours. Note "**" for this action statement states that this test is required to be completed regardless of when the inoperable emergency diesel generator is restored to operable status unless the emergency diesel generator was declared inoperable to do preplanned preventative maintenance, testing, or maintenance to correct a condition which, if left uncorrected, would not affect the operability of the emergency diesel generator. It is being proposed that the requirement to test the remaining operable emergency diesel generator when one offsite circuit and one emergency diesel generator is inoperable be limited to those situations where the cause for inoperability could not be conclusively demonstrated. This will preclude the potential for common mode failures. Also, in addition to the current exceptions stated in Note "**", the test would not be required to be accomplished if the emergency diesel generator was declared inoperable due to an inoperable support system or an independently testable component.

This action statement also states that a successful test of emergency diesel generator operability performed in accordance with Technical Specification 4.8.1.1.2a.4 under this action for an operable emergency diesel generator or an emergency diesel generator that was restored to operable, satisfies the subsequent testing requirements of Technical Specification 3.8.1.1, Action a or Action b for an operable emergency diesel generator. It is being proposed that the reference to Technical Specification 3.8.1.1, Action a be deleted since Action a no longer requires the testing of an emergency diesel generator.

B. Justification

This proposed change is consistent with the guidance of Generic Letter 93-05 and NUREG-1366 which recommend that when an emergency diesel generator is inoperable (not including a support system or independently testable component), the other emergency diesel generator should be tested only once and within 8 hours unless the absence of any potential common mode failure can be demonstrated. These proposed changes are also compatible with plant operating experience.

V. Technical Specification 3.8.1.1, Action e

A. Description of Proposed Change

This action statement currently provides the actions to be taken with two offsite circuits of the required A.C. electrical power sources inoperable. Specifically, this action statement requires, in part, the demonstration of the operability of two emergency diesel generators by performing Technical Specification 4.8.1.1.2a.4 within 8 hours unless the emergency diesel generators are already operating. Also, this action statement states that a successful test of emergency diesel generator operability performed in accordance with Technical Specification 4.8.1.1.2a.4 under this action for the operable emergency diesel generators, satisfies the subsequent testing requirement of Technical Specification 3.8.1.1, Action a. Note "*" for this action statement states the automatic start and sequence loading of an emergency diesel generator satisfies the testing requirements of Technical Specification 4.8.1.1.2a.4 for this action statement. It is being proposed that these portions of Action e and its associated note be eliminated.

B. Justification

These proposed changes are consistent with the guidance of Generic Letter 93-05 and NUREG-1366 which allow the deletion of requirements for alternate testing that requires testing of emergency diesel generators and other unrelated systems not associated with an inoperable train or subsystem (other than an inoperable emergency diesel generator). Note "*" can be deleted since an emergency diesel generator is no longer required to be tested as part of this action statement. Also, the reference to Technical Specification 3.8.1.1, Action a can be deleted since Action a no longer requires the testing of an emergency diesel generator. These proposed changes are consistent with Technical

Specification 3.8.1, Action C, from NUREG-1431 and are compatible with plant operating experience.

VI. Technical Specification 4.8.1.1.2a

A. Description of Proposed Change

This surveillance requirement currently requires that each emergency diesel generator be demonstrated operable in accordance with the frequency specified in Table 4.8-1 on a staggered test basis. Table 4.8-1 specifies the frequency of testing based on the number of failures during the last 20 valid tests of each emergency diesel generator. It is being proposed that Table 4.8-1 be deleted. The frequency of testing for the emergency diesel generators would be changed to at least once per 31 days on a staggered test basis.

B. Justification

The proposed change is consistent with the guidance presented in Generic Letter 94-01. This generic letter was developed based upon Option 4 in SECY-93-044, "Resolution of Generic Safety Issue B-56, 'Diesel Generator Reliability'." Option 4 recommends that licensees adopt the accelerated testing provisions of the improved Standard Technical Specifications with an option to relocate accelerated testing and special reporting requirements for the emergency diesel generators from the technical specifications to the maintenance program when the maintenance rule goes into effect in 1996. However, after further consideration it was concluded that it was not necessary to await the effective date of the maintenance rule. The generic letter states that licensees may request the removal of the technical specification provisions for accelerated testing and special reporting requirements for emergency diesel generators at this time. However, licensees must commit to implement within 90 days a maintenance program for monitoring and maintaining diesel generator performance consistent with the provisions of 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," and the guidance of Regulatory Guide 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants."

Wolf Creek Nuclear Operating Corporation will implement this maintenance program under the control of the Emergency Diesel Generator Reliability Program (EDGRP). The EDGRP will govern all activities associated with emergency diesel generator reliability and will be based upon Appendix D of NUMARC 87-00, Revision 1. This program will capture the provisions of the maintenance rule as it applies to emergency diesel generators and will be consistent with the provisions of 10 CFR 50.65 and the guidance of Regulatory Guide 1.160. The EDGRP will be fully implemented within 90 days of formal NRC approval of this proposed revision to the technical specifications. Also, as part of this license amendment request, it is being proposed that a description of the EDGRP be added to Section 6 of the technical specifications. This addition is discussed later in this evaluation.

