

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

Region I

Report No. 50-289/78-01  
Docket No. 50-289  
License No. DPR-50 Priority - Category C  
Licensee: Metropolitan Edison Company  
P. O. Box 542  
Reading, Pennsylvania 19603  
Facility Name: Three Mile Island Unit No. 1  
Inspection at: Middletown, Pa.  
Inspection conducted: January 10-11 and 16, 1978  
Inspectors: *L. C. Sjostrom* *Lon* *1/30/78*  
L. C. Sjostrom, Reactor Inspector date signed  
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\_\_\_\_\_ date signed  
Approved by: *D. L. Capton* *1/30/78*  
D. L. Capton, Chief, Nuclear Support date signed  
Section No. 1, RO&NS Branch

Inspection Summary:

Inspection on January 10-11 and 16, 1978 (Report No. 50-289/78-01)

Areas Inspected: Routine, unannounced inspection of pipe support and restraint systems surveillance and a followup on previous Unresolved Items.

Results: Of the two areas inspected, no Items of Noncompliance were found in one area; one apparent Item of Noncompliance was found in the other area (Infraction - failure to properly implement procedures, paragraph 3.a(2)(a)).

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## DETAILS

### 1. Persons Contacted

- \*R. Barley, Lead Mechanical Engineer
- \*C. Hartman, Lead Electrical Engineer
- W. Herman, Engineer Associate II, Nuclear
- J. O'Hanlon, Unit 1 Superintendent
- D. Pilsitz, Shift Foreman
- W. Ream, ISI Coordinator, Acting
- M. Shatto, Nuclear Engineer

\* denotes those present at the exit interview.

The inspector also interviewed several other licensee personnel during the course of this inspection. These personnel included operations personnel, engineering personnel, and members of the clerical staff.

### 2. Previous Inspection Item Update

(Open) Unresolved Item (289/77-09-02): The inspector reviewed Revision 7 of Surveillance Procedure 1301-9.9; however, each comment was not addressed and this item remains unresolved.

(Open) Unresolved Item (289/77-09-03): The inspector reviewed the following documents associated with functional testing of hydraulic snubbers.

- a. GPU Service Corporation Memo, D. Bulgarelli to R. Barley, dated June 7, 1977, subject - TMI Unit No. 1 - Snubber Fluid Testing.
- b. Met-Ed Memo, R. Barley to R. Klingaman, dated August 8, 1977, subject - Hydraulic Snubber Bleed Rates.
- c. Met-Ed Memo, R. Klingaman to J. O'Hanlon, dated December 21, 1977, subject - TMI-1, PR, Hydraulic Snubber Bleed Rates.
- d. Maintenance Procedure 1410-Y-34, Repair of Hydraulic Snubbers, Revision 0, November 7, 1976.

Items b. and c. above specify limits for lockup and bleed rates (except for minimum lockup velocity) for TMI-1; however, this criteria has not been incorporated into the licensee's procedure. This item remains unresolved.

(Closed) Unresolved Item (289/77-09-06): The inspector reviewed Surveillance Procedure 1300-1V25, Inservice Inspection of Piping Supports and Hangers Not Welded to a Pressure Boundary, Revision 0, February 11, 1976, and had no further questions concerning this item.

3. Surveillance of Pipe Support and Restraint Systems

a. Record Review

(1) Scope

The inspector reviewed the following records for conformance with procedural and TS requirements:

- (a) OPS-S31, Reactor Building Main Steam Line Snubber Inspections for December, 1977.
- (b) Hydraulic Snubber Functional Testing Records from the April 1977 Outage (Procedure 1410-Y-34).
- (c) Hydraulic Snubber Visual Inspection Records from March to December 1977 (Procedure 1301-9.9).
- (d) Inservice Inspection of Piping Supports and Hangers for 1977 (Procedure 1300-1V25).

