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

REGION III

Report No. 50-454/79-01; 50-455/79-01

Docket No. 50-454; 50-455 License No. CPPR-130; CPPR-131

Licensee: Commonwealth Edison Company
P. O. Box 767
Chicago, IL 60690

Facility Name: Byron Nuclear Generating Station, Units 1 and 2

Inspection At: Byron Site, Byron, IL

Inspection Conducted: January 9-11, 1979

Inspectors: J. E. Konklin 2/7/79
for K. R. Naidu 2/7/79
for P. A. Barrett 2/7/79
for F. Suermann 2/7/79

Approved By: for D. W. Hayes, Chief 2/9/79
Projects Section

Inspection Summary

Inspection on January 9-11, 1979 (Report No. 50-454/79-01; 50-455/79-01)
Areas Inspected: Ongoing site construction activities (Units 1 and 2); licensee actions relative to previously identified noncompliances, unresolved items, and items reported per 10 CFR 50.55(e) (Units 1 and 2); implementing procedures related to electrical cables and terminations (Units 1 and 2); work activities and QA records relative to electrical cables and terminations (Unit 1); work activities and QA records relative

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PDM and CECo personnel agreed with RIII NRC inspector that the written procedure differed from the actual practice. Accordingly the PDM site QA Manager initiated a change to Section 6 of the QA Manual. CECo QA personnel stated that PDM's Corporate QA Coordinator will visit the site and confer with site personnel regarding the QA Manual revision. The inspector determined that appropriate corrective action is being taken and has no further questions.

Unresolved Items

Unresolved items are matters about which more information is required in order to determine whether they are acceptable items, items of noncompliance, or deviations. An unresolved item disclosed during the inspection is discussed in Section IV, Paragraph 1.

Exit Interview

The inspectors met with licensee representatives (denoted under Persons Contacted) at the conclusion of the inspection on January 11, 1979. The inspectors summarized the purpose and findings of the inspection. The licensee acknowledged the findings reported herein.

to safety-related structures (Units 1 and 2); work activities and QA records relative to welding of safety-related structures (Units 1 and 2). The inspection involved a total of 72 inspector-hours onsite by four NRC inspectors.

Results: Of the six areas inspected, one item of noncompliance was identified in one area (infraction - measures not established to assure satisfactory accomplishment of rework - Section II, Paragraph 1.b).

DETAILS

Persons Contacted

Licensee Employees

G. Sorensen, Project Superintendent
*J. McIntyre, Quality Assurance Supervisor
*J. Mihovilovich, Lead Structural Engineer
*R. Tuetkin, Lead Mechanical Engineer
*G. Smith, Lead Electrical Engineer
*S. Forsha, Structural QA Coordinator
*R. Aken, Electrical QA Coordinator

The inspectors also contacted and interviewed other licensee and contractor personnel, including craftsmen, QA/QC, technical, and engineering staff members.

*Denotes those attending the exit interview.

Licensee Action on Previous Inspection Findings

(Closed) Followup Item (454/77-04; 455/77-04) - Inspection of cable tray supports. The previous RIII report noted that the licensee planned to initiate inspections of Category I cable tray supports in the near future, and that this item would be reviewed during subsequent inspections. Subsequent to that inspection, which took place in May, 1977, the licensee has initiated inspections of Category I cable tray supports. Section II of this report also discusses RIII inspection of cable tray supports. This followup item is considered to be closed.

(Closed) Unresolved Item (454/78-03-01; 455/78-03-01) - Evaluation of concrete core tests. The previous RIII report stated that the results of a statistical evaluation and core tests, for concrete which had low test cylinder break strengths, would be reviewed in future inspections. During this inspection, the inspector reviewed the CECo listing of all cases in which test cylinders have broken below design strength for safety-related concrete placements at the Byron Site. The inspector selected what appeared to be a worst case sample, Pour No. 1-A-377-0-1-S in the Unit 1 Containment, and reviewed the following documents:

1. The S&L letter to CECo, dated February 15, 1978, which requested that additional cores be taken and tested for Pour No. 1-A-377-0-1-S.

