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Dockets Nos. 50-277 & 278

Mr. Edward G. Bauer, Jr.
 Vice President and General Counsel
 Philadelphia Electric Company
 2301 Market Street
 Philadelphia, Pennsylvania 19101

Dear Mr. Bauer:

SUBJECT: RESPONSE TO GENERIC LETTER 81-04 ON IMPLEMENTATION OF
 NUREG-0313, REV. 1 FOR PEACH BOTTOM STATION UNITS 2 & 3

Our Generic Letter 81-04 to all BWR licenses dated February 26, 1981 requested you to review all ASME Code Class 1 and 2 pressure boundary piping, safe ends and fitting material at your BWR facilities to determine if it meets the material selection, testing and processing guidelines set forth in NUREG-0313, Rev. 1, a copy of which was enclosed with the generic letter. This letter requested that you propose a schedule to: 1) identify any materials that do not meet the guidelines, 2) implement the augmented inservice inspection requirements specified in Section IV of NUREG-0313, Rev. 1, 3) discuss your plans to replace (to the extent practicable) nonconforming materials and 4) install more sensitive, diverse leak detection systems. Our generic letter offered the option of providing a description, schedule and justification for alternative actions that would reduce the susceptibility of pressure boundary piping and safe ends to intergranular stress corrosion cracking (IGSCC) or increase the probability of early detection of leakage from pipe cracks.

Based on our review of your response to our Generic Letter 81-04, we have determined that we need the additional information identified in the enclosure to this letter. In view of recent developments regarding pipe cracking in BWRs, we request that you respond within 30 days of receipt of this letter. We also request that you send a copy of your response directly to our contractor:

EG&G Idaho, Inc.
 P. O. Box 1625
 Idaho Falls, Idaho 83415
 ATTN: Mr. Wayne Roberts

8211160097 821101
 PDR ADOCK 05000277
 P PDR

OFFICE	.....	.....	.....	.....	.....	.....	.....
SURNAME	.....	.....	.....	.....	.....	.....	.....
DATE	.....	.....	.....	.....	.....	.....	.....

Mr. E. G. Bauer, Jr.

-2-

This request for information is specific to one licensee. Therefore, OMB clearance is not required for this request under P. L. 96-511.

If you have any questions, please contact your NRC Project Manager.

Sincerely,
*ORIGINAL SIGNED BY
JOHN F. STOLZ*

John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing

Enclosure:
Request for Additional
Information

cc w/enclosure:
See next page

OFFICE ▶	ORB#4:DL	C-ORB#4:DL					
SURNAME ▶	MFairtile	JStolz					
DATE ▶	10/3/82:cb	10/1/82					

Philadelphia Electric Company

cc w/enclosure(s):

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Mr. Ronald C. Haynes, Regional Administrator
U. S. Nuclear Regulatory Commission, Region I
Office of Inspection and Enforcement
631 Park Avenue
King of Prussia, Pennsylvania 19406

PLANT NAME: Peach Bottom 2 and 3
UTILITY: Philadelphia Electric Company
TAC NUMBERS: 46671 and 46672

1. Nonconforming Nonservice Sensitive Piping Recirculation System Risers and RHR Shutdown Cooling Return Lines (IV.B.2.b of NUREG-0313 Rev. 1).

In the S. L. Daltroff letter to D. G. Eisenhut dated October 1, 1981, a revised program for mitigating IGSCC dated September 24, 1981 was attached. This program mentioned nonconforming service sensitive welds in the recirculation system risers and the RHR Shutdown Cooling Return Lines. It was inferred by EG&G Idaho personnel that not all the welds in these systems with a Stress Rule Index (SRI) greater than 1.2 would be inspected per NUREG-0313 Rev. 1.

- a. What proportion of the total welds in both systems with SRI > 1.2 will be inspected at each successive scheduled outage under the proposed program plan?
- b. What proportion of the total welds in both systems will be inspected at each successive scheduled outage under the proposed program plan?

2. Induction Heating Stress Improvement (IHSI) for Inhibiting Growth of IGSCC.

In the S. L. Daltroff letter to D. G. Eisenhut dated October 1, 1981, IHSI was mentioned as a means of inhibiting growth of IGSCC (V of NUREG-0313, Rev. 1).

