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May 14, 1985

Docket No. 50-277

Mr. John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

SUBJECT: Supplement to Peach Bottom
Atomic Power Station Unit 2
Justification for Continued Operation
Following Current Refueling/Major
Modification Outage

REFERENCE: Letter to J. F. Stolz from
S. L. Daltroff, dated April 15, 1985

Dear Mr. Stolz:

This letter provides supplementary information regarding the disposition of nonconforming welds in the Recirculation and Residual Heat Removal systems during pipe replacement activities on Peach Bottom Unit 2.

This information is provided in response to a request by G. A. Gears of your staff during a telephone conference with Philadelphia Electric Company Licensing Section staff on May 1, 1985 and addresses the augmented inspection requirements in NRC Generic Letter 84-11 for Peach Bottom Unit 2.

Recirculation System

All nonconforming welds, as defined in NUREG-0313, Rev. 1, in the recirculation system have been eliminated during the current pipe replacement outage.

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Residual Heat Removal System

All nonconforming welds in the RHR system have been eliminated during the pipe replacement outage with the exception of three welds located outside of the containment penetrations on the containment side of the second isolation valves of the RHR suction and return piping. These welds are categorized as follows:

Weld 10-0-17, is a dissimilar metal (carbon steel pipe to stainless steel containment penetration N-12) weld in the isolable portion of the RHR shutdown cooling suction 20-inch piping as shown on Attachment 1. This weld is categorized as a "nonconforming nonservice sensitive weld" in that the operational temperature is less than 200 degrees Fahrenheit and there is no flow during reactor power operation. Therefore, this weld is subject to the augmented inservice inspection requirements contained in paragraph IV.B.1.b of NUREG-0313, Rev. 1, and is inspected at least once in no more than 80-month intervals. Previous ultrasonic and visual examination was performed on this weld in 1980 and no reportable indications were discovered. During this pipe replacement outage, an internal surface, fluorescent penetrant examination was performed on this weld and no reportable indications were discovered.

Welds 10-1B-2 and 10-1A-2 are located in the isolable portion of the A and B 24-inch RHR return lines outside containment penetration N-13A and N-13B, respectively, as shown in Attachments 2 and 3. These welds are nonconforming welds (304 stainless steel pipe to 304 stainless steel valve) and nonservice sensitive in that the operating temperatures of this piping is less than 200 degrees Fahrenheit and there is no flow during reactor power operation.

These welds (10-1A-2 and 10-1B-2) are normally inaccessible for inservice inspection in accordance with ASME Code Section XI requirements. However, with portions of pipe removed during recent pipe replacement activities, an internal surface fluorescent type liquid penetrant examination was performed and no indications were observed.

Residual Heat Removal Head Spray

All nonconforming welds in the RHR head spray piping have been eliminated as a result of the pipe replacement modifications with the exception of two welds.

The two remaining nonconforming 6-inch pipe welds are dissimilar metal (carbon steel to stainless steel) welds 10-HS-3 and 10-HS-6 and their locations are shown in Attachment 4. The welds are categorized as nonconforming nonservice sensitive in that normal

operating temperature is less than 200 degrees Fahrenheit and there is no flow in the head spray piping during reactor power operation. Welds 10-HS-3 and 10-HS-6 are in the isolable portion of the head spray piping.

These welds are subject to the augmented inservice inspection requirements contained in paragraph IV.B.1.b of NUREG-0313, Rev. 1, and are inspected at least once in no more than 80-month intervals. The first and second 80-month interval ultrasonic and visual examinations were performed on weld 10-HS-3 in 1977 and 1985 and on weld 10-HS-6 in 1978 and no reportable indications were discovered. Weld 10-HS-6 is scheduled for the second 80-month interval examination during the next Unit 2 refueling outage.

Reactor Water Cleanup System

All non conforming welds as defined in NUREG-0313, Rev. 1 in the reactor water cleanup system out to a point beyond the second isolation (MO-18) have been eliminated as a result of the current pipe replacement modifications.

Previous partial replacement of the reactor water cleanup system from the residual heat removal tee to just inside the containment penetration utilizing 316 stainless steel was performed in 1982. During the current outage, the penetration and piping from the penetration to a point just downstream of valve MO-18 was replaced (with 316 stainless steel).

Core Spray System

Partial pipe replacement of core spray loops A and B performed prior to the current outage has eliminated all nonconforming service sensitive welds in the nonisolable portion of these lines with the exception of one weld in each loop.

