



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 69 AND 32 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 April 19, 1993, as supplemented by letter dated April 18, 1994, the Philadelphia Electric Company (the licensee) submitted a request for changes to the Limerick Generating Station, Units 1 and 2, Technical Specifications (TS). The requested changes would extend surveillance test intervals (STIs) and allowed outage times (AOTs) for containment isolation actuation instrumentation (IAI) as analyzed in, "Technical Specification Improvement Analysis for BWR Isolation Actuation Instrumentation," NEDC-31667P-A, July 1990, and as approved by NRC in the Safety Evaluation (SE), "Review of the BWR Owners Group Report NEDC-31667P on Justification for Extension of Surveillance Test Intervals and Allowed Outage Times for BWR Isolation Instrumentation Not Common to Reactor Protection System (RPS) or Emergency Core Cooling System (ECCS) Instrumentation," dated June 18, 1990. The supplemental letter does not change the proposed no significant hazards determination.

2.0 BACKGROUND

Licensing Topical Report (LTR), "BWR Owners Group Response to NRC Generic Letter 83-28, Item 4.5.3," General Electric Company, NEDC-30844, January 1985, provided justification for the acceptability of the current RPS instrumentation STIs. In addition, it established a basis for extending STIs and AOTs for RPS instrumentation based on reliability analyses which estimate RPS instrumentation failure frequency. The analyses were further developed in NEDC-31677P-A, July 1990, for extending TS STIs and AOTs for the containment IAI, and the analyses were subsequently approved as detailed in the related NRC SE, dated June 18, 1990. This SE describes the acceptability of both the analyses and the proposed TS changes that were provided to the NRC in NEDC-31677P-A, July 1990. In addition, NRC's SE provided criteria for plant-specific implementation of the generically approved TS changes. Compliance with these plant-specific criteria is discussed in the evaluation.

3.0 EVALUATION

The proposed changes to extend STIs and AOTs for the containment IAI are consistent with those approved by the NRC and documented in the related SE, dated June 18, 1990. In addition, the identified administrative changes are required to implement the proposed AOT and STI changes.

The staff's SE of June 18, 1990, concluded that implementation of the TS changes proposed in NEDC-31667P-A, July 1990, would provide an overall enhancement to plant safety and that the changes were acceptable subject to requirement of the licensee's documentation of the following: (1) plant-specific applicability, and (2) that instrument drift is bounded by the assumptions of the generic analyses.

The licensee has conducted a plant-specific review of the applicability of the LTR to Limerick Generating Station, Units 1 and 2 (LGS). For the containment IAI, the review compared the LGS IAI configurations with those in the NEDC-31667P-A, July 1990, analyses. This comparison concluded that the configurations were consistent with those in the NEDC-31667P-A, July 1990, analyses and thus applicable to LGS.

The NRC has issued additional guidance regarding instrument drift in a letter dated April 27, 1988, "Staff Guidance for Licensee Determination that the Drift Characteristics for Instrumentation Used in RPS Channels are Bounded by NEDC-3085P Assumptions: when the Functional Test Interval is Extended from Monthly to Quarterly." This letter states that "licensees need only confirm that the setpoint drift which could be expected under the extended STIs has been studied and either (1) has been shown to remain within the existing allowance in the RPS (for BWRs) ... instrument setpoint calculation or (2) that the allowance and setpoint have been adjusted to account for the additional expected drift."

Present setpoint calculations for LGS are based on an 18-month calibration interval. Therefore instrument drift occurring during a 3-month STI falls within the existing drift allowance. Further, the licensee has stated that instrument drift data has been examined over three consecutive monthly test intervals to verify the above conclusion. Also, the licensee has enclosed the document, "Limerick Generating Station, Unit 2, Instrument Drift Data for Containment Isolation Actuation Instrumentation," which provides the as-found drift data on a ten percent (10%) sample of LGS Unit 2 IAI. This data provides actual verification that the drift occurring over three consecutive test intervals (i.e., one calendar quarter) is within acceptable limits.

In conclusion, the staff's SE of June 18, 1990, provided acceptable TS changes based on the referenced LTR. The licensee has proposed TS changes consistent with those previously approved and specifically designated by the staff, and those administrative changes necessary to properly implement the proposed

changes. Therefore, the staff concludes that the NRC criteria for demonstrating the applicability and acceptability of all proposed changes has been met, as discussed above. The staff also concludes that the changes proposed will minimize unnecessary testing and relax excessively restrictive AOTs, which can provide an overall enhancement to plant safety. Further, the staff concludes that the administrative changes which are not addressed in the NRC SERs are necessary to correct inconsistencies and to facilitate implementation of the proposed TS changes.

The proposed administrative changes to TS Index pages "xviii" and "xix" are necessary to accurately reflect the location of various Sections in the TS. These changes are to correct inconsistencies and to reflect additions to the TS Bases which reference the appropriate LTR(s) and accompanying SER(s). Each of the TS Instrumentation Bases page changes are proposed to correct inconsistencies, make an addition, as just described, or to accommodate carry over from a previous page as a result of the addition. These changes have no impact on safety and, therefore, are acceptable to the staff.

The modifications to the notes referenced on TS pages 3/4 3-9, 3/4 3-16, and the associated notes in TS Table 4.3.2.1-1 are administrative as well and address the changes in STIs and AOTs addressed by this TS change. The notes are being revised to eliminate references which will no longer be necessary upon approval of the proposed changes. Specifically, the note is being revised to eliminate the previous references to instrumentation which was common to the Emergency Core Cooling Systems (ECCS) or the containment IAI, but which are no longer necessary. Modification of these notes does not affect any requirements of the TS, and thus has no impact on safety. Therefore, they are acceptable to the staff.

4.0 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.

5.0 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 (58 FR

34086). 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.

6.0 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: F. Rinaldi

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