



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20565

NEBRASKA PUBLIC POWER DISTRICT  
DOCKET NO. 50-298  
COOPER NUCLEAR STATION  
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 139  
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 November 1, 1988, 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. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 139, 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

*Stein R. Peterson*

*for* Theodore R. Quay, Director  
Project Directorate IV-1  
Division of Reactor Projects III, IV, and V  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: March 27, 1991

ATTACHMENT TO LICENSE AMENDMENT NO. 139

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

9  
70  
75  
108  
168

INSERT PAGES

9  
70  
75  
108  
168

## 2.1.A (Cont'd)

3. Turbine Stop Valve Closure Scram Trip Setting

<10 percent valve closure when above 30% turbine first stage pressure.

4. Turbine Control Valve Fast Closure Scram Trip Setting

Turbine control fluid pressure >1000 psi when above 30% turbine first stage pressure.

5. Main Steam Line Isolation Valve Closure Scram Trip Setting

<10 percent valve closure in 3 out of 4 main steam lines, and the Reactor Mode Switch in the "Run" position.

6. Main Steam Line Isolation Valve Closure on Low Pressure

>825 psig when mode switch is in "Run".

Relationship of instrument water level indications to core and reactor vessel levels is illustrated in Figure 2.1-1.

B. Reactor Water Level Trip Settings Which Initiate Core Standby Cooling Systems (CSCS)

Reactor low-low water level initiation of CSCS systems setting shall be at or above -145.5 i . indicated level.

COOPER NUCLEAR STATION  
TABLE 4.2.B (Page 1)  
CORE SPRAY SYSTEM TEST & CALIBRATION FREQUENCIES

Item	Item I.D. No.	Functional Test Freq.	Calibration Freq.	Instrument Check
<u>Instrument</u>				
1. Reactor Low Water Level	NBI-LIS-72, A,B,C, & D	Once/Month (1)	Once/3 Months	Once/Day
2. Reactor Low Pressure	NBI-PS-52, A1,A2,C1, & C2	Once/Month (1)	Once/3 Months	None
3. Drywell High Pressure	NBI-PIS-52, B & D	Once/Month (1)	Once/3 Months	None
4. Core Spray Pump Disch. Press.	PC-PS-101, A,B,C, & D	Once/Month (1)	Once/3 Months	None
5. Core Spray Pump Time Delay	CS-PS-44, A & B	Once/Month (1)	Once/3 Months	None
	CS-PS-37, A & B	Once/Month (1)	Once/Oper. Cycle (4)	None
6. Emergency Bus Low Volt Relay	CS-TDR - K16, A & B	Once/Month (1)	Once/Oper. Cycle (4)	None
	27X1 - 1F & 1G	Once/Oper. Cycle	N.A.	None
7. Aux. Bus Low Voltage Relay	27X2 - 1F & 1G	Once/Oper. Cycle	N.A.	None
8. Pump Disch. Line Low Press.	27X3 - 1A & 1B	Once/Oper. Cycle	N.A.	None
	CM-PS-73, A & B	Once/3 Months	Once/3 Months	None
<u>Logic (4) (6)</u>				
1. Logic Power Monitor		Once/6 Months	N.A.	N.A.
2. Core Spray Initiation		Once/6 Months	N.A.	N.A.
3. Pump & Valve (Signal Override) Control		Once/6 Months	N.A.	N.A.

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TABLE 4.2.B (Page 6)  
RCIC TEST & CALIBRATION FREQUENCIES

