



Southern Nuclear Operating Company

the southern electric system

Dave Morey
Vice President
Farley Project

June 1, 1994

Docket Nos.: 50-348, 50-364

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Joseph M. Farley Nuclear Plant
Reply to Notices of Violations (NOV)
NRC Inspection Report Nos. 50-348/94-07 and 50-364/94-07

Gentlemen,

As requested by your transmittal dated May 02, 1994, this letter responds to both notices of violation (50-348/94-07-01-VIO, "Unapproved Scaffolds Near Safety-Related Equipment") and (50-348,364/94-07-04-VIO, "NIS PR Channel Inoperability"), which are cited in the subject NRC inspection report.

1) The notice of violation (50-348/94-07-01-VIO, "Unapproved Scaffolds Near Safety-Related Equipment") therein states:

10 CFR Part 50, Appendix B, Criterion XVI, and the J. M. Farley Plant Operations Quality Assurance Policy Manual, require that the licensee take measures to assure that conditions adverse to quality are promptly identified and corrected. Such measures are to be taken to assure that the cause of the condition is determined and corrective action taken to preclude repetition.

Technical Specification 6.8.1 requires that applicable written procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, 1978 shall be established, implemented and maintained. Appendix A, Section 9.a, states that maintenance that can affect the performance of safety-related equipment should be properly performed in accordance with written procedures.

General Maintenance Procedure, FNP-0-GMP-60, Revision 10, "General Guidelines and Precautions for Erecting Scaffolding," Step 7.10, requires the Shift Foreman Operating (or his designee) to sign step 7.10 of the scaffold permit for any scaffolds near safety-related equipment signifying its approval for use.

000071

9406080239 940601
PDR ADOCK 05000348
D PDR

JED

Contrary to the above, on March 24, 1994, eight scaffolds were used near safety-related equipment in the Containment, Auxiliary Building and Diesel Generator Building that were not approved for use by the Shift Foreman Operating (i.e., step 7.10 of the scaffold permit was not signed). In addition the long-term corrective actions taken by the licensee in response to a similar violation identified during the past Unit 2 refueling outage (see NRC inspection report 50-364/93-28, non-cited violation 93-28-02) failed to prevent the recurrence of this problem during the current Unit 1 refueling outage.

This is a Severity Level IV violation (Supplement 1)

The Southern Nuclear Operating Company (SNC) response to this notice of violation is provided in Attachment 1

2) The notice of violation (50-348,364/94-07-04-VIO, "NIS PR Channel Inoperability") therein states:

Technical Specification 3.3.1, Table 3.3.1, Action Statement 2a requires that an inoperable Nuclear Instrumentation System Power Range channel be placed in the tripped condition within 1 hour (while in Modes 1 and 2).

Contrary to the above, the licensee on February 1, 1994, operated the reactor at power in Mode 1 rendering each Nuclear Instrumentation System Power Range channel inoperable for approximately ten to twelve hours (and had been doing so on a quarterly basis since 1983), in order to perform channel calibrations. The calibration involved disconnecting the detector input cables which resulted in an inoperable channel yet the respective channel was not placed in a tripped condition.

This is a Severity Level IV violation (Supplement 1)

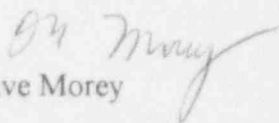
The response to this notice of violation is provided in Attachment 2.

Confirmation

I affirm that the responses are true and complete to the best of my knowledge, information, and belief.

Respectfully submitted,

SOUTHERN NUCLEAR OPERATING COMPANY


Dave Morey

BLM/clt:94-07R1.DOC

Attachments 1 and 2

cc: Mr. S. D. Ebnetter
Mr. B. L. Siegel
Mr. T. M. Ross

Attachment 1
Response to Notice of Violation
(50-348/94-07-01-VIO, "Unapproved Scaffolds Near safety-Related Equipment")

Admission or Denial

The above violation occurred as described in the subject report.

