

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

Inspection Report No: 50-289/75-25

Docket No: 50-289

Licensee: Metropolitan Edison Company

License No: DPR-50

P.O. Box 542

Priority: _____

Reading, Pennsylvania 19603

Category: C

Location: Middletown, Pennsylvania(Three Mile Island)

Safeguards Group: _____

Type of Licensee: PWR, 2535 MWt (B&W)

Mode of Inspection: Routine, Unannounced

Date of Inspection: November 10-19, 1975

Date of Previous Inspection: November 3, 1975

Reporting Inspector: R. O. Hurd
R. O. Hurd, Reactor Inspector

12/17/75
DATE

Accompanying Inspectors: _____

DATE

DATE

DATE

Other Accompanying Personnel: E. C. McCabe, Jr.
E. C. McCabe, Section Leader

12/17/75
DATE

Reviewed By: E. C. McCabe, Jr.
E. C. McCabe, Nuclear Support Section Leader
Reactor Operations and Nuclear Support Branch

12/18/75
DATE

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526

SUMMARY OF FINDINGS

Enforcement Action

A. Items of Noncompliance

Deficiency

Contrary to Technical Specification 6.2.3 requirements for adherence to procedures:

1. SP 1303-4.1 requirements for data recording were not met on July 22, 1975 and September 24, 1975. (Detail 12.a); and
2. SP 1302-1.1 administrative requirements for power range amplifier resetting were not met on August 7, 1975. (Detail 12.b.(2))

(Limiting safety system settings were not exceeded by the above.)

B. Deviations

None

Licensee Action on Previously Identified Enforcement Items

Report 50-289/75-14

The licensee's corrective actions with respect to Items of Noncompliance designated as Details 3.a, 3.b, 3.c, 4.c and 5.b of the above referenced report were reviewed with respect to the licensee's response letter to Region I dated September 15, 1975. The inspector had no further questions on these items. (Detail 17)

Other Significant Findings

A. Current Findings

1. Acceptable Areas

The following items were inspected on a sampling basis and findings did not involve an Item of Noncompliance, Deviation or an Unresolved Item.

90012323

- a. Limits on Reactor Building Pressure While Critical. (Detail 2)
- b. High and Low Pressure Injection Analog Channel Test. (Detail 3)
- c. Reactor Building Spray Actuation Setpoint. (Detail 4)
- d. Reactor Protection System Channel Bypass Key. (Detail 5)
- e. Restriction on Reduction of Boron Concentration. (Detail 6)
- f. Reactor Coolant Leakage Limitation. (Detail 7)
- g. Shift and Daily Checks - Core Flood Tank Pressure. (Detail 8)
- h. Shift and Daily Checks - RC Pressure Temperature Comparator. (Detail 9)
- i. Reactor Protection System Surveillance Procedure. (Detail 10)
- j. Variable Low Coolant Pressure Trip Setpoint. (Detail 11)
- k. Reactor Building Pressure Trip Setpoint. (Detail 13)
- l. Design Change Control Procedure. (Detail 15)

2. Unresolved Items

(These are items for which more information is required in order to determine if the item is Acceptable, a Deviation or an Item of Noncompliance.)

- a. Power Range Amplifier Calibration Procedure SP 1302-1.1 clarification of instructions on Data Sheet 1. (Detail 12.b.(1))
- b. Power Range Amplifier Calibration Procedure SP 1302-1.1 format clarification on Data Sheet 3. (Detail 12.b.(3))
- c. Plant Startup Procedure OP 1102-2 Precritical Check List changes to procedure numbers in item 22A. (Detail 14)

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3. Infractions and Deficiencies Identified by Licensee

None

B. Status of Previous Unresolved Items

1. Resolved Items

The following items identified in Report 50-289/75-14 were examined and resolved.

