

DEC 17 2002



LRN-02-0410
LCR H02-016

United States Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

**HOPE CREEK GENERATING STATION
REQUEST FOR ENFORCEMENT DISCRETION AND LICENSE AMENDMENT:
EMERGENCY DIESEL GENERATOR LOCKOUT RELAYS
FACILITY OPERATING LICENSE NPF-57
DOCKET NO. 50-354**

The purpose of this letter is to provide PSEG Nuclear LLC's (PSEG's) follow-up written request for Notice of Enforcement Discretion (NOED) and associated license amendment for the Hope Creek Generating Station (HCGS). The NOED was requested by PSEG and granted by NRC via telephone on December 13, 2002. The requirement for which enforcement discretion applies is the provision of HCGS Technical Specification (TS) 4.8.1.1.2.h.14 that requires Emergency Diesel Generator (EDG) lockout relay testing be done during shutdown. Each of the elements of a licensee request for Enforcement Discretion specified in NRC Manual Chapter 9900 is addressed in Attachment 1. PSEG requests the NOED remain in effect until such time as TS are amended to allow testing to meet TS 4.8.1.1.2.h.14 be performed during power operation in lieu of shutdown. The amendment request, contained in Attachments 2 and 3, applies on a one-time basis and would expire during restart from the next refueling outage. In accordance with 10CFR50.91(b)(1), a copy of this submittal has been sent to the State of New Jersey.

All four Hope Creek Emergency Diesel Generators (EDGs) were declared inoperable at 1307 on December 12, 2002 due to failure to fully comply with Technical Specification surveillance requirement 4.8.1.1.2.h.14.a. Technical Specification 4.0.3 was invoked, permitting 24 hours to complete the required surveillance activities. The surveillance requirement not met was to validate that generator differential current and low lube oil pressure independently provide trip and lockout inputs to the lockout relay 86R. These features have been satisfactorily tested during power operation, whereas TS 4.8.1.1.2.h requires the testing be performed during shutdown.

A001

At 1120 on December 13, 2002, it was discovered that portions of surveillances 4.8.1.1.2.h.14.b (backup relay 86B) and 4.8.1.1.2.h.14.c (breaker failure relay 86F) were missed for EDG A and EDG C. Technical Specification 4.0.3 was invoked, permitting 24 hours to complete the required surveillance activities. At the time of the NOED request at approximately 1430 hours on December 13, 2002, portions of testing to meet 4.8.1.1.2.h.14.b and 4.8.1.1.2.h.14.c were in progress. This testing has since been satisfactorily completed during power operation whereas TS 4.8.1.1.2.h requires the testing be performed during shutdown.

The subject testing is comparable to preventive maintenance activities that may be performed during power operation and do not require prior NRC approval, but the provision that the testing be done "during shutdown" results in a literal compliance issue with TS 4.8.1.1.2.h.14. Hope Creek Generating Station is currently in Operational Condition 1, Power Operation. Absent NRC approval of the requested NOED, the provisions of Technical Specification 3.0.3 would have required HCGS to shut down on December 13, 2002.

Pursuant to 10 CFR 50.90, PSEG hereby requests an amendment to TS 4.8.1.1.2.h.14 for HCGS, to allow testing be performed at power until startup from the eleventh refueling outage. Approval and implementation of the requested amendment would allow the testing that has been completed to be used to comply with TS 4.8.1.1.2.h.14, thereby obviating the need for enforcement discretion.

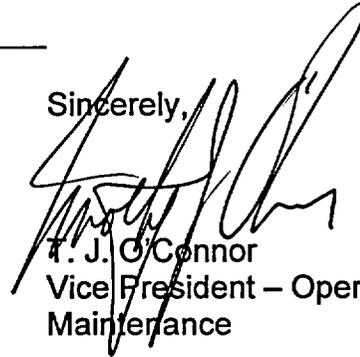
PSEG has evaluated the proposed TS change in accordance with 10 CFR 50.91(a)(1) using the criteria of 10 CFR 50.92(c), and has determined that this request involves no significant hazards considerations. An evaluation of the requested changes is provided in Attachment 2 to this letter. In addition, there is no significant increase in the amount or types of any effluents that may be released offsite, and there is no significant increase in individual or cumulative occupational radiation exposure. Consequently, the proposed amendment satisfies the criteria of 10 CFR 51.22(c)(9) for categorical exclusion from the requirement for an environmental assessment. The marked up Technical Specification page affected by the proposed change is provided in Attachment 3.

