

August 4, 2006

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

Limerick Generating Station, Units 1 and 2  
Facility Operating License Nos. NPF-39 and NPF-85  
NRC Docket Nos. 50-352 and 50-353

**Subject:** Inservice Inspection (ISI) Program – Alignment of Inservice Inspection and Containment Inservice Inspection (CISI) Intervals

In accordance with 10 CFR 50.55a, "Codes and standards," paragraph (a)(3)(i), Exelon Generation Company, LLC (EGC), is requesting relief from the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," on the basis that the proposed alternative provides an acceptable level of quality and safety.

Specifically, relief is being sought to reduce the duration of the Limerick Generating Station, Unit 2 second Inservice Inspection (ISI) interval in order to create a common ISI interval for Limerick Generating Station, Units 1 and 2. In addition, relief is requested to reduce the first Containment Inservice Inspection (CISI) interval for Limerick Generating Station, Unit 2, which will permit subsequent CISI interval dates to be synchronized with the future ISI intervals for both units. The net effect of this request is to establish one common interval for both the ISI and CISI Programs at Limerick Generating Station, Units 1 and 2. The details of the request for relief are enclosed. EGC requests approval by January 31, 2007 in order to support the Limerick Generating Station, Unit 1, conversion to the common, third ISI interval start date and the upcoming Limerick Generating Station, Unit 2 refueling outage scheduled to begin in Spring 2007.

Should you have any questions concerning this letter, please contact Tom Loomis at (610) 765-5510.

Very truly yours,

*Pamela B. Cowan*

Pamela B. Cowan  
Director – Licensing & Regulatory Affairs  
Exelon Generation Company, LLC

Attachment: 1) 10CFR50.55a Relief Request I3R-01

cc: S. J. Collins, Regional Administrator, Region I, USNRC  
S. Hansell, USNRC Senior Resident Inspector, LGS  
R. Guzman, Project Manager [LGS] USNRC  
J. Kim, Assistant Project Manager [LGS] USNRC

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**Request for Relief for Alternative Requirements for the Synchronization of Ten-Year ISI Intervals Between Units 1 and 2 for Class 1, 2, 3, MC, and CC Components In Accordance with 10CFR50.55a(a)(3)(i)**

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**1.0 ASME CODE COMPONENTS AFFECTED:**

|                       |   |
|-----------------------|---|
| Code Class:           | 1, 2, 3, MC, and CC   |
| Reference:            | IWA-2430<br>IWA-2432  |
| Examination Category: | All   |
| Item Number:          | All   |
| Description:          | Synchronization of Ten-Year Inservice Inspection (ISI) Intervals between Units 1 and 2 for Class 1, 2, and 3. In addition, alignment of Containment Inservice Inspection (CISI) Ten-Year Intervals for Class MC and CC with the Synchronized Units 1 and 2 Ten-Year ISI Interval. |
| Component Number:     | All Class 1, 2, 3, MC, and CC Components  |

**2.0 APPLICABLE CODE EDITION AND ADDENDA:**

The Third Inservice Inspection (ISI) interval and the Second Containment Inservice Inspection (CISI) interval are based on the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code, Section XI, 2001 Edition through the 2003 Addenda.

The current Limerick Generating Station, Units 1 and 2 Second ISI interval complies with the 1989 Edition of the ASME B&PV Code, Section XI. The current Limerick Generating Station, Units 1 and 2 First CISI interval complies with the 1992 Edition through the 1992 Addenda of Subsections IWE and IWL.

**3.0 APPLICABLE CODE REQUIREMENT:**

The following Code requirements are paraphrased from the 2001 Edition through the 2003 Addenda of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components."

Paragraph IWA-2430(b), "Inspection Intervals," requires the inspection interval to be determined by calendar years following placement of the plant into commercial service.

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Paragraph IWA-2432, "Inspection Program B," requires that each inspection interval consist of a ten-year duration, except as modified by IWA-2430(d) which permits the inspection interval to be reduced or extended by as much as one year, provided that successive intervals are not altered by more than one year from the original pattern of intervals.

**4.0 REASON FOR REQUEST:**

Pursuant to 10CFR50.55a(a)(3)(i), relief is requested from the ten-year interval requirements contained within IWA-2430(b) and (d) and IWA-2432 for the Limerick Generating Station, Unit 2 ISI Program and the Limerick Generating Station, Unit 2 CISI Programs on the basis that the proposed alternative would provide an acceptable level of quality and safety.

