

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report Nos. 50-315/86019(DRS); 50-316/86019(DRS)

Docket Nos. 50-315; 50-316

License Nos. DPR-58; DPR-74

Licensee: American Electric Power Service
Corporation
Indiana and Michigan Power Company
1 Riverside Plaza
Columbus, OH 43216

Facility Name: D.C. Cook Nuclear Plant, Units 1 and 2

Inspection At: D.C. Cook Site, Bridgman, MI., and Indiana and Michigan Power
Company Offices, Fort Wayne, IN.

Inspection Conducted: April 21 - May 2 and May 12-16, 1986

Inspectors: *Hand for*
H. A. Walker

6/12/86
Date

Hand for
T. E. Vandel

6/12/86
Date

Approved By: *Hand*
F. C. Hawkins, Chief
Quality Assurance Programs
Section

6/12/86
Date

Inspection Summary

Inspection on April 21 - May 2 and May 12-16, 1986 (Report Nos. 50-315/86019(DRS);
50-316/86019(DRS))

Areas Inspected: Unannounced inspection by two regional inspectors of licensee action on previous inspection findings; QA program annual review; QA/QC administration; procurement control; receipt, storage and handling of equipment; audit program; audit program implementation; QA program - measuring and test equipment; and calibration. This inspection was conducted according to NRC Inspection Procedures 30703B, 35701B, 35750B, 35751B, 38701B, 38702B, 40702B, 40704B, 56700B, 92701B, and 92702B.

Results: Four violations were identified (failure to properly classify procurements as safety-related, Paragraph 3.a; failure to ensure proper source evaluation and selection, Paragraph 3.a; failure to properly protect stored material, Paragraph 3.b.(4); failure to properly identify and segregate non-conforming material, Paragraph 3.b.(5)).

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DETAILS

1. Persons Contacted

American Electric Power Service Corporation (AEPSC)

J. B. Brittan, QA Section Manager
M. Evarts, Nuclear Safety and Licensing Engineer
*M. L. Horvath, Plant Quality Assurance Supervisor
R. T. Huerter, Quality Assurance Auditor
M. W. Kennedy, Quality Assurance Auditor
R. F. Kroeger, Manager of Quality Assurance
*J. A. McElligott, Quality Assurance Auditing Supervisor

Indiana and Michigan Electric Company (I&MEC)

*R. D. Allen, Planning
K. R. Baker, Operations Superintendent
*T. P. Beilman, Planning Superintendent
*A. A. Blind, Assistant Plant Manager, Maintenance
J. E. Fryer, Environmental Coordinator
*L. Gibson, Technical Engineering Superintendent
D. W. Girardot, Buyer
E. H. Klukas, Jr., Stores
R. H. Middleton, Purchasing and Stores Director
C. E. Miles, Control and Instrumentation Section Head
*J. E. Moline, Maintenance
R. L. Otte, Quality Control ISI Coordinator
R. W. Roemke, Purchasing Supervisor
J. E. Rutkowski, Staff Assistant
*R. J. Russel, Planning
J. R. Sampson, Operations Production Supervisor
*W. G. Smith, Jr., Plant Manager
*J. F. Stietzel, Quality Control Superintendent
*J. W. Veach, Planning/Stores Supervisor
T. A. Turner, Control and Instrumentation Engineer
D. G. Wisner, Maintenance Supervisor
P. J. Wyckoff, Planning General Supervisor
D. A. Yount, Accounting Supervisor

Westinghouse Electric Corporation

J. Casteel, Quality Assurance Manager
W. Stock, NDE Engineer

NRC

J. Heller, Resident Inspector
*B. L. Jorgensen, Senior Resident Inspector

*Indicates those attending the exit meeting on May 16, 1986.



2. Licensee Action on Previous Inspection Findings

- a. (Closed) Unresolved Item (315/84016-06; 316/84018-06): Procedure PMI 2290 is being revised to assure that all required work tasks are assigned and closed out upon completion. .

The inspection reviewed Revision 5 of the procedure. In Paragraphs 3.8.3, 3.8.4, and 5.5, this general revision provides new requirements limiting each job order to a single component and requiring the originator to complete separate job orders for each task. The inspector concluded that the revision provides adequate controls to resolve this matter.

- b. (Closed) Unresolved Item (315/85007-03; 316/85007-03): Site audit procedures do not include all requirements.

Auditing Procedure QAP-18.2, Revision 2 provided new guidance in (1) Section 3.1.5 regarding independent auditor selections; (2) Sections 4.2 through 4.2.1.6 regarding scheduling of supplemental audits; and (3) Section 3.1.3 regarding audits without lead auditors. These revisions adequately address this issue.

- c. (Closed) Violation (315/85007-05(A); 316/85007-05(A)): Failure to issue audit reports within the 30 days required by plant procedure PMI 7020, Revision 6.

