U. S. NUCLEAR REGULATORY COMMISSION Region I

Report No. 50-309/82-08

Docket No. 50-309

License No. DPR-36

Priority --

Category C

Licensee: Maine Yankee Atomic Power Company

83 Edison Drive

Augusta, Maine 04336

Facility Name: Maine Yankee Nuclear Power Station

Inspection At: Wiscasset, Maine

Inspectors:

Inspection Conducted:

P. Swetland, Reactor Inspector

May 4 - June 7, 1982

date signed

signed

Approved By:

. Gallo, Chief, Reactor Projects Section No. 1A, DPRP

Inspection Summary: Inspection on May 4 - June 7, 1982 (Report No. 50-309/82-08) Areas Inspected: Routine, regular and backshift inspection by the resident inspector (105 hours). Areas inspected included the Control Room, Turbine Building, Primary Auxiliary Building, Spray Building, Auxiliary Feed Pump Room and other licensee controlled areas as required. Activities/Records inspected included Plant Operations, Radiation Protection, Physical Security, Maintenance and Surveillance Testing, Followup on Previous Inspection Findings, Followup on Licensee Event Reports, Licensee Organization and Administration, Independent Review and Audit Activities, and Corrective Actions.

<u>Results</u>: Of the nine areas inspected, no violations were identified in seven areas and four violations (Failure to barricade and post High Radiation Areas, detail 3.d; Failure to perform an adequate radiation survey, detail 3.d; Failure to review 10 CFR 50.59 safety evaluations, detail 9.c; and Failure to correct and prevent recurrence of identified audit program deficiencies, detail 9.c) were identified in the remaining areas.

DETAILS

1. Persons Contacted

- R. Arsenault, Operations Department Head
- D. Boynton, Reactor Engineer
- J. Brinkler, Technical Support Department Head
- R. Chase, Quality Assurance Coordinator
- G. Cochrane, Health Physics Supervisor
- J. Hebert, Director, Plant Engineering
- B. Hoyt, Security Supervisor
- R. Lawton, Director, Operational Quality Assurance
- W. Paine, Assistant to the Plant Manager
- R. Prouty, Maintenance Department Head
- E. Wood, Plant Manager
- A. Shepard, Yankee Atomic Electric Company
- D. Pike, Yankee Atomic Electric Company

The inspectors also interviewed several plant operators, technicians and members of the engineering and administrative staffs.

- 2. Followup on Previous Inspection Findings
 - a. (Closed) Violation (309/81-26-02) Failure to sample volume control tank (VCT) in accordance with procedure 7-204-1. The inspector verified that the procedure for sampling the VCT, CDP 304.1, Revision 3, had been revised to reflect the installed equipment, and that subsequent samples were performed in accordance with this procedure. Changes to the Final Safety Analysis Report and to plant drawings were initiated to reflect the system as-built configuration. The inspector had no further questions in this area.
 - (Open) Unresolved Item (309/81-06-01) Licensee to revise procedure b. 3-1-20 to include valve stroke time acceptance criteria. The inspector reviewed the revised surveillance procedure 3-1-20, Safeguards Valve Testing, Revision 13 and verified that acceptance criteria had been specified for containment isolation valve SA-A-138. The procedure had been changed to incorporate the requirements of the ASME Code. Section XI. The inspector reviewed these changes to verify that other valve testing steps also had appropriate acceptance criteria. The acceptable closure time for the main feedwater isolation valves was listed as 300 seconds. Since these valves are assumed to function in 30 seconds to isolate feedwater to steam generators during a main steam line break accident, the inspector questioned the applicability of the 300 second criteria. The valve actual trip time is approximately 15 seconds. This item remains open pending resolution of this discrepancy.