- a. Reactor Containment System Leak Rate, reference report detail 8.a. (Detail 16.a.(1))
- b. Incore Neutron Detectors, reference report detail 8.c. (Detail 16.a.(2))
- c. Power Range Amplifier, reference report detail 8.f. (Detail 16.a.(3))
- d. Main Steam Isolation Valves, reference report detail 8.h. (Detail 16.a.(4))
- e. Station Batteries, reference report detail 8.k. (Detail 16.a.(5))
- f. Reactor Building Emergency Cooling and Isolation System Analog Channels, reference report detail 8.n. (Detail 16.a.(6))
- g. Tests and Experiments, reference report detail 7.d. (Detail 16.a.(7))
- h. AO 75-19, reference report detail 10.d.(3). (Detail 16.a.(8))
- i. AO 75-18, reference report detail 10.d.(8). (Detail 16.a.(9))
- j. PORC, reference report 13.b. (Detail 16.a.(10))
- k. Borated Water Storage Tank, reference report detail 8.p. (Detail 16.a.(11))

90012325

2. Items Still Unresolved

The following items identified in Report 50-289/75-14 were examined and remain unresolved.

- a. Turbine Overspeed Testing, reference report detail 8.g. (Detail 16.b.(1))
- b. Transmittal of Safety Evaluations to General Office Review Board, reference report detail 7.c. (Detail 16.b.(2))

Management Interview

- A. A management interview was conducted at the site on November 14, 1975 to discuss the findings at that point in the inspection with the following licensee attendees.

Mr. J. J. Colitz, Unit No. 1 Superintendent
Mr. J. C. Herbein, Manager - Generation Operations - Nuclear
Mr. D. L. Good, Technical Analyst III
Mr. G. A. Kunder, Supervisor, Station Operations
Mr. J. P. O'Hanlon, Senior Engineer, I

The following summarizes the items discussed.

1. Power Range Amplifier Calibration. (Detail 12.b)
2. Plant Startup Procedure. (Detail 14)
3. Nuclear Overpower Trip Setting. (Detail 2.a)
4. High and Low Pressure Injection Analog Channel Test. (Detail 3)
5. Reactor Building Spray Actuation Setpoint. (Detail 4)
6. Restriction on Reduction of Boron Concentration. (Detail 6)
7. Reactor Coolant Leakage Limitation. (Detail 7)

90012526

- B. An exit interview was conducted at the site on November 19, 1975 to discuss inspection findings not covered in the previous meeting, with the following attendees.

Mr. J. J. Colitz, Unit 1 Superintendent
Mr. D. L. Good, Technical Analyst III

The following summarizes the items discussed.

1. Operability of Nuclear Safety Instruments. (Detail 14)
2. Reactor Protection System Channel Bypass Key. (Detail 5)
3. Design Change Control Procedure. (Detail 15)

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DETAILS

1. Persons Contacted

Discussions were held with the following persons either onsite or at the Corporate Headquarters during the conduct of the inspection activities documented in this report.

Mr. R. O. Barely, Engineer II
Ms. R. S. Brown, Technical Analyst III
Mr. J. J. Colitz, Unit No. 1 Superintendent
Mr. P. Chalecki, Control Room Operator (in-training)
Mr. D. L. Good, Technical Analyst III
Mr. R. A. Klingaman, Manager Generation Engineering
Mr. G. A. Kunder, Supervisor, Station Operations
Mr. S. Lehigh, Instrument Man, Nuclear
Mr. J. P. O'Hanlon, Engineer, Senior I
Mr. V. Orlandi, Lead I and C Engineer
Mr. R. H. Porter, Shift Supervisor (SRO)
Mr. W. Potter, QC Engineer
Mr. D. Reich, Instrument Man, Nuclear
Mr. M. J. Ross, Shift Supervisor (SRO)
Mr. M. A. Shatto, Engineer, Associate I
Mr. W. J. Sawyer, Assistant Supervisor, Maintenance
Mr. D. M. Shoveling, Maintenance Supervisor
Mr. J. Smith, Shift Foreman (SRO)
Mr. P. Tinnes, Instrument Man, Nuclear

2. Limits on Reactor Building Pressure While Critical

The inspector reviewed SP 1301-1 Surveillance Records for Shift and Daily Checks for the months of July, August and September to verify that the Reactor Building Pressure limit of 2.0 psig or 1.0 psi vacuum with the reactor critical (T.S. 3.6.4) was maintained.

