

U.S. NUCLEAR REGULATORY COMMISSION  
REGION I

Report No: 50-29/89-17

Docket No: 50-29

Licensee No: DPR-3


Licensee: Yankee Atomic Electric Company  
580 Main Street  
Bolton, Massachusetts 01740-1398

Facility Name: Yankee Nuclear Power Station

Inspection at: Rowe, Massachusetts

Inspection Conducted: September 27, 1989 - November 6, 1989

Inspectors: H. Eichenholz, Senior Resident Inspector  
Michael T. Markley, Resident Inspector

Approved By:  12-5-89  
A. Randy Blough, Chief, Reactor Projects Section 3A Date

Inspection Summary: Inspection on September 27 - November 6, 1989 (Report No. 50-29/89-17)

Areas Inspected: Routine inspection on daytime and backshifts by two resident inspectors of: actions on previous inspection findings; operational safety; security; plant operations; maintenance and surveillance; engineering support; radiological controls; licensee event reports; periodic and special reports, and emergency preparedness activities.

Results: The licensee demonstrated excellent planning and coordination in performing onsite activities to support offsite power supply repairs on October 21-22. Outstanding operator performance was noted during the evolution and during the emergency load reduction on October 25 (Sections 6.1 and 6.2, respectively).

However, poor performance of the No. 2 turbine control valve warrants management attention. Degraded control valve performance continues to unnecessarily challenge operations shift personnel and plant systems. Ongoing maintenance has not resolved problems with the control valve.

No unresolved items or violations were identified.

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\*The NRC Inspection Manual inspection procedure (IP) or temporary instruction (TI) or the Region I temporary instruction (RI TI) that was used as inspection guidance is listed for each applicable report section.

## DETAILS

### 1. Persons Contacted

#### Yankee Nuclear Power Station

T. Henderson, Acting Plant Superintendent  
R. Mellor, Technical Director

#### Yankee Atomic Electric Company (YAEC)

N. St. Laurent, A. J. [unclear] [unclear]

The inspectors interviewed licensee employees during the inspection, including operations, radiation protection, chemistry, maintenance, reactor engineering, security, and general office staffs.

### 2. Summary of Activities

Yankee Nuclear Power Station (Yankee, NPS) on the plant) operated at 100% rated power until October 21, 1989, when plant load was reduced to approximately 28 MWe to perform maintenance on the 1-177 offsite power supply line. Following repairs on October 22, plant load was increased and full power operation resumed on October 23.

On October 25, the licensee initiated an emergency load reduction to repair a leak in the No. 1 feedwater heater drain line. During the load reduction, the No. 2 turbine control valve did not properly sequence closed. During troubleshooting the control valve, it fast-closed resulting in an approximate 50 MWe power transient. Control room operators were effective in stabilizing the plant. Plant conditions were established at approximately 55% rated power to effect repairs. Following repairs, the licensee commenced a plant load increase. The plant achieved full power operation later the same day. The plant continued to operate at full power through the remainder of the inspection period.

On October 23, 1989, NRC Region I and headquarters management personnel conducted a meeting with licensee management to discuss the Systematic Assessment of Licensee Performance (SALP) for the period April 1, 1988 to July 31, 1989. The meeting was open for public observation.

During the period of October 10-13, 1989, a NRC Region I (NRC:RI) specialist inspector conducted a routine licensed operator training inspection (50-29/89-18).



### 3. Status of Previous Inspection Findings

#### 3.1 (Closed) Inspector Follow Item (50-29/87-11-06), Provide Additional Instruction on Procedure OP-5751 on Maintaining Proper Setpoint Relationship Between Thermostats

Procedure OP-5751, Rev. 13, Heat Tracing Inspection, was revised by the licensee to require the checking of both thermostats that control the temperatures of the heat tracing on the boric acid mix tank (BAMT) flow path piping. The procedurally controlled thermostat setpoint of 165 degree Fahrenheit is consistent with the Technical Specification (TS) 4.1.2.1.a.2 requirement for the heat traced portion of the BAMT flow path. This item is closed.

