

U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

Region I

Report No. 50-289/80-16

Docket No. 50-289

License No. DPR-50 Priority -- Category C

Licensee: Metropolitan Edison Company

100 Interpace Parkway

Parsippany, New Jersey 07054

Facility Name: Three Mile Island Nuclear Station, Unit 1

Inspection at: Middletown, Pennsylvania and Parsippany, New Jersey

Inspection conducted: June 23-27, 30 and July 1-3 and 7-9, 1980

Inspectors: *G. Napuda*
G. Napuda, Reactor Inspector

8/29/80
date signed

G. Simonetti
G. Simonetti, Reactor Inspector

8/29/80
date signed

Approved by: *E. G. Greenman*
E. G. Greenman, Chief, Nuclear Support
Section No. 2, RO&NS Branch

date signed
8/29/80
date signed

Inspection Summary:

Inspection on June 12-17, 30 and July 1-3 and 7-9, 1980 (Report Number 50-289/80-16)

Areas Inspected: Routine, announced inspection by two region based inspectors of the Quality Assurance Program (OAP) and its implementation in the areas of Design Changes/Modifications; Drawing/Document Control; Records; and, Previously Identified Items. The inspection involved 150 inspector-hours onsite by two region based inspectors and 16 inspector-hours at the corporate offices by one region based inspector and the senior resident inspector.

Results: No items of noncompliance were identified.

DETAILS

1. Persons Contacted

- *B. Ballard, QA Modifications/Operations Manager
- T. Corrie, Assistant QC Manager
- T. Falkner, Supervisor, Modifications-Containment
- *R. Fenti, Site QA Audit Supervisor
- *J. Fornicola, Operations QA Supervisor
- J. Gulati, Electrical Engineer
- *W. Heysek, QA Auditor
- ***N. Kazanas, Manager-QA
- J. Kondras, Supervisor-Engineering Records, Reproduction and Distribution
- **R. Long, Vice President of Nuclear Assurance (Acting)
- I. Porter, Supervisor-Startup Test Group
- *G. Reuter, Stores Supervisor
- M. Shatto, Procedures Coordinator (PORC Secretary)
- **D. Slear, Project Engineering Manager
- **M. Stromberg, Methods/Operations/Audit Manager
- G. Troffer, Deputy Manager-Unit 1 Restart
- **E. Wallace, Licensing Manager
- **R. Wayne, Design QA Manager
- *J. Weiser, Manager-Information Manager
- H. Wilson, Lead I&C Foreman
- J. Wright, QC Manager
- W. Zewe, Shift Supervisor

*Denotes those present at the exit interview conducted at the Three Mile Island Station on July 9, 1980.

**Denotes those present at the exit interview conducted at the Parsippany, New Jersey corporate offices on July 8, 1980.

***Denotes those present at both exit interviews.

The inspectors also held discussions with and interviewed other licensee and contractor employees. They included administrative, construction, engineering, operations, quality assurance/control and stores personnel.

2. Previously Identified Items

(Open) Deficiency (289/77-35-01): Records Storage. The new single records storage facility is expected to be occupied by September, 1980 and it is being constructed to comply with the requirements of the licensee's commitments in the Operations Quality Assurance Plan, Revision 8. Single copy records are presently stored in either fire rated steel cabinets in various Unit 1 offices or the "Class A" storage area located in the Unit 2 Warehouse. The licensee representative stated that it is expected that all single copy records will be located in the new records facility by December, 1980. Pending the examination of records storage in the new records storage facility, this item remains open.

(Closed) Deficiency (77-35-02): As-built drawing not maintained up to date. Based on the unresolved item discussed in Paragraph 4, this item is closed for record purposes.

(Closed) Infraction (289/79-16-01): Contrary to 10 CFR 50.59(b) changes made to the QA Plan described in FSAR 17.2 were not reported in the annual report. The Operational Quality Assurance Plan (OOAP) for Three Mile Island, Unit 1, was found acceptable by NRC-NRR (NUREG-0680, Page C6-12) with one exception which is unrelated to this item. The OOAP, Paragraph 2.2.1, describes in detail what is and is not a significant change to the OOAP. Further, the same paragraph requires prior NRC approval prior to implementing significant changes and reporting non-significant changes to the NRC within 30 days. This item is closed.