The inspector also reviewed Operating Procedure 1102-2 "Plant Startup" to determine if that procedure provided for assuring that reactor building pressure is within the above limits prior to criticality.

The inspector found no inadequacies in this area.

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3. High and Low Pressure Injection Analog Channel Test

The inspector reviewed Surveillance Procedure 1303-4.11, Rev. 8 dated 8/12/75. This procedure is used to implement the monthly test required by Technical Specification 4.1-1, item 17. The three Reactor Coolant Channels are tested by applying an analog voltage signal to the pressure trip bistables and verifying that the voltage required to trip them corresponds to pressure trip points of 1540 to 1550 psig and 540 to 550 psig. Technical Specification 3.5.3.1 requires these setpoints to be, respectively 1500 psig and 500 psig, or greater.

The inspector reviewed the surveillance records for SP 1303-4.11 which were performed on 7/8/75, 8/6/75 and 9/5/75. The data sheets indicated that the procedure was completed at the required frequency (monthly), and that the pressure setpoints were in accordance with T.S. 3.5.3.1.

The inspector found no inadequacies in this area.

4. Reactor Building Spray Actuation Setpoint

The inspector reviewed Surveillance Procedure 1302-5.11 "Reactor Building 30 psig Pressure Channel" which is used to adjust or check the Reactor Building Spray actuation setpoint to be less than or equal to 28.5 psig. Technical Specification 3.5.3.1 requires this value to be less than or equal to 30 psig. The inspector reviewed the surveillance records for SP 1302-5.11 which was performed on 1/15/74. These records are still applicable since the channel calibration is required each refueling period (T.S. 4.1-1 T21). This was the initial calibration and the pressure setpoint was set at 28.5 psig.

The inspector found no inadequacies in this area.

5. Reactor Protection System Channel Bypass Key

The inspector determined, by discussion with the licensee, that only one channel bypass key was in the control room in accordance with Technical Specification 3.5.1.2. Plant keys are kept in a key locker adjacent to the Shift Foreman's desk. This key locker is normally locked. When any key is removed, the person charged with

90012329

the key is entered on the key log. The inspector reviewed this log to verify that only one RPS Channel Bypass Key was checked out at any given time. The inspector also observed that only one such key was available in the key locker. By inspection and discussion, the inspector determined that the licensee scheduled RPS surveillance testing on a one channel per week basis and therefore the surveillance schedule aids in preventing any attempt to bypass two channels simultaneously.

The inspector found no inadequacies in this area.

6. Restriction on Reduction of Boron Concentration

Technical Specification 3.1.1.1b states, "The boron concentration in the reactor coolant system shall not be reduced unless at least one reactor coolant pump or one decay heat removal pump is circulating reactor coolant." The inspector reviewed SP 1301-1 Shift and Daily Checks and determined that all of the Reactor Coolant Pumps were shutdown from 9/27/75 to 9/30/75. By discussion with the licensee and review of the Shift Foreman's log the inspector determined that Decay Heat Removal System Loop B was placed in service at the time the last Reactor Coolant Pump was shutdown and that loop B continued to operate until the RCPs were placed in operation.

The inspector found no inadequacies in this area.

7. Reactor Coolant Leakage Limitation

The inspector reviewed Surveillance Procedure 1303-3.1 Rev. 5, 10/14/75 "Reactor Coolant System Leak Rate" which is performed daily to implement Technical Specification 4.1-2T11. The acceptance criteria for total Reactor Coolant Leakage is less than or equal to 10 gpm. The inspector reviewed the SP 1303-1.1 data sheets for July, August and September of 1975 and verified that the calculated total reactor coolant leakage did not exceed the 10 gpm value of T.S. 3.1.6.1 at any time.

