

NOTICE  
AS OF AUG 9 1976  
REGION I HAS NOT OBTAINED PROPRIETARY  
CLEARANCE IN ACCORDANCE WITH 10 CFR 27.40

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

IE Inspection Report No: <u>50-289/76-15</u>	Docket No: <u>50-289</u>
Licensee: <u>Metropolitan Edison Company</u>	License No: <u>DPR-50</u>
<u>P. O. Box 542</u>	Priority: _____
<u>Reading, Pennsylvania 19603</u>	Category: <u>C</u>
Location: <u>Three Mile Island 1, Middletown, Pennsylvania</u>	Safeguards Group: _____
Type of Licensee: <u>PWR, 2535; MWT, B&amp;W</u>	
Kind of Inspection: <u>Routine, Unannounced</u>	
Dates of Inspection: <u>July 7-9, 12-15, 1976</u>	
Dates of Previous Inspection: <u>June 14-16, 1976</u>	
Reporting Inspector: <u>William A. Hurd</u> R. O. Hurd, Reactor Inspector	<u>8/4/76</u> DATE
Accompanying Inspectors: <u>W. J. Lazarus</u> W. J. Lazarus, Reactor Inspector (July 8-9, 1976)	<u>8/4/76</u> DATE
	DATE
	DATE
Other Accompanying Personnel: <u>E. C. McCabe</u>	<u>8/6/76</u> DATE
E. C. McCabe, Section Chief, Nuclear Support Section No. 1, Reactor Operations and Nuclear Support Branch	
Reviewed By: <u>E. C. McCabe</u>	<u>8/6/76</u> DATE
E. C. McCabe, Section Chief, Nuclear Support Section No. 1, Reactor Operations and Nuclear Support Branch	

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329

## SUMMARY OF FINDINGS

### Enforcement Action

### Items of Noncompliance

### Infraction

Technical Specification 3.5.2.4.d requires the core power quadrant tilt to be monitored at a minimum frequency of two hours, when core power exceeds 15 percent of rated power.

Contrary to the above the core quadrant tilt was not monitored between 2303 on May 26, 1976 and 0120 on May 27, 1976 when the core power was above 15 percent of rated power. (Details, 2.a)

### Other Significant Findings

#### A. Current Findings

##### 1. Acceptable Areas

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

- a. Shift and Daily Checks. (Details, 2.b)
- b. Precritical Checklist. (Details, 3)
- c. Reactor Protection System Surveillance. (Details, 4)
- d. Reactor Building Pressure Setpoints. (Details, 5)
- e. Power Range Channel Calibration. (Details, 6)
- f. Reactor Building Spray Channels. (Details, 7)
- g. Sampling of Spent Fuel Pool Water. (Details, 8)
- h. Pressurizer Code Safety Valves Setpoint. (Details, 9)
- i. Operability of Steam Generators. (Details, 10)
- j. Heat Rate Limitation. (Details, 11)

1413 150

- k. Temperature Limit for Criticality. (Details, 12)
- l. Limits on Oxygen in Reactor Coolant. (Details, 13)
- m. Reactor Coolant Leakage. (Details, 14)
- n. Startup Rate Control Rod Hold. (Details, 15)
- o. Channel Bypass Key. (Details, 16)
- p. Verification of Core Power Distribution. (Details, 18)
- q. Pressure Injection Actuation Setpoints. (Details, 19)
- r. Containment Integrity Requirements. (Details, 20)
- s. Followup Review of Refueling and Containment Leak Rate Procedure. (Details, 21)
- t. Handling, Storage and Shipping Requirements. (Details, 22)
- u. System Modification. (Details, 24)
- v. Followup Review of Facility Procedures. (Details, 25)
- w. Status of Manual Containment Isolation Valves. (Details, 26)

2. Unresolved Items

These are items for which more information is required in order to determine whether the items are acceptable or Items of Noncompliance.

