



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SAFETY EVALUATION

RELIEF REQUEST RR-IWF-4 SNUBBER INSERVICE SURVEILLANCE

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION UNIT 2

MECHANICAL ENGINEERING BRANCH

OFFICE OF NUCLEAR REACTOR REGULATION

INTRODUCTION

On July 17, 1990, the Niagara Mohawk Power Corporation (licensee) submitted Relief Request No. RR-IWF-4 from inservice test requirements for snubbers for the Nine Mile Point Nuclear Station Unit 2. The licensee requested that it be permitted to meet only the requirements in its Technical Specifications (TS) in lieu of meeting the requirements of both the TS and the 1983 ASME Boiler and Pressure Vessel Code Section XI (Section XI).

Thus, the relief requested would delete the snubber functional test requirements of Section XI from the NMP-2 IWF Program Plan. Snubber functional testing will then be based solely on the requirements delineated in TS 3/4.7.5. This TS was recently revised by Amendment No. 19, issued on July 13, 1990, to be consistent with the ASME OMc-1990, Part 4, Standard. The NMPC discussion in the subject relief request is consistent with the recently revised TS 3/4.7.5. The effect of this relief request will be to remove the potential for inconsistent requirements between the TS and the Section XI Program Plan by relying solely on the testing requirements in the TS, as recently amended.

DISCUSSION

The surveillance of safety-related snubbers was originally required by NRC during the 1973-1974 time period in the TS of all operating plants. Initially, only inservice inspection was required, and this requirement has remained unchanged. Later, inservice testing was added to the surveillance requirements. Unlike inspection, the requirement for inservice testing has been revised extensively to address technical developments and operating experiences gained from operating plants.

Section XI incorporated the early TS testing requirement into Subsection IWF. However, because Subsection IWF was not updated like other Section XI inservice testing requirements, a gap was created between the Section XI and the later TS testing requirements. The two major differences are:

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1. Capacity Limit to Exempt Snubbers from Being Tested

When the initial test requirement was established, there was a lack of availability of test machines. Machines with a load capacity above 50 kips did not exist; and snubbers with a load capacity above 50 kips had to be exempted from testing. Yet, from the safety point of view, operability of larger size snubbers is more important than that of smaller snubbers, and needs to be verified by testing. Therefore NRC encouraged the development of larger test machines. As a result, today's machine can test any size of snubbers. The 50 kips limit is no longer meaningful, and was eliminated from the TS of all operating plants. The ASME OMc-1990, Part 4, Standard, which has been recognized as the future guidance for snubber surveillance requirements, also adopted the same NRC position. However, Section XI did not incorporate this change, and is considered less conservative in that aspect.

2. Sampling Plans

The initial TS test requirement provided one method for the selection of test samples, the "10% Plan." Later, two other plans were developed statistically by the NRC staff in conjunction with the industry. These are the "37 Plan" and "55 Plan;" both were endorsed by NRC as acceptable alternatives to the 10% Plan and both provided the same level of snubber reliability as the 10% Plan. Most operating plants TS's, including the NMP-2 TS, and the OMc-1990, Part 4, Standard, have added the two new plans to their sampling requirements as acceptable alternatives to the 10% Plan. However, Section XI did not incorporate this change. Thus, if the licensee were required to follow both Section XI and the TS requirements, the licensee might be required to perform two sampling plans for the same test (e.g., 10% Plan under Section XI and 37 Plan under TS requirements). The staff finds that this duplication of effort is not warranted because the TS requirements provide the same level of quality and safety for snubber functional testing.

Furthermore, the staff finds that the NMP-2 TS requirements for the sampling plan are identical to those of OMc-1990, Part 4, Standard. Based on the discussion above, the staff concludes that the NMP-2 TS requirements are comparable to the requirements specified in Section XI for the sampling plan. In addition, the 1989 Edition of the ASME Boiler and Pressure Vessel Code, Section XI, endorsed the OMc-1990, Part 4, Standard and, thus, the differences between Section XI and the TS requirements for sampling plans are eliminated.



CONCLUSION

This relief request from Section XI test requirements for snubbers will allow the licensee to meet only the TS requirements for snubber functional testing.

The staff concludes, as discussed above, that pursuant to 10 CFR 50.55a(a)(3)(i), the requested relief will provide an acceptable level of quality and safety.

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