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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 178 AND 159 TO FACILITY OPERATING

LICENSE NOS. DPR-70 AND DPR-75

PUBLIC SERVICE ELECTRIC & GAS COMPANY

PHILADELPHIA ELECTRIC COMPANY

DELMARVA POWER AND LIGHT COMPANY

ATLANTIC CITY ELECTRIC COMPANY

SALEM NUCLEAR GENERATING STATION, UNIT NOS. 1 AND 2

DOCKET NOS. 50-272 AND 50-311

1.0 INTRODUCTION

By letter dated March 30, 1995, as supplemented August 18, 1995, the Public Service Electric & Gas Company (the licensee) submitted a request for changes to the Salem Nuclear Generating Station, Unit Nos. 1 and 2, Technical Specifications (TS). The requested changes would eliminate the defined term CONTROLLED LEAKAGE, remove Controlled Leakage flow from the Reactor Coolant System Operational Leakage Limiting Condition for Operation (LCO) and establish a new Seal Injection Flow LCO. The August 18, 1995, letter provided clarifying information that did not change the initial proposed no significant hazards consideration determination nor the original Federal Register notice.

2.0 EVALUATION

The reactor coolant pumps (RCP) provide sufficient forced circulation flow through the core to ensure heat transfer to prevent exceeding the minimum departure from nucleate boiling ratio. Among its many components, the RCP has a seal assembly that is cooled by controlled leakage from the high head safety injection system.

Currently, the TS define the controlled leakage as: "CONTROLLED LEAKAGE shall be that seal water from the reactor coolant pump (RCP) seals." The Westinghouse Emergency Core Cooling System (ECCS) flow calculation is based on the injection flow path, i.e. the flow into the seal. This analysis limits the ECCS flow that can be diverted from the injection path following an ECCS actuation. The analysis takes into consideration the known line pressure and flow to establish the line resistance which is the basis for the flow limit.

Since the current TS measures the seal leakoff, a seal injection flow path with slightly lower resistance values could occur, allowing a greater flow to be diverted from the injection path than the diverted flow assumed in the ECCS analysis. The licensee is therefore proposing to modify the TS to restrict seal injection flow rather than seal leakoff flow.

The proposed changes more clearly reflect the assumption concerning RCP seal flow diversion that was used in the Salem accident analysis related to ECCS operation. Therefore, the staff finds these changes acceptable.

The August 18, 1995, letter contained two typographical errors which are being corrected with the issuance of these TS changes. The phrase "the limit with" and the symbol "≥" were inadvertently omitted from the Action Statement in the LCO 3.5.4. Thus, the corrected Action Statement reads as follows:

> "With seal injection flow not within the limit, adjust manual seal injection throttle valves to give a flow within the limit with the charging pump discharge pressure ≥ 2430 psig and the charging flow control valve fully open within 4 hours, or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours."

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New Jersey State official was notified of the proposed issuance of the amendments. The State official responded by letter dated June 12, 1995, and supported the issuance of the amendments.

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 (60 FR 24918). 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.

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Date: October 30, 1995