Farley Nuclear Plant General Maintenance Procedure FNP-0-GMP-60 provides guidelines and installation requirements for erecting scaffolding with regard to both personnel safety and plant equipment operability. Prior to and during the fall 1993 Unit two refueling number nine outage (U2RF9), this procedure required certain pre-installation and post installation approvals for scaffolding erection. Pre-installation approvals were required from the Job Foreman/Supervisor, the HP Foreman (required if in a radiologically controlled area) and the Shift Foreman Operating (required if in vicinity of safety-related equipment). Post installation approvals were required from the Job Foreman/Supervisor prior use. By procedure, these approvals were to be obtained and documented on the scaffold permit prior to the scaffold being used for its intended purpose. During the U2RF9 outage, the NRC resident inspectors identified that the Job Foreman/Supervisor was not consistently signifying his post-installation approval on the scaffold permit prior to the scaffolding being put into use. To correct this problem, walk downs were performed to identify any scaffolding not having a completed scaffold permit attached and training was provided to Job Supervisors to reinforce scaffolding approval requirements. This incident was documented in NRC inspection report 50-364/93-28, non-cited violation 93-28-02.

During the time period between the U2RF9 and the spring 1994 Unit one refueling number twelve (U1RF12) outage, a committee was convened consisting of members of the various plant groups involved with the installation, approval and use of scaffolding. The purpose of this committee was to develop a new scaffold procedure to more effectively control scaffolding in the plant. Revision 7 to FNP-0-GMP-60 was issued on 2/7/94 to incorporate the committee's recommended changes. The most significant of these changes was the addition of a pre-installation approval by the Shift Foreman Operating for all scaffolding, regardless of its proximity to safety-related equipment, a post-installation inspection and approval by the Shift Foreman Operating for all scaffolding erected in the vicinity of safety-related equipment, and a post-installation inspection and approval of all scaffolding by the supervisor of the erector. Along with the addition of these new approval requirements, the new procedure retained all previous pre and post installation approval requirements. In addition, the scaffold permit was changed to a pre-numbered two part carbonless form. This was to allow one copy to be retained in the control room for tracking purposes and one copy to be attached to the scaffold during erection and use.

It was believed by the committee members responsible for the development of the new scaffolding procedure, that the monitoring and control of scaffolding would be improved by the addition of these controls. However, the procedure was ineffective from a human factor standpoint, in that it required excessive inspections and signoffs by multiple groups. This contributed to the identified scaffold permit documentation problems. It was assumed that the committee member representing each group would be responsible for ensuring that adequate training was provided to their groups on the new scaffolding requirements. However, training was not provided to all user group personnel.

During the initial portion of the UIRF12, plant personnel identified that the Job Supervisor was not consistently signing off the scaffold permits on completed scaffolding. In discussions with management, certain Job Supervisors expressed a concern over signing the permits due to their limited knowledge of OSHA requirements for scaffolding. Since the permits were now being signed by the erector's supervisor, who was knowledgeable of OSHA requirements, it was decided to remove the post-installation approval by the Job Supervisor from the procedure. Towards the end of the UIRF12, the resident NRC inspectors identified several scaffolds in use in the Containment, Auxiliary and Diesel Generator buildings, whose permits had not been signed by the Shift Foreman or his designee. These permits had received pre-installation approval by the Shift Foreman. This condition did not jeopardize plant safety since Operations Shift Personnel responsible for approving scaffold permits stated that they continued their previous policy of not allowing scaffolding to be erected over redundant trains of safety related equipment simultaneously. The procedural violation that occurred was not that the Shift Foreman Operating had failed to approve the installation of the subject scaffolding, but that the Shift Foreman Operating had not inspected the erected scaffolding prior to use. To correct this problem, all scaffolding in the plant was walked down and all scaffold permit deficiencies were corrected. In addition, management and supervision determined that the post erection inspection of scaffolding by the Shift Foreman was not necessary, because of preinstallation authorization by the Shift Foreman, and was adding an undue burden on the Operations staff. The procedure was then revised to remove this requirement.

In reviewing these sequence of events, it is apparent that the major contributors to the failure of FNP's corrective action in resolving scaffolding procedural violations were the lack of human factoring into the development of the new scaffolding procedure and the lack of training provided to the groups responsible for the successful implementation of the procedure.

Reason for Violation

Personnel error in that the individuals responsible for revising FNP-0-GMP-60 as part of corrective action for NRC non-cited violation 93-28-02 failed to recognize the human factor problems created by the revision to the procedure. In addition, adequate training was not provided to those individuals responsible for implementation of the procedure.

This event has been determined to be singular in nature with the scope of the problem being restricted to activities associated with the use of unauthorized scaffolding.

Corrective Action Taken and Results Achieved

A walk down was performed on all scaffolding in the plant and all scaffold permit deficiencies were corrected. FNP-0-GMP-60 was revised to eliminate the requirement for a post-installation approval by the Shift Foreman.

