

OPPD

Omaha Public Power District
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402/636-2000

October 19, 1994
LIC-94-0191

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

- References:
1. Docket No. 50-285
 2. American Society of Mechanical Engineers Boiler and Pressure Vessel Code, Section XI, 1989 Edition
 3. NRC Generic Letter 90-09, "Alternative Requirements for Snubber Visual Inspection Intervals and Corrective Actions," dated December 11, 1990
 4. First Addenda to ASME/ANSI OM-1987, Part 4 (Published in 1988)
 5. Second Addenda to ASME/ANSI Omb Code - 1992, Subsection ISTD, "Inservice Testing of Dynamic Restraints (Snubbers) in Light-Water Reactor Power Plants"
 6. Fort Calhoun Station Technical Specifications, Section 3.14, "Surveillance Requirements, Shock Suppressors (Snubbers)"

SUBJECT: Request for Approval to Perform Snubber Activities in Accordance with the American Society of Mechanical Engineers (ASME) Operations & Maintenance Code, Second Addenda (Omb) - 1992, Subsection ISTD

Pursuant to 10 CFR 50.55a(g)(5)(iii), the Omaha Public Power District (OPPD) requests approval to perform snubber activities at the Fort Calhoun Station (FCS) in accordance with the ASME Omb Code - 1992, Subsection ISTD (Reference 5), rather than the First Addenda to ASME/ANSI OM - 1987, Part 4 (Reference 4). The 1989 Edition of the ASME Boiler and Pressure Vessel Code, Section XI, currently endorses Reference 4 for snubber activities. Use of Reference 5 will result in lower total radiation exposures to personnel and provide significant economic benefits without any reduction in the level of snubber reliability and performance, as compared to Reference 4.

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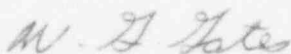
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Attached is the Discussion and Justification for OPPD's request to perform snubber activities at FCS in accordance with the ASME Omb Code - 1992, Subsection ISTD.

NRC approval is requested to allow implementation prior to the 1995 Refueling Outage. Therefore, it is requested that the NRC provide approval prior to March 1, 1995.

If you should have any questions, please contact me.

Sincerely,



W. G. Gates
Vice President

WGG/d11

Attachment

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

Current snubber examinations and testing are performed, and will continue to be performed, under Reference 6. OPPD will continue to use the functional testing sample sizing as delineated in the above table and will continue to maintain the existing frequencies required by Reference 6. However, there are certain snubber activities delineated in Reference 5 that are not specified in Reference 6 (e.g., various test parameters, items required to be inspected in visual examinations, etc.). OPPD will perform these snubber activities in accordance with Reference 5.

Use of Reference 5 duplicates the same level of quality in the visual examinations and operability tests as the current TS testing plan, while reducing occupational radiation exposure and increasing cost effectiveness as compared to Reference 4.

NRC approval is requested prior to March 1, 1995, to allow implementation prior to the 1995 Refueling Outage.

DISCUSSION AND JUSTIFICATION

The Fort Calhoun Station (FCS) Inservice Inspection (ISI) Program presently falls under the 1989 Edition of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components" (Reference 2).

Article IWF-5000 of Reference 2 provides the rules and requirements for inservice inspection of snubbers. IWF-5300 states that inservice examinations and tests "shall be performed in accordance with the first Addenda to ASME/ANSI OM - 1987, Part 4 (Reference 4)." IWF-5400 requires repair and replacement of snubbers to be "in accordance with the first Addenda to ASME/ANSI OM-1987, Part 4 (Reference 4)..." which requires that post-maintenance testing be performed in accordance with Reference 4.

Section 2.3.2.2 of Reference 4, provides visual examination intervals based on previous examination results. A maximum inspection interval of 18 months ($\pm 25\%$) is given for a previous inspection with 0 unacceptable snubbers. A previous visual inspection with 1 unacceptable snubber reduces the examination interval to 12 months ($\pm 25\%$) and a previous examination with 2 unacceptable snubbers reduces the interval to 6 months ($\pm 25\%$). The accelerated inspection intervals prescribed in Reference 4 are considered prohibitively restrictive because a small number of unacceptable visual exams could require a plant shutdown mid-cycle to perform snubber visual exams.

The ASME Omb Code - 1992, Subsection ISTD, Section 6.5.2 refers to Table ISTD 6.5.2-1, which provides visual examination intervals based on previous examination results that are more compatible with refueling outage schedules. For the current FCS hydraulic snubber population of 461, Table ISTD 6.5.2-1 allows greater than 10 but less than 21 unacceptable snubbers in order to continue the basic interval, which is the normal fuel cycle (18 months). For an examination which results in less than or equal to 10 unacceptable snubbers, the next examination interval may be increased to twice the previous interval, not to exceed 48 months. An examination which results in greater than 21 but less than 43 unacceptable snubbers shall result in an interval reduction between the previous interval and $2/3$ the previous interval, calculated by interpolation. An examination which results in greater than 43 unacceptable snubbers shall result in an interval $2/3$ of the previous interval.

Table 6.5.2-1 of Reference 5 is very similar to the current visual examination Table 3-14 found in the FCS Technical Specifications (TS), Section 3.14 (Reference 6). This table was added during TS Amendment 145, in response to Generic Letter 90-09 (Reference 3).

Section 3.2.3 of Reference 4, shows the various Inservice Operability Sample Plans: the 10% Plan, the 37 Plan and the 55 Plan. Appendix C of Reference 4 provides comparison of these sample plans. For the FCS hydraulic snubber population, either the 10% Plan or the 37 Plan is preferred to the 55 Plan. The 37 Plan requires less testing than the 10% Plan for the population size (461) but incurs the risk of a "reject" line, which requires 100% testing should the line be crossed.

Reference 5 utilizes only the 10% Plan and the 37 Plan. However, the 37 Plan of this Code does not have a "reject" line as compared to Reference 4. The 37 Plan is the closest equivalent of all the Plans to the current testing plan performed by FCS under Reference 6. Comparisons of these plans are shown below:

<u>No. of Failures</u>	<u>FCS Technical Specifications (Reference 6)</u>	<u>ISTD 37 Plan (Reference 5)</u>
0	88	37
1	88	55
2	88	73
3	88	91
4	110	110
5	132	128
6	154	146

These comparisons are shown assuming the entire population of hydraulic snubbers is counted as one group and not broken up into defined test plan groups as shown in Sections 7.7.2 and 7.7.3 of Reference 5.