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In addition, the inspector observed that, during September 1975, a negative reactor coolant leakage was computed in all cases where the calculated total losses plus leakage from the primary system were less than 2 gpm. Linear extrapolation of the least squares fit of the computed data values correlated to an unidentified in-leakage of 1.5 gpm to the reactor coolant system. However, the mean value of unidentified leakage rate times the total time period of measurement (45 hrs) indicated a measured total of unidentified in-leakage of about 12 gallons. The licensee stated that this was within the expected accuracy limitations of the measurements involved.

The inspector had no further questions in this area.

8. Shift and Daily Checks-Core Flood Tank Pressures

The inspector reviewed SP 1301-1, "Shift and Daily Checks", surveillance records for September and October 1975. These data sheets are used to document implementation of Technical Specification 4.1-1 T25.a which requires a check of Core Flood Tank Pressure Channels every shift. Recorded values are compared against an acceptance criteria in SP 1301-1 which states in part "...within normal expected range." The inspector observed that for all shifts the values recorded were acceptable.

The inspector had no further questions on this item.

9. Shift and Daily Checks-Reactor Coolant Pressure/Temperature Comparator

The inspector reviewed SP 1301-1, Shift and Daily Checks, surveillance records for July and August 1975. These data sheets are used to document implementation of Technical Specification 4.1-1T11 which requires a check of the RC Pressure/Temperature Comparator Channel every shift. The recorded values are compared against an acceptance criteria in SP 1301-1 which states in part, "...within normal expected range...". The inspector observed that for all shifts the recorded values were acceptable.

The inspector found no inadequacies in this area.

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10. Reactor Protection System Surveillance Procedure

The inspector reviewed Surveillance Procedure 1303-4.1 Rev. 15, 9/24/75 which is used to implement the Technical Specification requirements for monthly channel tests on the following channels.

- a. Reactor Coolant Temperature. (TS 4.1-1T7)
- b. High Reactor Coolant Pressure. (TS 4.1-1T8)
- c. Reactor Coolant Pressure Temperature Comparator. (TS 4.1-1T11)

The inspector witnessed the performance of this test on the instrument associated with RPS channel D. The inspector noted that the test was performed per the procedure.

The inspector reviewed the Data Sheets for SP 1303-4.1 for the tests performed in July, August and September of 1975. The inspector noted that each RPS Channel was tested each month and that therefore the instrument channels listed above were tested each month per the requirements of T.S. 4.1-1.

The inspector expressed concern to the licensee that there were several examples where the "as left" value of the recorded Digital Voltmeter (DVM) readings were not entered on the Data Sheet. Since the "as found" values were within Technical Specification and Administrative Limits, the "as left" values should have been the same as the "as found" values in these cases, and it appeared that the blanks indicated a failure to record an unchanged value. The licensee stated that more detailed completion of Data Sheets had been emphasized to the technicians. The inspector reviewed data sheets for 1303-4.1 completed in October 1975 and noted that "as left" values had been completed, therefore, verifying effectiveness of licensee corrective action.

The inspector had no further questions in this matter.

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11. Variable Low Coolant Pressure Trip Setpoint

The inspector reviewed SP 1303-4.1, "Reactor Protection System Surveillance," which is used to check and/or adjust the Variable Low Coolant Pressure Trip Setpoint at a value greater than or equal to the requirements of T.S. 2.3-1T6. (16.25T out-7756). Procedure 1303-4.1 Section 6.8.5 verifies that at a Reactor Coolant Outlet temperature of 590°F the pressure trip setpoint is greater than or equal to 1831.5 psig and at a temperature of 604°F the setpoint is greater than or equal to 2059 psig. The procedure steps perform this verification by inputting to the trip bistable the voltage value corresponding to the temperature listed above and then decreasing the voltage input which simulates a decreasing reactor pressure until the bistable trips. The trip voltage is then recorded and compared to licensee determined voltages which correspond to the pressure values listed above.