(Closed) Unresolved Item (289/79-16-02): Address inspector concerns detailed in IE Inspection Report 50-289/79-16, Paragraph 3.b(2). The licensee has had a major reorganization and an upgrading of the QA Program. The OOAP, Revision 8, has been reviewed and approved (see item 79-16-01 above) by the NRC-NRR and addresses/describes generally the inspector's previous concerns. This item is resolved.

(Closed) Unresolved Item (289/79-16-03): Unit 1 Restart OOAP not consistent with the FSAR; revise OOAP to address the inspector's concerns detailed in IE Inspection Report 50-289/79-16, Paragraph 3.c(2). The OOAP, Revision 8, (see items 79-16-01 and -02 above) now addresses the inspector's previous concerns. This item is resolved.

(Closed) Unresolved Item (289/79-16-04): Revise GP1003 to state that the cognizant engineer will sign the approval block of "Approved for Construction Drawings". The Gilbert/Commonwealth Project Management Manual for Continuing Services-Three Mile Island Nuclear Station, Revision 0 (dated April 30, 1980), Paragraph 5:05.3.5, describes drawing identification and requirements for indicating release of drawings for construction. GPU Procedure EMP-008, Revision 5, Paragraph V.C addresses the method for approving the release of drawings for construction. **The licensee representative stated that GP1003 is no longer used and that only GPUSC procedures are utilized for GPU technical functions. Both procedures are consistent with one another.** Based on the foregoing this item is resolved.

(Closed) Infraction (289/79-16-05): Modification RM-1 was performed with drawings which were not approved for construction. RM-1 has been totally reissued and the licensee representatives stated that all applicable drawings have been approved for construction. Further, since pull slips and termination sheets are now computer originated, they no longer require signatures. The inspector selected the following sample of applicable drawings to verify the licensee's corrective action and identified no discrepancies.

- SS-211-001, Sheet T281, Revision IA-0
- B-224-336, Sheet 5, Revision ID-0
- B-224-336, Sheet 9, Revision ID-0
- B-224-336, Sheet 15, Revision IC-0
- B-224-336, Sheet 55, Revision IC-0

Based on the foregoing the inspector had no further questions and this item is closed.

(Closed) Infraction (289/79-16-06): Drawing distribution and elimination of obsolete drawings was not controlled. Based on the unresolved item discussed in Paragraph 4, this item is closed for record purposes.

(Open) Unresolved Item (79-16-07): Procedures overdue for biennial review. A number of functional areas are discussed in Procedure AP 1001. The inspector noted that a number of procedures are under development, each addressing a given functional area. The licensee representative stated that these procedures are to replace the current AP 1001 in the near future. The inspector expressed concern that none of the procedures under development clearly described the method to be utilized to assure that plant procedures will be reviewed within the two year cycle required by ANSI N18.7-1976 and also pointed out that neither does the current procedure. The licensee representative stated that the inspector's concern would be considered during the continuing development of the procedures intended to replace AP 1001. This item remains unresolved.

(Closed) Unresolved Item (79-16-08): Revise Procedure GP 4414 or the OQAP so that they are consistent with each other. Procedure TMI-16-02, Paragraph 8.2.6 requires a copy of the Quality Deficiency Report to be sent to the applicable Unit Manager, Manager-Nuclear Assessment and Modifications/Operations QA Manager. TMI-15-03, Paragraph 8.2 requires the Material Nonconformance Report to be forwarded to the appropriate Section Manager(s) and to the applicable Unit Manager if it is deemed reportable to the NRC. The inspector verified that this is consistent with the OQAP, Section 8.3. This item is resolved.

(Closed) Deficiency (79-16-09): Met Ed Site QC and GPUSC Site QA were not performing periodic inspections/surveillances of warehouse storage areas. The inspector noted that six new warehouse procedures have been recently developed and issued and also verified that Warehousing Procedure #3, Storage of Material, Revision 0, addresses inspection/surveillance of stored material and is in the process of being implemented. The inspector stated that he had no further questions and this item is closed.

