

Exelon Generation Company, LLC  
LaSalle County Station  
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April 13, 2001

10CFR50.55a

United States Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555

LaSalle County Station, Units 1 and 2  
Facility Operating License Nos. NPF-11 and NPF-18  
NRC Docket Nos. 50-373 and 50-374

Subject: Submittal of Relief Requests CR-36 and CR-37 to the  
Requirements of 10CFR50.55a(g), "Inservice Inspection  
Requirements"

In accordance with 10CFR50.55a(a)(3)(i), Exelon Generation Company (EGC), LLC, requests approval of proposed Relief Request CR-36 and Relief Request CR-37 for use at LaSalle County Station, Unit 1 and Unit 2. The bases of the relief requests are that the proposed alternatives would provide an acceptable level of quality and safety. Relief Request CR-36 proposes changes to the annual ultrasonic training provisions of Subarticle VII-4240, "Annual Training," of Section XI of American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), 1995 Edition with the 1996 Addenda, Appendix VII. Relief Request CR-37 proposes changes to the statistical parameters of Subparagraph 3.2(c) of Section XI of the ASME Code, 1995 Edition with the 1996 Addenda, Appendix VIII, Supplement 4.

The proposed relief requests are similar to relief requests approved by the NRC for use at Millstone Nuclear Power Station on January 26, 2001.

It is requested that these proposed relief requests be approved by November 1, 2001 to allow their use in the upcoming LaSalle County Station, Unit 1 refuel outage currently scheduled to begin in November of 2001.

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Should you have any questions concerning this letter, please contact  
Mr. William Riffer, Regulatory Assurance Manager, at (815) 357-6761,  
extension 2383.

Respectfully,

A handwritten signature in black ink, appearing to read "Charles G. Pardee". The signature is fluid and cursive, with a large initial "C" and "P".

Charles G. Pardee  
Site Vice President  
LaSalle County Station

Attachment

cc: Regional Administrator - NRC Region III  
NRC Senior Resident Inspector - LaSalle County Station

**ATTACHMENT**

**RELIEF REQUEST CR-36**

**RELIEF REQUEST CR-37**

**Relief Request CR-36:  
Revision 0**

**COMPONENT IDENTIFICATION**

Code Class: All

Reference: ASME Section XI, 1995 Edition with 1996 Addenda, Appendix VII, Subarticle VII-4240, "Annual Training"

Examination Categories: All categories for components subject to Ultrasonic Examination

Item Number: All item numbers for components subject to Ultrasonic Examination

Description: Alternative Requirements to ASME Section XI, 1995 Edition with 1996 Addenda, Appendix VII, Subarticle VII-4240, "Annual Training"

Component Numbers: All Components Subject to Ultrasonic Examination

**CODE REQUIREMENT**

10CFR50.55a(b)(2) incorporates by reference, the 1995 Edition and Addenda through 1996 of Section XI of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) for use in preparing inservice inspection programs. Subarticle VII-4240, "Annual Training," of Section XI of ASME Code, 1995 Edition with the 1996 Addenda, Appendix VII, requires a minimum of 10 hours annual training.

10CFR50.55a(b)(2)(xiv), "Appendix VIII personnel qualification," requires that all personnel qualified to perform ultrasonic examinations in accordance with Section XI of the ASME Code, Appendix VIII, shall receive 8 hours of annual hands-on training on specimens that contain cracks. This training must be completed no earlier than 6 months prior to performing ultrasonic examinations at a licensee's facility.

**CODE REQUIREMENT FOR WHICH RELIEF IS REQUESTED**

Relief is requested from the training provisions of Subarticle VII-4240 of Section XI of ASME Code, 1995 Edition with the 1996 Addenda, Appendix VII.

## **BASIS FOR RELIEF**

Pursuant to 10CFR50.55a(a)(3)(i), relief is requested from the training provision of Subarticle VII-4240 of Section XI of ASME Code, 1995 Edition with the 1996 Addenda, Appendix VII, that requires a minimum of 10 hours annual training. The basis of the relief request is that the proposed alternative would provide an acceptable level of quality and safety.