If you have any questions concerning this request, please contact Mr. William
McTigue at (856) 339-1033.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on 10-17-2002

Sincerely,



F. J. O'Connor
Vice President – Operations and
Maintenance

Attachments (3)

C Mr. Hubert J. Miller, Administrator - Region I
U. S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Mr. G. Wunder
Licensing Project Manager – Hope Creek
U. S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Mail Stop 8B2
Rockville, MD 20852

USNRC Senior Resident Inspector – Hope Creek (X24)

Mr. K. Tosch, Manager, IV
Bureau of Nuclear Engineering
P.O. Box 415
Trenton, NJ 08625

WJM

BC Vice President - Operations and Maintenance (X10)
Vice President – Technical Support (X10)
Manager – Hope Creek Operations (S01)
Manager - Licensing (N21)
Program Manager - Nuclear Review Board (N38)
J. Keenan, Esq. (N21)
Records Management (N21)
Microfilm Copy
File No. 2.10, 5.19

**DISCUSSION OF ELEMENTS OF A REQUEST FOR ENFORCEMENT DISCRETION
AS SPECIFIED IN NRC INSPECTION MANUAL PART 9900**

HOPE CREEK GENERATING STATION

1. The TS or other license conditions that will be violated.

Hope Creek Technical Specification 4.8.1.1.2.h requires each Emergency Diesel Generator (EDG) be demonstrated OPERABLE "At least once per 18 months during shutdown, by...

14. Verifying that the following diesel generator lockout features prevent diesel generator starting only when required:

- a) Engine overspeed, generator differential, and low lube oil pressure (regular lockout relay, (1) 86R).
- b) Backup generator differential and generator overcurrent (backup lockout relay, (1) 86B)
- c) Generator ground and lockout relays – regular, backup and test, energized (breaker failure lockout relay, (1) 86F)"

Relief is requested from the provision of TS 4.8.1.1.2.h.14 that requires the surveillance testing be performed during shutdown.

2. The circumstances surrounding the situation, including apparent root causes, the need for prompt action and identification of any relevant historical events.

All four Hope Creek Emergency Diesel Generators were declared inoperable at 1307 on December 12, 2002 due to failure to comply with Technical Specification surveillance requirement 4.8.1.1.2.h.14.a. Technical Specification 4.0.3 was invoked, permitting 24 hours to complete the required surveillance activities. The surveillance activity not performed was to validate that generator differential current and low lube oil pressure independently provide trip and lockout inputs to the 86R lockout relay.

At 1120 on December 13, 2002, it was discovered that portions of surveillances 4.8.1.1.2.h.14.b (backup lockout relay 86B) and 4.8.1.1.2.h.14.c (breaker failure lockout relay 86F) were also missed for EDG A and EDG C. Technical Specification 4.0.3 was invoked, permitting 24 hours to complete the required surveillance activities.

These features have been satisfactorily tested during power operation, whereas Technical Specification 4.8.1.1.2.h requires the testing be performed during shutdown.

Surveillance procedures intended to satisfy Technical Specification 4.8.1.1.2.h.14 do not completely test the circuit. The Technical Specification Surveillance Improvement Project (TSSIP) that performed reviews in accordance with NRC Generic Letter 96-01 to ensure complete testing of safety related logic circuits, did not identify the absence of testing to independently verify actuation of the lockout relays. The apparent cause of these missed surveillance requirements is therefore failure to identify incomplete testing during the TSSIP review. This resulted in certain portions of the relay logic testing being missed (i.e., actuation of the 86R relay due to low lube oil pressure), and other portions being done as a 36 month preventive maintenance activity in lieu of a surveillance test (i.e., actuation of the 86R relay by the generator differential signal, and the missed portions of TS 4.8.1.1.2.h.14.b and 4.8.1.1.2.h.14.c).

PSEG requests prompt NRC action in this case because the 24 hour provision of Technical Specification 4.0.3 expired at 1307 hours on December 13, 2002. This would require plant shutdown per TS 3.0.3, even though the functional capability of subject EDG lockout features have been adequately demonstrated at power.