3. Review of Plant Operations - Plant Inspections

The inspector reviewed plant operation through direct observation throughout the reporting period. Except as noted below, conditions were found to be in compliance with the following licensee documents:

- -- Maine Yankee Technical Specifications
- -- Maine Yankee Technical Data Book
- -- Maine Yankee Fire Protection Program
- -- Maine Yankee Radiation Protection Program
- -- Maine Yankee Tagging Rules
- -- Administrative and Operating Procedures

a. Instrumentation

Control room process instruments were observed for correlation between channels and for conformance with Technical Specification requirements. No unacceptable conditions were identified.

b. Annunciator Alarms

The inspector observed various alarm conditions which had been received and acknowledged. These conditions were discussed with shift personnel who were knowledgeable of the alarms and actions required. Operator response was verified to be in accordance with procedure 2-100-1, Response to Panalarms, Revision 4, dated June 1979. During plant inspections, the inspector observed the condition of equipment associated with various alarms. No unacceptable conditions were identified.

c. Shift Manning

The operating shifts were observed to be staffed to meet the operating requirements of Technical Specifications, Section 5, both to the number and type of licenses. Control room and shift manning were observed to be in conformance with 10 CFR 50.54.

d. Radiation Protection Controls

Radiation Protection control areas were inspected. Radiation Work Permits in use were reviewed, and compliance with those documents, as to protective clothing and required monitoring instruments, was inspected. Proper posting and control of radiation and high radiation areas was reviewed in addition to verifying requirements for wearing of appropriate personnel monitoring devices.

(1) On May 11, 1982, during a tour of the Primary Auxiliary Building, the inspector found the normally locked door to the Degasifier Cubicle (EV-1 and 2) propped open with no barricade preventing access to the area. The posted High Radiation Area sign could not be seen since the sign on the door faced the adjacent wall. A rope barrier and High Radiation Area sign were found on the floor near the door. The inspector contacted the on-duty health physics (HP) technician who confirmed that the rope barrier was intended to control access to this High Radiation Area. The rope barrier and sign were replaced. The inspector reviewed the latest licensee survey of this area taken at 11:30 a.m., May 11. The highest recorded radiation level was 110 mrem per hour.

Access control and posting of High Radiation areas are required by 10 CFR 20.203 and Technical Specification (TS) 5.12. The inspector brought this violation to the attention of the Plant Shift Superintendent on May 11. At 12:15 p.m. May 12, the inspector again observed the Degasifier Cubicle Door and found that the temporary barrier and High Radiation Area sign had been posted over the doorway at eye level, creating a "visual barrier." The inspector notified the Plant Shift Superintendent that this eye level barrier did not meet the requirement for access control to High Radiation Areas.

In a subsequent discussion with the Radiation Control Section Head the licensee committed to take immediate corrective actions. Workers on this job were reinstructed not to remove radiation control barriers, but to bring difficulties posed by those barriers to the attention of their immediate supervisor and the on-duty HP personnel. The HP technicians were instructed to increase their surveillance of radiation controlled areas and were reminded that only HP personnel are allowed to move barricades. Radiation Area control procedures would be reemphasized in both the indoctrination and annual training programs. The inspector discussed this event with the Assistant Plant Manager on May 12. The inspector stated his concern that management attention to correct the violation of May 11 was less than adequate because a similar problem occurred on May 12, 1982.

(2) On June 3, 1982 the inspector observed the door to a High Radiation Area cubicle in the "RCA" storage area to be propped open and no other barrier was in place. The cubicle was unoccupied. The posted high radiation area sign could not be seen because it now faced the adjacent wall. The inspector called an HP technician to the scene. Two contractors entered the cubicle during this time without a radiation survey meter. They had departed the cubicle to get more tools and in the process had not removed their rubber shoe covers at the step-off pad as specified. With the HP technician present these workers again crossed the step-off pad without removing their shoe covers but were immediately corrected by the technician. The inspector reviewed Radiation Work Permit 82-06-21 which granted access to this area. The general area dose rates specified were 10-80 mrem per hour, consequently no High Radiation Area dose controls were specified. The HP technician stated that he had surveyed

