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April 4, 1984

Docket Nos. 50-277 50-278

Mr. Thomas T. Martin, Director Division of Engineering & Technical Programs U. S. Nuclear Regulatory Commission Region I 631 Park Avenue King of Prussia, PA 19406

Dear Mr. Martin:

Your letter of February 15, 1984, forwarded Combined Inspection Report 50-277/84-02 and 50-278/84-02. The need for delayed submittal was discussed with Dr. L. H. Bettenhausen of your staff and found acceptable. Appendix A addresses several items which do not appear to be in full compliance with Nuclear Regulatory Commission requirements. These items are restated below along with our response.

Peach Bottom Atomic Power Station Units 2 and 3
Technical Specification Section 6.8.1 states: "Written procedures and administrative policies shall be established, implemented and maintained that meet the requirements of .... Appendix 'A' of USAEC Regulatory Guide 1.33 (November 1972) ...." USAEC Regulatory Guide 1.33 (November 1972) Appendix A, Paragraph I.5, discusses General Procedures for the control of modification work.

Administrative Procedure A-14 (Rev. 9) implements the above requirement.

Contrary to the above, the implementation of the Administrative Procedure was inadequate in that:

 The drawing revisions for several modifications were not completed (for example, completed modifications MOD 21, MOD E & R 510, MOD 576, and MOD 655, issued prior to 1982).

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- 2. The Maintenance Request Forms for several modifications were not completed and returned to the Assistant Modification Coordinator for close out (for example, completed modifications MOD 270, MOD 271, and MOD 437 issued prior to 1979).
- 3. The carbon content in the piping for MOD 389, Core Spray Piping replacement, was incorrectly recorded on the construction drawings (11187-022-M-415 Series).
- 4. The response times of the installed containment pressure indicator channels were not measured to assure that the actual response times are consistent with the design assumptions.
- A revision to Procedure A-14, initiated in 1981 to address concerns raised by the NRC and the licensee's audits, was not completed.
- 6. A training program was not established for the Assistant Modification Coordinator in accordance with the requirements of ANSI N45.2.11 (committed by the licensee's Quality Assurance Program Description).
- 7. The corrected Plant Modification Control Sheet (PMCS) for Modification 510 was not maintained in accordance with the licensee's letter dated April 28, 1980.

The above collectively constitutes a Severity Level IV Violation (Supplement I) applicable to both DPR-44 and DPR-56.

## Response

# ITEM 1

Philadelphia Electric Company has been concerned about the need to expeditiously update modification drawings for some time. In August 1982, a special branch was formed within our Engineering Design Division to expedite the drawing revision process. At that time, the major workload was related to the investigative efforts associated with I.E. Bulletins 79-02 and 79-14. More recently, as a result of NRC commentary and our internal auditing, we have revised our procedures to remove certain administrative and technical review sign-offs in the interest of expediting revisions. Further, we have subdivided the revision workload into those that are of particular interest to personnel in operating the plants and those of a construction/design

orientation. The piping and instrument drawings (P&ID's) and electrical single diagrams, which are of keen interest to the operating staff, are essentially up-to-date and will continue to receive the highest priority.

In order to expedite the as-built revisions for the balance of the mechanical and electrical drawings, this dedicated group of designers, currently numbering 14, will be expanded by the reassignment of manpower, temporary use of contractors, and the use of overtime where necessary. We estimate that the current backlog of drawing revisions will be eliminated by June 1985. Additionally, the necessary manpower will be assigned to future revisions to preclude the creation of another significant backlog.

### ITEM 2

Modification packages are held open until the Maintenance Request Forms (MRF's) are reviewed in the Modification Coordinator office. There are currently estimated to be 425 outstanding modification packages. In many cases, to complete the modification package, an extensive search must be performed to locate the original completed MRF's. In order to closeout the backlog of open mcdification packages, additional manpower will be utilized to close out already completed modifications. The task of completing these modification packages will be performed by search to locate the original completed MRF's. If the original completed MRF for an open, but completed modification, cannot be located within a reasonable time, the modification package will be closed by verification that the information contained in the Plant Modification Control Sheet (PMCS) in Plant Modification Control Administrative Procedure A-14 has been satisfactorily performed. Additionally, walkdowns will be performed on selected completed modifications as required by the Modification Coordinator in order to close out the modification package. The expected completion date to eliminate the present backlog of open modifications is October 1, 1985.