VII. Technical Specification 4.8.1.1.2a.4

A. Description of Proposed Change

This surveillance requirement currently requires that each emergency diesel generator starts and accelerates to 514 revolutions per minute (RPM) in less than or equal to 12 seconds. This surveillance also requires that each emergency diesel generator obtain a voltage of 4160 + 160 - 420 volts and a frequency of 60 ± 1.2 Hertz within 12 seconds after the start signal. The emergency diesel generator shall be started by manual control, a simulated loss-of-offsite power signal, or a safety injection test signal. It is being proposed that this surveillance requirement be revised to eliminate the 12 second requirement for obtaining the prescribed speed, voltage, and frequency. The requirement to obtain 514 RPM would be deleted since it is redundant to the frequency requirement. A statement would also be added that allows the emergency diesel generator to be slow started and allowed to reach rated speed at a rate that is selected to minimize stress and wear. In order to accomplish a slow start, the emergency diesel generator must be placed in manual control; therefore, the requirement to start the emergency diesel generator by a simulated loss-of-offsite power signal or a safety injection test signal would be deleted. The requirement would continue to be satisfied by surveillance requirement 4.8.1.1.2f.

B. Justification

This surveillance requirement is considered to be a "Start Test" as described in Regulatory Guide 1.9, Revision 3. A "Start Test" is performed to demonstrate proper startup from standby conditions and to verify that the required design voltage and frequency is attained. For these tests, Regulatory Guide 1.9, Revision 3, recommends that the emergency diesel generators be slow started and allowed to reach rated speed on a prescribed schedule that is selected to minimize stress and wear. Therefore, the removal of the 12 second time requirement is justified in order to reduce undue stress and wear on the emergency diesel generators. Also, this proposed change is consistent, in part, with Technical Specification 3.8.1.2 from NUREG-1431.

The proposal to delete the requirement to obtain 514 RPM is consistent with Regulatory Guide 1.9, Revision 3, and Technical Specification 3.8.1.2 from NUREG-1431. As stated above, the 514 RPM verification is redundant to the frequency verification since the frequency of the generator can be converted directly into engine RPM (RPM=120(frequency)/#Poles). Therefore, the verification that the emergency diesel generator reaches rated voltage and frequency is a satisfactory means of demonstrating operability in lieu of the RPM verification.

VIII. Technical Specification 4.8.1.1.2a.5

A. Description of Proposed Change

This surveillance requirement currently requires that the emergency diesel generator be synchronized, gradually loaded to an indicated 6000

to 6201 kilowatts for at least 60 minutes. It is being proposed that the load band of 6000 to 6201 kilowatts be revised to correspond with 90 to 100 percent of the continuous rating of the emergency diesel generators (5580 - 6201 kilowatts). Also, it is being proposed that a statement be added to this surveillance requirement that requires the emergency diesel generator to be operated until temperature equilibrium is attained in addition to the 60 minute requirement. A statement would also be added that allows the loading of the emergency diesel generator to be gradual in order to minimize stress and wear on the emergency diesel generator.

B. Justification

Regulatory Guide 1.9, Revision 3, considers this surveillance requirement to be a "Load-Run Test." A "Load-Run Test" demonstrates 90 to 100 percent of the continuous rating of the emergency diesel generator for an interval of not less than 1 hour and until temperature equilibrium has been attained. This test may be accomplished by synchronizing the generator with offsite power and the loading and unloading of an emergency diesel generator during this test should be gradual and based on a prescribed schedule that is selected to minimize stress and wear on the emergency diesel generator. The proposed changes to this surveillance requirement are consistent with the guidance of Regulatory Guide 1.9, Revision 3, and Technical Specification 3.8.1.3 from NUREG-1431.

IX. Technical Specifications 4.8.1.1.2b and 4.8.1.1.2c

A. Description of Proposed Change

These surveillance requirements currently require the checking for and the removal of accumulated water in the diesel generator day tanks at least once per 31 days and after each operation of the emergency diesel generator where the period of operation was greater than or equal to 1 hour. Also, accumulated water must be checked for and removed from the fuel oil storage tanks at least once per 31 days. It is being proposed that these surveillance requirements be deleted.

B. Justification

These surveillance requirements are for preventative maintenance purposes, as stated in NUREG-1431, and should not be utilized as operability requirements for the emergency diesel generators. Therefore, these surveillance requirements would be deleted and relocated to the EDGRP. As discussed previously, it is being proposed that a description of the EDGRP be added to Section 6 of the technical specifications. As part of the EDGRP, the accumulation of water would be trended and removed as necessary.

X. Technical Specifications 4.8.1.1.2d and 4.8.1.1.2e

A. Description of Proposed Change

These surveillance requirements currently require, in part, the sampling of new fuel oil and stored fuel oil. It is being proposed that these surveillance requirements be deleted.

B. Justification

These surveillance requirements would be relocated to the Diesel Fuel Oil Testing Program with a description of the program being added to Section 6 of the technical specifications. This is discussed later in this evaluation. The Diesel Fuel Oil Testing Program includes the sampling and testing requirements and acceptance criteria which are based upon the applicable ASTM Standards. This program ensures that the quality of new fuel oil and stored fuel oil is verified and maintained in order to maintain the reliability and operability of the emergency diesel generators. The relocation of the diesel fuel oil surveillance requirements is consistent, in part, with NUREG-1431.