- a. Maintenance of Reactivity Plots. (Details, 17.a)
- b. Holding Times. (Details, 17.b)
- c. Reactor Building Purge System. (Details, 21)
- d. Preventive Maintenance-Lubrication. (Details, 23.b)

1413 151

3. Items of Noncompliance Identified by Licensee

Deficiency

Contrary to T.S. 6.8.1, Procedure AP 1016, Section 5.3.2 the required development of Preventive Maintenance Schedules was not accomplished for the first and second quarters of 1976. (Details, 23.a)

B. Status of Previous Unresolved Items

1. The following items have been resolved.
  - a. Checkoff Lists. (Details, 27.a)
  - b. Source Range Operability. (Details, 27.b)
  - c. Nuclear Overpower Trip Setting. (Details, 27.c)
  - d. Emergency Diesel Generator Monthly Test. (Details, 27.d)
  - e. OP 1102-2, Plant Startup. (Details, 27.e)
  - f. Temporary Change Notices. (Details, 27.f)
2. The following item remains unresolved.

Corporate Technical Staff Review. (Details, 27.g)

Management Interview

An exit meeting was held onsite on July 15, 1976 at the conclusion of the inspection to discuss the findings of the inspection as detailed in this report.

The following licensee personnel were in attendance:

Mr. J. J. Colitz, Unit No. 1 Superintendent  
Mr. J. P. O'Hanlon, Senior Engineer  
Mr. R. E. Nedig, QC Specialist

1413 152

## DETAILS

### 1. Persons Contacted

Discussions were held with the following persons during the conduct of the inspection activities documented in this report:

Ms. D. Bedair, Clerk Junior  
Mr. M. L. Beers, Shift Supervisor  
Mr. D. J. Boltz, Shift Foreman  
Mr. T. L. Book, Shift Foreman  
Mr. J. J. Colitz, Unit No. 1 Superintendent  
Mr. W. E. Daniels, QC Engineer  
Mr. D. L. Good, Technical Analyst III  
Mr. D. Harper, Instrument Foreman  
Mr. J. Hilbish, Nuclear Engineer  
Mr. G. A. Kunder, Operations Supervisor  
Mr. D. McGettrick, I and C Engineer  
Mr. R. Menser, Instrument Technician  
Mr. H. Mitchell, Electrical Maintenance Supervisor  
Ms. C. Nixdorf, Office Supervisor  
Mr. L. G. Noll, Shift Foreman  
Mr. J. P. O'Hanlon, Engineer, Senior I  
Mr. M. A. Shatto, Engineer, Associate I  
Mr. J. Smith, Maintenance Engineer  
Ms. R. Troutman, Maintenance Engineer  
Mr. G. Wallace, Shift Supervisor

### 2. Shift and Daily Checks

The inspector reviewed the data sheets for SP 1301-1, Shift and Daily Checks performed in April, May and June of 1976. The purpose of this review was to verify that compliance with the Technical Specification requirements listed below was documented by completion and approval of the data sheets.

T.S. 4.1-1, Item 3, Daily Check of Power Range Amplifiers.

T.S. 4.1-1, Item 7, Shiftly Check of Reactor Coolant Temperature Channels.

T.S. 2.2.1, Limit on Reactor Coolant System Pressure of 2750 psig.

T.S. 3.5.2.4.a., b. and c, Limit on Core Power Quadrant Tilt of 4%.

1413 153

T.S. 3.5.2.4.d, Monitoring Quadrant Tilt every 2 hours.

T.S. 3.5-1, Item 2, Operability of Power Range Instrument.

T.S. 3.5-1, Item 6, Operability of Pressure - Temperature Channels.

T.S. 3.5-1, Item 2.a, Operability of LPI Reactor Coolant Pressure Channels.

T.S. 3.5-1, Item 3.a, Operability of Reactor Building Isolation Channels.

T.S. 3.5.2.5.d, Limit on Core Power Imbalance.

Based on the above review the inspector had the following findings.

a. Quadrant Tilt Monitoring

Technical Specification 3.5.2.4.d requires the core power quadrant tilt to be monitored at a minimum frequency of two hours, when core power exceeds 15 percent of rated power. Surveillance Procedure 1301-1, Shift and Daily Checks requires that, every two hours, the indicated level of each power range channel be recorded and the quadrant tilt be determined when above 15 percent power.