The remaining welds are categorized as nonconforming nonservice sensitive in that the operating temperature is less than 200 degrees Fahrenheit and there is no flow in the core spray piping during reactor power operation. These dissimilar metal welds are located in the isolable portions of each line and are identified as weld 14-A-12 in the 'A' loop piping and weld 14-B-11 in the 'B' loop piping as shown in Attachments 5 and 6.

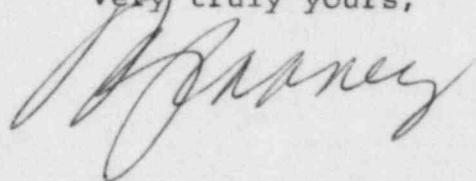
These welds are subject to the augmented inservice inspection requirements contained in paragraph IV.B.1.b of NUREG-0313, Rev. 1, and are inspected at least once in no more than 80-month intervals.

Surface and volumetric examinations were performed on these welds during the current pipe replacement outage and no reportable indications were discovered.

Table 1 provides a summary of the nonconforming welds in piping greater than 4 inches in diameter out to the second isolation valve, their categorization and inspection requirements that remain as a result of the current pipe replacement activities. None of the welds listed in Table 1 are subject to inspection in accordance with Generic Letter 84-11, paragraph 2, in that none of the weld operating temperatures exceed 200 degrees Fahrenheit as specified in the Generic Letter. The inspection plan for "nonconforming nonservice sensitive welds", as defined by NUREG-0313 on these welds, and results of inspections performed on these welds, present adequate assurance that the unit can be operated safely.

Should you require any additional information, please do not hesitate to contact us.

Very truly yours,

A handwritten signature in dark ink, appearing to read 'T. P. Johnson', is written over the typed name.

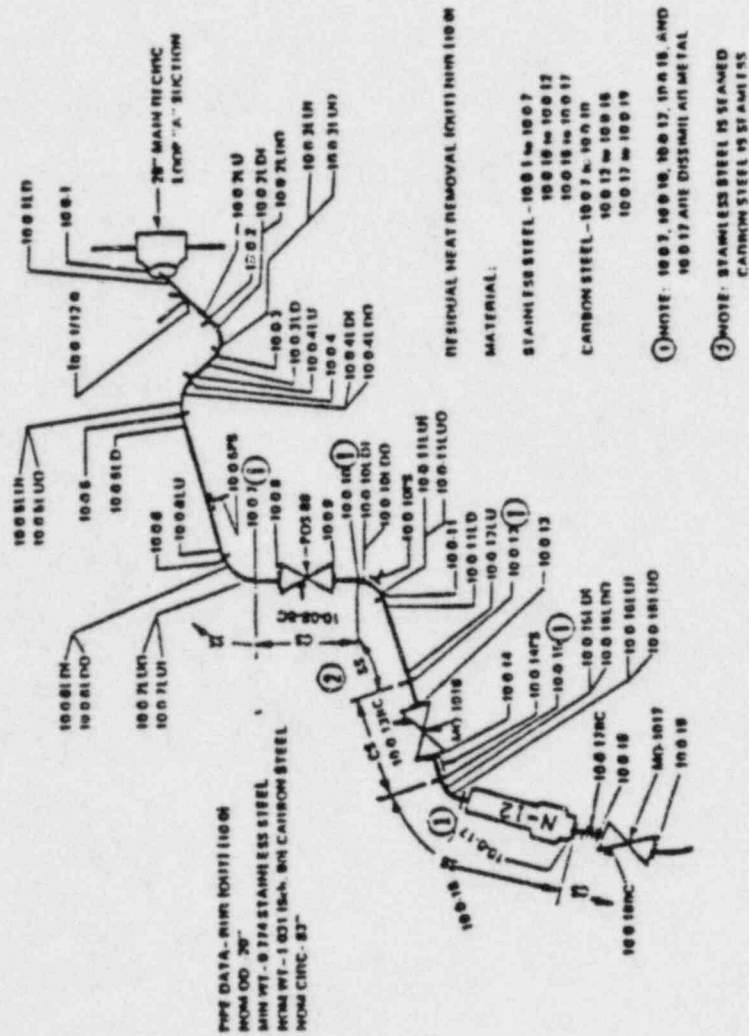
cc: T. P. Johnson, Resident Site Inspector