the work area three times during the day. The normally locked cubicle door controls access to areas inside the cubicle with general area radiation dose rates up to 400 mrem/hr as recorded on a routine licensee survey conducted on May 31, 1982. In addition, this locked door controls access to a sump and pipe tunnel area containing the Waste Resin Storage Tank (TK85). Radiation dose rates in this infrequently-surveyed area exceed 1000 mrem/hr. The posted, maximum dose rate was 5000 mrem/hr. The work area in question did not include this sump area, although the propped-open door compromised its access control and posting. The inspector conducted an independent survey of the work area. Dose rates in excess of 100 mrem per hour were identified near the work area. Specifically, the worker passed through a 100 mrem per hour field entering and exiting the work area. Dose rate at their hands was 100 mrem per hour while that at their body was 95 mrem per hour. Other unbarricaded areas inside the cubicle also exceeded 100 mrem per hour, however, the workers may not have reasonably been expected to enter these areas. Two unshielded barrels containing activated reactor coolant system components were located near the work area and were at least partially responsible for the existing dose rates. The latest licensee survey of this area was dated May 31, 1982. It was not detailed enough to show the actual work area dose rates nor was it sufficient for reference to specify the proper personnel done rate controls in accordance with Technical Specification (1) 5.12 and HP procedure 9-1-10, Radiation Work Permits. The facts surrounding this event were brought to the attention of the Radiation Controls Supervisor and the Plant Manager on June 3, 1982.

Subsequent discussions between the licensee and NRC led to the following determinations:

- (a) On May 11 and on June 3, the licensee failed to post a High Radiation Area greater than 100 mrem per hour as required by TS 5.12.
- (b) On May 11 and 12, and on June 3, the licensee failed to barricade a High Radiation Area greater than 100 mrem per hour as required by TS 5.12.
- (c) On June 3, the licensee failed to lock, barricade and post a High Radiation Area greater than 1000 mrem per hour as required by TS 5.12.

Items (a), (b), and (c) collectively constitute a violation (309/82-08-01).

(d) The radiation survey used as a basis for RWP 82-06-21 did not control the dose of personnel granted access to this High Radiation Area and did not properly inform the workers of the specific radiological hazards in accordance with 10 CFR 19.12. This is contrary to 10 CFR 20.201(b) and HP procedure 9-1-10, and constitutes a violation. (309/82-08-02)

- (e) The workers' nonconformance to step-off pad requirements were addressed by the licensee as follows:
 - Proper methods are taught in indoctrination training and in annual regualification.
 - (2) The workers involved and others supplied by the same contractor will be retrained including demonstrated practical training prior to June 11, 1982.
 - (3) All personnel onsite were reminded of their responsibilicy for conformance to plant procedures and of the possible disciplinary action that will result should these events recur.
 - (4) The licensee will revise procedure 9-1-4, Use of Protective Clothing, to include the step-off pad procedures.

This item is unresolved pending completion of the corrective actions. (309/82-08-03)

(f) The location of barrels containing highly radioactive material close to a work area does not conform to the principles of as low as reasonably achieveable (ALARA). The barrels could have been moved or shielded such that their dose contribution to the job exposure was minimized. The licensee committed to re-evaluate HP training and procedures and implement corrective actions to insure conformance to the ALARA principles prior to the October 1982 refueling outage. In the interim, HP technicians have been advised of the indequacies which resulted in this event and have been directed to insure that the use of surveys and dose reduction aides are used wherever appropriate to achieve the minimum personnel exposure. This item is unresolved pending licensee implementation and NRC review of corrective actions. (309/82-08-04)

e. Plant Housekeeping Controls

Storage of material and components was observed with respect to prevention of fire and safety hazards. Plant housekeeping was evaluated with respect to controlling the spread of surface and airborne contamination. There were no unacceptable conditions identified.

f. Fire Protection/Prevention

The inspector examined the condition of selected pieces of fire fighting equipment. Combustible materials were being controlled and were not found near vital areas. Selected cable penetrations were examined and fire barriers were found intact. Cable trays were clear of debris. No abnormal conditions were identified.

g. Control of Equipment

During plant inspections, selected equipment under safety tag control was examined. Equipment conditions were consistent with information in plant control logs.

h. Equipment Lineups

The inspector verified by observation of the Main Control Board and by inspections in the Diesel Generator and Auxiliary Feed Pump Rooms and in the Spray and Turbine Buildings that the major valve and switch positions were correct to insure operability of the Safety Injection System, the Safety Injection Accumulators, Containment Spray, Auxiliary Feedwater, and the Emergency Diesel Generators.

