



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 96 TO FACILITY OPERATING LICENSE NO. DPR-46
NEBRASKA PUBLIC POWER DISTRICT
COOPER NUCLEAR STATION
DOCKET NO. 50-298

1.0 INTRODUCTION

By letter dated March 11, 1986, the Nebraska Public Power District (the licensee) requested an amendment to Facility Operating License No. DPR-46 for the Cooper Nuclear Station. The proposed amendment would change the Technical Specifications to revise the maximum setpoint for main steam line high flow isolation instrumentation. This request was initiated following receipt by the licensee of a letter from the reactor vendor indicating that the existing setpoint is in apparent violation of the plant Technical Specifications.

2.0 EVALUATION

The proposed amendment would change the main steam line (MSL) high flow isolation setpoint limit from 140% of rated steam flow to 150% of rated steam flow to reflect the current actual setpoints of the instruments. The MSL high flow instrumentation is provided for detection of MSL breaks outside containment. It is one of several diverse means of initiating automatic MSL isolation in the event of MSL breaks of various sizes.

The basis for selection of the 140% setpoint is to provide a setting that is: (1) sufficiently high so as to preclude an inadvertent isolation of main steam isolation valve (MSIV) during surveillance testing (During MSIV testing, MSIVs are cycled one-at-a-time. This results in higher than normal steam flows in the lines not under test.), and (2) low enough to permit the high flow instrumentation to respond to small MSL breaks thereby serving as a backup to the other isolation instrumentation.

The proposed change would not affect the response of the high flow instrumentation to MSL breaks which result in a flow greater than 150% since such breaks would be detected with either setpoint. Furthermore, the response to breaks which result in an MSL flow less than 140% rated flow would not be affected since the high flow instrumentation is not relied upon to detect breaks of that size. The change would thus only affect the capability of the instrumentation to initiate isolation in event of an MSL break of a size which results in a steam flow of between 140% and 150% rated flow. This corresponds to break sizes of from 0.3 to 0.38 square feet, an increase of only 0.08 square feet. Within this range the other diverse MSL isolation functions relied upon for small breaks remain available.

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Based on the above, the proposed amendment would not affect the ability of the plant to detect and isolate an MSL break outside containment, nor would it result in significant increase in consequences of an MSL break. The proposed change is therefore acceptable.

3.0 EMERGENCY CIRCUMSTANCES

On March 10, 1986, promptly after reviewing a new General Electric report dated March 6, 1986, the licensee recognized the need to revise the maximum set point for main steam high flow isolation instrumentation. The licensee informed the NRC staff on the same day and on the next day requested the subject amendment to avoid the necessity of plant shutdown. The licensee's actions were very prompt and the licensee could not have otherwise avoided these emergency circumstances.

4.0 NO SIGNIFICANT HAZARDS CONSIDERATION

The Commission's regulations in 10 CFR 50.92 state that the Commission may make a final determination that a license amendment involves no significant hazards consideration if the operation of the facility in accordance with the amendment would not:

- (1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or
- (2) Create the possibility of a new or different kind of accident from any accident previously evaluated; or
- (3) Involve a significant reduction in a margin of safety.

The evaluation in Section 2.0 shows that the revised setpoint for main steam line high flow isolation would have no effect on the probability and no significant effect on the consequences of those accidents which the MSL flow instrumentation is intended to mitigate. The proposed change does not create a possibility of a new or different accident, and does not affect any margins of safety. Based on the above evaluation staff concludes that operation of the facility in the proposed manner would not involve a significant increase in the probability or consequences of an accident previously evaluated, would not create the possibility of a new or different kind of accident from any accident previously evaluated, and would not involve a significant reduction in a margin of safety.

Accordingly, we conclude the amendment involves no significant hazards consideration.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, consultation was held with the state of Nebraska by telephone. The State expressed no concern either from the standpoint of safety or no significant hazards consideration determination.

5.0 ENVIRONMENTAL CONSIDERATIONS

This 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, and changes surveillance requirements. The staff has determined that the amendment involves 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 made a final no significant hazards consideration finding with respect to this amendment. 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.

6.0 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.

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Dated: March 17, 1986