In addition, the licensee stated that the hourly computer log printout also records core quadrant tilt. The inspector determined, by review of the Shift Foreman's Log and the Station Daily Log, that the core power exceeded 15% between 2100 on May 26, 1976 and 0120 on May 27, 1976. The reactor tripped at 0120 on May 27, 1976. The SP 1301-1 data sheets for this period of time contained no entry for quadrant tilt. The inspector requested the hourly computer logs for this period. The licensee stated that, although the computer was operational, the only computer logs available for this period were at 2202 and 2303 on May 26, 1976. The inspector reviewed the logs and determined that the quadrant tilt had been monitored and did not exceed the limit of 4% at 2202 and 2303 on May 26, 1976. However, contrary to T.S. 3.5.2.4.d the core quadrant tilt was not monitored at a minimum frequency of 2 hours when the reactor power was above 15 percent of rated between 2303 on May 26, 1976 and 0120 on May 27, 1976. This is an Infraction.

1413 154

b. Other Areas Reviewed

With respect to the other areas reviewed under this item the inspector found no inadequacies.

3. Precritical Checklists

The inspector reviewed the "Precritical Checklist," OP 1102-2, Enclosure No. 1 completed prior to the reactor startup of May 24, 1976. The purpose of this review was to verify that compliance with the Technical Specification requirements listed below was documented by a sign-off of a specific item in on the "Precritical Checklist."

T.S. 3.1.1.3.a, Operability of Pressurizer Code Safety Valves.

T.S. 3.3.1.1.b, Operability of HPI Pumps.

T.S. 3.3.1.2.b, Core Flood Tank Boron Concentration greater than 2270 ppm.

T.S. 3.3.1.2.c, Core Flood Tank Discharge Valves open and breakers tagged open.

T.S. 3.3.1.4.c, Operability of Decay Heat Cooling Water Pumps.

T.S. 3.5-1, Item 2, Operability of Power Range Instrument Channels.

T.S. 3.5-1, Item 6, Operability of Pressure - Temperature Instrument Channels.

T.S. 3.5-1, Item 1.c, Operability of HPI Manual Pushbuttons.

T.S. 3.5-1, Item 2.a, Operability of Reactor Coolant Pressure Instrument Channels.

T.S. 3.5-1, Item 3.a, Operability of Reactor Building Isolation Pressure Instrument Channels.

T.S. 3.7.1.a, Operability of ES Electrical Systems.

T.S. 3.7.1.b, c., and d, Operability of Unit Electrical Systems.

T.S. 3.7.1.e, Operability of Emergency Diesel Generators.

T.S. 3.7.1.f, Operability of Station Batteries and Chargers.

The inspector found no inadequacies in the above areas.

1413 155

4. Reactor Protection System Surveillance

The inspector reviewed the data sheets for SP 1303.4.1, Reactor Protection System Surveillance, for tests performed during May and June, 1976. The purpose of this review was to verify that compliance with the Technical Specification requirements listed below was documented by proper completion and approval of the data sheets.

T.S. 2.3-1, Item 5, Reactor Coolant Pressure low pressure setting greater than 1800 psig.

T.S. 4.1-1, Item 11, Monthly test of Reactor Coolant Pressure Temperature Comparator Instrument Channel.

The inspector found no inadequacies in the areas listed above.

5. Reactor Building Pressure Setpoints

The inspector reviewed the data sheets for SP 1303-4.13, Reactor Building Emergency Cooling and Isolation System Analog Channels performed May 20, 1976 and June 7, 1976. The purpose of this review was to verify that compliance with the Technical Specification requirements listed below was documented by proper completion and approval of the data sheet.

T.S. 2.3-1, Item 8, Reactor Building Pressure Trip Channel setpoint less than or equal to 4 psig.

T.S. 3.5.3.1, Reactor Building Pressure Channel Setpoint for Actuation of RB Cooling and Isolation less than or equal to 4 psig.

The inspector found no inadequacies in the areas listed above.

