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

Region I

Report No.	50-333/80-21
Docket No.	50-333
License No.	DPR-59 Priority Category C
Licensee:	Power Authority of the State of New York
	P. O. Box 41
	Lycoming, New York 13093
Facility Na	me: James A. FitzPatrick Nuclear Power Station
Inspection	at: Scriba, New York
Inspection	conducted: October 25, 1980 - November 30, 1980
Inspectors:	W. Baunce 1/21/81
	W. Baunack, Senior Resident Inspector date signed
de	J. Linville, Resident Inspector date signed
	date signed
Approved by	H. B. Kister, Chief, Reactor Projects Section No. 4, RO&NS Branch

Inspection Summary:

Inspection on October 25, 1980 - November 30, 1980 (Report No. 50-333/80-21)

Areas Inspected: Routine inspection by resident inspectors (181 hours) of operational safety verification, surveillance test observation, maintenance observation, review of NUREG 0578 Category A items; evaluation and closeout of IE Bulletins 80-14 and 80-17 responses.

Results: Of the five areas inspected no items of noncompliance were noted in two areas, three items of noncompliance were noted in three areas (Failure to follow work activities control procedures, two examples; Failure to follow surveillance procedures; Failure to follow radiation protection procedures).

DETAILS

1. Persons Contacted

*R. Baker, Superintendent of Power

N. Brosem, Maintenance Superintendent

*V. Child:, Assistant to the Resident Manager

R. Converse, Operations Superintendent

*W. Fernancez, Technical Services Superintendent H. Kieth, Instrument and Control Superintendent

E. Mulcahey, Radiological and Environmental Services Superintendent

E. Connelly, Security and Safety Supervisor

*R. Pasternak, Resident Manager D. Tall, Training Coordinator

The inspectors also interviewed and talked with other licensee personnel during the course of the inspection including Shift Supervisors, Administrative, Operations, Health Physics, Security, Instrument and Control, Maintenance, and Contractor personnel.

*Denotes licensee individuals present for exit interview.

2. Operational Safety Verification

a. Control Room Observations

The inspector independently verified, through the use of a plant specific checklist plant parameters and equipment availability to ensure compliance with the limiting conditions for operations of the plant Technical Specifications. Items checked included:

- -- Switch and valve positions.
- -- Alarm conditions.
- -- Meter indication and recorder values.
- -- Status lights and power available lights.
- -- Computer printouts.
- -- Comparison of redundant readings.

The inspector directly observed the following plant operations.

- -- Routine power operations.
- Selected lit annunciators, which were discussed with control room operators to verify the reasons for them were understood and corrective action, if required, was being taken.

Shift turnovers were observed to ensure proper control room and shift manning on both day and back shifts. Shift turnover checklists and log review by the oncoming and offgoing shifts were observed by the inspectors.

No items of noncompliance were identified.

b. Shift Logs and Operating Records

- (1) Shift logs and operating records were reviewed to:
 - Obtain information to remain cognizant of facility problems and operations.
 - -- Detect changes and trends in performance.
 - Detect possible conflicts with Technical Specifications or regulatory requirements.
 - -- Identify problem areas for future followup.
 - -- Determine that records are being maintained and reviewed as required by facility administrative procedures.
 - -- Assess the effectiveness of the communications provided by the logs and determine that management is knowledgeable of problems identified in logs.
- (2) Selected portions of the following logs and records were reviewed:
 - -- Shift Supervisor Log.
 - -- Nuclear Control Operator Log.
 - -- Auxiliary Operator Log.
 - -- Shift Turnover Checklist.
 - -- Night Orders.
 - -- Daily Core Performance Surveillance Test.
 - -- Daily Instrument Check Surveillance Test.
- (3) No items of noncompliance were identified.

c. Plant Tours

(1) During the inspection period the inspectors made observations and conducted tours of the following plant areas:

