

Docket No. 50-298

November 22, 1991

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. 150 TO FACILITY  
OPERATING LICENSE NO. DPR-46 (TAC NO. 81148)

The Commission has issued the enclosed Amendment No. 150 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 July 19, 1991.

The amendment changes the Technical Specifications to revise the appearance of Figure 2.1.1, Reactor Water Level Indication Correlation. In addition, changes will be made to Paragraph 4.7.C. of the Bases and to Paragraph 6.1.6, ADMINISTRATIVE CONTROLS/ORGANIZATION Responsibility.

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, and V  
Office of Nuclear Reactor Regulation

Enclosures:

- 1. Amendment No. 150 to License No. DPR-46
- 2. Safety Evaluation

cc w/enclosures:

See next page

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

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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,

A handwritten signature in cursive script, appearing to read "R. B. Bevan".

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

Enclosures:

1. Amendment No. 150 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:

Mr. G. D. Watson, General Counsel  
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Columbus, Nebraska 68602-0499

Cooper Nuclear Station  
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Nebraska Department of Environmental  
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Lincoln, Nebraska 68509-8922

Mr. Larry Bohlken, Chairman  
Nemaha County Board of Commissioners  
Nemaha County Courthouse  
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Senior Resident Inspector  
U.S. Nuclear Regulatory Commission  
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Brownville, Nebraska 68321

Regional Administrator, Region IV  
U.S. Nuclear Regulatory Commission  
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Nebraska Department of Health  
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Lincoln, Nebraska 68509-5007



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. 150  
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 July 19, 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.

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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. 150, 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, 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: November 22, 1991