6. Power Range Channel Calibration

The inspector reviewed SP 1302-2.1, Power Imbalance Calibration, Revision 4, September 6, 1975 and TCN 76-219, which modifies SP 1302-2.1. The purpose section of this procedure states in part, "To verify that power imbalance calibration is in compliance with the requirements of T.S. 4.1-1, Item 4." The inspector also reviewed RP 1550-04, Power Imbalance Detector Correlation Test and the results of this procedure which was performed at 75% power during the initial power escalation following the refueling outage of February - May, 1976. The results of RP 1550-04 were used to determine the ratio of the core imbalance measured by the incore detectors to the out-of-core power range channel detectors. This ratio was incorporated into SP 1303-4.13 by TCN 76-219. In addition, the inspector reviewed the results of SP 1302-2.1 performed May 28, 1976, June 1, 1976,

1413 156



and June 13, 1976 to satisfy the requirements of T.S. 4.1-1, Item 4 to perform a monthly calibration of the power range channel imbalance.

The inspector found no inadequacies in this area.

7. Reactor Building Spray Channels

Technical Specification 4.1-1, Item 21 requires calibration of the Reactor Building Spray Channels at a refueling outage interval. The inspector reviewed SP 1302-5.11, Revision 2, September 5, 1975, Reactor Building Spray Channel Calibration and the completed data sheets for this procedure performed December 18, 1975. The licensee stated that SP 1302-5.11 was performed prior to the February, 1976 refueling outage to satisfy the requirements of T.S. 4.1-1, Item 21 and to conform to the, "not to exceed 27 month requirement" of T.S. 1.2.8. The performance of the surveillance test prior to the refueling outage had been previously inspected (refer to Inspection Report 75-11, Details, 4).

The inspector found no adequacies in this area.

8. Sampling of Spent Fuel Pool Water

The inspector reviewed SP 1301-5.7, Revision 0, October 18, 1973, Spent Fuel Pool Surveillance Procedure and the completed data sheets for this procedure performed monthly in April, May and June of 1976. The data sheets indicated that the Spent Fuel Pool Water boron concentration was greater than 2000 ppm during this period. T.S. 4.1-3, Item 4 requires that the concentration be maintained greater than 1800 ppm. The inspector found no inadequacies in this area.

9. Pressurizer Code Safety Valves Setpoint

The inspector reviewed SP 1303-11.2, Pressurizer Code Safety Valves Setpoint Verification which provides two methods to verify the set pressures. The procedure provides instructions and documentation for checking set pressure with the valve in place or using nitrogen pressure with the valve on a bench stand. The inspector reviewed data sheets of SP 1303-11.2 for the bench stand tests performed on valve RC-RV-1B (April 12, 1976) and valve RC-RV-1A (April 25, 1976).

The set pressures were within one percent of 2435 psig, the value given in the bases for T.S. 2.2. The inspector found no inadequacies in this area.

1413 157

10. Operability of Steam Generators

Technical Specification 3.1.1.2 requires that at least one steam generator be operable when the reactor coolant system temperature exceeded 250°F. The inspector verified that the following documentation indicated that this requirement was satisfied in April, May and June of 1976.

- a. OP 1102-1, Plant Heatup, Step 37, May 18, 1976.
- b. Shift Foreman's Log (April-June, 1976).
- c. SP 1301-1, Shift and Daily Check (April-June, 1976).

The inspector found no inadequacies in this area.

11. Heatup Rate Limitation

The inspector reviewed the recorder charts of the Reactor Coolant System temperature and pressure recorded during the plant heatup following the refueling outage. The plant heatup occurred from May 18, 1976 to May 21, 1976. The inspector compared this data against the limitations specified in T.S. 3.1.2.1, 3.1.2.3, 3.1.2.4 and Figure 3.1-1.

The inspector found no inadequacies in this area.

12. Temperature Limit for Criticality

Technical Specification 3.1.3.2 requires that the reactor coolant temperature be greater than 525°F whenever the reactor is made critical. The inspector reviewed the completed Precritical Checklists for the eight reactor startups which occurred between July 1, 1975 and June 30, 1976. The review of the documentation indicated that the Reactor Coolant System temperature exceeded 525°F each time the reactor was brought critical. The inspector found no inadequacies in this area.