- -- Control Room.
- -- Relay Room.
- -- Reactor Building.
- -- Turbine Building.
- -- Diesel Generator Rooms.
- -- Electric Bays.
- -- Pumphouse-Screenwell.
- -- Battery Rooms.
- -- Stack.
- -- Radwaste Building,
- -- Heater Bay Areas.
- -- Site Perimeter.
- (2) The following determinations were made:
 - -- There were no excessive piping vibrations.
 - -- Instrumentation and recorders were functioning.
 - -- Maintenance requests have been initiated for equipment in need of maintenance.
 - Plant areas are clear of fire hazards and selected fire equipment was operable.
 - -- Ignition sources and flammable materials are being controlled in accordance with licensee's procedures.
 - -- Activities in progress are being conducted in accordance with licensee's administrative controls and approved procedures.
 - -- Interior of selected electrical control panels are clean.
 - -- Physical Security Plan is being implemented by observing that:
 - -- Protected area barriers are not degraded.
 - -- Isolation zones are clear.
 - -- Persons and packages are checked prior to entry to the protected area.
 - -- Persons in the protected area display photo identification badges and persons requiring escort are properly escorted.
 - -- Communications checks are conducted.
 - -- Compensatory measures are employed when required.

- -- Plant housekeeping/cleanliness conditions are improving but excessive amounts of radioactive waste and tools are stored within the plant. The inspectors will continue to evaluate the licensee's efforts in this area during future inspections.
- -- Radiation protection controls are being implemented. The inspectors:
 - Verified by observation and review that the requirements of current RWPs were appropriate and were being followed.
 - -- Examined randomly selected radiation protection instruments to verify operability and adherence to calibration frequency.
 - -- Observed adherence to health physics procedures.
- (3) During one tour, on October 31, 1980, the inspectors observed contractor personnel walking into and out of the Reactor Building Track Bay Door without frisking. Although licensee operations and security personnel were present, health physics personnel were not and were apparently not aware of this activity. Failure to set up monitors at access points to and from restricted areas and failure to frisk when exiting from contaminated areas are contrary to Radiation Protection Operating Procedure III.C.1., Personnel Monitoring for Contamination dated December 26, 1979. This is an item of noncompliance (333/80-21-01).

Surveillance Test Observation

- a. The inspectors witnessed the performance of several surveillance tests to verify the following:
 - -- The procedure conforms to Technical Specification requirements.
 - -- Test data was accurate and complete.
 - -- Test results met Technical Specification requirements.
 - -- The surveillance schedule for the test was met.
 - -- Test instrumentation is calibrated.
 - -- Applicable limiting conditions for operation are being met.
 - -- Systems are properly returned to service.

The inspectors witnessed the performance of the following surveillance tests:

- -- Emergency Diesel Generator (EDG) Full Load Test F-ST-9B, Revision 7, dated June 11, 1980, performed on November 10, 1980.
- -- Calibration of the Main Steam Line Radiation Monitors F-ISP-69-1, Revision 6, dated September 1979, performed on November 15, 1980.

At the conclusion of the EDG Full Load Test the inspector observed that the door between the EDG Rooms 272/2 was open. This is contrary to Step V.2 of the EDG Full Load Test Procedure which states "Ensure the doors between the DG Rooms are closed when the DG's are required to be operable." This is an item of noncompliance (333/80-21-02).

4. Maintenance Observation

The inspector determined that for the removal of B Station battery from service to jumper one cell the appropriate surveillance tests were performed and included testing station battery F-ST-16A and F-ST-16B and A and C Emergency Diesel Generators F-ST-9D. The inspector determined by reviewing a 10 CFR 50.59 Nuclear Safety Evaluation performed by the licensee that B station battery has adequate capacity to perform its intended function with one cell jumpered. The inspector also verified that the appropriate surveillance tests were performed when B station battery was returned to service.

Review of NUREG 0578 Category A Items

The inspectors reviewed the following documents and correspondence to determine that the requirements of the NUREG 0578 Category A items had been satisfied.