2. The Wiss, Janney, Elstner and Associates letter of March 13, 1978 to CECo, which reported the results of the additional core tests.

3. The S&L letter of March 30, 1978, to CECo, which evaluated and stated the acceptability of the additional core tests performed by Wiss, Janney, Elstner and Associates.

Based on this review, the inspector concluded that adequate evaluation is being performed for those cases in which concrete test cylinders exhibit low break strengths. This item is considered to be resolved.

(Closed) Unresolved Item (454/78-08-01; 455/78-08-01) - Cracks in the Unit 1 and 2 tendon gallery walls. The previous RIII report noted that the inspector observed seepage of water through cracks into each of the two tendon galleries, that the inspector's inquiry determined that concrete cores had been taken through the center of one crack in the Unit 2 gallery, and that S&L was performing an evaluation of the cracking. During this inspection, the inspector reviewed S&L letter to CECo, dated October 31, 1978, which contains the results of the S&L evaluation of the cracking. The S&L engineering evaluation concludes that the cracks do not impair or jeopardize the structural integrity of the tendon tunnel walls, and that the cracks are now stationary. The inspector also discussed the S&L evaluation with licensee personnel and reinspected the Unit 1 and 2 tendon galleries. Based on the discussions and reinspection, this item is considered to be resolved.

(Closed) Unresolved Item (454/78-07-01; 455/78-07-01) - It was previously reported that the Visual Test Procedure VT 501 of Pittsburgh Des Moines (PDM), did not specify the use of suitable measuring devices to determine mismatches. The PDM offsite QA Manager provided additional training to three inspectors as documented in PDM's letter dated August 15, 1978. This item is resolved.

(Open) Unresolved Item (454/78-07-02; 455/78-07-02) - It was previously reported that insufficient evidence was available to indicate existence of documentation confirming that valves listed on MRR 10431, dated January 11, 1978, meet seismic qualification when installed in any position.

A memo from CECo's Station Nuclear Engineering Department (SNED) states that Note 3 on Velan drawing 83901-R Rev. A, for Valve Tag 1 and 2 CC9467C, allows the valves to be randomly oriented, and Quality Release Form No. 36909, dated December 6, 1977, states the design analysis has been reviewed and accepted. CECo did not desire to verify the existence of documentation supporting the actual analysis. Subsequent to the inspection, discussions with SNED's Project Engineer indicate this item will be reviewed during a forthcoming audit of Westinghouse, the nuclear steam system supplier.

(Closed) Unresolved Item (454/78-07-03; 455/78-07-03) - It was previously identified that the weld on hanger 13H5 was undersized. Pittsburgh Testing Laboratory (PTL) in their inspection report, dated August 23, 1978, indicated the welds on hanger 13H5 were rejected; the actual inspection was performed on June 28, 1978. Repair and reinspection of the weld is documented in PTL report of August 23, 1978. This item is resolved.

(Closed) Unresolved Item (454/78-07-04; 455/78-07-04) - It was previously reported that additional information was to show the licensee's methods of implementing Paragraph 3.1.4 of AWS D1.1-75, which states, in part, "weld leg oversize and additional weld lengths are acceptable at the purchaser's option." In an S&L letter to CECo, dated October 30, 1978, S&L provided their interpretation. The letter states that since any excess welds which cause burnthrough, distortion or cracking will be detected during visual inspections, acceptance of the welds was left to CECo's discretion. This item is resolved.

