

U. S. ATOMIC ENERGY COMMISSION  
DIRECTORATE OF REGULATORY OPERATIONS  
REGION I

RO Inspection Report No: 50-289/74-29

Docket No: 50-289

Licensee: Metropolitan Edison Company

License No: DPR-50

Three Mile Island Unit 1

Priority: \_\_\_\_\_

Category: B-2

Location: Middletown, Pennsylvania

Type of Licensee: PWR 871 MWe (B&W)

Type of Inspection: Routine, Announced

Dates of Inspection: August 13-16, 1974

Dates of Previous Inspection: July 11, 12, 16 and 17, 1974

Reporting Inspector: R. L. Spessard

R. L. Spessard, Reactor Inspector

9/6/74  
Date

Accompanying Inspectors: NONE

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

Other Accompanying Personnel: NONE

\_\_\_\_\_  
Date

Reviewed By: A. B. Davis

1566 298

A. B. Davis, Senior Reactor Inspector  
Reactor Operations Branch

9/6/74  
Date

7911110 043

SUMMARY OF FINDINGS

Enforcement Action

A. Violations

Contrary to the requirements of 10 CFR 50, Appendix B, Criterion XII and the licensee's QA Plan for Startup and Test, Section XII, a Brush Recorder used during the Generator Trip Test and other earlier Initial Startup Tests had not been properly controlled and recalibrated at the specified frequency. (Details, Paragraph 3.e)

B. Safety

None Identified

Licensee Action on Previously Identified Enforcement Items

- A. The licensee's corrective action as specified in his letter of response dated July 5, 1974 to the violations identified in RO:I letter dated June 12, 1974 and Report 50-289/74-23 was reviewed during this inspection and a previous inspection. These items are closed. (Details, Paragraph 6.a&b)
- B. The licensee's corrective action as specified in his letter of response dated July 15, 1974 to the violations identified in RO:I letter dated June 21, 1974 and Report 50-289/74-25 was reviewed during this inspection and a previous inspection. These items are closed. (Details, Paragraph 6.c&d)

Design Changes

A. Turbine Trip Test at 100% rated power (TP 800/14)

In accordance with the provisions of 10 CFR 50.59 and the Technical Specifications, the licensee intends to delete this test from the Initial Startup Test Program. (Details, Paragraph 5)

Unusual Occurrences

None Identified

Other Significant Findings

1566 299

A. Current

1. Significant personnel changes have occurred in the Met Ed site organization. (Details, Paragraph 2)

2. The Generator Trip Test from 100% rated power was performed during this RO inspection, and this test was witnessed by RO:I. Following this test, the plant was cooled down to begin a 2 week scheduled maintenance outage. (Details, Paragraph 3)
  3. Initial startup testing through the 76% FP plateau has been completed, and the data has been evaluated and accepted by the licensee. RO:I review of this data and the licensee's evaluation disclosed no deficiencies. (Details, Paragraph 4)
  4. Initial startup testing at the 100% FP plateau has been completed with the exception of a few tests that are to be completed at 100% FP steady state conditions; however, the data has not been reviewed and accepted by the licensee. RO:I review of a part of this data disclosed no major deficiencies relative to demonstration of the desired performance criteria and/or predicted performance. (Details, Paragraph 4)
  5. Licensee action on previously identified open items was reviewed, and several of these items were closed. (Details, Paragraph 6.e-h)
- B. Status of Previously Reported Unresolved Items

Not inspected.

Management Interview

An exit interview was held onsite on August 16, 1974 at the conclusion of the inspection with Mr. J. Herbein, Station Superintendent and Mr. J. Colitz, Unit Superintendent. The following summarizes the items discussed:

- A. The Generator Trip Test including the apparent violation. (Details, Paragraph 3)
- B. Initial Startup Test results (Details, Paragraph 4)
- C. Deletion of the Turbine Trip Test at 100% rated power from the Initial Startup Test Program. (Details, Paragraph 5)
- D. Licensee action on previously identified enforcement and open items. (Details, Paragraph 6)