The NRC inspector was informed that, subsequent to the identification of this violation, an identical instance occurred and a condition report was issued on December 18, 1985. However, no further instances of late reports are being experienced.

- d. (Closed) Unresolved Item (315/85007-06; 316/85007-06): Backup information is not available in the auditor certification files.

During this inspection, the AEPSC certification files were duplicated and the copies placed in the site certification files. Site files are now representative of the documents on file at the corporate office and are available for onsite review.

- e. (Open) Violation (315/85026-01; 316/85026-01): Radiograph and microfilm storage is not in accordance with requirements.

Licensee personnel had determined the correct method of storage and the film had been arranged properly; however, the pertinent procedure and training documents had not been revised to reflect the changes. This item remains open pending the document revisions.

3. Areas Inspected

This inspection was conducted to verify compliance with regulatory requirements and operational QA program commitments. The inspection was performed by reviewing applicable procedures and records, conducting personnel interviews and observing work activities. The inspection results are documented in the following sections.

a. Procurement Control

The inspector reviewed D.C. Cook procurement control practices at the D.C. Cook plant and the Indiana and Michigan Electric Company corporate purchasing office in Fort Wayne, Indiana. The inspection included a review of the implementing procedures.

Purchase requisitions for both safety-related (N) and nonsafety-related (S) material or services may be prepared by anyone at D. C. Cook. The completed purchase requisition is sent to the corporate purchasing department in Fort Wayne where the purchase order is prepared and issued. A qualified suppliers list (QSL) is used in the selection of suppliers for "N" material. "S" material is considered to be commercial grade material and may be purchased from anyone. The originator of the purchase requisition has the responsibility for proper designation of the material. The requisition is reviewed by the originator's supervisor who verifies the proper classification. Quality requirements are added to the purchase order by standard "boilerplate" paragraphs based on the type of material.

During the review of purchase orders, the following observations were made:

- (1) The inspector noted that two orders for service on the diesels for the emergency diesel generators were inappropriately classified as "S" (nonsafety-related) and were processed accordingly. In reviewing the QSL, the inspector also noted that Worthington Compressor Division of Dresser Industries, Incorporated is not listed as a supplier of parts or services for the emergency diesels. The two orders for service were as follows:
 - (a) Service Order No. 80138-040-6 issued to Worthington Compressor Division of Dresser Industries, Incorporated on March 6, 1986, for a field service engineer to supervise the technical specification surveillance inspections of Unit 2 emergency diesel engines.
 - (b) Service Order No. 80251-040-6 issued to Worthington Compressor Division of Dresser Industries, Incorporated on April 20, 1986, for services of a field service supervisor to supervise the repair work on the Unit 2 CD emergency diesel engine.

These two failures to properly classify procurements as safety-related are in violation of 10 CFR 50, Appendix B, Criterion IV (315/86019-01; 316/86019-01).

- (2) The inspector noted several purchase and service orders which were issued to suppliers who were not listed on the QSL as qualified to supply the product code index of the QSL, Revision 1b. These orders were as follows:

- (a) Service Order No. 80138-040-6 (March 6, 1986) and Service Order 80251-040-6 (April 20, 1986) were issued to Worthington Compressor Division of Dresser Industries, Inc. for services on the emergency diesel generator diesels.

This supplier had not been qualified to supply services according to the product codes listed in the QSL.

- (b) P.O. 72102-040-6X was issued to Dresser Industries, Inc. Worthington Compressor Division, Buffalo, New York (May 7, 1986) for repair parts for diesel air starting.

This supplier is qualified to supply generator spare parts and compressors but had not been qualified to supply diesel parts according to the product codes listed in the QSL.

- (c) P.O. 72296-040-5X was issued to Nuclear Energy Services, Danbury, Connecticut (August 13, 1985) for steam generator nozzle dam parts.

This supplier is listed on the QSL as qualified to supply "engineers - contractors." There is no product code indicating they were qualified to supply services.

During discussions with licensee personnel, the inspector was informed that suppliers were considered qualified to supply parts for equipment which they had originally supplied. The inspector stated that ANSI N 45.2.13 requires periodic evaluations of a supplier's performance to verify that procured items are continuously manufactured under an appropriate quality program and that adequate quality controls are maintained during manufacture and storage. No such verifications were evident.

These failures to ensure that source evaluation and selection is properly performed are in violation of 10 CFR 50, Appendix B, Criterion VII (315/86019-02; 316/86019-02).



