

APPENDIX B

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-313/89-16
50-368/89-16

Operating Licenses: DPR-51
NPF-6

Dockets: 50-313
50-368

Licensee: Arkansas Power & Light Company (AP&L)
P.O. Box 551
Little Rock, Arkansas 72203

Facility Name: Arkansas Nuclear One (ANO), Units 1 and 2

Inspection At: ANO, Russellville, Arkansas

Inspection Conducted: March 27-31, 1989

Inspector:

Wm McNeill

W. M. McNeill, Reactor Inspector, Materials
and Quality Programs Section, Division of
Reactor Safety

4/17/89
Date

Approved:

I Barnes

I. Barnes, Chief, Materials and Quality
Programs Section, Division of Reactor Safety

4/17/89
Date

Inspection Summary

Inspection Conducted March 27-31, 1989 (Report 50-313/89-16; 50-368/89-16)

Areas Inspected: Routine, unannounced inspection involving action on
previously identified inspection findings and licensee's self-assessment
capabilities.

Results: The operations assessment group (OAG) reviews of external operating experiences were found to be effective and well documented with only a few minor exceptions. During review of the actions taken on NRC Information Notice 88-81, one apparent violation was noted (paragraph 3) in regard to the practices used for procurement of Okonite tape. In later procurement, the purchase orders did not impose 10 CFR Part 21 despite including requirements that would classify the item as a basic component. In earlier procurements, the tape was procured as a commercial grade item without imposition of any requirements that would provide traceability to batches that had been subjected to environmental qualification type testing. An unresolved item was also identified (paragraph 3) in regard to justification of acceptability of installations utilizing this tape.

DETAILS

1. Persons Contacted

AP&L

- *C. G. Anderson, In-house Events Analysis Supervisor
- M. M. Azami, Lead Engineer
- T. J. Bartholomew, Quality Assurance (QA) Engineer
- W. M. Butzlaff, QA Engineering Supervisor
- *R. L. Bata, QA Engineer
- *R. D. Beckham, QA Engineer
- *W. E. Converse, Operations Assessment Superintendent
- C. Daniel, Storekeeper
- *E. C. Ewing, General Manager, Plant Support
- *R. J. Fletcher, Plant Engineering Technician
- *D. A. Graham, Quality Engineering Supervisor
- *H. T. Green, QA Superintendent
- *J. S. Grisham, Plant Administration Manager
- *R. A. Jensen, Operations Assessment Engineer
- *R. D. Lane, ANO Engineering Manager
- *D. B. Lomax, Plant Licensing Supervisor
- *P. L. Michalk, Plant Licensing Engineer
- *C. N. Shively, Plant Engineering Superintendent
- S. Strasner, QA Engineer
- *B. E. Williams, Plant Engineering Supervisor

NRC Personnel Contacted

- W. D. Johnson, Senior Resident Inspector
- *R. C. Haag, Resident Inspector

*Denotes those persons that attended the exit meeting on March 31, 1989. In addition, the NRC inspector contacted other members of the licensee's staff.

2. Followup of Previous Inspection Findings (92702)

- a. (Closed) Violation 313/8826-03; 368/8826-03: Failure to have a procedure for performing QA receiving inspection functions.

A procedure for receiving inspection has been issued. The violation occurred because of inadvertent deletion of an existing procedure during realignment of QA and QC functions by AP&L. A review was performed to verify that no other QA/QC procedures were omitted at the time of the realignment. The NRC inspector verified the above actions. This item is closed.

- b. (Closed) Violation 313/8826-04; 368/8826-04: The failure to maintain records of an auditor's qualification.

The NRC inspector reviewed the 1988 and 1989 audit files and verified that qualification records were on file or maintained by Middle South Utilities System for all auditors. A file memorandum documented the Middle South Utilities System, System Services, Inc. (SSI) records for those audits where SSI personnel were used. This item is closed.

3. Licensee Self-Assessment Capabilities (40500)

The objective of this inspection was to complete a review of licensee self-assessment programs that was initiated in NRC Inspection Report 50-313/88-37; 50-368/88-37.

- a. During this inspection, an assessment was performed of the effectiveness of the OAG in their review of external operating experience reports with respect to identification of concerns and followup to resolution.

The NRC inspector reviewed the implementing Procedure No. 1000.29 and found that OAG was to review such external operating event reports as:

- ° Institute of Nuclear Power (INPO) reports such as:

- Significant Event Reports (SERs)

- Significant Operating Experience Reports (SOERs)

- Significant By Others Notifications (SOs)

- Operations and Maintenance Reminders (O&MRs)

- Significant Event Notifications

- ° NRC Information Notices

- ° Nuclear Steam Supplier and Vendor Reports

Reviews were documented on a Plant Impact Evaluation (PIE) form by a staff of six shift technical advisors for each unit. The OAG activities had been reviewed by INPO in November 1988, by an in-depth review of the PIE associated with SOER 88-02. Two technical recommendations were made by INPO in regard to that review. The NRC inspector reviewed a sample of PIEs associated with seven INPO SERs, five NRC Information Notices, and two other reports.