13. Limits on Oxygen in Reactor Coolant System

The inspector reviewed the data sheets for SP 1301-3 which documented the results of reactor coolant analyses conducted during April, May and June of 1976. The data indicated that the oxygen concentration did not exceed 0.03 ppm during reactor operations.

Technical Specification 3.1.5.1 specifies a limit of 0.1 ppm during reactor operations. The inspector found no inadequacies in this area.

1413 158

14. Reactor Coolant Leakage

The inspector reviewed the Shift Foreman's Log and the data sheets of SP 1303-1.1, RC System Leak Rate Evaluation. The purpose of this review was to verify that the documentation indicated compliance with leak rate limitations of T.S. 3.1.6.3 (No leakage through a strength boundary) and T.S. 3.1.6.8 (Recoverable leakage greater than 30 ppm).

The inspector found no inadequacies in this area.

15. Startup Rate Control Rod Hold

Technical Specification 3.1.9.2 requires that the Startup Rate Control Rod Hold be operable during low power physics tests. The inspector verified that, prior to the performance of RP 1550-02, Zero Power Physics, on May 24, 1976 the following tests were performed demonstrating the operability of the Startup Rate Control Rod Hold of the source range and intermediate range nuclear instrumentation.

- a. SP 1303-7.2, Source Range Channel.
- b. SP 1303 7.1, Intermediate Range Channel.

The inspector also reviewed documentation relating to Section 6.5.7 of SP 1303-7.2 and Section 6.7.7 of SP 1303-7.1. This documentation indicated the Startup Rate Control Rod Hold feature of the source and intermediate range channels was operable. The inspector found no inadequacies in this area.

16. Channel Bypass Key

Technical Specification 3.5.1.2 requires that only one channel bypass key be available. The inspector reviewed the Key Log and inspected the key locker. This review and inspection indicated only one channel bypass key (key No. 13) was available. The inspector found no inadequacies in this area.

17. Power Cutoff Level

Technical Specification 3.5.2.5.c requires that the xenon reactivity be within 10% of equilibrium and asymptotically approaching stability before increasing power above the "cutoff level" defined by Figures 3.5-2A and 3.5-2B. The inspector reviewed OP 1102-2, Revision 14, May 22, 1976, Plant Startup, which provides instructions and documentation to the

1413 159

operation personnel for plant startup and power escalation to rated power. Section 2.3.2, Step 32, Part (10) of this procedure requires that, prior to exceeding 80% power, a plot of reactivity be made to determine compliance with T.S. 3.5.2.5.c and that the Control Room Operator or Shift Foreman initial this step indicating the requirements of T.S. 3.5.2.5.c are satisfied before exceeding the "cutoff level."

The inspector reviewed the records of OP 1102-2 completed for the eight plant startups which occurred between July, 1975 through June, 1976 and verified that Section 2.3.2, Step 32, Part (10) was properly initialed indicating compliance with the requirement of T.S. 3.5.2.5.c. The inspector had the following comments on this area.

a. Maintenance of Reactivity Plots

The reactivity plots developed in accordance with OP 1102-2, Section 2.3.2, Step 32, Part (10) are not required to be maintained. The inspector expressed concern that, since these plots are used to determine that the requirements of T.S. 3.5.2.5.c are satisfied prior to exceeding the power "cutoff level," they should be required to be maintained at the site. The licensee stated that OP 1102-2 would be revised to include this requirement. This item is unresolved pending completion of the revision to OP 1102-2.

b. Holding Times

The inspector noted that OP 1102-2, Section 2.3.2, Step 32, Part (11) referenced a Figure 9 which had been deleted. The licensee stated this figure was no longer required and was applicable only to the previous fuel cycle, and that OP 1102-2 would be revised to delete the reference to Figure 9 and holding times. This item is unresolved pending completion of the revision to OP 1102-2.

The inspector had no further questions concerning this area.