Specifically, relief is being sought to reduce the duration of the Limerick Generating Station, Unit 2 second ISI interval in order to create a common ISI interval for Limerick Generating Station, Units 1 and 2. In addition, relief is requested to reduce the first CISI interval for Limerick Generating Station, Unit 2, which will permit subsequent CISI interval dates to be synchronized with the future ISI intervals for both units. The net effect of this request is to establish one common interval for both the ISI and CISI Programs at Limerick Generating Station, Units 1 and 2.

Currently, the Limerick Generating Station, Unit 1 Second ISI Interval is scheduled to end on January 31, 2007 and the same Limerick Generating Station, Unit 2 Interval will end on January 7, 2010. This creates about a three-year gap between the two units' ISI Programs which may result in different governing Code Editions, different program requirements, and the need for different parallel implementing procedures.

Reducing the duration of the Second ISI Interval for Limerick Generating Station, Unit 2 by approximately three years will permit the commencement of its Third ISI Interval to coincide with the start of the Third ISI Interval for Limerick Generating Station, Unit 1 and hence will establish a joint inspection interval with common start and end dates moving forward. This will assure both ISI Programs use the same Code Edition and Addenda for the next and successive intervals and will likewise establish common implementing procedures for both units.

Any examination methods unique to and specifically required in the remainder of the Limerick Generating Station, Unit 2 Third Period under the previous ISI Interval Code (i.e., ASME Section XI, 1989 Edition), that will likewise be required in the next ISI Interval, will be scheduled and completed in the First Period of this subsequent interval. The examinations will be conducted and

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credited under the rules of the code of record applicable to the new interval. These examinations originally unique to the remainder of the Third Period of the previous interval will henceforth be conducted in the First Period of the subsequent ISI intervals, and deferral to the end of future intervals will not be available. This method of scheduling will maintain the original sequence of examinations and thus will not affect the frequency of examination.

The second part of this relief request is to similarly affect the CISI Program interval dates. CISI Programs were initially required by regulation (i.e., 10CFR50.55a) as amended within a Final Rule (61 FR 41303) issued on August 8, 1996. Accordingly, the Limerick Generating Station CISI Program was prepared and implemented in accordance with the 1992 Edition through the 1992 Addenda of Subsections IWE, "Requirements for Class MC and Metallic Liners of Class CC Components of Light-Water Cooled Plants," and IWL, "Requirements for Class CC Concrete Components of Light-Water Cooled Plants," of ASME Section XI as modified by the regulation at that time.

The examinations and tests required by the CISI Program to date have been implemented in accordance with the established schedule. For the IWE portion of the program, the examinations scheduled for the first, second, and third inspection periods for Limerick Generating Station, Unit 1 have been completed, and the examinations scheduled for the first and second inspection periods for Limerick Generating Station, Unit 2 have been completed. Additionally, the first five-year examinations have been completed for the IWL portion of the program. The examinations and tests performed to date have satisfied the acceptance standards contained within Articles IWE-3000 and IWL-3000, without exception. Currently, there are no containment surfaces or components requiring designation as augmented examination areas.

Reducing the duration of the first CISI Interval for Limerick Generating Station, Unit 2 by approximately three years will permit commencement of the next (i.e., second) CISI Interval for Class MC and CC components to coincide with the start of the joint third ISI Interval for Class 1, 2, and 3 components as established above. This will result in both the ISI and CISI Programs being under the same code edition and addenda for the next and successive intervals. For the rolling five-year IWL frequency applicable to Class CC components that are subject to Subsection IWL requirements, the current schedule will be maintained, and the inspections will be conducted in accordance with the ASME code of record for Limerick Generating Station at the time of examination.

The supplementary information contained within Section 2.2 of former Final Rule (67 FR 60520) dated September 26, 2002, contains statements supporting the

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proposed alternative for modifying the CISI Interval. Specifically, the information pointed out that 10CFR50.55a(g)(4)(ii) does not prohibit licensees from updating to a later Edition and Addenda of the ASME Code midway through a ten-year IWE and IWL examination interval. Additionally, the information advised that Licensees wishing to synchronize their 120-month intervals may submit a request in accordance with Section 50.55a(a)(3) to obtain authorization to extend or reduce 120-month intervals.

Using the common interval date justified above based on the current Unit 1 ISI Program dated February 1, 2007, the code of record for the third interval ISI and second interval CISI Programs is to be set on January 31, 2006 (i.e., 12 months prior to the start of the successive interval in accordance with 10CFR50.55a(g)(4)(ii)). On January 31, 2006, the latest edition and addenda of the code incorporated by reference in 10CFR50.55a(b)(2) of the regulation was the 2001 Edition through the 2003 Addenda. Thus, Limerick Generating Station will utilize the 2001 Edition through the 2003 Addenda of Section XI to develop the ISI Program update for the third ISI interval and second CISI interval.

