



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NOS. 168 AND 172 TO FACILITY OPERATING

LICENSE NOS. DPR-44 and DPR-56

PHILADELPHIA ELECTRIC COMPANY
PUBLIC SERVICE ELECTRIC AND GAS COMPANY
DELMARVA POWER AND LIGHT COMPANY
ATLANTIC CITY ELECTRIC COMPANY

PEACH BOTTOM ATOMIC POWER STATION, UNIT NOS. 2 AND 3

DCCKET NOS. 50-277 AND 50-278

1.0 INTRODUCTION

By letter dated January 31, 1992, as supplemented by letters dated April 28, 1992, and June 22, 1992, the Philadelphia Electric Company, Public Service Electric and Gas Company, Delmarva Power and Light Company and Atlantic City Electric Company (the licensees) submitted a request for changes to the Peach Bottom Atomic Power Station, Units 2 and 3, Technical Specifications (TS). The requested change would modify the surveillance requirements for the Emergency Diesel Generators (EDGs). The original application dated January 31, 1992 indicated that the licensee would be prepared to implement the enhanced testing requirements no earlier than July 31, 1992. Subsequent discussions with the NRC staff (the staff) determined that the licensee planned a series of EDG overhauls through the summer of 1992. By letter dated June 22, 1992, the licensee supplemented the original January 31, 1992 application by requesting that one provision of the original application be reviewed by the staff in advance of the remaining changes in order to better support the EDG overhauls. This safety evaluation addresses the one change requested in the supplemental letter dated June 22, 1992. A separate safety evaluation will be issued that addresses the changes requested in the January 31, 1992 letter.

The letter dated April 28, 1992 clarified several of the cross references that the licensee had used in the January 31, 1992 submittal to compare the current TS to the proposed TS. In addition, the April 28, 1992 supplement provided revised TS pages that corrected several typographical errors that had been included in the January 31, 1992 submittal. The letter dated April 28, 1992 did not change the substance of the original change request.

The supplement dated June 22, 1992 modified the implementation schedule of the January 31, 1992 submittal. In the January 31, 1992 letter, the licensee indicated that it would not be ready to implement the revised procedures to support the amendment prior to July 31, 1992. Subsequent discussions with the staff determined that the licensee would not be ready to implement the revised procedures until January 1993. The staff expressed concern that the delayed implementation could subject the EDGs to unnecessary wear and tear and could result in unnecessarily aligning EDGs to the general power distribution grid during the course of a series of scheduled maintenance overhauls planned for the EDGs through the summer and fall of 1992.

The licensee then modified the January 31, 1992 request by requesting that some of the modifications to the Surveillance Requirements for an inoperable diesel generator be approved and implemented in advance of the remainder of the changes included in the January 31, 1992 submittal. The technical basis for the change included in this amendment is included in the January 31, 1992 and June 22, 1992 letters and is evaluated by the staff in this safety evaluation.

2.0 EVALUATION

In its letter dated January 31, 1992, the licensee proposed numerous changes to the TS requirements for EDGs. Several of these changes (including the changes labelled B.5 and B.6) address compensatory EDG requirements in the instance that a single EDG is inoperable. Change B.5 deletes the requirement to verify the operability of operable EDGs if an EDG is declared inoperable due to preplanned preventative maintenance or testing. Change B.6 reduces the frequency for repeating operability demonstrations from daily to once-per-72-hours following the determination that an EDG, an offsite circuit or one of each is inoperable. Both changes B.5 and B.6 represent modifications to current TS requirement 4.5.F.1.

In the supplemental letter dated June 22, 1992, the licensee requested to implement the changes that eliminate immediate and daily testing when an EDG is out of service for scheduled, preplanned, preventative maintenance prior to implementing the remainder of the changes. Specifically, the licensee proposed that Section 4.5.F.1 read:

If a diesel generator becomes inoperable for any reason other than preplanned preventative maintenance or testing, the operable diesel generators shall be demonstrated to be operable immediately and daily thereafter.

The requirement to test operate operable EDGs when one EDG is inoperable is intended to provide increased assurance that the operable EDGs can satisfy the safety requirement for reliable standby AC power during a condition when one of the EDGs is known to be inoperable and to ensure that no EDG common mode

failure exists. However, in Generic Letter 84-15, "PROPOSED STAFF ACTIONS TO IMPROVE AND MAINTAIN DIESEL GENERATOR RELIABILITY," the staff concluded that excessive testing results in a degradation of the diesel engine. In the Generic Letter, the staff took the position that additional testing of EDGs during periods when emergency core cooling systems were inoperable could be eliminated. The inoperability of the ECCS component does not directly affect the availability and reliability of the EDG. The added assurance of EDG operability obtained by additional EDG testing is offset by the long term degradation in EDG reliability caused by wear due to additional EDG testing.

The licensee proposes to eliminate additional testing of EDGs during periods when one EDG is inoperable due to preplanned maintenance. A preplanned preventative maintenance outage is not expected to directly change the availability and reliability of the remaining EDGs and is not indicative of a potential failure in the remaining EDGs. The licensee proposes to perform accelerated operability tests of the operable EDGs during periods when a single EDG is inoperable for any reason other than preplanned preventative maintenance. This additional testing will provide additional assurance of the availability and reliability of the remaining EDGs when the cause and implications of the inoperability may not be fully known. The staff finds the licensee's proposal to eliminate additional EDG testing during periods when a single EDG is inoperable due to preplanned preventative maintenance and to perform accelerated testing during periods when a single EDG is inoperable for reasons other than preplanned preventative maintenance consistent with the guidance in Generic Letter 84-15 and, thus, acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Pennsylvania State official was notified of the proposed issuance of the amendments. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendments involve 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 amendments involve no significant hazards consideration, and there has been no public comment on such finding (57 FR 20515). Accordingly, the amendments meet 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 amendments.

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 amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: J. Shea

Date: July 6, 1992