

Exelon Nuclear
Peach Bottom Atomic Power Station
1848 Lay Rd.
Delta, PA 17314

www.exeloncorp.com

10CFR 50.55a

January 5, 2011

U. S. Nuclear Regulatory Commission
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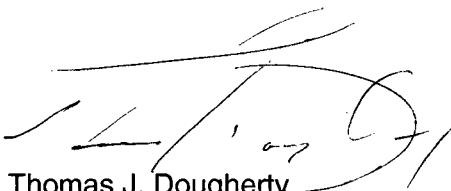
Peach Bottom Atomic Power Station (PBAPS) Unit 2
Facility Operating License No. DPR-44
NRC Docket Nos. 50-277

Subject: Submittal of the Inservice Inspection (ISI) Owner's Activity Report for the
18th Refueling Outage for Unit 2

Attached is the ISI Owner's Activity Report covering ISI activities associated with the first period of the current ISI inspection interval for Unit 2. This report is submitted pursuant to the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, "Rules for the Inservice Inspection of Nuclear Power Plant Components," Article IWA-6200, "Requirements" (2001 Edition) and ASME Code Case N-532-4 (Repair/Replacement Activity Documentation Requirements and Inservice Summary Report Preparation and Submission, section XI, Division 1).

If you have any questions or require additional information, feel free to contact Jeremy Searer at 717-456-4771.

Sincerely,



Thomas J. Dougherty
Site Vice President
Peach Bottom Atomic Power Station

Attachment

cc: US NRC, Administrator, Region I
US NRC, Senior Resident Inspector
R. R. Janati, Commonwealth of Pennsylvania
S. Grey, State of Maryland
P. Steinhauer, PSE&G, Financial Controls and Co-owner Affairs
CCN: 10-112

A047
NRR

PEACH BOTTOM ATOMIC POWER STATION, UNIT No. 2 – P2R18 OAR REPORT

FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number P2R18
Plant Peach Bottom Atomic Power Station, 1848 Lay Road, Delta, PA 17314
Unit No. 2 Commercial Service Date July 5, 1974 Refueling Outage No. 18
Current Inspection Interval ISI = Fourth / CISI = Second
Current Inspection Period ISI = First / CISI = First
Edition and Addenda of Section XI Applicable to the inspection plans 2001 Edition through 2003 Addenda
Date and revision of inspection plan 05/17/2010 Rev 1
Edition & Addenda of Section XI Applicable to repairs and replacements, if different than the inspection plan
2001 Edition through 2003 Addenda
Code Cases used: N-460, N-513-2, N-526, N-532-4, N-566-2, N-659 & N-700

CERTIFICATE OF CONFORMANCE

I certify that (a) the statements made in this report are correct; (b) the examinations and tests meet the Inspection Plan as required by the ASME Code, Section XI; and (c) the repair/replacement activities and evaluations supporting the completion of P2R18 conform to the requirements of Section XI.

Signed Jeremy Searer Jeremy Searer, ISI Program Owner Date 1/3/2011
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Pennsylvania and employed by Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the items described in this Owner's Activity Report, and state that, to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair/replacement activities and evaluation described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NB 7592 PA 2163 A N, I
Inspector's Signature National Board, State, Province, and Endorsements
Date 1/4/2011

**ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR CONTINUED SERVICE
FOR PEACH BOTTOM ATOMIC POWER STATION, UNIT NO.2
NOVEMBER 4, 2008 TO OCTOBER 8, 2010
(END OF P2R18 REFUEL OUTAGE)**

