



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. 86  
License No. DPR-46

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Nebraska Public Power District dated February 14, 1984, 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 licensee 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:

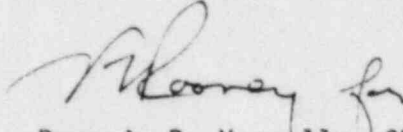
(2) Technical Specification

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 86, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION



Domenic B. Vassallo, Chief  
Operating Reactors Branch #2  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: June 1, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 86

FACILITY OPERATING LICENSE NO. DPR-46

DOCKET NO. 50-298

Revise the Appendix A Technical Specifications as follows. The revised areas are indicated by marginal lines.

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Amendment No. ~~92~~, ~~93~~, 95, 86

LIMITING CONDITIONS FOR OPERATION

SURVEILLANCE REQUIREMENTS

3.14 FIRE DETECTION SYSTEM

4.14 FIRE DETECTION SYSTEM

APPLICABILITY

Applies to the operational status of the Fire Detection System.

APPLICABILITY

Applies to the operational status of the Fire Detection System.

OBJECTIVE

To assure continuous automatic surveillance throughout the Main Plant.

SPECIFICATIONS

- A. The Fire Detection System instrumentation for each fire detection zone shown in Table 3.14 shall be operable.
- B. With one or more of the fire detection instrument(s) shown in Table 3.14 inoperable:
  - 1. Within 1 hour establish a fire watch patrol to inspect the zone(s) with the inoperable instrument(s) at least once per hour, and
  - 2. Restore the inoperable instrument(s) to OPERABLE status within 14 days or prepare and submit a Special Report to the Commission within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the instrument(s) to OPERABLE status.

- A. Each detector on Table 3.14 shall be demonstrated operable every 6 months by performance of a channel functional test.
- B. The NFPA Code 72.D Class B supervised circuits supervision associated with the detector alarms of each of the above required fire detection instruments shall be demonstrated OPERABLE at least once per 6 months.

3.15 FIRE SUPPRESSION WATER SYSTEM

4.15 FIRE SUPPRESSION WATER SYSTEM

APPLICABILITY

Applies to the availability of water for fire fighting purposes.

APPLICABILITY

Applies to the availability of water for fire fighting purposes.

OBJECTIVE

To assure a continuous operable water supply for fire fighting systems from 2 fire pumps.



LIMITING CONDITIONS FOR OPERATION

3.15 (cont'd)

SPECIFICATIONS

- A. The fire suppression water system shall be OPERABLE with:
1. Two fire pumps, each with a capacity of at least 2000 gpm, with their discharge aligned to the fire suppression header.
  2. An OPERABLE flow path capable of taking suction from either of two 500,000 gallon water storage tanks or the Missouri River and transferring the water through distribution piping with OPERABLE sectionalizing control or isolation valves to the yard hydrant valves and the front valve ahead of the water flow alarm device on each sprinkler, hose standpipe or spray system riser.
- B. If the requirement of 3.15.A cannot be met, restore the inoperable equipment to OPERABLE status within 7 days or prepare and submit a Special Report to the Commission within the next 30 days outlining the plans and procedures to be used to provide for the loss of redundancy in this system.
- C. With the fire suppression system inoperable:
1. Establish a backup fire suppression water system within 24 hours, and
  2. Submit a Special Report:
    - a) By telephone within 24 hours, and
    - b) In writing no later than the first working day following the event, outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.

SURVEILLANCE REQUIREMENTS

4.15 (cont'd)

SPECIFICATIONS

- A. The Fire Suppression Water Supply System shall be demonstrated operable:
1. At least once per 31 days by starting each pump on a staggered start-up basis and operating it for:
    - a) A minimum of 15 minutes for a diesel engine-driven fire pump, and
    - b) A minimum of 7 minutes for an electrical motor-driven fire pump.
  2. At least once per 31 days by verifying that each valve (manual, power operated or automatic) in the flow path that is not locked, sealed or otherwise secured in position, is in its correct position.
  3. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel.
  4. At least once per 18 months by performing a system functional test which includes simulated automatic actuation of the system throughout its operating sequence, and:
    - a) Verifying that each automatic valve in the flow path actuates to its correct position on a test signal,
    - b) Verifying that each pump develops at least 2000 gpm with at least 110 psi,

LIMITING CONDITIONS FOR OPERATION

3.16 (cont'd)

SPECIFICATIONS

- A. The Automatic Sprinkler Systems protecting the Cable Spreading Room, Cable Expansion Room, and Northeast Corner - 903 Ft. Elev. of Reactor Building shall be operable.
- B. If the requirement of 3.16.A cannot be met, establish a continuous fire watch with backup fire suppression equipment for the unprotected area within 1 hour; restore the system to OPERABLE status within 14 days or prepare and submit a Special Report to the Commission within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.

