



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 154 TO FACILITY OPERATING LICENSE NO. DPR-46
NEBRASKA PUBLIC POWER DISTRICT
COOPER NUCLEAR STATION
DOCKET NO. 50-298

1.0 INTRODUCTION

By letter dated June 16, 1988, Nebraska Public Power District (NPPD, the licensee) requested license amendment Proposed Change (PC) No. 57 to incorporate Cooper Nuclear Station Technical Specification (TS) changes regarding the newly installed redundant H_2/O_2 monitoring systems in containment. The proposed change incorporated requirements for the redundant oxygen analysis monitor of the redundant oxygen and hydrogen analysis systems.

By letter dated October 7, 1991, the licensee submitted PC No. 76, which proposed a change to the technical specifications that would add limiting conditions for operation and surveillance requirements for the containment post-accident hydrogen concentration analysis systems. By letter dated August 12, 1992, the NRC issued Amendment No. 153 in response to PC No. 57, technical specifications for the containment atmosphere analyzer systems. This safety evaluation addresses PC No. 76, technical specifications for limiting conditions for operation (LCOs) and surveillance requirements (SRs) for hydrogen monitoring instrumentation in the post-accident containment atmosphere.

2.0 EVALUATION

The licensee proposed changes to Tables 3.2.H and 4.2.H to include requirements for redundant primary containment hydrogen analyzers. A new entry in Table 3.2.H, Post-Accident Monitoring Instrumentation Requirement, designates the minimum number of operable channels for each hydrogen concentration analyzer. The required actions when the number of operational channels is less than the required number is specified in the proposed amendment following the guidance of Generic Letter (GL) 83-36.

The installation of the hydrogen concentration analyzers had already been received and accepted by the NRC staff (letter from D. Vassallo, NRC, to L. Kuncl, NPPD, dated August 5, 1983); however, there were no TS requirements for operation of the instruments. However, consistency with the guidance provided in NRC GL 83-36 requires that containment for all Boiling Water Reactors (BWRs) should have both hydrogen and oxygen monitoring instrumentation with appropriate LCOs and SRs. Accordingly, such specified conditions are proposed. The staff has evaluated the proposed new TS and

finds them to be appropriate and acceptable. In addition, a note has been added to Table 3.2.H to specify that one of two operable hydrogen concentration analyzers is normally in a standby mode of operation. This condition is appropriate to reduce equipment wear and to prolong the service life of the analyzer. The staff has previously approved a similar provision at another BWR-4 installation in a comparable condition, and finds it appropriate and acceptable in this case also. The operability of the standby analyzer will be verified by performing the calibration and test requirements as described in Table 4.2.H, Post-Accident Monitoring Instrumentation Requirements. The licensee proposed to incorporate into Table 4.2.H requirements for calibration and testing of the hydrogen analyzers. These requirements as proposed have been evaluated and found to be appropriate and acceptable. Another proposed change to Table 4.2.H not related to hydrogen monitoring instrumentation is the listing of an additional channel of primary containment gross radiation monitoring instrumentation. This change is likewise appropriate and is acceptable.

3.0 STATE CONSULTATION

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

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 and changes in surveillance requirements. 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 (57 FR 24673). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Section 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.

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Date: September 22, 1992