(Closed) Infraction (79-16-10): Failure to take timely corrective action. The licensee has established a computer audit/audit followup system and is in the process of resolving a few user identified problems. The QA Audit/Monitor Tracking System User Manual, dated June 6, 1980, details the manner in which to use the system. Presently there is also in use a Met Ed QA Audit Finding Status List that summarizes the status of pre GPUSC audit findings. Further, the Summary of Open Audit Findings indicates that responses have been received for all Met Ed Audit findings with the status being: one response inadequate; three responses under evaluation; thirteen corrective actions to be verified; corrective action in process for twenty one items; and, one item still in the resolution stage (Completed Modification Package backlog issue; see Paragraph 4). The inspector reviewed/verified the foregoing and determined that corrective action was now being processed in a timely fashion. This item is closed.

(Closed) Deficiency (79-16-11): Field procurement procedures not approved. The inspector verified that Field Purchasing Procedure TMI-1 Restart/TMI-2 Recovery, Revision 3 (dated October 26, 1979), provides basic instructions for the preparation and placing of field purchase orders and was reviewed/approved by appropriate management. This item is closed.

(Closed) Unresolved Item (79-16-12): Licensee to determine end use/safety significance of two purchase orders issued to non-approved vendors. Licensee Engineering and QA have reviewed these purchased items and determined that they were standard catalogue as defined by Procedure 7-4-01, Revision 2 and the Checklist for Commercial Grade Items. The subject items have been accepted for use and the licensee representative stated that henceforth any purchase orders meeting the criteria of the aforementioned documents will be annotated that the Contractor Classification List requirements do not apply. The inspector reviewed various licensee documentation and discussed the end use of the items with licensee engineering representatives. The inspector determined that this practice was acceptable in this instance because the manufacturer's catalogue description included material specifications, tensile strengths and other such information needed to determine the suitability of these items for their intended end use. The licensee acknowledged the reasons for the inspector's conclusion. This item is closed.

(Closed) Deviation (80-05-01): Failure to incorporate additional requirements of the RRR into implementing procedures. The inspector verified that a number of internal memoranda had been issued immediately following the conclusion of the inspection discussed in IE Inspection Report 50-289/80-05 to alert all appropriate engineering and other personnel that the additional requirements of the RRR must be incorporated into applicable engineering/technical documents. Further, the licensee approved Gilbert/Commonwealth Project Management Manual for Continuing Services-Three Mile Island Nuclear Station, Revision 0 (dated April 30, 1980) directs Project Engineers (in Paragraph 2:05) to ensure that all GAI work include, among other commitments, the requirements of the RRR. GPU ensures that this is accomplished by implementing Procedure ES-009 and utilizing the Verification General Checklist. Based on the foregoing this item is closed.

3. QA Program Status

The Operational Quality Assurance Plan, Revision 8, had recently been approved by NRC-NRR with one item still outstanding. The new plan generally upgraded the requirements/standards of the licensee's Quality Assurance Program. The inspector noted that all the implementing procedures do not yet reflect the newly added requirements and discussed the status of these procedures with the licensee representatives. The licensee representatives stated that the main efforts included the following.

- GPUSC procedures are used exclusively for engineering activities.
- Met Ed procedures are being reviewed and those that are found to still be appropriate are re-identified with a GPUSC designator and re-issued.
- New GPUSC procedures are developed and issued where necessary.
- Administrative type plant/site procedures are being reviewed/revised as necessary.
- Met Ed procedures (e.g., GP series) are cancelled when a new or redesignated procedure is issued.

The inspector reviewed various document/records describing ongoing activities/efforts in this area noting that the Manager-Quality Assurance had requested all applicable management to provide him with a detailed status of implementing procedures versus the OQAP requirements by September 1980. The inspector stated he had no further questions at this time.

No items of noncompliance were identified.

4. Drawing/Document Control Program

a. References

- EP-002, GPUSC Drawings, Revision 2
- EP-007, Control and Distribution of Procedures and Standards, Revision 0
- EF-029, Document Distribution, Revision 0
- Three Mile Island Nuclear Station Unit 1 Interim Drawing List, June 22, 1980

-- Plant Administrative Procedures-Master Index, July 2, 1980

b. Program Review

The documents referenced above were reviewed to verify that administrative controls for document control and records management have incorporated the requirements as described in the Operational Quality Assurance Plan (OQAP) for Three Mile Island Nuclear Station, Revision 8.

