

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

Region I

Report No. 50-289/78-13
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 Nuclear Station, Unit 1

Inspection at: Middletown, Pennsylvania

Inspection conducted: June 5-9, 1978

Inspectors: *D. R. Haverkamp*
D. R. Haverkamp, Reactor Inspector

6/22/78
date signed

date signed

date signed

Approved by: *D. M. Sternberg*
D. M. Sternberg, Acting Chief, Reactor
Projects Section No. 1, RO&NS Branch

6/26/78
date signed

Inspection Summary:

Inspection on June 5-9, 1978 (Report No. 50-289/78-13)

Areas Inspected: Routine, unannounced inspection of plant operations including shift logs and operating records and facility tour; reactor coolant system decontamination; 10 CFR Part 21 implementation; and licensee followup actions concerning selected previous inspection findings, licensee events, and IE Bulletins and Circulars. The inspection involved 42 inspector-hours onsite by one NRC inspector.

Results: No items of noncompliance were identified.

DETAILS

1. Persons Contacted

Metropolitan Edison Company

Mr. T. Acker, Shift Foreman
*Mr. R. Barley, Lead Mechanical Engineer
Mr. K. Bryan, Shift Foreman
Mr. J. Chwastyk, Shift Supervisor
Mr. W. Cotter, Supervisor of Quality Control
Mr. R. Dubiel, Supervisor of Radiation Protection and Chemistry
Mr. C. Hartman, Lead Electrical Engineer
Mr. J. Hilbish, Lead Nuclear Engineer
*Mr. G. Kunder, Superintendent - Technical Support
Mr. V. Orlandi, Lead Instrumentation and Controls Engineer
Mr. M. Ross, Supervisor of Operations
Mr. M. Shatto, PORC Secretary
Mr. W. Zewe, Shift Supervisor

The inspector also talked with and interviewed several other licensee employees during the inspection. They included control room operators, technical and engineering staff personnel and general office personnel.

*denotes those present at the exit interview.

2. Licensee Action on Previous Inspection Findings

(Closed) Inspector Followup Item (289/76-27-01): Training Program for Offsite Agencies. This item was reviewed and satisfactorily resolved for Unit 2, as described in NRC Inspection Report 50-320/78-09. The concerns noted in the referenced Unit 1 inspection report have been incorporated into facility procedures.

(Closed) Unresolved Item (289/77-09-04): Snubber Maintenance. Step 6.1.4 of MPI410-Y-34, Revision 1, contains precautions against removing snubbers during all modes of plant operations except cold shutdown and refueling.

(Closed) Inspector Followup Item (289/77-19-01): Valve Stem and Leak Off Incrustation in Borated Water Systems. Various borated water system leaks were corrected during the 1978 refueling outage. The inspector noted the improved conditions and had no further questions concerning this item.

(Closed) Inspector Followup Item (289/77-19-02): Diesel Generator Voltage Control Rheostats. Work request #19516 has been completed which installed an additional rheostat inside each diesel generator local control panel.

(Closed) Inspector Followup Item (289/77-19-03): Corrective actions have been completed for LER's 77-3/3L, 77-4/1T and 77-7/1T. A grease relief kit was installed on the motor operator for BS-V3B; TS Amendment 28 included the correct value of pressurizer code safety valve relief capacity; and personnel hatch strut bearing and latching bar interlock arm modifications were completed.

(Closed) Noncompliance (289/77-27-01): Use of Superseded Procedures. The licensee's corrective measures have been completed as described in MEC letter to NRC Region I serial GQL 1375, dated October 14, 1977. The inspector reviewed selected operating and surveillance procedures completed during October 1977 through May 1978 and verified that current procedures had been used.

(Closed) Unresolved Item (289/77-29-01): Status of Open Nonconformance Reports (NCR's). Generation Procedure GP-4012 was revised to include a viable mechanism for follow-up actions on overdue NCR's. The licensee has reduced the number of NCR's overdue for closeout to 34% of the total open NCR's. The inspector verified that the licensee's measures to close overdue NCR's have been effective. The inspector noted that the status of open NCR's and continuing licensee practices to ensure prompt correction of adverse conditions will be reviewed during routine NRC quality assurance inspections and had no further questions concerning this matter at this time.