- (3) In reviewing Revision 16 of specification DCC-QA-101-QCN ("Qualified Suppliers List,") the inspector noted several broad categories in the product code index. Examples are as follows:

	<u>Code</u>	<u>Product</u>
1.	1370	Constructors Materials
2.	1380	Constructors Services
3.	2580	Engineers - Constructors

These broad product code categories appear to have contributed to the occurrence of the item in paragraph 3.a. (2)(c). In discussing the Qualified Supplier List with AEPSC quality assurance personnel, the inspector was informed that all suppliers listed on the QSL were qualified to supply all products from the listed facility. They also stated that the product index was included only as a guideline. This statement appears to conflict with Paragraph 4.5.2(g) of the QSL. This item is unresolved pending further review of product codes and their use (315/86019-03; 316/86019-03).

b. Receipt, Storage and Handling of Equipment

The inspector reviewed material receiving, storage, and handling practices at D.C. Cook. The review included receiving inspection, receiving inspector qualifications, storage and material control practices, and a review of the storage facilities. Safety-related material is identified as "certified" or "nuclear" material. Small certified items are stored in areas designated for certified material. Larger items are stored in warehouses with nonsafety-related material. Items are identified by either a tagging or marking system traceable to the purchase order and material receipt records.

During the inspection, the following observations were made:

- (1) In reviewing stores procedures, the inspector noted that the required biennial review had not been performed on Procedure Nos. QAI-3115, QAI-3121 and 12-OAP-3120SRI.001 as required by PMI-2010. In discussing this with licensee personnel, the inspector was informed that the review had been completed recently and the procedures were ready for issuance. The inspector then reviewed the revised procedures.

The inspector was also informed that failure to perform the biennial review had been noted by Quality Assurance on an audit completed in July 1985. The inspector reviewed the audit package for Audit No. QA-85-5-02. This review included the findings and responses. The inspector concluded that the licensee's actions were appropriate, and he has no further questions.



- (2) While reviewing receiving inspection activities, the NRC inspector noted that inspection was performed using the purchase order and referenced documentation. Receiving inspection appeared to be performed primarily for purchase order required documentation, count, shipping damage, and material identification. Other parameters, such as dimensional checks, were not performed unless required by referenced documentation.

For material acceptance, there appeared to be extensive dependence placed on the supplier's certificate of conformance (C of C). For example, a shipment of 88 "O" rings was received on Purchase Order No. 76054-040-6X. There was no receiving inspection procedure written specifically to describe how the "O" rings were to be inspected. They were visually examined for damage, rough places, general size and identification, and the certificate of conformance was reviewed. The shipment was accepted without dimensional checks being performed.

The inspector is concerned that licensee personnel place too much dependence on supplier inspections and C of Cs without verification of critical parameters. This item is unresolved pending review of supplier audit and surveillance activities at AEPSC offices in Columbus, Ohio (315/86019-04; 316/86019-04).

- (3) The inspector reviewed the qualification/certification records for five receiving inspectors and made the following observations:
- (a) All five inspectors were certified as "receiving inspectors" and were authorized to inspect all received material. Inspectors are not certified by discipline. In the performance of their duties, receiving inspectors may request specialized assistance from other organizations, such as quality control, if they feel it is needed.
 - (b) Receiving inspector certification tests do not appear to ask appropriate technical questions relating to hardware inspection. Most questions on the tests appear to be administrative in nature.
 - (c) Resumes are not always clear and do not always indicate the inspection, examination and testing experience that was required for certification.
 - (d) The receiving inspector certification sheet, used to certify the five inspectors, specified stores experience rather than inspection, testing, and examination experience as required by ANSI N45.2.6. Procedure OAI-3115, Revision 2, requires that receiving inspectors be certified to ANSI N45.2.6.
 - (e) A resume was missing from one file, and the results of a current eye test was missing from another.



The inspector noted that all five receiving inspectors had been performing inspections for several years. The inspectors performing the three inspections observed by the NRC inspector appeared to be knowledgeable and the inspections were performed satisfactorily. This item is unresolved pending further review. (315/86019-04; 316/86019-04).

- (4) In a walkthrough of storage areas "E" and "T", the inspector noted that the roof appeared to be leaking. This allowed water to drip into the material storage areas. In area "T", water was noted to be dripping onto pipe fittings. A number of the fittings were beginning to rust. Additionally, identification tags for these fittings had been wet and were no longer legible. It was also noted that a job order had been issued in October 1985 to repair the leaking roof. At the time of this inspection, the repair had not been successfully accomplished.

This failure to protect stored material to prevent damage and deterioration is considered in violation of 10 CFR 50, Appendix B, Criterion XIII (315/86019-06; 316/86019-06).

- (5) In the walkthrough of Warehouse 4, the inspector noted a pile of three and four inch stainless steel pipe. Some pieces had a very small "rejected" sticker on the side, while other pieces did not. This piping was located adjacent to acceptable material which was available for use.

The inspector was informed that this was rejected piping which had been removed from the CVCS crosstie system, and the piping was being held pending agreements with the supplier. This failure to identify and segregate nonconforming material is considered to be in violation of 10 CFR 50, Appendix B, Criterion XV (315/86019-07; 316/86019-07).

