

February 14, 2002

Mr. Oliver D. Kingsley, President  
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Exelon Generation Company, LLC  
200 Exelon Way, KSA 3-E  
Kennett Square, PA 19348

SUBJECT: LIMERICK GENERATING STATION, UNITS 1 AND 2, EVALUATION OF  
RELIEF REQUEST RR-04, RE: ASME CLASS 1, 2, AND 3 SNUBBERS  
VISUAL EXAMINATION AND FUNCTIONAL TESTING (TAC NOS. MB1018  
AND MB1019)

Dear Mr. Kingsley:

By letter dated June 27, 2001, Exelon Generation Company, LLC (Exelon or the licensee), submitted a proposed alternative to the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.55a, concerning the second 10-year inservice inspection (ISI) programs for Limerick Generating Station (LGS), Units 1 and 2.

This evaluation addresses Relief Request RR-04 regarding snubber examination and testing requirements. Exelon requested relief from the requirements of Articles IWF-2000 and IWF-5000 of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI, 1989 Edition, to perform visual inspections and functional tests of snubbers. Article IWF-2000 provides the examination rules for component supports. Article IWF- 5000 references the first addenda to ASME/ANSI OM-1987, Part 4, for the requirements of snubber visual examination and functional testing. The licensee proposed, as an alternative, the use of the LGS Units 1 and 2 Technical Specifications for the required snubber surveillance activities.

As a result of its review of the licensee's submittal, the Nuclear Regulatory Commission (NRC) staff identified certain areas where additional information was needed from the licensee. By letter dated October 26, 2001, the licensee provided additional information concerning the use of the proposed alternative.

Based on the information provided by the licensee, the NRC staff concludes that for RR-04, the proposed alternative will provide an acceptable level of quality and safety. Therefore, the use of the proposed alternative is authorized pursuant to 10 CFR 50.55a(a)(3)(i) for the second 10-year ISI interval at each unit. The NRC staff's safety evaluation is enclosed.

O. Kingsley

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If you have any questions, please contact your Project Manager, Christopher Gratton, at 301-415-1055.

Sincerely,

***/RA/***

James W. Clifford, Chief, Section 2  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-352 and 50-353

Enclosure: Safety Evaluation

cc w/encl: See next page

O. Kingsley

- 2 -

If you have any questions, please contact your Project Manager, Christopher Gratton, at 301-415-1055.

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cc w/encl: See next page

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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELIEF REQUEST RR-04 FOR SNUBBERS

EXELON GENERATION COMPANY, LLC

LIMERICK GENERATING STATION, UNITS 1 AND 2

DOCKET NOS. 50-352 AND 50-353

1.0 INTRODUCTION

By letter dated June 27, 2001, as supplemented on October 26, 2001, Exelon Generation Company, LLC (Exelon or the licensee), submitted a proposed alternative to the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.55a, concerning the second 10-year inservice inspection (ISI) programs for Limerick Generating Station (LGS), Units 1 and 2. This evaluation addresses Relief Request RR-04 regarding snubber examination and testing requirements.

2.0 BACKGROUND

The operating license for LGS, Units 1 and 2, states that ISI of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) Class 1, 2, and 3 components, will be performed in accordance with Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," of the ASME 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). Section 50.55a(a)(3) states that alternatives to the requirements of paragraph (g) may be used, when authorized by the Nuclear Regulatory Commission (NRC), if the licensee demonstrates that (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 difficulty without a compensating increase in the level of quality and safety.

Pursuant to 10 CFR 50.55a(g)(4), ASME Code Class 1, 2, and 3 components (including supports) must meet the requirements set forth in the ASME Code, Section XI, to the extent practical, within the limitations of design, geometry, and materials of construction of the components, except the design and access provisions and the pre-service examination requirements. The regulation requires that inservice examination of components and system pressure tests conducted during the first 10-year interval and subsequent intervals comply with the requirements in the latest edition and addenda of Section XI of the ASME Code incorporated by reference in 10 CFR 50.55a(b) 12 months prior to the start of the 120-month interval, subject to the limitations and modifications listed therein. The applicable edition of Section XI of the ASME Code for the LGS Units 1 and 2 second 10-year ISI interval is the 1989 Edition, no Addenda.

Pursuant to 10 CFR 50.55a(g)(5), if the licensee determines that conformance with an examination requirement of Section XI of the ASME Code is not practical for its facility, information will be submitted to the Commission in support of that determination and a request must be made for relief from the ASME Code requirement. After evaluation of the determination, pursuant to 10 CFR 50.55a(g)(6)(i), the Commission may grant relief and may impose alternative requirements that are determined to be authorized by law, will not endanger life, property, or the common defense and security, and are otherwise in the public interest, giving due consideration to the burden upon the licensee that could result if the requirements were imposed.