During a review of control room equipment lineups the inspector observed that pressurizer backup heaters were being used instead of one set of normally energized proportional heaters. Degradation of heater capacity had been identified in the secured set of heaters. Plant operators noted that a plant computer calculation of total proportional heater capacity was approximately 298 kw. TMI Short Term Lessons Learned Item 2.1.1 required adequate, redundant pressurizer heater capability, powered from vital buses, to maintain post accident natural circulation cooling. The licensee's implementation of this requirement was reviewed and documented in an NRC safety evaluation dated April 29, 1980. This evaluation states that the licensee has redundant 150 kw (total of 300 kw) heater capacity (proportional heaters) powered from vital buses. Based on the licensee's calculation of heater capacity the inspector questioned whether a determination of adequacy for post accident natural circulation had been performed. The current degradation appeared minimal, however continued degradation may require corrective action. The inspector discussed this finding with the senior plant electrical engineer and with the assistant plant manager on May 28, 1982. Based on these discussions it was determined that the bearing of the TMI item commitment to the present system status had not been addressed by the licensee. The licensee committed to determine the actual heater capacity required and to evaluate the adequacy of the present system status. This item is unresolved pending NRC review of the licensee's evaluation. (309/82 - 08 - 05)

The inspector asked what administrative controls insured that commitments to TMI action items are not overlooked in post-implementation changes. This finding is further detailed in paragraph 8b.

4. Review of Plant Operations - Logs and Records

During the inspection period, the inspector reviewed operating logs and records covering the inspection time period against Technical Specifications and Administrative Procedure Requirements. Included in the review are:

Control Room Log	-daily during control room surveillance
Jumper and Lifted Leads Log	-all active entries
Maintenance Requests and Job Orders	-all active entries
Safety Tag Log	-all active entries
Plant Recorder Traces	-daily during control room surveillance
Plant Process Computer Printed Output	-daily during control room surveillance

Night Orders

-daily during control room surveillance

The log and records were reviewed to verify that entries are properly made and communicate equipment status/deficiencies; records are being reviewed by management; operating orders do not conflict with the Technical Specifications; logs detail no violations of Technical Specification or reporting requirements; logs and records are maintained in accordance with Technical Specification and Administrative Control Procedure requirements.

Several entries in these logs were the subject of additional review and discussion with licensee personnel. No unacceptable conditions were identified.

5. Observation of Physical Security

The resident inspector made observations, witnessed and/or verified, during regular and off-shift hours, that the selected aspects of the security plan were in accordance with regulatory requirements, physical security plans and approved procedures.

- -- Maine Yankee Security Plan, dated October 1979
- -- 15-1, Security Organization and Responsibilities, Revision 6, April 1980
- -- 15-2, Security Force Duties, Revision 9, February 1981
- -- 15-3, Plant Personnel Security, Revision 9, February 1981

- -- 15-7, Access Authorization and Control, Revision 2, July 1981
- -- 15-8, Protected Area Entry/Exit Control, Revision 2, July 1981.
- a. Physical Protection Security Organization
 - -- Observations and personnel interviews indicated that a full time member of the security organization with authority to direct physical security actions as present, as required.
 - Manning of all three shifts on various days was observed to be as required.
- b. Physical Barriers

Selected barriers in the protected area, access controlled area, and the vital areas were observed and random monitoring of isolation zones was performed. Observations of truck and car searches were made.

c. Access Control

Observations of the following items were made:

- -- Identification, authorization and badging
- -- Access control searches
- -- Escorting
- -- Communications
- -- Compensatory measures when required
- d. Review of Security Events

The inspector reviewed the following security event reports submitted in accordance with 10 CFR 73.71 to verify that the details of the event were clearly reported including the accuracy of the description of the cause and corrective action.

No items of noncompliance were identified.

6. Observation of Maintenance and Surveillance Testing

The inspector observed various maintenance and problem investigation activities. The inspector reviewed these activities to verify compliance with regulatory requirements, including those stated in the Technical Specifications; compliance with applicable codes and standards; required QA/QC involvement; proper use of safety tags; proper equipment alignment and use of jumpers; appropriate personnel qualifications; proper radiological controls for worker protection; adequate fire protection; and appropriate retest requirements. The inspector also ascertained reportability as required by Technical Specifications.