The Computerized History and Maintenance Planning System (CHAMPS) is now being utilized in place of the hardcopy MRF system. CHAMPS will hasten the Modification Office MRF recovery process for newly initiated modifications, thus permitting prompt closing of modification packages after the work is completed.

# ITEM 3

The construction drawings 11187-022-M-415 series were reviewed with respect to identifying changes relative to carbon content in

the piping for MOD 389. We have identified that the proper recording of carbon content on the core spray piping drawings for MOD 389 were completed on July 2, 1982, on the drawings listed below:

M 415 - 122 - 4 M 415 - 123 - 3 M 415 - 124 - 4 M 415 - 135 - 3 M 415 - 126 - 3 M 415 - 127 - 4 M 415 - 128 - 3 M 415 - 129 - 3 M 415 - 130 - 4 M 415 - 131 - 3 M 415 - 131 - 3 M 415 - 132 - 3 M 415 - 132 - 3 M 415 - 133 - 5

These revised drawings were available in the station files at the time of the inspection. However, both the Assistant Modification Coordinator and the inspector did not review these specific prints that properly documented the carbon content. The drawings that were provided for the inspection were outdated construction prints which were in the process of being archived. At the time of the inspection, moving of the Assistant Modification Coordinator and modification files into Peach Bottom's new administration building caused difficulty in locating the proper MOD 389 drawings.

### ITEM 4

At the time the Design Input was written (Oct. 1980), the applicable Nuclear Regulatory Commission requirement was a Sept. 5, 1980 letter, "Preliminary Clarification of TMI Action Plan Requirements." In this letter, "the response time of the containment pressure monitoring channels shall have a time constant of less than 1 second," is specified. This was incorporated into the Design Input. NUREG-0737, "Clarification of TMI Action Plan Requirements", was issued in November 1980. The requirement was changed to "the accuracy and response time specification of the pressure monitor shall be provided and justified to be adequate for their intended functions."

As noted in the inspection report, the NRC, on September 7, 1983, issued a Safety Evaluation Report (SER) approving the response time for containment pressure indication. This approval was based on a response time for individual components of the

instrument channel, which were submitted to the NRC by PECo on March 4, 1983. The NRC had computed an overall channel response time and specifically stated in a letter from J. F. Stolz, USNRC, to E. G. Bauer, PECo, dated January 5, 1983, that PECo was not to attempt to calculate a response time. This overall response time was furnished to PECo by the NRC in the September 7, 1983 SER. Response time testing was not performed, as it was no longer required by NUREG-0737.

This item was identified by the Philadelphia Electric Company, Quality Assurance Division, as a result of a finding in Combined Inspection Report 50-277/82-07 and 50-278/82-07. In response to the item, the Design Input documents were revised to eliminate response time testing. Since channel response time testing was not required by NUREG-0737, we believe this item does not constitute a failure to properly administer Plant Modification Procedure A-14.

### ITEM 5

Philadelphia Electric Company realizes that a major revision is required to rectify problem areas in Administrative Procedure, A-14. This revision has been initiated and will be completed by July 1, 1984.

Philadelphia Electric Company will increase the staff dedicated to modification control by the addition of clerical support and a technical assistant. These individuals will relieve the Assistant Modification Coordinator of those routine administrative functions which he now must perform himself, thereby allowing him to become more involved with each modification and the proper administration and control of plant modification procedures to preclude similar future occurrences.

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## ITEM 6

Philadelphia Electric Company has assigned an additional, well qualified, technically competent individual to assist the Modification Coordinator. The present Assistant Modification Coordinator is a degreed engineer and a qualified Shift Technical Advisor who has also worked in the Electrical Engineering Division in the Corporate offices. These qualities were carefully considered prior to assigning the Assistant Modification Coordinator responsibilities to this individual.

Administrative Procedure A-14 states that all requirements of the procedure may be performed by the Assistant Modification Coordinator except Part 1 of the Plant Modification Control Sheet (PMCS) and submission of the modification to the Plant Operations

Review Committee (PORC). These exceptions are waived if the individual possesses a senior operator's license. The Assistant Modification Coordinator does not possess a senior operator license; however, the responsibility for the exceptions mentioned are being assumed by the Modification Coordinator. Therefore, we believe that the Assistant Modification Coordinator need not possess a senior operator's license.

