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JOSEPH W. GALLAGHER VICE PRESIDENT NUCLEAR SERVICES

> SEP 1 5 1988 Docket Nos: 50-277 50-278

Mr. C. E. Rossl, Director Division of Operational Events Assessment Office of Nuclear Reactor Regulation U.S. Nuclear Regulatory Commission Attn: Document Control Desk Mail Station P1-137 Washington, DC 20555

Subject:

Peach Bottom Atomic Power Station (PBAPS) Units 2 & 3 NRC Bulletin 88-05, dated May 6, 1988 "Nonconforming Material Supplied by Piping Supplies, Inc. at Folsom New Jersey and West Jersey Manufacturing Company at Williamstown, New Jersey" Supplement 1 to Bulletin 88-05, dated June 15, 1988 Supplement 2 to Bulletin 88-05, dated August 3, 1988

Dear Mr. Rossi:

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The subject NRC Bulletin, reneived by Philadelphia Electric Company (PECo) on May 18, 1988, and Supplements 1 and 2, received on June 22, 1988, and August 5, 1988 respectively, require holders of operating licenses to provide a written response within 120 days of receipt of the Bulletin.

The original Bulletin instructed licensees to: review purchasing records for suspect materials, assure that materials comply with applicable codes, or are suitable for their intended service, or replace such material.

Subsequently, Supplement 1 reduced the scope of the review, established time frames for the testing program, and imposed additional reporting requirements. Supplement 2 temporarily suspended activities such as: document review, in-situ testing, and development of Justifications for continued operation (JCO's) until further notice.

The enclosed report comprises our complete response to the specific actions delineated by Bulletin 88-05 and the subsequent supplements. The report summarizes the document review, testing and analytical phases of the 88-05 program, specifies the various actions undertaken and to be undertaken during each phase, and complies the results of the document review performed prior to the receipt of Supplement 2.

Although the record review was in progress, we did not begin the testing phase prior to the receipt of Supplement 2. Like many other plants of the early 1970 vintage, PBAPS was designed and installed to B31.1/31.7 Code. The B31.1/31.7 Code does not have the stringent traceability and tracking programs currently required by the ASME Code. This hindered record search and delayed the implementation of the testing program. Attachment I to the report contains the results of the documentation review.

If you have questions or require additional information regarding our NRC Bulletin 88-05 program, please do not hesitate to contact us.

> Sincerely, Ju Dallaghan

SAT/vvg/09128801

Enclosure: Report

Copy to: Addressee

W. T. Russell, Region I Administrator T. P. Johnson, US NRC Senior Resident Inspector

T. E. Magette, State of Maryland

COMMONWEALTH OF PENNSYLVANIA

COUNTY OF PHILADELPHIA

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J. W. Gallagher, being first duly sworn, deposes and says:

That he is Vice President of Philadelphia Electric Company; that he has read the foregoing response to NRC Bulletin 88-05 and knows the contents thereof; and that the statements and matters set forth therein are true and correct to the best of his knowledge, information, and belief.

Vice President

Subscribe and sworn to Before me this _____ day of September, 1988.

Prelanie R. Companella

MELANIE R. CAMPANELLA Notary Public, Phrtadelphia, Pmledelphia Co. My Cammission Expires February 12, 1990 SS.

PEACH BOTTOM ATOMIC POWER STATION (PBAPS)

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UNIT 2 6 3

RESPONSE TO NRC BULLETIN 88-05

DOCKET NO. 50-277 50-278

SEPTEMBER 2, 1988

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PEACH BOTTOM ATOMIC F WER STATION UNITS 2 & 3

RESPONSE TO NRC BULLETIN 38-05

PURPOSE:

This report provides a complete response to the requirements set forth by NRC Bulletin 88-05 and Supplements 1 and 2 to the Bulletin. The Bulletin 88-05 required licensees to review purchasing records to determine presence of materials supplied by Piping Supplies, Inc. (PSI) and West Jersey Manufacturing Company (WJM), provide assurance that PSI and WJM supplied materials meet the applicable codes and specification requirements or are suitable for their intended service, or replace unsuitable materials.

