

November 7, 2006

Mr. R. T. Ridenoure
Vice President - Chief Nuclear Officer
Omaha Public Power District
Fort Calhoun Station FC-2-4 Adm.
Post Office Box 550
Fort Calhoun, NE 68023-0550

SUBJECT: FORT CALHOUN STATION, UNIT NO. 1 - ISSUANCE OF AMENDMENT RE:
REVISIONS TO EXISTING TECHNICAL SPECIFICATION STEAM
GENERATOR TUBE SURVEILLANCE PROGRAM (TAC NO. MD2188)

Dear Mr. Ridenoure:

The U.S. Nuclear Regulatory Commission (the Commission) has issued the enclosed Amendment No. 246 to Renewed Facility Operating License No. DPR-40 for the Fort Calhoun Station, Unit No. 1 (FCS). The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated May 30, 2006, as supplemented by two letters dated August 30, 2006.

The amendment revises the existing TS Steam Generator Tube Surveillance Program to be consistent with the U.S. Nuclear Regulatory Commission's approved Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-449, "Steam Generator Tube Integrity," Revision 4. TSTF-449 is part of the consolidated line item improvement process (CLIP).

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

Sincerely,

/RA by J. Donohew for/

Alan B. Wang, Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-285

Enclosures: 1. Amendment No. 246 to DPR-40
2. Safety Evaluation

cc w/encls: See next page

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OFFICE	NRR/LPL4/PM	NRR/LPL4/LA	BC:ITSB:DIRS	BC:CSGB:DCI	OGC	NRR/LPL4/BC
NAME	AWang:JND for ABW	LFeizollahi	TJKobetz	ALHiser	BPoole NLO w/ minor comments	DTerao
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OMAHA PUBLIC POWER DISTRICT

DOCKET NO. 50-285

FORT CALHOUN STATION, UNIT NO. 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 246

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 May 30, 2006, as supplemented by two letters dated August 30, 2006, 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, Renewed 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.
3. The license amendment is effective as of its date of issuance and shall be implemented within 120 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

David Terao, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment: Changes to the Renewed Facility
Operating License No. DPR-40
and the Technical Specifications

Date of Issuance: November 7, 2006

ATTACHMENT TO LICENSE AMENDMENT NO. 246

RENEWED FACILITY OPERATING LICENSE NO. DPR-40

DOCKET NO. 50-285

Replace page 3 of the Renewed Facility Operating License No. DPR-40 with the attached revised page.

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change.

REMOVE

TOC - Page 2 through Page 5
TOC - Page 7
Definitions - Page 8 and 9
2.1 - Page 3
2.1 - Page 13
2.1 - Page 16

3.2 - Page 2
3.2 - Page 3b
3.2 - Page 6 through Page 13
3.17 - Page 1 through Page 10

INSERT

TOC - Page 2 through Page 5
TOC - Page 7
Definitions - Page 8 and 9
2.1 - Page 3
2.1 - Page 13
2.1 - Page 16
2.23 - Page 1 through Page 4
3.2 - Page 2
3.2 - Page 3b
3.2 - Page 6 through Page 13
3.17 - Page 1 through Page 10
5.0 - Page 19
5.0 - Page 20

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 246 TO RENEWED FACILITY

OPERATING LICENSE NO. DPR-40

OMAHA PUBLIC POWER DISTRICT

FORT CALHOUN STATION, UNIT NO. 1

DOCKET NO. 50-285

1.0 INTRODUCTION

By letter dated May 30, 2006 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML061510203), as supplemented by two letters dated August 30, 2006 (ADAMS Accession Nos. ML062480074 and ML062430402), Omaha Public Power District (the licensee) requested changes to the Technical Specifications (TSs) for the Fort Calhoun Station, Unit No. 1 (FCS).

The proposed changes would revise the existing TS Steam Generator (SG) Tube Surveillance Program. The changes are modeled after TS Task Force (TSTF) traveler TSTF-449, Revision 4, "Steam Generator Tube Integrity," and the model safety evaluation prepared by the U.S. Nuclear Regulatory Commission (NRC) and published in the *Federal Register* on March 2, 2005 (70 FR 10298). The scope of the application includes changes to the definition of leakage, changes to the primary-to-secondary leakage requirements, changes to the SG tube surveillance program (TS 2.23, "Steam Generator (SG) Tube Integrity"), changes to the SG reporting requirements, and associated changes to the TS Bases.

The two supplements dated August 30, 2006, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on July 18, 2006 (71 FR 40750).

2.0 REGULATORY EVALUATION

The background, description, and applicability of the proposed changes associated with the SG tube integrity issue and the applicable regulatory requirements were included in the NRC staff's model safety evaluation (SE) published in the *Federal Register* on March 2, 2005 (70 FR 10298). The "Notice of Availability of Model Application Concerning Technical Specification; Improvement To Modify Requirements Regarding Steam Generator Tube Integrity; Using the Consolidated Line Item Improvement Process" was published in the *Federal Register* on May 6, 2005 (70 FR 24126), and made the model SE available for licensees to reference.

3.0 TECHNICAL EVALUATION

The proposed TS changes establish a programmatic, largely performance-based regulatory framework for ensuring SG tube integrity is maintained. The NRC staff finds that these TS changes address key shortcomings of the current framework by ensuring that SG programs are focused on accomplishing the overall objective of maintaining tube integrity. It incorporates performance criteria for evaluating tube integrity that the NRC staff finds consistent with the structural margins and the degree of leak tightness assumed in the current plant licensing basis. The NRC staff finds that maintaining these performance criteria provides reasonable assurance that the SGs can be operated safely without increase in risk.