Item	Item I.D. No.	Functional Test Freq.	Calibration Freq.	Instrument Check
<u>Instrument Channels</u>				
1. Reactor High Water Level	NBI-LIS-101 A & C, #2	Once/Month (1)		
2. Reactor Low Water Level	10A - K79 A & B-10A-K80 A & B	Once/Month (1)	Once/3 Months N.A.	Once/Day Once/Day
3. RCIC High Turbine Exhaust Press.	RCIC-PS-72, A & B	Once/Month (1)	Once/3 Months	None
4. RCIC Low Pump Suction Press.	RCIC-PS-67-1	Once/Month (1)	Once/3 Months	None
5. RCIC Steam Line Space Excess Temp.	RCIC-TS-79, A,B,C, & D	Once/Month (1)	Once/Oper. Cycle	None
	RCIC-TS-80, A,B,C, & D	Once/Month (1)	Once/Oper. Cycle	None
	RCIC-TS-81, A,B,C, & D	Once/Month (1)	Once/Oper. Cycle	None
	RCIC-TS-82, A,B,C, & D	Once/Month (1)	Once/Oper. Cycle	None
6. RCIC Steam Line High ΔP	RCIC-dPIS-83	Once/Month (1)	Once/3 Months	None
	RCIC-dPIS-84	Once/Month (1)	Once/3 Months	None
7. RCIC Steam Supply Press. Low	RCIC-PS-87, A,B,C, & D	Once/Month (1)	Once/3 Months	None
8. RCIC Low Pump Disch. Flow	RCIC-FIS-57	Once/Month (1)	Once/3 Months	None
9. Pump Disch. Line Low Pressure	CM-PS-269	Once/3 Months	Once/3 Months	None
10. RCIC Turbine Conditional Supv. Alarm Timer	RCIC-TDR - K9	Once/Month (1)	Once/3 Months Once/Oper. Cycle	None None
11. RCIC Steam Line High ΔP Actuation Timer	RCIC-TDR-K-12	Once/Month	Once/Oper. Cycle	None
	RCIC-TDR-K-32	Once/Month	Once/Oper. Cycle	None
<u>Logic Systems (4)(6)</u>				
1. Logic Bus Power Monitor		Once/6 Months	N.A.	
2. RCIC Initiation		Once/6 Months	N.A.	
3. Turbine Trip		Once/6 Months	N.A.	
4. RCIC Automatic Isolation		Once/6 Months	N.A.	

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LIMITING CONDITIONS FOR OPERATION

SURVEILLANCE REQUIREMENTS

3.4

4.4.A.2.c (Cont'd.)

pump demineralized water into the reactor vessel from the test tank.

These tests check the actuation of the explosive charge of the tested loop, proper operation of the valves, and pump operability. The replacement charges to be installed will be selected from the same manufactured batch as a previously tested charge.

d. Both systems, including both explosive valves, shall be tested in the course of two operating cycles.

B. Operation with Inoperable Components:

B. Surveillance with Inoperable Components:

1. From and after the date that a redundant component is made or found to be inoperable, Specification 3.4.A.1 shall be considered fulfilled and continued operation permitted provided that the component is returned to an operable condition within seven days.

1. When a component is found to be inoperable, its redundant component shall be demonstrated to be operable immediately and daily thereafter until the inoperable component is repaired.

C. Sodium Pentaborate Solution

C. Sodium Pentaborate Solution

At all times when the Standby Liquid Control System is required to be operable the following conditions shall be met:

The following tests shall be performed to verify the availability of the Liquid Control Solution:

1. The net volume versus concentration of the Liquid Control Solution in the liquid control tank shall be maintained as required in Figure 3.4.1.

1. Volume: Check and record at least once per day.

2. The temperature of the liquid control solution shall be maintained above the curve shown in Figure 3.4.2.

2. Temperature: Check and record at least once per day.

3. Concentration: Check and record at least once per month. Also check concentration anytime water or boron is

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 TABLE 3.7.1 (Page 1)  
 PRIMARY CONTAINMENT ISOLATION VALVES

Valve & Steam	Number of Power Operated Valves		Maximum Operating Time (Sec) (1)	Normal Position (2)	Action On Initiating Signal (3)
	Inboard	Outboard			
Main Steam Isolation Valves					
MS-AO-80- A,B,C, & D	4		3 5 T 5 5	0	GC
MS-AO-86- A,B,C, & D		4	3 5 T 5 5	0	GC
Drywell Floor Drain Iso. Valves					
RW-AO-82, RW-AO-83		2	15	0	GC
Drywell Equipment Drain					
Iso. Valves RW-AO-94, RW-AO-95		2	15	0	GC
Main Steam Line Drain					
Valves MS-MO-74, MS-MO-77	1	1	30	0	GC
Reactor Water Sample Valves					
RRV-740AV, RRV-741AV	1	1	15	0	GC
Reactor Water Cleanup System					
Iso. Valves RWCU-MO-15, RWCU-MO-18	1	1	60	0	GC
RHR Suction Cooling Iso.					
Valve RHR-MO-17, RHR-MO-18	1	1	40	C	SC
RHR Discharge to Radwaste					
Iso. Valves RHR-MO-57, RHR-MO-67		2	20	C	SC
Suppression Chamber Purge & Vent					
PC-245AV, PC-230MV		2	15	C	SC
Suppression Chamber N <sub>2</sub> Supply					
PC-237AV, PC-233MV		2	15	C	SC

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