



CONNECTICUT YANKEE ATOMIC POWER COMPANY

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DOCKET NO. 50-213
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U. S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
631 Park Avenue
King of Prussia, Pennsylvania 19406

Attn: Eldon J. Brunner, Chief
Reactor Operations and Nuclear
Support Branch

Reference: Letter, E. J. Brunner to W. G. Council,
dated June 26, 1980
Inspection 50-213/80-08

Dear Mr. Brunner:

Pursuant to Section 2.201 of the Nuclear Regulatory Commission's (NRC's) "Rules of Practice", Part 2, Title 10, Code of Federal Regulations, the following information concerning items identified during inspection 50-213/80-08 is hereby submitted.

A. Infraction

Technical Specification 6.8.1 states, in part, "Written procedures... shall be established, implemented and maintained that meet or exceed the requirements and recommendations of Sections 5.1 and 5.3 of ANS N18.7-1972 and Appendix "A" of USAEC Regulatory Guide 1.33...."

Regulatory Guide 1.33, Appendix A, paragraph E, states, in part, "...Each safety-related annunciator should have its own written procedure which normally contain the alarm setpoints and up to five or six items of corrective action per alarm."

ANSI N18.7-1972, 5.3.3 states, in part, "...Procedures correcting off-normal conditions should be developed for these events where system complexity may lead to operator confusion..."

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Contrary to the above, the following are examples of annunciator additions/changes where response procedures were not established/ revised to reflect those additions/changes although the plant had been operating in the interim.

- Axial Off-Set, Plus-Minus
- High Volts per Hz
- Steam Trip Valve Air Reservoir, Low Pressure
- ANN 4.9-1, Unit Annunciator EG-2A
- ANN 4.9-2, Unit Annunciator EG-2B

Response

All the above response procedures, with the exception of ANN 4.9-2, have been completed and reviewed by the Plant Operations Review Committee (PORC). Procedure ANN 4.9-2 will be completed and reviewed by PORC prior to July 30, 1980. This item will be included in Connecticut Yankee's activity surveillance program schedule prior to September 30, 1980.

B. Infraction

Technical Specification 6.8.1 states, in part, "Written procedures and administrative policies shall be established, implemented and maintained that meet or exceed the requirements and recommendations of Sections 5.1 and 5.3 of ANSI N18.7-1972..."

The following are examples of instances where plant written procedures, administrative policies and the requirements of ANSI N18.7-7 were either improperly or inadequately implemented:

- (1) ANSI N18.7-1972, Paragraph 5.1.6 states, in part, "Maintenance that can affect the performance of safety-related equipment shall be properly preplanned and performed in accordance with written procedures, documented instructions, or drawings appropriate to the circumstances..."

Contrary to the above, the following maintenance activities designated as QA Category 1 (safety-related) were accomplished without using written procedures:

- Work Permit, MA-0899, Disassemble and Repair 1A Auxiliary Feed Pump Valve 1206-A
- Work Permit, MA-0926, Replaced Emergency Diesel Generator 2A Air Start Drain Valve

- Work Permit, MA-0392, Replaced Reactor Coolant Pump Seal Bypass Valve
- Work Permit, MA-0983, Replaced Charging Pump Main Lube Oil Pump
- Work Permit, MA-0674, Remove Feedwater Regulation Valve in order to facilitate system testing

Response

Most of the maintenance cited activities were very routine and did not require a separate procedure for the work performed. Work Permit, MA-0392 was performed using an approved freeze sealing and welding procedure. In all cases, the equipment functioned properly. However, to reduce the possibility of maintenance being performed in cases where written procedures are required, the following is being implemented.

- Development and implementation of a QA training program for the Maintenance & Instrument & Control Department Supervisors to increase awareness of QA/QC requirements. This will be completed by September 30, 1980.
 - Increased QA Department involvement with the departments when preparing work permits. Additional QA/QC personnel and department reorganization are presently being budgeted to provide this function. In the interim, contractor QA/QC personnel are presently being used to supplement the QA Department.
 - The Material, Equipment & Parts List (MEPL) is being revised and improved to provide better guidance to department supervisors. This task will be completed by December 31, 1980.
- (2) ANSI N18.7, paragraph 5.3.5(3) states, in part, "...Instructions shall be included or referenced, for returning the equipment to its normal operating status. Operating personnel shall place the equipment in operation and verify and document its functional acceptability..."