References

- (1) September 13, 1979 letter from Eisenhut to licensee forwarding NUREG 0578 requirements for implementation.
- (2) Power Authority of the State of New York (PASNY) letter, Early to Denton dated October 22, 1979, which provided commitme ts on NUREG 0578 items.
- (3) October 30, 1979 letter from Denton to licensee which provided additional clarification of NUREG 0578 requirements.
- (4) PASNY letter, Schmieder to Denton dated November 21, 1979, which provided additional commitments based on NRC clarification of NUREG U578 requirements.

- (5) PASNY letter, Early to Denton dated January 2, 1980, which provided a status report on NUREG 0578 commitments.
- (6) PASNY letter, Early to Denton dated January 22, 1980, which provided the response to the NRC's Show Cause Order of January 2, 1980.

Based upon the results of this review, the inspectors determined, by discussion with licensee personnel, observation, procedure review, and licensee demonstrations, the extent to which the licensee met the requirements and their commitments. The findings for each item are documented after a summary of the requirements and the licensee commitments.

a. Item 2.2.1.b - Shift Technical Advisor (STA)

Requirements of the Denton Clarification Letter of October 30, 1979

- (1) Provide an STA on shift and available within ten minutes.
- (2) The STA shall have a bachelor's degree or equivalent.

Licensee Commitments

PASNY Letter - Schmieder to Denton dated November 21, 1979.

PASNY Letter - Early to Denton dated January 2, 1980.

The licensee agreed to provide an STA as required by January 1, 1980.

Inspection Findings

The inspector determined that STAs are assigned to each shift and are normally located at a desk in the Control Room. It was further determined that six of seven STAs have bachelor's degrees. The seventh STA has been determined by the licensee to have equivalent training and experience. This item is unresolved pending further definition of bachelor's degree equivalency (333/80-21-03).

Item 2.2.1.a - Shift Supervisor Responsiblity

The Requirements of the Denton Clarification of October 30, 1979

- (1) The highest level of corporate management shall issue a Management Directive that establishes Shift Supervisors' command duties.
- (2) Plant procedures shall define command decision authority of Shift Supervisor in the Control Room.

- (3) Shift Supervisor training programs shall emphasize responsibility for assuring safety.
- (4) The senior officer shall assure that administrative duties which detract from Shift Supervisor's management responsibility are delegated to others.

PASNY Letter - Early to Denton dated January 2, 1980.

The Senior Vice President and Director of Power Operations reviewed and approved up-dated procedures on the Shift Supervisor's responsibility.

Inspection Findings

Licensee corporate management reviewed and approved Operations Department Standing Order No. 1, Revision 3, dated December 21, 1979, Operating Staff Responsibilities and Authorities, which defines the command decision authority of the Shift Supervisor.

The licensee is in the process of implementing a training program which covers the areas identified by Section 5.2.1.8 of ANS 3.1.

The licensee has relieved the Shift Supervisor of some administrative responsibilities by requiring that time sheets and meal tickets be completed after the end of his shift.

The inspector had no further questions at this time.

c. Item 2.2.1.c - Shift Relief and Turnover Procedures

Requirements of the Denton Clarification Letter of October 30, 1979

- Provide a checklist for oncoming and offgoing control room operators and the oncoming Shift Supervisor to complete and sign.
- (2) Checklists or logs provided for completion of offgoing and oncoming auxiliary operators and technicians.
- (3) Establish a system to evaluate the effectiveness of shift and relief turnover procedure.

Licensee Commitments

PASNY Letter - Early to Denton dated October 22, 1979.

PASNY Letter - Early to Denton dated January 2, 1980.

PASNY agreed to review and revise plant procedures to assure adequate coverage during shift relief and turnover.

Inspection Findings

The licensee issued Operations Department Standing Order No. 4, Shift Relief and Log Keeping, Revision 4, dated December 21, 1979, which implements the requirement for a checklist for control room operators and shift supervisors.

While the auxiliary operators maintain a log of critical equipment under maintenance or test, no such log is maintained by technicians since technicians are normally not on shift except during outages or special situations. This item is unresolved pending licensee review of the need for technician logs by December 31, 1980 (333/80-21-04).

