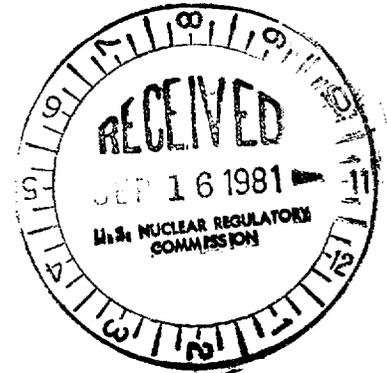


Docket No. 50-298

September 11, 1981



Mr. J. M. Pilant, Director
Licensing & Quality Assurance
Nebraska Public Power District
P.O. Box 499
Columbus, Nebraska 68601

Dear Mr. Pilant:

The Commission has issued the enclosed Amendment No. 73 to Facility Operating License No. DPR-46 for the Cooper Nuclear Station in response to your application dated August 21, 1981.

This amendment modifies Appendix A of the Technical Specifications to delete the requirement that the Scram Discharge Volume high water level scram signal be operative while the reactor is in the shutdown mode. Since the control rods are fully inserted when the reactor is in the shutdown mode, the availability of the scram discharge volume is not required. The Standard Technical Specifications for General Electric Boiling Water Reactors (NUREG-0123, Rev. 3) only require this trip to be operative in the startup mode, run mode, and refueling mode (when a control rod is withdrawn).

Based on the foregoing, we have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and pursuant to 10 CFR §51.5(d)(4) that an environmental impact statement, negative declaration or environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

cp
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We have further concluded that the amendment does not involve significant new safety information of a type not considered by a previous Commission safety review of the facility. It does not involve a significant increase in the probability or consequences of an accident, does not involve a significant decrease in a safety margin and, therefore, does not involve a significant hazards consideration. We have also concluded that there is reasonable assurance that the health and safety of the public will not be endangered by this action.

OFFICE
SURNAME	8109180088 810911
DATE	PDR ADDCK 05000298
	P PDR

Mr. J. M. Pilant

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A copy of the Notice of Issuance is also enclosed.

Sincerely,

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Byron L. Siegel, Project Manager
Operating Reactors Branch #2
Division of Licensing

Enclosures:

- 1. Amendment No. 73
- 2. Notice

cc: w/enclosure
See next page

Distribution:

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DATE	9/8/81	9/8/81	9/8/81	9/8/81	9/9/81	

off. notice objection to record & notice

Mr. J. M. Pilant
Nebraska Public Power District

cc:

Mr. G. D. Watson, General Counsel
Nebraska Public Power District
P. O. Box 499
Columbus, Nebraska 68601

Mr. Arthur C. Gehr, Attorney
Snell & Wilmer
3100 Valley Center
Phoenix, Arizona 85073

Cooper Nuclear Station
ATTN: Mr. L. Lessor
Station Superintendent
P. O. Box 98
Brownville, Nebraska 68321

Auburn Public Library
118 - 15th Street
Auburn, Nebraska 68305

Director
Nebraska Dept. of Environmental Control
P. O. Box 94877, State House Station
Lincoln, Nebraska 68509

Mr. William Siebert, Commissioner
Nemaha County Board of Commissioners
Nemaha County Courthouse
Auburn, Nebraska 68305

Mr. Dennis Dubois
USNRC
Resident Inspector
P. O. Box 218
Brownsville, NE 68321

U. S. Environmental Protection Agency
Region VII Office
ATTN: EIS COORDINATOR
324 East 11th Street
Kansas City, MO 64106



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

NEBRASKA PUBLIC POWER DISTRICT

DOCKET NO. 50-298

COOPER NUCLEAR STATION

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 73
License No. DPR-46

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Nebraska Public Power District dated August 21, 1981, 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 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:

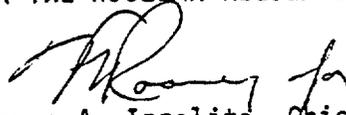
(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 73, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Thomas A. Ippolito, Chief
Operating Reactors Branch #2
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: September 11, 1981

ATTACHMENT TO LICENSE AMENDMENT NO. 73

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

28
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Insert

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COOPER NUCLEAR STATION
TABLE 3.1.1
REACTOR PROTECTION SYSTEM INSTRUMENTATION REQUIREMENTS

Reactor Protection System Trip Function	Applicability Conditions				Trip Level Setting	Minimum Number of Operable Channels Per Trip Systems (1)	Action Required When Equipment Operability is Not Assured (1)
	Mode Switch Position						
	Shutdown	Startup	Refuel	Run			
Mode Switch in Shutdown	X(7)	X	X	X		1	A
Manual Scram	X(7)	X	X	X		1	A
IRM (17) High Flux	X(7)	X	X	(5)	\leq 120/125 of indicated scale	3	A
Inoperative		X	X	(5)		3	A
APRM (17) High Flux (Flow biased)				X	\leq (0.66W+54%) (14) $\left[\frac{FRP}{MFLPD} \right]$	2	A or C
High Flux	X(7)	X(9)	X(9)	(16)	\leq 15% Rated Power		A or C
Inoperative		X(9)	X(9)	X	(13)	2	A or C
Downscale		(11)		X(12)	\geq 2.5% of indicated scale	2	A or C
High Reactor Pressure NBI-PS-55 A,B,C, & D		X(9)	X(10)	X	\leq 1045 psig	2	A
High Drywell Pressure PC-PS-12 A,B,C, & D		X(9)(8)	X(8)	X	\leq 2 psig	2	A or D
Reactor Low Water Level NBI-LIS-101 A,B,C, & D		X	X	X	$>$ 12.5 in. indicated level	2	A or D
Scram Discharge Volume High Water Level CRD-LS-231 A,B,C, & D		X	X(2)	X	\leq 36 gallons	2	A