Examination Category	Item Number	Item Description	Evaluation Description
D-A	D1.20	8 DPM LEAK FROM 'A' ESW DISCHARGE CHECK VALVE (CHK-0-33-515A)	Code Case N-513 was applied, and the ESW pipe downstream of the Check valve was repaired with a PM cap during 2R18 outage (Ref IR - 1099140, 1099407)
F-A	F1.20	M-1747-S-2 HAS LOOSE JAM NUT	The discovered condition did not affect operability of the system piping because the piping was still supported by the hanger. Jam nut was tightened (Ref IR - 1112688)
E-A	E1.11	N-110A, N-110C, N-110D, N-110E, N-110F, and N-110G Bolting had Inadequate thread engagement	Design Engineering evaluated acceptable per technical evaluation (Ref AR - A1427985-01)
E-A	E1.30	Moisture Barrier seal degradation	Moisture Barrier required repairs in three locations (Ref IR - 1113907)
F-A	F1.20	10GB-H154A spring hanger load set was outside of 10% design configuration	As found load was evaluated acceptable, and spring hanger was returned to its original design configuration (Ref IR - 1114095)
F-A	F1.30	33HB-S143 rigid support was found with a missing and loose bolt	33HB-S143 was evaluated unacceptable as found and reworked. IWF-2430 additional examinations were performed (Ref IR - 1114812)
E-A	E1.11	Torus Hatch N-200A identified 7 bolts that did not meet the acceptance criteria and N-200B identified 10 bolts	Torus hatch bolting that did not meet the acceptance criteria was replaced (Ref IR - 1117681 and IR - 1117682)
B-A	B1.40	CH-C-2, RPV Closure Head to Flange Weld had one new indication that exceeded Table IWB-3510-1	Indication was acceptable per an IWB-3600 evaluation performed by GEH (Ref IR - 1118530)

**ABSTRACT OF ASME REPAIR/REPLACEMENT ACTIVITIES REQUIRED FOR CONTINUED SERVICE
FOR PEACH BOTTOM ATOMIC POWER STATION, UNIT NO. 2
NOVEMBER 4, 2008 TO OCTOBER 8, 2010
(END OF P2R18 REFUEL OUTAGE)**

SYSTEM 01: MAIN STEAM AND TURBINE SYSTEM

<u>Code Class</u>	<u>Repair, or Replacement</u>	<u>Item Description (component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Date Complete</u>	<u>R&R Plan # and W/O #</u>
Class 1	Replacement	RV-3-02-070A	Installed a rebuilt safety relief valve	9/24/2010	10-002, R1053808
Class 1	Replacement	RV-3-02-071A	Installed a rebuilt safety relief valve	9/30/2010	10-003, R1053811
Class 1	Replacement	RV-3-02-071D	Installed a rebuilt safety relief valve	9/25/2010	10-004, R1114865
Class 1	Replacement	RV-3-02-071J	Installed a rebuilt safety relief valve	9/25/2010	10-005, R1053810
Class 1	Replacement	RV-3-02-071K	Installed a rebuilt safety relief valve	9/25/2010	10-006, R1054100
Class 1	Replacement	RV-3-02-071L	Installed a rebuilt safety relief valve	9/24/2010	10-007, R1053809
Class 1	Replacement	RV-3-02-071C	Installed a rebuilt safety relief valve	9/25/2010	10-008, R1051567
Class 1	Repair	Target Rock RV's	Machining valves at Target Rock Facility	5/4/2010	10-123, N/A

SYSTEM 01A: MAIN STEAM SYSTEM

<u>Code Class</u>	<u>Repair, or Replacement</u>	<u>Item Description (component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Date Complete</u>	<u>R&R Plan # and W/O #</u>
Class 1	Replacement	Main Steam Lines	EPU Project - install strain gages on main steam lines	9/20/2010	10-136, C0233837
Class 1	Replacement	HV-2-01A-83A	Installed new valve bonnet	9/29/2010	10-149, C0235035
Class 1	Replacement	HV-2-01A-84A	Installed new valve bonnet	9/29/2010	10-150, C0235035
Class 1	Replacement	HV-2-01A-83C	Installed new valve bonnet	9/26/2010	10-151, C0235084
Class 1	Replacement	HV-2-01A-84C	Installed new valve bonnet	9/26/2010	10-152, C0235084
Class 1	Replacement	HV-2-01A-83D	Installed new valve bonnet	9/27/2010	10-153, C0235034

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FOR PEACH BOTTOM ATOMIC POWER STATION, UNIT NO. 2
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SYSTEM 03: CONTROL ROD DRIVE

<u>Code Class</u>	<u>Repair, or Replacement</u>	<u>Item Description (component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Date Complete</u>	<u>R&R Plan # and W/O #</u>
Class 1	Replacement	CRD's 10-39, 14-11, 14-19, 14-55, 34-55, 34-59, 38-07, 38-11, 38-55, 42-07, 42-47, 42-51, 46-51, 50-43, 50-51, 54-27, 54-47, 58-23, 58-43	Exchanged CRD's with rebuilt CRD's	10/4/2010	10-047, R1123932