#### 3.2 (Update) Unresolved Item (50-29/87-11-09), Use of Low Range Span Gas to Calibrate High Range of Bendix Hydrogen Analyzer

This item was last updated in NRC Report No. 50-29/87-11. It documented the need for further NRC review of the licensee practice of using a low span gas (5%) to perform a TS calibration on the high range (0-20%) of the post-accident Bendix hydrogen analyzer. On August 25, 1988, the plant organization issued Service Request No. 88-70 to the Yankee Nuclear Services Division (YNSD) to review and evaluate this practice. YNSD issued memorandum YRP 158-89, dated February 1, 1989, which documented the YNSD evaluation and conclusion that the existing calibration methodology was acceptable. The inspector transmitted the licensee evaluation and applicable calibration procedures to the cognizant regional specialist inspector for additional NRC review. This item remains open.

#### 3.3 (Closed) Inspector Follow Item (50-29/88-16-01), Revise Procedure OP-3107 to Isolate Emergency Feedwater Steam Supply From a Steam Generator With a Tube Rupture

The licensee was requested by the NRC to consider, as part of the operator response to a tube rupture event involving either steam generators No. 2 or 3, the necessity to close or verify closed steam supply valves MS-V-693 and MS-V-694. The inspector reviewed procedure OP-3107, Rev. 21, Steam Generator Tube Rupture, and verified that steps had been added in the appropriate section of the procedure to close or verify closed the subject valves. This item is closed.

### 4. Operational Safety

#### 4.1 Plant Operations Review

The inspector observed plant operations during regular and backshift tours of the following areas:

Control Room	Safe Shutdown System Building
Primary Auxiliary Building	Fence Line (Protected Area)
Diesel Generator Rooms	Intake Structure
Vital Switchgear Room	Turbine Building
Cable Tray House	Spent Fuel Pit (SFP) Building
Safety Injection Building	

Control room instruments were observed for correlation between channels, proper functioning, and conformance with Technical Specifications. Alarm conditions in effect and alarms received in the control room were reviewed and discussed with the operators. Operator awareness and response to these conditions was reviewed. The inspector observed operators attentive to duty and cognizant of board and plant conditions. Control room and shift manning were compared with TS requirements. Postings and control of radiation, contaminated and high radiation areas were inspected. Radiation Work Permit (RWP) implementation and the proper use of personnel monitoring devices was checked. Plant housekeeping controls were observed including control of flammable and other hazardous materials. During plant tours, the inspector reviewed logs and records to ensure compliance with station procedures, to determine if entries were correctly made, and to verify correct communication of equipment status. These records included various operating logs, turnover sheets, tagout and jumper logs, and potential reportable occurrence reports. Inspections of the control room were performed on weekends and backshifts as follows: October 2, 3, 11, 12, 22, 24, 29 and November 4 and 6. Deep backshift included: October 12 from 12:15 a.m. to 1:00 a.m. Operators and shift supervisors were alert, attentive and responded appropriately to annunciators and plant conditions.

#### 4.2 Safety System Review

The emergency diesel generators, EDG fuel oil, residual heat removal, and safety injection systems were reviewed to verify proper alignment and operational status. The review included verification that (i) accessible major flow path valves were correctly positioned, (ii) power supplies were energized, (iii) lubrication and component cooling was proper, and (iv) components were operable based on a visual inspection of equipment for leakage and general conditions. System walkdowns to assess the material condition of the ECCS HPSI and LPSI and the low pressure safety injection accumulator were performed. Selected accessible valves were verified to be in the correct position and locked when required by plant procedures.

The condition of those system components inspected was good. Leakage from system piping and flanged joints was not observed. No unacceptable conditions were identified regarding ECCS pump lubrication.



Local instrumentation was verified to be operational by channel checks with remote indication. The inspector identified no conditions adverse to safety during inspection of this ECCS equipment.

#### 4.3 Review of Temporary Changes Switching and Tagging

Temporary change requests (TCRs), which were approved in support of implementing lifted leads and jumper requests and mechanical bypasses, were reviewed to verify that: controls established by AP 0018, Temporary Change Control, were met; no conflicts with the TS were created; the requests were properly approved prior to installation; and a safety evaluation in accordance with 10 CFR 50.59 was prepared if required. Implementation of the requests was reviewed on a sampling basis.