1566 300

DETAILS

1. Persons Contacted

Metropolitan Edison Company

Mr. J. Herbein, Station Superintendent  
Mr. J. Colitz, Unit Superintendent  
Mr. J. O'Hanlon, Nuclear Engineer  
Mr. C. Hartman, Electrical Engineer  
Mr. B. Getty, Mechanical Engineer  
Mr. R. Harper, Instrument Foreman  
Mr. D. Shovlin, Supervisor of Maintenance  
Dr. T. Baer, Station Engineer (Acting Technical Supervisor, Chemistry)  
Mr. R. Miller, Test Coordinator  
Mr. W. Poyck, Staff Specialist  
Ms. C. Nixdorf, Office Supervisor  
Mr. J. Chwastyk, Shift Supervisor  
Mr. G. Wallace, Shift Supervisor  
Mr. M. Ross, Shift Supervisor  
Mr. B. Smith, Shift Foreman  
Mr. B. Mehler, Control Room Operator

General Public Utilities Service Corporation

Mr. J. Barton, Startup and Test Manager  
Mr. G. Miller, Test Superintendent  
Mr. R. Toole, Assistant Test Superintendent  
Mr. C. Gatto, Shift Test Engineer  
Mr. I. Porter, Shift Test Engineer  
Mr. S. Poje, Shift Test Engineer  
Mr. T. Hawkins, Shift Test Engineer

Babcock and Wilcox Nuclear Services

Mr. W. Raymond, Shift Data Analyst

2. Personnel Changes

A licensee representative informed the inspector of the following changes in the site organization:

- a. Mr. J. Colitz, formerly Station Engineer, was promoted to Unit Superintendent on August 1, 1974.
- b. Mr. K. Beale, formerly Radiation Protection Foreman, was promoted to Radiation Protection Supervisor on August 1, 1974.

- c. Mr. G. Miller, presently GPU Test Superintendent, has been hired as Unit Superintendent to become effective when Unit I is declared commercial.
- d. Dr. T. Baer, presently Station Engineer and Acting Technical Supervisor, Chemistry, has been promoted to a position in the Met Ed corporate office to become effective on or about September 1, 1974.

3. Inspector's Witnessing of the Generator Trip Test

During this RO inspection the inspector witnessed the preparation for and the conduct of the Generator Trip Test (TP 800/34) which occurred on August 13, 1974. The following items represent areas observed and specific comments concerning them.

- a. Correct procedure and revision in use: The Official Field Copy of TP 800/34 had all revisions included.
- b. Minimum crew requirements: The normal shift complement supplemented by an additional Control Room Operator performed the test. Additionally, a second shift supervisor was present to assist if required. Personnel required to operate data recorders, as specified in TP 800/34, were at their assigned stations. Representatives from GAI were present to make steam hammer transient measurements during the trip and to inspect the results of transient loading on piping and supports due to the trip.
- c. Test prerequisites met: The inspector observed that the plant was operating at 98% of rated power (TP 800/34 requirement was 100% + 0%, -5% of rated power) and that the other prerequisites in Sections 4 and 7 of TP 800/34 were signed off prior to test performance.
- d. Proper plant systems in service: The inspector observed that reactor coolant pressure control was in automatic controlling pressure at 2155±25 psig and that the narrow range pressure channel input to the pressurizer spray valve, electromatic relief valve, and heater control circuit was the one hooked up to the brush recorder and reactimeter. Additionally, the inspector observed that the other prerequisite system conditions in Section 8 of TP 800/34 were signed off prior to test performance.
- e. Special Test equipment: The inspector observed that the reactimeter, 3 brush recorders and a multipoint recorder, as re-

1566 302

quired by TP 800/34, plus 5 brush recorders to monitor the Integrated Control System (ICS) were present and that the input signals required by TP 800/34 were connected and identified.

Control of this test equipment in accordance with the requirements of Test Instruction No. 19 (TI-19) was reviewed on a sampling basis by the inspector. This instruction requires in part that test equipment used during initial startup testing be calibrated and recalibrated at specified frequencies in accordance with Quality Control Procedures QC-13 and QC-13-2 and that on the first working day of each month the user and Quality Control be notified of the test equipment which requires recalibration during that month. The calibration label attached to each brush recorder (TI-19 requirement) was observed by the inspector. This observation revealed that one of the three brush recorders required by TP 800/34, designated brush recorder No. 1, had not been recalibrated on or before its calibration due date as required by TI-19. This recorder had been calibrated on December 27, 1973 and the calibration due date was June 27, 1974. According to licensee representatives this recorder had also been used on several other initial startup tests. The inspector also observed that one of the five brush recorders monitoring ICS response, which was not a part of this test, had also not been recalibrated within the required frequency.