The revised TSs will contain limited specific details concerning how the SG program is to achieve the required objective of maintaining tube integrity; the intent being that the licensee will have the flexibility to determine the specific strategy for meeting this objective. However, the NRC staff finds that the revised TSs include sufficient regulatory constraints on the establishment and implementation of the SG program such as to provide reasonable assurance that tube integrity will be maintained.

Failure to meet the performance criteria will be reportable pursuant to the requirements in 10 CFR Sections 50.72 and 50.73. The NRC reactor oversight process provides a process by which the NRC staff can verify that the licensee has identified any SG program deficiencies that may have contributed to such an occurrence and that appropriate corrective actions have been implemented.

Consistent with TSTF-449, the proposed TS changes include: (1) a revised definition of LEAKAGE, (2) a revised TS 2.1.1, "RCS (Reactor Coolant System) Operable Components," and TS 2.1.4, "RCS Operational Leakage Limits," (3) a new TS 2.23, "Steam Generator (SG) Tube Integrity," (4) a revised TS 3.2, "Equipment and Sampling Tests," (5) a revised TS 3.17, "Steam Generator Tubes Integrity," (6) a new TS 5.23, "Steam Generator (SG) Program," and (7) revised Table of Contents pages to reflect the proposed changes. The NRC staff has concluded that the application is generally consistent with TSTF-449. Acceptability of the deviations from the TSTF-449 are discussed below. As a result, the NRC staff determined that the model SE is applicable to this review and finds the proposed changes acceptable.

3.1 Deviations from the TSTF

In its May 30, 2006, application, and two August 30, 2006, supplements, the licensee proposed changes to the TSs that are modeled after TSTF Standard Technical Specification Change Traveler, TSTF-449, "Steam Generator Tube Integrity." There were minor differences between TSTF-449 and the licensee's application. These included differences in the facility licensing basis (other than that discussed in the TSTF-449) and differences in TS numbering and format, since the licensee has a different TS format than that assumed in TSTF-449.

With respect to the differences in the facility licensing basis, the differences did not invalidate the technical evaluation for the TSTF-449; but rather the differences resulted in the licensee slightly deviating from some of the modifications discussed in TSTF-449. For example, in the Bases section for Steam Generator Tube Integrity, TSTF-449 indicated that the accident analysis for an SG tube rupture assumed the contaminated secondary fluid was only briefly released to the atmosphere via safety valves and the majority is discharged to the main condenser. Since the

licensee has a different licensing basis than the one described in the standard TS (i.e., TSTF-449), the licensee modified the TSTF-449 wording to accommodate its existing licensing bases. Another example is that TSTF-449 has specific definitions for the modes of operation. For example, in TSTF-449, Mode 5 is referred to as cold shutdown and the average reactor coolant temperature during this mode must be less than 200 degrees Fahrenheit. For FCS, the comparable mode is termed "cold shutdown condition" and is referred to as "Operating Mode 4" and the cold-leg temperature must be less than 210 degrees Fahrenheit. These differences in modes required the licensee to deviate from the changes discussed in TSTF-449 to remain consistent with the intent of TSTF-449. Since these differences were minor in nature and they were consistent with the plant's licensing basis (e.g., in the level of detail incorporated into the TS Bases), and with the intent of TSTF-449, the NRC staff determined the proposed differences are acceptable.

As a result of the differences in the format of the TS, the licensee relocated many of the TSTF-449 requirements into the appropriate sections of its TSs. In addition, there were some changes in the Bases section of TSTF-449 that were not incorporated into the licensee's submittal, since the licensee did not have the corresponding paragraphs in their version of the Bases. For example, the licensee did not have several references to their SG tube surveillance program in their existing TSs so it did not need to delete these changes in order to adopt TSTF-449. Since these differences were administrative in nature and did not affect the technical adequacy of the submittal, the NRC staff has determined that these changes are acceptable.

In addition to these minor changes, the licensee proposed to delete the reference to a previously approved repair method (i.e., sleeving) since this repair method would no longer be applicable to its replacement SGs (which are being installed in the fall of 2006). Removal of the sleeving method as a repair method is acceptable since the licensee's TSs only allow plugging of SG tubes that have exceeded the repair criteria. Plugging is an acceptable method for removing tubes from service.

In conclusion, the NRC staff finds that the TS changes proposed by the licensee in its May 30, 2006, application, as supplemented by two letters dated August 30, 2006, conform to the requirements of 10 CFR 50.36 and establish a TS framework that will provide reasonable assurance that SG tube integrity is maintained without undue risk to public health and safety.

3.2 Bases Changes

The licensee included in its application the revised TS Bases to be implemented with the TS change. The NRC staff finds that the TS Bases Control Program is the appropriate process for updating the affected TS Bases pages and has, therefore, not included the affected Bases pages with this amendment.

4.0 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 comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to the installation or use of a 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 (71 FR 40750; published on July 18, 2006). 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 amendment.

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.

7.0 REFERENCES

A complete list of references used to complete this review can be found in the NRC's model SE published in the *Federal Register* on March 2, 2005 (70 FR 10298).

Principal Contributor: T. L. Wertz

Date: November 7, 2006

Ft. Calhoun Station, Unit 1

cc:

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April 2006