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Mr. W. C. Seidle, Chief
Reactor Project Branch #2
U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76011

SUBJECT: Arkansas Nuclear One - Units 1 & 2
Docket Nos. 50-313 & 50-368
License Nos. DPR-51 and NPF-6
Response to Inspection Reports
50-313/82-15 and 50-368/82-12
(File: 0232, 2-0232)

Gentlemen:

We have reviewed the Items of Noncompliance included in the subject reports. Attached is our response to the "Notice of Violation", the "Notice of Deviation" and the "Unresolved Item" included in these reports. Also attached is a clarification of findings from the report.

Very truly yours,

Donald A. Rute
for John R. Marshall
Manager, Licensing

JRM:GAC:sc
Attachment

cc: Mr. Richard C. DeYoung, Director
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Mr. Norman M. Haller, Director
Office of Management & Program Analysis
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

NOTICE OF VIOLATION

Based on the results of an NRC inspection conducted during the period of June 21-25, 1982, and in accordance with the NRC Enforcement Policy (10 CFR Part 2, Appendix C), 47 FR 9987, dated March 9, 1982, the following violations were identified:

1. Failure to Electrically Supervise or Lock Fire Doors Between Redundant Safe Shutdown Equipment - Units 1 and 2

Paragraph 2 of the license for each unit respectively requires completion of certain modifications described in the Fire Prevention Safety Evaluation Reports. One of these requirements, common to both units, is, "Fire doors which separate redundant safe shutdown equipment... will either be locked or provided with electrical supervision to alarm if opened."

Contrary to the above, it was found on June 22, 1982, that fire door 34, which separates the two diesel generator rooms for Unit 1, and fire door 259, which separates the two diesel generator rooms for Unit 2, were neither locked nor had an electrical supervisory alarm that was operable.

This is a Severity Level IV Violation. (Supplement I.D)
(50-313/8215-01; 50-368/8212-01)

RESPONSE

Door 34 listed above should be door 39. A DCP had been developed and partially installed (i.e., final terminations had not been made) which added electrical supervision to 12 doors (two of which are identified above) separating safe shutdown equipment. The 12 doors became electrically supervised or locked on 7/2/82. The supervised doors will alarm in CAS and SAS if left open too long. Should the electrical supervision become inoperative or problems develop which necessitate changes from electrical supervision, the affected door(s) will be locked or a fire watch posted.

The cause of the design change implementation error (i.e., the design change adding the electrical supervision had been installed, however, the final cable termination had not been accomplished) is attributed to ineffective job control/closeout. Improvements have been made subsequent to the time the design change was installed (8/79 to 10/79) which have improved control of job planning and design change package (DCP) implementation interfaces and closeout.

Improvements which should prevent recurrence presently include provisions in the following station procedures:

- 1000.12, Control of Site Contractors
- 1000.13, Control of Station Modifications
- 1000.24, Control of Maintenance
- 1001.03, Scheduling of Station Modifications
- 1025.03, Conduct of Maintenance
- 1032.01, Design Control
- 1032.02, Installation Technical Support

Provisions in these procedures address the completeness of DCP's (including functional testing), the manner in which installation is planned and scheduled, and the requirement that installation shall be as described in the DCP.

All of the above procedures have been put into effect since the subject incident occurred in 1979.

Additionally, the recent analysis conducted as a result of the requirements of Appendix R to 10 CFR 50 provided pertinent information necessary for the identification and control of fire doors. Specific door-by-door criteria are in the process of being developed. These criteria are being developed to incorporate the fire protection changes recently imposed by Appendix R and to ensure full compliance with the cited requirements of Notice of Violation. Development of these criteria are scheduled to be complete by November 30, 1982.

2. Failure to Conduct Surveillance on a Hose Reel Station in a Vital Area - Unit 1

Unit 1 Technical Specifications, paragraph 4.2.3.1 requires that, "each of the fire hose stations protecting safety-related areas shall be demonstrated operable... at least once per 31 days..."

Contrary to the above, the hose reel station identified in Design Change Package 655 as "HR-49," which was installed to satisfy, in part, the license condition 2.c.(3) had not had the monthly surveillance conducted between installation in April 1981 and June 22, 1982.

This is a Severity Level IV Violation. (Supplement I.D.)
(50-313/8215-02)

RESPONSE

Procedure 1308.02, "Fire Hose Station Inspection," has been revised to include hose reel station 49 at elevation 317' in the auxiliary building. The July visual inspection of HR-49 was satisfactorily conducted on 7/12/82.

The cause of the visual surveillance not being performed is twofold:

- a) Lack of input to the Safety and Fire Prevention Coordinator that the DCP for the hose reel station had been installed.
- b) No visual means exists at each hose reel station that indicates if the visual surveillance was accomplished.

