September 18, 2002

Mr. David L. Wilson Vice President of Nuclear Energy Nebraska Public Power District P.O. Box 98 Brownville, NE 68321

### SUBJECT: COOPER NUCLEAR STATION - ISSUANCE OF AMENDMENT RE: REACTOR EQUIPMENT COOLING SURGE TANK LEVEL SURVEILLANCE REQUIREMENT (TAC NO. MB4050)

Dear Mr. Wilson:

The Commission has issued the enclosed Amendment No. 194 to Facility Operating License No. DPR-46 for the Cooper Nuclear Station (CNS). The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated January 21, 2002.

The amendment will modify TS Surveillance Requirement 3.7.3.1 to improve consistency with CNS License Amendment No. 185, approved on March 13, 2001, and eliminate unnecessary restrictions regarding how the Reactor Equipment Cooling System surge tank level is monitored. In addition, the NRC staff updated TS 3.7.3.2 to reflect changes in REC supply water temperature approved by CNS Amendment No. 193, issued July 22, 2002.

A copy of our related Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,

## /RA/

John L. Minns, Project Manager, Section 1 Project Directorate IV Division of Licensing Project Management Office of Nuclear Reactor Regulation

Docket No. 50-298

Enclosures: 1. Amendment No. 194 to DPR-46 2. Safety Evaluation

cc w/encls: See next page

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## NEBRASKA PUBLIC POWER DISTRICT

## DOCKET NO. 50-298

### COOPER NUCLEAR STATION

### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 194 License No. DPR-46

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Nebraska Public Power District (the licensee) dated January 21, 2002, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

- 2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 2.C.(2) of Facility Operating License No. DPR-46 is hereby amended to read as follows:
  - (2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 194, are hereby incorporated in the license. The Nebraska Public Power District shall operate the facility in accordance with the Technical Specifications.

3. The license amendment is effective as of its date of issuance and shall be implemented within 30 days from the date of issuance.

### FOR THE NUCLEAR REGULATORY COMMISSION

#### /RA/

Robert A. Gramm, Chief, Section 1 Project Directorate IV Division of Licensing Project Management Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: September 18, 2002

# ATTACHMENT TO LICENSE AMENDMENT NO. 194

#### FACILITY OPERATING LICENSE NO. DPR-46

### DOCKET NO. 50-298

Replace the following page of the Appendix A Technical Specifications with the enclosed revised page. The revised page is identified by amendment number and contains a marginal line indicating the area of change.

### <u>REMOVE</u>

**INSERT** 

3.7-7 3.7-7

# SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

## RELATED TO AMENDMENT NO. 194 TO FACILITY OPERATING LICENSE NO. DPR-46

## NEBRASKA PUBLIC POWER DISTRICT

# COOPER NUCLEAR STATION

# DOCKET NO. 50-298

## 1.0 INTRODUCTION

In a letter dated January 21, 2002, Nebraska Public Power District (the licensee) requested a license amendment to modify Cooper Nuclear Station's Technical Specification (TS) Surveillance Requirement (SR) 3.7.3.1. The current SR 3.7.3.1 requires that "water level in the REC system surge tank is visible above the bottom of the gauge glass." The proposed change would revise SR 3.7.3.1 to state: "Verify the REC surge tank water level is within limits." This TS SR change would eliminate unnecessary restrictions regarding how the reactor equipment cooling (REC) system surge tank level is monitored. This change would require monitoring REC surge tank levels every 24 hours to support the REC system operability. This change would facilitate maintenance activities on the gauge glass because such activities would no longer necessarily cause a failure to meet SR 3.7.3.1 requirements. The TS page 3.7-7 provided by the licensee in January 2002, did not incorporate a change to TS 3.7.3.2 which was approved in Amendment No. 193 issued July 22, 2002. The NRC staff updated TS 3.7.3.2 to reflect changes in REC supply water temperature.

