

## UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

# SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NO. 11 TO FACILITY OPERATING LICENSE NO. NPF-39

#### PHILADELPHIA ELECTRIC COMPANY

#### LIMERICK GENERATING STATION, UNIT 1

### DOCKET NO. 50-352

#### 1.0 INTRODUCTION

By letter dated June 19, 1995, as supplemented by letter dated December 21, 1995, the Philadelphia Electric Company (the licensee) submitted a request for changes to the Limerick Generating Station (LGS), Unit 1, Technical Specifications (TSs). The requested changes would include the Minimum Critical Power Ratio (MCPR) safety limits for the use of GE13 fuel product line. The December 21, 1995, letter provided clarifying information that did not change the initial proposed no significant hazards consideration determination nor the Federal Register notice.

#### 2.0 EVALUATION

The licensee requested TS changes in accordance with the 10 CFR 50.90. The revised Specifications were proposed as follows:

(1) Specifications 2.1 and its associated Bases 2.1

The safety limit MCPR is changed to 1.09 for operation with two recirculation loops and 1.11 for single loop operation (SLO) due to the use of GE13 fuel product line at LSG. Unit 1.

- a. The staff has reviewed GE's submittal (JFK94-014 MFN-118-94) on "Safety Limit MCPR for GE13 Fuel," dated September 28, 1994 and found that the proposed SLMCPR of 1.09 for the GE13 fuel is acceptable for its reload application while the staff continues to resolve some generic issues for the GEXL09 correlation. The proposed SLMCPR of 1.09 is acceptable for LGS Unit 1 since the improved R-factor calculation method uses the same staff approved equation stated in GESTAR (NEDE-24011-P-A) and the term of  $\Delta X_{\rm G}$  in the GEXL09 correlation has no impact on the SLMCPR calculation.
- b. PECO Energy has provided single-loop operation analysis for LGS, Unit 1, which was excerpted from NEDC-31300, and GE has also provided the approved method used for analyzing SLMCPR for Peach Bottom Atomic Power Station, Units 2 and 3 Single-Loop Operation (NEDO-24229-1). The same approved method is used for LGS Unit 1 single-loop operation. Based on the review, the staff has concluded that the proposed SLMCPR of 1.11 for SLO is acceptable for

LSG Unit 1 reload application, since the new measurement uncertainty for core flow (from 2.5% to 6%) and for Traversing In-core Probe (TIP) reading (from 8.7% to 9.1%) are applied to the NRC-approved method.

Based on our review, we conclude that the changes to these Specifications and its associated Bases are acceptable for LGS Unit 1 reload application since the changes are analyzed based on the NRC-approved method that assures that operating safety limits are not exceeded and that fuel integrity will be maintained.

#### 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Pennsylvania State official was notified of the proposed issuance of the amendment. The State official had no comments.

#### 4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes 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 amendment involves 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 amendment involves no significant hazards consideration, and there has been no public comment on such finding (60 FR 52934). Accordingly, the amendment meets 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 amendment.

#### 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 amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: T. Huang

Date: February 8, 1996