The inspector observed that each brush recorder had been field calibrated (each input channel was subjected to known input voltages to verify alignment) by Met Ed instrument personnel; however, this calibration technique did not meet the full requirements of TI-19, e. g. calibration of time response. The licensee representative indicated that this type of calibration was done each time a brush recorder was to be used. Prior to test performance and in the presence of the inspector, the representatives performed a comparison check of time response between brush recorder No. 1 and No. 2 (required by TP 800/34), and they determined the time response of the recorders to be essentially the same. The representatives determined that brush recorder No. 1 was suitable for use, and a recalibration of this recorder pursuant to TI-19 was planned following test performance. According to the representatives, the results of the recalibration will be evaluated to assure that data obtained by this recorder is valid.

Failure to properly control and recalibrate at the specified frequency brush recorder No. 1 is an apparent violation of 10 CFR 50, Appendix B, Criterion XII which states in part, "Measures shall be established to assure...instruments...used in activities affecting quality are controlled, calibrated, and adjusted at specified periods to maintain accuracy within necessary limits." This is also an

1566 303

apparent violation of the licensee's QA Plan for Startup and Test, Section XII, which states in part, "Test equipment used during...startup tests is controlled and calibrated in accordance with TI-19."

- f. Transient test data equipment calibration to a common time base: The inspector observed that all recorders were to be started by a common switch and common event markers were available for time correlation. Additionally, a final check of recorders and signal response was made before the countdown began to initiate the test.
- g. Test performed as required by procedure: The test was observed to be performed in accordance with the test procedure which included portions of the plant emergency procedure for load rejection and in accordance with Emergency Procedure EP 1202-3 Turbine Trip.
- h. Crew response: Crew actions appeared to be correct and timely during the performance of the test. About four seconds following the generator trip, a reactor trip/turbine trip occurred as a result of high reactor coolant pressure. The plant is designed to withstand a 100% load rejection without a reactor trip; however, this condition was recognized by the crew, and EP 1202-3 Turbine Trip was followed along with the applicable portions of TP 800/34 to control plant conditions.
- i. Quick summary analysis made to assure proper plant response to the test: Following the generator trip, the main turbine control valves and intercept valves closed and the main turbine bypass valves and the main steam safety valves opened. Reactor run-back was initiated; however, the reactor tripped which initiated a turbine trip. This resulted in closure of the main and intermediate turbine stop valves. The reactor coolant pressure/temperature relationship, pressurizer level, steam generator levels, main steam pressure, and feedwater temperature were controlled within limits. The turbine did not exceed overspeed limits.
- j. All data is collected for final analysis by the proper personnel: Required recorder traces and data sheets were obtained and evaluation of the results was initiated.
- k. Test results indicate acceptance criteria has been met: Reactor coolant pressure was observed by the inspector to stay within

1566 304

the protection system envelope (Technical Specification Figure 2.3-1) while the reactor was operating, and a reactor trip was initiated by channels A and C when the reactor coolant high pressure trip set point (2355 psig) was reached. The maximum pressures recorded ranged between 2320-2350 psig. The minimum pressures recorded ranged between 1700-1750 psig and occurred about 68 seconds after the reactor trip. Reactor coolant pressure was returned to normal operating conditions about 10 minutes after the test was initiated.

A review of the raw test data indicated that the test acceptance criteria had been met or that where deviations occurred these could be justified on the basis of a reactor trip/turbine trip occurring. The turbine overspeed limit (1980 rpm) was not exceeded; maximum speed recorded was 1885 rpm and the speed was decreasing when the turbine trip occurred. No fission product activity increase was observed in the reactor coolant following the test.

4. Inspector's Review of Initial Startup Test Data

a. Detailed Review

The inspector conducted a detailed review of the completed/partially completed procedures (Official Field Copy) listed below. Additionally, the Partial Test Summary for these tests, as accepted by the licensee, was also reviewed and is listed below, where appropriate. No deficiencies were identified, and the inspector's review included the following: Data sheets available and completed (at least 10% sampling basis); raw data converted to test data; test exceptions and deficiencies identified; corrective action performed; acceptance criteria verified by licensee; test analysis reviewed by the appropriate persons; and inspector's verification that test results demonstrate the desired performance criteria and/or predicted results. Additionally, TWG Meeting minutes for the period August 1-9, 1974 (Meetings 123-126) were reviewed.

