

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

Region I

Report No. 50-352/ 81-04
50-353/ 81-04

Docket No. 50-352
50-353

License No. CPPR-106 Priority - Category A
CPPR-107

Licensee: Philadelphia Electric Company

2301 Market Street

Philadelphia, Pennsylvania 19101

Facility Name: Limerick Generating Station, Unit Nos. 1 and 2

Inspection at: Limerick, Pennsylvania

Inspection conducted: March 2-27, 1981

Inspectors: J. P. Durr
J. P. Durr, Senior Resident Inspector

4/13/81
date signed

S. D. Reynolds
S. D. Reynolds, Reactor Inspector

4/30/81
date signed

Approved by: E. C. McCabe Jr.
E. C. McCabe, Chief, Reactor
Projects Section 2B

date signed

4/27/81
date signed

Inspection Summary: (Unit No. 1) Inspection on March 2 - 27, 1981 (Report No. 50-352/81-04)

Areas Inspected: A routine inspection by the resident inspector and a regional based inspector of piping installation, welding, IEB 79-02 activities, and licensee's actions on previous inspection findings. The inspection included follow-up of an allegation (cutting of rebar without proper authorization). The allegation was not substantiated. The inspection involved 111 inspector-hours on site.

Results: Two items of noncompliance were identified in the five areas inspected. (Failure to follow core drilling procedure controls, para. 2; Failure to follow valve storage procedures, para. 4).

(Unit No. 2) Inspection on March 2-27, 1981 (Report 353/81-04)

Areas Inspected: A routine inspection by the resident inspector and a regional based inspector of piping installation, welding, IEB 79-02 activities, and licensee's actions on previous inspection findings. The inspection involved 21 inspector-hours on site.

Results: One item of noncompliance was identified in the areas inspected, (Failure to follow valve storage procedures).

DETAILS

1. Persons Contacted

Philadelphia Electric Company

D. A. Di Paolo, Quality Assurance Engineer (QAE)
F. J. Coyle, QAE
F. J. Koza, Jr. QAE
G. Lauderback, Jr. QAE
D. A. Marascio, QAE
P. L. Naugle, Engineer

Bechtel Power Corporation

T. Altum, Lead Welding Engineer
L. E. Brown, Quality Control Engineer
B. A. Dragon, QAE
H. D. Foster, Project Field QCE
H. F. Greenwalt, QAE
T. Gwin, Project Superintendent
G. Harper, Lead Subcontracts Engineer
E. R. Klossin, Project QAE
R. Lamley, Document Review Supervisor
R. A. Lanemann, Electrical Superintendent
R. Newman, Lead Mechanical Engineer
K. L. Quinter, Assistant Project Field QCE
S. K. Roy, Resident Engineer
D. Shaw, Assistant Project Field Engineer
R. L. Thomas, Lead Subcontracts Engineer
D. C. Thompson, Assistant Project Field QCE
M. G. Tokolics, QAE
A. Weedman, Project Field Engineer

General Electric Company

R. F. Arditi, Quality Assurance
T. P. Byrum, Technical Director
W. J. Neal, Resident Site Manager

Reactor Controls, Inc.

H. Phillips, Quality Control Supervisor

The above listed persons attended exit interviews held either on March 13, 1981, or March 26, 1981. Other engineers, craftsmen, quality control technicians, or supervisors were contacted as the inspection interfaced with their work.

2. Inspector Follow-up of an Allegation

Background: On February 23, 1981, the Senior Resident Inspector received a telephone call from a workman at the facility. He requested a meeting to discuss possible malpractice by a foreman. The inspector and the workman met at a prearranged location in the Unit No. 2 facility. The workman alleged that he knew a pipefitter who had been directed to cut concrete reinforcing steel bars (rebar) while installing a pipe support by his foreman and that the foreman did not have the proper authorization to do so. The workman could only give the pipe line number and the general area of the support.