The switching and tagging log was reviewed and tagging activities were inspected to verify plant equipment was controlled in accordance with the requirements of AP 0017, "Switching and Tagging of Plant Equipment."

Licensee administrative control of off-normal system configurations by the use of TCR and switching and tagging procedures, as reviewed above, was in compliance with procedural instructions and was consistent with plant safety. No unacceptable conditions were identified.

#### 4.4 Operational Safety Findings

During adverse weather conditions (rain) on October 11, 1989, the licensee discovered that protective measures for roof construction/modification had not prevented water penetration into the safety injection (SI) building. Specifically, water leaked through the plastic covering on the roof, down a structural support, and onto the SI building floor. The licensee quickly stopped the leak and contained the liquid. No safety related equipment or components became wet. Motor control centers (MCCs) were covered prior to the leak to prevent liquid damage.

To prevent recurrence, the licensee issued Special Order 89-173 to improve protective measures implemented by the contractor performing roof construction and to sensitize auxiliary operators to watch for water leakage and to keep the shift supervisor (SS) fully informed. The licensee continued covering selected safety significant components and hardware. No recurrence occurred during this inspection period.

Inspector review noted the licensee to be proactive in responding to the leakage. However, inspector assessment of protective measure indicated the licensee needs to improve oversight of contractor personnel and performance. It was fortuitous that no safety related pumps, motors, or electrical systems were impacted.

#### 4.5 Plant Housekeeping and Fire Protection

Plant housekeeping and fire protection were adequate. During this inspection period, the licensee initiated a program to improve the physical and aesthetic condition of the plant. Initial enhancements included painting the turbine building floor. The licensee is appropriately addressing needs due to age-related plant wear.

However, routine inspector tours noted poor housekeeping and fire protection practices. Specific examples are listed below:

- On October 18, the inspector observed a flashlight setting on the No. 2 charging pump. No work was ongoing and the charging pump was not operating. On a hanger adjacent to the primary drain tank pumps, the inspector observed two plastic containers filled with liquids. One of the containers was uncapped.
- On October 23, the inspector observed in the safety injection building an unsecured fire extinguisher near the low pressure safety injection pumps and an unsecured ladder directly adjacent to the front control area of motor control center EMCC-3. In the switchgear room, the inspector also identified an unsecured fire extinguisher and an improperly stored ladder near plant equipment. These observations occurred after 5:00 p.m., when no work was in progress in the areas.
- On October 31, the inspector observed two unsecured fire extinguishers in the safety injection (SI) building. One of the fire extinguishers was leaning against a safety related valve (SI-MOV-1). A valve handwheel wrench was leaning against the boric acid transfer pump housing. Also observed was a radioactive material control bag hanging from the handwheel of a valve (WDV-801). In the lower primary auxiliary building, the inspector observed an unsecured ladder located approximately two inches from the No. 1 VC booster pump bearing cooling line.
- On November 2, the inspector observed a worker grinding a support in the SI building where the grinding splatter was directly impinging polyethylene bags inside a radioactive material storage area. No fire occurred. However, the two firewatchers present did not initiate protective measures until directed by licensee personnel following identification by the NRC.



When identified by the NRC, each concern was promptly corrected. However, due to the multiple examples of the poor practices the inspector held a meeting with operations and maintenance managers on November 1, 1989 to discuss the above described concerns and the need to improve performance.

The licensee attributed many of the noted conditions to weak post-work restoration by contractor personnel. The licensee held a multi-departmental meeting to disseminate corrective actions and increase oversight of contractor activities by cognizant plant personnel.

The work being performed by contractor personnel involved structural upgrades to plant buildings that were part of licensee implementation of the NRC Systematic Evaluation Program, and the installation of equipment that is part of a water cleanup (WCU) system. This WCU system reflects a licensee initiative to have a post-accident capability for removal of cesium and iodine from emergency core cooling system recirculation water. Notwithstanding the importance of the ongoing upgrade activities, the inspector observations are a notable departure from a level of program performance that was routinely viewed as a licensee strength. Housekeeping controls will continue to be routinely monitored during NRC inspections.

