



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 123 TO FACILITY OPERATING LICENSE NO. DPR-63

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION, UNIT NO. 1

DOCKET NO. 50-220

INTRODUCTION

By letter dated November 6, 1990, Niagara Mohawk Power Corporation (the licensee) submitted a request for revision of the Technical Specifications, Appendix A to Operating License No. DPR-63 for the Nine Mile Point Nuclear Station, Unit No. 1. The proposed change would revise Table 3.6.2c of Technical Specification 3.6.2 and associated Bases to incorporate a revised set point for isolation of the Emergency Cooling System on high steam flow. The licensee stated that the proposed revision was necessary to correct an error which was discovered in an equation used to calculate the current set point.

EVALUATION

The current set point of 19 psid for isolation of the Emergency Cooling System was originally provided by General Electric and was based on design calculations. In November 1988, General Electric issued Revision 2 to its SIL-475. This revision stated that General Electric had discovered an error in an equation used to calculate the 19 psid set point. General Electric suggested that licensees recalculate the set point and confirm the calculation by a system test.

In response to Revision 2 to SIL-475, the licensee determined that the current set point of 19 psid may be non-conservative and that the set point value should be 12.5 psid which corresponds to 300% of normal steam flow. The 300% of normal steam flow value is below the choke flow limit and above normal system start up transients and is a value typically used by General Electric to determine isolation set points in Emergency Cooling Systems.

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The licensee performed a test which verified that a set point of 12.5 psid will allow Emergency Cooling System isolation at 300% of normal steam flow without causing inadvertent isolations due to normal system start up transients. This test required the plant to be at normal operating conditions; therefore, the test was delayed until after startup from the extended outage which ended in July 1990.

As noted in the Bases for Technical Specification 3.6.2 (page 237), the set point allowable deviation for this parameter is  $\pm 1$  psid; therefore, the specified set point should be  $\leq 11.5$  psid. The " $\leq$ " notation is provided to ensure that this set point is conservatively adjusted. Use of this notation is consistent with other set points specified in the Technical Specifications. Inadvertent isolations that could occur if the set point was adjusted excessively lower will be avoided by adjusting the set point to near the 11.5 psid value.

Based on the above evaluation, the staff finds the proposed technical specification changes acceptable and they are approved.

#### ENVIRONMENTAL CONSIDERATION

This amendment involves a change in a requirement with respect to the installation or use of the facility components located within the restricted areas as defined in 10 CFR Part 20. The staff has determined that this 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 this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this 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 this amendment.

#### CONCLUSION

We have 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, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: February 11, 1991

#### PRINCIPAL CONTRIBUTOR:

D. S. Brinkman