Allegation: Rebar was cut while installing a pipe support for pipe line KBF-101, reactor building No. 1, elevation 313', adjacent to the elevator, in the 14.1 line wall. The foreman did not have the proper authorization to direct the cutting of the rebar.

Investigation: The inspector examined the pipe line KBF-101 in the area described by the alleger. He determined that the only pipe support requiring drilling into the concrete was a temporary support on wall 301, elevation 314' - 6 $\frac{1}{2}$ ". The remainder of the pipe supports in that area were welded to structural supports.

It is common practice to support certain categories of pipe, electrical raceway, platforms, and other equipment with concrete expansion anchor bolts. The installation of these bolts requires that holes be drilled into existing concrete structures. The rebar is sometimes encountered while drilling and it requires that the holes be moved or the rebar cut. If too much rebar is cut, excessive weakening occurs. The cutting of rebar in structures is normally controlled to preclude an excessive number of bars from being cut.

At the Limerick facility, drilling is controlled by field engineering through the Job Rule, JR-G-28. The Job Rule requires that an "Excavation Check Sheet" be issued by the responsible engineer. If the engineer determines that no other rebars have been cut in the immediate area, he may authorize the cutting of rebar without further research. If, however, the possibility exists that other rebar may have been cut, further authorization is required from the civil staff engineering group. In either case, a "Cut Reinforcing Steel Report" must be sent to the civil staff and quality control engineer. The quality control engineer must receive his copy on the same day the rebar is authorized to be cut.

It was determined, from document review and interviews of engineers, craftsmen, and supervisors, that, for the pipe support in question, an "Excavation Check Sheet" had been issued by the responsible engineer. The foreman had notified the responsible engineer and obtained verbal approval to cut the rebar. However, further investigation revealed that the engineer failed to execute the "Cut Reinforcing Steel Report" and distribute it to the quality control engineer in a timely manner.

The sequence of events appears to be as follows:

- 2/9/81 Excavation Check Sheet issued
- 2/10-13/81 Daily Time Sheets show work on temporary pipe support for KBF-101
- 2/23/81 Allegation to NRC
- 2/25/81 Cut Reinforcing Steel Report issued

Job Rule JR-G-28, "Installation of Expansion Anchor Bolts and Grouted in Threaded Rods", paragraph 5.5, requires that, "When rebar is cut in a Q-listed area, a copy of the form (Cut Reinforcing Steel Report) is given, on the same day, to QC to verify the hole locations."

Based on the foregoing documentation and interviews, it was determined that the "Cut Reinforcing Steel Report" was not given to quality control as required. This is contrary to 10 CFR 50, Appendix B, Criterion V, and an item of noncompliance (352/81-04-01).

The investigation also disclosed that the licensee had imposed controls on the drills capable of cutting rebar. There are essentially two types of drills, the first being the standard masonry drill capable of cutting concrete, but not steel. The second type is core drill which are capable of boring through concrete and steel.

The Job Rule, JR-G-28, states, in part, "The Lead Area Engineer is responsible for issuing the rebar cutting drill. Each area's drill shall be kept out of general circulation and shall be used only with the approval of the Lead Area Engineer." The Lead Area Engineer was issuing core drills and maintaining a log of these issues based on type and size of drill, the craftsman's name who drew the drill, the date issued, the date the drill was returned, and the responsible engineer. A review of the log on February 24, 1981, indicated that 43 core drills had been drawn from November 12, 1980, through January 1, 1981, and never were returned. The failure to keep rebar cutting drills out of general circulation is contrary to the requirements of Job Rule G-28 and, therefore, violates the requirements of 10 CFR 50, Appendix B, Criterion V (352/81-04-01).