## 5. Security

### 5.1 Observations of Physical Security

Selected aspects of plant physical security were reviewed during regular and backshift hours to verify that controls were in accordance with the security plan and approved procedures. This review included the following security measures: guard staffing, vital and protected area barrier integrity, maintenance of isolation zones, and implementation of access controls including authorization, badging, escorting, and searches.

During inspector tours, workers were observed wearing their security identification inside their outer clothing garments. When questioned, each individual promptly placed the identification on the outer garment and attributed the cause to changing weather conditions and frequent access/egress through plant buildings.

Inspector review noted security management to be effective in correcting this practice. Security shift personnel were instructed to increase observation and questioning of workers during plant tours. Signs were posted in conspicuous locations to remind workers to place security identification on their outer garments during inclement weather conditions. The licensee evaluation determined that all individuals were authorized for the area accessed. The inspector observed no recurrence of similar anomalies.



## 5.2 Security Access Control Staffing

One exception to the normally high level of security access control personnel performance was observed by the inspector on November 1, 1989. Specifically, the cognizant security officer was away from his duty station to open the protected area vehicle gate. Another security staff member was in an adjacent room but did not maintain continual observation of the security access control area and the associated search and control devices. Because of other measures in place, there was no potential for unauthorized entry into the protected area.

The security manager met with the inspector on November 2 to discuss the incident. He was appropriately concerned about the lack of proper controls and poor judgement of the involved individuals. Corrective actions were taken by the licensee to preclude repetition.

## 6. Plant Operations

### 6.1 Load Reduction for Repair Offsite Power Supply

At 7:15 p.m. on October 21, 1989, the licensee commenced a plant load reduction to repair a transmission line tower repair on the 115 kV Cabot Line (Y-177). The Cabot Line is one of the two normal offsite power supplies for YNPS. Removal of the Y-177 line is allowed by TS for up to 72 hours with power at 30 MWe or less and the 2400 VAC Bus 3 tied to 2400 VAC Bus 1 (center bus) and the 2400 VAC Bus 2 directly energized from its normal offsite power supply (115 kV Harriman Line, Z-126). In this configuration, both 2400 VAC Buses 1 and 3 were powered from the No. 1 station service transformer (SST) with no voltage regulation. Thus, the voltage on Buses 1 and 3 were dependent on grid voltage, generator output power, and auxiliary electrical system load. Electrical switching and tagging was similar to a configuration used in 1988 for repairs to the No. 3 SST voltage regulator. The licensee limited other work activities to turbine throttle and control valve testing, main steam non-return valve (NRV) testing, and condenser waterbox tube plug leak testing.

The licensee was conservative in planning and conducting the evolution. A sound technical evaluation was prepared by the Yankee Nuclear Service Department (YNSD). A thorough procedure was drafted consistent with guidance contained in the evaluation. The plant operations review committee (PORC) provided a high level of oversight in both the analysis and procedure development. Senior management kept the resident inspector fully informed.

The licensee completed the evolution as planned. Normal electrical alignment was removed at 7:55 a.m. on October 22. Transmission line repairs were completed and normal electrical alignment was restored at 6:50 p.m. the same day.

Inspector review noted good licensee performance. The inspector verified proper procedure implementation which included dedicated control room operator support of specific control room panels. No unacceptable conditions were identified in electrical configurations. During throttle and control valve exercising, the No. 2 control valve improperly sequenced closed causing a momentary 40 MWe power transient. Operations shift personnel responded well to stabilize and restore plant conditions. This was the only anomaly in an otherwise well planned and completed activity. Inplant work was limited such that no activities challenged the successful completion of the evolution.

#### 6.2 Emergency Load Reduction to Repair No. 1 Feedwater Drain Line

At 12:03 p.m. on October 25, 1989, the licensee commenced an emergency load reduction in accordance with procedure OP-3003, Rev. 15, Emergency Controlled Plant Load Reduction, to repair a leak in the No. 1 feedwater heater drain line. During the load reduction the No. 2 turbine control valve did not properly sequence close. During troubleshooting, the control valve fast-closed resulting in an approximate 50 MWe power transient.

