



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20565-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 86 TO FACILITY OPERATING LICENSE NO. NPF-57

PUBLIC SERVICE ELECTRIC & GAS COMPANY

ATLANTIC CITY ELECTRIC COMPANY

HOPE CREEK GENERATING STATION

DOCKET NO. 50-354

1.0 INTRODUCTION

By letter dated November 28, 1994, the Public Service Electric & Gas Company (the licensee) submitted a request for changes to the Hope Creek Generating Station (HCGS), Technical Specifications (TS). The requested changes would revise the TS for the Reactor Coolant System (RCS) recirculation flow upscale trip function to change the trip setpoint and allowable value to reflect 105% of rated core flow, Item 1 of above application. The proposed changes to the TS, Items 2 and 3 of the above application, involving the Rod Block Monitor (RBM) trip function, which would transfer control of the setpoint and allowable value for the RBM - upscale rod block to the Core Operating Limits Report (COLR), and the setpoints and allowable values for the Average Power Range Monitor (APRM), flow-biased, upscale scram/control rod block in the Extended Load Line Limit Analysis (ELLLA) region are still under review at this time. It is the NRC staff's understanding that the licensee plans to withdraw these remaining parts of the application.

2.0 DISCUSSION

The licensee has requested changes to the TS associated with plant operation in the Increased Core Flow (ICF) region of the power/flow map. The ICF region extends from the 100% to 105% flow, over the full power range, on the power/flow map. The purpose of ICF is to compensate for reactivity reduction due to exposure during the operating cycle. The licensee has proposed to increase the RCS recirculation flow upscale trip and allowable value as specified in TS Table 3.3.6-2, "Control Rod Block Instrumentation Setpoints." The trip setpoint would increase from less-than-or-equal-to 108% of rated flow to less-than-or-equal-to 111% of rated core flow. The allowable value would increase from less-than-or-equal-to 111% of rated flow to less-than-or-equal-to 114% of rated core flow.

The licensee's analyses for operation in the ICF region of the power/flow map is provided in a General Electric Report, "Final Report, Increased Core Flow and Extended Load Line Limit Analysis for Hope Creek Generating Station, Unit 1 Cycle 2," NEDC-31487, dated November 1987. An additional report, "Supplemental Reload Licensing Report for Hope Creek Generating Station Unit 1, Reload 5 Cycle 6," Report No. 23A7219, dated November 1993, addresses ELLLA and ICF for the current operating cycle.

3.0 EVALUATION

On March 15, 1988, the NRC staff issued Amendment No. 15 to the HCGS Facility Operating License to address Cycle 2 operation. The safety evaluation in Amendment 15 approved the use of NEDC-31487 for HCGS and stated the following: "The licensee also submitted a report, NEDC-31487, 'Final Report, Increased Core Flow and Extended Load Limit Analysis for Hope Creek Nuclear Generating Station, Unit 1 Cycle 2,' in support of a request to include these features among the operating flexibility options. These options are among those that have been employed by several plants. The report provides analyses to support operation in these modes and to identify necessary changes to the TS. The analyses were performed with approved techniques and methods and the staff finds their use for HCGS acceptable." The TS that were needed to implement ICF for HCGS were not issued with Amendment No. 15. The staff is now considering the TS changes that should have been issued with Amendment No. 15.

As noted above, the licensee addressed operation in the ICF region for the current operating cycle in Report No. 23A7219 submitted with this application. A review of this report by the NRC staff indicated that the licensee assumes a core flow of 105%, reflecting operation in the ICF region. The results of analyses of transients and accidents were found to be acceptable.

Based upon previous review and acceptance of NEDC-31487 in Amendment No. 15, by the NRC staff, and the acceptability of the results of analyses of transients and accidents for the current operating cycle, the NRC staff concludes that operation of HCGS in the ICF is acceptable. Accordingly, the proposed increase in the RCS recirculation flow upscale trip and allowable value as specified in TS Table 3.3.6-2, "Control Rod Block Instrumentation Setpoints," is acceptable.

4.0 STATE CONSULTATION

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

5.0 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 39450). 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.

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 amendment 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 31, 1995