



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 93 TO FACILITY OPERATING LICENSE NO. DRP-75

PUBLIC SERVICE ELECTRIC & GAS COMPANY

PHILADELPHIA ELECTRIC COMPANY

DELMARVA POWER AND LIGHT COMPANY

ATLANTIC CITY ELECTRIC COMPANY

SALEM GENERATING STATION, UNIT NO. 2

DOCKET NO. 50-311

1.0 INTRODUCTION

By letter dated July 27, 1990, Public Service Electric & Gas Company requested an amendment to Facility Operating License No. DPR-75 for the Salem Generating Station, Unit No. 2. The proposed amendment would change the emergency diesel generator (EDG) surveillance test frequency basis in the Salem 2 technical specifications (TS) from the number of failures in the last 100 valid starts per nuclear unit to the number of failures in the last 20 valid starts per diesel generator. The NRC staff recommended these changes in Generic Letter 84-15.

2.0 EVALUATION

Table 4.8-1 of Salem Unit 2 technical specifications addresses emergency diesel generator testing frequency. The present requirement bases the diesel generator test frequency on the number of failures in the last 100 tests on a per nuclear unit basis. Based on the results of the last 100 valid tests, the present test frequency is once per 3 days for each of the three Salem Unit 2 emergency diesel generators, or one diesel generator start per day. The licensee has estimated that 30 consecutive successful tests would be required to increase the EDG test interval to 7 days per present TS and 35 consecutive successful tests would be required for a 31 day test interval. In order to prevent excessive diesel starts, the licensee has proposed to base the test frequency on the last 20 tests rather than the last 100 tests. With this proposed change, if a diesel generator has one or less failures in the last 20 tests, its test frequency would be once per 31 days. Whenever a diesel generator unit has experienced two or more failures in the last 20 tests, the test frequency would be reduced to seven days. This test frequency would be maintained until seven consecutive failure-free tests have been

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performed and the number of failures in the last 20 tests has been reduced to one or less. In addition, the licensee has proposed to base the test frequency on a per diesel generator basis rather than per nuclear unit basis. This would result in an immediate reduction in test frequency and prevent PSE&G from having to perform the excessively high number of tests required in the present situation (i.e., one diesel start per day).

Based on the above, the staff finds the proposed revised Table 4.8-1 to be consistent with the recommendations of Generic Letter 84-15 to improve and maintain EDG reliability by reducing unnecessary EDG testing and is acceptable.

3.0 EXIGENT CIRCUMSTANCES

The Commission's regulation, 10 CFR 50.91, provides special exceptions for issuance of amendments when the usual 30-day public notice period cannot be met. One type of special exception is an exigency. An exigency is a case in which the staff and licensee need to act quickly and time does not permit the Commission to publish a Federal Register notice allowing 30 days for prior public comment, and the Commission also determines that the amendment involves no significant hazards considerations. In this instance, the need for action is based on the excessive number of EDG surveillance tests. The current TS require a test frequency of once every 3-days for each of the Salem 2 EDG's.

In addition, 30 consecutive successful tests would be required to increase the EDG test interval to 7 days per the present Technical Specifications; 35 tests would be required for a 31 day interval. In order to prevent excessive diesel starts, consistent with the staff's recommendations, exigent approval of proposed Table 4.8-1 would result in a 31 day interval for each Unit 2 EDG, and would assure that the interval would not be less than 7 days. If the normal approval process is used, including the thirty day public comment period, then the accelerated testing schedule would result in a significant number of additional diesel starts. These additional starts have been shown to be unnecessary by Generic Letter 84-15. Therefore, approval of this request on an exigent basis will eliminate undue wear and stress on the diesel engines, without resulting in a reduction in safety.

The licensee had made application to change the EDG technical specifications in late 1987. The staff determined that significant revisions to the application had to be made and the licensee was so notified in mid 1989. Table 4.8-1 was only a small part of the proposed change. The licensee was in the process of revising the application when the fourth EDG failure to start occurred at Salem 2. When the licensee's licensing staff became aware of the test frequency of the EDGs, application was made to change that portion of the TS. The staff finds that

the licensee did not deliberately or negligently cause the exigent situation to come into being. Failure of the Commission to act on the licensee's request would result in undue wear and stress on the EDGs at Salem 2.

4.0 FINAL NO SIGNIFICANT HAZARDS DETERMINATION CONSIDERATION

The Commission has provided standards for determining whether a significant hazards consideration exists (10 CFR 50.92(c)). A proposed amendment to an operating license for a facility involves no significant hazards consideration if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated; (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.

The licensee has analyzed the proposed amendment to determine if a significant hazards consideration exists:

The proposed change to Technical Specifications Table 4.8-1 for Salem Unit No. 2:

- (1) does not involve a significant increase in the probability or consequences of an accident previously evaluated. Reducing the test frequency is intended to increase overall diesel reliability by minimizing severe test conditions which can lead to premature failures. The proposed change will continue to assure availability of the diesels and should serve to enhance the reliability and consequently the overall safe operation of the diesel generators.
- (2) do[es] not create the possibility of a new or different kind of accident from any accident previously evaluated. The proposed change affects only EDG testing frequency and has no impact on the accident analysis. No new operating modes or equipment are introduced which could initiate or affect the progression of an accident.
- (3) [does not] involve a significant reduction in a margin of safety. The change in the testing frequency does not adversely affect the capability of the diesels to perform their required function. Rather, the purpose of the proposed change is to increase the overall reliability of the diesels consistent with Generic Letter 84-15.

Based on the above considerations, including the staff's safety evaluation, the staff concludes that the amendment meets the standards set forth in 10 CFR 50.92 for a no significant hazards determination. Therefore, the staff has made a final determination that the proposed amendment involves no significant hazards consideration.

5.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change to a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes to the surveillance requirements. The 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 this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this 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 this amendment.

4.0 CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the Federal Register (55 FR 31919) on August 6, 1990 and consulted with the State of New Jersey. No public comments were received and the State of New Jersey did not have any comments.

We have concluded, based on the consideration discussed above, that (1) because the requested changes do not involve a significant increase in the probability or consequences of an accident previously evaluated, do not create the possibility of an accident of a type different from any evaluated previously, and do not involve a significant reduction in a margin of safety, the amendments do not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations, and the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Dated: August 22, 1990

Principal Contributors:

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