- 3. The safety basis for the request, including an evaluation of the safety significance and potential consequences of the proposed course of action. This evaluation should include at least a qualitative risk assessment using both risk insights and informed judgments, as appropriate.**

Safety Analysis

The portions of the lockout features that had not been tested in accordance with TS 4.8.1.1.2.h.14 have been tested satisfactorily. Relief was requested because verbatim compliance with TS 4.8.1.1.2.h.14 would have required the testing be performed during shutdown. The scope of the requested relief is to allow credit be taken for testing performed during power operation to meet a portion of the EDG testing that is required by TS to be performed during shutdown. The testing in question is comparable to preventive maintenance or post-maintenance testing that may be performed during power operation without prior NRC approval. The request is to resolve a verbatim compliance issue with no safety significance, to avoid unwarranted plant shutdown that would be required by literal compliance with TS 4.8.1.1.2.h.14.

Risk Assessment

The missed surveillance testing has been completed to adequately demonstrate the functional capability of the subject EDG lockout features. There is no increase in risk associated with this request.

4. The justification for the duration of the noncompliance.

As described in Item 3, above, this request as an alternative to plant shutdown does not involve an increase in risk. The requested duration is for discretion to be granted until such time as an amendment may be approved and implemented to allow TS 4.8.1.1.2.h.14 be met by taking credit for testing performed during power operation, until restart from the next refueling outage. The need for enforcement discretion would be obviated by approval and implementation of the requested amendment.

5. The basis for the licensee's conclusion that the noncompliance will not be of potential detriment to the public health and that no significant hazard consideration is involved.

Determination of No Significant Hazards Consideration

This proposed enforcement discretion:

Does not involve a significant increase in the probability or consequences of an accident previously evaluated.

This request is only administrative in nature. Portions of the protective Emergency Diesel Generator (EDG) lockout function testing required by Technical Specification (TS) 4.8.1.1.2.h.14 were discovered to have been missed and have since been satisfactorily performed during power operation. Although the surveillance requirement cannot be literally complied with due to the wording that it must be performed during shutdown conditions, the emergency diesel generators are still capable of fulfilling their design basis accident functions.

Therefore, the request does not involve a significant increase in the probability or consequences of an accident previously evaluated.

Does not create the possibility of a new or different kind of accident from any accident previously evaluated.

The request is only administrative in nature in that surveillance requirement 4.8.1.1.2.h requires the surveillance to be performed during shutdown. The operability of the EDG lockout functions has been satisfactorily demonstrated; however the surveillance requirement can not be administratively completed due to the shutdown conditions identified in the surveillance requirement. Since no physical changes are being made to the plant and there are no changes being

made to the operation of Hope Creek, this request does not create the possibility of a new or different kind of accident from any accident previously evaluated.

Does not involve a significant reduction in a margin of safety.

The operability of the EDG lockout functions has been satisfactorily demonstrated, however the surveillance requirement cannot be administratively completed due to the shutdown conditions identified in the surveillance requirement. Since there is no impact to the ability of the EDG's to function during a design basis accident, this request does not involve a significant reduction in a margin of safety.

6. The basis for the licensee's conclusion that the noncompliance will not involve adverse consequences to the environment.

The requested enforcement discretion does not cause any increase in effluents that may be released offsite, does not involve an increase in radiation exposure to the public, and does not involve a Significant Hazards Consideration. Therefore, the request does not involve any environmental consequences.

7. Any proposed compensatory measures.

Because the EDG lockout features have been demonstrated capable of performing their safety functions with no adverse risk to the plant, no compensatory actions are warranted.

8. A statement that the request has been approved by the facility organization that normally reviews safety issues (Plant Onsite Review Committee, or its equivalent)

The Station Operations Review Committee reviewed and approved this requested enforcement discretion before PSEG made the request via telephone call on December 13, 2002.

9. The request must specifically address how one of the NOED criteria for appropriate plant conditions specified in Section B is satisfied.

The applicable NRC Inspection Manual Part 9900 NOED criterion for this request is criterion 1.a:

The requested NOED applies to an operating plant, and is intended to avoid unnecessary transients as a result of compliance with the license condition and, thus, minimize potential safety consequences and operational risks.

- 10. If a follow-up license amendment is required, the NOED request must include marked-up TS pages showing the proposed TS changes and a commitment to submit the actual license amendment request within 2 working days. The amendment request must describe and justify the exigent circumstances.**

This NOED is requesting enforcement discretion until such time as an amendment may be granted to allow performance of 4.8.1.1.2.h.14 during power operation on a one-time basis. The requested amendment is provided in Attachments 2 and 3 and includes an explanation of exigent circumstances.

- 11. Severe Weather or Other Natural Phenomena**

Criterion 11 applies to conditions involving severe weather or other natural phenomena, and is not applicable to this request.