(Open) Unresolved Item (454/78-09-01; 455/78-09-01) - Essential service water makeup pumps control cable splice box. The previous RIII report noted that the inspector had observed that the splice box on the lower elevation of the cable run to the essential service water makeup pumps in the river screen house was submerged in water. During this inspection, the inspector reviewed a letter, with attachments, dated December 1, 1978, from the Okonite Company to S&L, regarding the moisture resistance of cable and splices. The attachments included test data for accelerated (high temperature) water immersion tests which indicate the adequacy of the cable insulation used in the Byron essential service water cabling application for long term service at 100% humidity. Since the documentation was not clear as to whether the test data also included the splice design, or whether the tests qualify the cable and splice for the submerged condition in addition to the 100% humidity condition, the inspector notified the licensee that this item will remain open for review during future inspection.

Section I

Prepared by J. E. Konklin

Reviewed by D. W. Hayes, Chief
Projects Section

1. Review of Licensee Actions on Previous Inspection Findings

The RIII inspector reviewed the licensee's actions relative to the resolution of specific open items which were identified in previous RIII inspection reports and which were still in an open status prior to this inspection. The items reviewed and the licensee actions relative to the resolution of the items are discussed in the foregoing section of this report.

2. Corrective Action on HVAC Ductwork Deficiencies, Reported Per 10 CFR 50.55(e)

The inspector reviewed the corrective actions taken by the licensee with regard to the HVAC ductwork forming and installation deficiencies identified at Byron. The CECo final report to Region III, dated August 17, 1978, discussed the specific deficiencies and the corrective action which would be taken to correct the deficiencies.

During an earlier inspection (50-454/78-11; 50-455/78-11) at the CECo Corporate Offices, the inspector had reviewed the applicable engineering documentation relating to the HVAC ductwork deficiencies. During this inspection the inspector observed that the specified corrective actions have been started on the ductwork in the auxilary building.

Based on the earlier review of the engineering documentation, discussions with the licensee, and the observation of the corrective actions being started in the auxiliary building, the inspector informed the licensee that the open 10 CFR 50.55(e) item noted above is considered to be resolved, but that a new open item will be designated (454/79-01-01; 455/79-01-01) pending verification in future inspections that the corrective action has been completed.

3. Post-Tensioning Buttonhead Cracks - Reported per 10 CFR 50.55(e)

On November 28, 1978, the licensee notified Region III of a reportable item per 10 CFR 50.55(e), regarding deficiencies in the post-tensioning tendons for the Unit 1 containment. INRYCO had made a field inspection on November 16 and 17, 1978, of the accessible buttonheads of 46 tendons, and found 13 rejectable tendons based on the crack criteria of INRYCO Specification 1610. The 452 tendons for Unit 1 are presently in storage at the Byron Site.

During this inspection, the inspector reviewed the vendor nonconformance report which documents the above deficiencies, INRYCO Report NC/CA No. 781-9, dated November 30, 1979. In addition, the inspector discussed with the licensee the planned field inspections of the shop applied buttonheads at the Byron Site and the buttonhead test program to be performed by INRYCO. The inspector also inspected, with the CECo Site QA Supervisor, the shop buttonheads on one tendon where the buttonheads had been cleaned preparatory to the start of the field inspections by INRYCO.

The planned field inspection and buttonhead test program will be reviewed as part of the Region III followup on the abovementioned 10 CFR 50.55(e) item.

4. Observation of Ongoing Construction Activities

A site tour was conducted to monitor the progress of site construction activities, and included observation of work activities and equipment status in the Unit 1 and 2 reactor containments, the fuel handling building, and the auxiliary building. It was noted that the three Unit 1 reactor coolant cold legs were fit up, and that work was starting on the hot legs. The reactor pool for Unit 1 was 95% complete and work on the Unit 2 reactor pool is scheduled to start in early February. The stainless steel liner in the fuel transfer canal was released for start of work just prior to this inspection.

With regard to concrete activities, the secondary shield wall in Unit 2 was finished during the week of January 8, and work on the main deck in Unit 2 was just starting. With regard to electrical work activities, 20% of the cable tray hangers in the Auxiliary Building are installed, and cable pulling has just started in the Auxiliary Building. No cable trays have been installed in either Containment Building. Installation of cable trays and cables in the pumphouse and river screen house are scheduled to start during the next month.