The inspector witnessed the performance of surveillance testing of selected components to verify that the surveillance test procedure was properly approved and in use; test instrumentation required by the procedure was properly calibrated and in use; technical specifications were satisfied prior to removal of the system from service; test was performed by qualified personnel; the procedure was adequately detailed to assure performance of a satisfactory surveillance; and, test results satisfied the procedural acceptance criteria, or were properly dispositioned.

The following activities were observed/reviewed:

- -- Replacement of Component Cooling Heat Exchanger End Bells (Maintenance Requests (MR) 82-0952, 1171, 1222 and 1254 and Purchase Order 31.044).
- -- Diesel Generator Monthly Surveillance and Start System Redundancy Test (Surveillance procedure 3.1.4) conducted on May 13, 1982.
- -- Quarterly Valve Operability Testing (Surveillance procedure 3-1-20) conducted on March 18, 1982.

On May 13, 1982, the inspector observed the performance of routine testing of Emergency Diesel Generator (DG) 1B. In accordance with procedure 3.1.4, DG Monthly Testing, the preliminary system verification and testing was performed and the diesel was turned over to maintenance for completion of the manufacturers specified start system redundancy tests. This test was conducted using the technical manual generic procedure (MI 1742). Several temporary connections were made in the start circuitry to simulate emergency start signals. The procedure in use did not specify the installation or removal of this test circuit. During the conduct of the redundancy test the air system lineup previously verified by the operations department was altered. After the completion of the maintenance test this system lineup was not reverified.

Upon completion of the redundancy test, with the diesel still running, the diesel was returned to the operations department for completion of full load testing. Operators were unable to parallel the diesel to the distribution system because of a disabling condition alarm, received as a result of the redundancy test. During this test the sequence of automatic starting and loading can be extended past normal timing sequence, yielding a disabling condition alarm. In order to reset the circuitry the diesel must be shut down and restarted normally. The inspector discussed the inadequacies in the maintenance procedures with the licensee. The licensee revised the redundancy test procedure to address installation and removal of the test device and specification of connection terminals. A step was added to require the diesel to be secured on completion of the test, if the disabling condition alarm is received. This procedure was also revised to require reverification of normal system lineups upon completion of maintenance testing. The inspector had no further questions in this area.

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

The inspector reviewed the following LERs received in the RI office to verify that details of the event were clearly reported including the accuracy of the description of cause and adequacy of corrective action. The inspector also determined whether further information was required from the licensee, whether generic implications were indicated, and whether the event warranted onsite followup. The following LER was reviewed:

-- 82-17 Failure of Diesel Generator 1B to Phase Properly during Testing (See paragraph 6).

8. Organization and Administration

a. The inspector reviewed the licensee's onsite and offsite organization structure to verify that it was in accordance with Technical Specification 5.2 or that changes had been reported to the NRC. Selected personnel assigned to new positions since the last inspection were verified to meet the qualifications of ANSI N 18.1-1971. The authorities and responsibilities of licensee personnel were found to be as delineated in Technical Specifications.

Proposed change 83-1 to Technical Specifications was submitted to the NRC on December 11, 1981 to reflect organizational changes which have been implemented. The inspector found the organization to be in conformance with the revised documents.

Continuing realignment of responsibilities at organizational levels below those delineated in Technical Specifications resulted in the need for clarification of the position of the Fire Protection Section Head. Specifically, the responsibilities for packaging and shipment of radioactive materials (Radwaste Coordinator), fire protection, and plant services have been combined into a Facilities Section Head position reporting to the Technical Support Department Head. The removal of the radioactive waste shipment responsibility from the cognizance of the Radiological Controls Section Head raised the question of appropriate personnel qualifications for the new Facilities Section Head. This item is unresolved pending the determination of the need for further TS revision and the applicability of Regulatory Guide 1.8 considerations to the Radwaste Coordinator position. (309/82-08-06)

b. The inspector reviewed the licensee's procedure change report 82-140 to procedure 0-07-3, Maintenance Requests, Revision 0. This change relaxed the requirement for Senior Reactor Operator approval to release equipment from service, allowing the Shift Operating Supervisor (SOS) to perform this function. The SOS is normally a senior reactor operator but, as is currently the case, a reactor operator is allowed to fill this position. The NRC position as stated in NUREG 0737, item I.C.6 and committed to in the licensee's letter WMY 80-162 dated December 15, 1980 requires a senior reactor operator to release equipment from service. The inspector brought this deviation to the attention of the Technical Assistant to the Plant Manager on May 10, 1982. It was determined that the procedure change was incorporated for flexibility based on the current staffing levels and without regard to the NUREG 0737 requirement. This requirement is not referenced in procedure 0-07-3 and was therefore not considered prior to making the change.