**HÖPE CREEK GENERATING STATION
FACILITY OPERATING LICENSE NO. NPF-57
DOCKET NO. 50-354**

**EVALUATION OF REVISIONS TO THE TECHNICAL SPECIFICATIONS
EMERGENCY DIESEL GENERATOR LOCKOUT RELAY TESTING**

1. DESCRIPTION

The proposed change to the Technical Specifications (TS) 4.8.1.1.2.h.14 would allow testing of the Hope Creek Generating Station (HCGS) Emergency Diesel Generators (EDGs) during power operation until restart from the next refueling outage (RFO 11, scheduled for April 2003). TS 4.8.1.1.2.h comprise the EDG surveillance requirements that must be met every 18 months during shutdown. This change would allow TS 4.8.1.1.2.h.14 to be satisfied in part by testing that has been performed during power operation upon discovery that certain surveillance requirements were missed. This amendment request is a follow-up to the request for enforcement discretion contained in Attachment 1.

2. PROPOSED CHANGE

Hope Creek Technical Specification 4.8.1.1.2.h requires each Emergency Diesel Generator (EDG) be demonstrated OPERABLE "At least once per 18 months during shutdown, by...

14. Verifying that the following diesel generator lockout features prevent diesel generator starting only when required:

- a) Engine overspeed, generator differential, and low lube oil pressure (regular lockout relay, (1) 86R).
- b) Backup generator differential and generator overcurrent (backup lockout relay, (1) 86B)
- c) Generator ground and lockout relays – regular, backup and test, energized (breaker failure lockout relay, (1) 86F)"

The proposed change would add the following footnote to TS 4.8.1.1.2.h.14:

"Surveillance Requirement 4.8.1.1.2.h.14 is allowed to be performed at power until startup from the eleventh refueling outage (RFO 11)."

3. BACKGROUND

This request is being submitted as a follow-up to the request for enforcement discretion in Attachment 1 that contains background information regarding the circumstances of the proposed TS amendment.

4. TECHNICAL ANALYSIS

The proposed change is administrative in nature because it addresses an issue of verbatim compliance with no safety significance. Upon discovery that portions of TS 4.8.1.1.2.h.14 were missed, PSEG reviewed completed preventive

maintenance procedures and performed additional testing to confirm the functional capability of the EDG lockout features addressed in TS 4.8.1.1.2.h.14. The provision of TS 4.8.1.1.2.h that requires testing be performed during shutdown precludes PSEG from taking credit for the on-line testing to meet the surveillance requirement. The scope of this amendment request is to enable PSEG to take credit for the testing that has been performed on-line to satisfy TS 4.8.1.1.2.h.14. The requested amendment applies on a one-time basis until the next refueling outage.

5. REGULATORY SAFETY ANALYSIS

5.1 No Significant Hazards Consideration

PSEG Nuclear LLC (PSEG) has evaluated whether or not a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10 CFR 50.92, Issuance of amendment," as discussed below.

1. The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

This request is only administrative in nature. Portions of the protective Emergency Diesel Generator (EDG) lockout function testing required by Technical Specification (TS) 4.8.1.1.2.h.14 were discovered to have been missed and have since been satisfactorily performed during power operation. The provision of TS 4.8.1.1.2.h that requires testing be performed during shutdown precludes PSEG from taking credit for the on-line testing to meet the surveillance requirement. The scope of this amendment request is to enable PSEG to take credit for the testing that has been performed at power to satisfy TS 4.8.1.1.2.h.14. The requested amendment applies on a one-time basis until the next refueling outage. The change is administrative and cannot affect the initiation of any accident, nor does it affect the capability of the EDGs to fulfill their design basis accident functions.

Therefore, the request does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated.

The request is only administrative in nature in that surveillance requirement 4.8.1.1.2.h requires the surveillance to be performed during shutdown. The operability of the EDG lockout functions has been satisfactorily demonstrated; however the surveillance requirement as presently written cannot be

administratively completed due to the shutdown conditions identified in the surveillance requirement. Since no physical changes are being made to the plant and there are no changes being made to the operation of Hope Creek, this request does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. The proposed amendment does not involve a significant reduction in a margin of safety.

The operability of the EDG lockout functions has been satisfactorily demonstrated, however the surveillance requirement as written cannot be administratively completed due to the shutdown conditions identified in the surveillance requirement. Since there is no impact to the ability of the EDG's to function during a design basis accident, this request does not involve a significant reduction in a margin of safety.