SYSTEM 04: REACTOR PRESSURE VESSEL AND INTERNALS

<u>Code Class</u>	<u>Repair, or Replacement</u>	<u>Item Description (component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Date Complete</u>	<u>R&R Plan # and W/O #</u>
Class 1	Replacement	PB-2-04-20S001	Replaced N-7 Flange bolt	10/4/2010	10-039, R1125232

SYSTEM 07: PRIMARY CONTAINMENT

<u>Code Class</u>	<u>Repair, or Replacement</u>	<u>Item Description (component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Date Complete</u>	<u>R&R Plan # and W/O #</u>
Class MC	Replacement	N-200B	Installed new bolting hardware on Supp Chamber Hatch	10/1/2010	10-027, R1114097
Class MC	Replacement	N-200A	Installed new bolting hardware on Supp Chamber Hatch	10/3/2010	10-028, R1113979

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SYSTEM 07B: CONTAINMENT ATMOSPHERE CONTROL (CAC)

<u>Code Class</u>	<u>Repair, or Replacement</u>	<u>Item Description (component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Date Complete</u>	<u>R&R Plan # and W/O #</u>
Class MC	Replacement	AO-2-07B-2502B	Installed new flange bolting hardware	9/29/2010	10-147, C0234925

SYSTEM 10: RESIDUAL HEAT REMOVAL

<u>Code Class</u>	<u>Repair, or Replacement</u>	<u>Item Description (component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Date Complete</u>	<u>R&R Plan # and W/O #</u>
Class 2	Replacement	PB-2-10-2CE024	Installed new RHR Hx. 2CE024 Floating Head	2/20/2009	07-036, C0220077
Class 2 ex	Repair	10GB-S25	Tightened rigid restraint pipe clamp support, A1755639	4/13/2010	10-122, R0928239
Class 2	Repair	PB-2-10-2CE024	Machined RHR Hx. 2CE024 Floating Hd gasket surface	9/21/2010	10-129, C0233586

SYSTEM 11: STANDBY LIQUID CONTROL SYSTEM

<u>Code Class</u>	<u>Repair, or Replacement</u>	<u>Item Description (component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Date Complete</u>	<u>R&R Plan # and W/O #</u>
Class 2	Replacement	RV-2-11-39A	Installed new relief valve	9/22/2010	09-097, R1114863
Class 2	Replacement	RV-2-11-39B	Installed new relief valve	9/22/2010	09-098, R1114861

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(END OF P2R18 REFUEL OUTAGE)**

SYSTEM 13: REACTOR CORE ISOLATION COOLING SYSTEM

<u>Code Class</u>	<u>Repair, or Replacement</u>	<u>Item Description (component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Date Complete</u>	<u>R&R Plan # and W/O #</u>
Class 2	Replacement	VRV-2-13C-139B	Installed new vacuum relief valve	3/2/2008	08-021, R0788620

SYSTEM 23: HIGH PRESSURE COOLANT INJECTION SYSTEM

<u>Code Class</u>	<u>Repair, or Replacement</u>	<u>Item Description (component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Date Complete</u>	<u>R&R Plan # and W/O #</u>
Class 2	Replacement	CHK-2-23C-130	Installed vent valves on each side of CHK-2-23C-130	9/25/2010	10-052, C0232138
Class 2	Replacement	HV-2-23C-21158	Installed new valve	9/25/2010	10-110, C0232107

SYSTEM 27G: TORUS WATER TRANSFER

<u>Code Class</u>	<u>Repair, or Replacement</u>	<u>Item Description (component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Date Complete</u>	<u>R&R Plan # and W/O #</u>
Class 2	Replacement	Torus Pump Mod.	Fab & install torus pump/piping per ECR PB09-00224	9/16/2010	10-048, C0228600
Class 2	Replacement	Torus Pump Mod.	TCC MR-90; tie in & operate torus dewatering system	9/30/2010	10-135, C0233635

