

March 19, 1990

Docket No. 50-298

Mr. George A. Trevors, Division  
Manager - Nuclear Support  
Nebraska Public Power District  
Post Office Box 499  
Columbus, Nebraska 68601-0499

Dear Mr. Trevors:

SUBJECT: COOPER NUCLEAR STATION - AMENDMENT NO. 132 TO FACILITY  
OPERATING LICENSE NO. DPR-46 (TAC NO. 74208)

The Commission has issued the enclosed Amendment No.132 to Facility Operating License No. DPR-46 for the Cooper Nuclear Station. The amendment consist of changes to the Technical Specifications in response to your application dated July 31, 1989 as supplemented December 13, 1989.

The amendment changes the Technical Specifications to 1) replace the current Station Operations Review Committee (SORC) membership requirements which specify membership by position title with membership requirements that are based on areas of functional expertise, 2) incorporate a requirement to have a Shift Technical Advisor on shift, and 3) changes position titles and designates persons who would automatically assume the responsibilities of the Manager of Nuclear Operations if he is not available.

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

Sincerely,

/s/

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

Enclosures:

- 1. Amendment No.132 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 enclosed. Notice of Issuance will be included in the Commission's next biweekly Federal Register notice.

Sincerely,

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

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

Enclosures:

1. Amendment No. 132 to  
License No. DPR-46
2. Safety Evaluation

cc w/enclosures:  
See next page

Mr. George A. Trevors  
Nebraska Public Power District

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. 132  
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 31, 1989 as supplemented December 13, 1989, 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, as amended, 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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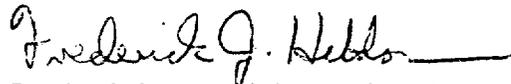
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 2.C.(2) of Facility Operating License No. DPR-46 is hereby amended to read as follows:

2. Technical Specifications

- The Technical Specifications contained in Appendix A, as revised through Amendment No.132, 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



Frederick J. Hebdon, Director  
Project Directorate IV  
Division of Reactor Projects - III,  
IV, V and Special Projects  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: March 19, 1990

ATTACHMENT TO LICENSE AMENDMENT NO. 132

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.

Pages

219  
219a  
220  
221  
223  
234

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, or the Senior Manager of Technical Support Services (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 from 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.

- D. A licensed senior reactor operator (SRO) with no other concurrent duties shall be directly in charge of any refueling operation, or alteration of the reactor core.

A licensed reactor operator (RO) with no other concurrent duties shall be directly in charge of operations involving the handling of irradiated fuel other than refueling or reactor core alteration operations.

- E. An individual who has been trained and qualified in health physics techniques shall be on site at all times that fuel is on site.
- F. Minimum crew size during reactor operation shall consist of four licensed reactor operators (two of whom shall be licensed SRO) and three unlicensed operators. Minimum crew size during reactor cold shutdown conditions shall consist of two licensed reactor operators (one of whom shall be licensed SRO) and one unlicensed operator.

In the event that any member of a minimum shift crew is absent or incapacitated due to illness or injury a qualified replacement shall be designated to report onsite within two hours.

- G. A Fire Brigade of at least 5 members shall be maintained at all times. This excludes the 3 members of the minimum shift crew necessary for safe shutdowns, and other personnel required for other essential functions during a fire emergency. Three fire Brigade members shall be from the Operations Department and 2 support members may be from other departments inclusive of Security personnel.

Fire Brigade composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence of Fire Brigade members provided immediate action is taken to restore the Fire Brigade to within the minimum requirements.

- H. The Operations Supervisor, Shift Supervisor and Control Room Supervisor shall hold a senior reactor operator license. The Unit Operators shall hold, at a minimum, a reactor operator license.
- I. A Shift Technical Advisor shall be available, except during cold shutdown conditions, to serve in an advisory capacity to the shift crew on matters pertaining to the engineering aspects assuring safe operation of the plant.

