DOCKET FILE

Docket No. 50-298

September 22, 1992

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. 154 TO FACILITY OPERATING LICENSE NO. DPR-46 (TAC NO. M83228)

The Commission has issued the enclosed Amendment No.154 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 October 7, 1991.

The amendment changes the Technical Specifications to add operational and surveillance requirements for the primary containment hydrogen concentration analyzer in accordance with the guidance of NRC Generic Letter 83-36.

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:
Roby B. Bevan, Project Manager
Project Directorate IV-1
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

Enclosures:
1. Amendment No.154 to License No. DPR-46
2. Safety Evaluation

cc w/enclosures:
See next page

DISTRIBUTION:

Docket File	NRC/Local PDRs	PD4-1 Reading
M. Virgilio	J. Larkins	P. Noonan
ACRS(10)(MSP315)	OGC(MS15B18)	D. Hagan(MS3206)
Wanda Jones(MS7103)	C. Grimes(MS11E22)	PD4-1 Plant File
OPA(MS2G5)	OC/LFMB(MS4503)	P. Harrell, RIV
R. Bevan (2)	B. Boger	

OFC	LA:PD4-1	PM:PD4-1	OGC	D:PD4-1
NAME	PNoonan	RBevan:pk		JLarkins
DATE	9/14/92	9/14/92	9/18/92	9/22/92

subject to minor changes

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

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See next page

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. 154
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 October 7, 1991, 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. 154 , 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

John T. Larkins

John T. Larkins, Director
Project Directorate IV-1
Division of Reactor Projects - III/IV/V
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: September 22, 1992

ATTACHMENT TO LICENSE AMENDMENT NO. 154

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
67a	67a
67b	67b
82a	82a

COOPER NUCLEAR STATION
TABLE 3.2.H
POST-ACCIDENT MONITORING INSTRUMENTATION REQUIREMENTS*

Instrument	Instrument ID Number	Range	Minimum Number of Operable Instrument Channels	Action Required When Component Operability Is Not Assured
Elevated Release Point (ERP) Monitor (High Range Noble Gas)	RMP-RM-3B	1.00E-2 to 1.00E+5 μc/cc (Xe-133 Equivalent)	1 (Note 1)	A
Turbine Building Ventilation Exhaust Monitor (High Range Noble Gas)	RMV-RM-20B	1.00E-2 to 1.00E+5 μc/cc (Xe-133 Equivalent)	1 (Note 1)	A
Radwaste/Augmented Radwaste Exhaust Monitor (High Range Noble Gas)	RMV-RM-30B	1.00E-2 to 1.00E+5 μc/cc (Xe-133 Equivalent)	1 (Note 1)	A
Primary Containment Gross Radiation Monitor	RMA-RM-40A RMA-RM-40B	1.0-1.0E+7 R/Hr. 1.0-1.0E+7 R/Hr.	2 (Note 1)	A
Primary Containment Hydrogen Concentration Analyzer	PC-AN-H_2/O_2I PC-AN-H_2/O_2II	0% to 30% 0% to 30%	2 (Notes 1 and 2)	B

*Note: Other Post-Accident Monitoring Instrumentation is located in Table 3.2.F-
Drywell Pressure, PC-PR-1A and 1B, Suppression Chamber/Torus Water Level PC-LR-1A and 1B

NOTES FOR TABLE 3.2.H

Action:

A. With the number of operable components less than required by the minimum component operable requirements, initiate the preplanned alternate method of monitoring the appropriate parameter(s) within 72 hours, and:

1) Either restore the inoperable component(s) to operable status within 7 days of the event, or

2) Prepare and submit a Special Report to the Commission within 14 days following the event outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to operable status.

B. The following actions will be taken if the minimum number of operable instrument channels as required are not operable:

1) With the number of operable channels one less than the minimum number of operable channels shown, restore the inoperable channel to operable status within 30 days or be in at least hot shutdown within the next 12 hours.

2) With no operable channels available, restore at least one channel to operable status within 7 days or be in at least hot shutdown within the next 12 hours.

Notes:

1. These instruments are required to be operable at all times except when the reactor is in cold shutdown or in the REFUEL mode during a refueling outage.