On September 22, 1999, the NRC published a final rule in the Federal Register (64 FR 51370) to amend 10CFR50.55a(b)(2), to incorporate by reference the 1995 Edition and addenda through the 1996 Addenda, of Section XI of ASME Code. The change included the requirement to have a minimum of 10 hours of annual training contained in Subarticle VII-4240 of Section XI of ASME Code.

Additionally, the September 22, 1999 Federal Register notice amended 10CFR 50.55a(b)(2)(xiv). The amended 10CFR50.55a(b)(2)(xiv) requires that all personnel qualified to perform ultrasonic examinations in accordance with Appendix VIII of the ASME Code shall receive 8 hours of annual hands-on training on specimens that contain cracks. This training must be taken no earlier than 6 months prior to performing examinations at a licensee's facility. Paragraph 2.4.1.1.1 in the Federal Register notice contained the following statement which includes a discussion of the Electric Power Research Institute (EPRI) Performance Demonstration Initiative (PDI) program.

"The NRC had determined that this requirement (i.e., Subarticle VII-4240) was inadequate for two reasons. The first reason was that the training does not require laboratory work and examination of flawed specimens. Signals can be difficult to interpret and, as detailed in the regulatory analysis for this rulemaking, experience and studies indicate that the examiner must practice on a frequent basis to maintain the capability for proper interpretation. The second reason is related to the length of training and its frequency. Studies have shown that an examiner's capability begins to diminish within approximately 6 months if skills are not maintained. Thus, the NRC had determined that 10 hours of annual training is not sufficient practice to maintain skills, and that an examiner must practice on a more frequent basis to maintain proper skill level... The PDI program has adopted a requirement for 8 hours of training, but it is required to be hands-on practice. In addition, the training must be taken no earlier than 6 months prior to performing examinations at a licensee's facility. PDI believes that 8 hours will be acceptable relative to an examiner's abilities in this highly specialized skill area because personnel can gain knowledge of new developments, material failure modes, and other pertinent technical topics through other means. Thus, the NRC has decided to adopt in the Final Rule the PDI position on this matter. These changes are reflected in 10CFR50.55a(b)(2)(xiv) of the final rule."

Implementation of the training requirements contained in Subarticle VII-4240 of Section XI of ASME Code, 1995 Edition with the 1996 Addenda, Appendix VII and 10CFR50.55a(b)(2)(xiv) will result in redundant training programs. The approval of this Relief Request, to qualify our personnel to perform ultrasonic examinations in accordance with 10CFR50.55a(b)(2)(xiv), will simplify record keeping, satisfy the need to maintain skills, and provide an acceptable level of quality and safety.

### **PROPOSED ALTERNATIVE PROVISIONS**

Annual ultrasonic training shall be conducted in accordance with 10CFR50.55a(b)(2)(xiv) in lieu of Subarticle VII-4240 of Section XI of ASME Code, 1995 Edition with the 1996 Addenda, Appendix VII. The annual ultrasonic training shall require that all personnel qualified for performing ultrasonic examinations in accordance with Section XI of the ASME Code, Appendix VIII, shall receive 8 hours of annual hands-on training on specimens that contain cracks. This training must be completed no earlier than 6 months prior to performing ultrasonic examinations at a licensee's facility.

### **APPLICABLE TIME PERIOD**

This alternative is requested for the remaining duration of the second and third inspection periods for LaSalle County Station, Unit 1 and Unit 2.

**Relief Request CR-37:  
Revision 0**

**COMPONENT IDENTIFICATION**

Code Class: Class 1

Reference: ASME Section XI, 1989 Edition, Table  
IWB-2500-1

ASME Section XI, 1995 Edition with 1996  
Addenda, Appendix VIII, Supplement 4,  
Subparagraph 3.2(b)

Examination Category: B-A

Item Numbers: B1.10, B1.11, B1.12, B1.20, B1.21, B1.22, B1.50,  
B1.51

Description: Alternative requirements to Appendix VIII,  
Supplement 4, "Qualification Requirements for  
the Clad/Base Metal Interface of Reactor Vessel"

Component Numbers All Components

**CODE REQUIREMENT**

10CFR50.55a(b)(2) incorporates by reference, the 1995 Edition and Addenda through 1996 of Section XI of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) for use in preparing inservice inspection programs.

