UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

NEBRASKA PUBLIC POWER DISTRICT

DOCKET NO. 50-298

COOPER NUCLEAR STATION

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 176
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 May 5, 1997, 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 to approve the relocation of certain Technical Specification requirements to licensee-controlled documents, as described in Licensee's application dated May 5, 1997, and reviewed in the Staff's safety evaluation report dated May 9, 1997. This license is also hereby 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. Technical Specifications

      The Technical Specifications contained in Appendix A, as revised through Amendment No. 176, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. The license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

William D. Beckner, Project Director
Project Directorate IV-1
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: May 9, 1997

ATTACHMENT TO LICENSE AMENDMENT NO. 176

FACILITY OPERATING LICENSE NO. DPR-46

DOCKET NO. 50-298

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change.

REMOVE PAGES	INSERT PAGES
107	107
110	110

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
3.4 STANDBY LIQUID CONTROL SYSTEM	4.4 STANDBY LIQUID CONTROL SYSTEM
Applicability:	Applicability:
Applies to the operating status of the Standby Liquid Control (SLC) System.	Applies to the surveillance requirements of the Standby Liquid Control (SLC) System.
Objective:	Objective:
To assure the OPERABILITY of a system with the capability to SHUTDOWN the reactor and maintain the SHUTDOWN condition without the use of control rods.	To verify the OPERABILITY of the SLC System.
Specification:	Specification:
A. Normal System Operation	A. Normal System Operation
1. During periods when fuel is in the reactor and prior to startup from a Cold Condition, the Standby Liquid Control System shall be operable, except as specified in 3.4.B below. This system need not be operable when the reactor is in the Cold Condition and all control rods are fully inserted and Specification 3.3.A is met.	The OPERABILITY of the SLC System shall be shown by the performance of the following tests:
	1. At least once each 3 months each subsystem shall be tested for OPERABILITY by recirculating demineralized water to the test tank and verifying each pump develops a flow rate $\geq$ 38.2 gpm at a discharge pressure $\geq$ 1300 psig.
	2. At least once during each OPERATING CYCLE:
	a. Manually initiate the system, except explosive valves, and pump boron solution from the SLC Storage Tank through the recirculation path. Verify each pump develops a flow rate $\geq$ 38.2 gpm at a discharge pressure $\geq$ 1300 psig. After pumping boron solution the system will be flushed with demineralized water.

3.4 BASES

STANDBY LIQUID CONTROL SYSTEM

A. The Standby Liquid Control (SLC) System consists of two, distinct subsystems, each containing one positive displacement pump and independent suction from the SLC storage tank, and discharge to a common injection header through parallel explosive valves. The purpose of the SLC System is to provide the capability of bringing the reactor from RATED POWER to a cold, xenon-free SHUTDOWN CONDITION assuming that none of the withdrawn control rods can be inserted. To meet this objective, the system is designed to inject a quantity of boron that produces a concentration of 660 ppm of boron in the reactor pressure vessel in less than 125 minutes. The 660 ppm concentration in the reactor pressure vessel is required to bring the reactor from RATED POWER to a 3.0 percent Δk subcritical condition, considering the hot to cold reactivity difference, xenon poisoning, etc. The time requirement for inserting the boron solution was selected to override the rate of reactivity insertion caused by cooldown of the reactor following the xenon poison peak.

The conditions under which the SLC System must provide shutdown capability are identified in Limiting Conditions for Operation. If no more than one OPERABLE control rod is withdrawn, the basic shutdown reactivity requirement for the core is satisfied and the SLC System is not required. Thus, the basic reactivity requirement for the core is the primary determinant of when the SLC System is required.

B. Only one of the two SLC subsystems is needed for operating the system. One inoperable subsystem does not immediately threaten shutdown capability, and reactor operation can continue while the inoperable subsyster is being repaired. The seven day completion time is based on the availability of an OPERABLE subsystem capable of performing the intended SLC system function and the low probability of a Design Basis Accident (DBA) or severe transient occurring concurrent with the failure of the Control Rod Drive (CRD) system to shut down the plant.