

January 10, 2003

Mr. Harold W. Keiser  
Chief Nuclear Officer & President  
PSEG Nuclear LLC-X04  
Post Office Box 236  
Hancocks Bridge, NJ 08038

SUBJECT: HOPE CREEK GENERATING STATION - ISSUANCE OF AMENDMENT RE:  
EXIGENT CHANGE REGARDING EMERGENCY DIESEL GENERATOR OUTPUT  
BREAKER LOCKOUT RELAYS (TAC NO. MB6965)

Dear Mr. Keiser:

The Commission has issued the enclosed Amendment No. 141 to Facility Operating License No. NPF-57 for the Hope Creek Generating Station. This amendment consists of changes to the Technical Specifications (TSs) in response to your application dated December 17, 2002, as supplemented December 31, 2002. The amendment modifies Surveillance Requirement 4.8.1.1.2.h.14 to allow the required surveillance to be performed at power until startup from the eleventh refueling outage.

A copy of our safety evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

*/RA/*

George F. Wunder, Project Manager, Section 2  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-354

Enclosures: 1. Amendment No. 141 to  
License No. NPF-57  
2. Safety Evaluation

cc w/encls: See next page

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DATE	01/09/03	01/09/03	01/09/03	01/07/03	01/09/03	01/09/03

OFFICIAL RECORD COPY

\*Safety Evaluation dated January 7, 2003

\*\*See previous Concurrence

Hope Creek Generating Station

cc:

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Lower Alloways Creek Township  
c/o Mary O. Henderson, Clerk  
Municipal Building, P.O. Box 157  
Hancocks Bridge, NJ 08038

PSEG NUCLEAR LLC

DOCKET NO. 50-354

HOPE CREEK GENERATING STATION

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No.141  
License No. NPF-57

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment filed by the PSEG Nuclear LLC December 17, 2002, as supplemented on December 31, 2002, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-57 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 141, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into the license. PSEG Nuclear LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. The license amendment is effective as of its date of issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA by VNurses for/*

James W. Clifford, Chief, Section 2  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical  
Specifications

Date of Issuance: January 10, 2003

ATTACHMENT TO LICENSE AMENDMENT NO. 141

FACILITY OPERATING LICENSE NO. NPF-57

DOCKET NO. 50-354

Replace the following page of the Appendix A Technical Specifications with the attached revised page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

Remove  
3/4 8-8

Insert  
3/4 8-8

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 141 TO FACILITY OPERATING LICENSE NO. NPF-57

PSEG NUCLEAR LLC

HOPE CREEK GENERATING STATION

DOCKET NO. 50-354

## 1.0 INTRODUCTION

By letter dated December 17, 2002, as supplemented by letter dated December 31, 2002, PSEG Nuclear LLC (the licensee) proposed a change to the Facility Operating License NPF-57 for Hope Creek Generating Station (Hope Creek).

The proposed change will revise Technical Specification (TS) 4.8.1.1.2.h.14 that requires Emergency Diesel Generator (EDG) lockout relay testing to be performed during shutdown. The proposed change would allow, on a one-time basis, testing of the EDG during power operation until restart from the next refueling outage (RFO 11, scheduled for April 2003).

## 2.0 REGULATORY EVALUATION

General Design Criterion (GDC) - 17, "Electrical Power System," of Appendix A, "General Design Criterion for Nuclear Power Plants," to 10 CFR Part 50 requires, in part, that nuclear power plants have an onsite and offsite electric power system to permit the functioning of structures, systems and components important to safety. The onsite system is required to have sufficient independence, redundancy and testability to perform its safety function, assuming a single failure. The offsite system is required to have two independent supply circuits to the onsite system. In addition, this criterion requires provisions to minimize the probability of losing electric power from the remaining electric power supplies as the result of loss of power from the unit, the offsite transmission network, or the onsite power supplies. GDC-18, "Inspection and Testing of Electric Power System," requires that electric power systems important to safety be designed to permit appropriate periodic inspection and testing.

The onsite standby emergency power system at Hope Creek consists of four EDGs that supply the four safety-related load groups. The sizing of EDGs and the loads assigned among them is such that any combination of three out of four of these EDGs are capable of shutting down the plant safely, maintaining the plant in a safe shutdown condition, and mitigating the consequences of accidental conditions.

## 3.0 TECHNICAL EVALUATION

Hope Creek TS 4.8.1.1.2.h.14 requires each EDG be demonstrated OPERABLE at least once per 18 months during shutdown, by...

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 licensee is requesting a relief from the provision of the TS that requires the surveillance testing be performed during shutdown by adding 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 (RFO11)"

All four Hope Creek EDGs were declared inoperable at 1307 on December 12, 2002, due to failure to comply with TS Surveillance Requirement (SR) 4.8.1.1.2.h.14.a. TS 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 provided 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. TS 4.0.3 was invoked, permitting 24 hours to complete the required surveillance activities.

The apparent cause of these missed SRs is failure to identify incomplete testing during the Technical Specification Surveillance Improvement Project.

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

The proposed addition of the footnote is administrative. The requirement of testing being performed during shutdown precludes the licensee from taking credit for the on-line testing to meet the SR. The operability of the EDG lockout functions has been satisfactorily demonstrated; however, the SR as presently written cannot be administratively completed due to the shutdown conditions identified in the SR. SRs for EDG in NUREG-1433, Revision 2, "Standard Technical Specifications, General Electric Plants BWR/4" that are normally performed during shutdown, contain a note that allows their performance during power operation "to reestablish OPERABILITY provided an assessment determines the safety of the plant is maintained or enhanced."

This is acceptable as it reestablishes operability based on surveillance testing that has been performed at power with no adverse safety impact.



#### 4.0 EXIGENT CIRCUMSTANCES

All four EDGs were declared inoperable at 1307 on December 12, 2002, due to a failure to comply fully with SR 4.8.1.1.2.h.14.a. TS 4.03 was invoked permitting 24 hours to complete the required surveillance activities. The SR not met was to verify that generator differential current and low lube oil pressure independently provide trip and lockout inputs to the lockout relay. These failures have been satisfactorily tested during power operation, whereas TS 4.8.1.1.2.h requires the testing to be performed during shutdown. On December 13, 2002, the NRC issued a verbal Notice of Enforcement Discretion (NOED) to allow the licensee to declare the EDGs operable based on successful completion of the SR at power. Because the licensee is operating under a verbal NOED, the NRC finds that an exigent review is appropriate.

#### 5.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATIONS DETERMINATION

The Commission's regulations at 10 CFR 50.92 state that the Commission may make a final determination that a license amendment involves no significant hazards considerations if operation of the facility in accordance with the amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated, or (2) create the possibility of a new or different kind of accident from any accident previously evaluated, or (3) involve a significant reduction in a margin of safety. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration which is presented 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.

Based on the above considerations the NRC staff concludes that the amendment meets the three criteria of 10 CFR 50.92; therefore, the staff has made a final determination that the proposed amendment does not involve a significant hazards consideration.

## 6.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New Jersey State Official was notified of the proposed issuance of the amendment. The State official had no comments.

## 5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a surveillance requirement. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (67 FR 79163). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

## 6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (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.

Principal Contributor: S. Saba

Date: January 10, 2003