

January 16, 2003

Mr. R. T. Ridenoure
Division Manager - Nuclear Operations
Omaha Public Power District
Fort Calhoun Station FC-2-4 Adm.
P.O. Box 550
Fort Calhoun, NE 68023-0550

SUBJECT: FORT CALHOUN STATION NO. 1 - ISSUANCE OF AMENDMENT
RE: RELOCATION OF NUCLEAR DETECTOR COOLING TECHNICAL
SPECIFICATION 2.13 TO THE UPDATED SAFETY ANALYSIS REPORT
(TAC NO. MB6470)

Dear Mr. Ridenoure:

The Commission has issued the enclosed Amendment No. 214 to Facility Operating License No. DPR-40 for the Fort Calhoun Station, Unit No. 1 (FCS). The amendment consists of changes to the technical specifications (TS) in response to your application dated October 8, 2002.

The amendment relocates TS 2.13, "Nuclear Detector Cooling System," and its associated Bases to the FCS Updated Safety Analysis Report.

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

Sincerely,

/RA/

Alan B. Wang, Project Manager, Section 2
Project Directorate IV
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-285

Enclosures: 1. Amendment No. 214 to DPR-40
2. Safety Evaluation

cc w/encls: See next page

Ft. Calhoun Station, Unit 1

cc:

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OMAHA PUBLIC POWER DISTRICT

DOCKET NO. 50-285

FORT CALHOUN STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 214
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 October 8, 2002, 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.

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. _____, 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 and shall be implemented within 120 days of the date of issuance. Implementation includes the incorporation of the changes to the Fort Calhoun Station Updated Safety Analysis Report as described in the licensee's application dated October 8, 2002.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Stephen Dembek, Chief, Section 2
Project Directorate IV
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: January 16, 2003

ATTACHMENT TO LICENSE AMENDMENT NO. 214

FACILITY OPERATING LICENSE NO. DPR-40

DOCKET NO. 50-285

Replace the following page of Appendix A Technical Specifications with the attached revised page. The revised page is identified by amendment number and contains vertical lines indicating the areas of change.

REMOVE

2-60

INSERT

2-60

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 214 TO FACILITY OPERATING LICENSE NO. DPR-40

OMAHA PUBLIC POWER DISTRICT

FORT CALHOUN STATION, UNIT NO. 1

DOCKET NO. 50-285

1.0 INTRODUCTION

By application dated October 8, 2002, Omaha Public Power District (the licensee) requested changes to the Technical Specifications (Appendix A to Facility Operating License No. DPR-40) for the Fort Calhoun Station, Unit No. 1 (FCS). The amendment would relocate Technical Specification (TS) 2.13, "Nuclear Detector Cooling System," and its associated Bases in their entirety to the FCS Updated Safety Analysis Report (USAR).

2.0 REGULATORY EVALUATION

In Section 50.36, "Technical Specifications," to Title 10 of the *Code of Federal Regulations* (10 CFR), the Commission established its regulatory requirements related to the content of TSs. In doing so, the Commission placed emphasis on those matters related to the prevention of accidents and mitigation of accident consequences. The Commission noted that applicants were expected to incorporate into their TSs "those items that are directly related to maintaining the integrity of the physical barriers designed to contain radioactivity." (Statement of Consideration, "Technical Specification for Facility Licenses; Safety Analysis Reports," 33 FR 18610 (December 17, 1968)). Pursuant to 10 CFR 50.36, TSs are required to include items in the following five categories: (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation (LCOs); (3) surveillance requirements (SRs); (4) design features; and (5) administrative controls. However, the rule does not specify the particular requirements to be included in a plant's TSs.

On July 22, 1993, the Commission issued its Final Policy Statement, expressing the view that satisfying the guidance in the policy statement also satisfies Section 182a of the Atomic Energy Act of 1954, as amended, and 10 CFR 50.36 (58 FR 39132). The Final Policy Statement gave guidance for evaluating the required scope of the TSs and defined the guidance criteria to be used in determining which of the LCOs and associated surveillances should remain in the TSs. The Final Policy Statement established four criteria to define the scope of equipment and parameters to be included in the TSs. These criteria were developed for licenses authorizing operation and focused on instrumentation to detect degradation of the reactor coolant system pressure boundary and on equipment or process variables that affect the integrity of fission product barriers during design basis accidents or transients. The fourth criterion refers to the use of operating experience and probabilistic risk assessment to identify and include in the TS,

structures, systems, and components shown to be significant to public health and safety. Nevertheless, these criteria, codified by 10 CFR 50.36, are the source of the TS requirements for facilities licensed under 10 CFR Part 50. A general discussion of these considerations is provided below.

The regulations contained in 10 CFR 50.36, "Technical Specifications," require that LCOs must be established for each item meeting one or more of the following criteria:

- (1) Criteria 1. Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
- (2) Criteria 2. A process variable, design feature, or operating restriction that is an initial condition of design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
- (3) Criteria 3. A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient and either assumes the failure of or presents a challenge to the integrity of the fission product barrier.
- (4) Criteria 4. A structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

If a system, structure, or component does not meet any of the above criteria, it need not be included in the TSs.

3.0 TECHNICAL EVALUATION

The licensee has proposed a change to delete TS 2.13 and its Bases and relocate it to the FCS USAR. The nuclear detector cooling system is used to cool the air in the annulus between the reactor vessel and the biological shield. This cooling assures that the concrete in the biological shield does not overheat. Overheating could cause a reduction in concrete strength through a loss of moisture. TS 2.13 currently requires that the annulus exit temperature from the nuclear detector cooling system not exceed a temperature that correlates to 150°F concrete temperature.

Below is the licensee's evaluation of this system against the screening criteria of 10 CFR 50.36(c)(2)(ii):

Criterion 1

The nuclear detector cooling system is not an instrumentation system that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.

Criterion 2

The nuclear detector cooling system is not a process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or challenge to the integrity of a fission product barrier.

Criterion 3

The nuclear detector cooling system is not a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

Criterion 4

The FCS Probabilistic Safety Assessment does not address the nuclear detector cooling system. This system is considered to be a non-risk contributor to the core damage frequency and offsite releases.

The staff agrees with the licensee that the nuclear detector cooling system does not meet the criteria set forth in 10 CFR 50.36(c)(2)(ii) for inclusion in the TS. Since the nuclear detector cooling system requirements are not required to be in the TS to provide adequate protection of the public health and safety, the staff concludes that the nuclear detector cooling system requirements may be relocated to a licensee-controlled document. Any changes to the FCS USAR are controlled by the provisions of 10 CFR 50.59 and would require staff review and approval if the change did not meet the criteria set forth in 10 CFR 50.59. As TS 2.13 and its associated Bases will be relocated to the FCS USAR, the USAR will continue to assure that the biological shield structure concrete temperature will be maintained below 150°F and therefore, the deletion of TS 2.13 is acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Nebraska State official was notified of the proposed issuance of the amendments. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of facility component located within the restricted area as defined in 10 CFR Part 20. 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 (67 FR 68741). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

6.0 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: Brian Benney

Date: January 16, 2003