Based on the foregoing allegation and items of noncompliance, the inspector was concerned that the licensee was not exercising adequate control over concrete rebar cutting activities. Therefore, interviews were arranged with 31 craftsmen, foremen, and general foremen selected from the electrical, pipefitter, and ironworker disciplines. A series of questions was asked each person directed toward his perception of what was required of him relative to rebar cutting and the practice of supervisors directing unauthorized cutting of rebar. None of the interviewees were aware of unauthorized rebar cutting or undue pressure from supervision to perform less than quality work. They confirmed the fact that core drills were not being properly controlled, but that when rebar was encountered, the proper notifications were made.

Conclusions: The allegation was not substantiated. Rebar was cut on the temporary pipe support KBF-101, but prior approval had been given by engineering. The licensee's program for control of rebar cutting was not functioning at an acceptable level to assure adequate control of activities.

3. Plant Tours

Periodically during the inspection, tours were made of the Unit Nos. 1 and 2 primary reactor containment, the reactor buildings, the control structure, and surrounding yards and shops. The inspector examined completed work, work in-progress, quality control activities, and equipment storage, handling, and maintenance. He discussed the technical aspects of the work with craftsmen, supervisors, and engineers to assure work was being performed in accordance with requirements.

During one of these tours, the inspector observed pipefitters grinding the outside diameter of the suppression pool cooling spray lines (GBB-112). The grinding extended for approximately 10' along the pipe and described a helix around the circumference. When asked why the grinding was necessary, the workman indicated there was a "crack" in the pipe.

Further investigation disclosed that Nonconformance Report No. 4542 had been written describing the condition. The NCR characterized the "crack" as a "surface defect". The engineer dispositioned the NCR to remove the indications, perform nondestructive testing, and verify that minimum wall requirements are satisfied.

It was felt by the inspector that insufficient information was transmitted by the NCR to make a proper disposition. This was based on the fact that if the "surface defect" were truly a "crack", then further efforts were needed to properly correct the deficiency. It was determined by a telephone interview with the responsible engineer that he had made other undocumented contacts with site personnel and the pipe fabricator and had properly characterized the surface defect as "die-marks". Based on this added information, the inspector had no further questions concerning this matter.

4. Licensee's Action on Previous Inspection Findings

(Open) Deficiency (353/77-10-01): Recirculation loop valve storage. The licensee had failed to maintain the proper storage conditions for the 28" diameter, recirculation loop valves. The licensee and the General Electric Company reviewed the discrepancy between the vendor instruction manuals and issued FDDR No. HHO-065 to correct the problem.

The inspector reviewed the following documents:

- Lunkenheimer Procedure No. SP-2224, Revision 4, "Storage Procedure for Motor Operated Valves".
- Maintenance Log MRR #717, P. O. #LX366046

- Maintenance Manual, G.E. Co., APED Recirculation Gate Valves
- Quality Control Maintenance Action Cards for Valves B32-F031 (1F031A, B, 2F031A and B) for the period 5/1/80 to present.
- Quality Control Inspection Record, P-1.30, M43-1P-HV-F031A and M43-1P-HV-1F023B
- General Electric Specification 22A2724, Revision 2, Equipment Storage Requirements.

The inspector visually examined the valves which are partially installed in Unit No. 1 and the ones stored in Unit No. 2. The following is a list of the valves inspected and their "as found" condition:

<u>Valve</u>	<u>Condition</u>
1F023A	Partially installed, bonnet removal, body and bonnet covered.
1F023B	Partially installed, bonnet removed, body covered, packing gland exposed.
1F031A	Partially installed, bonnet removed, body covered, bonnet internals exposed.
1F031B	Partially installed, bonnet removed, body covered, bonnet internals exposed.
2F023A	In-plant storage, covered.
2F023B	In-plant storage, valve body end cover off and interior exposed.
2F032A	In-plant storage, covered.

The General Electric specification 22A2724, Revision 2, paragraph 4.1.2.1.2, requires that, "...Internal cleanliness of equipment... shall be maintained by closing openings where possible by plugging, capping and/or sealing...". The failure to properly protect the recirculation loop valves is contrary to 10 CFR 50, Appendix B, Criterion V (352/81-04-02 and 353/81-04-01).