Inspector discussion with NRC Operator Licensing Branch identified a conflict between the required knowledge of operators serving as Shift Operating Supervisor and the level of knowledge examined by the NRC in the areas of Administrative Controls, technical specification compliance and radiation controls. Specifically, the SOS has the responsibility for equipment and radiation controls through his verification and approval of equipment tag-outs, maintenance requests and radiation work permits, however the NRC reactor operator examination does not certify the competence of these individuals for these functions. The Plant Shift Superintendent, a licensed senior reactor operator, is on shift and has overall responsibility for plant operations. He does not, however, maintain detailed surveillance of these areas. The licensee committed to review this deficiency and propose corrective action to limit the responsibilities of reactor operators acting as the SOS or providing training and certification of operator competence in the subject areas. This item is unresolved pending licensee determination of corrective actions and NRC review of their implementation. (309/82-08-07)

The inspector stated that changes to systems and administrative controls specified in commitments to the NRC are considered to be part of the analyzed facility upon implementation. Subsequent modification of these committed actions must consider the existence and basis for the commitment in the evaluation of the modification. Administrative controls to prevent modification of commitments without full consideration and NRC notification is considered unresolved pending licensee evaluation and NRC review. (309/82-08-08)

9. Independent Review and Audit Activities

- a. The inspector reviewed the licensee's independent review and audit activities to verify that:
 - -- changes to the charter governing the review group activities are consistent with Technical Specifications (TS) and other regulatory requirements;

- -- review group membership and qualifications meet the specified requirements;
- -- review group meetings were held at the required frequency and that members participating met the quorum requirements and possessed expertise in the areas reviewed;
- -- specific review requirements delineated in TS were conducted and documented in review group meeting minutes;
- -- audits are being conducted in accordance wth regulatory requirements and the licensee's implementing procedures.

The inspection included document review, discussion with licensee staff and attendance at a regular meeting of the offsite review committee May 26, 1982.

- b. The following documents were reviewed:
 - -- Maine Yankee Technical Specification 5.5
 - -- Charter of the Maine Yankee Nuclear Safety and Audit Review Committee (NSARC)
 - -- NSARC Meeting minutes 81-01 through 82-04
 - -- ANSI N45.2.12, 1977, Requirements for Auditing Quality Assurance Programs
 - -- ANSI N18.7, 1976, Administrative Controls and Quality Assurance for the Operating Phase of Nuclear Power Plants
 - -- Personnel Qualification records for NSARC members
 - -- Maine Yankee Annual Report of Changes made in accordance with 10 CFR 50.59, dated April 14, 1982.
- c. Findings:
 - (1) The inspector identified the following inconsistencies between the NSARC charter/implementing documents and the specified requirements:
 - (a) A written program for the independent review group containing responsibility and authority for verification of corrective action is required in ANSI N18.7, paragraph 4.2(2). The NSARC chairman keeps track of NSARC recommendations and provides followup information to members at subsequent meetings. This process is not formalized as a written program nor are measures in place to insure prompt corrective action as required by 10 CFR 50 Appendix B, Criterion XVI.