Control room operator action was noteworthy in stabilizing the plant. The operators effectively took manual control of steam generator water level. Three out of four steam generator levels came within 1.5 inches of the -13 inch TS reactor protection system (RPS) trip setpoint. Similarly, operators took manual control of pressurizer spray to control main coolant system (MCS) pressure which came within 100 psig of the 2300 psig TS RPS trip setpoint. Strong performance of the operating shift successfully and safely averted a reactor trip.

Operators properly entered the appropriate action statement when cold leg temperature exceeded the TS operating limit of 520 degrees Fahrenheit. Personnel effectively restored the temperature in approximately ten minutes; the TS action statement allows operation above 520 degrees Fahrenheit for two hours. For reasons unrelated to this specific event the limit was subsequently replaced in TS Amendment No. 127, dated October 27, 1989, with limits for average loop temperature.

Plant conditions were established at 100 MWe (approximately 55% rated power). Following repairs of the drain line, the licensee commenced a plant load increase at 8:00 a.m. on October 26. Full power was achieved at 6:30 p.m. the same day. A more detailed description of drain line repairs is discussed in Section 7.1 of this report.

The licensee is continuing to evaluate erratic performance of the No. 2 turbine control valve. Ongoing maintenance has not resolved problems with control valve performance. The valve continues to operate



in a degraded condition since the core XX refueling outage. Normal operation is accompanied by obvious steam leakage. The licensee plans to rework the valve during the next refueling outage.

Although outstanding personnel performance was noted in operator response to the transient, the licensee has not resolved problems with the control valve which continues to challenge personnel and plant systems.

## 7. Maintenance/Surveillance

### 7.1 Repair of the No. 1 Feedwater Heater Drain Line

As described in Section 6.2 of this report, the licensee initiated repairs to the No. 1 feedwater heater drain line on October 25, 1989. Repair activities were controlled by Maintenance Request No. 89-2063 and procedure OP-5100, Rev. 14, Valve, Fitting or Pipe Section Replacement, Installation and/or Repair. The repairs consisted on replacing piping downstream of the No. 1 feedwater heater level control valve, FW-LCV-401.

Initially, the identified deficiency was a small hole in the drain pipe just downstream of a flanged fitting that attaches the drain piping to valve FW-LCV-401. Attempts by licensee maintenance personnel to install a temporary patch with a clamp resulted in further degradation and the need to implement the load reduction. Once the drain line was isolated, the existing piping was removed and inspected. The cause of the leak was attributed to excessive grinding on the weld during drain line fabrication. Licensee management stated that the condition is not a generic problem and appears to be an isolated case. The inspector observed the sectioned portion of the failed drain line and agreed that the probable cause of the leak was poor weld fabrication.

Inspector review noted licensee documentation of replacement material and repair data to be adequate and appropriate. Work packages were technically sound and provided adequate detail for effective implementation. The inspector observed good coordination and communications between the various plant departments and a high level of involvement by maintenance support department engineers.

### 7.2 Maintenance Activities Associated with Motor Operated Valves

The licensee is conducting activities associated with the development and implementation of a program to ensure that motor operated valves (MOVs) perform their intended design functions. This area is the subject of NRC Generic Letter 89-10, Safety-Related Motor-Operated Valve Testing and Surveillance, dated June 28, 1989. On September 20, 1989, Yankee Nuclear Services Division (YNSD) issued a Design Change Plan (DCP) describing planned MOV modifications.



The DCP was issued to support the Generic Letter 89-10 envisioned program, and the need for MOV related hardware modifications (YNSD Memo YRP 2166-88) that would be part of a new MOV Testing Program. Specifically, the DCP describes intended modifications that include: (1) replacing over a three cycle period (with nine motor operators during the 1990 refueling outage) 27 Type SMA Limitorque MOV operators; (2) rewiring all 26 MOVs scheduled for testing in the 1990 refueling outage using a consistent and optimally designed control circuit; (3) replacing the SMB-5000 operator for valve SI-MOV-46 with a different motor operator due to a high frequency of required maintenance; and (4) implementing a number of control board nomenclature changes, as well as control switch, limit switch and spring pack replacements. The bases that the licensee has developed for the replacement of the type SMA motor operators includes the fact that they are obsolete and no longer readily serviceable, that they require more frequent attention due their age, and that MOV diagnostic test equipment designated for use is not specifically designed for this type of motor operator.

