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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO THE INSERVICE INSPECTION PROGRAM REQUESTS FOR RELIEF

COMMONWEALTH EDISON COMPANY

LASALLE COUNTY STATION, UNITS 1 AND 2

DOCKET NOS. 50-373 AND 50-374

1.0 INTRODUCTION

The Code of Federal Regulations, 10 CFR 50.55a, requires that inservice inspection (ISI) of certain American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (Code) Class 1, 2, and 3 components be performed in accordance with Section XI of the ASME Code applicable Edition and Addenda, except where specific written relief has been requested by the licensee and granted by the Commission pursuant to paragraph 10 CFR 50.55a(g)(6)(i), or alternatives approved pursuant to 10 CFR 50.55a(a)(3). In proposed alternatives, the licensee must demonstrate that (i) the proposed alternatives provide an acceptable level of quality and safety; or (ii) compliance would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety. In requesting relief, the licensee must demonstrate that the requirement is impractical for their facility. NRC guidance contained in Generic Letter (GL) 90-09, "Alternative Requirements for Snubber Visual Inspection Intervals and Corrective Actions," provided alternatives to the Code requirements determined to be acceptable to the staff.

10 CFR 50.55a authorizes the Commission to grant relief from ASME Code requirements upon making the necessary findings. The NRC staff's findings with respect to granting or not granting the relief request as part of the licensee's ISI program are contained in this Safety Evaluation (SE).

This SE pertains to a request for relief from the ASME Code, Section XI, Subarticle IWF-5300(a), inservice examination requirements. The licensee proposed an alternate examination method, as described in relief request CR-11, submitted by the Commonwealth Edison Company (ComEd) letter dated October 14, 1994, as revised by letter dated July 22, 1996. The licensee's ISI program is based on the requirements of Section XI of the ASME Code, 1989 Edition. The 1989 Edition of the ASME Code, Section XI, Subarticle IWF-5300(a), requires that snubber inservice examinations be performed in accordance with the first Addenda to ASME/ANSI OM-1987, Part 4, published in 1988 (OMa-1988, Part 4), using the VT-3 visual examination method described in paragraph IWA-2213.

2.0 RELIEF REQUEST CR-11

The licensee requests relief from the snubber inservice examination requirements of the ASME Code, Section XI, Subarticle IWF-5300(a), for the LaSalle County Nuclear Station, Units 1 and 2, ISI program for the second 10-year interval for snubbers.

2.1 Licensee's Basis for Requested Relief

The current Lasalle Technical Specifications (TS) include a comprehensive program for visual examination and functional testing of all safety-related hydraulic and mechanical snubbers. The safety-related snubber population encompasses all Code Class 1, 2, and 3 snubbers.

Of the approximate total of 240 safety-related snubbers per unit, approximately 215 are Code Class. The overlap of the visual examination and functional tests programs per ASME Section XI and TS for Code Class snubbers presents an unnecessary redundancy without a compensating increase in the level of quality and safety.

The TS snubber visual examination program requires a sample size of 100 percent of all safety-related snubbers and incorporates the alternate snubber visual examination schedule delineated in GL 90-09. As determined by the NRC staff, the alternate schedule of GL 90-09 maintains the same confidence level of quality and safety as the previous TS schedule, which was very similar in content to that of OMa-1988, Part 4.

The GL 90-09 alternate schedule is based on the number of unacceptable snubbers found during the previous examination in proportion to the size of the various snubber populations or categories. The alternative examination interval is based on a fuel cycle of up to 24 months and may be as long as two fuel cycles, depending on the number of unacceptable snubbers found during the previous visual examination.

The TS snubber functional test program contains the sampling plans described in OMa-1988, Part 4. In the event a snubber fails to meet the functional test acceptance criteria, the TS requires additional testing samples and requires corrective actions that are equal to or more conservative than those specified in OMa-1988, Part 4.

Based on the fact that the TS snubber visual examination and functional test programs maintain the same or better levels of quality and safety as that of OMa-1988, Part 4, ComEd requested that the TS visual examination and functional test programs for snubbers be used in lieu of the OMa-1988, Part 4 visual examination and functional test programs required by ASME Section XI, Subarticle IWF-5300(a).

2.2 Alternate Method

The licensee proposes to perform visual and functional tests of Code Class snubbers at LaSalle Station, Units 1 and 2, in accordance with the snubber examination and tests programs contained in the latest approved revision of the TS in lieu of the OMa-1988, Part 4, visual examination and functional test programs required by Subarticle IWF-5300(a). Further, the licensee proposes to employ visual examiners qualified to the applicable rules of ASME Section XI, Article IWA-2000 to perform the examinations of Code Class snubbers, and to record and report the visual examination and functional tests results in accordance with the applicable rules of ASME Section XI Article IWA-6000.

2.3 Evaluation

The staff developed GL 90-09 to provide an alternate schedule for snubber visual inspections that maintains the same confidence level as the existing inspection intervals and allows for inspections and corrective actions during plant outages. The GL 90-09 guidance inspection interval is based on the number of unacceptable snubbers of the last inspection in proportion to the size of the various snubber populations or categories. The current required interval for visual inspection is based only on the number of unacceptable snubbers found during the last inspection without regard to the snubber population. The visual inspection provides for detection of impaired functional ability caused by physical damage, leakage, corrosion, or degradation from environmental exposure or operating conditions. The staff determined that the visual inspection schedule of GL 90-09 is an acceptable alternative.

By letter dated March 2, 1993, the licensee submitted a request for an amendment to LaSalle County Station, Units 1 and 2 to change the snubber visual inspection intervals and corrective actions in the TS surveillance requirements to the alternative requirements provided in GL 90-09. The proposed amendments to the TS were approved and issued as Amendment No. 91 and Amendment No. 75 for LaSalle County Station Units 1 and 2 respectively by NRC letter dated September 1, 1993.

The current TS 3/4.7.9 requirements for the LaSalle County Station, Units 1 and 2, snubber surveillance program for visual examination are consistent with GL 90-09 requirements. Licensees with a large population of snubbers find that the visual inspections are excessively restrictive, expend a significant amount of resources, and subject plant personnel to unnecessary exposure without a compensating increase in the level of quality and safety. The staff developed the alternative GL 90-09 guidance to alleviate these concerns, and encouraged licensees to change their TS to be consistent with this guidance. The licensee's proposed alternative visual inspection requirements of TS 3/4.7.9 provide an acceptable level of quality and safety and are acceptable as an alternative to ASME Code, Section XI, Subarticle IWF-5300(a) inservice examination requirements.

3.0 CONCLUSIONS

The staff concludes that the licensee's proposal to perform snubber inservice visual inspections in accordance with LaSalle Station TS 3/4.7.9 is acceptable as an alternate method to the inservice examination requirements of the ASME Code, Subsection XI, Subarticle IWF-5300(a). The staff has determined that pursuant to 10 CFR 50.55a(3)(a)(ii), compliance would result in hardship without a compensating increase in the level of quality and safety.

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Dated: August 30, 1996