It appears that the inspection system permitted the above storage conditions to exist undetected due to the practice of doubling the inspection period for successive successful inspections. This allowed the normal inspection period of 3 months to be extended to one year. In the interim, the Unit No. 1 valves were disassembled, thus becoming more vulnerable to in-plant construction hazards.

(Closed) Infraction (78-07-01) (78-03-03) Liquid Penetrant Testing. In the course of closing the item of noncompliance 78-03-03, the improper dispositioning of nonrelevant indications, a technician evaluated (non-relevant) indications before the specified 7 minute wait time. The licensee's corrective actions consisted of the following:

- The NDE technician was requalified.
- Weld HBC-182-1-FW50 was re-examined.
- 50% of the technician's welds were re-examined.
- Increased surveillance of Peabody NDE by Bechtel.
- Bechtel Q.C. witness the first examination of each method a Peabody technician performs.

The inspector examined the NDE technician's recertification papers. The technician is no longer employed at this facility. He also verified that the weld HBC-182-1 FW50 was re-examined, that Bechtel QC does witness the first NDE of each method performed by a technician, and that 50% of the welds performed by the technician in question were re-examined.

In conjunction with the foregoing, the inspector witnessed liquid penetrant tests performed by various NDE technicians and discussed the technical aspects of the procedure with them. This item is considered closed.

(Closed) Infraction (352/79-02-02) Subcontractor Quality Assurance Program. The licensee failed to invoke quality assurance requirements for a masonry block wall subcontractor. The subcontractor referenced in the noncompliance is no longer performing work at the facility. The licensee responded by stating that any subcontracts written on or after April 10, 1980, will have quality assurance program responsibilities required in writing.

Inspection disclosed only two probable subcontracts that fall into the above category. The first is the M-129, Specification for Testing, Balancing, and Adjusting of the Heating, Ventilating, and Air Conditioning System. This specification appears to adequately cover the necessary 18 criteria of 10 CFR 50, Appendix B, relative to the scope of the contract. The second is for the excavation and finishing of the spray pond. This subcontract will be administered from Site Procurement. Site Procurements are regulated by Project Specification G-13 and Job Rule G-6. These documents require quality assurance programs to be an integral part of procurements. This item is considered resolved.

(Closed) Infraction (352/79-02-04) Drilling new expansion anchor bolt holes in proximity to abandoned holes. The licensee's response to the item was to:

- (1) Issue verbal instructions to the craftsmen and supervision regarding the requirements for drilling in proximity to abandoned holes.
- (2) Issue a memorandum by Project Field Engineering to the field to re-emphasize the requirement.
- (3) Revise Job Rule G-28 to reference the design drawing requirement.

The inspector examined the base plates described in the item of noncompliance (Reference: Dwg. C-1163). At this stage of installation, the holes and the repairs would be obscured by the base plate. He reviewed the memorandum issued by Project Field Engineering, PFEM-1075, dated May 2, 1979, and the revision to Job Rule G-28, paragraph 7, and verified that items (2) and (3) above were accomplished.

In addition to the foregoing, the inspector interviewed the quality control engineers responsible for inspection of concrete expansion anchor bolt installations. He verified that the inspectors are aware of the abandoned anchor bolt hole criteria and that the Quality Control Instruction, C-1.50, provides for surveillance inspection of these criteria.

This item is closed.

(Closed) Infraction (352/80-05-03) The subject infraction involved incomplete instructions to the grinder and welder in the rework welding of a pipe restraint. The instructions as written failed to indicate the contour and limits for grinding conducted for slag removal of a vendor welded partial penetration joint coincident with the field welded joint. Failure to explicitly define the limits for grinding permitted removal of base metal beyond the original scope of the joint to be welded and yielded an unacceptable contour for rewelding.

