



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NOS. 115 AND 77 TO FACILITY OPERATING
LICENSE NOS. NPF-39 AND NPF-85
PHILADELPHIA ELECTRIC COMPANY
LIMERICK GENERATING STATION, UNITS 1 AND 2
DOCKET NOS. 50-352 AND 50-353

1.0 INTRODUCTION

By letter dated December 22, 1995, the Philadelphia Electric Company (the licensee) submitted a request for changes to the Limerick Generating Station (LGS), Units 1 and 2, Technical Specifications (TSs). The proposed change to TS 3.6.1.8, "Drywell and Suppression Chamber Purge System," would increase the drywell and suppression chamber purge system operating time limit from 90 hours each 365 days to 180 hours each 365 days.

2.0 EVALUATION

At the present time, TS 3.6.1.8 states that, "The drywell and suppression chamber purge system may be in operation for up to 90 hours each 365 days with the supply and exhaust isolation valves in one supply line and one exhaust line open for inerting, deinerting, or pressure control."

The annual limit in operating time of the drywell and suppression chamber purge system during Operating Conditions 1, 2, and 3 was imposed to reduce the probability of, and minimize the consequences of, equipment damage resulting from a loss-of-coolant-accident (LOCA) during the time that the large purge and vent valves are open.

The licensee's submittal of December 22, 1995, requested that the drywell and suppression chamber purge system operation limit be changed from 90 hours in 365 days to 180 hours in 365 days. The request was based on recent operational experience which showed that the drywell and suppression chamber purge system was required for 85.1 hours for LGS Unit 1 during planned and unplanned outages. The licensee's request to extend the allowable operation time of the drywell and suppression chamber purge system from 90 to 180 hours in 365 days is supported by an analysis which demonstrates that the probability of a large early release is still significantly below the staff's safety goal value of 1.0 E-6 per year of reactor operation.

The LGS, Units 1 and 2, Safety Analysis Report (SAR) evaluations and the Level 2 Probabilistic Safety Assessment (PSA) analysis for containment failure have evaluated the risk associated with the proposed change. The main parameter considered is the large early release frequency (LERF), which considers the

release of radioactive material without the occurrence of public evacuation. This condition results in a 3% increase of the LERF from the Level 2 base value of $2.58 \text{ E-}8$ that considered all PSA initiators. This 3% increase is still well below the staff's safety goal value of $1.0 \text{ E-}6$ per year of reactor operation.

The NRC staff recognizes the need to provide operational flexibility with regard to the use of the drywell and suppression chamber purge system for the uses specified in LGS's TS 3.6.1.8. The licensee's proposed operating time extension, from 90 to 180 hours per 365 days, provides a reasonable margin to expected operational needs, and the licensee's request is well within the staff's policy limit. The staff approves the changes of the 365-day purge time limit from 90 to 180 hours. However, the staff requests that the licensee submit, within one year, a proposal to remove the purge time limit from the TS and replace it with requirements similar to those stated in the improved TS.

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 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 (61 FR 7555). 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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