XI. Technical Specification 4.8.1.1.2f (4.8.1.1.2b)

A. Description of Proposed Change

This surveillance requirement currently requires that each emergency diesel generator be started from ambient conditions (using the keep warm system) by manual control, a simulated loss-of-offsite power signal, or a safety injection test signal. Each emergency diesel generator must be accelerated to at least 514 rpm in less than or equal to 12 seconds and generator voltage and frequency shall be 4160 + 160 - 420 volts and 60 ± 1.2 Hertz within 12 seconds after the start signal. Also, the emergency diesel generator must be loaded to an indicated 6000 to 6201 kilowatts in less than or equal to 60 seconds and be operated at a load of 6000 to 6201 kilowatts for at least 60 minutes. Note "**" states that the 6000 to 6201 kilowatt band is meant as guidance to avoid routine overloading of the engine and that loads in excess of this band for special testing under direct monitoring or momentary variations due to changing bus loads shall not invalidate this test. It is being proposed that the requirement to load the emergency diesel generator to an indicated 6000 to 6201 kilowatts in less than or equal to 60 seconds and to operate the emergency diesel generator at a load of 6000 to 6201 kilowatts for at least 60 minutes and it associated note be eliminated. Also, it is proposed that the requirement to accelerate the emergency diesel generator to at least 514 rpm in less than or equal to 12 seconds be deleted.

B. Justification

Regulatory Guide 1.9, Revision 3, considers this surveillance to be a "Fast-Start Test." A "Fast-Start Test" demonstrates that each emergency diesel generator starts from standby conditions. If a plant normally has in operation keep warm systems designed to maintain lube oil and jacket water cooling at certain temperatures or prelubrication systems

or both, this would constitute normal standby conditions for that plant. Verification that the emergency diesel generator reaches required voltage and frequency within acceptable limits and time is also required. Therefore, based on this guidance, the requirement to operate the emergency diesel generator for at least 60 minutes at 6000 to 6201 kilowatts can be deleted. This portion of the surveillance requirement would be satisfied by the performance of Technical Specification 4.8.1.1.2a.5 once per 31 days on a staggered test basis. The requirement to accelerate the emergency diesel generator to at least 514 rpm in less than or equal to 12 seconds can be deleted since it is redundant to the requirement to obtain the specified frequency and voltage in less than or equal to 12 seconds (Reference Justification for Technical Specification 4.8.1.1.2a.4). Also, the requirement to load the emergency diesel generator to an indicated 6000 to 6201 kilowatts in less than or equal to 60 seconds can be deleted since Regulatory Guide 1.9, Revision 3, no longer requires the emergency diesel generator to be fast loaded, due to the adverse affect on the reliability of the emergency diesel generator. The proposed changes to this surveillance requirement are consistent with the guidance of Regulatory Guide 1.9, Revision 3, and surveillance requirement 3.8.1.7 from NUREG-1431.

XII. Technical Specification 4.8.1.1.2g.1

A. Description of Proposed Change

This surveillance requirement currently requires the inspection of an emergency diesel generator in accordance with procedures prepared in conjunction with its manufacturer's recommendations for this class of standby service at least once per 18 months during shutdown. It is being proposed that this requirement be deleted.

B. Justification

It is being proposed that this requirement be eliminated based on the guidance of Regulatory Guide 1.9, Revision 3, and NUREG-1431 which no longer requires an inspection of an emergency diesel generator on an 18 month frequency. The EDGRP will still require the inspection in conjunction with the manufacturer's recommendations and the incorporation of specific plant experience; however, the inspection will no longer be a technical specification requirement.

XIII. Technical Specification 4.8.1.1.2g.2

A. Description of Proposed Change

This surveillance requirement currently requires the verification of the capacity of an emergency diesel generator to reject the Essential Service Water Pump motor load (the largest single emergency load) while maintaining voltage at 4160 + 160 - 420 volts and the frequency at 60 ± 5.4 Hertz. It is being proposed that this requirement be deleted.

B. Justification

It is being proposed that this surveillance requirement, which is considered to be the "Single-Load Rejection Test" by Regulatory Guide 1.9, Revision 3, be eliminated based on its redundancy with the "Full-Load Rejection Test" which is required to be accomplished by surveillance requirement 4.8.1.1.2g.3. Analysis of previous surveillance tests conducted at Wolf Creek Generating Station has shown that the frequency and voltage transient from the "Single-Load Rejection Test" is far less severe of a test on the emergency diesel generators than that from the "Full-Load Rejection Test."

Regulatory Guide 1.9, Revision 3, position C.2.2.7, "Single Load Rejection Test," requires the demonstration that the emergency diesel generator is capable of rejecting a loss of the largest single load while operating at a power factor between 0.8 and 0.9 with voltage and frequency requirements being met. The emergency diesel generator shall not trip on overspeed. Position C.2.2.8, "Full-Load Rejection Test," requires the demonstration that the emergency diesel generator is capable of rejecting a load equal to 90 to 100 percent of its continuous rating while operating at a power factor between 0.8 and 0.9 with the voltage requirements being met. The emergency diesel generator shall not trip on overspeed. Regulatory Guide 1.9, Revision 3, allows a maximum frequency of 65.4 Hertz (560 RPM) for the "Single-Load Rejection Test" and the "Full-Load Rejection Test". This is based on a nominal speed of 514 RPM plus 75 percent of the difference between the nominal speed and the over speed trip setpoint of 575 RPM.