The Operations Superintendent reviews the checklists to evaluate the effectiveness of shift relief and turnover.

d. Item 2.2.2.a - Control Room Access

Requirements of Denton Clarification Letter of October 30, 1979

- Develop and implement an administrative procedure that establishes the authority and responsibility of the person in charge of the control room to limit access.
- Develop and implement procedures that establish a clear line of authority and responsibility in the control room in the event of an emergency.

Licensee Commitment

PASNY Letter - Early to Denton dated October 22, 1979.

PASNY Letter - Early to Denton dated January 2, 1980.

The licensee agreed to review and revise, as necessary, plant procedures to assure that access to the control room is limited to those persons necessary for the safe command and control of operations.

Inspection Findings

The licensee has revised Operations Department Standing Order (ODSO) No. 1, Operating Staff Responsibilities and Authorities, Revision 3, dated December 21, 1979 and issued ODSO No. 2, Operating Principles and Philosophy, Revision 1, dated November 30, 1979. These procedures appear to establish the authority and responsibility of the person in

charge of the control room to limit access. However, because of an exception "For conditions outlined in the Emergency Plan" contained in ODSO No. 1 and because of ambiguities in the Emergency Plan, the line of authority and responsibility in the control room in the event of an emergency is not clear. The licensee has agreed to revise the procedures by December 31, 1980. This item is unresolved pending further revision of these procedures (333/80-21-05).

e. Item 2.1.8.a - Post Accident Sampling

Requirements of the Denton Clarification Letter of October 30, 1979

The licensee shall have the capability to promptly obtain pressurized and unpressurized reactor coolant samples and a containment atmosphere sample. Plant procedures for the handling and analysis of samples (if necessary), minor plant modifications for taking samples and a design review and procedural modifications shall be complete by January 1, 1980.

Licensee Commitments

PASNY Letter - Schmieder to Denton dated November 21, 1979.

PASNY Letter - Early to Denton Dated January 1, 1980.

The licensee committed to a design review, long term modifications to upgrade post accident sampling capabilities, and an interim procedure for sampling and analyzing high activity reactor water samples.

Inspection Findings

The licensee developed procedure RTP 31, Reactor Water Sampling Post Accident, Revision 0, dated December, 1979 which provides for drawing a high activity reactor water sample and for obtaining conductivity, chloride, and isotopic analyses of it. The licensee has no capability to obtain a pressurized reactor water sample, but there are provisions for doing so in the sample sink modification package.

Because the shielding design review showed that the Reactor Building would be inaccessible in the event of a worst case accident, the licensee had made no provisions for obtaining a containment atmosphere sample. As a result of subsequent discussions, the licensee has agreed to develop procedures identifying the conditions under which the Reactor Building could be entered for a containment atmosphere sample and the means by which such a sample would be drawn under these adverse conditions. This item is unresolved pending the development of the procedure which the licensee has agreed to complete by December 31, 1980 (333/80-21-06).

f. Item 2.1.3.a - Direct Indication of Safety and Relief Valve Position Requirements of Denton Clarification Letter of October 30, 1979

- (1) Provide operator with unambiguous indication of valve position.
- (2) Valve position should be indicated in the control room and an alarm should be provided.
- (3) Valve position indication may be safety grade. If position indication is not safety grade, a reliable single direct indication powered from a vital instrument bus may be provided if backup methods of determining valve position are available and are discussed in the emergency procedures as an aid to operator diagnosis and action.
- (4) The valve position indication should be seismically qualified consistent with the component or system to which it is attached. If not by January 1, 1980, provide justification and a schedule for upgrading.
- (5) Qualified for its appropriate environment by January 1, 1980 or provide a proposed schedule.

Licensee Commitments

PASNY Letter - Schmieder to Denton Dated November 21, 1979.

PASNY Letter - Early to Denton dated January 2, 1980.