The inspector reviewed those Data Sheet 6, items 4 and 7 of SP 1303-4.1 which were completed in July, August and September of 1975 for each pressure and verified that the "as found" Variable Low Coolant Pressure Setpoint based on an analog input voltage was greater than required by T.S. 2.3-1T6. The inspector noted that for Data Sheet 6 step 6, completed on 7/22/75, the analog voltage used to simulate reactor temperature was recorded as -0.084, however, the required accuracy is +0.0002. The licensee stated that the value should have been recorded as -0.0840 and that Data Sheet 6 of SP 1303-4.1 had been revised on 8/22/75 to state this more clearly.

The inspector had no further questions in this area. .

12. Nuclear Overpower Trip Setting

The inspector reviewed the following procedures which are used by the licensee to implement Technical Specification 2.3-1T1, Nuclear Power Trip Setting of 105.5%. SP 1303-4.1, "Reactor Protection System Surveillance," is performed monthly on each RPS Channel. Section 6.5.8 of that procedure verifies that the High Flux trip bistable is set at less than or equal to 105.5% and adjust the trip setting to be 104.75%. SP 1302-1.1, Power Range Amplifier Calibration, is performed on a minimum of twice weekly and is used to adjust the output of the power range amplifier to a value equal to core power as determined by a heat balance calculation. The power range amplifier provides the analog input to the High Flux trip bistable and therefore, the calibration of this amplifier is necessary to the accuracy of the Nuclear Overpower Trip Setting.

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POOR ORIGINAL

The inspector reviewed the surveillance records for SP 1303-4.1 and SP 1302-1.1 for the period of July, August and September of 1975. This review indicated that the nuclear overpower trip setting was maintained at less than 105.5%. The inspector had the following comment on these surveillance records.

- a. RPS surveillance test SP 1303-4.1 was performed 12 times during July, August and September of 1975. The inspector reviewed Data Sheet 3 for each of these surveillance tests to determine that the High Flux Bistable was set at less than or equal to 105.5%. The inspector noted that, on two occasions on the 7/22/75 Surveillance of RPS Channel C, and on the 9/24/75 Surveillance of RPS Channel D, the instrument technician neglected to enter the High Flux bistable input voltage at the trip points as required by the procedure.

A power range channel consists of two neutron detectors (an upper and a lower), each having a linear amplifier and a summing amplifier which provides an output proportional to core power. This output provides indication of core power and input to the high flux bistable. The trip point of this bistable is established by first setting the test input voltage to one of the neutron detector linear amplifiers at a given value and then increasing the test input voltage to the other linear amplifier until the bistable trips. This test input value is then compared against a voltage criterion which corresponds to the 105.5% overpower trip setting. The procedure requires that the voltage to the bistable also be recorded and compared against a voltage criterion which also corresponds to the 105.5% overpower trip setting. The licensee stated that recording of the bistable input was a "backup" to the previously recorded value of the input to the linear amplifier and therefore, since that value had been recorded, the bistable trip was in compliance with T.S. 2.1-1T1 (105.5% overpower trip).

Technical Specification 6.2.3 states in part: "Written procedures shall be strictly adhered to in all matters relating to nuclear safety." Contrary to this Technical Specification, the requirements of SP 1303-4.1 Data Sheet 3, item 3, were not adhered on two occasions 7/22/75 and 9/24/75.

This item is an example of a Deficiency.

90012334

b. SP 1302-1.1, "Power Range Amplifier Calibration" was performed 264 times in July, August and September of 1975. The inspector reviewed the data sheets associated with the performance of each of these tests and had the following comments.

(1) The instructions included on Data Sheet 1 of SP 1302-1.1 differs from procedural step 6.1.2. The procedure requires recalibration of the power range channel if the computer read out of neutron power differs from the heat balance calculation of core power by more than 1%, or if the console indication of neutron power differs by more than 2% from the same calculation of core power. However, the Data Sheet specifies "and/or" for those two conditions.