ATTACHMENT TO LICENSE AMENDMENT NO. 150

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

10  
182  
219

INSERT PAGES

10  
182  
219

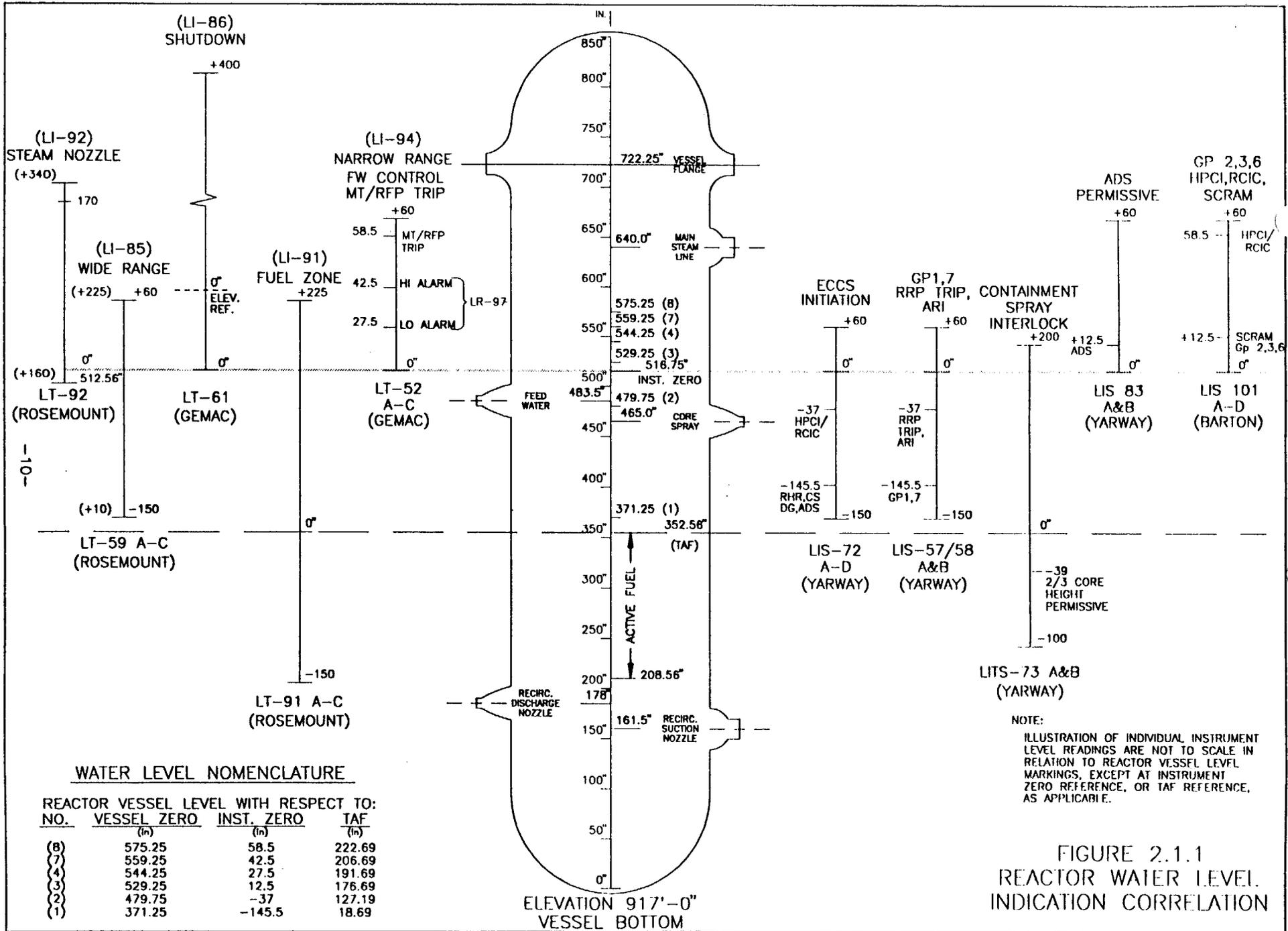


FIGURE 2.1.1  
REACTOR WATER LEVEL  
INDICATION CORRELATION

WATER LEVEL NOMENCLATURE

REACTOR VESSEL LEVEL WITH RESPECT TO:

NO.	VESSEL ZERO (in)	INST. ZERO (in)	TAF (in)
(8)	575.25	58.5	222.69
(7)	559.25	42.5	206.69
(4)	544.25	27.5	191.69
(3)	529.25	12.5	176.69
(2)	479.75	-37	127.19
(1)	371.25	-145.5	18.69

### 3.7.B & 3.7.C BASES (cont'd)

High efficiency particulate absolute (HEPA) filters are installed before and after the charcoal adsorbers to minimize potential release of particulates to the environment and to prevent clogging of the iodine adsorbers. The charcoal adsorbers are installed to reduce the potential release of radioiodine to the environment. The in-place test results should indicate a system leak tightness of less than 1 percent bypass leakage for the charcoal adsorbers and HEPA filters. The laboratory carbon sample test results should indicate a radioactive methyl iodide removal efficiency of at least 99 percent for expected accident conditions. If the performance of the HEPA filters and charcoal adsorbers are as specified, the resulting doses will be less than the 10 CFR 100 guidelines for the accidents analyzed.

Only one of the two standby gas treatment systems is needed to cleanup the reactor building atmosphere upon containment isolation. If one system is found to be inoperable, there is no immediate threat to the containment system performance and reactor operation or refueling operation may continue while repairs are being made. If neither system is operable, the plant is brought to a condition where the standby gas treatment system is not required.

### 4.7.B & 4.7.C BASES

#### Standby Gas Treatment System and Secondary Containment

Initiating reactor building isolation and operation of the standby gas treatment system to maintain at least a 1/4 inch of water vacuum within the secondary containment provides an adequate test of the operation of the reactor building isolation valves, leak tightness of the reactor building and performance of the standby gas treatment system. Functionally testing the initiating sensors and associated trip channels demonstrates the capability for automatic actuation. Periodic testing gives sufficient confidence of reactor building integrity and standby gas treatment system performance capability.

Pressure drop across the combined HEPA filters and charcoal adsorbers of less than 6 inches of water at the system design flow rate will indicate that the filters and adsorbers are not clogged by excessive amounts of foreign matter. A 7.8 kw heater is capable of maintaining relative humidity below 70%. Heater capacity and pressure drop should be determined at least once per operating cycle to show system performance capability.

The frequency of tests and sample analysis are necessary to show that the HEPA filters and charcoal adsorbers can perform as evaluated. Tests of the charcoal adsorbers with halogenated hydrocarbon refrigerant shall be performed in accordance with ANSI N510-1980. The test canisters that are installed with the adsorber trays should be used for the charcoal adsorber efficiency test. Each sample should be at least two inches in diameter and a length equal to the thickness of the bed. If test results are unacceptable, all adsorbent in the system shall be replaced

6.0 ADMINISTRATIVE CONTROLS

6.1 ORGANIZATION

6.1.1 Responsibility

The Division Manager of Nuclear Operations shall have the over-all fulltime onsite responsibility for the safe operation of the Cooper Nuclear Station. During periods when the Division Manager of Nuclear Operations is unavailable, this responsibility automatically shifts to either the Senior Manager of Operations, the Senior Manager of Technical Support Services, or the Senior Manager of Staff Support (in that order). During periods when none of these individuals are available, the responsibility may be delegated in writing to one of the managers in the Nuclear Operations Division.