Subparagraph 3.2(c) of Section XI of the ASME Code, Appendix VIII, Supplement 4, requires that the ultrasonic testing (UT) performance demonstration results be plotted on a two dimensional plot with the measured depth plotted along the ordinate axis and the true depth plotted along the abscissa axis. For qualification, the plot must satisfy the statistical parameters identified in Subparagraph 3.2(c).

## **CODE REQUIREMENT FOR WHICH RELIEF IS REQUESTED**

Relief is requested from the statistical parameters identified Subparagraph 3.2(c) of Section XI of the ASME Code, Appendix VIII, Supplement 4.

## **BASIS FOR RELIEF**

Pursuant to 10CFR50.55a(a)(3)(i), relief is requested from the statistical parameters identified in Subparagraph 3.2(c) of Section XI of the ASME Code, Appendix VIII, Supplement 4. The basis of the relief requests is that the proposed alternatives would provide an acceptable level of quality and safety.

On September 22, 1999, the NRC published a final rule in the Federal Register (64 FR 51370) to amend 10CFR50.55a(b)(2), to incorporate by reference the 1995 Edition and addenda through the 1996 Addenda, of Section XI of ASME Code. The change included the provisions of Subparagraph 3.2(a), 3.2(b) and 3.2(c) of Section XI of the ASME Code, 1995 Edition with the 1996 Addenda, Appendix VIII, Supplement 4.

Additionally, the September 22, 1999 Federal Register amended 10CFR50.55a(b)(2)(xv)(C)(1). The amended 10CFR50.55a(b)(2)(xv)(C)(1), requires a depth sizing acceptance criterion of 0.15 inch Root Mean Square (RMS) to be used in lieu of the requirements of Subparagraph 3.2(a) and 3.2(b) of Section XI of the ASME Code, Appendix VIII, Supplement 4.

On March 26, 2001, the NRC published a correction to the September 22, 1999 final rule in the Federal Register (66 FR 16390). The NRC identified that an error had occurred in the published wording of 10CFR50.55a(b)(2)(xv)(C)(1). The corrected 10CFR 50.55a(b)(2)(xv)(C)(1), requires a depth sizing acceptance criterion of 0.15 inch Root Mean Square (RMS) to be used in lieu of the requirements of Subparagraph 3.2(a) and a length sizing requirement of 0.75 inch RMS to be used in lieu of the requirements 3.2(b) of Section XI of the ASME Code, Appendix VIII, Supplement 4.

The statistical parameters to be used in flaw sizing specified in Subparagraph 3.2(c) of Section XI of ASME Code, 1995 Edition with the 1996 Addenda, Appendix VIII, Supplement 4, rely upon the depth sizing acceptance criteria used in Subparagraph 3.2(a) and the length sizing acceptance criteria used in Subparagraph 3.2(b). For Supplement 4 UT performance demonstrations, the linear regression line of the data required by Subparagraph 3.2(c) is not applicable because the performance demonstrations are performed on test specimens with flaws located on the inner 15% through-wall. Additionally, the Subparagraph 3.2(c) specified value for evaluating the mean deviation of flaw depth is too lax for evaluating flaw depths within the inner 15% of wall thickness. We propose to use the

10CFR50.55a(b)(2)(xv)(C)(1) RMS calculations of Subparagraph 3.2(a), which utilizes an RMS value of 0.15 inch from, and the RMS calculations of Subparagraph 3.2(b), which utilizes an RMS value of 0.75 inch, in lieu of the statistical parameters of 3.2(c).

**PROPOSED ALTERNATIVE PROVISIONS**

The RMS calculations of Subparagraph 3.2(a) of Section XI of the ASME Code, Appendix VIII, Supplement 4, which utilize an RMS value of 0.15 and the RMS calculations of Subparagraph 3.2(b), which utilizes an RMS value of 0.75 shall be used in lieu of the statistical parameters of Subparagraph 3.2(c) of Section XI of the ASME Code, Appendix VIII, Supplement 4.

**APPLICABLE TIME PERIOD**

This alternative is requested for the remaining duration of the second and third inspection periods for LaSalle County Station, Units 1 and 2.