- a. Please provide a copy of the process specifications for the IHSI technique to be used on Peach Bottom 2&3 nonconforming piping.
- b. Please provide data and literature proving the efficacy of the particular IHSI technique to be used on Peach Bottom 2&3.
- c. Please provide a schedule of application of IHSI to Peach Bottom 2&3.
- d. Please provide a copy of the General Electric Topical Report alluded to in the Daltroff-to-Eisenhut letter.

3. Augmented Inservice Inspection (ISI) of Nonconforming Pipe Welds.

In the attachment to the S. L. Daltroff letter to D. G. Eisenhut dated October 1, 1981, the augmented ISI program for nonconforming service sensitive pipe welds with a Stress Rule Index (SRI) equal to or greater than 1.2 was mentioned. Welds with SRI > 1.2 would be examined during three consecutive refuel outages, then once every other scheduled refueling outage, then once every 80 months. Credit would "be taken for examination performed to date."

For the pipe welds for which the above description is valid, provide the schedule of examinations to date (IV.B.2.b of NUREG-0313, Rev. 1).

4. Unidentified Leakage Monitoring (IV.B.1 of NUREG-0313, Rev. 1).
 - a. Identify the methods to detect and monitor unidentified leakage in the pressure boundary piping of your BWR. Some of these methods are enumerated in Regulatory Guide 1.45, Paragraph B.
 - b. Please fill out the attached table of information regarding the systems identified in the above paragraph.
5. Augmented ISI of Nonconforming Service Sensitive Pipe
 - a. Please identify the methods for augmented ISI of the nonconforming service sensitive pipe (IV.B.3 of NUREG-0313 Rev. 1).
 - b. Provide a copy of the specifications for the augmented ISI method or methods (IV.B.3 of NUREG-0313 Rev. 1).
 - c. Identify each of the augmented ISI methods used and the training and certification levels the individuals using those methods received. (IV.B.3 of NUREG-0313 Rev. 1). Indicate if cracked specimens are used in your training.
 - d. Identify the proportion of the nonconforming service sensitive pipe that is being inspected (IV.B.2.b of NUREG-0313 Rev. 1).
 - e. Identify the inspection interval of each system of the partially nonconforming service sensitive pipe (IV.B.2.b of NUREG-0313 Rev. 1).
 - f. Identify the Stress Rule Index Numbers for the welded joints in the partially nonconforming service sensitive pipe (IV.B.1.b (6) of NUREG-0313 Rev. 1).
6. Augmented ISI of Nonconforming Nonservice Sensitive Piping
 - a. Please identify the methods for augmented ISI of the piping (IV.B.3 of NUREG-0313 Rev. 1).
 - b. Please provide a copy of the specifications for the augmented ISI method or methods (IV.B.3 of NUREG-0313 Rev. 1).
 - c. Identify each of the augmented ISI methods used and the training and certification levels the individuals using those methods received. Indicate if cracked specimens are used in your training (IV.B.3 of NUREG-0313 Rev. 1).
 - d. Identify the proportion of the piping that is being inspected (IV.B.2.b of NUREG-0313 Rev. 1).

- e. Identify the Stress Rule Index Numbers for the welded joints in the piping (IV.B.1.b (6) of NUREG-0313 Rev. 1).
- f. Identify the proposed inspection interval for each system of piping (IV.B.1.b of NUREG-0313 Rev. 1).

7. Coolant Leakage (IV.B.1.b(2) of NUREG-0313 Rev. 1)

NUREG-0313 Rev. 1 requires that:

Plant shutdown should be initiated for inspection and corrective action when any leakage detection system indicates, within a period of 24 hours or less, an increase in rate of unidentified leakage in excess of 2 gallons per minute or its equivalent, or when the total unidentified leakage attains a rate of 5 gallons per minute or its equivalent, whichever occurs first. For sump level monitoring systems with fixed-measurement interval method, the level should be monitored at 4-hour intervals or less.

Please provide technical justification for not including this in your Technical Specifications. This justification should include data or operating experience.

INFORMATION REQUESTED ON LEAK DETECTION SYSTEM

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Type of System	Is System Operable (yes/no)	Leak Rate Sensitivity (gpm)	Time Required To Achieve Sensitivity (hours)	Is System Functional After SSE (yes/no)	Control Room Indications (alarms) (recorders)	Calibration or Testing During Operation (yes/no)	Documentation Reference for (1) Thru (6)
