

May 5, 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 1 - REQUEST FOR ADDITIONAL
INFORMATION RELATED TO LICENSE AMENDMENT REQUEST FOR
UPDATED SAFETY ANALYSIS REPORT CLARIFICATION OF OPERATOR
ACTION DURING LOSS OF MAIN FEEDWATER EVENT (TAC NO. MC7524)

Dear Mr. Ridenoure:

By letter dated July 1, 2005, Omaha Public Power District (OPPD) submitted a license amendment request for the Fort Calhoun Station, Unit 1. The license amendment proposed to revise the Updated Safety Analysis Report (USAR), Section 14.10, to credit operator action during the Loss of Main Feedwater Event. The proposed change will add a description of an existing Emergency Operating Procedure operator action to isolate steam generator blowdown within 15 minutes of reactor trip during a loss of main feedwater event to the USAR.

The Nuclear Regulatory Commission (NRC) staff has reviewed OPPD's submittal and had a teleconference on April 24, 2006, with OPPD to discuss this submittal. The NRC staff has determined that additional information is needed to complete our review. A request for additional information (RAI) is enclosed. This request was discussed with Thomas Matthews of your staff on May 1, 2006, and it was agreed that a response would be provided within 6 weeks of receipt of this letter.

If you have any questions, please contact me at (301) 415-1445.

Sincerely,

/RA/

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

Docket No. 50-285

Enclosure: RAI

cc w/encl: See next page

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SUBJECT: FORT CALHOUN STATION, UNIT 1 - REQUEST FOR ADDITIONAL INFORMATION RELATED TO LICENSE AMENDMENT REQUEST FOR UPDATED SAFETY ANALYSIS REPORT CLARIFICATION OF OPERATOR ACTION DURING LOSS OF MAIN FEEDWATER EVENT (TAC NO. MC7524)

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By letter dated July 1, 2005, Omaha Public Power District (OPPD) submitted a license amendment request for the Fort Calhoun Station, Unit 1. The license amendment proposed to revise the Updated Safety Analysis Report (USAR), Section 14.10, to credit operator action during the Loss of Main Feedwater Event. The proposed change will add a description of an existing Emergency Operating Procedure operator action to isolate steam generator blowdown within 15 minutes of reactor trip during a loss of main feedwater event to the USAR.

The Nuclear Regulatory Commission (NRC) staff has reviewed OPPD's submittal and had a teleconference on April 24, 2006, with OPPD to discuss this submittal. The NRC staff has determined that additional information is needed to complete our review. A request for additional information (RAI) is enclosed. This request was discussed with Thomas Matthews of your staff on May 1, 2006, and it was agreed that a response would be provided within 6 weeks of receipt of this letter.

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REQUEST FOR ADDITIONAL INFORMATION

REGARDING UPDATED SAFETY ANALYSIS REPORT (USAR) CLARIFICATION

OMAHA PUBLIC POWER DISTRICT

FORT CALHOUN STATION

DOCKET NO. 50-285

By letter dated July 1, 2005, Omaha Public Power District (OPPD), the licensee for the Fort Calhoun Station, Unit 1 (FCS), requested a license amendment to permit FCS to revise the USAR, Section 14.10, to credit operator action during the Loss of Main Feedwater (LMFW) Event. The proposed change will add a description of an existing Emergency Operating Procedure operator action to isolate steam generator blowdown within 15 minutes of reactor trip during an LMFWE event to the USAR. The operator action is intended to assist the auxiliary feedwater system in performing its design function of maintaining adequate steam generator (SG) water level for decay heat removal once the auxiliary feedwater actuation signal is actuated. OPPD requests approval of the proposed change to support plant operations following the 2006 outage during which the SGs, pressurizer, and reactor vessel head will be replaced.

The Nuclear Regulatory Commission (NRC) staff has performed a preliminary review of the human performance associated changes in the license amendment request. The licensee's responses to the following request for additional information with regard to containment analysis aspects of the license amendment are needed for the NRC staff to complete its review.

1. Page 22 of Attachment 4 to the licensee's letter of July 1, 2005, stated that for the feedwater line break (FLB) analysis that "SG blowdown flow is automatically and conservatively isolated at 49.03 sec...." The NRC staff has noted that in FCS Technical Specification Table 2-1, a containment pressure high signal (CPHS) or a pressurizer pressure low signal (PPLS) would actuate a containment isolation actuation signal that isolates SG blowdown flow. As such:
 - a. Please indicate which signal (a CPHS or a PPLS) was credited to automatically isolate the SG in the analysis. Demonstrate that the FLB case with SG blowdown isolation occurring at 49.03 seconds is the limiting break case (considering full-break sizes of the FLB) with respect to the acceptance criterion of the peak post-trip hot-leg temperature of 600 degrees F.
 - b. If OPPD credited a CPHS to isolate the SG blowdown flow, please discuss how the CPHS time was determined for FLB cases with break sizes ranging from the maximum break size to the smallest credible size.
 - c. Please provide a description of the containment model to show its adequacy for the CPHS time determination (with respect to prediction of a lower containment pressure resulting in a high CPHS time).

- d. For the small-size FLBs that would not result in a CPHS, please discuss the available Emergency Operating Procedures for the operator to manually isolate SG blowdown flow, and show that the proposed operation action (15 minutes after a reactor trip) for the LMFW event is sufficient for the FLB event.

Ft. Calhoun Station, Unit 1

cc:

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April 2006