The Peach Bottom Final Safety Analysis Report commits
Philadelphia Electric Company to ANSI N45.2.11 (1973) titled
"Quality Assurance Requirements for the Design of Nuclear Power
Plants". We believe we meet the intent of this standard.
Paragraph TR2.2 of the Peach Bottom Quality Assurance Plan,
Volume 3, specifies that training of non-licensed professionals
is not required if the individual has the necessary
qualifications to perform the task. The qualifications of the
present Assistant Modification Coordinator, as stated above, are
sufficient to preclude specific training for this individual.
The qualifications of the Assistant Modification Coordinator have
been reviewed by the Assistant Station Superintendent, and this
review has been documented in his training records.

#### ITEM 7

In the letter from S. L. Daltroff to B. H. Grier, dated April 28, 1980, responding to the violation concerning MOD 510, the PMCS was committed to be corrected to reflect the need for procedural revision. Certain procedural revisions were added to the original PMCS but not dated nor otherwise documented in the modification package. Our intent in the April 28, 1980, letter response was to commit to revising of the PMCS form in the procedure, not to prepare a new PMCS for this particular modification.

Additionally, the letter stated that the intent of the "Design Review" signature on the PMCS of A-14 is to document only design reviews for "minor modifications" generated on-site and that Administrative Procedure A-14 would be revised to reflect this. A-14 was revised and since MOD 510 was a "major modification" with the design review performed off-site by the Engineering and Research Department, the "Design Review" signature was not required to be signed on the PMCS.

An Appendix, Modification Status Sheet for Document Revisions, has been added to the Administrative Procedure A-14, Plant Modification, since MOD 510 was initiated. This Appendix will be completed for this modification package to avoid any future confusion.

The cover letter for this combined inspection report states in part:

"we are concerned about continued weaknesses in the plant modification area. At the exit meeting, the Assistant Station Superintendent informed the inspector that management was aware of these weaknesses and had initiated actions to strengthen the weaknesses. In your response to the Notice of Violation, you are requested to include your plans and schedules to strengthen the plant modification activities."

#### Response

We have reviewed the findings in this inspection report and recognize a need for additional improvement in the administrative control of plant modifications. Actions specifically intended to improve control of modifications will be made in the following areas: (1) Organizational changes, (2) Increased staffing, (3) Procedural revisions, and (4) Corporate.

The first area will be resolved by assigning the Assistant Modification Coordinator to the staff of the plant Technical Engineer. This will improve communication and coordination between the Assistant Modification Coordinator and the test engineering staff personnel assigned to plant modifications. The Assistant Modification Coordinator will be assigned to the plant Technical Engineer by April 6, 1984.

Additionally, Philadelphia Electric Company is currently establishing Electric Production Department Requirements and Guidelines. These documents are departmental policy requirements regarding nuclear operations, including a guideline entitled Control of Modifications. The purpose of this document is to specify the requirements and guidelines for Electric Production Department responsibilities and provides direction for interfacing with other departments for control of modifications. The requirements and guidelines in this document will govern control of major, minor and emergency modifications, both safety and non-safety related, from inception to completion. This document is currently in the draft and approval process. It is expected that it will be approved for trial use by June 1, 1984.

Philadelphia Electric Company will increase the staff dedicated to modification control by the addition of clerical support and a technical assistant. These individuals will relieve the Assistant Modification Coordinator of those routine administrative functions which he now must perform himself,

thereby allowing him to become more involved with each modification and the proper administration and control of plant modification procedures to preclude similar future occurrences as covered in this inspection report.

In the third area and as stated in the response to Item 5, Philadelphia Electric Company has initiated a major revision to Administrative Procedure A-14, Plant Modification. The revision will require a substantial rewrite of the existing A-14 procedure and will concentrate on the following areas: improvement of communication between groups; improvement in the delineating of responsibilities and reduction of paperwork. In addition, a new Administrative Procedure will be written for improved control of plant modification preoperational acceptance tests. The revision to Procedure A-14 and generation of the new procedure regarding acceptance tests will be completed by July 1, 1984.

Finally, a corporate level committee will examine all aspects of the modification process. This ad hoc committee will examine the processes internal to the involved departments and divisions as well as their interdependence and interactions. We expect this committee to complete its task by August 1, 1984. It is expected that the findings of this committee will result in an enhancement over the current modification process.

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cc: A. R. Blough, Site Inspector