

### UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION INSERVICE INSPECTION PROGRAM PLAN - REQUEST FOR RELIEF RI-13

# NEBRASKA PUBLIC POWER DISTRICT

## COOPER NUCLEAR STATION

## DOCKET NO. 50-298

#### 1.0 INTRODUCTION

By letter dated June 21, 1995, the Nebraska Public Power District (NPPD), requested relief from the requirements of Section XI of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (the ASME Code), 1980 Edition with the Winter 1981 Addenda, for the Second 10-Year Inservice Inspection (ISI) interval at the Cooper Nuclear Station (CNS). The NRC staff approved most of the requested reliefs in a letter dated December 13, 1995, with the exception of Relief Request RI-13, regarding snubber examination and testing, which is the subject of this evaluation.

By letter dated October 18, 1995, NPPD submitted the Third 10-Year ISI Program for CNS, which included a number of **new** relief requests and some that were similar to those previously submitted for the second 10-year interval. Relief Request RI-13 for the third ISI interval is essentially identical to RI-13 for the second 10-year interval; therefore, the staff has reviewed these requests together. By letter dated November 21, 1995, NPPD indicated that the third 10-year ISI interval for CNS will commence on March 1, 1996.

The CNS Technical Specifications (TSs) state that the inservice inspection of the ASME Code Class 1, 2, and 3 components shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50.55a(g), except where specific written relief has been granted by the Commission pursuant to 10 CFR 50.55a(g)(6)(i). 10 CFR 50.55a(a)(3) states that alternatives to the requirements of paragraph (g) may be used, when authorized by the NRC, if (i) the proposed alternatives would provide an acceptable level of quality and safety or (ii) compliance with the specified requirements would result in hardship or unusual difficulties without a compensating increase in the level of quality and safety.

Currently (during the second 10-year ISI interval), all Code Class 1, 2, and 3 snubbers that are included in the inservice inspection program for CNS are required to be visually examined per the 1980 Edition of the ASME Code, Section XI, Article IWF-2000. The functional testing of the snubbers is required to be performed in accordance with Article IWF-5000. For the third 10-year interval, snubber examination and testing will be performed in accordance with Section XI, Article IWF-5300 of the 1989 Edition of the ASME

9602290276 960227 PDR ADOCK 05000298 P PDR Code. The requirements of these respective editions of the ASME Code for snubber examination and testing are similar. In both submittals, NPPD stated that, in lieu of meeting the ASME Code requirements, the alternative use of the visual examination and functional testing programs for Code Class 1, 2, and 3 snubbers, in accordance with CNS TSs, would provide an acceptable level of quality and safety.

#### 2.0 EVALUATION

NPPD stated in the above submittals that the CNS TSs include comprehensive programs for visual examination and functional testing of all safety-related hydraulic and mechanical snubbers, including all ASME Code Class 1, 2, and 3 snubbers as a subset. NPPD stated that the overlap of the visual examination and functional testing programs per ASME Section XI and CNS TSs for the Code Class snubbers presents an unnecessary redundancy.

NPPD also stated that the TS snubber visual examination and functional testing programs are similar in content to those of Subsection IWF of ASME Section XI, and hence could serve as acceptable alternatives. Both programs include parallel criteria for operability, examination schedule, sample size, testing frequency, and additional sampling for failures, etc.

According to the CNS TS 4.6.H.3., at least once per 18 months during shutdown, a representative sample of 10 percent of the total of each type of snubber in use in the plant shall be functionally tested. For each type of snubber that does not meet the functional test acceptance criteria of TS Section 4.6.H.5 or 6, as applicable, an additional 10 percent of that type of snubber shall be functionally tested. The representative sample selected shall include the various configurations, operating environments and the range of size and capacity of snubbers.

The functional testing program in the CNS TS is not explicit regarding the definition of snubber type. During a conference call on November 30, 1995, NPPD discussed the grouping of snubbers into four general types; a single group consisting of all hydraulic snubbers and three groups of mechanical snubbers (types PSA-3, PSA-10, and PSA-35). These four groups would number 53, 15, 90, and 52 snubbers, respectively. The staff, in turn, informed NPPD that the proposed further division of mechanical snubbers by type would require additional justification. NPPD later responded that it will consider only two snubber types, i.e., hydraulic and mechanical, in the functional testing program. This is consistent with the Bases for TS 3.6.H and 4.6.H. Based on this understanding, the staff considers the CNS TS sample expansion scheme to be acceptable. We further understand that this interpretation will be documented in the appropriate CNS procedure(s).

TS 4.6.H.4.a. specifies that in addition to the regular sample, snubbers which failed the previous functional test shall be retested during the next test period. If a spare snubber has been installed in place of a failed snubber, then both the failed snubber (if it is repaired and installed in another location) and the spare snubber shall be retested. Test results of these snubbers shall not be part of the sample expansion.

For visual examination of snubbers, the CNS TSs adopt the guidelines of NRC Generic Letter (GL) 90-09, "Alternative Requirements for Snubber Visual Inspection Intervals and Corrective Actions," dated December 11, 1990. GL 90-09 was issued to reduce the burden of the overly restrictive visual examination schedule in the first addenda to ASME/ANSI OM-1987, Part 4 (OM Part 4), for licensees that use a large number of snubbers. This is acceptable to the staff.

The staff has reviewed the above NPPD submittals and has determined that the current CNS TS requirements for snubber visual examination and testing programs meet the intent of the ASME Code Section XI requirements. The staff, therefore, concurs with NPPD that the TSs provide an acceptable alternative for visual examination and functional testing of Code Class 1, 2, and 3 snubbers at CNS.

#### 3.0 CONCLUSION

Based on the information provided, the staff has determined that NPPD has presented an adequate justification for its relief request from the requirements of Section XI of the applicable editions of the ASME Code, with regard to visual examination and functional testing of Code Class 1, 2, and 3 snubbers. The staff concurs with NPPD that the application of the TS requirements for the Code Class snubbers would provide an acceptable level of quality and safety and, therefore, the proposed alternative is authorized, pursuant to 10 CFR 50.55a(a)(3)(i), for the remainder of the second 10-year ISI interval and the duration of the third 10-year ISI interval for CNS. Further, the staff has determined that the granting of this relief is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest, giving due consideration to the burden upon the licensee that could result if the Code requirements were imposed on the facility.

Principal Contributor: A. Lee

Date: February 27, 1996