Further, procedure QA 1.2-11.3, "Retest/Test Requirements", paragraph 4.5 requires that when rework, repair, adjustment or modifications have been made to mechanical or electrical components or systems, the appropriate foreman or supervisor shall be responsible for establishing retest requirements and acceptance criteria to assure that the affected component or system shall function satisfactorily in operation.

Contrary to the above, the following maintenance activities which were designated as QA Category I (safety-related) were accomplished without performance of any post installation functional tests to prove acceptability of the maintenance:

- Work Permit, MA-0926, Replaced Emergency Diesel Generator 2A Air Start Drain Valve
- Work Permit, MA-0983, Replaced Charging Pump Main Lube Oil Pump
- Work Permit, MA-0674, Remove Feedwater Regulation Valve in order to facilitate system testing

Response

Work permit, MA-0983 and MA-0926 have operators signatures for verification of equipment operability. Also work permit, MA-0926 references satisfactory completion of Surveillance Procedure SUR 5.1-17, entitled Emergency Diesel Generators Manual Starting and Load Test, to prove equipment operability. In every instance, the equipment operated properly.

However, to reduce the possibility of not performing required Retests/Tests, until the MEPL is revised, all work permits, after July 31, 1980, will be reviewed by the Quality Assurance Department prior to the start of an activity. These reviews will be performed using a checklist to assure consistency. Subsequently, the Quality Assurance Department will review all QA work permits prior to the start of an activity.

- (3) Procedure QA 1.2-10.1, "Installation Inspections", paragraph 5.1 requires the following: "When work is being performed on QA systems, structures or components, the Job Supervisor shall be responsible for ensuring that installation inspections are performed as appropriate."

Contrary to the above, it appears that the following maintenance activities which were designated as QA Category I (safety-related) were accomplished without performing any post installation inspections:

- Work Permit, MA-0899, Disassemble and Repair 1A Auxiliary Feed Pump Valve 1206-A
- Work Permit, MA-0926, Replaced Emergency Diesel Generator 2A Air Start Drain Valve
- Work Permit, MA-0444, Change Boric Acid Filter
- Work Permit, MA-0983, Replaced Charging Pump Main Lube Oil Pump
- Work Permit, MA-0674, Remove Feedwater Regulation Valve in order to facilitate system testing

Response

The actions taken per item B(2) will prevent possible failures to perform installation inspections.

- (4) Procedure QA 1.2-8.2, "Material Issue", paragraphs 7.1 and 7.2 require that QA material be issued for QA maintenance work and that the Job Supervisor shall enter the QA material control number ("CYSN") on the work permit and that the QA Department shall ensure that the CYSN is written on the work permit.

Contrary to the above, the QA material serial number for material used for Work Permit, MA-0926, Replacement of Emergency Diesel Generator 2A Air Start Drain, was not recorded on the work permit.

Response

Work Permit, MA-0926 is the replacement of a brass one-half inch drain valve from a trap and was not considered by the supervisor to be a component requiring Quality Assurance controls.

As stated in response B(2), a more definitive QA Material, Equipment and Parts List is being developed, and by July 31, 1980, all work permits will be reviewed by the QA Department. This will decrease the "judgmental" decisions required by department personnel for QA classification.

- (5) Procedure QA 1.2-5.1, "Maintenance Work Requests and Work Permits", paragraph 6.2.13 requires the following:

"6.2.13 It is the originators responsibility to state whether or not there are QA requirements for the job. If "Yes" is checked off, the requirements stated requests the QA Department to perform an inspection, hold point, check or signature on the procedure or QA-QC Inspection Plan, the Work Permit is to be forwarded to QA for approval before being taken to the Control Room."