TABLE 1

NONCONFORMING WELD DATA
 REACTOR COOLANT PRESSURE BOUNDARY PIPING \geq 4 INCHES

SYSTEM	WELD NO.	1) WELD ISOLABLE 2) WELD TEMP. DURING NCRMAL OPER. 3) FLOW RATE DURING REACTOR OPER.	WELD CLASSIFICATION	INSPECTION REQUIREMENTS
Recirculation System		None		
RWCU System		None		
RHR System (S/D Cooling)	10-0-17	1) Yes 2) < 200 degrees F 3) 0 gpm	Dissimilar Metal Nonconforming Nonservice Sensitive	NUREG-0313, Rev. 1
	10-IA-2	1) Yes	Nonconforming	Inaccessible for Inspection
	10-IB-2	2) < 200 degrees F 3) 0 gpm	Nonservice Sensitive	
RHR System (Head Spray)	10-HS-3	1) Yes	Dissimilar Metal	NUREG-0313 Rev. 1
	10-HS-6	2) < 200 degrees F	Nonconforming	
		3) 0 gpm	Nonservice Sensitive	
Core Spray System	14-A-12	1) Yes	Dissimilar Metal	NUREG-0313 Rev. 1
	14-B-11	2) < 200 degrees F	Nonconforming	
		3) 0 gpm	Nonservice Sensitive	

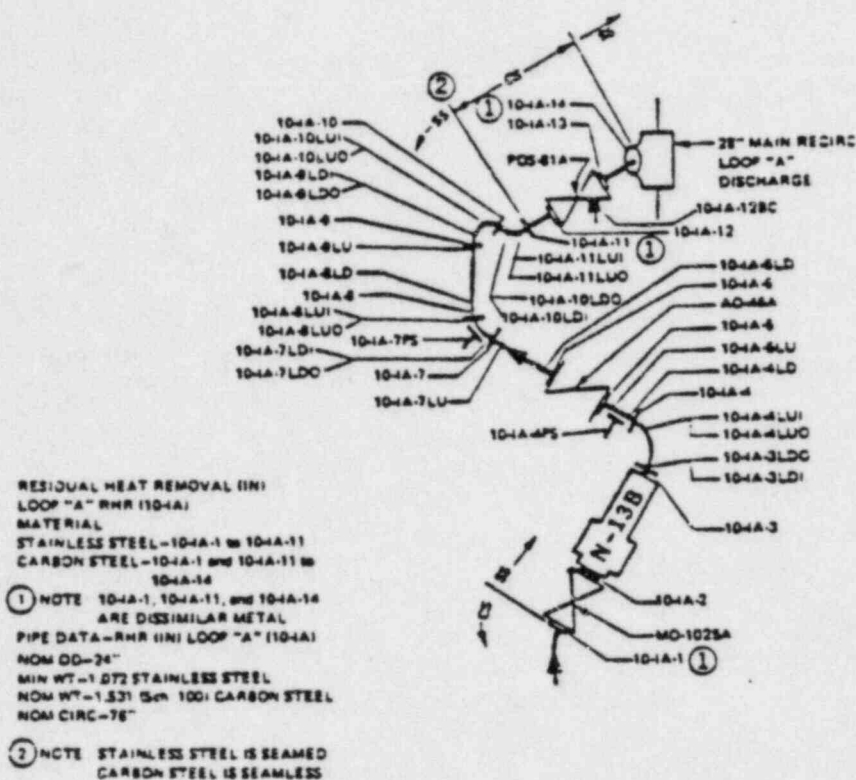
Pench Bottom, Unit 2



PIPE DATA - NHR (OUT) (10-0)

Figure A-17

Peach Bottom, Unit 2



RESIDUAL HEAT REMOVAL

Figure A-15

Peach Bottom, Unit 2

RESIDUAL HEAT REMOVAL

HEAD SPRAY (10-MS)