A work stoppage on this weldment was enacted by the licensee, corrective action to the specific joint indicated in a second rework notice (W456, dated 4/30/80), and the instructions given to cognizant personnel indicating that Rework Notices require information sufficiently explicit to preclude recurrence of this type of a problem. The welder and foremen associated with the subject weldment were given additional instructions in proper grinding and welding techniques for repair welds. Representatives from the licensee's QA Department and Bechtel's Welding Department were present during the instructional period.

The NRC inspector reviewed the weld documentation records for the subject weld (Drawing C940, Rev. 3, Detail 5, FP6W"C" and the Peabody NDE records for the finished weld PBT-MT-512 dated 6/19/80. The NRC inspector reviewed all actions taken and applicable documents and considers this item closed.

(Closed) Unresolved Item (352/80-12-01) Issuance of ER 308L filler metal when ER 308 is specified in WPS. The NRC inspector verified that Revision 6 (and later revisions) of RCI WPS W 8/8-OTS-1L permit the use of either ER 308 or ER 308L filler metal. Filler metal is being issued in accordance with WPS specification requirements by this revision. This item is considered closed.

(Closed) Unresolved Item (352/80-12-02) Improper Completion of RCI Weld Data Sheets for preheat and interpass temperature control entries. The NRC inspector reviewed RCI response and disposition (LM-RPV-14 Amendment #1) and reviewed a large number of current weld data sheets for entries in the preheat and interpass temperature control. The RCI Quality Assurance Training Program for welders was reviewed and documentation of training program attendance for over 30 welders was verified indicating that welders have been instructed in the requirements for preheat and interpass temperature control.

(Closed) Unresolved Item (352/80-12-04) Welding Heat Input. The NRC inspector reviewed PECO Finding Report N-204 issued 6/30/80 and the GE Corrective Action Response dated 8/8/80 forwarded to PECO in GE letter LS1438 dated 8/11/80. GE has clarified their position on the control of weaving as sufficient control to minimize harmful sensitization and replaces the joulian heat input with this weaving requirement. In addition to this method of minimizing sensitization, the licensee has substituted low carbon grades of austenitic stainless steel piping for the originally specified 304 grade. The remaining regular carbon stainless steel in the reactor coolant piping systems is essentially limited to values where the heat sink of the values minimizes sensitization due to rapid cooling rates. This item is considered closed.

(Closed) Noncompliance (50-352/80-12-14): Improperly Qualified Receipt Inspector

Schneider, Incorporated, the heating, ventilation and air conditioning (HVAC) subcontractor, employed a receipt inspector who was not properly qualified.

The licensee reinspected the work performed by this inspector and revised the Project Procedure, PPM 5.1 to provide three different categories of inspectors.

At the time of this inspection, the individual identified as unqualified no longer was employed by Schneider, Incorporated. Examination of Project Procedure, PPM 5.1 verified that three categories of inspectors were established (Receipt, Welding, and Installation). A sampling of inspector qualification records verified that the procedure's new requirements have been implemented. The inspector also reviewed some of the receipt inspections performed by the unqualified inspector and verified that they were reinspected.

5. IE Bulletin Review

IEB 79-02, Revision 2, "Base Plate Designs Using Concrete Expansion Anchor Bolts". The Bulletin required licensees to address the following:

- (1) Verify that pipe supports using concrete expansion anchors of the wedge or shell type are designed with a minimum safety factor of 4 and 5, respectively.
- (2) Verify proper minimum edge distances and bolt spacing.
- (3) Verify or establish quality control documentation to evidence proper bolt size, type, embedment, thread engagement, plate bolt hole size, preload, and essentially that the bolts are properly installed.