(1) TP 800/2 Nuclear Instrumentation Calibration at Power

Test is complete and included testing at the 76% and 100% FP test plateaus. Additionally, a Partial Test Summary for the 76% FP test plateau was approved by the licensee prior to power escalation to the next higher test plateau. Final review and acceptance of test data by the licensee was not completed, and this remains as an open item.

1566 305



(2) TP 800/5 Reactivity Coefficients at Power

Test is complete and included testing at the 76% and 100% FP test plateaus. Additionally, a Partial Test Summary for the 76% FP test plateau was approved by the licensee prior to power escalation to the next higher test plateau. On the basis of testing at Oconne 2 and at TMI-1 (40% FP test data), B&W provided new design values for the Power Doppler coefficient for 76% and 100% FP (TCN-1 to T1 800/5 dated July 26, 1974). Data obtained indicated close agreement with the new design values of -8.5 PCM/% FP at 76% FP and -7.3 PCM/% FP at 100% FP and met the acceptance criteria. The Temperature Coefficient was determined to be -2.51 PCM/°F at 76% FP (1120 ppm Reactor Coolant boron concentration) and -3.29 PCM/°F at 100% FP (1092 ppm Reactor Coolant boron concentration), and these values met the acceptance criteria. Final review and acceptance of test data by the licensee was not completed, and this remains as an open item.

(3) TP 800/11 Core Power Distribution

Test is complete and included testing at the 76% and 100% FP test plateaus. Additionally, a Partial Test Summary for the 76% FP test plateau was approved by the licensee prior to power escalation to the next higher test plateau. Final review and acceptance of test data by the licensee was not completed, and this remains as an open item.

(4) TP 800/18 Power Imbalance Detector Correlation Test

Test is complete and the results were accepted by the licensee prior to power escalation from the 76% to the 100% FP test plateau.

(5) TP 800/20 Rod Reactivity Worth Measurement

Test is complete and included testing at the 76% and 100% FP test plateaus. Additionally, a Partial Test Summary for the 76% FP test plateau was approved by the licensee prior to power escalation to the next higher test plateau. Final review and acceptance of test data by the licensee was not completed, and this remains as an open item.

(6) TP 800/21 Unit Startup and Power Escalation Test

Test is partially complete and included testing from 76% to 100% FP. Additionally, a Partial Test Summary for the 76%

FP test plateau was approved by the licensee prior to power escalation to the next higher test plateau. The inspector also verified the following by review of plant records and discussions with licensee representatives:

- (a) Licensee evaluated the data obtained at the 76% FP test plateau and authorized operation at the next higher power level.
- (b) Licensee reset the high flux trips as required by TP 800/21 prior to power escalation to the next higher test plateau.
- (c) Licensee performed core and plant surveys to assure safe operation during the increase of power level and arrival at the new power level.
- (d) Licensee determined control rod configuration and necessary boron concentration prior to increasing power above 80% FP and positioned the control rods during escalation to 100% FP in order to meet control rod withdrawal limits of Technical Specification Figure 3.5-2A.
- (e) Licensee verified operability of incore detectors prior to escalation above 80% FP as required by Technical Specification 3.5.4.
- (f) Licensee performed a reactivity balance prior to escalation above 80% FP to verify the shutdown margin met Technical Specification 3.5.2.1.
- (g) Licensee verified xenon reactivity met Technical Specification 3.5.2.5.c prior to escalation above 82.5% FP.
- (h) Licensee adjusted and calibrated the Reactor Protection System Flow Summer in accordance with Work Request No. 3409 during escalation from 80% to 100% FP, as required by the TWG for power escalation testing above 76% FP.

Final review and acceptance of test data by the licensee was not completed (test has not been completed), and this remains as an open item.

b. Verification

The inspector verified by review of the Official Field Copy of the completed test procedure or the partially completed test procedure with corresponding Partial Test Summary, as appropriate and by review TWG Meeting minutes that the test results for the procedures listed below had been evaluated by the licensee and that he had determined them to be acceptable and/or had taken proper corrective action on non-acceptable findings. No deficiencies were identified, and the inspector's observations are included, where appropriate.