The licensee agreed to install the B&W acoustic monitoring instrumentation not earlier than March 1980, but within 30 days of delivery. The licensee expected B&W to complete its component qualification program for the system by July 1980.

Inspection Findings

The licensee installed the B&W acoustic monitoring system with alarm and individual SRV gross position indication in the control room on August 3, 1980. The position indication is not safety grade, but is powered by an uninterruptible power supply. In addition, SRV tailpipe temperature monitors provide both computer and annunciator alarms in the control room. These alarms are discussed in Special Procedure 6, Inadvertent Relief Valve Opening, as an aid in diagnosis and action. B&W has informed the licensee that the qualification program for the system will be completed in the second quarter of 1981.

By reviewing modification package FL-80-01 the inspector determined that the licensee had not completed and tested the modification in accordance with the PORC reviewed and approved test procedure as required by the Work Activities Control Procedure No. 10.1.6, Control of Modifications dated September 15, 1978. Part B of the test procedure which required testing at 100% power was not completed. The minutes of the PORC Review 80-045 dated June 24, 1980 indicated that Part B was to have been changed. However, the test procedure was approved as written by the Resident Manager on June 24, 1980. The licensee indicated that the required testing was completed and that the test procedure would be modified to delete Part B. In addition, they considered the equipment to be fully operational.

This failure to follow the procedures for the control of modifications is an item of noncompliance (333-80-21-07). An added example is contained in paragraph 6.

The Plant Modification Tracking Form indicated that the following procedures had been updated.

- -- Operating Procedure No. 1, Main Steam System.
- -- Operating Procedure No. 68, Automatic Depressurization System.
- -- Special Procedure No. 6, Inadvertent Relief Valve Opening.

A review by the inspector indicated that the above procedures were in the process of being revised, but that the master copies in the control room did not reflect the modification. This oversight was immediately corrected by the licensee.

g. Item 2.1.4 - Containment Isolation

Denton Clarification Letter Dated October 30, 1979

- Provide diverse containment isolation signals that satisfy safetygrade requirements.
- (2) Identify essential and non-essential systems and provide results to NRC.
- (3) Non-essential systems should be automatically isolated by containment isolation signals.
- (4) Resetting of containment isolation signals shall not result in automatic loss of containment isolation.

PASNY Letter - Schmieder to Denton dated November 21, 1979.

PASNY Letter - Early to Denton dated January 2, 1980.

The licensee agreed to meet this requirement. A detailed review identified one pair of isolation valves on a reactor water sample line which required modification to prevent automatic reopening upon reset.

Inspection Findings

The licensee appears to have satisfied the requirements of this item. Diverse containment isolation signals are provided for non-essential systems. The licensee identified essential and non-essential systems. Non-essential systems are automatically isolated by containment isolation signals. The licensee modified the logic for the reactor water sample line such that resetting of containment isolation signals does not result in automatic loss of containment isolation. The inspector confirmed these findings through discussions with the licensee, a review of Technical Specification Table 3.7.1 and a review of modification package FL-79-29.

h. Item 2.2.2.b - Onsite Technical Support Center

Requirements of Denton Clarification Letter Dated October 30, 1979

- Establish a Technical Support Center (TSC) and provide a complete description.
- (2) Provide plans and procedures for engineering/management support and staffing of TSC.
- (3) Install dedicated communications between the TSC and the control room, near site Emergency Operations Center, and the NRC.
- (4) Provide monitoring for both direct radiation and airborne contaminants. Designate action levels for protective measures.
- (5) Assimilate or ensure access to technical data, include licensee's best effort to display plant parameters.
- (6) Develop procedures for performing accident assessment function from the control room.
- (7) Submit to NRC a longer range plan for upgrading TSC.

PASNY Letter - Schmieder to Denton, dated November 21, 1979.

PASNY Letter - Early to Denton dated January 2, 1980.