A review of the licensee's program for the installation of anchor bolts was made to ascertain its compliance with Bulletin requirements. Although there appears to be general compliance, the following items remain to be resolved:

- (1) NRC review of bolt torque versus tension data.
- (2) Justification for installation of bolts without preloading. Bolts currently being installed are preloaded; however, bolts installed prior to Bulletin 79-02 were not preloaded.
- (3) In an internal meeting notice it was disclosed that, for nonself drilling anchor bolts with manufacturing defects, there is a safety factor of 3 for cyclic loads. The Bulletin requires a safety factor of 5 for static loads.
- (4) NRC review of the test data for concrete anchor bolts in masonry walls.
- (5) The implementation of a complete test program for anchor bolts installed before January 17, 1980.

6. Observation of Welding Activities

Reactor coolant pressure boundary (ASME III, Class I) and other safety related pipe welds (ASME III, Class II and III) were selected for document review and observation of welding activities. The document reviews verified the welder's qualifications, proper welding procedures were employed, required nondestructive tests specified, appropriate quality control inspection points specified and signed off, and proper preheat and postweld heat treatments were required. The observation of welding consists of, where applicable, examination of the cleanliness, fitup, and alignment of the parts; proper welding equipment; purge and cover gas flow rates; electrodes and filler materials; appearance of the weld deposit; evidence of quality control activities; and proper documentation. The following welds were examined:

<u>Weld No.</u>	<u>Class</u>	<u>System</u>	<u>Status</u>
DBB-104-1FW3	II	Feedwater	Root & Intermediate
N4A270	I	Reactor Vessel	Root Pass
BWRPD-1REC-1WA16	I	Recirc. Loop	Root Pass & Intermediate
BWRPD-1REC-1WA1	I	Recirc. Loop	Root Pass & Intermediate
HBB-154-1/2FW56C	II		Final Pass
10JX105E	MC	Containment Penetration (electrical)	In-process

During the review of the welding procedure, LRI-79-1-15D, for the closure spool to nozzle weld N4A270, the inspector noted that 3 of the Supplementary Essential Variables were not properly addressed. These variables deal with the minimum thickness qualified; the changes in width, frequency, or dwell time of oscillation; and heat input. No materials were welded with the procedure at the time of the review and the licensee stopped work until such time as the procedure could be revised.

In the actual welding of nozzle closure N4A270, the internal purge gas pressure apparently became too great and blew out a portion of the root weld. Work has stopped on this joint until appropriate repairs can be accomplished.

The inspector noted that the weld joint design for the electrical penetrations is an integral backing ring configuration. Due to the inaccessibility, the licensee has chosen not to perform radiography of this joint as prescribed by the ASME III Code, Subsection NE 5220. In lieu of radiography, he has chosen to perform ultrasonic examinations. It appears from the geometry of the joint that meaningful testing by ultrasonics may not be possible. The inspector has requested the licensee to notify him when testing begins to evaluate the procedure and results. This item is considered unresolved pending demonstration of meaningful ultrasonic testing. (352/81-04-03)

The NRC inspector reviewed Bechtel specification GWS-SN. Paragraph 5.4 (under preheat and interpass temperature control) is considered to be ambiguous.

"5.4 Interpass temperatures shall be verified with temperature indicating crayons or contact pyrometers outside the weld joint, but near the weld area. Acceptable temperature indicating crayons are made by either Tempil Division of the Big Three Industries (See Note) or Markal Company with the following specific temperature designations."

This paragraph can be interpreted to require 100% verification between passes (by the welder), can be interpreted as a surveillance check by QC on every joint, or a general surveillance check by QC. The NRC inspector requested clarification of the interpretation of this paragraph by the licensee. This item is considered unresolved until a clarification of the requirement is received and approved by NRC. (352/81-04-04)