#### 6.1.4 Plant Staff - Qualifications

The minimum qualifications, training, replacement training, and retraining of plant personnel at the time of fuel loading or appointment to the active positions shall meet the requirements as described in the American National Standards Institute N-18.1-1971, "Selection and Training of Personnel for Nuclear Power Plants". The Radiological Manager shall meet or exceed the qualifications of Regulatory Guide 1.8, Sept. 1975; personnel qualification equivalency as stated in the Regulatory Guide may be proposed in selected cases. The minimum frequency of the retraining program shall be every two years. The training program shall be under the direction of the Training Manager.

- A. A training program for the fire brigade will be maintained under the direction of the Training Manager and shall meet or exceed the requirements of Section 27 of the NFPA Code 1976, except for Fire Brigade training sessions which shall be held at least quarterly.

The training program requirements will be provided by a qualified fire protection engineer.

- B. The Shift Technical Advisor shall have a bachelor's degree or equivalent in a scientific or engineering discipline and shall have received specific training in plant design, and response and analysis of the plant for transients and accidents.

## 6.2 REVIEW AND AUDIT

6.2.1 The organization and duties of committees for the review and audit of station operation shall be as outlined below:

A. Station Operations Review Committee (SORC)

1. SORC shall have a minimum of eight voting members comprised of the following:
  - a. Chairman: Division Manager of Nuclear Operations, or alternate
  - b. Individuals from the following disciplines:
    - Operations
    - Radiological (Chemistry/Health Physics)
    - Maintenance
    - Engineering
    - Reactor Engineering
    - Instrumentation and Control

The above, according to individual job title, shall meet the requirements as described in Sections 4.2, 4.3.1, or 4.4 of the American National Standards Institute N-18.1 1971. "Selection and Training of Personnel for Nuclear Power Plants."

Non-voting members may also serve on SORC to broaden its expertise in other areas (e.g., Quality Assurance).

All alternate members shall be appointed in writing by the SORC Chairman to serve on a temporary basis; however, no more than two alternates shall participate as voting members in SORC at any one time.

2. Meeting Frequency: Monthly, and as required on call of the Chairman.
3. Quorum: SORC chairman plus such a number as to constitute a majority of the voting members.
4. Responsibilities:
  - a. Review all proposed normal, abnormal, maintenance and emergency operating procedures specified in 6.3.1, 6.3.2, 6.3.3, and 6.3.4 and proposed changes thereto: and any other proposed procedures or changes thereto determined by any member to effect nuclear safety.
  - b. Review all proposed tests and experiments and their results, which involve nuclear hazards not previously reviewed for conformance with technical specifications. Submit tests which may constitute an unreviewed safety question to the NPPD Safety Review and Audit Board for review.
  - c. Review proposed changes to Technical Specifications.
  - d. Review proposed changes or modifications to station systems or equipment as discussed in the USAR or which involves an unreviewed safety question as defined in 10CFR50.59(c). Submit changes to equipment or systems having safety significance to the NPPD Safety Review and Audit Board for review.
  - e. Review station operation to detect potential nuclear safety hazards.

- f. Investigate all violations of Technical Specifications, including reporting evaluation and recommendations to prevent recurrence, to the Nuclear Power Group Manager and to the Chairman of the NPPD Safety Review and Audit Board.
  - g. Perform special reviews and investigations and render reports thereon as requested by the Chairman of the Safety Review and Audit Board.
  - h. Review all reportable events specified in Section 50.73 to 10CFR Part 50.
  - i. Review drills on emergency procedures (including plant evacuation) and adequacy of communication with off site groups.
  - j. Periodically review procedures required by Specifications 6.3.1, 6.3.2, 6.3.3, and 6.3.4 as set forth in administrative procedures.
5. Authority
- a. The Station Operations Review Committee shall be advisory.
  - b. The Station Operations Review Committee shall recommend to the SORC Chairman approval or disapproval of proposals under items 4, a through e and j above. In case of disagreement between the recommendations of the Station Operations Review Committee and the Division Manager of Nuclear Operations, the course determined by the Division Manager of Nuclear Operations to be the more conservative will be followed. A written summary of the disagreement will be sent to the Nuclear Power Group Manager and to the NPPD Safety Review and Audit Board.
  - c. The Station Operations Review Committee shall report to the Chairman of the NPPD Safety Review and Audit Board on all reviews and investigations conducted under items 4.f, 4.g, 4.h, and 4.i.
  - d. The Station Operations Review Committee shall make determinations regarding whether or not proposals considered by the Committee involve unreviewed safety questions. This determination shall be subject to review by the NPPD Safety Review and Audit Board.
6. Records:
- Minutes shall be kept for all meetings of the Station Operations Review Committee and shall include identification of all documentary material reviewed. Copies of the minutes shall be forwarded to the Chairman of the NPPD Safety Review and Audit Board and the Nuclear Power Group Manager within one month.
7. Procedures:
- Written administrative procedures for Committee operation shall be prepared and maintained describing the method for submission and content of presentations to the committee, provisions for use of subcommittees, review and approval by members of written Committee evaluations and recommendations, dissemination of minutes, and such other matters as may be appropriate.

