

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

#### OMAHA PUBLIC POWER DISTRICT

DOCKET NO. 50-285

FORT CALHOUN STATION, UNIT NO. 1

#### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 113 License No. DPR-40

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by the Omaha Public Power District (the licensee) dated February 8, 1988, 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.

8805160087 880504 PDR ADDCK 05000285 PDR ADDCK 2. Accordingly, Facility Operating License No. DPR-40 is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B. of Facility Operating License No. DPR-40 is hereby amended to read as follows:

#### B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 113, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. The license amendment is effective 90 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Jose A. Calvo, 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: May 4, 1988

# ATTACHMENT TO LICENSE AMENDMENT NO. 113 FACILITY OPERATING LICENSE NO. DPR-40

#### DOCKET NO. 50-285

Revise Appendix "A" Technical Specifications as indicated below. The revised pages are identified by amendment number and contain vertical lines indicating the area of change.

Remove Pages	Insert Pages
2-40	2-40 2-41
2-41 2-43	2-43
5-15	5-15

### 2.0 LIMITING CONDITIONS FOR OPERATIONS 2.9 Radioactive Effluents

#### 2.9.1 Liquid and Gaseous Effluents

#### Applicability

Applies to the controlled release of radioactive materials in liquid and gaseous effluents from the facility. The provisions of Technical Specification 2.0.1 for Limiting Condition for Operation are not applicable.

#### Objective

To define the limits and conditions for the controlled release of radioactive materials in liquid and gaseous effluents to the environs to ensure that these releases are as low as is reasonably achievable in conformance with 10 CFR Part 50.34a and 50.36a, and to ensure that these releases result in concentrations of radioactive materials in liquid and gaseous effluents released to unrestricted areas that are within the limits specified in 10 CFR Part 20.

To ensure that the releases of radioactive materials above background to unrestricted areas are as low as is reasonably achievable, the following design objectives apply.

#### A. Liquid Effluents

- (1) The dose or dose commitment to a member of the public during any calendar year should not exceed 3 millirems to the total body.
- (2) The dose or dose commitment to a member of the public during any calendar year should not exceed 10 millirems to any organ.

#### Gaseous Effluents В.

- (1) The calculated annual air dose due to gamma radiation at any location which could be occupied by individuals in unrestricted areas should not exceed 10 millirads;
- (2) The calculated annual air dose due to beta radiation at any location which could be occupied by individuals in unrestricted areas should not exceed 20 millirads; and
- (3) The calculated annual total quantity of iodine-131, tritium, and all radioactive material in particulate form with halflives greater than 8 days should not result in an annual dose or dose commitment to any organ of an individual in an unrestricted area from all pathways of exposure in excess of 15 millirems.

2.0 LIMITING CONDITIONS FOR OPERATIONS
2.9 Radioactive Effluents (Continued)
2.9.1 Liquid and Gaseous Effluents (Continued)

#### (1) Specifications for Liquid Waste Effluents

- a. (i) The release rate of radioactive material in liquid effluents shall be controlled such that the instantaneous concentrations for radionuclides, other than dissolved or entrained noble gases, do not exceed the values specified in 10 CFR Part 20, Appendix B. for unrestricted areas. For dissolved or entrained noble gases, the concentration shall be limited to 2.0 E-04 microCi/ml total activity.
  - (ii) With the concentration of radioactive material released to unrestricted areas exceeding the above limits, appropriate corrective actions shall be taken immediately to restore concentrations within the above limits.
- b. The cumulative dose contributions from radioactive materials in liquid effluents released to unrestricted areas shall be determined, in accordance with the ODCM, on a quarterly basis. If the dose contributions, due to the cumulative release of liquid effluents averaged over a calendar quarter, exceed one-half of the design objectives, the following course of actions shall be taken:
  - (i) Make an investigation to identify the causes for such releases.
  - (ii) Define and initiate a program of action to reduce such releases to the design levels.
  - (iii) Submit a special report, pursuant to Specification 5.9.3, within 30 days from the end of the quarter during which release occurred, identifying the causes and describing the proposed program of action to reduce such release to the design levels.
- The equipment or subsystem(s) of the liquid radwaste treatment system as identified in the ODCM shall be operated prior to the discharge of radioactive materials in liquid wastes. If the radioactive liquid wastes were discharged without treatment by one or more of the pieces of equipment or subsystem(s) identified in the ODCM and it appears that one-half of the annual objective will be exceeded during the calendar quarter, a special report, pursuant to Specification 5.9.3, shall be prepared and submitted to the Commission within 30 days. This report shall include the following information:
  - Identification of equipment or subsystems not operable and reasons for inoperability.