(1) TP 500/3 Initial Radiochemistry Test

Test is complete and included testing from 76% to 100% FP. Additionally, a Partial Test Summary for the 76% FP test plateau was approved by the licensee prior to power escalation to the next higher test plateau. Final review and acceptance of test data by the licensee was not completed, and this remains as an open item.

(2) TP 800/8 ICS Tuning at Power

Test is complete and included testing from 76% to 100% FP. Additionally, a Partial Test Summary for the 76% FP test plateau was approved by the licensee prior to power escalation to the next higher test plateau. Final review and acceptance of test data by the licensee was not completed, and this remains as an open item.

(3) TP 800/14 Turbine/Reactor Trip

Test is partially complete. Test results for the Turbine Trip at 30% FP (Report 50-289/74-28, Details 3.b.(2)(b)) were reviewed and determined to be acceptable by the licensee; however, the results were not approved because a Main Steam Safety Valve (MS-V17D) lifted below its setpoint (1050±10.5 psig). Prior to this test all of these valves had been checked and reset in accordance with TP 271/4 Main and Auxiliary Steam System Functional Test because of premature lifting experienced during the Reactor Trip at 40% (Report 50-289/74-28, Details 2.a.). The results of TP 271/4 which included resetting of valve MS-V17D (after the Turbine Trip at 30% FP) were approved by the licensee. The cause of the premature lift is still being reviewed by the licensee, and this item remains open pending final resolution by the licensee. The licensee concluded on the basis of testing (Reactor Trip at 40% FP, Turbine Trips at 30% and 76% FP,

and retesting per TP 271/4) that conditions were safe for increasing reactor power from 76% to 100% FP.

(4) TP 800/23 Unit Load Transient Test

Testing at the 76% FP test plateau was not completed prior to escalation to the 100% FP test plateau because of power reduction caused by condenser leakage and generator bearing vibration. For these reasons and on the basis of satisfactory performance of the ICS, the licensee approved the postponing of this testing until after completion of steady state testing at 100% FP and rescheduled this testing in conjunction with the transient testing to be done at the 100% FP test plateau. Test is complete; however, final review and acceptance of test data by the licensee was not completed, and this remains as an open item.

(5) TP 800/31 Pseudo Dropped Rod

Test is complete, and the results were accepted by the licensee prior to power escalation from the 76% to the 100% FP test plateau.

(6) TP 800/35 Effluent and Effluent Monitoring System Test

Test has not been conducted because insufficient radwaste activity (liquid and gas) had been generated to meet test prerequisites. The Partial Test Summary for the 76% FP test plateau was approved by the licensee on this basis prior to power escalation to the next higher test plateau. Completion of this test and acceptance of the results by the licensee remain as open items.

c. Other Test Results

The inspector observed during review of TWG Meeting minutes for the period August 1-9, 1974 (Meetings 123-126) and Official Field Copies of Partial Test Summaries for the 76% FP test plateau that the results of the tests listed below had been evaluated by the licensee prior to power escalation to the next higher test plateau. Additionally, results of completed tests that were accepted by the licensee are identified, as appropriate.

- (1) TP 800/7 Feed System Operation and Testing
- (2) TP 800/9 Turbine Generator Operation and Testing
- (3) TP 800/12 Unit Load Steady State Test
- (4) TP 800/24 Incore Detector Testing (test complete and results accepted by the licensee)
- (5) TP 800/30 Power Escalation Checkpoints

5. Design Change

The licensee's Power Escalation Test Program, as described in Table 13-4 of the FSAR, includes a reactor trip at 40% FP, turbine trips at 30% FP and 100% FP, and a Generator Trip at 100% FP. The licensee plans to delete the Turbine Trip at 100% FP from the Power Escalation Test Program pursuant to the requirements of 10 CFR 50.59.

The inspector reviewed the licensee's written initial safety evaluation for this design change, and he observed that this evaluation had been reviewed by the PORC pursuant to Technical Specification 6.1.1.1.d.2), had been approved by the Station Superintendent pursuant to Technical Specification 6.1.D.2, and had been sent to the Manager-Generation Engineering for review by the Met Ed Corporate Technical Support Staff pursuant to Technical Specification 6.1.1.2.b.1). Review by the Met Ed Corporate Technical Support Staff to verify that an unreviewed safety question was not involved had not been completed, and this remains as an open item.

