

10 CFR 50.55a

June 2, 2011

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

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 - Relief Request I4R-52  
Concerning Nozzle-to-Vessel Weld and Inner Radii Examinations (Use of  
Code Case N-702)

- References:
- 1) Letter from D. P. Helker to U.S. Nuclear Regulatory Commission,  
"Submittal of Relief Request I4R-52 Concerning Nozzle-to-Vessel  
Weld and Inner Radii Examinations (Use of Code Case N-702),"  
dated January 24, 2011
  - 2) Letter from J. D. Hughey (U.S. Nuclear Regulatory Commission) to M.  
Pacilio (Exelon Generation Company, LLC), "Peach Bottom Atomic  
Power Station, Units 2 and 3 - Request for Additional Information  
Regarding Relief Request I4R-52 Concerning Alternatives to Reactor  
Vessel Weld Examinations (TAC NOS. ME5394 and ME5395)," dated  
May 23, 2011

In the Reference 1 letter, Exelon Generation Company, LLC (Exelon) requested relief from the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components." Relief Request I4R-52 proposed an alternative to the requirements contained in Table IWB-2500-1 concerning nozzle-to-vessel weld and nozzle inner radii examination requirements. In the Reference 2 letter, the U.S. Nuclear Regulatory Commission requested additional information. Attached is our response to this request.

No regulatory commitments are contained in this letter.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Michael D. Jesse", with a stylized flourish at the end.

Michael D. Jesse  
Director - Licensing & Regulatory Affairs  
Exelon Generation Company, LLC

Attachment: Response to Request for Additional Information - Relief Request I4R-52

cc: USNRC Region I, Regional Administrator  
USNRC Senior Resident Inspector, PBAPS  
USNRC Project Manager, PBAPS  
R. R. Janati, Bureau of Radiation Protection  
S. T. Gray, State of Maryland

**ATTACHMENT**

**Response to Request for Additional Information - Relief Request I4R-52**

**Question:**

RAI-01: Clarify whether all the inspection results for the life of each unit are included or only those conducted in accordance with Appendix VIII to the ASME Code, Section XI, "Performance Demonstration for Ultrasonic Examination Systems."

**Response:**

As noted in the attached Tables 1 and 2, the inspection results provided do not include all the inspection results for the life of each unit. The tables include the completed examinations for the third and fourth Inservice Inspection (ISI) intervals at Peach Bottom Atomic Power Station, Units 2 and 3. The third interval for Unit 2 began on November 5, 1998 and concluded on November 4, 2008. The third interval for Unit 3 began on August 15, 1998 and ended on November 4, 2008 (see ML090430052). The fourth interval for Peach Bottom Atomic Power Station, Units 2 and 3 began on November 5, 2008. See the response to RAI-02 below for discussion on Appendix VIII.

**Question:**

RAI-02: Indicate which examinations listed in Enclosure 3 were conducted in accordance with Appendix VIII to the ASME Code, Section XI, "Performance Demonstration for Ultrasonic Examination Systems."

**Response:**

The attached Tables 1 and 2 indicate which examinations were performed in accordance with Appendix VIII to the ASME Code, Section XI, "Performance Demonstration for Ultrasonic Examination Systems." The examinations performed after the 2R14 refueling outage (2002) for Unit 2 and after the 3R13 refueling outage (2001) for Unit 3 were conducted in accordance with Appendix VIII.

**Table 1**  
**PBAPS, Unit 2 Nozzle-to-Vessel and Nozzle Inner Radius Inspection Results**

As provided in I4R-52, the following tables identify the inspection results (Recordable Indications (RI) and No-Recordable Indications (NRI)). An additional column has been added to identify the examinations performed in accordance with Appendix VIII to the ASME Code, Section XI, "Performance Demonstration for Ultrasonic Examination Systems." This column is identified as "App. VIII." As stated in I4R-52, all the indications were evaluated as acceptable per ASME Section XI.