This report is intended to fully satisfy the 120-day written response reporting requirements of NRC Bulletin 88-05 as modified by Supplements 1 & 2.

SUMMARY:

In response to the Bulletin and Supplements 1 and 2 requirements, Philadelphia Electric Company (PECo), in accordance with Nuclear Management and Resources Council (NUMARC) guidelines, developed a three-phased program for Peach Bottom Atomic Power Station (PBAPS) Units 2 & 3.

During Phase I of the program, PECo conducted an extensive review of purchase records for PBAPS Units 2 & 3 to determine presence of material supplied by PSI and WUM. We have concluded that suspect material has been received at PBAPS Units 2 & 3. Upon discovery of suspect material, those components determined to be in the warehouse were immediately segregated and placed on hold. Those components determined to be installed and accessible in safety-related systems were to be tested in accordance with the Testing Program (Phase II) developed under NUMARC guidelines. However, Supplement 2 suspended in-situ testing before testing could begin for suspect material identified as installed and accessible in safety-related systems.

Attachment I to this Report summarizes the results of the document review conducted until August 5, 1988. It contains the material database formatted by NUMARC in response to the Bulletin reporting requirements. SUMMARY DESCRIPTION OF PBAPS UNITS 2 & 3 NRC BULLETIN 88-05 PROGRAM:

The Peach Bottom Atomic Power Station Units 2 & 3 NRC Bulletin 88-05 Program is a three-phase program which addresses the following:

Phase I:	Documentation Review
Phase II:	Testing
Phase III:	Analysis of Test Results and Development of Justification for
	Continued Operation (JCO's)

DOCUMENTATION REVIEW:

- Review purchasing records for material purchase of PSI and WJM manufactured/supplied fittings and flanges.
- (2) Review maintenance request forms (MRF) for purchase of PSI/WJM material.
- (3) Review modification packages (Mod) for use or purchase of PS1/WJM material.
- (4) Review Receipt Inspection and Storage Reports (RISR) for PSI/WJM material.
- (5) Determine installation status (i.e., location, accessibility, etc.,) via a review of Mod packages, spool installation records and other pertinent installation documentation.

TESTING PROGRAM:

- Develop site specific in-situ testing guidelines in accordance with NUMARC developed guidelines.
- (2) Conduct testing of accessible safety-related suspect material.

ANALYSIS & JCO's:

- Analyze results of testing to determine acceptability of component.
- (2) Write qualitative JCO's for those components that have failed or have been determined to be inaccessible.

The program was developed and monitored in accordance with existing internal PECo procedures and guidelines established by NUMARC for Bulletin 88-05.

The following discusses how the program satisfies the required action items to be undertaken by the licensee. To assure clarity, the requested actions are restated below along with PECo response to each of these items.

RESPONSE TO BULLETIN & SUPPLEMENTS 1 AND 2 REQUIREMENTS:

(1) Action Requested

Review purchasing records to determine whether any PSI or WJM supplied ASME Code or ASTM material has been furnished. Supplement 1 reduced the scope from "materials" to "fittings and flanges". Supplement 2 identified another affiliated company, Chews Landing Metal Manufacturers Incorporated (CLM) who may have supplied suspect materials.

PECo Response

(1) PECo was in the process of reviewing purchasing records for fittings and flanges which may have been purchased from PSI and WUM upon receipt of Supplement 2. The results of the partial review were incorporated into the material database established by NUMARC. Attachment I provides the results of the document review.

Phase I of the PBAPS Units 2 & 3 Bulletin 88-05 Program provides the documentation review. Since Peach Bottom is designed and installed to the B31.1/31.7 Code, we encountered several impediments associated with traceability of the material. However, a procedure was developed which addresses the various means by which PSI and WJM material may have been procured for use at PBAPS. The documentation review was divided into the following three (3) categories:

- A) Review of Purchase Orders
- B) Review of Modification (Mod) packages and Maintenance Request Forms (MRF's)
- C) Skid Mounted Components and Secondary Suppliers

The review, thus far, has identified 267 components that were purchased for Peach Bottom Atomic Power Station Units 2 and 3 during the time frame (1976 to present) established by the bulletin. NUMARC, acting on behalf of the industry, coordinated the review for skid mounted components or those supplied by secondary suppliers. Recently, NUMARC provided the list of secondary suppliers and components purchased to affected utilities. However, we have temporarily suspended the documentation review until further notice from the NRC.