5.2 Applicable Regulatory Requirements/Criteria

5.2.1 Basis for Exigent Circumstances

In accordance with the NRC Inspection Manual Part 9900 Technical Manual: Guidance, Operations – Notices of Enforcement Discretion (NOED) dated November 2, 2001, the amendment proposed herein requires description and justification of exigent circumstances. The proposed amendment is associated with a request for NOED requested by telephone on December 13, 2002. The NOED was necessitated by discovery of missed surveillances and entry in the 24 hour action requirements of TS 4.0.3 at 1307 hours on December 12, 2002. Absent the requested NOED, unit shutdown would have been required to comply with the "during shutdown" provision of TS 4.8.1.1.2.h, notwithstanding the successful performance of the missed surveillance testing during power operation. Exigent treatment of the amendment request in accordance with 10 CFR 50.91(a)(6) is appropriate because PSEG acted promptly upon discovery of the missed surveillances; approval and implementation of the requested amendment would obviate the need for the NOED that is currently in effect.

5.2.2 Other Applicable Regulatory Requirements/Criteria

For EDG Surveillance Requirements in NUREG-1433 Revision 2, "Standard Technical Specifications, General Electric Plants BWR/4," that are normally performed during shutdown, a note is included that allows their performance during power operation "to reestablish OPERABILITY provided an assessment

determines the safety of the plant is maintained or enhanced.” The proposed change is consistent with this note in that it reestablishes operability based on surveillance testing that has been performed at power with no adverse safety impact.

The proposed change is also consistent with the current HCGS TS definition 1.22, LOGIC SYSTEM FUNCTIONAL TEST that allows any series of sequential, overlapping or total system testing to demonstrate that an entire logic system is tested. Although it is not explicitly defined as a LOGIC SYSTEM FUNCTIONAL TEST, HCGS TS 4.8.1.1.2.h.14 is met by demonstrating the proper response of the EDG lockout relays via a series of tests of their actuation logic and output. The proposed amendment would allow credit be taken for those portions of the testing that have been performed during power operation.

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission’s regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

6. ENVIRONMENTAL IMPACT EVALUATION

PSEG has determined that the proposed amendment would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

7. REFERENCES

- 7.1 NUREG-1433, Revision 2, June 2001, Standard Technical Specifications, General Electric Plants, BWR/4
- 7.2 NRC Inspection Manual Part 9900: Technical Guidance, Operations – Notices of Enforcement Discretion, November 2, 2001

**HOPE CREEK GENERATING STATION
FACILITY OPERATING LICENSE NPF-57
DOCKET NO. 50-354
REVISIONS TO TECHNICAL SPECIFICATIONS**

TECHNICAL SPECIFICATION PAGE WITH PROPOSED CHANGES

The following Technical Specification for Facility Operating License NPF-57 is affected by this change request:

Technical Specification	Page
4.8.1.1.2.h.14	3/4 8-8

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

10. Verifying the diesel generator's capability to:
 - a) Synchronize with the offsite power source while the generator is loaded with its emergency loads upon a simulated restoration of offsite power,
 - b) Transfer its loads to the offsite power source,
 - c) Be restored to its standby status, and
 - d) Diesel generator circuit breaker is open.
11. Verifying that with the diesel generator operating in a test mode and connected to its bus, a simulated ECCS actuation signal overrides the test mode by (1) returning the diesel generator to standby operation, and (2) automatically energizes the emergency loads with offsite power.
12. Verifying that the fuel oil transfer pump transfers fuel oil from each fuel storage tank to the day tank of each diesel via the installed cross connection lines.
13. Verifying that the automatic load sequence timer is OPERABLE with the interval between each load block within $\pm 10\%$ of its design interval.
14. Verifying that the following diesel generator lockout features prevent diesel generator starting only when required: *
 - a) Engine overspeed, generator differential, and low lube oil pressure (regular lockout relay, (1) 86R).
 - b) Backup generator differential and generator overcurrent (backup lockout relay, (1) 86B)
 - c) Generator ground and lockout relays-regular, backup and test, energized (breaker failure lockout relay, (1) 86F)
- i. At least once per 10 years or after any modifications which could affect diesel generator interdependence by starting all diesel generators simultaneously, during shutdown, and verifying that all diesel generators accelerate to at least 514 rpm in less than or equal to 10 seconds.
- j. At least once per 10 years by:
 1. Draining each fuel oil storage tank, removing the accumulated sediment and cleaning the tank using a sodium hypochlorite solution or equivalent, and

* Surveillance Requirement 4.8.1.1, 2, h, 14 is allowed to be performed at power until startup from the eleventh refueling outage (RF011).