The licensee's written safety evaluation included the following:

- a. Consequences Related to Plant Safety - Plant response to various planned system transients (reactor trip at 40% FP and turbine trip at 30% FP) and unplanned system transients (reactor trip at 100% FP and turbine trip at 76% FP) was reviewed and determined to be acceptable. Additionally, data obtained for turbine trips at 30% and 76% FP was extrapolated to 100% FP, and the projected response of safety related parameters was determined to be acceptable. The planned generator trip at 100% FP was viewed by the licensee as providing additional assurance of the unit's ability to withstand transients.
- b. Comparison of Turbine and Generator Trip - Plant response (safety related parameters) to either trip was determined to be the same due to plant design with the exception of the potential for turbine overspeed following a generator trip. The planned generator trip at 100% FP was viewed by the licensee as accomplishing the same requirements as a turbine trip at 100% FP plus demonstrating the turbine does not overspeed.

6. Licensee Action on Previously Identified Enforcement and Open Items

- a. Daily Reactor Coolant System leakage evaluations not performed

Reference: (1) RO:I letter dated June 12, 1974 and Report 50-289/74-23, Details 10.

(2) Met Ed letter dated July 5, 1974

1566 310

Based on a review of facility records and discussions with licensee representatives, the inspector determined that licensed personnel had been reinstructed concerning this requirement by the Supervisor of Operations and that more strict administrative control of surveillance test documentation had been achieved. During a review of completed surveillance tests (1303-1.1) for the period June 1 - August 13, 1974, the inspector observed that this test was being conducted on each shift (3 times per day), whereas Technical Specification Table 4.1-2 specifies a daily test. This item is closed.

- b. Improper change made to an initial startup procedure (TP 330/5)

Reference: (1) RO:I letter dated June 12, 1974 and Report 50-289/74-23, Details 20.

(2) Met Ed letter dated July 5, 1974

Based on a review of facility records and discussions with licensee representatives, the inspector determined that Met Ed operations and GPU test personnel had been reinstructed on the proper method of affecting procedure changes by the Station Superintendent and the GPU Assistant Test Superintendent. Additionally, Superintendent's Operation Memo No. 17, dated June 3, 1974 stressed the requirements concerning procedures and procedure changes.

The preparation, approval, issuance and use of TCN-2 to TP 330/5 was reviewed during a previous RO inspection (Report 50-289/74-25, Details 3.b.(1) (c)).

The licensee had not prepared a procedure for repatching control rods from one group to another. According to a licensee representative, this procedure is to be prepared, approved and issued prior to performing the next scheduled repatch of the control rods and is to be similar to TCN-2 to TP 330/5. The control rods have not been repatched since the completion of TP 330/5, and therefore a procedure has not been required.

This item is closed; however, the issuance of a procedure for repatching control rods will be verified during a subsequent RO inspection.

- c. Superseded procedures used to align safety related systems during preparations for initial criticality

1566 311

Reference: (1) RO:I letter dated June 21, 1974 and Report 50-289/74-25, Details 13.e.(1) and (2).  
(2) Met Ed letter dated July 15, 1974

The actions taken by the licensee prior to beginning the approach to initial criticality were reviewed during a previous RO inspection (Report 50-289/74-25, Details 13.e)

To avoid future violations of this type, the licensee issued Operations Memo No. 27 which defined responsibilities for maintaining the procedure files and reiterated the importance of assuring only current procedures are used. This memo also requires weekly audit of these files. The inspector observed the current procedure index was kept with the procedure files in the Control Room, and an audit of these files (20 procedures involving safety related systems selected at random) by the inspector disclosed no deficiencies. According to licensee representatives, these files are being continually maintained as revised procedures are issued and the audits are being accomplished more frequently than weekly.

This item is closed.

