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the southern electric system

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10 CFR 2.201
10 CFR 2, App. C

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Docket No. 50-364

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

Joseph M. Farley Nuclear Plant - Unit 2
Reply To Notices of Violation and Deviation
Report Numbers 50-348/92-19 and 50-364/92-19
Violation Number 50-364/92-19-01
Deviation Number 50-364/92-19-02
NRC Inspection of May 18 - June 29, 1992

Gentlemen:

This letter refers to the violation and deviation cited in the subject inspection report. Attachment 1 provides the Southern Nuclear Operating Company (SNC) response to violation number 50-364/92-19-01, and Attachment 2 provides the SNC response to deviation number 50-364/92-19-02.

Respectfully submitted,

J. D. Woodard

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Attachments

cc: Mr. S. D. Ebneter
Mr. S. T. Hoffman
Mr. G. F. Maxwell

ATTACHMENT 1

REPLY TO NOTICE OF VIOLATION

REPORT NUMBERS 50-348/92-19 AND 50-364/92-19

VIOLATION NUMBER 50-364/92-19-01

The violation states:

> Technical Specification 6.8.1 requires that applicable written procedures recommended in Appendix A of Regulatory Guide (RG) 1.33, Revision 2, 1978 shall be established, implemented and maintained.
>
> Procedure FNP-0-AP-52, Equipment Status Control and Maintenance Authorization, Rev. 18, Section 7.5.6 requires delineation of work sequence activities by the inclusion of steps in a written work request and Section 7.7.1 further states that maintenance performed shall follow the work sequence specified.
>
> Procedure FNP-0-AP-85, Electrical Maintenance Group Conduct of Operations, Rev. 0, Section 9.0 notes that the individual will confirm that he is at the correct piece of equipment prior to beginning maintenance. The section states that to avoid inadvertent isolation or incorrect maintenance, it is the responsibility of all maintenance personnel to ensure that equipment being worked on is properly identified. If not, it is their duty to report such discrepancies to their foreman.
>
> Contrary to the above, during performance of rod control power fuse inspection and replacement activities on May 26, 1992, a plant electrician failed to perform step number two of the original work sequence; "... regardless of their condition, replace these fuses." He also failed to seek clarification of the task from his foreman or the shift supervisor when he had difficulty in identifying the correct panel for fuse replacement. Because of these failures, the rod control system stationary gripper coil power supply was de-energized, associated control rods dropped into the core and the Unit 2 reactor automatically tripped due to a high negative flux rate.
>
> This is a Severity Level IV violation (Supplement 1).

Admission or Denial

The violation occurred as described in the subject report.

Reason for Violation

The violation was caused by personnel error in that:

1. The Maintenance Foreman did not adequately plan the work request. The planning sequence did not specify that the movable coil disconnect fuses were the only fuses to be changed. It was not noted in the work request that there were three disconnects for each cabinet.

Reason for Violation (continued)

2. The Maintenance Foreman did not conduct an adequate pre-job briefing. The journeyman was not cautioned about the stationary coil disconnect.

3. The Shift Foreman and Shift Supervisor did not adequately review the work prior to releasing the work order for implementation, in that the journeyman was not cautioned or questioned about the specific equipment to be worked.

4. The journeyman failed to use the proper level of caution in carrying out the job. Even though the work request made no mention of three disconnects, he proceeded to check the fuses in all three and opened the stationary disconnect without questioning the apparent discrepancy.

Corrective Steps Taken and Results Achieved

To alleviate the adverse condition, the work request was replanned and all power supply fuses in each of the three disconnects were replaced for all four CRDM cabinets.

Corrective Steps Taken to Avoid Further Violations

1. All personnel involved received discipline in the form of coaching and/or oral reminders.

2. Permanent labels have been placed on all the disconnects for each CRDM cabinet on both units to identify their functions. Additionally, warning labels were placed on the stationary gripper disconnects explaining that a reactor trip will result from opening the disconnect.

3. Electrical Maintenance and Daily Planning personnel have been trained on this event.

4. Electrical Maintenance personnel are receiving specialized instruction in the rod control system during the current session of retraining.

5. This event will be discussed during the next session of operations licensed, operations non-licensed, and maintenance annual retraining.

Date of Full Compliance

September 21, 1992

ATTACHMENT 2

REPLY TO NOTICE OF DEVIATION

REPORT NUMBERS 50-348/92-19 AND 50-364/92-19

DEVIATION NUMBER 50-364/92-19-02

The deviation states:

> By letter dated February 20, 1992, Southern Nuclear Operating Company, Inc. (SNC), requested approval of an amendment to the J.M. Farley Nuclear Plant, Unit 2, Technical Specifications, to permit use of interim steam generator tube plugging criteria (IPC). In Attachment 1 to the letter, SNC made the following commitment:
>
> > "A sample rotating pancake coil (RPC) inspection of 100 tube support plate intersections will be performed. All intersections with bobbin dent voltage exceeding 5 volts will be inspected."
>
> On April 1, 1992, the NRC issued Amendment No. 87 to Facility Operating License No. NPF-8, approving the use of IPC for Unit 2 for one cycle. In a Safety Evaluation supporting issuance of the amendment, the NRC staff evaluated the commitment to inspect bobbin dent voltages exceeding 5 volts with an RPC. This commitment formed part of the basis on which the staff found the amendment request acceptable.
>
> Contrary to SNC's commitment, in implementing the IPC during the last Unit 2 refueling outage, all intersections with bobbin dent voltages exceeding 5 volts were not inspected by a RPC. One dent voltage of 7.02V in steam generator "2A", tube "R40C37", and located at intersection "5TSPC", was not inspected with the coil. Therefore, SNC did not comply with all commitments made for implementation of the IPC.

Reason for Deviation

This deviation was caused by cognitive personnel error. When the Unit 2 eighth refueling outage eddy current database was updated with additional information, the list of intersections with bobbin dent voltages exceeding 5 volts, which is generated from the eddy current database, was not also updated.

Specific Actions Taken

A 10 CFR 50.59 evaluation of the issue was reviewed and approved by the Plant Operations Review Committee (PORC) on June 19, 1992. The 50.59 evaluation concluded that no safety or technical concerns were applicable for the missed inspection of the one support plate dent for the following reasons:

- 167 of 168 Unit 2 steam generator tube support plate intersections with bobbin dent voltages greater than 5 volts were RPC inspected. Since no axial or circumferential cracking was found at these dented intersections, it is highly unlikely that any flaw exists at the missed intersection.

Specific Actions Taken (continued)

- An axial flaw amplitude of 1 volt to 1.5 volts would be expected to be detected by bobbin inspection in a 7 volts dent. Analysis of the bobbin data for this intersection found no flaw signal present.

- Historically, no circumferential indications at dented tube support plates have been identified above the fifth hot leg tube support plate. Thus, no circumferential indications would be expected on the cold leg.

Also, the NRC was verbally notified of the missed inspection.

Corrective Steps to Avoid Further Deviations

Additional procedural guidance will be prepared for eddy current data management. This guidance will include an enhancement in the verification process by the eddy current contractor and SNC personnel.

Date Corrective Action Will be Completed

September 25, 1992