NOTES FOR TABLE 3.1.1

1. There shall be two operable or tripped trip systems for each function. If the minimum number of operable instrument channels for a trip system cannot be met, the affected trip system shall be placed in the safe (tripped) condition, or the appropriate actions listed below shall be taken.
 - A. Initiate insertion of operable rods and complete insertion of all operable rods within four hours.
 - B. Reduce power to less than 30% of rated.
 - C. Reduce power level to IRM range and place mode switch in the Startup position within 8 hours and depressurize to less than 1000 psig.
 - D. Reduce turbine load and close main steam line isolation valves within 8 hours.
2. Permissible to bypass, with control rod block, for reactor protection system reset in refuel and shutdown positions of the reactor mode switch.
3. Permissible to bypass when reactor pressure is \leq 1000 psig and the mode switch is not in Run.
4. Permissible to bypass when turbine first stage pressure is less than 30% of full load.
5. IRM's are bypassed when APRM's are onscale and the reactor mode switch is in the run position.
6. The design permits closure of any two lines without a full scram being initiated.
7. When the reactor is subcritical, irradiated fuel is in the vessel, and the reactor water temperature is less than 212^oF, only the following trip functions need to be operable:
 - a. Mode switch in shutdown.
 - b. Manual scram.
 - c. High flux IRM. 120/125 indicated scale.
 - d. APRM (15%) high flux scram.
8. Not required to be operable when primary containment integrity is not required.
9. Not required while performing low power physics tests at atmospheric pressure during or after refueling at power levels not to exceed 5 MW(t).
10. Not required to be operable when the reactor pressure vessel head is not bolted to the vessel.

3.1 BASES' (Cont.d)

ence paragraph VII.5.7 FSAR). Thus the IRM System is not required in the "Run" mode. The APRM's cover only the power range. The IRM's and APRM's provide adequate coverage in the startup and intermediate range.

The requirement to have the scram functions indicated in Table 3.1.1 operable in the Refuel mode assures that shifting to the Refuel mode during reactor power operation does not diminish the protection provided by the reactor protection system.

Turbine stop valve scram occurs at 10% of valve closure. Below 233 psig turbine first stage pressure (30% of rated), the scram signal due to turbine stop valve closure is bypassed because the flux and pressure scrams are adequate to protect the reactor.

Turbine control valves fast closure initiates a scram based on pressure switches sensing Electro-Hydraulic Control (EHC) system oil pressure. The switches are located on the Control Valve Emergency Trip oil header, and detects the loss of oil to hold the valves open.

This scram signal is also bypassed when turbine first stage pressure is less than 233 psig.

The requirements that the IRM's be inserted in the core when the APRM's read 2.5 indicated on the scale in the Startup and Refuel modes assures that

4.1 BASES (Cont.d)

zero flow signal will be sent to half of the APRM's resulting in a half scram and rod block condition. Thus, if the calibration were performed during operation, flux shaping would not be possible. Based on experience at other generating stations, drift of instruments, such as those in the Flow Biasing Network, is not significant and therefore, to avoid spurious scrams, a calibration frequency of each refueling outage is established.

Group (C) devices are active only during a given portion of the operational cycle. For example, the IRM is active during startup and inactive during full-power operation. Thus, the only test that is meaningful is the one performed just prior to shutdown or startup; i.e., the tests that are performed just prior to use of the instrument.

Calibration frequency of the instrument channel is divided into two groups. These are as follows:

1. Passive type indicating devices that can be compared with like units on a continuous basis.
2. Vacuum tube or semi-conductor devices and detectors that drift or lose sensitivity.

Experience with passive type instruments in generating stations and substations indicates that the specified calibrations are adequate. For those devices which employ amplifiers, etc., drift specifications call for drift to be less than 0.4%/month; i.e., in the period of a month a maximum drift of 0.4% could occur, thus providing for adequate margin.

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-298

NEBRASKA PUBLIC POWER DISTRICT

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY
OPERATING LICENSE

The U.S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 73 to Facility Operating License No. DPR-46, issued to Nebraska Public Power District (the licensee), which revised the Technical Specifications for operation of the Cooper Nuclear Station located in Nemaha County, Nebraska. The amendment is effective as of the date of its issuance.

This amendment modifies Appendix A of the Technical Specifications to delete the requirement that the scram discharge volume high water level scram signal be operative while the reactor is in the shutdown mode. Since the control rods are fully inserted when the reactor is in the shutdown mode, the availability of the scram discharge volume is not required. The Standard Technical Specifications for General Electric Boiling Water Reactors (NUREG-0123, Rev. 3) only require this trip to be operative in the startup mode, run mode, and refueling mode (when a control rod is withdrawn).

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

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The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR Section 51.5(d)(4), an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment dated August 21, 1981, (2) Amendment No. 73 to License No. DPR-46 and (3) the Commission's letter to the licensee dated September 11, 1981. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C., and at the Auburn Public Library, 118 - 15th Street, Auburn, Nebraska 68304. A copy of items (2) and (3) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 11th day of September 1981.

FOR THE NUCLEAR REGULATORY COMMISSION



Vernon L. Rooney, Acting Branch Chief
Operating Reactors Branch #2
Division of Licensing