Contrary to the above, prior QA Department authorization for the following QA Category I Maintenance Work Permits were not obtained:

-- Work Permit, MA-0399, Disassemble and Repair 1A Auxiliary Feed Pump Valve 1206-A

-- Work Permit, MA-0788, Realign "A" Auxiliary Feed Pump

-- Work Permit, MA-0674, Remove Feedwater Regulation Valve
in order to facilitate system testing

Response

As stated in response B(2), until the MEPL is revised, all work permits will be reviewed by the QA Department prior to the start of an activity. Subsequently, the QA Department will review all QA work permits prior to the start of an activity.

(6) Procedure QA 1.2-5.1, paragraph 6.2.2.3 requires the following:

"6.2.2.3 The QA Department shall review the Work Permit for:

- 1) Completeness
- 2) Use of QA material. It is the QA Department's responsibility to enter all CYSN numbers on the Work Permit
- 3) Test data sheets
- 4) Special process data
- 5) QA Inspection Plans
- 6) Housekeeping requirements
- 7) Fire Protection requirements

If a Work Permit is found incomplete, it will be returned to originator.

Quality Assurance shall indicate their review by stamping the Work Permit with the designation "CY QA Concurrence" and sign the designation.

Contrary to the above, the QA Work Permit final review appears to be inadequate in that for all of the Work Permit discrepancies the Work Permits had received QA review and sign-off.

Response

A checklist is being upgraded to assure all required items are reviewed and will be completed by September 30, 1980.

In addition, the Quality Assurance Department is being reorganized and upgraded. A separate Quality Assurance function will be added to the department. This will provide increased awareness and capability of meeting Quality Assurance requirements. This is planned for 1981. Until then, contractor personnel, who are on site, will assist in providing additional services where needed.

C. Deficiency

Technical Specification 6.5.1.4 states, "Alternate members shall be appointed in writing by the PORC Chairman to serve on a temporary basis; however, no more than two alternates shall participate in PORC activities at any one time."

Technical Specification 6.5.1.6 states, "A quorum of the PORC shall consist of the Chairman and four members including two alternates."

Technical Specification 6.5.1.8 for PORC responsibilities states, in part, "The PORC shall maintain written minutes of each meeting...."

Procedure ADM 1.1-1 states, in part, the responsibilities of PORC as "Review of a) all procedures required by Specification 6.8 and changes thereto, b) any other proposed procedures or changes thereto...."

Contrary to the above, PORC meeting minutes were not adequately maintained and several items requiring PORC review did not receive proper PORC review in that:

- PORC meetings held on February 28, 1980; November 28, 1979; and, February 13, 1979, did not accurately document the meeting attendees.
- A PORC meeting on February 13, 1979, was conducted without the required quorum; hence, the following items reviewed at that meeting did not receive proper PORC review:
 - Technical Specification Change Requests, #79-2 and #79-3
 - NOP 2.4-5, Draining an Isolation Loop
 - SUR 5.3-24, Dead Weight Tested PC-23C
 - SUR 5.1-47, CCW to Neutron Shield Tank
 - SPL 10.5-30, Testing of OT-2 Switch
 - FP-CYW-R8, Refueling Procedure
 - M 8.15-11, Boric Acid Filter
 - SPL 10.5-155, Welding and NDE Requirements

Response

The proper quorum was available at each of the above PORC meetings, but the meeting minutes did not accurately document the attendees.

All the items listed have been reviewed by PORC with the correct quorum on July 5, 1980.

The following changes will be implemented by August 1, 1980, to prevent recurrence:

- A checklist is to be prepared for the PORC Secretary. This will be included with the minutes of the meeting and will address:
 - Previous minutes review is documented.
 - Quorum is present and actual status is recorded.
 - The applicable membership is present for the items to be discussed

D. Deficiency

Technical Specification 6.8.1 requires, in part, "Written procedures and administrative policies shall be established, implemented and maintained...."

Technical Specification 6.10.1 requires, in part, "The following records shall be retained... a. Records...of principal maintenance activities, inspections, repair and replacement of principal items of equipment related to nuclear safety...."

