June 27, 1978

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Docket No. 50-298

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

Gentlemen:

The Commission has issued the enclosed Amendment No. 49 to Facility License No. DPR-46 for the Cooper Nuclear Station. This amendment consists of changes to the Technical Specifications in response to your request dated June 26, 1978, as supplemented June 27, 1978.

The amendment provides new limiting conditions of operation for the secondary containment integrity.

Copies of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

Thomas A. Ippolito, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Enclosures:
1. Amendment No. 49 to DPR-46
2. Safety Evaluation
3. Notice

cc w/enclosures:
see next page

| OFFICE | ORB#3 | ORB#3 | OELD | ORB#3 | | |
|---|---|---|---|---|---|---|
| SURNAME | SSheppard | VRooney:acr | V. Harding | TIppolito | | |
| DATE | 6/27/78 | 6/27/78 | 6/28/78 | 6/28/78 | | |

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Director
Nebraska Dept. of Environmental Control
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Mr. William Siebert, Commissioner
Nemaha County Board of Commissioners
Nemaha County Courthouse
Auburn, Nebraska 68305

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U. S. Environmental Protection Agency
Region VII
ATTN: EIS COORDINATOR
1735 Baltimore Avenue
Kansas City, Missouri 64108

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. 49
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 June 26, 1978, as supplemented June 27, 1978, 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 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. 49, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION

for Thomas A. Ippolito, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: June 28, 1978

ATTACHMENT TO LICENSE AMENDMENT NO. 49

FACILITY OPERATING LICENSE NO. DPR-46

DOCKET NO. 50-298

Revise Appendix A as follows:

Remove pages 166 and 181 and insert revised pages 166 and 181.

| LIMITING CONDITIONS FOR OPERATION | SURVEILLANCE REQUIREMENTS |
|---|---|
| 3.7.C (cont'd.) | 4.7.C (cont'd.) |
| a. The reactor is subcritical and Specification 3.3.A is met. | a. A preoperational secondary containment capability test shall be conducted after isolating the reactor building and placing either standby gas treatment system filter train in operation. Such tests shall demonstrate the capability to maintain 1/4 inch of water vacuum under calm wind ($2<\bar{\mu}<5$ mph) conditions with a filter train flow rate of not more than 100% of building volume per day. ($\bar{\mu}$= wind speed) |
| b. The reactor water temperature is below 212°F and the reactor coolant system is vented. | b. Additional tests shall be performed during the first operating cycle under an adequate number of different environmental wind conditions to enable valid extrapolation of the test results. |
| c. No activity is being performed which can reduce the shutdown margin below that specified in Specification 3.3.A. | c. Secondary containment capability to maintain 1/4 inch of water vacuum under calm wind ($2<\bar{\mu}<5$ mph) conditions with a filter train flow rate of not more than 100% of building volume per day, shall be demonstrated at each refueling outage prior to refueling. |
| d. Irradiated fuel is not being handled in the secondary containment. | d. After a secondary containment violation is determined, the standby gas treatment system will be operated immediately after the affected zones are isolated from the remainder of the secondary containment to confirm its ability to maintain the remainder of the secondary containment at 1/4 inch of water negative pressure under calm wind conditions. |
| e. If secondary containment integrity cannot be maintained, restore secondary containment integrity within 4 hours or; | |
| a. Be in at least Hot Shutdown within the next 12 hours and in cold shutdown within the following 24 hours. | |
| b. Suspend irradiated fuel handling operations in the secondary containment and all core alterations and activities which could reduce the shutdown margin. The provisions of Specification 1.0.J are not applicable. | |
| D. Primary Containment Isolation Valves | D. Primary Containment Isolation Valves |
| 1. During reactor power operating conditions, all isolation valves listed in Table 3.7.1 and all instrument line flow check valves shall be operable except as specified in 3.7.D.2. | 1. The primary containment isolation valves surveillance shall be performed as follows: |
| | a. At least once per operating cycle the operable isolation valves that are power operated and automatically initiated shall be tested for simulated automatic initiation and closure times |

check of the temperature and volume is adequate to assure that adequate heat removal capability is present.

Drywell Interior

The interiors of the drywell and suppression chamber are painted to prevent rusting. The inspection of the paint during each major refueling outage, approximately once per year, assures the paint is intact. Experience with this type of paint at fossil fueled generating stations indicates that the inspection interval is adequate.

Drywell to Suppression Chamber Structure Leakage Test

A leakage test of the drywell to suppression chamber structure shall be conducted at the end of each refueling outage. Using the drywell purge and vent system, the drywell pressure will be increased by 1.0 psi with respect to the wetwell pressure and held constant. Maintaining 1 psig in the drywell, the wetwell pressure will be monitored with a sensitive mercury manometer.