In order to prevent recurrence of cause a), the DCP completion notification form (which is filled out and distributed each time a DCP is completed) has been revised to include the following:

- (1) The Safety and Fire Prevention Coordinator and ANO Department Heads have been added to the distribution for DCP completion notification forms.
- (2) The notification form has been modified to specifically instruct each recipient to ensure that any surveillances for which they are responsible are revised.

In order to prevent recurrence of cause b), an inspection tag indicating the monthly inspection status has been attached to each hose reel within the plant (excluding the reactor buildings).

A review was performed to assure that there were not discrepancies between Procedure 1308.02 and the P&ID's identifying hose reels. No other hose reels protecting safety related areas, other than those identified by the NRC inspector were noted. Full compliance was achieved on 9/3/82 upon completion of the review.

The design change package number referenced in the notice of violation above (655) should be 661. The installation date should also be May 1979. It should also be noted that operability was established with the satisfactory hydrostatic testing of the hose reel piping upon initial installation (5/1/79). Subsequently, operability was again verified on 2/8/82 with the 3 year hydrostatic test (Procedure 1306.15, "Fire Hose Reel Inspection and Hydro").

NOTICE OF DEVIATION

Based on the results of an NRC inspection conducted during the period of June 21-25, 1982, and in accordance with NRC Enforcement Policy (10 CFR Part 2, Appendix C), 47 FR 9987, dated March 9, 1982, the following deviation was identified:

Fire Door Integrity - Units 1 and 2

10 CFR 50.48 stipulates that Appendix R to Part 50 shall not be applicable to nuclear power plants licensed to operate prior to January 1, 1979, to the extent that fire protection features proposed or implemented by the licensee have been accepted by the NRC staff as satisfying the provisions of Branch Technical Position BTP APCSB 9.5-1.

Branch Technical Position 9.5-1, "Guide for Fire Protection for Nuclear Power Plants," paragraph C.4.c.(3) states, in part, that, "(3) cable and cable tray penetration of fire barriers (vertical and horizontal) should be sealed to give protection at least equivalent to that required of the fire barrier."

In deviation from the above, electrical conduit installations, which had unsealed air gaps external to the conduits, were found penetrating the lintels above fire doors in door units; e.g., doors 46, 259, 260, and 271. (50-313/8215-03; 50-368/8212-02)

RESPONSE

Arkansas Power & Light has reviewed the subject of the 3/4" conduit penetrating the fire door lintels and has concluded that the 3-hour rating of the door has not been violated; therefore, a deviation does not exist. The basis for this conclusion is as follows:

- (1) Due to the relatively tight mechanical fit of the conduit through the drilled hole, the air gap is not sufficient to present a viable path for combustion or combustion products.
- (2) Drawings E-2059 and E-59, showing the notes and details for conduits penetrating fire barriers, make reference to conduits that are open at both ends of the fire barrier. The conduits in question are connected by enclosed flexible conduit to the sealed switches and are considered as closed conduits on that side of the door.

An inspection of all fire doors penetrating fire barriers has been completed. Those fire doors that had conduit penetrating the lintels have subsequently been sealed. Included were the specific doors identified in the notice of deviation except door 259. Door 259 was incorrectly identified in the notice of deviation. Door 259 does not have conduit penetrating the door lintel.

ATTACHMENT I

UNRESOLVED ITEM

In the cover letter dated August 6, 1982, transmitting Inspection Reports 50-313/82-15 and 50-368/82-12, AP&L was requested to respond to unresolved item 50-368/8212-07 by addressing the issues identified in paragraph 32 of the Inspection Report. The requested response is provided below:

ISSUE 1

The NRC inspectors reviewed licensee surveillance Procedure 1302.02, "Fire Hose Station Inspection," Revision 1, May 6, 1981. This procedure identified hose reel stations 2HR-41, 2HR-42 and 2HR-43 as being located in the new maintenance area. The NRC inspectors also interviewed licensee personnel who normally conduct the monthly surveillance of hose reel stations. It was established that no monthly surveillance had ever been conducted on hose reel stations identified in DCP-80-2002 as "2-41, 2-42 and 2-43." The NRC inspectors concluded that equipment required by license condition had been installed, but its operability had not been demonstrated. This is considered to be an unresolved item. (50-368/8212-07)

RESPONSE TO ISSUE 1

The correct numbering for the hose reels in question is "2-40, 2-41 and 2-42." Visual inspection to demonstrate operability per Technical Specification 4.23.1, of hose reels 2-40, 2-41 and 2-42 was satisfactorily accomplished on 7/23/82. Procedure 1308.02 (Inspection report 50-368/82-12 incorrectly indicates 1302.02), "Fire Hose Inspection," has been revised to include the hose reel stations added by DCP-80-2002. The causes and corrective action for this item are identical to item 50-313/8215-02 (enclosed).