Previous surveillance tests results at Wolf Creek Generating Station have shown that the frequency has never exceeded 61 Hertz (523 RPM) for the "Single-Load Rejection Test" nor the "Full-Load Rejection Test." This is well within the band allowed by Regulatory Guide 1.9, Revision 3 and does not approach the overspeed trip setpoint of 575 RPM. Similar analysis has shown that the voltage transient from the "Single-Load Rejection Test" is insignificant compared to that of the "Full-Load Rejection Test." Typical maximum transient values are 4300 volts for the "Single-Load Rejection Test" with the maximum allowable value being 4320 volts and 4600 volts for the "Full-Load Rejection Test" with the maximum allowable value being 4784 volts.

Institute of Electrical and Electronics Engineers (IEEE) Std 387-1977, "IEEE Standard Criteria for Diesel-Generator Units Applied as Standby Power Supplies for Nuclear Power Generating Stations," only specifies the performance of a load rejection test that demonstrates the capability of the emergency diesel generator to reject the maximum rated load without exceeding speeds or voltages which will cause tripping, mechanical damage, or harmful overstresses. It does not specify the performance of a "Single-Load Rejection Test." Therefore, based on the above discussion, the "Single-Load Rejection Test" is redundant to the "Full-Load Rejection Test" and can be deleted.

XIV. Technical Specification 4.8.1.1.2g.3 (4.8.1.1.2c.1)

A. Description of Proposed Change

This surveillance requirement currently requires the verification that each emergency diesel generator is capable of rejecting a load of 6201 kilowatts without tripping and that the emergency diesel generator voltage does not exceed 4784 volts during and following the load rejection. It is being proposed that this surveillance requirement be revised to require the verification that each emergency diesel generator operating at a power factor between 0.8 and 0.9 does not trip on overspeed and that the voltage does not exceed 4784 volts and that the frequency does not exceed 65.4 Hertz following a load rejection of 5580 to 6201 kilowatts. The frequency criteria from the "Single-Load Rejection Test" in surveillance requirement 4.8.1.1.2g.2 would be relocated to this surveillance requirement. Also, a note would be added which states that this surveillance shall not be performed in Modes 1 or 2 and credit may be taken for unplanned events that satisfy this requirement.

B. Justification

As discussed previously, this surveillance requirement is classified as the "Full-Load Rejection Test" by Regulatory Guide 1.9, Revision 3. Specifically, Regulatory Guide 1.9, Revision 3, describes this test as a demonstration of the emergency diesel generator's capability to reject a load equal to 90 to 100 percent of its continuous rating (5580-6201 kilowatts) while operating at a power factor between 0.8 and 0.9 and verifying that the voltage requirements are met and that the emergency diesel generator will not trip on overspeed. The proposed changes to this surveillance requirement will encompass, in part, the guidance of Regulatory Guide 1.9, Revision 3. Also, the proposed addition of the note that will not allow the surveillance requirement to be performed in Modes 1 or 2 is based on the improved Standard Technical Specifications (NUREG-1431) which recognizes that the performance of this surveillance requirement during operation with the reactor critical could cause perturbations to the electrical distribution systems that could challenge continued steady state operation and, as a result, unit safety systems. The proposed deletion of surveillance requirement 4.8.1.1.2g.2 and the revision of surveillance requirement 4.8.1.1.2g.3 has combined, in part, the requirements of the "Single-Load Rejection Test" and the "Full-Load Rejection Test."

XV. Technical Specification 4.8.1.1.2g.4 (4.8.1.1.2c.2)

A. Description of Proposed Change

This surveillance requirement currently requires the demonstration, by simulating a loss-of-offsite power, that the emergency buses are deenergized and the loads are shed from the emergency buses, and the emergency diesel generator starts on the autostart signal. Also, the emergency busses must be energized with the permanently connected loads with 12 seconds and the auto-connected shutdown loads must be energized through the shutdown sequencer with the emergency diesel generator

operating for greater than or equal to 5 minutes while its generator is loaded with the shutdown loads. After energization, the steady state voltage and frequency of the emergency busses shall be maintained within specified limits. It is being proposed that this surveillance requirement be retained in its entirety; however, it would be reformatted to be consistent with surveillance requirement 3.8.1.11 from NUREG-1431. Also, a note would be added which states that this surveillance shall not be performed in Modes 1 or 2 and credit may be taken for unplanned events that satisfy this requirement.

B. Justification

This surveillance requirement can be classified as the "Loss-of-Offsite-Power Test" in accordance with Regulatory Guide 1.9, Revision 3. As stated above this surveillance requirement would be retained in its entirety; however, it would be reformatted to be consistent with the improved Standard Technical Specifications. Also, the justification for the addition of the note is discussed above under Technical Specification 4.8.1.1.2g.3.

XVI. Technical Specification 4.8.1.1.2g.5 (4.8.1.1.2c.3)

A. Description of Proposed Change

This surveillance requirement currently requires that on a safety injection actuation signal (SIAS) without loss-of-offsite power, the emergency diesel generator starts on the autostart signal and operates on standby for greater than or equal to 5 minutes. Also, the offsite power source must energized the auto-connected emergency (accident) load through the LOCA sequencer and the generator voltage and frequency shall be within specified limits within 12 seconds after the autostart signal. It is being proposed that this surveillance requirement be retained in its entirety; however, it would be reformatted to be consistent, in part, with surveillance requirement 3.8.1.12 from NUREG-1431. Also, a note would be added which states that this surveillance shall not be performed in Modes 1 or 2 and credit may be taken for unplanned events that satisfy this requirement.