18. Verification of Core Power Distribution

Technical Specification 3.5.2.7 requires that the core power distribution be recorded every ten days during power operation. The inspector reviewed SP 1301-9.8, Revision 0, February 1, 1974, Core Power Distribution, which provides the instruction and documentation for compliance with T.S. 3.5.2.7. SP 1301-9.8 (Including TCN-221) requires obtaining computer printout of the following:

1413 160

- a. Core Thermal Heat Balance.
- b. Three Dimensional Power Map.
- c. Individual Fuel Assembly Power (MW).
- d. Ratio of Fuel Assembly Power to Average Assembly Power (Radial Power Factor).

The analysis of the data includes comparison of Radial Power Factor to predicted values, determination of maximum heat generation rate and comparison of heat generation rates to Technical Specification limits. The inspector reviewed the data sheets for SP 1301-9.8 performed since completion of the refueling outage. The inspector found no inadequacies in this area.

19. Pressure Injection Actuation Setpoints

The inspector reviewed SP 1303-4.11, Revision 10, June 17, 1976, High and Low Pressure Injection Analog Channels and the completed data sheets for this procedure performed May 9, 1976 and June 4, 1976. The purpose of this review was to verify that the actuation setpoints were greater than 1500 psig and 500 psig as required by T.S. 3.5.3.1. The inspector determined that setpoint were within the range specified by the procedure, ie., 1540 to 1550 psig and 540 to 550 psig. The inspector found no inadequacies in this area.

20. Containment Integrity Requirements

Technical Specification 3.6.3 requires containment integrity to exist prior to rod movement or boron dilution which might reduce shutdown margin to less than 1% Dk/k. The inspector reviewed OP 1102-1, Plant Heatup to 525°F and OP 1101-3, Containment, to determine that the requirements of T.S. 3.6.3 were contained in these procedures. The inspector also reviewed the documentation for 1101-3 completed May 17, 1976 which indicated that containment integrity was established prior to taking Reactor Coolant temperature and pressure above 300 psig and 200°F, or prior to any rod withdrawal or any boron dilution. The inspector found no inadequacies in this area.

21. Reactor Building Purge System

Technical Specification 3.8.9 requires that the Reactor Building Purge System, including the radiation monitors which actuate purge isolation, be tested and verified to be operable within one week prior to refueling operations. The inspector reviewed the following plant procedures relating to this requirement.

1413 161

- a. RP 1505-1, Core Assembly.
- b. RP 1505-2, Defueling.
- c. SP 1303-10.1, Reactor Building Purge System Surveillance Test.
- d. SP 1303-4.15, Radiation Monitor Monthly Surveillance Tests.

The inspector also reviewed the documentation for performance of the above procedures during the refueling outage of February 21, 1976 to May 27, 1976. Based on this review the inspector determined that the surveillance records for SP 1303-10.1 and SP 1303-4.15 and the signoffs of Items 13 in RP 1505-1 and Item 15 of RP 1505-2 indicated compliance with T.S. 3.8.9 prior to initiation of core defueling on March 3, 1976 and core assembly on April 24, 1976. The inspector expressed concern that the specific surveillance procedure which was performed was not listed in RP 1505-1, Item 13 and RP 1505-2, Item 15.

The inspector also noted that SP 1303-10.1 did not require specific documentation for return of the radiation monitor setpoint to the normal level. The licensee acknowledged the above comments and stated appropriate revisions would be made to RP 1505-1, RP 1505-2 and SP 1303-10.1. This item is unresolved pending completion of those revisions.

21. Followup Review of Refueling and Containment Leak Rate Procedure

The inspector reviewed the status of procedures discussed in Inspection Report 76-06, Details 2 and 8, to verify that any changes made to procedures in the period March 19 to June 30, 1976 were made and reviewed and approved in accordance with T.S. 6.8.1.

The inspector also reviewed the document control forms and verified the procedure maintain in the control room and document files were the latest revisions. Procedures reviewed follow.