(Closed) Noncompliance (289/77-29-04): Inoperative Battery Room Fan. The licensee's corrective measures have been completed as described in MEC letter to NRC Region I serial GQL 1514, dated November 11, 1977. Operating logs were revised to require shiftly checks of proper battery room ventilation.

(Closed) Inspector Followup Item (289/77-31-01): Corrective actions for LER 77-22/1T, as described in licensee letters dated September 8 and 23, 1977, have been completed. Results of periodic decay heat pump shaft ultrasonic testing and vibration measurements have been satisfactory. The pump shafts of DH-P1A and DH-P1B were replaced during the Spring 1978 refueling outage. The replacement shafts have rounded keyways and the appropriate material certification and heat treatment documentation and have been satisfactorily tested. These corrective actions were reported in MEC letter to NRC (NRR) serial GQL 0858, dated May 10, 1978. In view of these actions, there is no longer a need to perform periodic ultrasonic testing and vibration measurements.

(Closed) Noncompliance (289/77-32-01): Control Rod Program Verification. The licensee's corrective measures have been completed as described in MEC letter to NRC Region I serial GQL 1526, dated November 18, 1977. Surveillance Procedure 1301-9.2, Revision 10, limits movement of control rods to less than 2 inches during program verification, in conformance with current Technical Specification requirements. A Technical Specification Change Request to allow movement of 2% of rod length has been incorporated in the licensee's submittal of revised Technical Specifications in the STS format.

(Closed) Unresolved Item (289/77-32-02): Heat Balance Calculations. A memorandum was sent to shift foremen re-emphasizing that input parameter checks shall be completed just prior to performing a heat balance calculation. Procedure 1103-16, Revision 8, clarified when the input parameter checks shall be run.

(Closed) Inspector Followup Item (289/77-37-04): Cautionary Equipment Control. SAP 1037, "Control of Caution Tags" has been issued to formally implement the use of Caution Tags and Do Not Operate Tags. Refer to paragraph 4.a of this report for additional information concerning this item.

(Closed) Inspector Followup Item (289/77-37-08): Permanent Repair of DH-V1. Decay Heat System isolation valve DH-V1 remains in a condition of temporary repair using Furmanite leak-sealing compound, as described in LER 76-40/3L. Routine visual surveillance and DH system operation during the Spring 1978 refueling outage has indicated no need for reinjection of Furmanite due to no additional

seal ring gasket leakage. An engineering evaluation performed by the licensee concluded that DH-VI would not be permanently repaired during the recent outage, and the facility would be operated for another year with the temporary repair. Routine visual surveillance for increased valve leakage will be continued and permanent valve repair will be re-evaluated by the licensee prior to the 1979 refueling outage. The inspector had no further questions concerning this item.

(Open) Noncompliance (289/78-01-01): Hydraulic Snubbar Surveillance. The status of this item was described in NRC Region I Inspection Report 50-289/78-07, paragraph 2, however, an incorrect heading (Unresolved Item 289/77-09-04) was contained in the referenced report. The licensee's corrective measures regarding Noncompliance 289/78-01-01 will be reviewed during a subsequent inspection.

(Open) Inspector Followup Item (289/78-02-01): Corrective actions for LER 77-25/3L have not yet been completed. Installation of permanent piping for seal water tank makeup to the evaporator was deferred due to higher priority work during the recent refueling outage. This item remains open pending completion of the permanent piping installation.

(Closed) Noncompliance (289/78-03-02): Personnel Monitoring/Radwaste Container Contamination Determination. The licensee's corrective measures have been completed as described in MEC letter to NRC Region I Serial GQL 0705, dated April 19, 1978. Procedure HPP 1612 was changed to allow individuals to move to low background areas to monitor for contamination. Responsible HP personnel were counselled to ensure that proper procedures are carried out regarding movement of radwaste containers.