- c. Proposed tests or experiments which involve an unreviewed safety question as defined in Section 50.59, 10 CFR.
  - d. Proposed changes to Appendix A Technical Specifications or the CNS Operating License.
  - e. Violations of applicable codes, regulations, orders, Technical Specifications, license requirements, or of internal procedures or instructions having nuclear safety significance.
  - f. Significant operating abnormalities or deviations from normal and expected performance of plant equipment that affect nuclear safety.
  - g. All reportable events specified in Section 50.73 to 10CFR Part 50.
  - h. Any indication of an unanticipated deficiency in some aspect of design or operation of safety related structures, systems, or components.
  - i. Minutes of meetings of the Station Operations Review Committee.
  - j. Disagreement between the recommendations of the Station Operations Review Committee and the SORC Chairman.
  - k. Review of events covered under e, f, g, and h above include reporting to appropriate members of management on the results of investigations and recommendations to prevent or reduce the probability of recurrence.
5. Authority: The NPPD Safety Review and Audit Board shall report to and be advisory to the Nuclear Power Group Manager on those areas of responsibility specified in Specifications 6.2.1.B.4 and 6.2.1.B.7.

6. Records:

Minutes shall be recorded for all meetings of the NPPD Safety Review and Audit Board and shall identify all documentary material reviewed. Copies of the minutes shall be forwarded to the Nuclear Power Group Manager and the Division Manager of Nuclear Operations, and such others as the Chairman may designate within one month of the meeting.

7. Audits:

Audits of selected aspects of plant operation shall be performed under the cognizance of SRAB with a frequency commensurate with their safety significance. Audits performed by the Quality Assurance Department which meet this specification shall be considered to meet the SRAB audit requirements if the audit results are reviewed by SRAB. A representative portion of procedures and records of the activities performed during the audit period shall be audited and, in addition, observations of performance of operating and maintenance activities shall be included. These audits shall encompass:

6.5.2 Reportable Events

A Reportable Event shall be any of those conditions specified in Section 50.73 to 10CFR Part 50. The NRC shall be notified and a report submitted pursuant to the requirements of Section 50.73. Each Reportable Event shall be reviewed by SORC and the results of this review shall be submitted to SRAB and the Nuclear Power Group Manager.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO.132 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 31, 1989 and a supplement dated December 13, 1989, the Nebraska Public Power District (NPPD) (the licensee) requested an amendment to Facility Operating License No. DPR-46 for the Cooper Nuclear Station. The proposed amendment would change Technical Specification Section 6.0, "Administrative Controls" by:

1. Replacing the current Station Operations Review Committee (SORC) membership requirements, which specify SORC membership by position title, with membership requirements that are based on areas of functional expertise and adding a specification that requires the individuals serving in these positions to meet certain requirements contained in the American National Standards Institute Standard N-18.1 1971, "Selection and Training of Nuclear Power Plant Personnel".
2. Incorporating requirements for Shift Technical Advisor (STA) manning and qualifications into the Technical Specifications.
3. Designating the Senior Manager of Operations and Senior Manager for Technical Support Services as the prime alternates for the Division Manager of Nuclear Operations and changing the position titles of the "Chemistry and Health Physics Supervisor" and "Vice-President-Nuclear" to "Radiological Manager" and "Nuclear Power Group Manager," respectively.