This review verified, except as discussed below, that administrative controls have been established which require:

- master indices for all controlled documents including drawings;
- distribution of current and control of obsolete documents including drawings;
- resolution of discrepancies between as-built documents and the as-built facility; and,
- preparation, approval, and revision of controlled documents.

The licensee representative informed the inspector that a new document/drawing control computer based system is in the process of being implemented. The inspector reviewed the base document that described this system and the licensee representative provided additional information and demonstrated some new equipment. The licensee representative stated that this new system was expected to be operational by January 1981.

Based on the fact that a new system was being implemented, Items 77-35-02 and 79-16-06 (see Paragraph 2) and the findings in Paragraphs 4.d and e, the inspector determined that the following specific activities will be examined during a subsequent inspection to verify that documents/drawings are controlled in accordance with the requirements established by the OQAP.

- the control and distribution of drawings in general;
- the distribution of as-built documents (recent modifications); and,
- the control/distribution of documents.

This item is unresolved pending this review (289/80-16-01).

c. Procedure Control

The inspectors selected procedures from the computerized master procedure and revisions listing to determine if the established controls were being implemented. The selected procedures were reviewed at the various stated locations to verify specifically that:

- the master index and master procedure file revisions were identical;
- current revisions were at the various designated locations in the procedure distribution listings; and
- the required biennial procedure reviews were accomplished.

The selected procedures and the revision noted at the respective locations are listed below.

<u>Procedure</u>	<u>Master Index</u>	<u>Control Room</u>	<u>Document Control</u>
OPERATING			
1101-1	11	11	11
1102-1	40	40	40
1102-2	38	38	38
1105-3	5	5	5
1103-4	16	16	16
EMERGENCY			
1202-2	2	2	2
1202-11	3	3	3
1202-29	11	11	11
SURVEILLANCE			
1300-1	3	3	3
1300-4A	2	2	2

No items of noncompliance were identified.

d. Drawing Control

- (1) The inspector sampled the following drawings from the group that had previously been found to contain discrepancies (reference IE Inspection Report 50-289/79-16, Paragraph 5.d). The drawings in the Document Room, Control Room and I&C Shop were compared to the Master Index.

- 208-572, Revision 6
- 209-496, Revision 6
- 210-085, Revision 5
- 302-121, Revision 13
- 302-231, Revision 26
- 302-671, Revision 20
- 302-719, Revision 24
- 302-831, Revision 25
- 302-201, Revision 16

No items of noncompliance were identified.

- (2) The inspector attempted to verify that a selected sample of other drawings were of the current revision. The inspector noted many discrepancies in the Site Aperture Card Set. The licensee provided records to the inspector documenting ongoing audits within the Document/Record Management group. One of the completed audits, Aperture Card Audit of As-Built-Unit 1, June 28, 1980, identified similar and additional problems with site drawings, including aperture cards. The licensee representative stated that this internal audit effort was directed to preparing for full implementation of the new computer based document/drawing control system. The licensee representative also demonstrated that corrective action was ongoing.

No items of noncompliance were identified, however an unresolved item which includes drawing control is discussed in Paragraph 4.b above.

e. Modification Package Document History

The inspector reviewed the status of the licensee's efforts with respect to ensuring that previously completed modifications are depicted in current as-built drawings. An onsite engineering group has been established and the licensee representative stated that it is in the process of reviewing packages of completed modifications to verify that: document histories are complete; as-builts are accurate; all affected drawings are identified; and, necessary corrective action is taken. The inspector reviewed the Plant Walkdown Log and several Change Modification History Checksheets that verified the licensee's statement. The licensee representative also stated that the group expects to have completed its task by January, 1981.

No items of noncompliance were identified, however an unresolved item which includes the distribution of as-built drawings is discussed in Paragraph 4.b above.

5. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, items of noncompliance, or deviations. An unresolved item disclosed during this inspection is discussed in Paragraph 4.

6. Exit Interview

The inspector met with the licensee representatives (denoted in Paragraph 1) on July 8, 1980 and at the conclusion of the inspection on July 9, 1980. The inspector summarized the purpose, scope, and findings of the inspection. During these meetings the unresolved item was identified.