B. Justification

This surveillance requirement can be classified as the "SIAS Test" in accordance with Regulatory Guide 1.9, Revision 3. As stated above this surveillance requirement would be retained in its entirety; however, it would be reformatted to be consistent, in part, with the improved Standard Technical Specifications. The portion of surveillance requirement 3.8.1.12 from NUREG-1431 which requires the verification that permanently connected loads remain energized from the offsite power system would not be added to Technical Specification 4.8.1.1.2g.5 since it is not discussed in Regulatory Guide 1.9, Revision 3 and is not currently in Technical Specification 4.8.1.1.2g.5. Also, the justification for the addition of the note is discussed above under Technical Specification 4.8.1.1.2g.3.

XVII. Technical Specification 4.8.1.1.2g.6 (4.8.1.1.2c.4)

A. Description of Proposed Change

This surveillance requirement currently requires the demonstration that the emergency diesel generator can satisfactorily respond to a loss-of-offsite power (LOOP) in conjunction with a SIAS in whatever sequence they might occur. A simultaneous LOOP/LOCA event is demonstrated by simulating a LOOP and SIAS and verifying that the emergency buses are deenergized and loads are shed from the emergency buses and the emergency diesel generator starts on the autostart signal. Also, the emergency diesel generator must attain the required voltage and frequency, energize the permanently connected loads within acceptable limits and time, energize the autoconnected loads through the load sequencer, and operate for greater than or equal to 5 minutes. Also, all automatic diesel generator trips, except high jacket coolant temperature, engine overspeed, low lube oil pressure, high crankcase pressure, start failure relay, and generator differential, must be verified to be automatically bypassed upon loss of voltage on the emergency bus concurrent with a SIAS. It is being proposed that this surveillance requirement be retained in its entirety, except that the requirement to verify that a portion of the automatic diesel generator trips are automatically bypassed would be relocated to renumbered Technical Specification 4.8.1.1.2c.5. In addition, the surveillance requirement would be reformatted to be consistent with surveillance requirement 3.8.1.19 from NUREG-1431. Also, a note would be added which states that this surveillance shall not be performed in Modes 1 or 2 and credit may be taken for unplanned events that satisfy this requirement.

B. Justification

This surveillance requirement can be classified as the "Combined SIAS and LOOP Tests" in accordance with Regulatory Guide 1.9, Revision 3. As stated above, this surveillance requirement would be retained in its entirety except that a portion of the surveillance test would be relocated to renumbered Technical Specification 4.8.1.1.2c.5. Also, it would be reformatted to be consistent with the Improved Standard Technical Specifications. The justification for the addition of the note is discussed above under Technical Specification 4.8.1.1.2g.3.

XVIII. (Renumbered Technical Specification 4.8.1.1.2c.5)

A. Description of Proposed Change

Currently, Technical Specification 4.8.1.1.2g.6 requires, in part, that all automatic diesel generator trips, except high jacket coolant temperature, engine overspeed, low lube oil pressure, high crankcase pressure, start failure relay, and generator differential, be verified to be automatically bypassed upon loss of voltage on the emergency bus concurrent with a SIAS. It is being proposed that this portion of Technical Specification 4.8.1.1.2g.6 be relocated to renumbered Technical Specification 4.8.1.1.2c.5. Also, a note would be added which states that this surveillance shall not be performed in Modes 1 or

2 and credit may be taken for unplanned events that satisfy this requirement.

B. Justification

The portion of Technical Specification 4.8.1.1.2g.6 that is being proposed to be relocated to renumbered Technical Specification 4.8.1.1.2c.5 is considered to be the "Protective Trip Bypass Test," as described in Regulatory Guide 1.9, Revision 3. This surveillance would be reformatted to be consistent with surveillance requirement 3.8.1.13 from NUREG-1431. Also, the justification for the addition of the note is discussed above under Technical Specification 4.8.1.1.2g.3.

XIX. Technical Specification 4.8.1.1.2g.7 (4.8.1.1.2c.6)

A. Description of Proposed Change

Currently, surveillance requirement 4.8.1.1.2g.7 requires the verification that each emergency diesel generator operate for at least 24 hours. During the first 2 hours of this test, the emergency diesel generator shall be loaded to an indicated 6600 to 6821 kilowatts and during the remaining 22 hours of this test, the emergency diesel generator shall be loaded to an indicated 6000 to 6201 kilowatts. The generator voltage and frequency shall be 4160 + 160 - 420 volts and 60 + 1.2 Hertz, - . Hertz within 12 seconds after the start signal and the steady state generator voltage and frequency shall be maintained within 4160 + 160 - 420 volts and 60 ± 1.2 Hertz during the test. Within 5 minutes after completing this 24 hour test, surveillance requirement 4.8.1.1.2g.6b must be performed. Note "*" states that if Technical Specification 4.8.1.1.2g.6b is not satisfactorily completed, it is not necessary to repeat the preceding 24 hour test. Instead, the emergency diesel generator may be operated at 6201 kilowatts for 1 hour or until operating temperature has stabilized. It is being proposed that this note be deleted and the surveillance requirement revised to require that the full-load capability of each emergency diesel generator be demonstrated at a power factor between 0.8 and 0.9 for an interval of not less than 24 hours at 5580 to 6201 kilowatts. The generator voltage and frequency shall be maintained within 4160 + 160 - 420 volts and 60 ± 1.2 Hertz during this test. This proposed change would eliminate the requirement to load the emergency diesel generator to an indicated 6600 to 6821 kilowatts for the first 2 hours of the test and the requirement to perform surveillance requirement 4.8.1.1.2g.6b within 5 minutes after completing the 24 hour test.