No items of noncompliance were identified in the above areas.

Section II

Prepared by P. A. Barrett

Reviewed by R. L. Spessard, Chief
Engineering Support
Section 1

1. Observation of Electrical Work Activities

a. The RIII inspector observed the following installed cable raceway hangers and braces:

(1) As located per Sargent and Lundy drawing No. 6E-0-3005, Revision E (between worklines 17 and 18):

Hangers

2-13H3, 1-13H2, 2-13H1, 3-13H9, and 1-13H7

Braces

1-2HV3 and 1-2HV1

(2) As located per S&L drawing No. 6E-0-3013, Revision H:

Hangers

2-12H9 and 1-12H13

(3) As located per S&L drawing No. 6E-0-3015, Revision C (between worklines 18 and 19):

Hangers

6-13H1 and 1-13H2

Braces

1-8HV3 and 1-8HV4

Where applicable, the above supports were installed in accordance with S&L drawings No. 6E-0-3005H01 Rev.F, No. 6E-0-3013H02 Rev. H, No. 6E-0-3015H01 Rev. C, No. 6E-0-3260 Rev. E, No. 6E-0-3263 Rev. K (Details DV2, DV3, and DV4), No. 6E-0-3264 Rev. L (Details DV5, DV6, and DV8),

No. 6E-0-3265 (Details DV14 and DV22), No. 6E-0-3273 Rev. F, Note 2, Figure 7 and S&L Standards No. STD-EB-116.12 dated June 10, 1974, and No. STD-EB-116.13 dated June 10, 1974.

The components, dimensions, tolerance, welds, number of assemblies, and spacing were as specified. The welds exhibited no lack of fusion, cracking, porosity, overlap, or excessive undercut.

The welded joints (hangers to embedded steel) were covered with rust. The licensee's contractor stated that there was no painting or other protective requirements specified for the joints. The rusty joints pose no apparent conflict with requirements of AWS D1.1-75.

The torque on approximately ten bolted hanger connections was checked during this inspection with Hatfield Electric Company's calibrated torque wrench, serial number 7372387. The torque values in each case exceeded the minimum requirements specified in S&L standard No. STD-EB-115.0 dated September 10, 1976. The inspector noted that the torque wrench was due for recalibration one day after the above verifications were made. The wrench was appropriately submitted for recalibration to Pittsburgh Testing Laboratories (on site).

No items of noncompliance were identified.

b. On January 9, 1979, the RIII inspector observed hanger 12H1 located between worklines 10 and Q at elevation 346 feet. The hanger was identified on S&L drawing No. 6E-0-3001. The hanger was installed and accepted by Hatfield Electric quality control per Revision G to the drawing; revision H required hanger 12H1 to be relocated. Discussions with pertinent CECo and Hatfield Electric personnel indicated that incorporation and inspection of such design changes would be implemented concurrent with the construction schedule. In some cases, extended periods of time would elapse before any rework would be implemented. Therefore, if additional revisions (e.g. Revision I, J, etc.) were issued there would not be measures to assure implementation of Revision H. This condition is contrary to 10 CFR 50, Appendix B, Criterion V and CECo Topical Report CE-1-A, Rev. 5, Section 5 and is an item of noncompliance, as identified in Appendix A of the report transmittal letter. (454/79-01-02; 455/79-01-02)

The scope of this noncompliance appears to be limited to hangers installed by Hatfield Electric Company and only those hangers affected by design changes initiated by Sargent and Lundy. The licensee stated that this scope will be confirmed.

Corrective action by the licensee was initiated during the inspection period to develop controls to assure that all rework necessitated by design changes is not inadvertently bypassed.