This is an unresolved item.

(2) The inspector noted that, for SP 1302-1.1 Data Sheet No. 1 dated 8/7/75, power range channel NI-7 computer readout value was 1.277% above the core power determined by heat balance. Contrary to step 6.1.2 of SP 1302-1.1 the power range channel was not recalibrated. Since the power range channel indicated greater than core power this conservative deviation affectively lowered the nuclear overpower trip setting. However, failure to recalibrate the channel is contrary to Technical Specification 6.2.3 which requires strict adherence to written procedures, and such failure with non-conservative deviations could lead to failure to meet Limiting Safety System Settings.

This item is an example of a Deficiency.

(3) Data sheet 3 of SP 1302-1.1 is used to document Power Range Channel values following recalibration. The inspector noted that the Core Thermal Power entry on Data Sheet 3 is not followed by a blank. This apparently contributed to the operators failure to enter the core thermal power value following all of the six amplifier recalibrations performed in July, August and September of 1975. The licensee stated that such a blank would be added to the sheet.

This item is unresolved.

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13. Reactor Building Pressure Trip Setpoint

The inspector reviewed Surveillance Procedure 1302-4.13, "Reactor Building Emergency Cooling and Isolation System Analog Channels," which is used to check and/or adjust the setpoints for the Reactor Building high pressure trip points. The test verifies or adjusts the setpoints to a value of 2.4 psig to 2.6 psig by using an analog test input voltage to the bistable. This voltage corresponds to the voltage signal received from the pressure transmitter. Technical Specification 2.3-1T8 requires a Reactor Building High Pressure Setpoint of less than or equal to 4 psig. The inspector reviewed the surveillance records for SP 1302-4.13 for tests performed on 7/1/75, 8/6/75 and 9/4/75 and verified that the "as found" setpoints were within the requirements of SP 1302-4.13 and therefore less than the 4 psig requirements of T.S. 2.3-1T8.

The inspector found no inadequacies in this area.

14. Operability of Safety Instrumentation

The inspector reviewed Operating Procedure 1102-2 to verify it implemented the operational requirements imposed by Technical Specification 3.5.1.1 on the following instrument channels.

- a. Reactor Building 30 Psig (Reactor Building Spray) Instrument Channel.
- b. Reactor Building 4 Psig (Low Pressure Injection) Instrument Channel.
- c. Reactor Coolant Pressure (Low Pressure Injection) Instrument Channel.
- d. Manual Pushbutton, High Pressure Injection Logic Channels.
- e. Reactor Building 4 Psig (High Pressure Injection) Instrument Channels.
- f. Power/number of pumps Instrument Channels.
- g. Flux/imbalance/flow Instrument Channels.

90012536

POOR ORIGINAL

- h. Reactor Coolant Temperature Instrument Channels.
- i. Power Range Instrument Channels.
- j. Intermediate Range Instrument Channel.
- k. Source Range Instrument Channel.

OP-1102-2 contained a "Precritical Check List," which included a specific signoff for each of the above items. This signoff indicated that the appropriate Surveillance Test had been performed successfully in the required number of channels prior to startup. This implements Technical Specification 1.3 which defines "Operable" and states in part "...tested periodically in accordance with Specification 4 and has met its performance requirements."

During this review the inspector noted that item 22A of the Precritical Check List references by number surveillance procedures which are not consistent with the presently used procedure number. For example, item 22A lists Pressure Temperature surveillance procedure as SP 1303-4.8. The correct reference is Section 6.8.5 of SP 1303-4.1. The licensee stated that procedure numbers would be reviewed and corrected for this checklist.

This is an unresolved item.

15. Design Change Control Procedure

The inspector reviewed GP 1003, Rev. 2, 7/22/75, "Control of Design Change/Modification" which the licensee uses to implement the requirement of Technical Specification 6.1.1.2.b.2 and 6.1.1.2.b.3.