PASNY established a TSC at the FitzPatrick Plant. The features of the TSC include a controlled set of plant documents, video and line printer displays of parameters and alarms provided by the plant computer, and communication equipment including an NRC red telephone and a dedicated control room phone jack among others. PASNY is evaluating a modification to provide filtered ventilation.

Inspection Findings

Through discussions with the licensee, a tour of the TSC, a demonstration of Plant Standing Order No. 25, Technical Support Center Access to Process Computer Information, dated September 23, 1980, and a review of applicable portions of the site Emergency Plan and procedures, the inspectors determined that the licensee had met their commitments and all requirements with the exception of the requirement to develop procedures for performing the accident assessment function from the control room if the TSC was uninhabitable. This item is unresolved pending licensee development of the procedures by December 12, 1980 as agreed (333/80-21-09).

Item 2.2.2.c - Onsite Operational Support Center

Requirements of Denton Clarification Letter of October 30, 1979

- Designate an area separate from the control room where operations support personnel will report in an emergency situation as the onsite Operational Support Center (OSC).
- (2) Provide communications with the control room.
- (3) Revise the Emergency Plan to reflect OSC existence and establish methods and lines of communication and management.

Licensee Commitments

PASNY Letter - Early to Denton dated October 22, 1979.

PASNY Letter - Schmieder to Denton, January 2, 1980.

The licensee agreed to designate the visitor's gallery outside the control room as the OSC.

Inspection Findings

The licensee designated the visitor's gallery adjacent to the control room as the OSC as committed. However, the licensee did not modify the existing Emergency Plan and procedures as required. This item is unresolved pending revision to the Emergency Plan as agreed by December 12, 1980 (333/80-21-10).

j. <u>Item 2.1.6.a - Systems Integrity Outside Containment</u>

Requirements of Denton Clarification Letter Dated October 30, 1979

- Provide a description of a program to reduce leakage outside containment from highly radioactive systems during accident conditions.
- (2) Include a list of systems excluded from this program.
- (3) Testing of gaseous systems should include helium leak detection or equivalent methods.
- (4) Include in program potential release paths due to design and operator deficiencies.

Licensee Commitments

PASNY Letter - Early to Denton dated October 22, 1979.

PASNY Letter - Early to Denton dated January 2, 1980.

The licensee agreed to implement a program to reduce leakage by visually inspecting components for leakage during monthly surveillance tests. The systems included in this program are the core spray system, the residual heat removal system, the high pressure coolant injection system, and the reactor core isolation cooling system. Any leaks identified would be reported to the maintenance superintendent for repair. In addition, the licensee agreed to consider installing Reactor Building floor drain sump timers to help identify excessive leakage.

Inspection Findings

The inspector reviewed draft Operations Department Standing Order No. 14, ECCS Leak Rate Program and ECCS System Surveillance Procedures, to determine that the licensee was meeting his commitments. The inspector determined through discussions with the licensee that the licensee did not consider helium leak detection methods adequate for a gaseous system with the large volume of the standby gas treatment system

(SGTS). In addition, the licensee knew of no equivalent means of identifying leakage from the SGTS. Consequently, the licensee dropped the SGTS from the leak detection program. Also, the portion of the reactor water sample system used for post accident sampling was not included in the leak detection system. Since portions of the reactor water sample system and the SGTS system would be required under post accident, and accident conditions the licensee agreed to identify a means to detect leakage and include them in the program. This item is considered unresolved pending inclusion of the above systems in the program (333-80-21-11).

k. Item 2.1.8.c - Improved in Plant Iodine Instrumentation

Requirements of Denton Clarification Letter of October 30, 1979

- (1) Monitoring must include portable instruments.
- (2) Capability to accurately detect the presence of iodine in the region of interest following an accident.

Licensee Commitments

PASNY Letter - Early to Denton dated October 22, 1979.

PASNY Letter - Early to Denton dated January 2, 1980.

The licensee determined that existing plant procedures are adequate.

Inspection Findings

The inspector determined that the licensee appears to meet this requirement by reviewing RTP-29, Emergency Air Sample Survey, dated December 19, 1979.

