Exelon Nuclear
200 Exelon Way
Kennett Square, PA 19348

www.exeloncorp.com

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RS-10-016
January 21, 2010

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

Braidwood Station, Units 1 and 2
Facility Operating License Nos. NPF-72 and NPF-77
NRC Docket Nos. STN 50-456 and STN 50-457

Byron Station, Units 1 and 2
Facility Operating License Nos. NPF-37 and NPF-66
NRC Docket Nos. STN 50-454 and STN 50-455

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

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

Peach Bottom Atomic Power Station, Units 2 and 3
Renewed Facility Operating License Nos. DPR-44 and DPR-56
NRC Docket Nos. 50-277 and 50-278

Subject: Response to Request for Additional Information - Request to Use Specific Provisions from a Later Edition of the ASME Boiler and Pressure Vessel Code, Section XI

References:

1) Letter from P. B. Cowan (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, "Request to Use Specific Provisions from a Later Edition of the ASME Boiler and Pressure Vessel Code, Section XI," dated August 7, 2009

2) Letter from C. G. Gratton (U.S. Nuclear Regulatory Commission) to C. G. Pardee (Exelon Generation Company, LLC), "Braidwood Station, Units 1 and 2; Byron Station, Unit Nos. 1 and 2; LaSalle County Station, Units 1 and 2; Limerick Generating Station, Units 1 and 2; and Peach Bottom Atomic Power Station, Units 2 and 3 – Request for Additional Information (TAC NOS. ME1862 Thru ME1871)," dated December 8, 2009

In the Reference 1 letter, Exelon Generation Company, LLC (EGC) requested U.S. Nuclear Regulatory Commission (USNRC) approval to use specific provisions from a later edition of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code, Section XI, for Braidwood Station, Units 1 and 2, Byron Station, Units 1 and 2, LaSalle County Station, Units 1 and 2, Limerick Generating Station, Units 1 and 2, and Peach Bottom Atomic Power Station, Units 2 and 3. Specifically, EGC desires to utilize IWA-2221(c) ("Magnetic Particle Examination") and IWA-2222(b) ("Liquid Penetrant Examination") of the ASME Code, Section XI, 2004 Edition. IWA-2221(c) and IWA-2222(b) are not currently included in the 2001 Edition, through 2003 Addenda.

In the Reference 2 letter, the USNRC requested additional information. Attached is our response to this request.

There are no regulatory commitments in this letter.

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

Respectfully,

DOH 

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

Attachment: Response to Request for Additional Information - Request to Use Specific Provisions from a Later Edition of the ASME B&PV Code, Section XI

cc: NRC Project Manager, NRR - Braidwood Station
NRC Project Manager, NRR - Byron Station
NRC Project Manager, NRR - LaSalle County Station
NRC Project Manager, NRR - Limerick Generating Station
NRC Project Manager, NRR - Peach Bottom Atomic Power Station
USNRC Senior Resident Inspector - Braidwood Station
USNRC Senior Resident Inspector - Byron Station
USNRC Senior Resident Inspector - LaSalle County Station
USNRC Senior Resident Inspector - Limerick Generating Station
USNRC Senior Resident Inspector - Peach Bottom Atomic Power Station
USNRC Region I, Regional Administrator
USNRC Region III, Regional Administrator
S. T. Gray, State of Maryland
Illinois Emergency Management Agency - Division of Nuclear Safety
R. R. Janati - Bureau of Radiation Protection, Commonwealth of Pennsylvania

Attachment

Response to Request for Additional Information - Request to Use Specific Provisions from a Later Edition of the ASME B&PV Code, Section XI

Question:

1. The licensee requested to use the 2004 Edition of the ASME Code, Section XI, IWA-2221 (c) and IWA-2222(b) for Class 1, 2, and 3 components and IWE-2100 for Class MC components subjected to surface examination using magnetic particle examination and liquid penetrant examination. Discuss whether all related requirements of the respective editions or addenda will be met.

Response:

The following are the two (2) related requirements associated with the 2004 Edition of the ASME Code, Section XI, IWA-2221(c) and IWA-2222(b):

1. Paragraph IWA-2221(c) states "For nonfluorescent particles the visible light intensity required is 50 fc. Alternatively, light shall be sufficient if the examination can resolve standard test chart characters as described for VT-1 in IWA-2210."

2. Paragraph IWA-2222(b) states "For visible dye penetrant, the visible light intensity required is 50 fc. Alternatively, lighting shall be sufficient if the examiner can resolve standard test chart characters as described for VT-1 in IWA-2210."

The related requirements associated with IWA-2221(c) and IWA-2222(b) from the 2004 Edition of the ASME Code shall be met. Both paragraphs state, in part, that alternatively, light shall be sufficient if the examination (examiner) can resolve standard test chart characters as described for VT-1 in IWA-2210. The standard test chart characters specified for VT-1 in Table IWA-2210-1 of Section XI, 2004 Edition, shall be utilized.

For clarification, Exelon Generation Company, LLC (EGC) is not requesting the use of IWE-2100 from Section XI, 2004 Edition. The requirements of IWE-2100 will continue to be based on the unit's code of record for MC components (e.g., the 2001 Edition through 2003 Addenda of ASME Section XI). There are no requirements to perform surface examinations specified by IWE-2000, including Table IWE-2500-1, of Section XI, 2001 Edition through 2003 Addenda, or 2004 Edition. This request applies to surface examination methods (e.g., magnetic particle and liquid penetrant). General visual, detailed visual or ultrasonic thickness are the only nondestructive examination methods required by IWE-2000, including Table IWE-2500-1, of Section XI, 2001 Edition through 2003 Addenda, or 2004 Edition. The request to use the alternate illumination verification specified for VT-1 in Table IWA-2210-1 of Section XI, 2004 Edition, for magnetic particle and liquid penetrant is only for the conduct of supplemental surface examinations which are above and beyond those required by IWE-2000 that might be needed to clarify or further characterize a flaw indication identified in MC components.

Question:

2. Discuss and/or revise the request to reflect which editions or addenda will be used for IWA-2221(a), IWA-2221(b) and IWA-2222. Discuss whether all related requirements of the respective editions or addenda will be met.

Response:

The following are the related requirements associated with the 2004 Edition of the ASME Code, Section IX, IWA-2221(a), IWA-2221(b) and IWA-2222:

1. Paragraph IWA-2221(a) in the 2001 Edition through 2003 Addenda, and the 2004 Edition states: "Magnetic particle examination shall be conducted in accordance with Section V, Article 7". The requirements of Section V, Article 7 from the 2004 Edition (or later) shall be utilized.

2. Paragraph IWA-2221(b) in the 2001 Edition through 2003 Addenda, and the 2004 Edition states: "Magnetic particle examination of coated materials shall be conducted in accordance with Section V, Article 7, Appendix I". The requirements of Section V, Article 7, Appendix I from the 2004 Edition (or later) shall be utilized.

3. Subparagraph IWA-2222 in the 2001 Edition through 2003 Addenda, and IWA-2222(a) in the 2004 Edition states: "Liquid penetrant examination shall be conducted in accordance with Section V, Article 6". The requirements of Section V, Article 6 from the 2004 Edition (or later) shall be utilized.