ISSUE 2

The NRC inspectors reviewed DCP-80-2002. This DCP installed three hose reel stations, two on elevation 317' of the auxiliary building and one on elevation 335' of the same building. The licensee identified these hose reel stations as 2-40, 2-41 and 2-42 in Technical Specification Change Request serial 2CANØ182Ø1, dated January 5, 1982. The license for Unit 2, paragraph 2.C.(3)(e), required that these hose reel stations be installed, "Prior to startup following the first regularly scheduled refueling outage." An additional caveat to this paragraph states, "Technical Specifications covering these items should be proposed not later than 90 days prior to implementation." DCP-80-2002 indicated that the actual installation of hose reel stations 2-40, 2-41 and 2-42 occurred in the fall of 1980, although the DCP was not closed out until January 1982. The startup after refueling occurred during the summer of 1981. The Technical Specification Change Request was submitted in

January 1982. The licensee had apparently met the license requirement which allowed continued operation after refueling by installation of the hose reel stations but had failed to conform to the caveat concerning timeliness of a supporting Technical Specification change request.

RESPONSE TO ISSUE 2

The ANO-2 Fire Protection Safety Evaluation Report (SER) requested that Technical Specifications related to items 3.5 [Protection of Redundant Cable in the Hallway - Elevation 372' (2109-U)], 3.11 [Protection of Redundant Reactor Protection System Cables (2136-I)], 3.14 [Smoke Detectors], and 3.15 [Manual Hose Stations (2055-JJ, 2084-DD, Containment, Elevation 317' of Auxiliary Building)] be submitted 90 days prior to implementation. All of these items, per the schedule presented in the SER, were to be completed by the end of the 1981 ANO-2 refueling outage. This refueling outage was completed July 4, 1981. It was AP&L's intention to submit a single Technical Specification addressing each of these items once the needed information was available.

To comply with the ANO-1 and 2 Fire Protection SER requirements, especially those items which required AP&L to install smoke detectors, AP&L was required to conduct a massive engineering effort which required thousands of man-hours to design and install the required fire protection systems. This effort of designing installing and correcting deficiencies in the systems continued up to and during the ANO-2 1981 refueling outage. Since the final systems were not completely designed and installed until the end of the outage this made it impractical for AP&L to submit a final Technical Specification since the final designs were not known until this time. Once the fire protection systems to meet the SER requirements were installed, work was begun to compile the needed information for the Technical Specification submittal.

While compiling this information, a review of past fire protection Technical Specification Submittals was conducted. From this review it was determined AP&L's August 16, 1978, (2-088-9) Technical Specification submittal on fire protection had not yet been acted upon by the NRC. In a telephone conversation with the ANO-2 Nuclear Reactor Regulation (NRR) Project Manager, it was agreed that a comprehensive effort addressing the August 16, 1978, submittal and subsequent June 26, 1980, (2-060-31) submittal on fire protection as well as the SER requirements would be the most effective means of bringing the ANO-2 fire protection Technical Specifications up to date. In order to conduct this expanded effort, additional time was necessary for subsequent correspondence and to compile additional supportive information. The ANO-2 NRR Project Manager was aware of this need and worked closely with AP&L to develop AP&L's comprehensive submittal of January 5, 1982, (2CAN018201) which address AP&L's two previous Technical Specification submittals and required SER modifications.

It is our opinion the Technical Specification changes requests were made on the most timely manner possible given the time frame and circumstances under which they were developed. Efforts were made (and will continue to be made on other issues) to assure the requested schedule was met. Although not submitted on schedule, the Technical Specifications were submitted as soon as reasonably practical. Therefore, we consider this instance an isolated case which AP&L was aware of at the time. As such, we believe no further action is required.

ATTACHMENT 2

CLARIFICATION OF REPORT FINDINGS

3. Requirement: "Portable radio equipment will be provided and available for fire brigade use."

Applicability and SER Reference: Unit 1 - paragraph 3.1; Unit 2 - paragraph 3.1.

Findings: The NRC inspectors found that portable radios were stored on the first floor of the licensee's administrative building. The portable radios were in a locker which included built-in electrical charging outlets. The portable radios had separate microphones which could be clipped to the user's collar and throat microphones for use under respiratory equipment. Licensee representatives stated that all members of the fire brigade received instructions in the use of the portable radios as part of "Emergency Response" training and that the portable radios were used on some of the drills. The portable radio frequency assigned for fire brigade use was monitored in the control rooms.

There were no violations or deviations identified.

CLARIFICATION

Contrary to the findings above, the portable radios do not have throat microphones for use under respiratory equipment.

Also, we have been unable to determine who stated to the inspector that "... all members of the fire brigade received instructions in the use of the portable radios. . . ." At the time of the inspection, the statement should have been "... all but one member of the fire team received instruction. . . ."

Currently, all members of the fire team have received portable radio use instruction, and the fire brigade will begin in October 1982 receiving the instruction during their regular training sessions.

The portable radio equipment is and has been available for fire brigade use.