1. Item 2.1.8.b - Increased Range of Radiation Monitors

Requirements of the Denton Clarification Letter Dated October 30, 1979

- (1) Provide interim method for quantifying high level releases up to 10,000 Ci/sec for noble gases from all potential release points.
- (2) Provide a description of the method including instrumentation to be used, sampling locations, capability to obtain readings every 15 minutes during an accident and source of power.

PASNY Letter - Early to Denton dated October 22, 1979.

PASNY Letter - Early to Denton dated January 2, 1980.

The licensee developed interim procedures for monitoring noble gas effluents in a post accident situation. Noble gas release rates are determined by using portable high range ion chambers mounted in a Marinelli sampling chamber. They are drawn from existing isokenetic probes and the flowing sample is analyzed in a low background area. The procedure is capable of determining the concentration of noble gases over a range of 10 to 10 microcuries per centimeter cubed. Communications between the sampler and the control room are by portable radio.

Inspection Findings

The inspector reviewed RTP 30, Noble Gas Activity Estimation Post Accident, dated December 21, 1979 and observed a demonstration of it. The licensee appears to meet the requirements with this procedure with one exception. Although one RM-16 was designated for use, there are three potential release points which may require venting under post accident conditions. The licensee agreed to (and since the inspection has) obtain additional RM-16's so that all potential release points can be monitored simultaneously if necessary under post accident conditions.

Review of Drywell Sump System Modification

While reviewing drywell sump systems, to determine plant susceptibility to a flooding event, the inspector reviewed modification package FL-78-30. This modification altered the scheme for cooling the drywell equipment drain sump by continuously recirculating the drains through the cooler and using a level signal to control opening and closing the outlet valve to the equipment drain system. The fact that this modification which has been installed has never been indicated on the (controlled copy of) Radwaste System Drawing FM-17A-14 as required by paragraph 7.1.7.1 of Work Activities Control Procedure 10.1.6, Control of Modifications, Revision 4, dated December 1979 is an added example of failure to follow work activities procedures. See paragraph 5.f.

7. Evaluation and Closeout of IE Bulletin 80-17 Responses

In response to an IE Headquarters request the inspectors prepared a matrix to aid in the evaluation and closeout of IE Bulletin 80-17 including Supplements 1, 2, and 3, and IE Bulletin 80-14. The information provided for IE Bulletin 80-17 was based on the review documented in Inspection Report 80-15. The information provided for IE Bulletin 80-17 Supplements 1, 2, and 3 and IE Bulletin 80-14 was gathered during this inspection period and is documented below.

a. IEB 80-17, Supplement 1

The inspector reviewed the licensee response dated August 15, 1980 which provided an analysis of the adequacy of the "as-built" SDV system and associated vent and drain systems including an evaluation of the loop seal identified in the drain line between the east SDV and the SDIV.

The inspector verified that special procedure F-EOP-25, dated July 30, 1980 was revised to provide clear guidance to licensed operators in the control room regarding initiation of Standby Liquid Control System (SLCS) without supervisory authority. The inspector verified that Operations Department Standing Order (ODSO) No. 12, "Requirements of IE Bulletin 80-17", Revision 3, dated September 26, 1980 provides guidance to assure remedial action is taken if water is found in the SDV when it should be free of water and to ensure the SLCS key is readily available to the operator in the control room. The inspector also verified that the SLCS key was taped to the control panel as required by ODSO No. 12 and that daily monitoring of the SDV was being accomplished by log review and direct observation.