- d. Procedure containing unauthorized changes used to align a safety related system during preparations for initial criticality

Reference: (1) RO:I letter dated June 21, 1974 and Report 50-289/74-25, Details 13.e.(3).  
(2) Met Ed letter dated July 15, 1974

The actions taken by the licensee prior to beginning the approach to initial criticality were reviewed during a previous RO inspection (Report 50-289/74-25, Details 13.e)

Licensee records indicated that the TCN requested had been approved on May 24, 1974; however, due to a backlog of administrative work at that time the TCN had not been issued. A permanent change request (PCR 74-105), which covered the changes involved, was approved and issued on July 1, 1974.

Based on discussions with licensee representatives, the inspector determined that shift supervisors and reactor operators were instructed on the proper method of making changes to procedures by the Supervisor of Operations.

This items is closed.

1566 312

- e. Licensee guidance to employees on practices to be followed in evaluating a reactor coolant leak

Reference: (1) Report 50-289/74-23, Details 17

The inspector reviewed plant records and had discussions with licensee representatives to determine what action had been taken by the licensee since this item was brought to his attention. The inspector observed the following actions had been taken:

- (1) The PORC (Meeting 233) recommended to the Station Superintendent that when reactor coolant leakage is identified evaluations be made by the Shift Supervisor and one of the following - Station Superintendent, Station Engineer or Supervisor of Operations and that the evaluation be documented in the Shift Supervisor's Log Book. The Station Superintendent accepted the PORC's recommendation and had this guidance instituted. The inspector observed the documentation of one such evaluation and had no questions on this matter.
- (2) Chemistry Standing Order 13 was issued which requires technicians to inspect designated areas at specified frequencies for reactor coolant leakage, to report leakage identified to the Shift Supervisor, and to document the leakage in the Chemistry Supervisor's Log Book.
- (3) Excessive reactor coolant leakage identified during the performance Surveillance Procedure 1301-1.1 (Daily Leak Rate Evaluation) is investigated, evaluated, and documented in accordance with this procedure. Additionally, the results of these tests are reviewed and evaluated in the same manner as other surveillance test results, ie. in accordance with AP 1010.

This item is closed.

- f. Fluid Block System

References: (1) Report 50-289/74-18, Details 3.a.(6)  
(2) Report 50-289/74-23, Details 7.b.(2)

The licensee submitted FSAR Amendments 48 and 49 dated May 15, 1974 and August 1, 1974, respectively, to update the description of this system based on results obtained during preoperational testing.

This item is closed.

1566 313



g. Reactor Building Fan Motor Malfunction

Reference: Report 50-289/74-18, Details 3.a.(7)

The third reactor building fan (AH-ElC) was returned to service on August 2, 1974. The motor was installed and post maintenance testing performed in accordance with a properly approved Work Request (WR 2718). The inspector observed that the post maintenance test requirements were consistent with the initial test requirements performed during preoperational testing (TP 250/2 Testing and Checking of Mechanical and Electrical Equipment) and that no deficiencies had been identified by the licensee during post maintenance testing.

This item is closed.

h. Apparent weakness in the licensee's document control system

Reference: Report 50-289/74-23, Details 8

The inspector had discussions with licensee representatives to determine what action had been taken by the licensee since this matter had been brought to his attention. The inspector was informed of the following:

- (1) The Aperature Card File had received a 100% review, had been updated following this review, and has been maintained current as drawing revisions are processed in accordance with AP 1001.
- (2) Each controlled print is audited every 3 months following receipt of the updated computer printout.
- (3) Priority attention has been given to prompt distribution of revised drawings and aperature cards in accordance with AP 1001.

Additionally, the inspector observed a package of updated drawings that had been recently received and was being processed for distribution. The inspector had no questions on this matter.

The inspector informed the licensee representatives that it appeared the licensee's system provided reasonable assurance that the latest approved drawing revisions would be promptly distributed. However, the inspector expressed concern about an apparent weakness in the licensee's program. For example, an approved plant modification could be made in accordance with a Problem Report (PR) or GAI Field Questionnaire (STQ), and in these cases a long period of time could elapse between completion of the modification and revision/distribution of the affected prints; therefore, during this

period of time, the as-built system would not be correctly described by the controlled prints. The inspector observed that this condition does not occur for approved plant modification made in accordance with a Field Change Request (FCR), as revised drawings are issued with the approved FCR.

The licensee representatives acknowledged the inspector's concern and indicated that it would be evaluated.

This matter is considered an open item.

1566 315