- (b) A written program for the independent review group containing provisions for assuring members are made aware on a timely basis of matters within their scope of responsibility is required by ANSI N18.7, paragraph 4.2(8). The NSARC chairman provides a monthly summary of items he receives which require NSARC review. Neither the content nor the technical detail of this summary is formalized.
- (c) Safety evaluations for changes to procedures as described in the Safety Analysis Report (FSAR) are not reviewed by NSARC as required by ANSI N18.7, paragraph 4.3.4(1). The onsite review group reviews procedures and makes a determination on the existence of an unreviewed safety question however, no determination as to the applicability of the procedure to the FSAR is made nor is a written safety evaluation produced to provide a basis for the determination of the existence of an unreviewed safety question. Consequently the NSARC does not review safety evaluations but only PORC meeting minutes which indicate only that no unreviewed safety question exists.
- (d) ANSI N18.7, paragraph 4.5 requires the independent review group to review written reports of audits on safety related functions. Additionally a semi-annual review of audit program status is required by this group. The NSARC does not review audit reports. Semi-annual audit status is presented at regular NSARC meetings. The review of audit reports is not formalized in the NSARC charter.
- (e) ANSI N18.7, paragraph 4.1, requires the independent review program to be established to detect trends which may not be apparent to a day-to-day observer. This responsibility is not formalized in the NSARC charter nor is a formal program of trend analysis in place.

The inspector brought these discrepancies to the attention of the NSARC chairman and the licensee management. The licensee committed to revise the appropriate documents to formalize the methods used by the independent review group to meet the requirements of ANSI N18.7. This item is unresolved pending implementation of these program revisions. (309/82-08-09)

(2) The inspector identified a discrepancy between the licensee's annual report (1981) of changes made in accordance with 10 CFR 50.59 and recor's of NSARC safety evaluation reviews documented in committee meeting minutes. Plant Design Change Request (PDCR) 14-81 and Plant Alterations (PA) 14-80 and 3-81 were not reviewed by NSARC, yet they were reported as 50.59 changes in the 1981 report. The inspector brought this discrepancy to the attention of the NSARC Chairman on May 21, 1982. It was determined that these documents were either not submitted to the NSARC or misplaced prior to inclusion as NSARC material. The NSARC did not have a system of crosschecks to insure that required reviews are completed in a timely manner.

The failure to review these documents as required by Technical Specification 5.5.B.8.(a) constitutes a violation. (309/82-08-10)

(3) The licensee's audit program status was reviewed by the NRC in November 1981. The findings reported in Inspection Report 50-309/81-31 stated that a majority of the 1981 scheduled audits had not been conducted as of that date and questioned the adequacy of audits conducted in a condensed period to achieve their purpose to verify all aspects of the program. Further NRC review of this area documented in Inspection Report 50-309/82-06 confirmed the completion of the 1981 audits and indicated satisfactory progress with the 1982 audits. It should be noted however that three of eight 1982 audit reports were not completed within 30 working days as required by TS 5.5.B.11.c and procedure 0-00-3, Internal Audits, Revision 1. Appendix B to 10 CFR 50, Criterion XVI requires measures to assure that conditions adverse to quality are identified and corrected in a timely manner. ANSI N45.2.12 as committed to in Section II of the approved Maine Yankee Quality Assurance Program further stipulates that corrective action will be completed within 30 days or that a written response within 30 days will clearly state the corrective action planned and the scheduled date for completion. Procedure 0-00-3 requires only the plant position to be developed within 30 working days. In many cases the corrective action and implementation date are not specified until corporate review is accomplished. Only one of sixteen plant positions to 1981 audits was developed within 30 days as required and delays of up to six months were experienced in finalizing corrective action and implementation dates. This deficiency in timely corrective action was noted at two semi-annual NSARC meetings (81-12-R and 82-03-R), yet the status of the 1982 program as given by the NSARC on May 26, 1982 showed 3 of 8 plant positions to 1982 audits and 6 of 16 positions to 1981 audits had not been developed within the required time. The inspector discussed with licensee personnel the lack of timely corrective actions to audit findings and the lack of licensee management action to correct this twice-identified nonconformance. The failure to correct and prevent recurrence of this licensee identified nonconformance as required by 10 CFR 50 and the Maine Yankee Quality Assurance Program is a violation. (309/82 - 08 - 11)

Further, the inspector determined that the specification in procedure 0-00-3 of 30 working days to develop a plant position does not agree with ANSI N45.2.12 paragraph 4.5; both from the extension of time (specifying working days vice calendar days),

and that the plant position is not always a comprehensive statement of corrective action (actions to prevent recurrence and implementation dates). This item is unresolved pending licensee determination of necessary program/procedure changes and implementation of these actions. (309/82-08-12)

