

Omaha Public Power District
444 South 16th Street Mall
Omaha, Nebraska 68102-2247
402/636-2000

November 16, 1992
LIC-92-330

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Station P1-137
Washington, DC 20555

References: 1. Docket No. 50-285
2. Generic Letter 89-13, dated July 18, 1989
3. Letter from OPPD (K. J. Morris) to NRC (Document Control Desk) dated January 26, 1990 (LIC-90-0050)

Gentlemen:

SUBJECT: Generic Letter 89-13, Service Water System Problems Affecting Safety-Related Equipment - Confirmation of Completion of Recommended Actions (TAC No. 74004)

In Reference 3, Omaha Public Power District (OPPD) informed the NRC of planned actions pursuant to Generic Letter (GL) 89-13. Reference 2 requested that each licensee confirm completion of all GL 89-13 recommended actions or their justified alternatives within 30 days of implementation. OPPD completed the implementation of the GL 89-13 actions on October 16, 1992. This letter satisfies the 30 day notification requirement. This letter also contains a summary of the GL 89-13 recommendations and the implemented actions at Fort Calhoun Station (FCS). As noted in Reference 3, the service water system at FCS is considered to include the Component Cooling Water (CCW) and Raw Water (RW) systems.

- I. Implement and maintain an ongoing program of surveillance and control techniques to significantly reduce the incidence of flow blockage as a result of biofouling.

OPPD has implemented an annual visual inspection of the Intake Structure for biological fouling. The visual inspection includes draining down a particular RW pump cell, visually inspecting the area and collecting cell floor samples for additional analysis. The inspection activity is administratively controlled by the FCS Preventive Maintenance (PM) Program. The pump cell inspection was first performed on February 15, 1990.

- II. Conduct a test program to verify the heat transfer capability of all safety-related heat exchangers cooled by service water.

Heat exchanger performance tests are conducted on the CCW heat exchangers, the Shutdown Cooling heat exchangers, the Letdown Cooling heat exchanger and the Spent Fuel Pool Cooling heat exchanger. The performance tests vary in frequency from three to eighteen months depending on the type of heat exchanger. These testing activities are administratively controlled by the FCS PM Program. The initial stages of the test program began in 1990, and the program was fully implemented by October 16, 1992.

9211200001 921116
PDR ADOCK 05000285
P PDR

- III. Ensure by establishing a routine inspection and maintenance program for open-cycle service water system piping and components that corrosion, erosion, protective coating failure, silting and biofouling cannot degrade the performance of safety-related systems supplied by service water.

This action is being satisfied by a combination of existing FCS programs. The Preventative Maintenance Program, the Inservice Inspection Program and the Erosion/Corrosion Program all perform specific activities (including cleaning and inspections) which collectively ensure that corrosion, erosion, silting and biofouling will not degrade the performance of the safety-related systems cooled by the CCW and RW systems. Initial inspections began in March 1990, and full implementation of these activities was achieved by August 14, 1991.

- IV. Confirm that the service water system will perform its intended function in accordance with the licensing basis for the plant.

OPPD completed four specific actions which confirmed that the CCW and RW systems will perform their intended function in accordance with the licensing basis for the plant.

1. OPPD completed the design basis reconstitution for the RW and CCW systems which verified that system design capabilities meet the intended functions. This activity was completed on May 13, 1991.
2. OPPD performed a post-accident single failure evaluation on the RW and CCW systems. This was completed on April 7, 1992.
3. OPPD conducted system walkdowns to reconcile selected design basis open items. These were completed on April 8, 1992.
4. OPPD conducted RW and CCW system performance tests on all critical heat exchangers. These tests demonstrated that the systems perform as designed. Testing and evaluation were completed on August 19, 1992.

- V. Confirm that maintenance practices, operating and emergency procedures, and training that involves the service water system are adequate to ensure that safety-related equipment cooled by the service water system will function as intended and that operators of this equipment will perform effectively.

OPPD revised maintenance, operations and emergency procedures associated with the RW and CCW systems as part of Safety Enhancement Program (SEP) Items 41, 48, and 49. The last of these items was completed on August 5, 1991.

To summarize, the OPPD action plans in response to GL 89-13 required incremental implementation over a period of time. The final phases of the plans have now been implemented. Therefore, OPPD considers all actions associated with GL 89-13 to be complete.

U. S. Nuclear Regulatory Commission
LIC-92-330
Page 3

If you should have any questions, please contact me.

Sincerely,

W. G. Gates

W. G. Gates
Vice President - Nuclear

WGG/grc

c: LeBoeuf, Lamb, Leiby & MacRae
J. L. Milhoan, NRC Regional Administrator, Region IV
R. P. Mullikin, NRC Senior Resident Inspector
S. D. Bloom, NRC Project Manager