- a. RP 1505-1, Revision 0, February 22, 1976, Core Assembly.
- b. RP 1501-2, Revision 1, April 19, 1976, Core Defueling.
- c. SP 1303-6.1, Revision 2, January 16, 1976, Reactor Building ILRT.
- d. SP 1303-11.18, Revision 6, January 26, 1976, Building Local Leak Rate Testing.
- e. SP 1303-11.23, Revision 0, January 26, 1976, Fluid Block System.
- f. SP 1303-11.24, Revision 0, Local Leakage Penetration Pressurization.

The inspector found no inadequacies in this area.

1413 162

22. Handling, Storage and Shipping Requirements

The inspector reviewed the following Purchase Order files to verify that completion of the Receiving Checklist/Inspection Report, GPF 4003.002 indicated compliance with the requirements of FSAR Appendix 1A, Operational Quality Assurance Plan, Section 12, Control of Purchased Material, Equipment and Services.

- a. P.O. 18329, Pump Bearings for WD Pumps, March 10, 1976.
- b. P.O. 18809, Seals, Etc. for Reactor Building, November 18, 1975.
- c. P.O. 20080, Vent Valve Parts, December 3, 1975.
- d. P.O. 20838, CRD Miscellaneous Parts, March 15, 1976.
- e. P.O. 13715, Main Steam Isolation Valve Jog Switch, May 3, 1975.

The inspector found no inadequacies in this area.

23. Preventive Maintenance

FSAR Appendix 1A, Section 8.2 requires that procedures be prepared, reviewed and approved for control of station maintenance. To verify that such procedures were available and in use the inspector reviewed the plant procedures and documentation records listed below.

- a. AP 1001, Document Control.
- b. AP 1016, Implementation and Control of Station Maintenance and Modification.
- c. Work Request 13322, Preventive Maintenance completed June 29, 1976 in Radiation Monitors.
- d. Work Request 15865, Lubrication completed June 29, 1976 on Control Building Chilled Water System Compressor AH-C-4A.
- e. E-2, Procedure used to "megger" Decay Heat Water Pump Motors.

Based on review of the above items and subsequent discussions with cognizant licensee personnel the inspector had the following findings.

1413 163

a. Preventive Maintenance Schedules

Preventive maintenance schedules are required to be developed quarterly by Section 5.3.2 of AP 1016. Contrary to this requirement the schedules were not developed for the first and second quarter of 1976. Failure to follow the requirements of AP 1016 is contrary to T.S. 6.8.1 which requires the implementation of approved procedures. This Deficiency was identified in G.D. Audit 76-09, performed by licensee quality control personnel during the period June 14-21, 1976.

The licensee's actions to correct this Item of Noncompliance and to prevent its recurrence were in progress consistent with the requirements of the OQA Plan. No inadequacies were identified with corrective action, and no response to this item is required.

b. Preventive Maintenance - Lubrication

The licensee stated that the present lubrication program performed was not controlled by AP 1016. Inspector review of this area indicated that the lubrication was scheduled by a maintenance engineer. The inspector selected seven items for which the engineer had request lubrication work be performed in May and June to determine the status of this work. Of the seven items, one had been completed, five were awaiting completion of writing the procedure prior to the work request being assigned, and one item had not had the work request initiated. The inspector expressed concern that the present lubrication control scheme was not effective because there was no "loop closing" in that the engineer who requested the work did follow up to verify completion in a timely manner.

Further the inspector questioned the practice of not including the control of lubrication under AP 1016. FSAR Appendix 1A, Section 8.2 specifically defines lubrication as preventive maintenance. The licensee stated that this area would be reviewed. This item is unresolved.

24. System Modifications

The inspector selected ten station design changes made during May and June of 1976. The inspector verified, by review of the completed work request packages for this item, that the documentation indicated that the changes were inspected and tested in accordance with the Generation Engineering approved procedures. The documentation also indicated the test results were within the prescribed acceptance criteria. The inspector found no inadequacies in this area.

