



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 65 TO FACILITY OPERATING LICENSE NO. NPF-57

PUBLIC SERVICE ELECTRIC & GAS COMPANY

ATLANTIC CITY ELECTRIC COMPANY

HOPE CREEK GENERATING STATION

DOCKET NO. 50-354

1.0 INTRODUCTION

By letter dated May 21, 1993, as supplemented on August 23, 1993, the Public Service Electric & Gas Company (the licensee) submitted a request for changes to the Hope Creek Generating Station, Technical Specification (TS). The requested changes would revise a Technical Specifications surveillance requirement to increase the voltage limit from 4580 to 4785 volts when performing the 18-month emergency diesel generator (EDG) full load rejection test. The August 23, 1993, letter provided clarifying information that did not change the initial proposed no significant hazards consideration determination.

2.0 DESCRIPTION

The licensee's request would revise surveillance requirement 4.8.1.1.2.h.3 to increase the voltage limit to 4785 volts when performing the 18-month EDG full load rejection test. The "##" and corresponding footnote applicable to Section 4.8.1.1.2.h would also be deleted.

The current TS limit the maximum voltage when performing the continuous rating load rejection test on the EDGs to 4580 volts both during and after the surveillance.

3.0 EVALUATION

Surveillance 4.8.1.1.2.h.3 is intended to demonstrate the EDGs' capability to reject a full load without overspeed tripping or exceeding the predetermined voltage limits. An EDG full load rejection may occur because of a system fault or inadvertent breaker tripping. This surveillance ensures proper EDG response under the simulated test conditions. This test simulates the loss of the total connected load that the EDG experiences following a full load rejection and verifies that the EDG does not trip upon loss of the load. The acceptance criteria ensure that the EDG is not degraded for future application, including reconnection to the bus, if the cause of the EDG bus trip can be corrected or isolated.

The staff reviewed the licensee's proposal to determine if the EDGs could be damaged by the increased allowable voltage. In its original submittal, the

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licensee stated that there would be no detrimental effects on the generator if 4785 volts would be experienced. The licensee also stated that during the initial manufacturer's acceptance test, a high-pot on the generator was performed with a voltage of 1.5 times the nominal rating (6240 volts) applied to the unit.

During a telephone call, the staff questioned the effect on the generator and components upstream of the EDG output breaker from a 15% voltage spike. In an August 23, 1993 letter, the licensee responded that the effects were evaluated and found to be negligible.

The staff reviewed the licensee's submittals against the guidance of Standard Review Plan 8.3.1, and Regulatory Guide 1.9 (Revision 3); and the requirements of General Design Criteria 17, "Electric Power Systems," and 18, "Inspection and Testing of Electric Power Systems." Based on its review, the staff finds that the licensee's proposal complies with the guidance and requirements listed above and will not adversely effect the operability of the EDGs. Therefore, the licensee's proposal is acceptable.

The "##" footnote on TS page 3/4 8-6 pertained to a one time surveillance interval extension for the 1AG400 and 1DG400 Emergency Diesel Generators. This extension is no longer applicable since it expired on October 15, 1989. This is an editorial revision to the TS and the staff finds it acceptable.

3.0 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.

4.0 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 (58 FR 34091). 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.

5.0 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. Dembek

Date: February 4, 1994