Unit	Component ID	Outage	Interval	Period	Results	App. VIII
2	CH-NA (N6A)	2R14	3	1	NRI	No
2	CH-NA (N6A)	2R18	4	1	NRI	Yes
2	CH-NA-IRS (N6A)	2R14	3	1	NRI	No
2	CH-NA-IRS (N6A)	2R18	4	1	NRI	Yes
2	CH-NC (N6B)	2R14	3	1	NRI	No
2	CH-NC-IRS (N6B)	2R14	3	1	NRI	No
2	N2A	2R14	3	1	NRI	No
2	N2A-IRS	2R14	3	1	NRI	No
2	N2B	2R14	3	1	NRI	No
2	N2B-IRS	2R14	3	1	NRI	No
2	N2C	2R14	3	1	NRI	No
2	N2C-IRS	2R14	3	1	NRI	No
2	N2D	2R15	3	2	NRI	Yes
2	N2D-IRS	2R15	3	2	NRI	Yes
2	N2E	2R16	3	3	NRI	Yes
2	N2E-IRS	2R16	3	3	NRI	Yes
2	N2F	2R15	3	2	NRI	Yes
2	N2F-IRS	2R15	3	2	NRI	Yes
2	N2G	2R16	3	3	NRI	Yes
2	N2G-IRS	2R16	3	3	NRI	Yes
2	N2H	2R15	3	2	NRI	Yes
2	N2H-IRS	2R15	3	2	NRI	Yes
2	N2J	2R16	3	3	NRI	Yes
2	N2J-IRS	2R16	3	3	NRI	Yes
2	N2K	2R16	3	3	NRI	Yes
2	N2K-IRS	2R16	3	3	NRI	Yes
2	N3A	2R17	3	3	NRI	Yes
2	N3A-IRS	2R17	3	3	NRI	Yes
2	N3B	2R17	3	3	NRI	Yes
2	N3B-IRS	2R17	3	3	NRI	Yes
2	N3C	2R16	3	3	NRI	Yes
2	N3C-IRS	2R16	3	3	NRI	Yes
2	N3D	2R16	3	3	NRI	Yes
2	N3D-IRS	2R16	3	3	NRI	Yes
2	N5A	2R17	3	3	NRI	Yes

Unit	Component ID	Outage	Interval	Period	Results	App. VIII
2	N5A-IRS	2R17	3	3	NRI	Yes
2	N5B	2R17	3	3	NRI	Yes
2	N5B-IRS	2R17	3	3	NRI	Yes
2	N8A	2R14	3	1	NRI	No
2	N8A-IRS	2R14	3	1	NRI	No
2	N8B	2R16	3	3	NRI	Yes
2	N8B-IRS	2R16	3	3	NRI	Yes

**Table 2**  
**PBAPS Unit 3, Nozzle-to-Vessel and Nozzle Inner Radius Inspection Results**

As provided in I4R-52, the following tables identify the inspection results (Recordable Indications (RI) and No-Recordable Indications (NRI)). An additional column has been added to identify the examinations performed in accordance with Appendix VIII to the ASME Code, Section XI, "Performance Demonstration for Ultrasonic Examination Systems." This column is identified as "App. VIII." As stated in I4R-52, all the indications were evaluated as acceptable per ASME Section XI.

Unit	Component ID	Outage	Interval	Period	Results	Misc.	App. VIII
3	CH-NA (N6A)	3R13	3	1	NRI		No
3	CH-NA-IRS (N6A)	3R13	3	1	NRI		No
3	CH-NC (N6B)	3R13	3	1	NRI		No
3	CH-NC-IRS (N6B)	3R13	3	1	NRI		No
3	N2A	3R14	3	2	NRI		Yes
3	N2A-IRS	3R14	3	2	NRI		Yes
3	N2B	3R14	3	2	RI	Recordable indications identified – acceptable per ASME Section XI.	Yes
3	N2B-IRS	3R14	3	2	NRI		Yes
3	N2C	3R14	3	2	NRI		Yes
3	N2C-IRS	3R14	3	2	NRI		Yes
3	N2D	3R13	3	1	NRI		No
3	N2D-IRS	3R13	3	1	NRI		No
3	N2E	3R13	3	1	NRI		No
3	N2E-IRS	3R13	3	1	NRI		No
3	N2F	3R13	3	1	NRI		No
3	N2F-IRS	3R13	3	1	NRI		No
3	N2G	3R14	3	2	RI	Recordable indication identified – acceptable per ASME Section XI.	Yes
3	N2G-IRS	3R14	3	2	NRI		Yes
3	N2H	3R16	3	3	NRI		Yes
3	N2H-IRS	3R16	3	3	NRI		Yes
3	N2J	3R16	3	3	NRI		Yes
3	N2J-IRS	3R16	3	3	NRI		Yes
3	N2K	3R16	3	3	NRI		Yes
3	N2K-IRS	3R16	3	3	NRI		Yes
3	N3A	3R13	3	1	NRI		No
3	N3A-IRS	3R13	3	1	NRI		No
3	N3B	3R13	3	1	NRI		No
3	N3B-IRS	3R13	3	1	NRI		No
3	N3C	3R16	3	3	NRI		Yes
3	N3C-IRS	3R16	3	3	NRI		Yes
3	N3D	3R16	3	3	NRI		Yes
3	N3D-IRS	3R16	3	3	NRI		Yes

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Unit	Component ID	Outage	Interval	Period	Results	Misc.	App. VIII
3	N5A	3R14	3	2	NRI		Yes
3	N5A-IRS	3R14	3	2	NRI		Yes
3	N5B	3R15	3	3	NRI		Yes
3	N5B-IRS	3R15	3	3	NRI		Yes
3	N8A	3R13	3	1	NRI		No
3	N8A-IRS	3R13	3	1	NRI		No
3	N8B	3R16	3	3	NRI		Yes
3	N8B-IRS	3R16	3	3	NRI		Yes