

March 15, 1991

Docket No. 50-298

Mr. Guy R. Horn
Nuclear Power Group Manager
Nebraska Public Power District
Post Office Box 499
Columbus, Nebraska 68602-0499

Dear Mr. Horn:

SUBJECT: COOPER NUCLEAR STATION - AMENDMENT NO. 138 TO FACILITY
OPERATING LICENSE NO. DPR-46 (TAC NO. 75792)

The Commission has issued the enclosed Amendment No. 138 to Facility Operating License No. DPR-46 for the Cooper Nuclear Station. The amendment consists of changes to the Technical Specifications in response to your application dated January 11, 1990.

The amendment revises Technical Specification Table 3.7.4, "Primary Containment Testable Isolation Valves," to reflect a modification associated with air operated testable check valves RCIC-AO-22 and HPCI-AO-18. The valves have been redesignated as RCIC-26CV and HPCI-29CV as a result of the removal of the air actuator. In addition, reference to RCIC-MO-17 and HPCI-MO-57 has been deleted to reflect the removal of these bypass valves as part of the modification.

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

Sincerely,

Original signed by:

Paul W. O'Connor, Project Manager
Project Directorate IV-1
Division of Reactor Projects III, IV, and V
Office of Nuclear Reactor Regulation

Enclosures:

- Amendment No. 138 to License No. DPR-46
- Safety Evaluation

cc w/enclosures:
See next page

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Docket File	NRC/Local PDR	PD4-1 Reading
M. Virgilio	T. Quay	P. Noonan
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Wanda Jones(MS7103)	J. Calvo(MS11F22)	PD4-1 Plant File
GPA/PA(MS2G5)	ARM/LFMB(MS4503)	L. Constable,RIV
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OFC : PD4-1/LA	OM : PD4-1/PE	WDR : PD4-1/PM	RWR : NRR/EMEB	OGC : ETO	PD4-1/D	
NAME : PNoonan	WReckley	PO'Connor	Th: TSu	E Holler	TQuay	Pre
DATE : 2/19/91	2/19/91	2/20/91	3/4/91	3/11/91	3/15/91	

OFFICIAL RECORD COPY Document Name: COOPER AMEND/75792

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

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Sincerely,

A handwritten signature in cursive script that reads "Paul W. O'Connor".

Paul W. O'Connor, Project Manager
Project Directorate IV-1
Division of Reactor Projects III, IV, and V
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 138 to
License No. DPR-46
2. Safety Evaluation

cc w/enclosures:
See next page

Mr. Guy R. Horn
Nuclear Power Group Manager

Cooper Nuclear Station

cc:

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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. 138
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 11, 1990, 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.

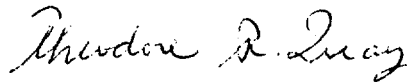
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 2.C.(2) of Facility Operating License No. DPR-46 is hereby amended to read as follows:

2. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 138, 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



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 15, 1991

ATTACHMENT TO LICENSE AMENDMENT NO. 138

FACILITY OPERATING LICENSE NO. DPR-46

DOCKET NO. 50-298

Replace the following page of the Appendix A Technical Specifications with the enclosed page. The revised page is identified by Amendment number and contains vertical lines indicating the area of change.