In conclusion, Exelon Generation Company, LLC concludes that authorizing the proposed alternative as described herein provides an acceptable level of quality and safety, and does not adversely impact the health and safety of the public.

**5.0 PROPOSED ALTERNATIVE AND BASIS FOR USE:**

As an alternative to the full ten-year interval duration requirements of IWA-2430(b) and (d) and IWA-2432 for the Unit 2 Second ISI Interval and for the Unit 2 First CISI Interval, Limerick Generating Station proposes to modify the interval dates of the Unit 2 Second ISI Interval and of the Unit 2 First CISI Interval. This will permit the subsequent ISI and CISI Programs to share a common inspection interval and to implement common Code Editions for Class 1, 2, 3, MC, and CC components. The common code of record for the third interval ISI programs and second interval CISI programs will be the 2001 Edition through the 2003 Addenda of ASME Section XI.

As a result of these interval modifications, the start date of the Third Interval ISI Programs and the Second Interval CISI Programs will be February 1, 2007 for both Limerick Generating Station, Units 1 and 2. Using this date, the Limerick Generating Station, Unit 1 Spring 2008 refueling outage (Li1R12) and the Limerick Generating Station, Unit 2 Spring 2007 refueling outage (Li2R09) will be the first refueling outages of the next intervals. The intervals will be scheduled in 10-year increments from this point forward with the modifications allowed by IWA-2430 fully available to future intervals and periods of the adjusted Programs (Limerick Generating Station, Unit 2 ISI; Limerick Generating Station, Unit 1

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CISI; and Limerick Generating Station, Unit 2 CISI) based on this new common interval date replacing the sequence established by the commercial service dates of the respective units. The Limerick Generating Station, Unit 1 ISI Program, for which the common interval is based, will maintain its current schedule under the requirements of IWA-2430.

The inspection periods for Class 1, 2, 3, and MC components will commence for the next interval based on the modified common interval start date. Any examination methods unique to and specifically required in the third period under the previous interval, that will likewise be required in the next interval, will be scheduled and completed in the first period of the subsequent interval. The examinations will be conducted and credited under the rules of the new code of record (i.e., 2001 Edition through the 2003 Addenda). These examinations originally unique to the third period of the previous interval will henceforth be conducted in the first period of the subsequent ISI intervals, and deferral to the end of future intervals will not be available.

In addition, the rolling five-year IWL frequency applicable to Class CC components that are subject to Subsection IWL requirements will be maintained as currently scheduled. The date of the first examination performed prior to September 9, 2001, to satisfy 10CFR50.55a(g)(6)(ii)(B)(2), at that time titled "Expedited examination of containment," will be maintained in establishing the subsequent five-year rolling frequency. These inspections will be conducted in accordance with the ASME Code of Record for Limerick Generating Station ISI/CISI Programs at the time of examination.

**6.0 DURATION OF PROPOSED ALTERNATIVE:**

Relief is requested to modify the end dates of the Limerick Generating Station, Unit 2 Second ISI Interval and of the Limerick Generating Station, Unit 2 First CISI Interval and the start/end dates of the subsequent ISI and CISI intervals for Limerick Generating Station, Units 1 and 2.

The third interval ISI and second interval CISI Programs will begin February 1, 2007 and will conclude January 31, 2017 for Limerick Generating Station, Units 1 and 2. On January 31, 2006, the latest edition and addenda of the code incorporated by reference in 10CFR50.55a(b)(2) of the regulation was the 2001 Edition through the 2003 Addenda.

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**7.0 PRECEDENTS:**

Relief requests that have been submitted or approved are:

1. Relief Request I3R-01 submitted for Byron Station, Units 1 and 2 (Exelon Generation Company, LLC letter BYRON 2005-0132 dated November 8, 2005, “Inservice Inspection Program Relief Request I3R-01”)
2. Relief Request 3RR-10 approved by the U. S. Nuclear Regulatory Commission for Susquehanna Steam Electric Station, Units 1 and 2 (U. S. Nuclear Regulatory Commission letter dated September 24, 2004, “Susquehanna Steam Electric Station, Units 1 and 2 – Third 10-Year Inservice Inspection (ISI) Interval Program Plan (TAC NOS. MC1185, MC1186, MC1191, MC1192, MC1193, MC1194, MC1195, MC1196, MC1197, MC1198, MC1199, MC1200)”).