The maximum allowable bypass leakage limit is equivalent to a rate of change of wetwell pressure less than 0.30 inches of water per minute as measured over a ten minute period with a differential pressure of 1 psid between the drywell and the wetwell.

In the event the rate of change of pressure exceeds this value, the source of leakage will be identified and eliminated before power operation is resumed.

3.7.B&C. Standby Gas Treatment System and Secondary Containment

The secondary containment is designed to minimize any ground level release of radioactive materials which might result from a serious accident. The reactor building provides secondary containment during reactor operation when the drywell is sealed and in service. The reactor building provides primary containment when the reactor is shutdown and the drywell is open, as during refueling. Because the secondary containment is an integral part of the complete containment system, secondary containment is required at all times that primary containment is required as well as during refueling. Secondary containment may be broken for short periods of time to allow access to the reactor building roof to perform necessary inspections and maintenance.

The standby gas treatment system is designed to filter and exhaust the reactor building atmosphere to the stack during secondary containment isolation conditions. Both standby gas treatment system fans are designed to automatically start upon containment isolation and to maintain the reactor building pressure to the design negative pressure so that all leakage should be in-leakage. Should one system fail to start, the redundant system is designed to start automatically. Each of the two fans has 100 percent capacity.

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

# SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

# SUPPORTING AMENDMENT NO. 49 TO FACILITY OPERATING LICENSE NO. DPR-46

# NEBRASKA PUBLIC POWER DISTRICT

# COOPER NUCLEAR STATION

# DOCKET NO. 50-298

## Introduction

By letter dated June 26, 1978, supplemented by letter dated June 27, 1978, Nebraska Public Power District (NPPD - the licensee) requested an emergency amendment to Facility Operating License No. DPR-46 for the Cooper Nuclear Station (CNS). The amendment would authorize operation of CNS with limiting conditions of operation for the secondary containment integrity revised to agree with the "Standard Technical Specifications for General Electric Boiling Water Reactors" (NUREG 0123, Rev. 1).

## Background

On June 25, 1978 high winds removed panels from the outside skin of the Cooper Nuclear Station Building at the 146 foot elevation. The Cooper FSAR (p. XII-2-12) stated that reactor building metal siding and roof decking is designed for normal 100 mph wind loading. Wind speeds of 96 mph were logged. The licensee states that gusts probably exceeded 100 mph, and believes that the 100 mph design criteria has been met. We accept this conclusion. Although outer panels were removed, inner panels remained to preserve the secondary containment integrity. However, with the outer panels missing, the inner panels are more vulnerable should high winds occur. In order to inspect and repair the damaged area, the licensee must open a hatch in secondary containment. The licensee's present Technical Specifications do not permit reactor operation with the secondary containment open for even brief periods of time.

## Evaluation

The "Standard Technical Specifications for General Electric Boiling Water Reactors" (NUREG 0123, Rev. 1 April 1, 1978) permits operation up to 4 hours without secondary containment integrity. The 4 hour interval is sufficiently short that there is small likelihood of an accident occurring while secondary containment is open. Four hours is long enough to permit personnel and equipment access for repair of the reactor building outer panels. Other BWR licensee's who have Standard Technical Specifications are permitted up to 4 hours without secondary containment integrity.

Without this Technical Specification change the licensee may continue to operate without repairing the damaged outer panels of the Reactor Building. This Technical Specification change permits the repairs to be performed, thereby improving the structural integrity of secondary containment during continued reactor operation.

This Technical Specification also provides access for inspection and repair to the exterior surface of secondary containment for future operation, thereby increasing assurance of secondary containment integrity.

Environmental Consideration

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 or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: June 28, 1978

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. 49 to Facility Operating License No. DPR-46, issued to the Nebraska Public Power District (the Licensee), which revised the Technical Specifications for operation of the Cooper Nuclear Station (the facility) located in Nemaha County, Nebraska. The amendment is effective as of the date of issuance.

The amendment provides new limiting conditions of operation for the secondary containment integrity.

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.

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

For further details with respect to this action, see (1) the application for amendment dated June 26, 1977 as supplemented June 27, 1978, (2) Amendment No. 49 to License No. DPR-46, and (3) the Commission's related Safety Evaluation. 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 68305. A single 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 Operating Reactors.

Dated at Bethesda, Maryland this 28th day of June 1978.

FOR THE NUCLEAR REGULATORY COMMISSION

Brian K. Grimes
Assistant Director for
Engineering and Projects
Division of Operating Reactors