2. Record Review of Electrical Work Activities

a. Pertaining to the aforementioned hangers, the RIII inspector reviewed Hatfield Electric Company Cable Pan Hanger Inspection Checklists, Form HE-9A-1, Rev. 0; Pittsburgh Testing Laboratory Reports of Structural Welding Inspection (Reports No. VWI-118, VWI-586 R-1, VWI-581, VWI-582, VWI-583, VWI-584 and VWI-584 R-1); and Peabody Testing Services, Inc. letters (dated July 28, 1977, and August 22, 1977) of certifications for visual inspection of hanger welds. The records identified the inspector, the type of observation, the results, the acceptability, and related documents. The records were identifiable, retrievable, and appropriate for the activities inspected.

b. The RIII inspector reviewed the qualification records offour Pittsburgh Testing Laboratories visual weld inspectors, who were responsible for the aforementioned hanger welds. The records included appropriate practical and visual examinations which the four inspectors passed. The inspectors' certifications indicated qualification per AWS D1.1-75.

c. The RIII inspector reviewed qualification records for the Peabody Testing Services visual weld inspector, who was responsible for examination of some of the aforementioned hanger welds (drawing No 6E-0-3013 only). The records included appropriate practical and visual examinations which the inspector passed.

No items of noncompliance were identified.

Section III

Prepared by K. R. Naidu

Reviewed by R. L. Spessard
Engineering Support
Section 1

1. Observation of Safety Related Structures Work Activities

a. Inside the Reactor Cavity and Spent Fuel Storage Facility the RIII inspector observed the following installations:

(1) Reactor Cavity

(a) Tool rack identified as 357MI in Section S-S on drawing E 102 DE.

(b) Lower Internal Guide Pin Bracket (LIGPB) identified as 382M2 in Section L-L on drawing E 102 CE.

(c) Liner plates identified as 91M2, 91M4, 90M4, 90M11, and 90M12 on drawing E 59 B.

(2) Spent Fuel Storage Facility (SFSF)

(a) Liner plates joined by seam welds 6 and 7 including slots 281M2-8 identified on drawing E 77 AB.

b. The inspector determined that applicable work and inspection requirements were met in the following areas:

(1) Materials specified in the previously mentioned drawings were used.

(2) Installation of the liner plates and components were according to the previously mentioned drawings.

(3) Qualified NDE inspection personnel were used.

(4) Records were legible and retrievable.

(5) Test results were acceptable.

No items of noncompliance were identified.

2. Review of Safety Related Structures Records

The inspector reviewed receipt, pertinent material and work quality records associated with liner plate installation in the SFSF, tool rack and LIGPB, and determined that these records met established procedures.

a. Material received without any visible shipping damage:

(1) Field Receiving Report (FRR) No. 5, dated February 13, 1978, for liner liner plates 91M2, 91M3, and 91M4.

(2) FRR No. 13, dated February 15, 1978, for liner plate 90M4.

(3) FRR No. 14, dated February 15, 1978, for liner plates 90M11 and 90M12.

(4) FRR No. 144, dated August 7, 1978, for piece No. 357M1.

(5) FRR No. 165, dated October 9, 1978, for piece No. 382M2.

b. Certifications

Material certifications from Eastern Stainless Steel Company, which identify the heat numbers of the liner plates, provide results of chemical and physical tests and certify that the material meets requirements of ASTM A 240-75A, ASME SA 240-75 of the ASME Section III, Division 2, Paragraphs CA-1440 and CC-2000 and the PDM Specification MS240 3.2, revision E, dated February 1, 1977. It is stated the material was solution annealed at 1900°F for 85 minutes.

c. Installation

(1) Erection specifications were adhered to.

(2) Qualified inspection personnel performed nondestructive examinations.

d. Inspections

(1) Record keeping met acceptable standards; records were retrievable.

(2) Inspections of the welds included visual, and vacuum box PT.