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SYSTEM 32: HIGH PRESSURE SERVICE WATER SYSTEM

<u>Code Class</u>	<u>Repair, or Replacement</u>	<u>Item Description (component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Date Complete</u>	<u>R&R Plan # and W/O #</u>
Class 3	Replacement	CHK-2-32-502B	Replaced HPSW 2BP042 Disch Check Valve drain pipe	1/6/2010	09-001, C0227204
Class 3	Repair	CHK-2-32-502A	Replaced HPSW 2AP042 Disch Check Valve drain pipe	10/19/2010	09-006, C0227706
Class 3	Repair	CHK-2-32-502D	Replaced HPSW 2DP042 Disch Check Valve drain pipe	6/7/2010	09-084, C0228614
Class 3	Repair	CHK-2-32-502C	Weld repaired bearing cap 2CP042 Disch Check Valve	7/9/2009	09-088, R0986131
Class 3	Replacement	RV-2-32-180C	Installed new RHR Hx. 2CE024 Tube Side Relief Valve	9/20/2010	10-145, R0951359

SYSTEM 33: EMERGENCY SERVICE WATER

<u>Code Class</u>	<u>Repair, or Replacement</u>	<u>Item Description (component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Date Complete</u>	<u>R&R Plan # and W/O #</u>
Class 3	Replacement	2-DG-33-220	Replaced 16" elbow in E3/E4 Diesel ESW piping	12/18/2008	08-128, C0225767
Class 3	Repair	CHK-0-33-515B	Weld build up disc arm and valve body stop location	10/26/2009	09-114, C0230912
Class 3	Replacement	HV-0-33-519D	Install branch connection over min wall near HV-519D	1/9/2010	09-126, C0231377
Class 3	Replacement	CHK-2-33-514	Installed new check valve	9/28/2010	10-053, C0232103
Class 3	Replacement	CHK-0-33-515A	Install branch hot tap connection for draining purposes	9/10/2010	10-139, C0234405
Class 3	Replacement	CHK-0-33-515A	Install PM Cap over low wall reading near CHK-33-515A	10/2/2010	10-141, C0234505
Class 3	Replacement	CHK-0-33-515A	Install new supports for PM Cap installation	9/21/2010	10-142, C0234506

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NOVEMBER 4, 2008 TO OCTOBER 8, 2010
(END OF P2R18 REFUEL OUTAGE)**

SYSTEM 52E: DIESEL GENERATOR JACKET COOLING

<u>Code Class</u>	<u>Repair, or Replacement</u>	<u>Item Description (component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Date Complete</u>	<u>R&R Plan # and W/O #</u>
Class 3	Replacement	PB-2-52E-0AE376	E1 D/G Jacket Coolant Cooler tube bundle replacement	6/24/2009	09-087, C0225963

SYSTEM 65A: HYDRAULIC SNUBBERS

<u>Code Class</u>	<u>Repair, or Replacement</u>	<u>Item Description (component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Date Complete</u>	<u>R&R Plan # and W/O #</u>
Class 2	Replacement	13-DBN-S-16	Installed new hydraulic snubber	9/14/2010	10-067, C0231632

SYSTEM 65B: MECHANICAL SNUBBERS

<u>Code Class</u>	<u>Repair, or Replacement</u>	<u>Item Description (component I.D.)</u>	<u>Description Of Work Performed</u>	<u>Date Complete</u>	<u>R&R Plan # and W/O #</u>
Class 1	Replacement	M-295-55-H1	Installed new mechanical snubber	9/28/2010	10-077, C0231642
Class 1	Replacement	SS-6-A	Installed new mechanical snubber	9/22/2010	10-078, C0231643
Class 2	Replacement	10-GB-S-92	Installed new mechanical snubber	10/1/2010	10-083, C0231648
Class 1	Replacement	SS-6-B	Installed new mechanical snubber	9/28/2010	10-090, C0232225
Class 3	Replacement	1-GG-S-111-A	Installed new mechanical snubber	9/25/2010	10-093, C0232228
Class 1	Replacement	SS-1-A	Installed new mechanical snubber	9/29/2010	10-156, C0235139
Class 3	Replacement	1-GG-S-204-B	Installed new mechanical snubber	10/2/2010	10-163, C0235171