The NRC inspector found the reviews to be well documented, technically sound, and followup satisfactory with the exceptions noted below. The timeliness of reviews appeared to be satisfactory. Observations by the NRC inspector were as follows:

- ° PIEs 88-93, -104, and -161 did not exhibit the thoroughness, format or detail of others. PIE 88-93 on emergency diesel generators (EDGs) recommended that the lube oil system for Unit 1 EDGs be upgraded in accordance with recommendations. The recommendation was answered by plant engineering with the note that the lube oil system was already upgraded. PIE 88-104 on ground faults did not follow the point-by-point discussion format of the other PIEs. PIE 88-161 on General Electric Magna Blast circuit breakers failed to include the number of the Condition Report (CR) which documented the problem in question.
- ° Recommended actions in regard to training associated with PIEs 88-104 and -120 were not logged in the "Corrective Action Tracking Log."
- ° Two recommended actions associated with PIE 88-85 on control rod worth were as much as 3 months overdue.
- ° There appeared to be some tracking errors in regard to followup. The files were missing the Training Evaluation-Action Request (TEAR) in regard to maintenance personnel training associated with PIE 88-82. The files were missing the TEAR, in regard to Unit 1 operator training, associated with PIE 88-92. A note on the transmittal of PIE 88-93 identified that the recommendations on Unit 2 EDGs were not going to be tracked and followed. The above NRC inspector observations were discussed with licensee personnel.
- ° In review of the actions taken, in regard to NRC Notice 88-81, the NRC inspector noted that the licensee used Okonite tape. Additional review was performed by the NRC inspector of AP&L's procurement practices for Okonite tape. The NRC inspector found that AP&L had placed seven purchase orders (POs) with Okonite. The most recent POs (i.e., 171006, 180606, and 1897102) identified that "10 CFR Part 21 did not apply" and also included, in the technical requirements of the POs, design and specification requirements that were unique to nuclear facilities. The technical requirements stated that the tape was to "be equivalent to the item tested per Okonite Report No. NQRN-3, Revision 3, which qualifies the item for nuclear service both inside and outside containment per IEEE 383-1974 and IEEE 323-1974." Inclusion of these requirements makes this item a basic component, as defined by 10 CFR Part 21, and for which the provisions of 10 CFR Part 21 are required to be specified as being applicable in the PO. This was identified as one example of an apparent violation (313/8916-01; 368/8916-01).

The earlier POs for Okonite tape (i.e., 22223, 29083, and 05792) identified that the tape was to be commercial grade, with no technical requirements, and that there were "no documentation requirements." The NRC inspector found that materials from PO 22223, dated November 1984, were used from November 1984 to April 1985 in the following examples of equipment qualification (EQ) applications:

<u>Job Order</u>	<u>Part Number</u>
76283J	P36C
76282	P36A
76284	P35A
84211	2UVC1C
521498	2VSF-031B

The NRC inspector found that materials from PO 29083 dated March 1985, were used from April 1985 to March 1986 in the following examples of EQ applications:

<u>Job Order</u>	<u>Part Number</u>
84284	2VSFM31B
710286	VUC-7C

The NRC inspector found that materials from PO 05792, dated November 1986, were used from December 1986 to September 1987 in the following examples of EQ applications:

<u>Job Order</u>	<u>Part Number</u>
719661	2VUC-1E
527709	CV1414
716670	CV1272
739562	P36C

AP&L personnel informed the NRC inspector that the material, in both early and later procurement, was commercial grade and dedicated by AP&L. Dedication was detailed to be: verification of the part number, no shipping damage, shelf life not expired, and the receipt of a certification (in later procurement only). Paragraph 5.2.2 of the "Guidelines for Evaluating Environmental Qualification of Class IE Electrical Equipment in Operating Reactors," November 1979 (DOR Guidelines) requires that materials used be traceable to the type tested. Procurement of commercial grade tape, without imposition of appropriate technical requirements to assure material characteristics were the same as batches subjected to EQ type testing, does not provide a basis for establishing such traceability. In the absence of specific EQ testing of the received products, the NRC inspector could find no technical basis to support dedication of these commercial grade items. The procurement practice used for these items was

identified as a second example of the apparent violation discussed above (313/8916-01; 368/8916-01). The licensee by telecon of April 14, 1989, with J. Callan, Director of Division of Reactor Projects was requested to review the above POs to justify acceptability of installations utilizing this tape. This subject is an unresolved item pending completion of licensee review and NRC followup (313/8916-02; 368/8916-02).

- b. During this inspection, the NRC inspector also had the opportunity to observe the QA subcommittee of the Safety Review Committee (SRC). The NRC inspector found a well organized meeting. Discussions on a third party assessment by Middle South Utilities and overdue punch list items, i.e., audit findings's responses, were of particular note.

3. Exit Meeting

An exit meeting was held on March 31, 1989, with those individuals denoted in Section 1 of this report. At this meeting, the scope of the inspection and the findings were summarized. The NRC resident inspectors also attended. The licensee did not identify as proprietary any of the information provided to, or reviewed by the NRC inspector.