(3) Qualification records of inspection personnel were current. The qualification records of the Level III inspector was considered inadequate. The licensee had identified this inadequacy in an audit described in the following paragraph.

e. Licensee Audit

The inspector reviewed CECo's Audit Report No. 6-78-161 documenting the audit performed on PDM during November 20-30, 1978. Two audit findings and three observations were identified therein. One of the audit findings was that contrary to the requirement of Section 408.3 of S&L Specification F-2766 and SNT-TC-1A 75, the NDE personnel qualification package did not contain all required documentation for NDE Level II personnel and for the NDE Level III certifying these personnel.

The audit was legible and retrievable. CECo requested corrective action within 15 days from the receipt of the audit. The inspector stated he has no further questions.

No items of noncompliance were identified.

3. Observation of Safety Related Welding Activities

The inspector observed welding activities being performed by Pittsburgh Des Moines (PDM) relative to the Spent Fuel Storage Facilities (SFSF). The inspector determined that the requirements of the Weld Procedure Specification (WPS) and inspection requirements were met in the following areas:

a. Several vertical and horizontal liner plate welds where joint preparations were complete and welding had not started were inspected. The following requirements had been met:

(1) The welds had been identified on the drawing.

(2) The minimum gap requirements had been met.

(3) QC verifications were recorded on the inspection check list.

b. The inspector observed welding activities in progress on seams 22 and 29 in the Cask gate area and determined the following:

(1) The welds were identified on drawing E-97.

(2) WPS 74-32a was being used.

(3) Weldors identified as 95 and 36 were welding the seams; records indicate the weldors were qualified.

(4) Weld rod type ER-308 was being used.

(5) Physical appearance of the welds appeared to be acceptable.

(6) Liquid Penetrant examination had been performed on adjacent welds in the Spent Fuel Storage Pool area; unacceptable indications were distinctly identified; repair had not commenced.

(7) Periodic checks were being made to assure that welding variables were within specified limits; the NRC inspector independently verified that the volume of the shielding gas used was within the range specified in the WPS.

No items of noncompliance were identified.

4. Review of Safety Related Welding Records

The inspector reviewed records related to several welds in the SFSF and determined that the requirements of applicable specifications were met in the following areas:

a. Inspection records document that fit up was checked by construction staff; QA verified and concurred that the fit up was acceptable.

b. WPS 77-8a (automatic) and WPS 74-80b (manual) were used as applicable.

c. The seam welds were examined utilizing procedures VB-608D, PT-301 and VT-501 for Vacuum Box, Liquid Penetrant and Visual examinations respectively.

d. Test reports document the results of the above examinations; no adverse findings were identified.

e. Material Test Report (MTR) from Teledyne-McKay, dated May 12, 1977, certified that 300 lbs. of 3/32" diameter E 309-16 type weld rod identified by Heat No. 11130 and Lot No. 3266078 met the requirements of AWS A5.4-69 and ASME SFA 5.4. MTR from Teledyne-McKay, dated July 13, 1977, certified that 1080 lbs. of 3/32" diameter by 36" ER-309 type weld wire met the requirements of AWS A5.6-69 and ASME SFA 5.9. FRR No 24 indicates that the above

rod along with other material was received on site February 15, 1978. FRR No. 39 indicates that 780 lbs. of 3/32" diameter ER-309 type weld wire was received on February 27, 1978. Neither report identified adverse findings.

No items of noncompliance were identified.

5. Review of Containment Structural Steel Activities

The inspector observed the activities associated with Interior Steel Framing at elevation 390' in Unit 1 containment. This work was being performed by Mid-City Architectural Iron Company (MAI) to Sargent & Lundy Specification No. 2735. The box beams were fabricated and supplied by American Bridge Company (AB). The inspector observed activities in progress on welds No. 14, 51A and 9A and determined the applicable requirements were being met in the following areas:

a. The welds were identified on drawings E 101 Revision A and E 102 Revision A.

b. WPS MC-WP76-30, prequalified to American Welding Society (AWS) D1.1-75 was being used; joint configuration was per detail TC-U4C - single bevel partial penetration.

c. Weld rod was being stored in portable heated electrode ovens.

d. Review of the records for beams A135BB, A123BB1, A137BB1 indicates the following:

(1) Beam A135BB was fabricated from steel beam components with heat numbers 75 C 257, 69 C 076 and 66 C 242.