B. Justification

These changes are consistent, in part, with the definition of the "Endurance and Margin Test" as described in Regulatory Guide 1.9, Revision 3. However, the requirement to operate each emergency diesel generator for two hours at 105 to 110 percent of the continuous rated load has been deleted. It appears that this requirement originates from the fact that many older nuclear power plants were built with emergency diesel generator capacity below emergency bus loading. At the start of an accident, the bus loading during the first two hours may well be

above the continuous rating of the emergency diesel generator. Bus loading calculations for Wolf Creek Generating Station indicate that under the worst scenario, emergency bus loading would be 5822 kilowatts, which is only approximately 94 percent of the rated continuous load for each emergency diesel generator. In addition, operating at 110 percent of rated load is detrimental to long-term diesel generator reliability as discussed in Technical Evaluation Report PNL-7516, "Emergency Diesel Generator Technical Specifications Study Results." Specifically, the relationship between high loads and wear is well known for typical piston engine applications and engine manufactures have indicated that aging and wear significantly increase after 95 percent of the continuous load rating is achieved. Therefore, based on the Wolf Creek Generating Station emergency bus loading, the diesel generator rated capacity, and the increase in aging and wear, the requirement to perform the two hour margin test is considered unnecessary and detrimental to the long-term reliability of the emergency diesel generators.

It is also being proposed to eliminate the "Hot Restart Test," which is required to be completed within 5 minutes after completing the 24 hour test and its associated note. This test, as defined in Regulatory Guide 1.9, Revision 3, demonstrates the hot restart functional capability at full-load temperature conditions by verifying that the emergency diesel generator starts on a manual or autostart signal, attains the required voltage and frequency within acceptable limits and time, and operates for longer than 5 minutes. Report PNL-7516 discusses unnecessary and redundant testing based on information provided by diesel generator consultants and engine manufacturers. The "Hot Restart Test" is specifically addressed as a unnecessary test since the hot restart capability of the emergency diesel generator is not considered to be a problem area. Wolf Creek Generating Station agrees with this conclusion based on the past operating history of the emergency diesel generators. The requirement to obtain 4160 + 160 - 420 volts and 60 + 1.2 Hertz, - 3 Hertz within 12 seconds after the start signal would also be deleted since Regulatory Guide 1.9, Revision 3, does not require a fast start in conjunction with the 24 hour endurance test.

XX. Technical Specification 4.8.1.1.2g.8

A. Description of Proposed Change

Currently, Technical Specification 4.8.1.1.2g.8 requires the verification that the auto-connected loads to each emergency diesel generator do not exceed 6201 kilowatts. It is being proposed that this surveillance requirement be deleted.

B. Justification

This surveillance requirement can be deleted based on the fact that bus loading calculations for Wolf Creek Generating Station indicate that under the worst scenario emergency bus loading would be 5822 kilowatts which is only approximately 94 percent of the rated continuous load for each emergency diesel generator. Also, this requirement is not contained in NUREG-1431 or Regulatory Guide 1.9, Revision 3. The auto-connected bus loadings are monitored and trended by the Emergency Diesel

Generator Reliability Program with the electrical bus load growth is controlled by an Electrical Load Growth Program.

XXI. Technical Specification 4.8.1.1.2g.9 (4.8.1.1.2c.7)

A. Description of Proposed Change

It is being proposed that a note be added to this surveillance requirement that stipulates that the surveillance shall not be performed in Modes 1, 2, 3, or 4 and that credit may be taken for unplanned events that satisfy this requirement.

B. Justification

The addition of this note would make this surveillance requirement consistent with surveillance requirement 3.6.1.16 from NUREG-1431. The requirement for not performing this surveillance requirement in Modes 1, 2, 3, or 4 is due to the fact that a required offsite circuit is removed from service, the electrical distribution system is perturbed, and safety systems are challenged.

XXII. Technical Specification 4.8.1.1.2h (4.8.1.1.2d)

A. Description of Proposed Change

This surveillance requirement currently requires that at least once per 10 years or after any modifications which could affect emergency diesel generator interdependence, both emergency diesel generators be started simultaneously, during shutdown, and verify that both emergency diesel generators accelerate to at least 514 RPM in less than or equal to 12 seconds. It is being proposed that this surveillance requirement be revised to eliminate the requirement to perform the test after any modifications which could affect emergency diesel generator interdependence and replace the requirement to obtain 514 RPM with voltage and frequency requirements.

B. Justification

This surveillance requirement can considered to be the "Redundant Unit Test" in accordance with Regulatory Guide 1.9, Revision 3. This test demonstrates that, by starting and running both redundant units simultaneously, potential common failure modes that may be undetected in single emergency diesel generator unit tests do not occur. The proposed change to this surveillance requirement will make it consistent with surveillance requirement 3.8.1.20 from NUREG-1431. The replacement of the requirement to accelerated the emergency diesel generator to at least 514 RPM in less than or equal to 12 seconds with voltage and frequency requirements is justified since the RPM requirement is redundant to the frequency and voltage requirements (Reference Justification for Technical Specification 4.8.1.1.2a.4).

XXIII. Technical Specification 4.8.1.1.2i (4.8.1.1.2e)

A. Description of Proposed Change

This surveillance requirement currently requires that every 10 years each fuel oil storage tank be drained, accumulated sediment removed and cleaned using a sodium hypochlorite solution or equivalent. It is being proposed that this surveillance requirement be revised to eliminate the requirement to clean the tank using a sodium hypochlorite solution or equivalent.