REMOVE PAGE

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INSERT PAGE

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TABLE 3.7.4

PRIMARY CONTAINMENT TESTABLE ISOLATION VALVES

<u>PEN. NO.</u>	<u>VALVE NUMBERS</u>	<u>TEST MEDIA</u>
X-7A	MS-AO-80A and MS-AO-86A, Main Steam Isolation Valves	Air
X-7B	MS-AO-80B and MS-AO-86B, Main Steam Isolation Valves	Air
X-7C	MS-AO-80C and MS-AO-86C, Main Steam Isolation Valves	Air
X-7D	MS-AO-80D and MS-AO-86D, Main Steam Isolation valves	Air
X-8	MS-MO-74 and MS-MO-77, Main Steam Line Drain	Air
X-9A	RF-15CV and RF-16CV, Feedwater Check Valves	Air
X-9A	RCIC-26CV, and RWCU-15CV, RCIC/RWCU Connection to Feedwater	Air
X-9B	RF-13CV and RF-14CV, Feedwater Check Valves	Air
X-9B	HPCI-29CV, HPCI Connection to Feedwater	Air
X-10	RCIC-MO-15 and RCIC-MO-16, RCIC Steam Line	Air
X-11	HPCI-MO-15 and HPCI-MO-16, HPCI Steam Line	Air
X-12	RHR-MO-17 and RHR-MO-18, RHR Suction Cooling	Air
X-13A	RHR-MO-25A and RHR-MO-27A, RHR Supply to RPV	Air
X-13B	RHR-MO-25B and RHR-MO-27B, RHR Supply to RPV	Air
X-14	RWCU-MO-15 and RWCU-MO-18, Inlet to RWCU System	Air
X-16A	CS-MO-11A and CS-MO-12A, Core Spray to RPV	Air
X-16B	CS-MO-11B and CS-MO-12B, Core Spray to RPV	Air
X-18	RW-732AV and RW-733AV, Drywell Equipment Sump Discharge	Air
X-19	RW-765AV and RW-766AV, Drywell Floor Drain Sump Discharge	Air
X-25 (Note 1)	PC-232MV and PC-238AV, Purge and Vent Supply to Drywell	Air
X-25	ACAD-1305MV and ACAD-1306MV, Supply to Drywell	Air
X-26 (Note 1)	PC-231MV, PC-246AV, and PC-306 MV Purge and Vent Exhaust from Drywell	Air
X-26	ACAD-1310MV, Bleed from Drywell	Air



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 138 TO FACILITY OPERATING LICENSE NO. DPR-46
NEBRASKA PUBLIC POWER DISTRICT
COOPER NUCLEAR STATION
DOCKET NO. 50-298

1.0 INTRODUCTION

By letter dated January 11, 1990, Nebraska Public Power District (the licensee) requested an amendment to the Technical Specifications appended to Facility Operating License No. DPR-46 for the Cooper Nuclear Station. The proposed amendment would revise Technical Specification Table 3.7.4, "Primary Containment Testable Isolation Valves," to reflect a modification associated with air operated testable check valves RCIC-AO-22 and HPCI-AO-18. The valves have been redesignated as RCIC-26CV and HPCI-29CV as a result of the removal of the air actuator. In addition, reference to RCIC-MO-17 and HPCI-MO-57 has been deleted to reflect the removal of these bypass valves as part of the modification.

2.0 DISCUSSION

The air actuator and associated motor-operated bypass valves for testable isolation check valves in the Core Spray (CS), Residual Heat Removal (RHR), Reactor Core Isolation Cooling (RCIC) and High Pressure Coolant Injection (HPCI) Systems were installed to allow remote testing of the check valves during power operation. Due to concerns related to the accuracy of the tests performed using the air actuator and industry experience with check valve failures caused by the air actuators, the licensee removed the actuators during the 1990 refueling outage. The motor-operated bypass valves used to equalize pressure across the check valves during on-line testing were also removed. The operability testing of the check valves is not specifically addressed by the Technical Specifications but reference to the RCIC and HPCI valves is made in Table 3.7.4 which lists those valves subject to primary containment local leak rate testing. The amendment changes the designation for the RCIC and HPCI valves from RCIC-AO-22 and HPCI-AO-18 to RCIC-26CV and HPCI-29CV to reflect the removal of the air actuator. Reference to the associated bypass valves RCIC-MO-17 and HPCI-MO-57 is deleted since the modification has removed these valves.

The use of the air actuators to perform on-line testing of these check valves provides questionable results due to the excessive force applied. The testing may not provide an accurate representation of valve operability under full flow accident conditions. Following the removal of the air actuators, testing of the RCIC and HPCI check valves is conducted in accordance with ASME, Section XI, IWV-3522 requirements. Given

that the check valve operability testing is not specifically addressed by the Technical Specifications and is performed in accordance with ASME Section XI requirements, the staff agrees with the licensee that the change does not involve a reduction in the margin of safety.

The modification may enhance safety by reducing the probability of check valve failures and the resultant potential for an interfacing system Loss of Coolant Accident (LOCA). The contribution of air actuators to the history of testable check failures was detailed in the NRC Case Study Report AEOD/C502, "Overpressurization of Emergency Core Cooling Systems in Boiling Water Reactors." The case study discussed the potential interfacing system LOCA concerns associated with testable check valves and on-line testing. The modification and related procedure changes performed by the licensee is in accordance with the recommendations of the AEOD/C502 report and therefore achieves the safety improvements identified in the report.

Based on its review, the staff finds the licensee's proposed Technical Specification change to be acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

The amendment involves a change in 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. The 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 exposures. 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. 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.

4.0 CONCLUSION

The staff 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, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: March 15, 1991

Principal Contributor: W. Reckley