(Closed) Unresolved Item 289/78-05-01): Start Work Approval for Maintenance. Supervisor of Maintenance Memorandum dated April 17, 1978, restated the need for maintenance personnel to get Shift Foreman approval on Work Request Forms prior to commencing work. The inspector had no further questions concerning this item.

3. Review of Safety Limits, Limiting Safety System Settings and Limiting Conditions for Operation

The inspector observed process instrumentation monitoring current operations on June 8 and 9, 1978 and reviewed records of previous reactor operations during March 1977 - May 1978. The following logs and records were reviewed on a sampling basis.

- Shift Foreman Log
- Control Room Log Book
- Completed Operating Procedures 1102-1, "Plant Heatup to 525°."
- Completed OP's 1102-2, "Plant Startup."
- Completed OP's 1102-10, "Plant Shutdown."
- Completed OP's 1102-11, "Plant Cooldown."
- Completed Surveillance Procedures 1301-1, "Shift and Daily Checks."
- Completed SP's 1301-2, "Boric Acid Mix Tank or Reclaimed Boric Acid Tank Chemistry."
- Completed SP's 1301-3, "Reactor Coolant System Chemistry."
- Completed SP's 1301-4.1, "Weekly Surveillance Checks."
- Completed SP's 1301-4.4., "BWST Chemistry."
- Completed SP's 1301-4.6, "Station Storage Batteries - Weekly."
- Completed SP's 1301-5.1, "BAMT Temp Channels, RBAST Temp Channel."
- Completed SP's 1301-5.6, "Core Flooding Tank Water Sample."
- Completed SP's 1301-5.8, "Station Batteries - Monthly."

- Completed SP's 1301-6.5, "Sodium Hydroxide Tank Concentration."
- Completed SP's 1301-6.6, "Sodium Thiosulphate Tank Concentration."
- Completed SP's 1301-9.2, "Control Rod Program."
- Completed SP's 1303-1.1, "Reactor Coolant System Leak Rate."
- Completed SP's 1303-3.1, "Control Rod Movement."
- Completed SP's 1303-4.16, "Emergency Power System."
- Completed SP's 1303-5.4, "Emergency Feedwater Pumps."

The observations and records review were conducted to verify that startup, power and/or shutdown reactor operations were in conformance with Technical Specification safety limits, limiting safety system settings, and limiting conditions for operation.

Acceptance criteria for the above items included selected requirements of facility operating procedures and the following Technical Specifications (listed according to their respective systems).

- Reactivity Control and Power Distribution Technical Specifications 2.1.2, 3.1.3.4, 3.1.3.5, 3.2.1, 3.5.2.1, 3.5.2.4, 3.5.2.5, 3.5.2.6, 4.1.2, 4.7.1, and 4.7.2.
- Instrumentation Technical Specifications 2.3.1 (Table 2-3.1 and Fig. 2.3.2), 3.5.1, 3.5.3, and 4.1.1.
- Reactor Coolant System Technical Specifications 2.1.1, 2.2.1, 3.1.1.1.b, 3.1.1.1.c, 3.1.1.2, 3.1.2.1, 3.1.2.2, 3.1.2.3, 3.1.3.1, 3.1.3.2, 3.1.5, 3.1.10, and 4.1.2.
- Emergency Core Cooling System Technical Specifications 3.3.1.1, 3.3.1.2, 3.3.1.3, 3.3.1.4, 3.3.1.5, and 4.1.2.
- Containment Systems Technical Specifications 3.6.1, 3.6.2, 3.6.3, 3.6.4, 3.6.5, and 3.6.6.
- Plant and Electrical Power Systems Technical Specifications 3.12.3, 3.4.1, 3.4.2, 3.4.3, 3.4.6, 3.7.1, 3.7.3, 4.6.1.a, 4.6.2.a, 4.6.2.b, 4.6.2.c, 4.9.1.1, and 4.9.1.2.

The items observed and reviewed by the inspector were acceptable.