2.0 DISCUSSION AND EVALUATION

2.1 Station Operations Review Committee Membership

The current wording of Specification 6.2.1.A of the Cooper Nuclear Station Technical Specifications require that the membership of the Station Operations Review Committee (SORC) include the following individuals:

- a. Chairman: Division Manager of Nuclear Operations
- b. Technical Staff Manager
- c. Operations Manager

- d. Technical Manager
- e. Operations Supervisor
- f. Maintenance Supervisor
- g. Instrument and Control Supervisor
- h. Chemistry and Health Physics Supervisor
- i. Plant Engineering Supervisor
- j. Operations Engineering Supervisor
- k. Computer Applications Supervisor
- l. Maintenance Manager
- m. Quality Assurance Manager - non-voting member.

Collectively, the experience of the individuals assigned to these positions provides a multi-disciplined background and expertise in the areas of nuclear power plant operations, chemistry/health physics, equipment and plant maintenance, engineering, nuclear reactor engineering, and instrumentation and control systems.

The licensee has, on occasion, made changes to the onsite organization that have resulted in changes to the titles of the positions specified above. In some of these cases, although there was no change to the expertise or experience represented on the SORC, it was necessary for the licensee to propose a change to the technical specifications and for the NRC staff to review that proposed change and issue an amendment to the Cooper Nuclear Station Operating License.

The licensee has proposed to replace the current detailed listing of position titles used in Specifications 6.2.1.A with the following listing of disciplines that must be represented on the SORC:

- o Operations
- o Radiological (Chemistry/Health Physics)
- o Maintenance
- o Reactor Engineering
- o Instrumentation and Control

Additionally, NPPD has proposed the addition of a specification that requires that those persons serving on the SORC must meet the requirements described in Sections 4.2, or 4.3.1, or 4.4 of the American National Standards Institute (ANSI) N-18.1 1971, "Selection and Training of Personnel for Nuclear Power Plants."

### Evaluation

The staff has reviewed the licensee's proposed modification to the manner that the SORC membership is specified and concludes that operation with the technical disciplines specified in the proposed change, when taken in conjunction with the additional limitations included from ANSI N-18.1, will provide an equivalent level of technical expertise to that of the current SORC, meets the acceptance criteria of Section 13.4 of NUREG-0800, the Standard Review Plan, and is acceptable to the staff.

### 2.2 Shift Technical Advisor

NPPD has requested the addition of Specification 6.1.3.H that requires that a Shift Technical Advisor shall be available, except during cold shutdown conditions, to serve in a advisory capacity to the shift crew on matters pertaining to the engineering aspects assuring safe operation of the plant.

### Evaluation

The NRC staff approved the licensee's Shift Technical Advisor (STA) training program by our letter dated April 1, 1982 and STAs have been on shift at Cooper Nuclear Station since that date. The issue of Technical Specifications for the STA remained open at that time pending subsequent correspondence from the staff.

The licensee proposal to require that the STA be present on shift in all modes of reactor operation except cold shutdown, is consistent with the Standard Technical Specifications that the staff provided to licensees for guidance.

Based on the above discussion, the staff concludes that the proposed wording is acceptable.

### 2.3 Designation of Alternates and Position Title Changes

NPPD has proposed the following editorial and administrative changes:

- ° The automatic delegation of the responsibilities of the Division Manger of Nuclear Operations to the Senior Manger of Operations or the Senior Manager of Technical Support Services (in that order).
- ° The change of the title of the "Chemistry and Health Physics Supervisor" to "Radiological Manager".

- ° The change of the title of the "Vice President-Nuclear" to "Nuclear Power Group Manager".
- ° The change of the Title "Division Manager of Nuclear Operations" to "SORC Chairman" in Specifications 6.2.1.A.3, 6.2.1.A.5.b, and 6.2.1.A.7.j.

### Evaluation

The proposed changes listed above are editorial and administrative in nature. These changes provide additional clarification to the specifications and update the specifications to incorporate administrative changes that have taken place in the NPPD organization. Based on the above the staff finds these changes acceptable

### 3.0 ENVIRONMENTAL CONSIDERATION

The amendment relates to changes in recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Section 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.

### 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.

Date: March 19, 1990

Principal Contributors: Fred Allenspach  
Paul W. O'Connor