10. Corrective Actions

The inspector reviewed the licensee's corrective action program required by 10 CFR 50, Appendix B, Criterion XVI, the Maine Yankee Quality Assurance Program, Section XVI, and Quality Assurance Procedure 0-08-2, Corrective Action, Revision 0. Conformance to these documents was verified with respect to the following:

- -- Conditions adverse to quality are promptly identified.
- -- Conditions adverse to quality are promptly corrected; including where appropriate, measures to prevent recurrence of the adverse condition in similar components systems or procedures.
- -- Conditions adverse to quality and the corrective actions are documented and brought to management attention.
- a. The inspector reviewed corrective actions documented in accordance with procedure 0-08-2 during the 1981-82 time period. These actions consisted of Engineering Department review of maintenance conducted on safety-related components or systems upon identification of an adverse condition as noted on a maintenance request form. Licensee review was found to be incomplete in several cases in that the review constituted a concurrence with maintenance action performed on the particular component without assessing the cause of the failure and its applicability to replacement or similar components. In cases where no further corrective action is deemed necessary, no further management review is required. The following examples are illustrative of this finding:
 - (1) Maintenance Request (MR) 0513-82 describes the replacement in kind of a control room ventilation isolation damper motor following its failure during routine testing. The corrective action documentation states that this was an isolated occurrence without describing the cause or its applicability to similar components. Licensee Event Report (LER) 82-009 reported that the failure was caused by an accumulation of oil and dirt inside the motor housing. There is no record of an evaluation of the source of this condition and its applicability to either the newly installed motor or the redundant motor operated dampers in the control room ventilation system.
 - (2) MR 0514-82 describes the replacement in kind of a Westinghouse BFD type relay in the excess flow check valve circuitry. The corrective action evaluation does not document the cause of the

BFD relay failure. There are several BFD relays installed in safety systems at the facility and BFD relay failures have been the subject of several industry and NRC commensurate failure notifications such as IE Bulletin 79-25. The applicability of the Bulletin to this failure was not evaluated.

(3) MR 1218-81 describes the replacement of a failed power supply for the auxiliary feedwater flow indication system. A previous failure evaluation had resulted in a redesign of the power supply to increase its reliability. This evaluation did not determine whether this failed power supply was of the new or old design. Consequently, no valid judgement on either the acceptability of the previous corrective action or the continued use of the old type supplies could be made.

The lack of depth of corrective action review is also documented in the licensee's inplant audit 81-16. The inspector brought this concern to the attention of the Director of Plant Engineering. A departmental lecture was conducted on June 1, 1982 to emphasize a more detailed evaluation of corrective actions. This item is unresolved pending action on the licensee's audit finding and subsequent NRC review of corrective action evaluations (309/82-08-13).

b. The inspector reviewed the licensee's program for identification and evaluation of corrective actions for adverse conditions which do not result in a maintenance request being generated. The Maine Yankee Quality Assurance Program requires the Plant Operations Review Committee (PORC) to review conditions adverse to quality and recommend corrective action. PORC responsibility as discussed in Section XVI of the Maine Yankee Quality Assurance Program covers a range of adverse conditions from operational deficiencies to material deficiencies which have not yet resulted in component failures. While the licensee has several methods for documentation of problems and recommended solutions including the Plant Information Report. PORC minutes and Licensee Event Reports, none of these methods is formalized by procedure nor is the method of tracking identified items to insure timely completion of corrective action formalized. The inspector stated that the methods used to determine and follow up on corrective action are themselves activities affecting quality and must be conducted in accordance with written instructions. procedures, etc. in accordance with 10 CFR 50 Appendix B. Criterion V. Since the licensee is conducting a corrective action program under the cognizance of the PORC, the inspector stated that the absence of written instructions would be unresolved pending formalization of this corrective action program (309/82-08-14).

11. Unresolved Items

Unresolved items are matters about which more information is required in order to determine whether they are acceptable items or items of non-compliance. Unresolved items identified during this inspection are discussed in paragraphs 3.b, 3.h, 8.a, 8.b, 9.c, and 10.

12. Exit Interview

At periodic intervals during the course of the inspection, meetings were held with senior facility management to discuss the inspection scope and findings.