4. Review of Plant Operationsa. Shift Logs and Operating Records

The inspector reviewed the following logs and records:

- Shift Foreman Log, Control Room Log Book, Control Room Operator's Log Sheets, Primary Auxiliary Operator's Log-Tour Readings, Primary Auxiliary Operator's Log-Liquid Waste Disposal Panels, Secondary Auxiliary Operator's Log Sheets, and Auxiliary Operator Log Sheets-Out-Building Tour; dated February 23 - May 31, 1978.
- Shift and Daily Checks; dated February 21 - May 22, 1978.
- Jumper, Lifted Lead, and Mechanical Modifications Log (active and cleared); entries made during February 23 - May 31, 1978.
- Equipment Lockout Tag Log (active and cleared); entries made during February 23 - June 5, 1978 and May 14 - June 5, 1978, respectively.
- Do Not Operate Tag Log; entries made during February 23 - June 1, 1978.
- Transient Cycle Log Book; entries made during February 23 - May 31, 1978.
- Unit 1 Superintendent's Operating Memos 77-1 and 78-1.
- Unit 1 Operations Department Memos 78-5 through 78-7.

The logs and records were reviewed to verify the following items.

- Log keeping practices and log book reviews are conducted in accordance with established administrative controls.
- Log entries involving abnormal conditions are sufficiently detailed.

- Operating orders do not conflict with Technical Specifications (TSs).
- Jumper log and tagging log entries do not conflict with TSs.
- Jumper/lifted lead/mechanical modification and tagging operations are conducted in conformance with established administrative controls.
- Problem identification reports confirm compliance with TS reporting and LCO requirements.

Acceptance criteria for the above review included inspector judgement and requirements of applicable Technical Specifications and the following procedures.

- Station Administrative Procedure (SAP) 1002, "Rules for the Protection of Employees Working on Electrical and Mechanical Apparatus," Revision 12.
- SAP 1010, "Technical Specification Surveillance Program," Revision 12.
- SAP 1011, "Controlled Key Locker Control," Revision 16.
- SAP 1012, "Shift Relief and Log Entries," Revision 8.
- SAP 1013, "Bypass of Safety Functions and Jumper Control." Revision 7.
- SAP 1016, "Operations Surveillance Program," Revision 12.
- SAP 1033, "Operating Memos and Standing Orders," Original.
- SAP 1037, "Control of Caution Tags," Original.

The inspector's findings regarding shift logs and operating records were acceptable, as noted below.

- SAP 1037, issued March 13, 1978, implements use of yellow cardboard type CAUTION tags as an information tag only. The tag is to be attached to a component, control switch or other device to indicate an off normal condition or to caution personnel to a specific condition which must be satisfied prior to using the component or device. Additionally, SAP 1037 provides for use of a red bakelite DO-NOT-OPERATE tag in place of a CAUTION tag, particularly when used in environments where the CAUTION tags may easily deteriorate under extended use. The administrative controls provided by SAP 1037 have not yet been fully implemented, including operator training regarding use of CAUTION tags, and replacement of existing white information stickers and DO-NOT-OPERATE tags with CAUTION tags where applicable. Licensee representatives stated that it was originally intended to gradually implement the controls of SAP 1037, however, the existing information stickers and DO-NOT-OPERATE tags would be reviewed for continued applicability and replaced with CAUTION tags, as required. The inspector had no further questions concerning this matter at this time, and stated that the licensee's implementation of SAP 1037 would continue to be reviewed during periodic NRC inspections of plant operations.

b. Plant Tour .

On June 9, 1978, the inspector conducted a tour of the following accessible plant areas.

- Auxiliary Building
- Turbine Building
- Fuel Handling Building
- Control Room
- Switchgear Rooms
- Inverter and Battery Rooms
- Diesel Rooms
- Chemical Addition Room
- Make-up Pump Rooms

The following observations/discussions/determinations were made.