By letter of June 27, 2001, Exelon requested relief from performance of visual inspections and functional testing for snubbers that are required by Article IWF-2000 and Article IWF-5000, ASME Code, Section XI, 1989 Edition. Article IWF-2000 provides the examination rules for component supports. Article IWF- 5000 references the first addenda to ASME/ANSI OM-1987, Part 4 (OMa-4), for the requirements of snubber visual examination and functional testing. As an alternative, the licensee proposed to use the LGS Units 1 and 2 Technical Specifications (TSs) for the required snubber surveillance activities.

As a result of its review of the licensee's submittal of June 27, 2001, the NRC staff identified certain areas where additional information was needed from the licensee. The licensee responded to the staff's questions during a conference call on October 17, 2001. The licensee's responses were also documented in a letter dated October 26, 2001.

### 3.0 EVALUATION

The licensee stated that Article IWF-5000 provides the ISI requirements for snubbers. Paragraphs IWF-5300(a) and IWF-5300(b) specify that snubber inservice examinations and functional testing shall be performed in accordance with the first Addenda to ASME/ANSI OMa-4 (published in 1988), using the VT-3 visual examination method specified in IWA-2213.

The licensee stated in its June 27, 2001, letter that LGS Units 1 and 2 TS 3/4.7.4 establishes the alternative surveillance requirements for snubbers. The TS snubber visual examination program requires a sample size of all safety-related snubbers and incorporates the alternate snubber visual examination guidance delineated in NRC Generic Letter (GL) 90-09, "Alternate Requirements for Snubber Visual Inspection Intervals and Corrective Actions." This is acceptable to the staff since GL 90-09 has been approved by the NRC for snubber visual examination.

The licensee stated that the alternative snubber functional testing program contained in the TSs is based on the ASME/ANSI OM-1990 Addenda to ASME/ANSI OMa-4, "Examination and Performance Testing of Nuclear Power Plant Dynamic Restraints (Snubbers)." This is acceptable since ASME/ANSI OM-1990 Addenda provides an update for the requirements specified in the first addenda to ASME/ANSI OMa-4, for snubber functional testing, and was previously approved by the NRC for use at LGS Units 1 and 2 for the first 10-year inspection interval.

As stated above, the visual examination and functional testing of Class 1, 2, and 3 snubbers are required to be performed in accordance with the 1989 Edition (no Addenda) of the ASME Code, Section XI, Subsection IWF. Article IWF-2000 provides the examination rules for component

supports. These rules are summarized in Table IWF-2500-1, which specifies VT-3 visual examination of supports in each inspection interval. The licensee stated that the LGS visual examinations are to be performed by qualified personnel and will meet the intent of the inspections and tests of ASME Code, Section XI. In responding to a question raised by the staff during the October 17, 2001, telephone conference, the licensee stated in its October 26, 2001, letter that examination personnel are qualified, and certified, as Level II inspectors as defined in Section XI of the ASME Code, IWA-2300. Level II personnel are currently recertified by qualification examinations every 3 years. In addition, VT-3 examiners would further complete site-specific training (i.e., Snubber Visual Inspection Orientation Program) prior to each inspection. The licensee stated that the completion of the site-specific training is documented in accordance with applicable Exelon procedures. The staff finds the licensee's VT-3 qualification procedure meets the intent of the ASME Code, Section XI, and is, therefore, acceptable.

The licensee also stated that the purpose of the plant Augmented Inservice Inspection Program described in the LGS Units 1 and 2 TS 3/4.7.4 is to assure and demonstrate operational readiness and structural integrity of snubbers through testing and visual examination. Specifically, the visual examination shall verify that: (1) there are no visible indications of damage or impaired operability, (2) attachments to the foundation or supporting structure are secure, and (3) fasteners for attachment of the snubber to the component and to the snubber anchorage are secure. The NRC staff finds the alternative examination criteria for snubber assemblies meets the intent of ASME Code, Section XI, Article IWF-2000, and is, therefore, acceptable.

#### 4.0 CONCLUSION

Based on the information provided by the licensee, the NRC staff has determined that the licensee has presented an adequate justification for relief from the requirements of ASME Code, 1989 Edition, Section XI, Article IWF-2000 and Article IWF-5000 (which references OMa-4), with regard to visual examination and functional testing of the LGS Units 1 and 2 snubber assemblies. The NRC staff has determined that the proposed alternative use of the LGS Units 1 and 2 TSs for the visual examination and functional testing of snubbers would provide an acceptable level of quality and safety. Therefore, pursuant to 10 CFR 50.55a(a)(3)(i), the licensee's request for relief relating to the second 10-year interval of the LGS Units 1 and 2 ISI program is authorized.

Principal Contributor: A. Lee

Date: February 14, 2002