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Omaha NE 68102-2247

February 27, 2006  
LIC-06-0022

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555-0001

- References:
1. Docket No. 50-285
  2. Letter from OPPD (R. T. Ridenoure) to NRC (Document Control Desk) dated November 5, 2002, "Submittal of the Fort Calhoun Station Inservice Inspection Plan for the Fourth Ten-Year Interval (2003-2013)" (LIC-02-0123)
  3. Generic Letter 89-04, "Guidance on Developing Acceptable Inservice Testing Programs," dated April 3, 1989

**SUBJECT: Fort Calhoun Station, Unit No. 1, (FCS) Relief Request for Inservice Test Program, Fourth Ten-Year Interval, "Use Of Minimum Flow Recirculation Lines Without Flow Measuring Devices For Pump Testing"**

Pursuant to 10 CFR 50.55a(a)(3)(i), the Omaha Public Power District (OPPD) hereby requests NRC approval of the attached relief request for the FCS Inservice Test Program, Fourth Ten-Year Interval, "Use Of Minimum Flow Recirculation Lines Without Flow Measuring Devices For Pump Testing." Specifically, relief is requested from Section ISTB-5121(c) and the associated test parameters of Table ISTB-3000-1 of the ASME Code for Operation and Maintenance of Nuclear Power Plants. The details of the 10 CFR 50.55a request are attached.

The need for relief was overlooked when the FCS Inservice Inspection Plan for the Fourth Ten-Year Interval (Reference 2) was submitted in 2002. As explained in the attachment, OPPD was granted relief for the Third Ten-Year Interval based on Position 9 of Attachment 1 to Generic Letter 89-04 (Reference 3).

OPPD requests approval of this relief request by April 22, 2006 to allow the next quarterly test to be conducted in accordance with the requested relief.

No commitments to the NRC are made in this letter.

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If you have any questions or require additional information, please contact T. C. Matthews at 402-533-6938.

Sincerely,

A handwritten signature in black ink, appearing to read "D. J. Bannister". The signature is fluid and cursive, with the first name "D. J." and last name "Bannister" clearly distinguishable.

D. J. Bannister  
Manager – Fort Calhoun Station

Attachment: 10 CFR 50.55a Request

**Use Of Minimum Flow Recirculation Lines Without Flow Measuring  
Devices For Pump Testing**

**Fort Calhoun Station, Unit No. 1  
Relief Request E-2**

**Omaha Public Power District (OPPD)  
Fort Calhoun Station, Unit No. 1 (FCS)  
10 CFR 50.55a Request Number E-2**

**Proposed Alternative  
In Accordance with 10 CFR 50.55a(a)(3)(i)**

**– Alternative Provides Acceptable Level of Quality and Safety –**

**1. ASME Code Component(s) Affected**

This relief request applies to pumps tested quarterly using minimum flow recirculation lines without flow measurement indication. The affected pumps are:

- a. Low Pressure Safety Injection (LPSI) Pumps SI-1A, SI-1B
- b. High Pressure Safety Injection Pumps (HPSI) SI-2A, SI-2B
- c. Containment Spray (CS) Pumps SI-3A, SI-3B, SI-3C

**2. Applicable Code Edition and Addenda**

The ASME Code of Operation and Maintenance of Nuclear Power Plants (OM Code), 1998 Edition with 2000 Addenda is the applicable code for the FCS Inservice Test Program, Fourth Ten-Year Interval.

**3. Applicable Code Requirement**

Relief is requested from Paragraph ISTB 5121(c): “where it is not practical to vary system flow resistance, flow rate and pressure shall be determined and compared to their respective reference values.”

**4. Reason for Request**

The flow rate of the subject pumps cannot be measured while they are operating on minimum flow recirculation because flow instrumentation is not installed on the lines. The minimum recirculation flow lines are used when testing the pumps quarterly during power operations. For the LPSI and HPSI pumps, the only other available flow path is to the Reactor Coolant System (RCS) where such flow is undesirable during power operation. The only other available flow path for the CS pumps is into the CS headers, which would result in water damage to equipment in Containment.

**5. Proposed Alternative and Basis for Use**

FCS proposes the following alternative to the ISTB-5121(c) requirement:

- a. As a minimum, quarterly testing continues to measure pump differential pressure and vibration.
- b. During each refueling outage, a comprehensive test using Section ISTB-5123 of the ASME Code will be conducted under full or substantial flow rates. Pump differential pressure, flow rate, and bearing vibration measurements will be taken.
- c. Data from both the quarterly and comprehensive tests will be monitored and analyzed as required by Section ISTB-6000 of the ASME Code.

This testing regimen provides an effective alternative to ISTB-5121(c).

In the FCS Inservice Testing Program Plan for the Fourth Ten-Year Interval, pumps are categorized as either Group A or Group B as required by OM Code Section ISTB-1400. The Containment Spray and Low Pressure Safety Injection pumps are in Group A. The High Pressure Safety Injection pumps are in Group B. A Group A test may be required on a High Pressure Safety Injection pump if conditions of OM Code Section ISTB-3310 are met.

## **6. Duration of Proposed Alternative**

This relief is requested for the remainder of the Fourth Ten-Year Interval, which ends in September 2013.

## **7. Precedent**

This relief request complies with Position 9 of Attachment 1 to Generic Letter (GL) 89-04, "Guidance on Developing Acceptable Inservice Testing Programs." On November 13, 1992, OPPD requested relief (LIC-92-0320) for the subject pumps for the Third Inservice Testing Interval (1993 – 2003) based on Position 9 of Attachment 1 to GL 89-04. In a letter (NRC-94-0186) dated June 21, 1994, (TAC No. M 84936) the NRC approved the relief request.