- Control Room and local monitoring instrumentation for various components and parameters was observed, including reactor power level, Reactor Building pressure, BWST level and temperature, diesel fuel oil levels, and control rod positions.
- Radiation controls established by the license, including the posting of radiation and high radiation areas, the condition of step-off pads and the disposal of protective clothing, were observed. Radiation work permits used for entry to radiation and controlled areas were reviewed. Actual radiation level measurements were observed and compared with posted values throughout the plant.
- Plant housekeeping, including general cleanliness conditions and storage of materials and components to prevent safety and fire hazards, was observed.
- Systems and equipment in all areas toured were observed for the existence of fluid leaks and abnormal piping vibrations.
- Selected piping snubbers/restraints were observed for proper fluid level and condition/proper hanger settings.
- The indicated positions of electrical power supply breakers and selected control board equipment start switches and remote-operated valves and the actual positions of selected manual-operated valves were observed.
- Selected equipment lockout tags and caution tags were observed for proper posting and the tagged equipment was observed for proper positioning.
- The Control Board was observed for annunciators that normally should not be lighted during the existing plant conditions. The reasons for the annunciators were discussed with control room operators.

- The licensee's policy and practice regarding plant tours was reviewed.
- Control Room manning was observed on several occasions during the inspection.

Acceptance criteria for the above items included inspector judgement and requirements of 10 CFR 50.54(k), Regulatory Guide 1.114, applicable Technical Specifications and the following procedures.

- SAP 1002, "Rules for the Protection of Employees Working on Electrical and Mechanical Apparatus," Revision 12.
- SAP 1003, "Radiation Protection Manual," Revision 12.
- SAP 1008, "Good Housekeeping," Revision 3.
- SAP 1009, "Station Organization and Chain of Command," Revision 3.
- SAP 1028, "Operator at the Controls," Original.
- SAP 1037, "Control of Caution Tags," Original.

The inspector's finding regarding the plant tours were acceptable.

5. In-Office Review of Licensee Event Reports (LERs)

The LERs listed below were reviewed in the Region I office promptly following receipt to verify that details of the event were clearly reported including the accuracy of the description of cause and the adequacy of corrective action. The LERs were also reviewed to determine whether further information was required from the licensee, whether generic implications were involved, whether the event should be classified as an Abnormal Occurrence, and whether the event warranted onsite followup.

The following LERs were reviewed.

- *-- LER 78-01/1T, dated January 24, 1978; Potential error between heat balance and nuclear instruments during some transients.

*denotes those LERs selected for onsite followup.

- *-- LER 78-02/1T, dated January 26, 1978; Continuous fire watch was not posted when the "B" Diesel Generator Radiator Room sprinkler system was isolated for maintenance.
- *-- LER 78-03/3L, dated February 3, 1978; Emergency Diesel Generator 1B failed to start during surveillance testing due to oil pressure limit switch setpoint drift.
- *-- LER 78-04/3L, dated February 3, 1978; Packing gland leak from MU-V47A caused average gaseous radioactivity concentrations in the area to exceed 500 times the values specified in 10 CFR 20.403(b)(2).
- *-- LER 78-05/1T, dated February 2, 1978; Violation of containment integrity during surveillance testing.
- *-- LER 78-06/3L, dated February 21, 1978; Sample isolation valve CA-V13 failed to close following routine sampling.
- LER 78-07/3L, dated February 24, 1978; Quadrant power tilt limit of +2.66% was exceeded due to transient power operations and maneuvering to an all rods out configuration.
- *-- LER 78-08/1T, dated February 16, 1978; Steam generator level found to be outside the limitations assumed in the Main Steam Line Break Analysis.
- *-- LER 78-09/3L, dated April 3, 1978; D.C. Breaker CB3 failed to trip during one of several tests due to apparent binding of the breaker operating linkage.
- *-- LER 78-10/1T, dated April 5, 1978; During ES surveillance test both diesels failed to start on initial actuation and the make-up pumps tripped when transferred to the diesel generators on subsequent actuation.
- *-- LER 78-11/3L, dated April 17, 1978; During visual testing of shock and sway suppressors, snubber MS-201 was found to have no fluid in the reservoir due to a pinched rod wiper seal.
- *-- LER 78-12/3L, dated May 5, 1978; Snubber DHH-187 would not lock up upon compression during functional testing.