During the 1990 refueling outage, the licensee will implement for the first time an expanded MOV Testing Program which will use a MOVATS, Inc. data acquisition system. To support the test methodology at the plant and the implementation of enhanced valve refurbishment program, a new training program was developed for electrical maintenance, supervisors, and QC inspection personnel. This program consists of two three-week classes being conducted by MOVATS, Inc. under the oversight of the licensee training and maintenance departments. The inspector examined the data acquisition training being conducted during the inspection period, and observed (1) a well structured program, (2) an ample number of training stations; (3) the use of mockup equipment; and (4) a high level of classroom participation by the attendees.

The licensee expressed disappointment with the training results from the seven attendees at the completion of the valve refurbishment course portion of the first class. Several individuals failed the initial training program. As a result, plant management directed the training department to develop a remedial valve refurbishment course and retrain those who did not certify in this area. Those individuals that did not pass the refurbishment course were not certified to work on Limitorque operators and any work performed on Limitorque operators will be done under the direct observation of an individual that has received certification in this training course. Remedial training is planned prior to the 1990 outage.

The high level of involvement and oversight by station and departmental managers is a licensee strength. Strong program support and dedication to ensure effective remedial action was evident. The

inspector also acknowledged the licensee's continuing efforts to provide effective solutions to equipment issues involving plant aging phenomenon.

### 7.3 Charging Pump Repairs and Surveillance Testing

On September 26, 1989, the licensee identified an irregular noise coming from the No. 1 charging pump gyrol-drive variable controller when operated at lower speeds. The licensee issued maintenance request No. 89-1834. The preliminary assessment determined it was a bearing problem. Gyrol-drive bearing replacement and testing was completed in conjunction with a manufacturer representative. The charging pump was returned to service on October 4.

On October 5, the licensee identified excessive packing leakage from the No. 2 packing box of the No. 1 charging pump. Maintenance request No. 89-1928 was issued. The licensee removed the packing boxes, cleaned and inspected the rams - No. 1 and No. 3 were replaced, and reassembled the pump with new seals and gaskets. The charging pump was returned to service on October 6.

Inspector review noted good licensee performance. Although the No. 1 charging pump gyrol-drive unit had been replaced in January 1989, no evidence of degraded performance was observed prior to the premature bearing failure. Review of the maintenance history file, operability testing and surveillance testing verified adequate performance monitoring. Licensee identification and corrective action for the leaking seal was prompt and effective.

The inspector verified post-maintenance, operability and surveillance testing met programmatic requirements. The licensee performed system removal and tagout, alignment and surveillance testing in accordance with the appropriate attachments of OP-4217, Charging System Operability Test. Results adequately satisfied OP-4217 acceptance criteria.

The licensee also effectively implemented procedure DP-5001, Rev. 5, Vibration Monitoring Program. Horizontal, vertical and axial displacement and velocity readings were taken at fixed locations on the motor, gyrol-drive, charging pump and associated components.

No unacceptable conditions were identified. The licensee is properly trending equipment performance and equipment history.

## 8. Radiological Controls

Radiological controls were reviewed on a routine basis relative to industry radiological standards, administrative and radiological control procedures, and regulatory requirements. Selected work evolutions were observed to determine the adequacy of program implementation commensurate



with the radiological hazards and importance to safety. Independent surveys were performed by the inspector to verify the adequacy of radiological controls and instructions to workers.

Inspector review indicated the licensee was effectively implementing the radiation protection (RP) program. RP personnel demonstrated improved attention to detail in self-identifying radiological deficiencies. Specifically, an individual was identified by RP personnel circumventing programmatic controls in accessing the lower pipe trench in the primary auxiliary building (PAB), a posted high radiation area. Licensee management took strong action in support of the RP program. Root cause analysis and corrective actions were comprehensive and effective.