The licensee committed to install the GE Ultrasonic SDV Monitoring System by December 1, 1980 and to conduct UT of the SDV once per shift. This will be reviewed in a subsequent inspection after the installation is complete.

b. IEB 80-17, Supplement 2

The inspector verified by observation that the licensee had completed the reroute of the SDV vent pipes from the reactor building equipment drain sump to the RHR heat exchanger rooms. Minor modification M-03-8028 included a spray deflector which drains to the Reactor Building floor drain system to minimize airborne contamination. This modification appears to meet the requirements of the bulletin.

c. IEB 80-17, Supplement 3

The inspector reviewed Operations Department Standing Order No. 12, "Requirements of IE Bulletin 80-17", Revision 3 dated September 26, 1980 and associated alarm response procedures to ensure that guidance had been provided to require an immediate scram on low control rod drive air pressure, on multiple rod drift-in alarms or on a marked change in the number of control rods with high temperature alarms. The inspector further verified that ODSO No. 12 requires the functional test of the SDIV level switches after each scram before returning to power. The requirement to perform the instrument surveillance procedure on the SDIV level switches was also added to the startup checklist.

The inspector verified that indication of the control rod drive air pressure is available in the control room. On October 24, 1980, the inspectors determined that the control rod drive temperature recorder was not in service and that it had not been in service since before the post refueling outage start up in August 1980. Work Request WR 03-6365 dated March 1, 1980 indicated that the CRD temperature recorder had been worked on in August prior to start up and the licensee was waiting for parts to repair it. Since the licensee, in their response to IEB 80-17, Supplement 3 (JAFP 80-676 dated August 27, 1980), had agreed to initiate an immediate manual scram in the event of multiple control rod drift alarms or the presence of a marked change in the number of control rods which exhibited high temperature alarm conditions, they agreed to restore the CRD temperature recorder to service immediately to provide gross CRD temperature indication and alarms pending receipt of the necessary replacement parts to restore it to a fully operational condition.

During subsequent discussions the licensee stated that it had been their intent to restore the recorder to operation as soon as possible. However, they had interpreted the bulletin requirements as an indication of either multiple CRD drift alarms or a marked change in the number of CRDs exhibiting high temperatures for determining the need to scram. The inspectors clarified the bulletin to mean that each indication (rod drift alarms and CRD high temperature) should be separately used as criteria for determining that symptoms exist which could lead to the introduction of unwanted water in the scram discharge volumes. The inspector will monitor the licensee's progress in repairing the subject temperature recorder (333-80-21-12).

d. IE Bulletin 80-14

The inspector verified by a computer search of the licensee's record system that there have been no recorded instances of the following types of events:

- Degradation of SDV level switches resulting from damaged or bent float assemblies.
- -- Degradation of SDV vent and draft valve operation.
- Damage to SDV caused by water hammer.

The inspector verified the SDV vent and drain valve opening and closing times were reported in the licensee response to IE Bulletin 80-17.

The inspector reviewed Operations Department Standing Order No. 12, "Requirements of IE Bulletin 80-17", Revision 3, dated September 26, 1980 to determine that the following requirements had been met.

- Notify the NRC within 24 hours if scram discharge volume vent and drain valves are not operable or closed for more than one hour in any 24 hour period during operation.
- -- Perform functional test of SDV level switches prior to start up.

The inspector verified that existing instrument surveillance procedure F-ISP-66-1, Scram Discharge Volume High Water Level Instrument, Revision 1, dated March 1979 requires the following:

- -- Quarterly functional test of the SDV level switches.
- Occurrence report if SDV level switch is degraded due to a damaged float.

The inspector verified that Surveillance Procedure FST-29B, Mode Switch in Shutdown Functional Test, Revision 2, dated January 27, 1978 has provisions for verifying the operability of and testing once per cycle the SDV vent and drain valves. Since there are no provisions for verifying that the SDV vent and drain valves are normally open the licensee agreed to add these valves to the shift relief turnover check sheet by January 2, 1981. This item is unresolved pending this revision to the shift relief check sheet (333/80-21-13).

8. Unresolved Items

Unresolved items are those items for which information is required to determine whether the item is acceptable or an item of noncompliance. Unresolved items are discussed in paragraphs 5a, 5c, 5d, 5e, 5h, 5i, 5j, 7c and 7d.

9. Exit Interview

At periodic intervals during this inspection, meetings were held with senior facility management to discuss inspection scope and findings. At the conclusion of the inspection a summary meeting was held.