(2) Action Requested

For ASME Code and ASTM materials furnished by PSI or WUM that are either not yet installed in safety-related systems at your facility or are installed in safety-related systems of plants under construction, the following actions are requested: (perform action a and either action b or c).

- a. Provide a list of WJM and PSI supplied materials that are found not to be in conformance with the applicable code requirements or procurement specifications and identify the applications in which these materials are used or will be used. Include the material specification, the nature of the component (e.g., pipe flange), size and pressure rating; also indicate the chain of purchase, and either,
- b. Take actions that provide assurance that all received materials comply with ASME Code Section 111, ASTM, and applicable procurement specification requirements, or that demonstrate that such materials are suitable for the intended service. For example, this program should include specific verification that austenitic stainless steels have been received in a non-sensitized condition, or,
- c. Replace all questionable fittings and flanges with materials that have been manufactured in full compliance with ASME Code Section III, ASTM, and the applicable procurement specification requirements.

Supplement 1 reduced the scope of the review from "materials" to "fittings and flanges".

PECo Response

2a. PECo is a participating member of the NUMARC 88-05 Program. The NUMARC program established the scope of the documentation review, determined testing priorities for operating plants, and issued acceptance criteria for testing to be used by the industry to comply with the Bulletin's requirements.

NUMARC developed a generic format for the material database to be used by all member utilities. The database includes several fields designating material specification, nature of component, size, pressure rating and chain of purchase.

Attachment I contains the results of our documentation review conducted until August 5, 1988.

2b. In accordance with NUMARC guidelines, we have developed a well defined, quality assured, testing program to demonstrate conformance of suspect material to applicable codes or to determine acceptability of the suspect material. In addition to the generic material database, NUMARC also created a generic testing database for industry use. Several guidelines established by NUMARC and accepted by the NRC include:

- Use of the Equotip Hardness Tester for in-situ hardness testing of flanges and fittings.
- For operating plants, field testing priority to be placed on flanges and fittings installed and accessible on safety-related systems.

Supplement 2 temporarily suspended all field activities prior to implementation of our testing program.

2c. The actions described in 2b above preclude any replacement of questionable fittings and flanges. Additionally, PECo will not install components which are suspect. A hold was promptly placed on suspect components in the warehouse until further notice from the NRC.

(3) Action Requested

For ASME Code and ASTM materials furnished by WUM or PSI already installed in safety-related systems in operating plants, the following actions are requested:

- a. Provide a list of the WJM and PSI supplied materials that are found not to be in conformance with the applicable code requirements or procurement specifications and identify the applications in which the materials are used. Include the material specification, the nature of the component (e.g., pipe flange), size, and pressure rating; also indicate the chain of purchase.
- b. Take actions requested in 2b or 2c above. However, an evaluation should be undertaken prior to replacing questionable material in accordance with 2c above that considers the occupational radiation exposure that would be received during the replacement process. This evaluation should be considered in developing the method and timing of material replacements.
- c. Document and maintain for inspection a basis for continued plant operation if the program requested in item 3b has not been completed within 120 days of the date of receipt of this bulletin.

Supplement 1 reduced the scope of paragraph 3 of Bulletin 88-05 from ASME and ASTM "materials" to ASME and ASTM "flanges and fittings". For ASME and ASTM flanges and fittings furnished by PSI and WJM already installed in safety-related systems in operating plants, the following actions are requested by Supplement 1:

- a. Commence appropriate testing of accessible flanges and fittings promptly to identify conformance of materials to ASME and ASTM material specifications. Test results for flanges and fittings reported to be from the same heat should be compared for consistency and for conformance to the ASME/ASTM specifications and to values listed on material CMIRs. Any deviation from the specification requires an appropriate analysis justifying continued operation.
- b. If any inaccessible flanges or fittings are identified, an analysis must be performed justifying continued operation.
- c. All other provisions of paragraph 3 of Bulletin 88-05 remain in effect.