3.17 CARBON DIOXIDE SYSTEM

APPLICABILITY

Applies to the operational status of the High Pressure Carbon Dioxide Extinguishing System protecting the Diesel Generator Rooms.

OBJECTIVE

To assure continuous Automatic Fire Protection for the Diesel Generator Rooms.

SPECIFICATIONS

- A. The High Pressure Carbon Dioxide Extinguishing System protecting the Diesel Generator Rooms shall be operable.

SURVEILLANCE REQUIREMENTS

4.16 (cont'd)

SPECIFICATIONS

- A. The Automatic Sprinkler Systems protecting the Cable Spreading Room, Cable Expansion Room, and Northeast Corner - 903 Ft. Elev. of Reactor Building shall be demonstrated to be operable by:
  - 1. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel.
  - 2. At least once per 18 months:
    - a) By performing a system functional test which includes simulated automatic actuation of the system, and
      - 1) Verifying that the automatic valves in the flow path actuate to their correct positions on a test signal, and
      - 2) Cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel.
    - b) By inspection of the spray headers to verify their integrity.

4.17 CARBON DIOXIDE SYSTEM

APPLICABILITY

Applies to the operational status of the High Pressure Carbon Dioxide Extinguishing System protecting the Diesel Generator Rooms.

SPECIFICATIONS

- A. The High Pressure Carbon Dioxide Extinguishing System protecting the Diesel Generator Rooms shall be demonstrated operable by:

LIMITING CONDITIONS FOR OPERATION

SURVEILLANCE REQUIREMENTS

3.17 (cont'd)

B. If the requirement of 3.17.A cannot be met:

1. Establish a continuous fire watch with backup fire suppression equipment for the unprotected area(s) within 1 hour; restore the system to OPERABLE status within 14 days or prepare and submit a Special Report to the Commission within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.

3.18 FIRE HOSE STATIONS

APPLICABILITY

Applies to the operational status of the Fire Hose Stations in the Control and Reactor Buildings.

OBJECTIVE

To assure continuous manual fire fighting capability provided by existing Fire Hose Stations.

SPECIFICATIONS

- A. The Fire Hose Stations shown in Table 3.18 shall be operable.
- B. If the requirement of 3.18.A cannot be met, route an additional hose to the area protected by the inoperable Fire Hose Station from an operable Fire Hose Station of equivalent capacity within 1 hour.

4.17 (cont'd)

1. At least once per 6 months, the High Pressure Carbon Dioxide storage cylinders should be weighed.
2. At least once per 18 months by verifying the system valves, alarms, and associated ventilation motor interlocks and dampers actuate to a simulated automatic and manual actuation signal. A brief air flow test ("Puff Test") shall be made to verify flow from each nozzle.

4.18 FIRE HOSE STATIONS

APPLICABILITY

Applies to the operational status of the Fire Hose Stations in the Control and Reactor Buildings.

SPECIFICATIONS

- A. The Fire Hose Stations in the Control Building and Reactor Building shall be demonstrated to be operable by:
  1. At least once per 31 days by:
    - a) Visual inspection to assure all required equipment is at the station.
  2. At least once per 18 months by:
    - a) Removing the hose for inspection and re-racking, and
    - b) Replacement of all degraded gaskets in couplings.
  3. At least once per 3 years by:
    - a) Partially opening each hose station valve to verify valve OPERABILITY and no flow blockage, and



LIMITING CONDITIONS FOR OPERATION

3.20 YARD FIRE HYDRANT AND HYDRANT HOSE HOUSE

APPLICABILITY

Applies to the operational status of the yard fire hydrant, HT-1 and associated hydrant hose house located near the northwest corner of the Intake Structure.

OBJECTIVE

To assure continuous manual fire fighting capability for the fire water pumps and service water pumps in the Intake Structure provided by the existing yard fire hydrant, HT-1, and the associated hydrant hose house.