Procedure QA 1.2-5.1, "Maintenance Work Requests and Work Permits" requires, in part, the following:

"6.2.22 The Shift Supervisor shall then forward the entire Work Permit Package to the QA Department. ALL WORK PERMITS SHALL BE TRANSMITTED TO THE QA DEPARTMENT...."

"6.2.25 QA personnel shall forward completed Work Permits to the records supervisor for records control...."

"6.2.26 The QA Department shall maintain traceability of Work Permits transmitted to them by the Shift Supervisor."

Contrary to the above, Work Permit documentation records for the following maintenance activities could not be located and were apparently not maintained.

-- Work Permit, MA-0380, Monthly Electrical PMs, performed January 3, 1979;

-- Work Permit, MA-0459, Monthly Electrical PMs, performed June 1, 1979;

-- Work Permit, MA-0646, No. 2 Reactor Coolant Pump (RCP) Seal Replacement, performed September 30, 1979; and,

-- SUR 5.5-1, "Testing of Pressurizer Safety Valves", Attachment No. 1, pressure setpoint data for Pressurizer Safety Valve No. 524 associated with Work Permit, MA-0647, Repair of Pressurizer Code Safety Valve 524, performed September 29, 1979.

Response

Work Permits, MA-0380 and MA-0459 were monthly electrical preventative maintenance items and verified complete. To provide record keeping consistency, two new work permits were prepared and marked as duplicate and placed in station records.

The Work Permits, MA-0646 and MA-0647 are indicated complete in the maintenance records and appear to be lost in the transfer of records. A memo will be sent to file by August 15, 1980, documenting the records are not available. The equipment in both work permits has been reworked due to normal surveillance and maintenance.

To prevent recurrence, the importance and procedure for proper record keeping will be included in the QA/QC training program described in item B(1).

E. Deficiency

Technical Specification 6.8.1 requires, in part, "Written procedures and administrative policies shall be established, implemented and maintained that meet or exceed the requirements and recommendations of Sections 5.1 and 5.3 of ANSI N18.7-1972...."

ANSI N18.7-1972, paragraph 5.1 requires, in part, "...policies shall be provided to control the issuance of document { }... changes.... These policies shall assure that document { }... revisions or changes...are distributed to and used by the personnel performing the prescribed activity."

Procedure QA 1.2-61 7.1, states, in part, "To assure each document holder has received and inserted the change to that document, the Office Supervisor is responsible for issuing a transmittal form with each change issued.... The holder of document shall remove and destroy the superseded portion, insert changes...."

Contrary to the above, Procedure SUR 5.1-15, "Fire Protection System Tests", was performed on August 31, 1979; September 11, 1979; and September 13, 1979, using Revision 4 of the procedure although

a later revision was in effect. In addition, the following procedures located in the Control Room files and library did not have their current revisions posted:

- NOP 2.7-5, Purification of Refueling Cavity Water
- NOP 2.7-1, Processing Letdown Liquid
- NOP 2.12-1, Core Cooling System Lineup for Shutdown and at Power Operations
- NOP 2.2-2, Steady State Operation and Surveillance
- DOP 3.1-9, Total Loss of AC, and Surveillance Procedure SUR 5.5-14, "Feedwater Snubber Surveillance", which had been superseded by procedure SUR 5.15-11, had not been removed from the station procedure controlled copy files.

Response

All procedures files were examined and outdated procedures destroyed as of July 15, 1980.

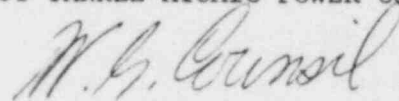
The library copies are now controlled by means of a checklist in each library copy.

QA is to include this item as a periodic surveillance in the surveillance program by September 30, 1980.

As per J. F. Opeka's telephone conversation and agreement with you on July 25, 1980, this report is being submitted to you seven (7) days beyond the twenty (20) day deadline.

Very truly yours,

CONNECTICUT YANKEE ATOMIC POWER COMPANY



W. G. Council
Senior Vice-President