U. S. NUCLEAR REGULATORY COMMISSION
REGION I

Report Nos. 50-277/92-05
50-278/92-05

Docket Nos. 50-277
50-278

License Nos. DPR-44
DPR-56

Licensee: Philadelphia Electric Company
Nuclear Group Headquarters
Correspondence Control Desk
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Facility Name: Peach Bottom Units 2 & 3

Inspection At: Delta, Pennsylvania

Inspection Conducted: January 27-31, 1992

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February 26, 1992
Date

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February 26, 1992
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3/3/92
Date

Inspection Summary: Inspection from January 27-31, 1992 (Inspection Report Nos. 50-277/92-05 and 50-278/92-05

Areas Inspected: Unannounced safety inspection by two region-based inspectors to review the procedures and the implementation of the maintenance work order and the clearance and tagging programs. Also, a review was conducted of the status of unresolved items 50-277/91-23-01 and 50-278/91-23-01 which addressed missed surveillance tests.

Results: Both the work order and the clearance and tagging programs are performing as stated in their plant documentation. These two programs have been tested and accepted and are now integrated into the Plant Information Management System (PIMS). The missed surveillance test unresolved items 50-278/91-23-01 and 50-278/91-23-01 still remain open pending NRC approval of the licensee technical specification change request 91-07, dated December 19, 1991. The present technical specification surveillance test frequencies are being maintained through administrative procedures.

DETAILS

1.0 Persons Contacted

Attachment 1 provides a listing of persons contacted during the inspection.

2.0 Inspection Scope (62700)

The inspection evaluated the implementation of the maintenance work order and clearance and tagging programs and their integration with the site Plant Information Management System (PIMS). In addition, the inspectors reviewed the status of the upgraded surveillance test program. Attachment 2 contains a list of the documents reviewed during this inspection.

2.1 Plant Information Management System (PIMS) Overview

The Plant Information Management System (PIMS) consists of ten major sub-systems which are integrated into an overall management system. The ten sub-systems are: Management Action, Commitment Tracking, Resource Data, Maintenance Planning, Purchasing, Inventory Control, Radiation Protection, Personnel, Engineering Control and Plant Performance. Each of the ten PIMS sub-systems contains modules that provide specific task inputs to the sub-systems. As an example, the Maintenance Planning sub-system reviewed during this inspection contains the Work Order and Clearance and Tagging modules. Other modules such as corrective maintenance, component incident/failure reporting, and plant mode history are examples of the type of modules in this sub-system. The inspectors focused their inspection on the work order and clearance and tagging modules of the Maintenance Planning sub-system.

2.2 Plant Maintenance Work Orders

This inspection reviewed the implementation of the work order process using the Plant Information Management System (PIMS), and associated administrative procedures. PIMS was partially implemented in April 1991 to control only work orders initiated to support the July 1991 refueling outage. It was fully implemented in November 1991 to control all work orders initiated on site.

The inspectors reviewed a PIMS surveillance (i.e. audit), A0157609 issued December 31, 1991. Peach Bottom Nuclear Quality Assurance conducted this surveillance at both Peach Bottom and Chesterbrook Engineering offices from October 15, 1991, through November 20, 1991. The surveillance was designed to evaluate the adequacy of PIMS as part of the work order process, and to evaluate the activities supporting PIMS and the work order process. The inspector's review concluded that the licensee's audit of the work order process implementation into the PIMS was comprehensive in scope; and, although the report identified some weaknesses, corrective actions were being

taken to resolve these weaknesses and prevent reoccurrence. The results of these weaknesses were in the programming portion of the PIMS which is presently being upgraded.

The inspectors reviewed the individual steps of the work order process from initiation of an Action Request (which generates the initial work order) through clearing of the work order by the Operations Shift Supervisor. The procedure that provides the direction and control for performing maintenance work using the PIMS is described in A-26, Revision 30, November 6, 1991, "Maintenance Work Process." Personnel were observed to be adequately trained and using the system as specified in the licensee's procedures. The system appeared to have adequate controls in place to ensure only qualified and authorized personnel could plan, authorize, control, and clear work orders using PIMS.

The licensee has a feedback system in place for the users to submit Information Service Requests (ISRs) to request changes and improvements to PIMS. These ISRs are evaluated and prioritized for implementation not only at Peach Bottom Atomic Power Station but also at Limerick. The Plant Maintenance Work Order Process using PIMS and the associated administrative procedures appears to be functioning adequately with no observed weaknesses at this time.

An important part of the PIMS work order process involved in planning work is the proper classification of safety-related components. The inspectors reviewed two Corrective Action Requests (CARs) Q0001932 and Q0001933 written December 19, 1991, on a Unit 3, SRM-A Subpile Room connector that was changed out without notification of Quality Control (QC). The classification on this component had been recently changed by Engineering following a reevaluation of the existing Q-list. The component had been changed from a non-Q to an Augmented Q-list item. The Augmented-Q component has some but not all aspects of design, fabrication, and installation of a component that is safety-related; therefore, it is given some appropriate level of QC. The maintenance group accomplished the work assuming QC was not required for this component and later realized after reviewing the work order, that the Q-list designation had changed for this component. The utility completed a review of Peach Bottom's Q-list August 1991. A number of components especially in the electrical area were identified by the licensee as needing further engineering review to determine proper designation (i.e., Q, Augmented-Q, or non-Q). A violation was written last year concerning Q-list discrepancies (NV4 91-20-001). The resident inspector is following the licensee's corrective actions to address the violation. In regards to this inspection, PIMS was found to have adequate controls in place to ensure safety components have received proper review and classification.

