



10 CFR 50.55a

**FEB 12 2018**

LR-N18-0017

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

Salem Generating Station Unit 2  
Renewed Facility Operating License No. DPR-75  
NRC Docket No. 50-311

Subject: Request to Use a Portion of a Later Edition of the ASME Boiler and Pressure Vessel Code, Section XI, for Inservice Inspection Activities

- Reference:
1. PSEG letter to NRC, "Request to Use a Portion of a Later Edition of the ASME Boiler and Pressure Vessel Code, Section XI, for Inservice Inspection Activities," dated October 27, 2017 (ADAMS Accession No. ML17300B457)
  2. NRC letter to PSEG, "Salem Nuclear Generating Station, Unit No. 1 – Use of a Later Edition of the ASME Boiler and Pressure Vessel Code, Section XI, for Inservice Inspection Activities (EPID L-2017-LRO-0048)," dated November 1, 2017 (ADAMS Accession No. ML17304A943)

Pursuant to 10 CFR 50.55a(g)(4)(iv) and in accordance with the guidance provided in NRC Regulatory Issue Summary (RIS) 2004-12, dated July 28, 2004, PSEG Nuclear, LLC (PSEG) hereby requests NRC approval to use the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, 2007 Edition with the 2008 Addenda in lieu of the 2004 Edition for the inspection of Primary Containment Structures. As noted in RIS 2004-12, licensees seeking to use later editions and addenda of the ASME Code, Section XI, pursuant to 10 CFR 50.55a(f)(4)(iv) or 10 CFR 50.55a(g)(4)(iv), are not required to request an alternative pursuant to 10 CFR 50.55a(a)(3) (now 10 CFR

50.55a(z)), or to request relief pursuant to 10 CFR 50.55a(f)(5)(iv) or 10 CFR 50.55a(g)(5)(iv).

This request is being made for the second ten-year Containment Inservice Inspection (CISI) Interval for Salem Unit 2. The applicable ASME Section XI Code of Record for the CISI Interval is the 2004 Edition, no Addenda. The second CISI Interval for Unit 2 began on April 22, 2010 and is currently scheduled to end on April 21, 2020. This request is similar to the Reference 1 request for Salem Unit 1 that was approved by the NRC in Reference 2.

Per this letter, PSEG Nuclear, LLC is requesting to use the ASME Boiler and Pressure Vessel Code, Section XI, 2007 Edition with the 2008 Addenda paragraph IWE-2200(c) and Article IWE-5000, subject to the conditions in 10 CFR 50.55a(b)(2), in lieu of the requirements of ASME Section XI 2004 Edition Article IWE-5000 for system pressure tests of the Primary Containment Structures. PSEG plans on using the proposed later Code edition and addenda as part of the Salem Unit 2 23<sup>rd</sup> Refueling Outage (S2R23). S2R23 is scheduled for the Fall 2018.

During the S2R23 refueling outage, PSEG is conducting examinations of the Salem Unit 2 containment liner. Based on the experience from the prior Salem Unit 1 outage as discussed in Reference 1, PSEG is preparing for potential liner repair activities in the event that the examinations determine that repairs are necessary. Any ASME code required repairs to the containment liner would be followed by required non-destructive examination (NDE) in accordance with the ASME Code.

Paragraph IWE-5221 of the 2004 edition of ASME Section XI requires a pneumatic leakage test for repair / replacement activities performed on the pressure retaining boundary of Class MC or Class CC components. IWE-5240, Visual Examination, states "During the pressure test required by IWE-5220, a detailed visual examination (IWE-2310) shall be performed on areas affected by the repair/replacement activities."

If a pneumatic leakage test is performed on the repaired areas, the test rig will make the containment liner internal surface areas affected by any repair activities inaccessible for direct visual examination during the pneumatic leakage test. Therefore, the requirements of IWE-5240 from the 2004 Edition of ASME Section XI could not be met.

Paragraph IWE-2200(c) and subarticle IWE-5240 of the 2007 Edition with the 2008 Addenda of Section XI allow performance of the visual examinations upon completion of the pneumatic leakage test. Following completion of any pneumatic leakage tests, the test rig will be removed allowing visual examination of the repaired containment liner surfaces.

Additionally IWE-5224 of the 2007 Edition with the 2008 Addenda of Section XI allows a bubble test – vacuum box technique to be performed as an alternative to the requirements for a pneumatic leakage test for repair/replacement activities performed by welding on metallic shell and penetration liners of Class CC components and on non-structural pressure-retaining metallic liners of Class MC components embedded in concrete. The vacuum box test can be performed with lower potential for damage to the containment liner associated with attaching and removing a pneumatic leakage test rig.

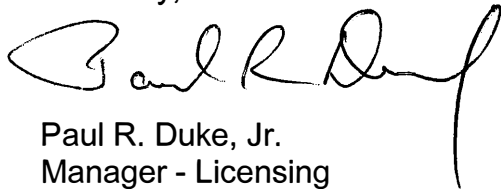
As discussed in RIS 2004-12, if portions of a later Code edition and addenda are used, licensees must assure that all related requirements of the respective editions and addenda are met. PSEG will meet the requirements referenced in the 2007 Edition with the 2008 Addenda of Section XI of Article IWE-5000.

PSEG requests approval of the proposed request by October 11, 2018.

There are no regulatory commitments contained in this letter.

Should you have any questions concerning this matter, please contact Mr. Brian Thomas at 856-339-2022.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul R. Duke, Jr.", with a stylized, cursive script.

Paul R. Duke, Jr.  
Manager - Licensing  
PSEG Nuclear LLC

cc: Administrator, Region I, NRC  
NRC Senior Resident Inspector, Salem  
C. Parker, Project Manager, Salem, USNRC  
P. Mulligan, Chief, NJBNE  
L. Marabella, Corporate Commitment Tracking Coordinator  
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