*denotes those LERs selected for onsite followup.

- *-- LER 78-13/IT, dated May 9, 1978; Error in small break LOCA safety analysis.
- *-- LER 78-15/IT, dated May 15, 1978; Control rods were positioned in the restricted region of TS limits due to use of the wrong rod index curve in the procedure.
- *-- LER 78-16/IT, dated May 17, 1978; Error in feedwater line break accident analysis.
- *-- LER 78-17/IT, dated May 19, 1978; Error in uncertainties applied to measurements of imbalance and quadrant power tilt as performed by the incore detector system.

The above LERs were closed based on satisfactory review in the Region I office, except those LERs selected for onsite followup.

6. Onsite Licensee Event Followup

For those LERs selected for onsite followup (denoted in Paragraph 5), the inspector verified that the reporting requirements of Technical Specifications GP 4703 (Original) had been met, that appropriate corrective action had been taken, that the event was reviewed by the licensee as required by Technical Specifications, and that continued operation of the facility was conducted in conformance with Technical Specification limits.

The inspector's findings regarding these licensee events were acceptable, unless otherwise noted below.

- LER 78-08/IT described operation of the facility in a condition not analyzed in the FSAR, e.g. flooding the OTSG feedwater nozzles during operation below 5% full power. When the Main Steam Line Break Analysis was originally performed, the B&W recommended operating procedure required a 30" water level in the OTSGs at low power levels. As B&W gained operating experience, flooding of the feedwater nozzles at low power levels was recommended to prevent thermal shocking the nozzles. However, operation with feedwater nozzles submerged, when below 5% full power, was not reconsidered for the Steam Line Break Analysis. Shutdown and cooldown procedures were changed to

denotes those LERs selected for onsite followup.

prevent flooding the nozzles when <5% full power. Additionally, the licensee has determined that should a main steam line break occur during operation below 5% full power with OTSG nozzles flooded, no return to criticality will occur following reactor trip, as described in MEC letter to B&W serial GQL 0850, dated May 4, 1978. The Met-Ed evaluation of OTSG operation at low power levels has not yet received concurrence from B&W. Final resolution of this matter will be reviewed during a subsequent inspection. (289/78-13-01).

- LER 78-16/1T described the Cycle 4 reanalysis results of a feedwater line break accident, which indicated that peak RCS pressure following the accident would exceed the maximum allowable pressure of 2750 psig by about 4.4 psig. The RCS High Pressure Trip setpoints of Procedure 1303-4.1 have been reduced to 2390 psig to prevent exceeding 2750 psig, however, an applicable Technical Specification Change Request has not yet been submitted. This item will be reviewed during a subsequent inspection. (289/78-13-02).

7. IE Bulletin and Circular Followup

The inspector reviewed the licensee's followup actions regarding the IE Bulletins and Circulars listed below.

- IEB 77-04, "Calculational Error Affecting the Design Performance of a System for Controlling pH of Containment Sump Water Following a LOCA," dated November 4, 1977.
- IEB 77-05 and 77-05A, "Electrical Connector Assemblies," dated November 8 and 15, 1977.
- IEB 77-06, "Potential Problems with Containment Electrical Penetration Assemblies," dated November 22, 1977.
- IEB 78-01, "Flammable Contact-Arm Retainers in General Electric (G.E.) CR120A Relays," dated January 16, 1978.
- IEB 78-02, "Terminal Block Qualification," dated January 30, 1978.
- IEB 78-04, "Environmental Qualification of Certain Stem Mounted Limit Switches Inside Reactor Containment," dated February 21, 1978.

