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USNRC REGION
ATLANTA, GEORGIA



Alabama Power

the southern electric system

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March 25, 1983

Docket Nos. 50-348
50-364

U. S. Nuclear Regulatory Commission
Region II, Suite 3100
101 Marietta Street, N. W.
Atlanta, Georgia 30303

Attention: Mr. J. P. O'Reilly

Joseph M. Farley Nuclear Plant - Units 1 and 2
I. E. Bulletin No. 83-04

Gentlemen:

In response to I. E. Bulletin No. 83-04 dated March 11, 1983 and to clarify and amplify the Alabama Power Company March 4, 1983 response to I. E. Bulletin 83-01, herein is a reply regarding specific action taken at the Farley Nuclear Plant - Units 1 and 2 associated with the reactor trip breakers. The action includes testing, maintenance, performance history, management controls, and licensed operator notification involving the reactor trip breakers. The Joseph M. Farley Nuclear Plant, Units 1 and 2, utilizes Westinghouse DS-416 type breakers in the Reactor Protection System.

Alabama Power Company's responses to each of the required action items are as follows:

- a. Surveillance Testing Alabama Power Company has verified by testing that the reactor trip breaker undervoltage trip function is operable independent of the shunt trip function. This testing was performed in accordance with Farley Nuclear Plant Surveillance Test Procedures. The testing was completed as follows:

Unit 1	"A" Train on March 19, 1983
	"B" Train on March 19, 1983
Unit 2	"A" Train on March 15, 1983
	"B" Train on March 9, 1983

No problems with the reactor trip breakers were identified as a result of this surveillance testing. All acceptance criteria were satisfied.

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- b. Maintenance Program - Complete preventive maintenance (i.e., inspection, cleaning, lubrication, contact checks, timing checks, etc.) on relays and breakers at the Farley Nuclear Plant is performed by a dedicated onsite group specializing in such activities. This group has developed considerable expertise and knowledge related to relay and circuit breaker maintenance and operation. The current and past maintenance activities associated with the reactor trip breaker Model DS-416 have been compared with the vendor technical manual recommendations. As a result of this comparison, a determination has been made that the Farley program is more extensive in many areas of preventive maintenance than that recommended by the vendor technical manual. This is due in part to the vast experience accumulated by similar work throughout the company system and implemented via the onsite group of specialists. The results of the comparison also identified areas in which specific compliance with vendor recommendations were not being met. Justifiable exceptions include the following:
- 1) In lieu of the recommended use of alcohol and molybdenum disulphide as a lubricant, Alabama Power Company is currently using WD-40 (a silicone, petroleum distillate base penetrating lubricant). Alabama Power Company has experienced better performance from the use of WD-40 than alcohol and molybdenum disulphide at other generating plants; however, an evaluation is continuing on both lubricants for use in conjunction with the Farley Nuclear Plant reactor trip breakers.
 - 2) Alabama Power Company has concluded that preventive maintenance should be conducted at refueling outage intervals in lieu of the vendor recommendation of maintenance at annual inspection periods or after 500 operating cycles for purpose of lubrication. Since the Farley Nuclear Plant refueling cycles are being changed to 18 months beginning in late 1983, the annual inspection schedule is not feasible nor is it deemed necessary. In addition, the performance of complete preventive maintenance at refueling intervals will be more frequent than the 500 operating cycle lubrication schedule.

Applicable changes to maintenance procedures will be made by April 15, 1983 to document the program revisions described above.

- c. Licensed Operator Notification In response to I. E. Bulletin 83-01 dated February 25, 1983, Farley Nuclear Plant licensed operators were notified of the failure to trip incident at Salem and were required to perform a refresher review of the Farley emergency operating procedure related to Anticipated Transients Without Trip prior to relieving first shift after

mid-day on February 26, 1983. In response to I. E. Bulletin 83-04, Farley Nuclear Plant licensed operators were notified upon their arrival on-shift, prior to relieving the evening shift commencing on March 15, 1983, of the testing failures at San Onofre Units 2 and 3, were reminded of the Salem incident, and were required to perform an additional refresher review of the Farley emergency operating procedures related to Anticipated Transients Without Trip.

- d. Previous Malfunctions Alabama Power Company has performed a review of previous reactor trip breaker surveillance records and maintenance reports and conducted interviews with appropriate plant personnel. There have been no identified failures of the reactor trip breakers to "open" at Farley Nuclear Plant. There have been cases of failure of the reactor trip breakers to "close" but none that have been deemed to affect the reliability to "open".
- e. Verify Safety Related Activities Testing and maintenance activities associated with the reactor trip breakers and undervoltage trip coils are treated as safety related. It should be noted that undervoltage trip coils are not specifically addressed in the maintenance procedures nor in the vendor technical manual section related to inspection or maintenance. When maintenance has been performed on the reactor trip breakers, the undervoltage relay dropout and pickup voltages have been measured but not always recorded. Further, each month the reactor trip breakers have been verified to open when the undervoltage coil receives a simulated trip signal during the performance of a surveillance test procedure. The results of this test have been appropriately documented. The maintenance procedures, which will be revised by April 15, 1983, will include specific maintenance, testing and documentation provisions associated with the undervoltage trip coil.

The procurement activities associated with reactor trip breaker assemblies and subcomponents are handled in accordance with the provisions of the Farley Nuclear Plant Operations Quality Assurance Program (OQAP) described in FSAR Section 17.2. This program ensures that adequate provisions associated with codes, standards, design, testing, inspection, etc. are required for each reactor trip breaker assembly and subcomponent. These breakers are procured in accordance with safety related quality requirements of the OQAP. Individual breaker subcomponent procurement requirements vary based on the subcomponent's function.

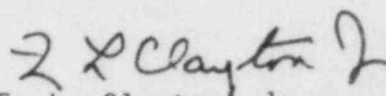
Mr. J. P. O'Reilly
U. S. Nuclear Regulatory Commission

March 25, 1983
Page 4

Alabama Power Company will continue to evaluate failure data resulting from the failure to trip incident described in I. E. Bulletin No. 83-04. Appropriate follow-up action will be taken at the Farley Nuclear Plant should the need arise.

If you have any questions, please advise.

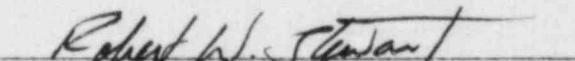
Yours very truly,


F. L. Clayton Jr.

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cc: Mr. R. A. Thomas
Mr. G. F. Trowbridge
Mr. S. A. Varga
Mr. E. A. Reeves
Mr. W. H. Bradford
Mr. R. C. DeYoung

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 25th DAY OF MARCH, 1983


Notary Public

My Commission Expires: 10/27/85