Supplement 2 temporarily suspended the above listed activities.

PECo Response

- 3a) As stated in item 2 above, we have developed a list of suspect materials. The conformance of suspect materials to the applicable material specification was to be determined via the testing program. Thus far, we have developed a well defined, quality assured, testing program for in-situ testing of suspect materials in accordance with existing internal PECo procedures and generic NUMARC guidelines. Attachment I contains the material data which will be transmitted to NUMARC soon.
- 3b) Due to the difficulties encountered during the record review phase, we have not determined the installation status of the suspect items.

3c) Phase III of the PBAPS 88-05 Program addresses development of justification for continued operation. If JCO's are needed in the future for Bulletin 88-05, we will develop and maintain them for inspection.

(4) Action Requested

For any PS1 and WUM supplied materials having suspect CMTRs and used in systems that are not safety-related, take actions commensurate with the function to be performed.

Supplement 1 provides the following further instructions:

For flanges and fittings already identified as having been supplied by PSI or WUM, the actions requested in 3a and 3b above are to be completed within 30 days of receipt of this supplement. For flanges and fittings identified after receipt of this supplement, the actions requested in 3a and 3b above are to be completed within 30 days of identifying the flanges or fittings as being supplied by PSI and WUM.

Supplement 2 temporarily suspended the right e listed activities for operating plants.

PECo Response

We did not begin our tosting phase because of the difficulties encountered during the documentation review phase. A higher priority on safety-related systems would have precluded any testing on non-safety-related suspect flanges prior to the completion of the safety-related flanges.

(5) Action Requested

Addressees are requested to retain nonconforming materials and maintain for inspection the documentation of the specific actions taken for the identified materials until advised further by the NRC. Nonconforming materials should be segregated to ensure that they are not inadvertently used.

PECo Respor Je

We have segregated and retained the suspect materials as requested above. Documentation pertaining to the specific actions undertaken for the identified materials will be maintained for inspection.

(6) Action Requested

For operating plants, all scheduled actions should be completed before a restart from the next major outage starting after 180 days from the date of receipt of this bulletin. For plants under construction all scheduled actions and the reporting required by 2 below should be completed prior to the planned fuel load date. If any addressee cannot meet this schedule, they should justify to the NRC their proposed alternative schedule.

Supplements 1 & 2 further Instruct:

Addressees are encouraged to report the results of tests of PSI and WUM supplied flanges and fittings to the INPO Nuclear Network for dissemination to the industry.

PECo Response

The material database is being transmitted to NUMARC. This report satisfies the required 120 day written response requested by the NRC.

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ATTACHMENT I

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MATERIAL DATABASE

FOR

PEACH STTOM ATOMIC POWER STATION

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3	PBAPS	01	Α	Q.C. hold area, addt'l Heat codes found - B39 & 472892
4	PBAPS	03	A	2 sets - Canueo C of C states Heat Cooles of B34
5	PBAPS	05	9	2 sets
6	PBAPS	06	A.	2 sets
7	PBAPS	08	A	credit from field = 2; R. I. R. dated 3/17/88; returned 2 to W. J.M. on 2/24/68
8	PBAPS	16	A.	2 Pits
9	PBAPS	18	A.	construction R. I.R. states heat #(XH)
10	PBIAPS	19	A	purchased for HPCI (2.AND SERL BLOWER (K-02)
11	PRAPS	20	A	purchased for HPC1 GLAND SEAL BLOWER (K-02)
51	PERPS	15	A	purchased for HPCI BLAND SEAL BLOWER (K-02)
13	PBAPS	22	A	purchased for HPCI BLAND SEAL BLOWER (K-02)
14	PBAPS	24	A	6 sets
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16	PBAPS	26	A	* 6 located in G.C. hold area. Heat code to be verified.
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26	PBAPE	40	0	Non-Q (located in Q.C. hold area)No CMTR located
27	PERPS	41	A	Transferred from Limerick on TR#527, No CMTR located
88	PERPS	42	ά	Transferred from Limerick on TR#SE7, No CMTR located
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