To provide implementation with 6.1.1.2.b.2 GP-1003 (pg. 3) specifically requires a "safety evaluation" to determine if the proposed change would constitute an unreviewed safety question or change to the Technical Specification. The inspector toured the Technical Support Staff offices and verified procedure GP-1003 was available for the case of the Technical Support staff.

90012537

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Technical Specification 6.1.1.2.b.3 requires that Corporate Technical Support Staff specify any tests that must be performed following plant change or modification. To determine if T.S. 6.1.1.2.b.3 was implemented, the inspector reviewed all Change/Modification (C/M) packages of all 27 C/M's approved by the Manager, Generation Engineering during July, August, September and October of 1975. Each C/M package contains a C/M Design Checklist GPF 1003.002, Rev. 2 dated 7/22/75, which the Cognizant Engineer assigned to review the C/M completes. Item 21 of that checklist is a signoff that testing requirements were reviewed and included in C/M approval when required. The inspector expressed concern that the C/M checklist was not with the C/M package at the site. Also with the exception of 6 of the 24 C/M's reviewed, no specific mention was made in the C/M approval memo that testing requirements had been reviewed. The licensee stated that a memo was written on 11/10/75 to Generation Engineering Personnel from the Manager, Generation Engineering, requiring that all approved memos for Change/Modifications would specifically mention that review of Test/Retest requirements had been made and detail the results of that review.

The inspector had no further questions on this item. It will, however, be subsequently reviewed as a part of the routine inspection program.

16. Previously Unresolved Items

a. Resolved Items

The following items identified in Report 50-289/75-14 were examined and resolved.

(1) Reactor Containment System Leak Rate (Ref: Detail 8.a)

SP 1303-1.1, Revision 5, 10/14/75, has been issued. DVM traceability is provided by recording of model and serial number, providing a reference to calibration records. The inspector had no further questions on this item.

90012338

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(2) Incore Neutron Detectors (Ref: Detail 8.e)

SP 1301-5.3, Revision 3, 10/22/75, has been issued. DVM traceability is provided by recording model and serial number. The inspector had no further questions on this item.

(3) Power Range Amplifier (Ref: Detail 8.f)

SP 1302-1.1, Revision 6, 10/20/75, has been issued. DVM traceability is provided by recording model and serial number. The inspector had no further questions on this item.

(4) Main Steam Isolation Valves (Ref: Detail 8.h)

SP 1303-4.17, Rev. 2, 10/8/75, has been issued. Step 6 calls for stationing an Auxiliary Operator at the valve to verify that it is 100% open, to listen for abnormalities, and to verify that the valve moves the required 10% and goes back open. The inspector had no further questions on this item.

(5) Station Batteries (Ref: Detail 8.k)

SP 1301-4.6, Revision 2, 9/10/75, has been issued. DVM model, serial and calibration data are required to be recorded. The inspector had no further questions on this item.

(6) Reactor Building Emergency Cooling and Isolation System Analog Channels (Ref: Detail 8.n)

SP 1301-4.13, Revision 4, 10/20/75 has been issued. Licensee review was accomplished. Step 6.2.7 now specifies resetting of the bistable, reference to a QA procedure in step 6.3.2.e was considered unnecessary and deleted, and step 6.3.9 was considered satisfactory. DVM data providing traceability is required to be recorded. The inspector had no further questions on this item.

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POOR ORIGINAL

(7) Tests and Experiments (Ref: Detail 7.d)

The licensee stated that the present procedure had been evaluated with regard to T.S. 6.1.C.3 which requires safety evaluations in accordance with 10 CFR 50.59 for tests and experiments and that any test or experiment performed would require Special Operating Procedure, Temporary Change Notice or a Permanent Change Notice prior to their performance. All of the above must be reviewed and approved by the PORC and Unit Superintendent. The inspector had no further questions on this item.

(8) AO 75-19 (Ref: Detail 10.d.(3))

The inspector reviewed RPS surveillance for Variable Reactor Coolant Pressure Trip Setpoints for July, August and September of 1975. There was no further indication of setpoint drift and all tests indicated that setpoints were within procedural and Technical Specification limits. The inspector had no further questions on this item.