2.0 LIMITING CONDITIONS FOR OPERATIONS

2.9 Radioactive Effluents (Continued)

2.9.1 Liquid and Gaseous Effluents (Continued)

operable radiation monitor. If both radiation monitors are inoperable, steam generator liquid release may continue provided appropriate grab samples are analyzed for principal gamma emitters at a sensitivity of 5.0E-07 µCi/ml and recorded at least daily when the specific activity of the sample is less than or equal to 0.01 µCi/gram dose equivalent I-131 and at least once per 12 hours when the specific activity of the secondary coolant is greater than 0.01 µCi/gram dose equivalent I-131. If the radicactivity cannot be recorded automatically, effluent releases may continue provided the gross radioactivity level is recorded manually at least once per four hours during actual release.

#### (2) Specifications for Gasecus Waste Effluents

- a. (i) The release rate of radioactive materials in gaseous effluents shall be controlled such that the instantaneous concentrations of radionuclides do not exceed the values specified in 10 CFR Part 20, Appendix B, Table 2 for unrestricted areas. Unrestricted area concentrations shall be calculated based on the annual average Chi/Q.
  - (ii) With the concentration of radioactive material released to unrestricted areas exceeding the above limits, appropriate corrective actions shall be taken immediately to restore concentration within the above limits.
- b. The radiation dose contributions from radioactive materials in gaseous effluents shall be determined, in accordance with the ODCM, on a quarterly basis. If the dose contributions, due to the cumulative release of gaseous effluents averaged over a calendar quarter exceed one-half of the design objectives, the following course of actions shall be taken:
  - (i) Make an investigation to identify the cause for such release rates.
  - (ii) Define and initiate a program of action to reduce such releases to design levels.
  - (iii) Submit a special report, pursuant to Specification 5.9.3. within 30 days from the end of the quarter during which release occurred, identifying the causes and describing the proposed program of action to reduce dose contributions.
- c. The equipment of subsystem(s) of the gaseous radwaste treatment system as identified in the ODCM shall be operated prior to the discharge of radioactive materials in gaseous wastes. If the radioactive gaseous wastes were discharged without treatment by

#### 5.9.3 Special Reports

Special reports shall be submitted to the Regional Administrator of the appropriate NRC Regional Office within the time period specified for each report. These reports shall be submitted covering the activities identified below pursuant to the requirements of the applicable reference specification where appropriate:

- a. In-service inspection report, reference 3.3.
- b. Tendon surveillance, reference 3.5.
- c. Containment structural tests, reference 3.5.
- d. Special maintenance reports.
- e. Containment leak rate tests, reference 3.5.
- f. Radioactive effluent releases, reference 2.9.
- g. Materials radiation surveillance specimens reports, reference 3.3.
- h. Fuel performance following each refueling outage.
- i. Fire protection equipment outage, reference 2.19.
- Post-accident monitoring irstrumentation, reference 2.21.

#### 5.9.4 Unique Reporting Requirements

#### a. Radioactive Effluent Release Perort

A report covering the operation of the Fort Calhoun Station during the previous six months shall be submitted within 60 days after January 1 and July 1 of each year per the requirements of 10 CFR 50.36a.

The radioactive effluent release report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the plant as outlined in Regulatory Guide 1.21, Revision 1.

The radioactive effluent release report shall include a summary of the meteorological conditions concurrent with the release of gaseous effluents during each quarter as outlined in Regulatory Guide 1.21, Revision 1.

The radioactive effluent release report shall include an assessment of radiation doses from the radioactive liquid and gaseous effluents released from the unit during each calendar quarter as outlined in Fegulatory Guide 1.21, Revision 1. In addition, the unrestricted area boundary maximum noble gas gamma air and beta air doses shall be evaluated. The meteorological conditions concurrent with the