2. With two channels operable, the normal condition is with one analyzer in the standby mode.

COOPER NUCLEAR STATION

TABLE 4.2.H

CALIBRATION FREQUENCY FOR POST-ACCIDENT MONITORING INSTRUMENTATION*

Instrument	Instrument ID Number	Function Test Frequency	Calibration Frequency
Elevated Release Point (ERP) Monitor (High Range Noble Gas)	RMP-RM-3B	Once/Month	Once/Cycle
Turbine Building Ventilation Exhaust Monitor (High Range Noble Gas)	RMV-RM-20B	Once/Month	Once/Cycle
Radwaste/Augmented Radwaste Exhaust Monitor (High Range Noble Gas)	RMV-RM-30B	Once/Month	Once/Cycle
Primary Containment Gross Radiation Monitors**	RMA-RM-40A RMA-RM-40B	Once/Month	Once/Cycle
Primary Containment Hydrogen Concentration Analyzer	PC-AN-H_2/O_2I PC-AN-H_2/O_2II	Once/Month	Once/Quarter

*Note: Other Post-Accident Monitoring Instrumentation calibration requirements are in Table 4.2.F-Drywell Pressure, PC-PR-1A and 1B, Suppression Chamber/Torus Water Level PC-LR-1A and 1B.

**CHANNEL CALIBRATION shall consist of an electronic calibration of the channel, not including the detector, for range decades above 10 R/hr and a one point calibration check of the detector below 10 R/hr with an installed or portable gamma source.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 154 TO FACILITY OPERATING LICENSE NO. DPR-46

NEBRASKA PUBLIC POWER DISTRICT

COOPER NUCLEAR STATION

DOCKET NO. 50-298

1.0 INTRODUCTION

By letter dated June 16, 1988, Nebraska Public Power District (NPPD, the licensee) requested license amendment Proposed Change (PC) No. 57 to incorporate Cooper Nuclear Station Technical Specification (TS) changes regarding the newly installed redundant H_2/O_2 monitoring systems in containment. The proposed change incorporated requirements for the redundant oxygen analysis monitor of the redundant oxygen and hydrogen analysis systems.

By letter dated October 7, 1991, the licensee submitted PC No. 76, which proposed a change to the technical specifications that would add limiting conditions for operation and surveillance requirements for the containment post-accident hydrogen concentration analysis systems. By letter dated August 12, 1992, the NRC issued Amendment No. 153 in response to PC No. 57, technical specifications for the containment atmosphere analyzer systems. This safety evaluation addresses PC No. 76, technical specifications for limiting conditions for operation (LCOs) and surveillance requirements (SRs) for hydrogen monitoring instrumentation in the post-accident containment atmosphere.

2.0 EVALUATION

The licensee proposed changes to Tables 3.2.H and 4.2.H to include requirements for redundant primary containment hydrogen analyzers. A new entry in Table 3.2.H, Post-Accident Monitoring Instrumentation Requirements, designates the minimum number of operable channels for each hydrogen concentration analyzer. The required actions when the number of operational channels is less than the required number is specified in the proposed amendment following the guidance of Generic Letter (GL) 83-36.

The installation of the hydrogen concentration analyzers had already been received and accepted by the NRC staff (letter from D. Vassallo, NRC, to L. Kuncl, NPPD, dated August 5, 1983); however, there were no TS requirements for operation of the instruments. However, consistency with the guidance provided in NRC GL 83-36 requires that containment for all Boiling Water Reactors (BWRs) should have both hydrogen and oxygen monitoring instrumentation with appropriate LCOs and SRs. Accordingly, such specified conditions are proposed. The staff has evaluated the proposed new TS and finds them to be appropriate and acceptable. In addition, a note has been added to Table 3.2.H to specify that one of two operable hydrogen concentration analyzers is normally in a standby mode of operation. This condition is appropriate to reduce equipment wear and to prolong the service life of the analyzer. The staff has previously approved a similar provision at another BWR-4 installation in a comparable condition, and finds it appropriate and acceptable in this case also. The operability of the standby analyzer will be verified by performing the calibration and test requirements as described in Table 4.2.H, Post-Accident Monitoring Instrumentation Requirements. The licensee proposed to incorporate into Table 4.2.H requirements for calibration and testing of the hydrogen analyzers. These requirements as proposed have been evaluated and found to be appropriate and acceptable. Another proposed change to Table 4.2.H not related to hydrogen monitoring instrumentation is the listing of an additional channel of primary containment gross radiation monitoring instrumentation. This change is likewise appropriate and is acceptable.

3.0 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.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes in surveillance requirements. 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 (57 FR 24673). 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.

5.0 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.

Principal Contributor: R. Bevan

Date: September 22, 1992