The NRC inspector visually examined the root pass ID of the P8 to P8 nozzle to safe end weld BWRPD-1REC-WA16 (Nozzle NZG-240° Azimuth). This weld was rejected in process on basis of the interpretation of excessive suck-back on a partial weld radiographic examination conducted for information purposes only. It was reported that the ID contour was acceptable upon completion of the root pass, but that subsequent GTAW passes radically changed the ID contour probably due to excessive heat input. Visual examination of the ID following removal of the nozzle showed two areas of linear indications in the severe suck-back area. The contour of the root pass was acceptable on the top half of the weld joint, 9 o'clock through 12 o'clock to 3 o'clock positions. The bottom half of the 5 G weld showed areas of gross suck-back and visual evidence of linear indications that could possibly be a center line crack. Review of the records indicated that the welder performing the root pass weld had not welded other P8-P8 root pass on the recirculation piping. The NRC inspector agrees that the most probable cause of the defective weld was excessively high GTAW heat passes including distortion of the contour of the root pass. The repair procedure for this joint will call for removal of the weld and sufficient material adjacent to the weld to essentially eliminate the original weld HAZ in the rewelded joint. No NDE or metallurgical tests were conducted to verify that the linear indications noted visually were center line cracks or center line depressions caused by shrinkage, however, as the weld and weld affected area will be removed, there is no code or specification requirement to conduct such an examination.

Except as noted, no items of noncompliance or unresolved items were identified.

7. Piping Installation and Documentation

Pipe spool DBA-106-1 was selected for observation of rigging, handling, and installation practices. The inspector verified that rigging practices and handling were performed in accordance with Job Rule G-10 and Specification P-301.

Three pipe spools were selected for a detailed review of quality assurance documentation. The review consisted of selected attribute verifications such as chemical and physical properties of the pipe and welding filler metals, appropriate nondestructive tests and the results, special tests required by the ASME III Code, and completeness of documentation. Pipe spools DBA-106-1, HBC-139-3-9, and GBB-118-2-5 were selected for review. The document package for pipe spool GBB-118-2-5, weld material certification report No. 00447, does not appear to satisfy the ASME II Code, Subsection C, SFA-5.4 requirements for a fillet weld test. This item is considered unresolved pending verification of the test by the vendor. (352/81-04-05)

A review of Field Drawing Change Notice No. 4, 8031-M-56, disclosed an intent to downgrade two attachments to the HPCI pump casing from "Q"-listed, seismic category I to non-"Q"-listed, seismic category IIA. This does not appear to satisfy NRC Regulatory Guide 1.26 and the safety status attributed to this system in the PSAR. This item is considered unresolved pending re-evaluation by the licensee and/or returning the system classification to "Q"-listed. (352/81-04-06)

There is a small bore pipe ($2\frac{1}{2}$ " diameter and less) storage area in the Unit No. 2 reactor building on elevation 253'. The Job Rule M-6, paragraph 5.1.8 requires that the piping be kept segregated by pipe class and color at a location such as this. The inspector noted several lengths of misplaced pipe in the segregated racks. The licensee took immediate steps to correct this condition. Subsequent reinspections have not identified similar conditions. In addition, the inspector verified that it would be extremely difficult for the wrong class of pipe to be used, due to a lack of segregation. The color coding is only an aid, but the control is etched pipe heat numbers. The inspector had no further questions concerning this matter.

8. Spent Fuel Pool to Containment Seal

The inspector observed work in progress on the spent fuel pool (SFP) to reactor containment seal. This is a flexible, water-tight seal which allows flooding of the SFP cavity. The licensee is currently installing the seal ring, which provides one surface of the annular space enclosing the inflatable seal. The observation verified that work was being performed in accordance with Specification C-45 and drawing C-778. No items of noncompliance were identified.

9. Unresolved Items

Unresolved items are matters about which more information is required to ascertain if the item is a noncompliance, a deviation, or acceptable. Unresolved items are discussed in paragraphs 6 and 7.

10. Exit Interviews

Exit interviews were held with members of the licensee's staff, denoted in paragraph 1, on March 13 and 26, 1981. The inspector discussed the scope and findings of the inspection.