- IEB 78-05, "Malfunctioning of Circuit Breaker Auxiliary Contact Mechanism - General Electric Model CR105X," dated April 14, 1978.
- IEC 77-14, "Separation of Contaminated Water Systems from Noncontaminated Plant Systems," dated November 28, 1977.
- IEC 77-15, "Degradation of Fuel Oil Flow to the Emergency Diesel Generator," dated November 30, 1977.
- IEC 77-16, "Emergency Diesel Generator Electrical Trip Lock-Out Features," dated December 13, 1977.
- IEC 78-02, "Proper Lubricating Oil for Terry Turbines," dated April 20, 1978.

The review included discussions with licensee personnel, review of selected facility records, and observation of selected facility equipment and components.

With respect to the above Bulletins, the inspector verified that licensee management forwarded copies of the bulletin response to appropriate onsite management representatives, that information and corrective action discussed in the reply was accurate and effected as described, and that the reply was submitted within the time period described in the bulletins.

With respect to the above Circulars, the inspector verified that the circular was received by appropriate licensee management, a review for applicability was performed, and that action taken or planned is appropriate.

Acceptance criteria for the above review included inspector judgment and requirements of applicable Technical Specifications and facility procedures.

No items of noncompliance were identified concerning licensee follow-up to the above Bulletins and Circulars.

8. In-Office Review of Periodic Reports

The periodic reports listed below were reviewed in the Region I office to verify that the report included information required to be reported and that test results and/or supporting information

discussed in the report were consistent with design predictions and performance specifications, as applicable. The reports were also reviewed to ascertain whether planned corrective action was adequate for resolution of identified problems, where applicable, and to determine whether any information contained in the report should be classified as an Abnormal Occurrence.

The following TMI 1 periodic reports were reviewed.

- Summary of Safety Related Maintenance (1977), dated March 16, 1978.
- Summary of Operating Experience (1977), dated March 16, 1978.
- 10 CFR 50.59b Report of Facility Changes, Tests and Experiments conducted without prior Commission Approval (1977), dated April 25, 1978.
- January Operating Status Report, dated February 10, 1978.
- February Operating Report, dated March 13, 1978.
- March Operating Report, dated April 14, 1978.
- April Operating Report, dated May 12, 1978.

The above reports were closed based on satisfactory review of the Region I office.

9. 10 CFR Part 21 Implementation

The inspector reviewed the following items related to licensee implementation of 10 CFR Part 21 requirements.

- Posted documents for informing employees of Part 21, Section 206, and procedures adopted pursuant to Part 21, including the location where the regulations and procedures may be examined and to whom reports may be made.
- Selected purchase orders.
- Nonconformance Reports 77-336 and 77-396.

These items were reviewed to verify the adequacy of the implementation of Part 21 requirements/procedures/controls listed below.

- Posting of requisite documents.
- Specification of the application of 10 CFR Part 21 provisions in applicable procurement documents issued after January 6, 1978.
- Evaluation of deviations or conditions or circumstances, or failures to comply, not resulting in a report to the Commission.

Acceptance criteria for the above review included inspector judgment and requirements of 10 CFR Part 21 and applicable licensee implementing procedures.

The inspector's findings regarding 10 CFR Part 21 implementation were acceptable.

10. Reactor Coolant System Decontamination

Several facilities have recently carried out or are planning to carry out decontamination of reactor coolant pressure boundary components without prior NRC approval. This is allowed under the provisions of 10 CFR 50.59. Operations of this nature generally do not represent unreviewed safety questions provided that the following conditions are satisfied.

- The components involved have been physically removed from the system.
- The licensee's administrative controls and post-decontamination surveillance are adequate to assure that residual decontamination solution is not introduced into other components within the reactor coolant pressure boundary.
- The component is not degraded.

The inspector informed licensee representatives that NRR is actively developing generic criteria to govern decontamination of reactor coolant pressure boundary components. Until these generic criteria are developed, decontamination solutions with unproven corrosion characteristics should not be introduced into components within the reactor coolant pressure boundaries of operating reactors without prior NRC approval.

11. Exit Interview

The inspector met with licensee representatives (denoted in Paragraph 1) at the conclusion of the inspection on June 9, 1978. The inspector summarized the purpose and scope of the inspection and the findings.