6.1.2 Offsite and Onsite Organizations

Onsite and offsite organizations shall be established for unit operation and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting the safety of the nuclear power plant.

- A. Lines of authority, responsibility, and communication shall be established and defined for the highest management levels through intermediate levels to and including all operating organization positions. These relationships shall be documented and updated, as appropriate, in the form of organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements shall be documented in the USAR.
- B. The Division Manager of Nuclear Operations shall be responsible for overall unit safe operation and shall have control over those onsite activities necessary for safe operation and maintenance of the plant.
- C. The Nuclear Power Group Manager shall have corporate responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the plant to ensure nuclear safety.
- D. The individuals who train the operating staff and those who carry out health physics and quality assurance functions may report to the appropriate onsite manager; however, they shall have sufficient organizational freedom to ensure their independence from operating pressures.

6.1.3 Plant Staff - Shift Complement

The shift complement at the station shall at all times meet the following requirements. Note: Higher grade licensed operators may take the place of lower grade licensed or unlicensed operators.

- A. A licensed senior reactor operator (SRO) shall be present at the station at all times when there is any fuel in the reactor.
- B. A licensed reactor operator shall be in the control room at all times when there is any fuel in the reactor.
- C. Two licensed reactor operators shall be in the control room during all startup, shutdown and other periods involving significant planned control rod manipulations. A licensed SRO shall either be in the Control Room or immediately available to the Control Room during such periods.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 150 TO FACILITY OPERATING LICENSE NO. DPR-46

NEBRASKA PUBLIC POWER DISTRICT

COOPER NUCLEAR STATION

DOCKET NO. 50-298

1.0 INTRODUCTION

By letter dated July 19, 1991, Nebraska Public Power District (the licensee) submitted a request for changes to the Cooper Nuclear Station (CNS) Technical Specifications. The requested changes would:

- 1) provide a new format for Figure 2.1.1, Reactor Water Level Indication Correlation;
- 2) delete the third sentence of Paragraph 4.7.C of the Bases addressing the performance of tests to demonstrate secondary containment capacity prior to the time primary containment is opened for refueling; and
- 3) amend the second sentence of Paragraph 6.1.1, ADMINISTRATIVE CONTROLS/ ORGANIZATION Responsibility, to designate the Senior Manager of Staff Support as an additional alternate to assume responsibility in the absence of the Division Manager of Nuclear Operations.

2.0 EVALUATION

The first of these changes involves a modification of the format for the Reactor Vessel Level Indication Correlation figure. This change is administrative in nature. It does not involve any changes in numerical vessel level setpoint values and their associated instrumentation, which are controlled elsewhere in the CNS Technical Specification. The proposed change would present the figure in a manner that would more accurately illustrate level transmitter and level indication identification nomenclature numbers.

The second change is proposed to correct the apparent conflict between the Paragraph 4.7.C of the Bases and 4.7.C.1.c, Surveillance Requirements. The change is consistent with the recommendation from the staff dated March 28, 1988, to the licensee. It involves no hardware changes and does not affect operations, including refueling, in any way. This change only corrects a potential source of confusion in the CNS Technical Specifications.

The final change addresses administrative changes that have taken place in the CNS organization. This change seeks to designate an additional alternate to assume fulltime site responsibility in the absence of the Division Manager Nuclear Operations. It would designate the Senior of Staff Support as capable of assuming fulltime site responsibility. This change is consistent with the requirement of ANSI N18.1-1971. It does not change the hierarchy of automatically shifting the Division Manager of Nuclear Operations responsibility to the Senior Manager of Operations or the Senior Manager of Technical Support Services.

On the basis of its review of the above items, the staff concludes that the proposed are 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 (56 FR 47239). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Section 51.22(c)(9). The amendment also involves changes in recordkeeping, reporting or administrative procedures or requirements. Accordingly, with respect to these items, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). 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: Marvin Sykes

Date: November 22, 1991