1413 164



25. Follow-Up Review of Facility Procedures

The inspector reviewed the status of facility procedures discussed in NRC Inspection Report 76-11, Details, 4-16, to verify that any changes made to procedures in the period May 7 - June 31, 1976, including temporary changes, were made and reviewed and approved in accordance with Technical Specifications and the licensee's administrative procedures. The inspector also reviewed control room copies of the procedures which had been changed to verify that they were the most recent revision. The following revised procedures were reviewed.

- a. 1102-1, Plant Heatup to 525°F, Revision 16, June 1, 1976.
- b. 1102-2, Plant Startup, Revision 15, June 1, 1976.
- c. 1102-4, Power Operation, Revision 13, May 22, 1976.
- d. 1103-2, Reactor Coolant Fill and Vent, Revision 13, May 10, 1976.
- e. 1302-3.1, R.M.S. Quarterly Calibration, Revision 15, June 4, 1976.
- f. 1202-31, Fire Emergency Procedure, Revision 2, June 1, 1976.

Based on this review, no inadequacies were noted.

26. Status of Manual Containment Isolation Valves

The inspector reviewed the valve checklist from Procedure 1101-3, Containment Integrity and Access Limits. It indicated that a valve lineup of manual containment isolation valves was completed satisfactorily on May 17, 1976 near the end of the refueling outage. The checklist was properly reviewed by a shift supervisor.

The inspector had no further questions in this area.

27. Previously Unresolved Items

a. Check Off Lists

Reference: Report 50-289/76-11, Details, 17.b

The reference report identified several instances in which valve check lists and startup check lists were filled out and signed by the same individual without review and approval by another individual. The inspector reviewed the most recent checklists

1413 165

for the procedures identified in NRC Report 76-11, Details, 17.b and noted that those checklists completed since that inspection have been reviewed by a licensed operator.

This item is resolved.

b. Source Range Operability

Reference: a. Report 50-289/76-03, Details, 2.b.  
b. Report 50-289/76-12, Details, 12.a.

The inspector reviewed SP 1303-7.2, Revision 3, May 27, 1976 and verified that Item 6.2.3 had been expanded to include documentation of recalibration data. This item is resolved.

c. Nuclear Overpower Trip Setting

Reference: a. Report 50-289/76-03, Details, 4.b.  
b. Report 50-289/76-12, Details, 12.b.

The inspector reviewed OP 1102-11, Revision 11, June 23, 1976 and OP 1102-1, Revision 16, June 15, 1976 and determined that the procedures required resetting of the overpower trip setting during plant heatup and cooldown per OP 1105-2, Appendix I.

The inspector reviewed OP 1105-2, Revision 5, June 27, 1976 and verified that Appendix I of that procedure provides instructions and documentation for this activity. This item is resolved.

d. Emergency Diesel Generator Monthly Test

Reference: a. Report 50-289/76-09, Details, 10.  
b. Report 50-289/76-12, Details, 12.f.

The inspector reviewed the data sheet for SP 1303-4.16, Revision 10, June 10, 1976 and verified that changes made to this data sheet indicate revised temperature limits. This item is resolved.

e. OP 1102-2, Plant Startup

Reference: Report 50-289, Details, 7.

The inspector reviewed Enclosure No. 1 to OP 1102-2, Revision 15, June 17, 1976 and verified that appropriate corrections had been made to Page 39. This item is resolved.

1413 166

f. Temporary Change Notices (TCNs)

Reference: a. Report 50-289/76-06, Details, 5.

The inspector reviewed several TCNs during the course of this inspection. The inspector was able to trace the changes in the procedure to TCNs which were attached to the procedure in all cases. This item is resolved.

g. Corporate Technical Support Staff Review

Reference: a. Report 50-289/76-09, Details, 17.  
b. Report 50-289/76-12, Details, 12.g.

The inspector determined by review of memoranda from the Manager, Generation Engineering, to the Unit No. 1 Superintendent that for PCRs implemented during January and February of 1976 PCRs 75-524, 75-496, 75-468, 75-457, 75-493, 75-543, 75-538, 75-480, 75-492, 76-018, 76-098, 76-129, 76-065, 76-104 and 76-105 have not been reviewed by the CTSS as required by T.S. 6.5.2.A.2.a. This item remains unresolved.

1413 167