Upon notification of this problem, licensee personnel immediately roped the piping storage area off, identifying the area as a nonconforming materials area. A "hold" tag was also placed on the pipe. Based on discussions with licensee personnel, the inspector is convinced that the personnel are aware of nonconforming material control requirements. Because appropriate action was taken by the licensee to correct this matter and prevent its recurrence, no response to this violation is required.

- (6) In Warehouse 2, the inspector identified nine pieces of small bore pipe which did not contain the acceptance stores procedure (ASP) number used to provide traceability from the material to receiving records and other required quality documentation. Eight of the pieces contained heat numbers which were used to trace the material back to the appropriate records. No heat number could be found on the other piece, and it was removed from stock. The inspector has no further concerns in this area.



- (7) In Warehouse 3, the inspector noted a 12 inch valve which contained no identification. Safety-related and nonsafety-related equipment are both stored in this warehouse. Licensee personnel took immediate steps to identify the valve, and prior to completion of the inspection the valve was tagged and identified. The identification indicated the valve was non safety-related. The inspector has no further concerns in this area.
- (8) During a review of receiving packages, the inspector noted that a number of the packages did not contain a copy of the purchase order. In discussing this with licensee personnel, the inspector was informed that prior to March 1982, a copy of the purchase order was not included as a part of the receiving package. Copies of the pre-March 1982 purchase orders are kept in the D.C. Cook stores area and are not sent to the record storage vault. Copies are also kept at the I&M purchasing offices in Fort Wayne, Indiana. It could not be immediately determined if duplicate record storage requirements were being met. This item is unresolved pending a review for duplicate storage or vault storage of pre-1982 purchase orders (315/86019-08; 316/86019-08).

c. Audit Program

The inspection conducted a review of the auditing programs by reviewing the applicable procedures, current auditing schedules and records. The inspector selected for review, five audits completed during 1986. The audit checklists used during the audits and qualification files of five lead auditors were reviewed. The inspector also observed an inprocess audit and discussed the details of several audit reports with auditors.

Observations made during the review include the following:

- (1) Qualification/certification files located at the site were noted to be incomplete. The inspector inquired as to the resolution planned for this item and was informed that the AEPSC corporate certification files are being duplicated to provide a representative set of files onsite. The inspector found that the files had been completed prior to the end of this inspection.
- (2) The audit reports reviewed were considered to be in-depth reports providing excellent detail to substantiate the results and conclusions for each concern identified. For the five reports reviewed, a total of 44 separate checklist items had been prepared and 25 items of concern (i.e., nonconformance, deviation or recommendation) had been identified.

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- (3) The audit observed by the inspector was of the inservice inspection activities for the Unit 2 steam generator tubes eddy current examination and tube plugging activity (Audit Report No. QA-86-14). The inspector considered the auditing coverage adequate and the performance satisfactory.

d. Test and Measurement Equipment and Calibration

The inspector reviewed governing procedures for the M&TE program and calibration control. A copy of a recently completed test and calibration instruction and procedure, performed on the Unit 2 steam generators, was obtained to verify that program controls were adequately implemented. Instruction and Procedure No. 2 THP 6030 IMP.211, Revision 6 ("Steam Generator 1 and 2 Mismatch Protection Set I Calibration") is used as the test instructions and to document the results of the test and the equipment used. They reviewed the completed procedure and the following items were discussed with the C&I Engineer:

- (1) During a check of instrument calibration status, the inspector noted that an instrument list attached to the record as Appendix A, showed instrument number CNP-142 as having a recalibration due date of January 9, 1986. A review of the calibrations folder for this item, a multimeter (Fluke) Model No. 8120A, indicated the instrument was found to be out-of-tolerance on April 19, 1986.

Section 4.3 of Procedure No. 12 THP 6030 IMP 505, Revision 0, requires that a trace sheet be issued notifying the Instrument Maintenance Supervisor of out-of-tolerance equipment. Section 4.4 requires that specified tolerances and reported values be checked against the calibration check sheets. The results are then to be noted on the trace sheet, and it filed with the supporting documentation of the tested instrument. In this instance, the required check had not been performed. In response, the check was completed, and the trace sheet placed in the file on May 1, 1986. The inspector has no further questions on this matter at this time.

- (2) Information was provided to the inspector regarding the qualifications of C&I technicians and the organization staffing. To the satisfaction of the inspector, qualifications were discussed with the C&I Engineer.

4. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, violations or deviations. Four unresolved items were disclosed during this inspection.

5. Exit Interview

The inspectors met with licensee representatives (denoted in Paragraph 1) on May 16, 1986, and summarized the purpose, scope and findings of the inspection. The inspectors discussed the likely informational content of the inspection report with regard to documents or processes reviewed by the inspectors during the inspection. The licensee did not identify any such documents or processes as proprietary.