(2) Beam A123BB1 was fabricated from steel beam components with heat numbers 66 C 242, 69 C 050 and 75 C 134.

(3) Beam A137BB1 was fabricated from steel beam components with heat numbers 66 C 242 and 69 C 167.

(4) Material Test Reports from United States Steel Corporation, furnished the physical and chemical test results and certified that the material met the requirements of ASTM-A-588-75 grade A.

No items of noncompliance were identified.

Section IV

Prepared by J. F. Suermann

Reviewed by R. L. Spessard, Chief
Engineering Support
Section 1

1. Review of QA Procedures - HVAC

Reliable Sheet Metal Works, Inc. (RSM) installs Heating, Ventilation and Air Conditioning (HVAC) ductwork. RSM fabricates sections of ductwork in their shop. Sargent & Lundy Specification 2782 covers the fabrication and installation of ductwork.

The RIII inspector reviewed the RSM QA Manual to ascertain adequacy of the QA program.

a. Review of the QA Manual indicated that additional information is required in the following areas:

(1) Section 1 does not designate the individual with stop work authority.

(2) The QA organizational structure does not include shop QC personnel nor does it differentiate between QC and QA activities.

(3) Section 11 (audits) does not make clear whether audits are performed in the shop or in the field.

The licensee stated that he would obtain clarifications from RSM. This matter is considered unresolved and is identified at the conclusion of Paragraph 1.b.

b. The following procedures were reviewed:

(1) Procedure 1, Welder Qualification

(2) Procedure 2, Control of Weld Rod

(3) Procedure 3, Weld Inspection and Repair

(4) Procedure 4A-1, Prequalified Welding Procedure

(5) Procedure 4B-1, Prequalified Welding Procedure

(6) Procedure 5, Audits

(7) Procedure 6, QA Personnel and Training

(8) Procedure 7, Design and Drawing Control

(9) Procedure 8, Storage of Material

(10) Procedure 9, Receipt Inspection

(11) Procedure 10, Noncomformance and Corrective Action - Shop and Field

The inspector determined that additional information should be included in Procedure No. 8 regarding the storage of acceptable versus unacceptable items.

The cognizant CECo QA engineer agreed to discuss this matter with RSM and provide clarification. The additional information to clarify the above and those items identified in Paragraph 1.a is considered unresolved (454/79-01-03; 455/79-01-03).

No items of noncompliance were identified.

2. Review of Nonconformance Reports

The inspector reviewed records of Pittsburgh-Des Moines Steel Company (PDM) to ascertain adequacy of implementation of written procedures regarding nonconformances. This review was followed by discussions with PDM's QA Manager and licensee QA personnel. A total of eleven (11) Corrective Action Requests (CAR's) (Nos. 12697 to 12706 and 12708) and eight (8) Engineering Corrective Action Requests (ECAR's) F-4, F-12, F-16, F-22, F-23, F-25, F-27, and F-28, were reviewed.

The documents reviewed correctly identified problems noted during construction; the corrective action recommended appeared to be appropriate. Review of the CARs and ECARs indicates procedural requirements of the PDM QA Manual for Non-ASME Stamped Nuclear Power Plant Components, Revision 1, dated August 8, 1977, were met.

Discussion of implementing Section 6 of the QA manual indicated field practice of reporting a nonconformance differed from the procedure. Field practice was considered correct i.e., a Fabrication Checklist (FCL) or Fabrication Checklist Addendum (FCA) may not always be generated depending on the prior existence of an FCL. However, Paragraph 6.2.6 of the QA Manual stated that an FCA will always be prepared and "Hold Points" assigned as required. The