



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NOS. 212 AND 217 TO FACILITY OPERATING  
LICENSE NOS. DPR-44 and DPR-56

PECO ENERGY 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 November 21, 1995, the PECO Energy Company (the licensee) submitted a request for changes to the Peach Bottom Atomic Power Station, Unit Nos. 2 and 3, Technical Specifications (TS). The requested changes would revise the test pressure requirements for the high pressure coolant injection (HPCI) system and the reactor core isolation cooling (RCIC) system surveillance tests. The requested change also revises Section 5.5.7 of the TS to eliminate reference to a section which was previously eliminated.

## 2.0 EVALUATION

### 2.1 HPCI and RCIC System Test

The HPCI system is one of the core standby cooling systems installed at Peach Bottom whose objective, in conjunction with primary and secondary containment features, is to limit the release of radioactive material to the environment following a loss of coolant accident (LOCA). The HPCI system is provided to ensure that the reactor is adequately cooled to limit fuel-clad temperature in the event of a small break in the nuclear pressure boundary and subsequent loss of coolant which does not cause the rapid depressurization of the reactor vessel. The HPCI system consists of a steam turbine driven pump, piping, valves and controls necessary to meet the above objective.

The RCIC system is installed to provide makeup water to the reactor vessel during shutdown and isolation in order to prevent the release of radioactive material to the environs as a result of inadequate core cooling. The RCIC system is designed to operate either automatically or manually following reactor pressure vessel isolation followed by a loss of coolant flow from the feedwater system to provide adequate core cooling and control of reactor

vessel water level. The RCIC system consists of a steam turbine driven pump, piping, valves and controls necessary to meet the above objective.

In order to assure the ability of the system to meet its design objectives, surveillance requirements (SR) are included for the HPCI and RCIC systems in the TS. Surveillance requirements 3.5.1.8 and 3.5.3.3 for the HPCI and RCIC systems respectively state:

Verify, with reactor pressure  $\leq 1030$  psig and  $\geq 920$  psig, the HPCI [RCIC] pump can develop a flow rate  $\geq 5000$  [600] gpm against a system head corresponding to reactor pressure.

These tests are intended verify the ability of the HPCI and RCIC systems to perform their intended function at normal rated operating pressures.

In Amendments 198 and 211 for Peach Bottom Units 2 and 3 respectively, the NRC authorized an increased authorized rated thermal power to 3458 MWt. The licensee implemented the provisions of these amendments in October 1994 and October 1995 for Units 2 and 3 respectively. The increased thermal power resulted in an increase in normal operating pressure. During the licensee's development of its submittal for improved technical specifications (Technical Specification Change Request (TSCR) 93-16, submitted September 29, 1994), the licensee proposed a value of 1053 psig as the TS limit on steam dome pressure for TS 3.4.10. This value reflected the results of a reanalysis of reactor vessel overprotection requirements considering operation at uprated conditions. In developing a test pressure band for SR 3.5.1.8 and 3.5.3.3, the licensee did not use values that reflected uprated conditions. Thus, the licensee has proposed to revise the SR 3.5.1.8 and 3.5.3.3 pressure bands to reflect uprated conditions.

The revised SR 3.5.1.8 and 3.5.3.3 state:

Verify, with reactor pressure  $\leq 1053$  psig and  $\geq 940$  psig, the HPCI [RCIC] pump can develop a flow rate  $\geq 5000$  [600] gpm against a system head corresponding to reactor pressure.

The upper value of 1053 psig is consistent with the reactor steam dome pressure limit of 1053 psig specified in TS 3.4.10. The lower value of 940 psig is consistent with the minimum electro-hydraulic control (EHC) pressure setpoint at which reactor power can be increased without the need to adjust the EHC pressure setpoint during operation in MODE 1. Increasing the lower test pressure from 920 psig to 940 psig does not impact when the performance of the test is required.

Because SR 3.5.1.8 and 3.5.3.3 are intended to verify the operation of the HPCI and RCIC systems at the upper end of the reactor pressure operating range and such operation previously has been found to be safe (as authorized in Amendments 198 and 211), the staff finds the proposal to revise the SR 3.5.1.8 and 3.5.3.3 pressure band upward to reflect uprated conditions acceptable.

## 2.2 Ventilation Filter Test Program

During development of TSCR 93-16, a SR for the control room emergency ventilation system was retained from current TS and identified as Section 5.5.7.f in the TSCR 93-16 submittal. This SR was subsequently deleted from the TS by Amendments Nos. 202 and 205 on May 30, 1995. Section 5.5.7.f was subsequently eliminated from the ITS submittal, but ITS Section 5.5.7 was not concurrently revised to reflect the elimination of 5.5.7.f. The licensee proposed to eliminate reference to Specification 5.5.7.f from Section 5.5.7 of the TS.

The staff finds that the proposed change is administrative in nature because it eliminates reference to a requirement that was deleted by previous amendments and is therefore, 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 and changes surveillance requirements. 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 (60 FR 62271). 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

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