



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NOS. 153 AND 134 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 May 3, 1994, 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 modify the surveillance frequency for Combustible Gas Control channel functional test to once-per-quarter and the channel calibration to once-per-refueling. Also, the surveillance frequency for the Auxiliary Feedwater (AFW) System pump operability test would be changed to once-per-quarter.

2.0 EVALUATION

The NRC has completed a comprehensive examination of surveillance requirements in TS that require testing at power. The evaluation is documented in NUREG-1366, "Improvements to Technical Specification Surveillance Requirements," dated December 1992. The NRC staff found that, while the majority of testing at power is important, safety can be improved, equipment degradation decreased, and an unnecessary burden on personnel resources eliminated by reducing the amount of testing at power that is required by technical specifications. Based on the results of the evaluations documented in NUREG-1366, the NRC issued Generic Letter 93-05, "Line-Item Technical Specifications Improvements to Reduce Surveillance Requirements for Testing During Power Operation," dated September 27, 1993.

Consistent with Generic Letter 93-05, Item 5.4 and NUREG-1366, the licensee is requesting to change TS surveillance requirement 4.6.4.1, "Hydrogen Analyzers" for the channel functional test to at least once per 92 days and the channel calibration to at least once per refueling.

9408050017 940727
PDR ADOCK 05000272
P PDR

Current TS surveillance requirement 4.6.4.1, requires each hydrogen analyzer to be demonstrated operable by the performance of a channel check at least once per 12 hours, a channel functional test at least once per 31 days, and a channel calibration using sample gases containing two volume percent hydrogen and one containing six volume percent hydrogen at least once per 92 days on a staggered test basis.

Hydrogen analyzers are used to monitor hydrogen concentration in the containment following a loss of coolant accident (LOCA) and are designed in accordance with NUREG-0737, "Clarification of TMI Action Plan Requirements" and Regulatory Guide 1.57, "Information For Light-Water-Cooled Nuclear Power Plants To Assess And Environs Conditions During And Following An Accident." These monitors are used only after a LOCA to tell the operator when to initiate the hydrogen recombiners.

The AFW system supplies water to the steam generators to remove decay heat from the reactor coolant system. Currently, to ensure operability of the AFW system, Salem Unit Nos. 1 and 2, TS 4.7.1.2 "Auxiliary Feedwater System," requires that the AFW pumps be tested on a monthly basis. Consistent with Generic Letter 93-05, Item 9.1 and NUREG-1366, the licensee is requesting a change to the surveillance testing frequency for the AFW pumps from monthly to quarterly on a staggered test basis.

The AFW system in each unit is equipped with one turbine-driven and two motor-driven AFW pumps. Steam for the turbine-driven pump is taken from two of the four main steam lines upstream of the steam generator stop valves. The motor-driven pumps receive power from the 4KV vital buses.

In the past, the NRC has required monthly testing of the AFW pumps. However, as specified in NUREG-1366 and NRC Generic Letter 93-05, operating and testing experience has indicated that the monthly testing requirement of the AFW pumps is not necessary to adequately ensure that the AFW pumps will perform their intended function.

The amendment request would require the AFW pumps to be tested quarterly on a staggered basis. This new testing frequency should reduce the AFW system unavailability resulting from failures and equipment degradation and result in increased system reliability. The test to be performed will satisfy the current TS requirements as well as those identified in the ASME Code, Section XI.

The proposed changes are consistent with the intent of NUREG-1366. Also, the proposed changes are in conformance with NRC Generic Letter 93-05, Items 5.4 and 9.1 regarding surveillance requirements for the hydrogen analyzer and AFW pumps. Therefore, the staff finds the proposed changes acceptable.

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 had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendments change 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 (59 FR 29634). 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. Zimmerman

Date: July 27, 1994