APPENDIX B

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-313/89-26
50-368/89-26

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: June 5-9, 1989

Inspector: V. G. Stetka for
A. Singh, Reactor Inspector, Plant Systems Section, Division of Reactor Safety

Date: 6/21/89

Approved: V. G. Stetka
T. F. Stetka, Chief, Plant Systems Section
Division of Reactor Safety

Date: 6/21/89

Inspection Summary

Inspection Conducted June 5-9, 1989 (Report 50-313/89-26)

Areas Inspected: Routine, unannounced inspection of the licensee's Technical Specification (TS) required calibration program, the preventive maintenance (PM) program related to the calibration of plant instrumentation for components not addressed in the TS and the licensee's action on previously identified inspection findings.

Results: Within the areas inspected, one violation and one deviation were identified. The violation involved the area of calibration for instrumentation not specifically addressed in the TS. The calibration frequency requirements were not met as required by procedures (paragraph 3). The deviation involved a failure to meet the commitment and implementation date for a new PM program (paragraph 2).

The licensee's plant surveillance (PS) calibration program for the control and evaluation of installed instrumentation and control (I&C) devices, specified by the TS, is effectively being implemented. An apparent weakness was noted in the licensee's training program for the I&C technicians.

Inspection Conducted June 5-9, 1989 (Report 50-368/89-26)

Areas Inspected: Routine, unannounced inspection of licensee action on previously identified inspection findings.

Results: Within the area inspected, one deviation was identified (failure to meet the commitment and the implementation date for a new PM program, paragraph 2).

DETAILS

1. Persons Contacted

AP&L

*D. B. Lomax, Plant Licensing Supervisor
W. Perks, Training Manager
*C. Zimmerman, Operations Technical Supervisor, Unit 1
G. Kendrick, Maintenance I&C Superintendent
E. Ewing, General Manager, Plant Support
*J. D. Vandergrift, Operations Manager
*R. Lane, Manager, Engineering
*J. Tayler-Brown, Quality Control Superintendent
*R. Thorton, Licensing
*N. S. Carns, Director, Nuclear Operations
*A. J. Wrape, Manager, EIC Design Engineering
*G. R. D'Aunoy, Operations, Unit 2
*S. McGregor, Engineering Services Superintendent, Engineering Department
*G. T. Jones, General Manager, Engineering

NRC, Region IV

*R. Haag, Resident Inspector
*W. A. Johnson, Senior Resident Inspector
*R. V. Azua, Reactor Inspector
*H. F. Bundy, Reactor Inspector
*W. C. Seidle, Chief, Test Programs Section

*Denotes those personnel present at the June 9, 1989, exit interview.

The NRC inspector contacted other AP&L personnel during the performance of the inspection.

2. Followup on Previous Inspection Item

2.1 (Open) Violation (313/8730-01; 368/8730-01): Inadequate PM program for safety-related components. The NRC inspector reviewed the licensee's response to this violation. In their response, the licensee committed to implement and complete a new PM program by October 1988. As of June 9, 1989, the licensee has completed and implemented only about 50 percent of the PM program. Failure to meet the commitment date is considered to be a Deviation to a commitment made to the NRC.

Deviation (313/8926-01; 368/8926-01): Failure to complete and implement the new PM program by October 1988.

3. Calibration of Plant Instrumentation for ANO Unit 1 (56700)

This inspection was to ascertain whether the licensee had developed and implemented a program for the calibration and testing of plant installed I&C devices. This includes the I&C devices specified in the TS and I&C devices that are used for the operation and testing of equipment, but not specifically addressed in the TS as requiring calibration.

3.1 Calibrations Specified by TS

Calibrations required by TS are controlled as part of the ANO Surveillance Test Program. The inspector determined that procedures for calibration of plant installed I&C devices are being implemented in accordance with the TS and surveillance test program controls, as described in the ANO's Final Safety Analysis Report (FSAR), Sections 7.0 and 9.5 and related commitments to Regulatory Guides and Standards. TS surveillance and calibrations are further controlled by Procedures 1000.009 and 1001.009, "Surveillance Test Program," Revision 19 and, "Master Test Control List," Revision 14, respectively.