2.3 Clearance and Tagging System

The clearance and tagging system is a part of the work control program that provides protection to workers and prevents damage to equipment by defining safe conditions and controls within a defined work boundary. The program documents that describe this task are:

- A-26, Revision 30, "Plant Maintenance Work Process;"
- A-41.1, Revision 7, "Control of Safety Related Equipment"; and
- CTM, Revision 2, "Clearance and Tagging Manual."

Using the above documents as a reference, the inspectors reviewed the initial steps in generating a system tag out prior to the work beginning. The personnel observed were knowledgeable of the tagout requirements for the systems they were working on. The inspectors verified that the following steps were followed by the maintenance personnel in tagging out the system:

- Clearance number (assigned by PIMS computer);
- Status/Date (assigned by PIMS computer);
- Unit/System/Functional Equipment Group Number;
- Specific component identification number of the component to be worked on (assigned by the PIMS computer);
- Description of the clearance;
- Name of individual creating the clearance;
- Special instructions. In the clearances witnessed by the inspectors, grounding and breaker information was added to the instruction section of the direction;
- Equipment and component isolation points; and
- Associated work order activity numbers.

The tag out documentation was reviewed by the assigned supervisor and verified before the work began. The clearance and tagging process using PIMS and the associated administrative procedures was functioning adequately with no observed deficiencies.

3.0 Licensee Actions On Previous Identified NRC Items

(Open) Unresolved Item 50-277/91-23-01 and 50-278/91-23-01

The unresolved item described a programmatic issue related to missed surveillance tests (ST's). Actions taken and completed by the licensee to ensure present technical specification surveillance tests are performed as required are listed as follows:

- Developed Performance Indicators, including Management goals, for test completion on schedule and in grace.
- Refresher training conducted for Cognizant Engineers and Management on A-43 program requirements and the vision for the improved program.
- Revised GP-2 (plant start-up procedure) to amplify the controls on event tests and restarted periodic tests.
- Revised the Operations Management Manual (OMM) to formalize expectations on restarting periodic tests after equipment inoperability.
- Clarified the scope and consistency of plant staff reviews of completed tests.
- Revised A-43 to incorporate various plant corrective actions related to the ST program.
- Developed Performance indicator for tests in the results review process.
- Revised the OMM to better define controls for "aborting" tests.

The inspectors verified that the above actions have been implemented; and, since November 1991, no technical specification surveillance tests have been reported missed. The long term actions by the licensee are to provide a new computer scheduling system with updated technical specification surveillance dates. A licensee's TS change request 91-07 was sent to the NRC for evaluation and approval on December 19, 1991. This TS change re-defines the surveillance intervals to be in line with Table 1.1 of NUREG-0123, Revision 3, "Standard Technical Specifications for General Electric Boiling Water Reactors." The testing of the updated PIMS system with the requirements of TS change request 91-07 is scheduled to be implemented and verified for use by the third quarter of 1992. This unresolved item remains open pending verification of the PIMS update program using the surveillance frequencies referenced in the TS Change Request 91-07. The present surveillance test program is in compliance with the existing TS surveillance test requirements; and, as stated above, no missed TS surveillances have been reported since November 1991.

4.0 Exit Meeting

Licensee management was informed of the scope and purpose of the inspection at an entrance meeting conducted on January 27, 1992.

The findings of the inspection were discussed periodically with licensee representatives during the course of the inspection. An exit was conducted on January 31, 1992, at which time the findings of the inspection were presented.

Attachments:
1. Persons Contacted
2. Documentation Reviewed

Attachment 1

Persons Contacted

Philadelphia Electric Company

*H. Abendroth, Staff Engineer, Electric
*D. Alshouse, Installations - Contract Administrator
*B. Borzillo, Engineering
*G. Daibeler, Support Manager
*D. Foss, Regulatory Engineer
*A. Fulvio, Regulatory Engineer
*G. Gellrich, Assistant Superintendent of Operations
*T. Hafycz, Maintenance Planning
*A. Hegedus, Engineer
*R. Knieriem, Engineer
*D. LeQuia, Superintendent of Plant Services
*J. McElwain, Outage Superintendent
*D. Meyers, Superintendent Technical
*T. Niessen, Superintendent of Operations
*P. Ott, Site Representative, PSE&G
*J. Rogenmuser, Training Supervisor
*R. Smith, Regulatory Engineer
*J. Wilson, Maintenance Superintendent

United States Nuclear Regulatory Commission

J. Lyash, Senior Resident Inspector
*M. Evans, Resident Inspector
L. Meyers, Resident Inspector

*Denotes those present at the exit meeting held on January 31, 1992.

During the course of this inspection, the inspectors contacted other members of the licensee's Technical, Operations, Maintenance, Quality and Training staffs.

Attachment 2

Documentation Reviewed

Plant Information Management System (PIMS)

Maintenance Subsystem Documents

A-26, Revision 30, "Plant Maintenance Work Process"
A-41.1, Revision 7, "Control of Safety Related Equipment"
CTM, Revision 2, "Clearance and Tagging Manual"
A-47, "Procedure for the Generation of Surveillance Tests"
A-43, "Surveillance Testing System"

Quality Assurance Audits

A0157609, Reviewed PIMS Surveillance Test, October 15 - November 20, 1991

Corrective Action Requests (CARs)

Q0001932, "Maintenance Planning Handling of Augmented Q-Work Orders"
Q0001933, "SRM Connector Soldered Without Required QC Inspection"

General Documents

NUREG-0123, Revision 3, "Standard Technical Specification for General Electric Boiling Water Reactor"
OMM Operations Management Manual
GP-2, "Plant Start-Up Procedure"