## 2.0 REGULATORY EVALUATION

The Commission's regulatory requirements related to the contents of the TSs are set forth in Section 50.36 of Title 10 of the *Code of Federal Regulations* (10 CFR) and require that the TS specified limiting conditions for operations are consistent with assumed values of the initial conditions in the licensee's safety analyses. In accordance with 10 CFR 50.36, the NRC staff and the Nuclear Steam Supply System Owner's groups developed improved standard TSs (STS) as models for meeting 10 CFR 50.36(c)(2)(ii) and 10 CFR 50.36(c)(3) requirements. The Boiling Water Reactors (BWRs) Owners Group is referencing NUREG-1433, Revision 1, "Standard Technical Specifications BWR Plants," as staff guidance to effectively implement 10 CFR 50.36, provided no unique plant design necessitates changes in the STS. The licensee is using the guidance from NUREG-1433, Revision 1, and the guidance from NUREG-0800, Standard Review Plan (SRP), Section 9.2.2., "Reactor Auxiliary Cooling Water Systems," as appropriate for their plant.

## 3.0 TECHNICAL EVALUATION

The REC consists of two subsystems that provide cooling for those components which must function during postulated accidents and transients conditions. Each REC subsystem has two centrifugal pumps discharging to one REC heat exchanger and is capable of delivering

demineralized water to the supported equipment. A 550 gallon capacity surge tank, located at the highest point of the system, accommodates system volume changes, and maintains static pressure in the REC subsystems. It allows detection of gross leaks in the REC system and provides a means for adding makeup water. The surge tank level is maintained automatically by means of level switches and a control valve. Additionally, each subsystem is provided with service water backup cross tie valves to provide required equipment cooling in the event of an REC subsystem failure.

During normal plant operation, water leakage from the REC system is monitored by plant procedures to ensure that leakage does not exceed the maximum allowable leakage. The maximum allowable leakage is based on the criterion which was approved by the NRC staff in License Amendment No. 185 that the REC surge tank shall be capable of providing sufficient net positive suction head for the REC subsystems pumps in a post-loss-of-coolant accident (LOCA) condition for at least 7 days, without makeup during this 7 day period.

If the gauge glass were drained for maintenance of the glass or drain valve, the current SR procedural details requiring that "water level in the REC surge tank is visible above the bottom of the gauge glass" would not be met. The failure to meet SR 3.7.3.1 would result in declaring both systems of REC inoperable and entering into the immediate shutdown requirements of the TS. The licensee developed an alternate practical method to monitor the REC surge tank level to "verify REC surge tank water level is within limits" without reliance on the gauge glass. This serves the purpose of this SR, which is to verify that the water level in the surge tank is sufficient for the proper operation of the REC system.

The plant procedures require that two acceptance criteria be met for satisfactory performance: (1) an absolute minimum level requirement of greater than or equal to 5.25 inches from the bottom of the sight glass in the surge tank; and (2) a maximum rate of level change of 5.625 inches in a 24-hour period.

The NRC staff has reviewed this proposal to simplify the current SR to eliminate unnecessary current restrictions. This will improve maintenance requirements and avoid plant shutdown due to a failure to meet the SRs. The plant procedures also provide assurance that the REC surge tank water level will be maintained to meet post-LOCA conditions requirements. Thus, it meets the regulatory requirements and the NRC staff finds this proposal acceptable.

## 4.0 <u>SUMMARY</u>

In summary, the NRC staff has determined that the licensee proposed change of SR 3.7.3.1 is acceptable because it meets the current regulation at 10 CFR 50.36 and SRP Section 9.2.2 as discussed above.

#### 5.0 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.

#### 6.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes a

surveillance requirement. 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 (67 FR 15624 published April 2, 2002). 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.

## 7.0 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.

## 8.0 <u>REFERENCES</u>

- 1. Letter from David L. Wilson, Nebraska Public Power District to US Nuclear Regulatory Commission, "Proposed License Amendment Related to REC Surge Tank SR 3.7.3.1," dated January 21, 2002.
- 2. NUREG-1433, Rev. 1, "Standard Technical Specifications BWR plants," dated April 1995.
- 3. Issuance of License Amendment No. 185 on "Crediting Service Water for Reactor Equipment Cooling During a LOCA Event," dated March 13, 2001.

Principal Contributor: K. Desai

Date: September 18, 2002

#### **Cooper Nuclear Station**

cc:

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