The NRC inspector reviewed the completed test and calibration procedures (documentation packages) for surveillances performed during the last 18 months. This review verified: (a) test documentation was completed, (b) approved procedures were utilized, (c) acceptance criteria were met, and (d) completed procedures documented "as found" and "as left" conditions.

The NRC inspector reviewed the following surveillance test procedures:

Procedure No.	Title	Date
1304.001 Revision 2	High Pressure Injection/Low Pressure Injection (HPI/LPI) and Reactor Building Spray Flow Instrumentation Surveillance Green Channel	03/05/87
1304.012 Revision 11	Borated Water Storage Tank Level and Temperature Instrumentation Surveillance Test	09/04/88
1304.038 Revision 2	Unit 1 Reactor Protection System Channel B Test	02/21/89
1304.41 Revision 16	Reactor Protection System Channel A Calibration	11/01/88
1304.52 Revision 10	Engineered Safeguards Actuation System (ESAS) Channel No. 1 Calibration	08/17/87

In addition, the NRC inspector observed a calibration of the reactor protection system being conducted in accordance with Procedure 1304.038. The NRC inspector verified that the I&C technicians used the approved procedures and that the calibration was performed in accordance with these procedures. While observing this activity, the NRC inspector noted that there was no documentation available concerning the training and qualification of the individuals performing the calibration. The NRC inspector's discussions with the licensee's representatives indicated that there was no written requirement to document the training and qualification of the I&C technicians. The qualification was determined by the immediate supervisor and approval to perform the test was granted verbally by this supervisor. This is considered to be a weakness in the training program.

No violations or deviations were identified in this part of the inspection.

3.2 Calibrations not Specified by TS

The programmatic controls for calibration of installed I&C devices that are not specifically addressed in the TS as requiring calibration, are part of the ANO PM program. The schedule of calibration and verification for these installed I&C devices is outlined in the ANO, Unit 1 Procedures 1092.179A.006, Revision 5, "Preventive Maintenance Engineering Evaluation" and 1001.004, Revision 1, "Preventive Maintenance Program." Conditions required to perform calibrations on plant installed instrument devices are further defined in 1000.22, Revision 3, "Preventive Maintenance of Instrumentation." The NRC inspector reviewed the following completed procedures:

Procedure No.	Title	Date
1304.119 Revision 2	Waste Gas Surge Tank Instrument Calibration	4/11/88
1413.013 Revision 1	Pressure Differential Transmitter (PDT) 2131 VEF-38A Inlet Crossover Air Flow	3/6/89
1412.101 Revision 0	Emergency Diesel Generator (EDG) 2DG1-480V 30 Circuit Breaker Panel	3/11/89
2413.121 Revision 0	Circuit Breakers Heating, Ventilation and Air Conditioning (CBHVAC) Hydrogen Purge Air Flow	3/22/89
1000.104 Revision 4	Condition Reporting and Corrective Actions	4/30/89

The review determined that the test documentation was completed, acceptance criteria had been met, the approved test procedures were used, and technical content was acceptable. The licensee used a computerized program for scheduling the conduct of calibrations. Section 7.3 of Procedure 1092.179A.006,

requires that the calibration schedules and frequencies be established for the safety-related systems which are not addressed in TS. As a result of the NRC inspector's review, it was determined that two calibrations were overdue. The two calibrations, which had an 18-month frequency, exceeded this frequency by 20 days including the allowable grace period. The two late calibrations were the result of the licensee's untimely approval process in issuing two new procedures. Failure to meet the calibration frequency as required by Procedure 1092.179A.006 is considered to be an apparent violation.

This finding is considered to have minimal safety significance because the examples appeared to be isolated examples within a generally effective program. Therefore, in accordance with 10 CFR Part 2, Appendix C of the NRC Enforcement Policy, dated October 13, 1988, this violation will not be cited.

4. Exit Interview

The NRC inspector met with the licensee's representatives denoted in paragraph 1 on June 9, 1989, and summarized the scope and findings of the inspection. No information was presented to the NRC inspector that was identified by the licensee as proprietary.