(2) Findings

- (a) Contrary to the requirements of Administrative Procedure 1010, Technical Specification Surveillance Program, and Surveillance Procedure 1301-9.9, Hydraulic Shock and Sway Suppressors, the following items were identified by the inspector during a review of snubber visual inspection records.
  - On five different occasions, between March and December 1977, data sheets were missing indicating that incomplete inspections were performed.
  - An Exception and Deficiency List was not executed on May 7, 1977 following the completion of 1301-9.9E.
  - The corrective action specified for a snubber found void of hydraulic fluid was not followed on May 7, 1977 for snubber NSE 96A.

The above items are examples of failing to implement written procedures as required by T.S. 6.8.1 and constitute an Item of Noncompliance (289/78-01-01).

- (b) During the 1977 Outage the licensee functionally tested 259 snubbers for operability. Many of these snubbers were reinstalled without meeting the acceptance criteria of Procedure 1410-Y-34, Revision 0; however, the inspector noted that the licensee had addressed this problem in Quality Control Surveillance Report 77-109 and QC Nonconformance Reports 186 and 187. The resolution of this problem involved a PORC review and a subsequent engineering evaluation, which concluded that the non-conforming snubber settings would not detract from the snubber's ability to sustain seismic loadings. The inspector had no further questions on this item.
- (c) The inspector reviewed the records from the 1977 inservice inspection of piping supports and hangers (Procedure 1300-1V25) and noted that those deficiencies identified had been resolved or corrected. The inspector also requested to review the results of the 1976 inspection, but the licensee was unable to locate the records during the period of this inspection. This item is unresolved pending NRC review of the 1976 records from Procedure 1300-1V25. (289/78-01-02)

b. T.S. Table 3.16.1

The inspector attempted to verify that the licensee's Surveillance Procedure 1301-9.9, Hydraulic Shock and Sway Arrestors, Revision 7, and T.S. Table 3.16.1 included the same number of safety related snubbers. As a result of this audit, it was apparent that a discrepancy existed between the two lists and that the TS Table needed to be updated. This item is unresolved pending a revision of TS Table 3.16.1 to include all safety-related snubbers and a verification that all of these snubbers are included in the licensee's visual surveillance procedure. (289/78-01-03)

c. Inservice Inspection Procedure

Surveillance Procedure 1300-1V25, Inservice Inspection of Piping Supports and Hangers not Welded to a Pressure Boundary, Revision 0, February 11, 1976, verifies for spring type hangers, snubbers and shock absorbers that the device is not at either end of its



operating range. Section XI, Category B-K-2, of the ASME Code requires a verification of support settings for these types of supports and hangers. This item is unresolved pending revision of Procedure 1300-1V25 to meet the intent of requirement B-K-2 of Section XI of the ASME Code. (289/78-01-04)

d. Hydraulic Fluid Controls

The licensee's snubber surveillance program does not include any controls over new hydraulic fluid which would prevent cross-contamination with old fluid during testing or a contamination with foreign matter during storage of an unsealed container. In addition, administrative controls do not exist which would ensure that the correct type of hydraulic fluid is added to a particular snubber. This item is unresolved and is designated (289/78-01-05).

e. Seal Material

Procedure 1410-Y-34, Repair of Hydraulic Snubbers, Step 6.9.b, specifies the use of either ethylene propylene or cork end cap seals for snubber reservoirs. Since cork has been used for this purpose, the inspector questioned the licensee on whether cork has been demonstrated compatible with the operating environment for the snubbers affected. This information was not available during the period of this inspection and is unresolved. (289/78-01-06)

f. Observations

The inspector examined selected main steam and emergency feed snubbers in the Intermediate Building while the plant was at 100% power. Several minor deficiencies were observed and noted to the licensee. The inspector had no further questions in this area.

4. Unresolved Items

Unresolved Items are matters about which more information is required in order to ascertain whether they are acceptable items, Items of Non-compliance or Deviations. Unresolved Items disclosed during this inspection are discussed in paragraph 3 of this report.

5. Exit Interview

The inspector met with licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on January 16, 1978. The inspector summarized the inspection findings including the Unresolved Items and Item of Noncompliance.