B. Justification

The proposed change to this surveillance requirement will make it consistent with surveillance requirement 3.8.3.6 from NUREG-1431. The proposed removal of the requirement to clean the tank using a sodium hypochlorite solution or equivalent will allow greater flexibility for cleaning the tanks. Sodium hypochlorite is no longer a viable cleaning medium since it has been classified as a hazardous waste. More effective cleaning techniques are now available such as high-pressure water cleaning. The EDGRP will ensure that the method of cleaning the fuel oil tanks will not introduce surfactants in the fuel oil system that could potentially affect the operability and reliability of the emergency diesel generators.

XXIV. Technical Specification 4.8.1.1.3

A. Description of Proposed Change

This surveillance requirement currently requires the reporting of all emergency diesel generator failures, valid or nonvalid, in a Special Report to the Commission. It is being proposed that this surveillance requirement be deleted.

B. Justification

The deletion of this surveillance requirement is consistent with the guidance provided in Generic Letter 94-01 and is discussed under Technical Specification 4.8.1.1.2a. 10 CFR 50.72 and 50.73 still provide criteria that may require the notification of the Commission of significant emergency diesel generator failures. Also, guidance will be provided in the EDGRP on reporting failures of the emergency diesel generators.

XXV. Table 4.8-1

A. Description of Proposed Change

Reference Technical Specification 4.8.1.1.2a.

XXVI. Technical Specification 4.8.1.2

A. Description of Proposed Change

This surveillance requirement currently requires the demonstration of the operability of one circuit between the offsite transmission network and the onsite Class 1E Distribution System and one emergency diesel generator during Modes 5 and 6 by the performance of each of the requirements of Technical Specifications 4.8.1.1.1, 4.8.1.1.2 (except for Technical Specification 4.8.1.1.2a.5), and 4.8.1.1.3. It is being proposed that the reference to Technical Specification 4.8.1.1.3 be deleted.

B. Justification

The proposed deletion of the reference to Technical Specification 4.8.1.1.3 (Reports) is necessary since it is being proposed to eliminate Technical Specification 4.8.1.1.3 based on the guidance provided in the draft Generic Letter 94-01.

XXVII. Technical Specification Bases Section 3/4.8

A. Description of Proposed Change

It is being proposed that the Bases section of 3/4.8 be revised to describe, in part, the changes proposed by this license amendment request and provide greater detail concerning certain surveillance requirements and actions statements.

XXVIII. Technical Specification 6.8.4g

A. Description of Proposed Change

It is being proposed that this technical specification be added to the "Administrative Controls" section of the technical specifications in order to briefly describe the Diesel Fuel Oil Testing Program. The Diesel Fuel Oil Testing Program includes sampling and testing requirements, and acceptance criteria for both new fuel oil and stored fuel oil to ensure the proper quality of the fuel oil utilizing recommended fuel oil practices. The program provide means of determining whether new fuel oil is of the appropriate grade and has not been contaminated with substances that would have an immediate, detrimental impact on emergency diesel generator operability. Also, the program provides sufficient testing of stored fuel oil to ensure that fuel oil degradation is identified prior to potentially affecting emergency diesel generator operability or reliability.

This change is consistent, in part, with NUREG-1431. However, contrary to NUREG-1431, exception is taken to the limit placed on the total particulate concentration (10 mg/L) for stored fuel oil. Technical Evaluation Report PNL-7516 states that the particulate concentration limit is not an appropriate operability criterion for fuel in long term storage. Instead it was intended as an acceptance criterion for new fuel bound for storage and was taken from United States Federal

Government Specification W-F-800D. This federal specification requires the particulate level of new fuel to be less than 10 mg/liter, but it does not address the required particulate level of the stored fuel. Therefore, it is being proposed that new fuel shipments be checked to ensure particulate concentration is acceptable before the shipment is placed in storage. The particulate level of the stored fuel oil would continue to be monitored, trended, and maintained within the commercially acceptable limit of less than or equal to 20 mg/liter as part of the Diesel Fuel Oil Testing Program.

The technical specification requirement for a total particulate concentration limit for stored fuel oil is also contradicted by information from the Nuclear Maintenance Assistance Center (NMAC) as published in "Storage and Handling Requirements of Fuel Oil for Standby Diesel Generator Systems," (EPRI 1988). The generally accepted maximum limit for particulate contamination in diesel fuel is 20 to 25 mg/liter. None of the ASTM fuel specifications or emergency diesel generator manufacturers place a limit on total particulate concentration. The fuel filtering system on the emergency diesel generator engines is considered to be sufficient by the manufacturer (Fairbanks-Morse) to remove any particulate of concern. The fuel filters are of 10 micron size, while the filter used in the total particulate test is 0.8 microns. Thus, the particulates level test is indicating very small particles which are smaller than the mesh size of the engine fuel oil filters.

Also, contrary to NUREG-1431, exception is taken to the requirement for new fuel oil to have a clear and bright appearance with proper color. 40 CFR 80.29, "Fuels and Fuel Additives," was amended in 1992 to conform with the Clean Air Act Amendments of 1990. The Clean Air Act authorizes the EPA to require the use of a dye in high sulfur non-highway diesel fuel to differentiate it from low sulfur highway diesel fuel. Therefore, all emergency diesel generator high sulfur fuels are dyed, resulting in fuel with a greenish-blue appearance. As an alternate test method for the requirement in NUREG-1431 to test for clear and bright appearance with proper color, it is being proposed that new fuel oil be tested for water and sediment based on the applicable ASTM Standards. This proposed change will still ensure that the properties of new fuel oil are adequate to maintain the reliability and operability of the emergency diesel generators.