Corrective Steps to Avoid Further Violations

1. The scaffolding procedure will be simplified. This revision will receive review by the user groups for effectiveness and usability from a human factor standpoint. User group personnel will then receive training on the revised procedure.
2. A Training Advisory Notice has been issued to management and supervision describing this event, with the importance of adequate training being stressed.
3. A Training Advisory Notice will be issued to management and supervision describing the importance of recognizing human factors problems in procedures in which multiple groups interface.
4. Procedural requirements for scaffolding control are now included in refresher training courses prior to outages for contractor personnel and in annual retraining for plant staff personnel.

Date of Full Compliance

This item will be in full compliance as of 8-1-94.

Attachment 2
Response to Notice of Violation
(50-348,364/94-07-04-VIO, "NIS PR channel Inoperability")

Admission or Denial

The above violation occurred; however, there are a number of items pertaining to the violation and the inspection report description of the events that require clarification.

The violation itself states "... the licensee on February 1, 1994, operated the reactor at power in mode 1 rendering each Nuclear Instrument System Power Range channel inoperable for approximately ten to twelve hours...in order to perform channel calibrations." It should be noted that on February 1, 1994, each nuclear instrument (NI) power range (PR) channel was not rendered inoperable; however, since plant startup, NI's have been removed from service one at a time for the performance of their quarterly calibrations.

FNP has been performing this type of calibration since the quarterly NI surveillance test procedures were originally developed to support initial plant startup. The Technical Specification definition for a channel calibration states that a calibration shall encompass the entire channel including the sensor and alarm and/or trip functions and shall include the channel functional test. FNP personnel who originally wrote and approved the NI quarterly test procedures believed that a complete channel calibration was required, not just a calibration of the high and low flux trip set points. A calibration of only the high and low flux trip set points is essentially the same as performing a functional check of the set points. Technical Specifications makes a distinct difference between a calibration and a functional check. In fact, FNP does monthly functional checks on the PR NI trip set points (required by TS 4.3-1) which are in accordance with FSAR section 7.2.2.2.1.f.

The Inspection Report states that in 1983, FNP made a Technical Specification interpretation that removing an NI power range channel from service for surveillance testing did not constitute inoperability. FNP has consistently treated power range channels inoperable during calibrations both before and after 1983. It is true that while a channel was being calibrated not all bistables associated with the channel were placed in trip as required by Action Statement 2.a of Table 3.3-1. This was done because of the perceived conflicting requirement to perform the full quarterly channel calibration which requires functionality of NI drawer inputs to the solid state protection system and the main control board for verification of bistable trip input, alarm, and indication functions. What took place in 1983 was a clarification on how to return an inoperable power range drawer to service following corrective maintenance.

The Inspection Report goes on to state that for the last 11 years FNP's methodology for performing quarterly surveillance tests of NI power range channels has been inconsistent with the test methodology described in the FSAR and that no evidence exists that FNP has ever evaluated the safety consequences of performing testing using a method which deviates from the FSAR. As noted above the FNP methodology for performing quarterly power range NI channel calibrations has been consistent for the past 17 years in that full channel calibrations have been performed which is consistent with FNP's interpretation of Technical Specifications and the FSAR. In addition, FNP has performed monthly at power functional checks of the power range NI channels which meets the requirements of Technical Specifications and the FSAR (specifically Section 7.2.2.2.1.f). Thus, FNP believes there is no inconsistency between the FNP test procedures methodologies and that of the Technical Specifications and FSAR.

FNP does concur with the NRC on the requirement to place all bistables in trip while a power range channel is being calibrated. In addition, with input from Westinghouse (the NI vendor) FNP has agreed with the Inspection Report 94-07 position on NI calibrations which states, "A complete NIS PR channel calibration is only required by T.S. on a refueling outage basis." NRR has also concurred with this position verbally.

Reason for Violation

Personnel error in that Technical Specifications were improperly interpreted for meeting an action statement requirement.

This event has been determined to be singular in nature. This is the only Technical Specification action statement that was interpreted in this manner.

Corrective Action Taken and Results Achieved

Operations shift personnel were notified of this event and were informed of the appropriate actions to take when Nuclear Instrumentation surveillance procedures are in progress. Instrument and Control group procedures associated with power range nuclear instrumentation have been changed to ensure conformance with Technical Specifications.

Corrective Steps to Avoid Further Violations

Same as for "Corrective Action Taken and Results Achieved" section.

Date of Full Compliance

The date of full compliance was May 19, 1994.