

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION SUPPORTING

AMENDMENT NOS. 134 AND 137 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

DOCKET NOS. 50-277 AND 50-278

1.0 INTRODUCTION

By letter dated October 19, 1987, Philadelphia Electric Company requested an amendment to Facility Operating License Nos. DPR-44 and DPR-56 for Peach Bottom Atomic Power Station, Unit Nos. 2 and 3. The amendments would incred the recorder ranges of the reactor vessel water level instrumentation for the fuel zone instrumentation and for the wide range instrumentation. Changes are made to Technical Specification Table 3.2.F to range the fuel zone recorder range from minus 325 inches to zero inches to a range of minus 325 inches to plus 60 inches. Changes are also made to Table 3.2.F to change the wide range recorder from a range of minus 165 to plus 50 inches to a range of minus 165 to plus 60 inches. The revised ranges encompass the former ranges and both range upper end points are the same at plus 60 inches.

Other changes are made to Table 3.2.F of an editorial nature such as spelling out the word "inches", use of the word "to" instead of a dash between numbers and spelling out the word "feet".

2.0 EVALUATION

The licensee states that the changes to the recorder ranges in the TS are related to modifications being made to the reactor water level instrumentation system in response to NRC Generic Letter 84-23 and Item II.F.2 of NUREG-0737. The staff's earlier letter of February 11, 1985, provided an evaluation of the licensee's response to this issue and the pertinent parts of the letter are restated for convenience as follows:

On October 26, 1984, the NRC staff sent Generic Letter No. 84-23 (Reactor Vessel Water Level Instrumentation in BWRs) to Pfiladelphia Electric Company and other BWR licensees. This Generic Letter outlined the importance of reactor vessel water level instrumentation in BWRs. The staff concluded that permanent

physical improvements should be made on a deliberate schedule to reduce the burden on the operator. Two improvement categories were proposed that, if implemented, would result in increased assurance that the level instrumentation will provide the inadequate core cooling instrumentation required by NUREG-0737, Item II.F.2. Licensees were asked to submit description of plans to implement these improvements and a proposed schedule.

By letter dated December 5, 1984, you responded to GL 84-23 and indicated that the wide range and fuel zone reactor vessel water level instrumentation would be modified to improve accuracy and reliability under transient and accident conditions and decrease the need for operator diagnosis. The specific modifications would address the issue of indication errors caused by high drywell temperature and are, therefore, acceptable.

Subsequently, the licensee evaluated and implemented modifications which had been approved as noted above. Specifically, the licensee's safety evaluation for modification package number 1457, rev. 2, prepared pursuant to 10 CFR 50.59, noted that because the numerical value of their ranges had been used in the TS to identify the two level recorders, the ranges in the TS would need revision to reflect the expanded ranges. This safety evaluation was reviewed by a NRC inspector as reported in Inspection Report Nos. 50-277/87-23 and 50-278/87-23 with no deficiencies being observed in the licensee's safety evaluation.

With respect to the subject change in the range of the level recorders the licensee states that the affected ranges envelope the ranges currently specified, the associated instrumentation provides the same safety actuation functions at the same level as before, the common upper range end point incorporates human factors principles and the accuracy of the vessel level inputs is not affected.

On the bases discussed above the staff concludes that the change in the information used to identify these level recorders on TS Table 3.2.F is consistent with previously approved safety evaluations and is acceptable. The staff also concludes that the previously mentioned editorial changes to Table 3.2.F will alleviate confusion in the reading of the data and are acceptable.

3.0 ENVIRONMENTAL CONSIDERATIONS

These amendments involve 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. The 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. 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 nor environmental assessment need be prepared in connection with the issuance of the amendments.

4.0 CONCLUSION

The Commission made a proposed determination that the amendments involve no significant hazards consideration which was published in the Federal Register (52 FR 47790) on December 16, 1987 and consulted with the State of Pennsylvania. No public comments were received and the State of Pennsylvania did not have any comments.

The staff 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, and (2) 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.

Principal Contributor: Robert E. Martin

Dated: August 3, 1988