XXIX. Technical Specification 6.8.4h

A. <u>Description of Proposed Change</u>

It is being proposed that this technical specification be added to the "Administrative Controls" section of the technical specifications in order to briefly describe the Emergency Diesel Generator Reliability Program. The EDGRP will establish the requirements and guidelines for emergency diesel generator reliability, availability, and monitoring. The EDGRP will be based upon NUMARC 87-00, "Guidelines and Technical Bases for NUMARC Initiatives Addressing Station Blackout at Light Water Reactors," Revision 1, Appendix D. Also, provisions will be incorporated in the EDGRP for meeting the requirements of the

Maintenance Rule, 10 CFR 50.65. The EDGRP will require implementation of activities to ensure that: emergency diesel generator performance is maintained at an acceptable level and target reliability is achieved; emergency diesel generators whose performance deviates significantly from acceptable levels are subject to additional efforts to restore emergency diesel generator performance; and a graded response to declining emergency diesel generator reliability is implemented via action levels and remedial efforts developed from statistical analyses and programmatic experience.

Compliance with the requirements of the maintenance rule, as it applies to the emergency diesel generators, will be accomplished by: using an emergency diesel generator target reliability as the overall performance goal; using an emergency diesel generator target reliability and system availability goal as the overall performance criteria; using methods of the NUMARC program to monitor emergency diesel generator failures and govern the remedial actions taken when a failure occurs; screening emergency diesel generator failures for maintenance preventable function failures; and prescribing system parameters important to system performance and reliability that are to be monitored and trended.

This license amendment request proposes to revise the existing Wolf Creek Generating Station Technical Specification requirements concerning emergency diesel generator testing. These changes are in accordance with the intent of guidance provided by the Commission in Generic Letter 94-01, Generic Letter 93-05, Regulatory Guide 1.9, NUREG-1431, and manufacturer's recommendations. The proposed changes will serve to increase the overall emergency diesel generator reliability and longevity. Based on the aforementioned discussion, Wolf Creek Nuclear Operating Corporation has concluded that the proposed technical specification revisions do not adversely affect or endanger the health or safety of the general public or involve an unreviewed safety question.

ATTACHMENT II

NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

No Significant Hazards Consideration Determination

This license amendment request proposes revising Technical Specification 3/4.8.1 and its associated Bases to achieve an overall improvement in emergency diesel generator reliability and availability. These proposed changes adopt the guidance of Regulatory Guide 1.9, Revision 3, Generic Letter 93-05 and Generic Letter 94-01, deletes surveillance requirements that are either redundant, inappropriate, or better suited to be EDGRP requirements, and relocates fuel oil surveillance requirements to the Diesel Fuel Oil Testing Program.

Standard I - Involve a Significant Increase in the Probability or Consequences of an Accident Previously Evaluated

These proposed changes do not involve a change in the operational limits or physical design of the emergency power system. Emergency diesel generator operability and reliability will continued to be assured while minimizing the number of required emergency diesel generator starts. Also, emergency diesel generator reliability will be enhanced by minimizing severe test conditions which can lead to premature failures.

Standard II - Create the Possibility of a New or Different Kind of Accident from any Previously Evaluated

These proposed changes do not involve a change in the operational limits or physical design of the emergency power system. The performance capability of the emergency diesel generator will not be affected. Emergency diesel generator reliability and availability will be improved by the implementation of the proposed changes. There is no actual impact on any accident analysis.

Standard III - Involve a Significant Reduction in the Margin of Safety

These proposed changes do not involve a change in the operational limits or physical design of the emergency power system. The performance capability of the emergency diesel generator will not be affected. Emergency diesel generator reliability and availability will be improved by the implementation of the proposed changes. No margin of safety is reduced.

Based on the above discussions, it has been determined that the requested technical specification revision does not involve a significant increase in the probability or consequences of an accident or other adverse condition over previous evaluations; or create the possibility of an new or different kind of accident or condition over previous evaluations; or involve a significant reduction in a margin of safety. The requested license amendment does not involve a significant hazards consideration.

ATTACHMENT III

ENVIRONMENTAL IMPACT DETERMINATION

Environmental Impact Determination

10 CFR 51.22(b) specifies the criteria for categorical exclusions from the requirement for a specific environmental assessment per 10 CFR 51.21. This amendment request meets the criteria specified in 10 CFR 51.22(c)(9) as specified below:

(i) the amendment involves no significant hazards consideration

As demonstrated in Attachment II, the proposed changes do not involve any significant hazards consideration.

(ii) there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite

The proposed changes do not involve a change to the facility or operating procedures which would cause an increase in the amounts of effluents or create new types of effluents.

(iii) there is no significant increase in individual or cumulative occupational radiation exposure

The proposed changes do not create additional exposure to personnel nor affect levels of radiation present. Also, the proposed change does not result in any increase in individual or cumulative occupational radiation exposure.

Based on the above it is concluded that there will be no impact on the environment resulting from this change and the change meets the criteria specified in 10 CFR 51.22 for a categorical exclusion from the requirements of 10 CFR 51.21 relative to requiring a specific environmental assessment by the Commission.