During a tour of the facility on October 24, the inspector identified the high radiation area barrier to the shutdown cooling heat exchanger cubicle lying on the floor. The licensee performed a thorough evaluation which concluded that the barrier had inadvertently fallen to the floor and that no unplanned personnel exposures occurred.

The licensee was proactive in assessing radiological controls during this inspection period.

#### 9. Licensee Event Reporting (LER)

The inspector reviewed the below listed licensee event reports (LERs) to determine that with respect to the general aspects of the events: (1) the report was submitted in a timely manner; (2) description of the events was accurate; (3) root cause analysis was performed; (4) safety implications were considered; and (5) corrective actions implemented or planned were sufficient to preclude recurrence of a similar event.

##### 9.1 LER 89-03, Rev. 1

The LER 89-03, Rev. 1, No. 2 Steam Generator Blowdown Monitor Inoperative, addresses personnel error resulting in the licensee not implementing continuous monitoring of the steam generator blowdown line when the blowdown monitor was inoperable for greater than eight hours, as required by TS 3.3.3.1. This LER adequately documents the incident, resolution of casual analysis, and corrective actions to prevent recurrence. Similarly, inspector concerns regarding the initial LER 89-03, described in Section 9.1 of IR 50-29/89-06, are adequately addressed. The inspector had no further questions.

##### 9.2 LER 89-13

The LER 89-13, Reactor Scram Due to Inadvertent Actuation of RPS, addresses the procedure deficiency and operator error which resulted in an inadvertent reactor trip on August 29, 1989. The details of



this event and licensee corrective actions are documented in Section 6.4 of NRC:RI Inspection Report 50-29/89-16. The LER adequately documents the event, causal analysis, and identifies a similar occurrence reported in LER 86-13. No deficiencies were identified.

### 9.3 LER 89-14

The LER 89-14, Technical Specification Violation Concerning Entry into High Radiation Area, addresses the unauthorized entry of an individual into a posted high radiation area on September 25, 1989. The details of this event are described in Section 8.0 of this report. A NRC Region I specialist inspector reviewed this incident, causal analysis, and licensee corrective actions to prevent recurrence in IR 50-29/89-19. The inspector had no further questions.

## 10. Review of Periodic and Special Reports

Upon receipt, the inspector reviewed periodic and special reports submitted pursuant to Technical Specifications. This review verified, as applicable: (1) that the reported information was valid and included the NRC-required data; (2) that test results and supporting information were consistent with design predictions and performance specification; and (3) that planned corrective actions were adequate for resolution of the problem. The inspector also ascertained whether any reported information should be classified as an abnormal occurrence. The following reports were reviewed:

- Monthly Statistical Report for plant operations for the months of September and October, 1989.
- Semi-Annual Effluent Release Report BYR 89-131, dated August 29, 1989. Preliminary inspector review indicated that the report was properly submitted in accordance with technical specification 6.9.5 (a). Review of analysis results provided no indication of an inadvertent radiological release offsite.
- Special Report to the NRC for No. 2 main steam line radiation monitor inoperable greater than 7 days. Root cause and corrective actions are detailed in licensee letter BYR 89-125.

## 11. Emergency Preparedness Activities

On October 24, 1989, the inspector observed portions of a Medical Emergency Drill which was conducted by the licensee to test the Emergency Medical Team response to on site medical emergencies. Additional objectives included (1) to test radiation protection department response to a medical emergency in a radiological control area, (2) to test plant personnel interfacing with off site support services (i.e., ambulance and hospital), and (3) to evaluate the North Adams Regional Hospital response to a radiation medical emergency.

Inspector review of site related drill activities indicated good licensee performance. The inspector observed an effective, well planned and conducted drill. Strength was noted in the licensee self-assessment of the drill.

12. Management Meetings

At periodic intervals during this inspection, meetings were held with senior plant management to discuss the findings. A summary of findings for the report period was also discussed at the conclusion of the inspection and prior to report issuance. No proprietary information was identified as being included in the report.

- On October 23, 1989, representatives of the NRC and the Yankee Atomic Electric Company met to discuss the results of the NRC Systematic Assessment of Licensee Performance review conducted for the period April 1, 1988 - July 31, 1989. This assessment is documented in SALP Report 50-29/88-99.