SPECIFICATIONS

- A. Yard fire hydrant HT-1 and its associated hydrant hose house shall be operable.
- B. If the requirement of 3.20A cannot be met, provide sufficient additional lengths of 2½ inch diameter hose located in an adjacent operable hydrant hose house to provide service to the unprotected area within one hour, if the inoperable fire hydrant or associated hydrant hose house is the primary means of fire suppression; otherwise provide the additional hose within 24 hours. Restore the hydrant or hose house to operable status within 14 days or prepare and submit a Special Report to the Commission within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the hydrant or hose house to operable status.

SURVEILLANCE REQUIREMENTS

4.20 YARD FIRE HYDRANT AND HYDRANT HOSE HOUSE

APPLICABILITY

Applies to the operational status of the yard fire hydrant, HT-1, and associated hydrant hose house located near the northwest corner of the Intake Structure.

SPECIFICATIONS

- A. Yard fire hydrant HT-1 and associated hydrant hose house shall be demonstrated operable:
  - 1. At least once per 31 days by:
    - a) Visually inspecting the hydrant hose house to assure all required equipment is at the hose house.
  - 2. At least once per six months (once during March, April or May and once during September, October or November) by:
    - a) Visually inspecting the yard fire hydrant and verifying that the hydrant barrel is dry and that the hydrant is not damaged.
  - 3. At least once per 12 months by:
    - a) Conducting a hose hydrostatic test at a pressure at least 50 psig greater than the maximum pressure available at the yard fire hydrant.
    - b) Inspecting all the gaskets and replacing any degraded gaskets in the couplings.
    - c) Performing a flow check of the hydrant to verify its operability.

- f. Investigate all violations of Technical Specifications, including reporting evaluation and recommendations to prevent recurrence, to the Assistant General Manager - Nuclear 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 Division Manager of Nuclear Operations 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 Assistant General Manager - Nuclear 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 documen-

6.2 (cont'd)

- 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 Division Manager of Nuclear Operations.
  - 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 Assistant General Manager - Nuclear on those areas of responsibility specified in Specifications 6.2.1.B.4 and 6.2.1.B.7.

## 6.4 RECORD RETENTION

### 6.4.1 5 Year Retention

Records and/or logs relative to the following items shall be kept in a manner convenient for review and shall be retained for at least 5 years unless a longer period is required by applicable regulations.

- A. Records of normal station operation, including power levels and periods of operation at each power level.
- B. Records of periodic checks, inspection and/or calibrations performed to verify that Surveillance Requirements are being met.
- C. Records of principal maintenance activities, including inspection, repair, substitution or replacement of principal items of equipment pertaining to nuclear safety.
- D. Records of reportable events as specified in 6.5.2.
- E. Record of changes to plant procedures.
- F. Records of special tests and experiments.
- G. Records of wind speed and direction.

### 6.4.2 Life Retention

Records and logs relating to the following items shall be kept for the life of the plant.

- A. Records of changes made to the station as described in the Safety Analysis Report and amendments and reflected in updated, corrected and as-built drawings and records.
- B. Records of new and spent fuel inventory and assembly histories.
- C. Records of station radiation and contamination surveys.
- D. Records of off-site environmental monitoring surveys.
- E. Records of radiation exposure for all station personnel, including all contractors and visitors to the station in accordance with 10 CFR 20.
- F. Records of radioactivity in liquid and gaseous wastes released to the environment.
- G. Design Fatigue Usage Evaluation
  1. Monitoring, recording, and evaluation will be met for various portions of the reactor coolant pressure boundary (RCPB) for which detailed fatigue

1. A tabulation on an annual basis of the number of station, utility and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated man rem exposure according to work and job functions, 1/ e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance (describe maintenance), waste processing, and refueling. The dose assignment to various duty functions may be estimates based on pocket dosimeter, TLD, or film badge measurements. Small exposures totaling less than 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources shall be assigned to specific major work functions.
2. A summary description of facility changes, tests or experiments in accordance with the requirements of 10CFR50.59(b).
3. Pursuant to 3.8.A, a report of radioactive source leak testing. This report is required only if the tests reveal the presence of 0.005 microcuries or more of removable contamination.

D. Monthly Operating Report

Routine reports of operating statistics, shutdown experience, and a narrative summary of operating experience relating to safe operation of the facility, shall be submitted on a monthly basis to the individual designated in the current revision of Reg. Guide 10.1 no later than the tenth of each month following the calendar month covered by the report.

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 Assistant General Manager - Nuclear.

1/ This tabulation supplements the requirements of §20.407 of 10CFR Part 20.



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