(9) AO 75-18 (Ref: Detail 10.d.(8))

The inspector reviewed TMI Unit No. 1 Stores Procedure No. 1, "Procurement." The purpose section of this procedure states in part: "...establish administrative controls and requirements related to the requisitioning of material, equipment or outside technical services...". The inspector had no further questions on this item.

(10) PORC (Ref: Detail 13.b)

The inspector reviewed Technical Specification Change Request No. 5, Amendment No. 3, transmitted to the NRC by licensee letter GQL 1579 dated October 3, 1975. The inspector had no further questions on this item.

90012340

(11) Borated Water Storage Tank (Ref: Detail 8.p)

SP 1301-4.4, Rev. 2, 9/12/75, has been issued. Step No. 5 now references CP 1912, Determination of Boron. The purpose of the procedure now includes a phrase, "Boron Concentration requirements of T.S. 3.3.1.1a only." The licensee stated that the water volume and temperature specification of T.S. 3.3.1.1a are addressed in other appropriate procedures. The inspector verified that this requirement was included in the Plant Startup Procedure 1102-2. The inspector had no further questions on this item.

b. Items Still Unresolved

The following items, identified in Report 50289/75-14 were examined and remain unresolved.

(1) Turbine Overspeed Testing (Ref: Detail 8.g)

DVM traceability is not yet provided in SP 1303-11.19.

(2) Transmittal of Safety Evaluations to General Office Review Board (Ref: Detail 7.c)

The inspector reviewed AP 1001, Rev. 3 of March 7, 1975. Section 3.6.3.4, discusses the Nuclear Safety/Environmental Impact Evaluations of procedure revisions and changes and also requires (Line 5) that such evaluations be sent to the GORB. The inspector reviewed a Procedure-Change Request (PCR) to AP 1016, Section 7.2.2 which has been entered for approval. This change will require that safety evaluations transmitted with C/M's will be sent to the GORB. Issuance of the change to AP 1016 will resolve this item.

17. Noncompliance Resolution

The inspector reviewed the status of the following noncompliances from inspection 50-289/75-14.

90012341

POOR ORIGINAL

a. Recording Information on AO's (Ref: Detail 3.a)

The licensee's response to this citation identified logging of the item in question and emphasizing to personnel of the responsibilities in logging abnormal occurrences. Inspector review of the Control Room Log Book during this inspection showed written emphasis upon entering AO's in the Control Room Log on the part of the operations supervisor. The inspector had no further questions on this item.

b. Log Book Review (Ref: Detail 3.b)

Instances of documentation of log book review by the Operations Supervisor was noted in the Control Room Log Book by the inspector. Draft Revision 4 of AP 1012 specifically requires Operations Supervisor documentation of review of the Control Room Log Book. This item is unresolved pending revision of AP 1012.

c. Jumper Log Review (Ref: Detail 3.c)

Review of Jumper/Lifted Loads-Mechanical Modification Log Book 37 identified no Shift Foreman failures to initial entries since the citation for this noncompliance. However, two instances of failure to identify the "installer" in the column recorded for entries on October 16, 1975 for Jumper Tags 11 and 14 were identified. Generic corrective action adequacy for ensuring that this log provides the necessary data is, consequently, unresolved.

d. Record Keeping File Custodian (Ref: Detail 4.c)

GP 4407, Revision 0, 10/17/75, Regulatory Retention and Storage of Quality Control Department Records, designates the Administrative Assistant-Quality Control as records custodian. This item is resolved.

e. Engineering Drawing Control (Ref: Detail 5.b)

The licensee's memo GEM 3321 of 9/29/75, GQL 1507 TMI-1, concerning TMI-1 NRC Inspection 75-14 documented the committed licensee review of 20 drawings with 1 deficiency identified and reaudit scheduled in June 1976. The inspector had no further questions on this item.

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