MATERIAL

CARBON STEEL - 10-MS-1 to 10-MS-3

10-415-4 re 10-415-6

STAINLESS STEEL-10-MS-3 & 10-MS-4

10-PC-8 vs 10-PC-27

① NOTE 10-45-3 10-45-4 AND 10-45-9
ARE DISSIMILAR METAL

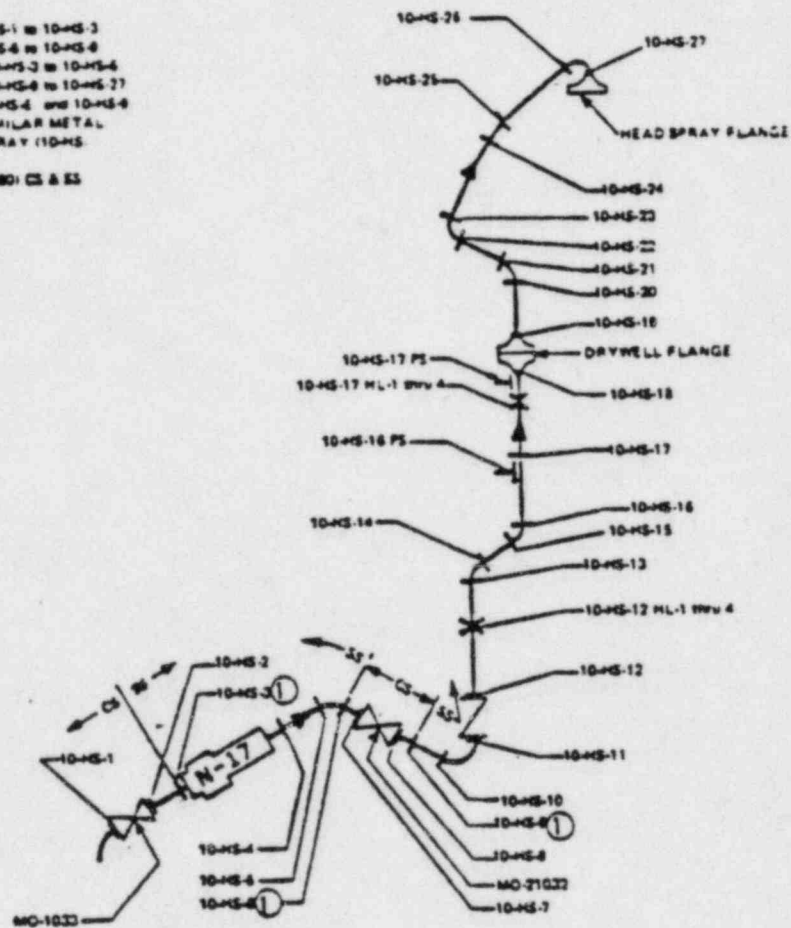
ARE DISSIMILAR METAL

PIPE DATA--LEAD SPRAY (10-MS)

NOW OD-6.629

NOM WT -0.422 Gen. 80: CS & ES

NOM CIRC-71"

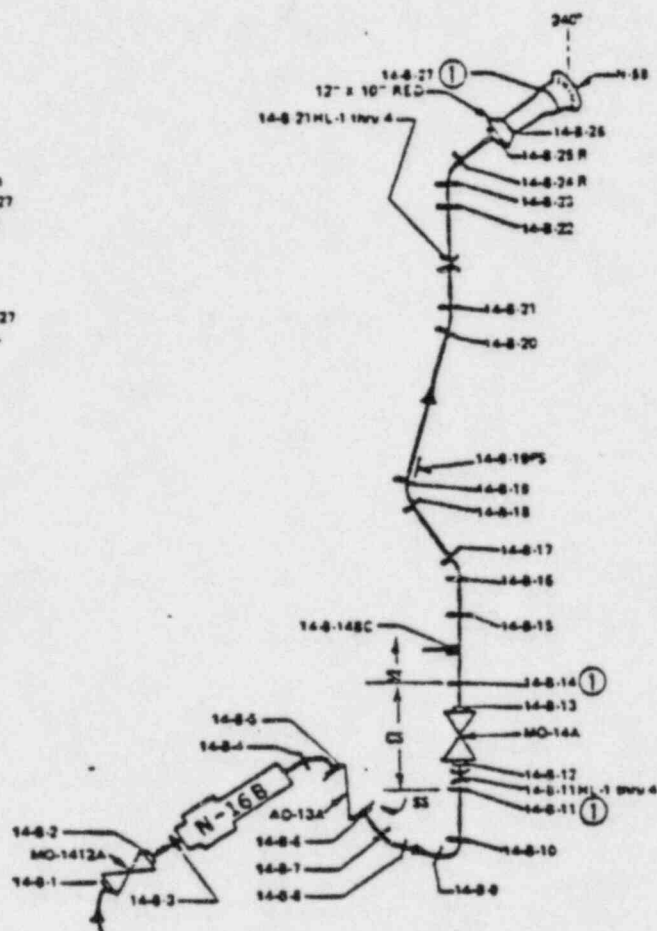


RESIDUAL HEAT REMOVAL

Figure A-14

Peach Bottom, Unit 2

CORE SPRAY-LOOP "B" (14-B)
 MATERIAL
 STAINLESS STEEL-14-B-1 to 14-B-11
 14-B-14 to 14-B-27
 CARBON STEEL-14-B-12 to 14-B-14
 PIPE DATA-
 NOM OD-12.75"
 NOM WT-0.587" (SCH. 80)
 NOM CIRC-40.5"
 (1) NOTE 14-B-11, 14-B-14 and 14-B-27
 ARE DISSIMILAR METAL



CORE SPRAY-LOOP "B" (14-B)

Figure A-20

