

Mailing Address
Alabama Power Company
600 North 18th Street
Post Office Box 2641
Birmingham, Alabama 35291
Telephone 205 783-6081

F. L. Clayton, Jr.
Senior Vice President
Flintridge Building



September 16, 1981

Docket No. 50-364

Director of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Mr. S. A. Varga

Gentlemen:

Amendment To
Joseph M. Farley Nuclear Plant - Unit 2
Facility Operating License No. NPF-8

Section 2.C.9.(b) of Facility Operating License No. NPF-8 requires Alabama Power Company to submit results for the natural circulation cool-down with boron mixing test to the NRC. The test results are to be submitted to the NRC within 60 days after operation for 25,000 MW(e) days which for Farley Unit 2 is approximately October 13, 1981.

There has not been an opportunity to perform the test after the core exceeded 25,000 MW(e) days of operation since the unit has not been shutdown for sufficient time to run the test. The condition to conduct and report the results of the test within 60 days after operation for 25,000 MW(e) days was agreed upon between Alabama Power Company personnel and the NRC Staff based on a planned maintenance outage during this time period. Based on the current equipment availability, this outage is no longer required.

Alabama Power Company currently has an approved procedure to conduct the subject test and discussions have been held concerning the performance of the test during the requalification training program for licensed operators. Such discussions have included methods to improve boron mixing, primary loop transport time, boration rates and flow paths. It should be noted that Farley currently has in place a procedure for natural circulation and that operations personnel receive training on this mode of plant operation as part of the operator licensing process and the attendant requalification program.

A001
5
1/1
w/check:
\$4000.00

8109220526 810916
PDR ADCK 05000364
PDR

Several plants licensed prior to Farley Unit 2 have successfully completed this test with the attendant results matching very closely the response predicted by Westinghouse. As shown in Alabama Power Company's letter from Mr. F. L. Clayton, Jr. to Mr. A. Schwencer dated October 6, 1980, the thermohydraulic characteristics of the Farley primary systems have been shown to be very similar to those of Diablo Canyon and Sequoyah. It is expected that the results of the proposed Farley Nuclear Plant test would closely resemble the response of Sequoyah under similar conditions. Units licensed after Farley Unit 2 have either had this condition deleted (based on similar thermohydraulic characteristics with other units which have successfully conducted this test) or had a condition to conduct the test at the first refueling outage. In 1978 Farley Unit 1 experienced a loss of off-site power during which the reactor was placed in a safe condition and applicable systems operated as designed under actual natural circulation conditions.

The required test criteria of the boron mixing during natural circulation cooldown [license condition 2.C.9.(b)] will be demonstrated by performance of the license condition 2.C.12.(c) test which is required to be conducted on Unit 2 by the first refueling unless such test is successfully run on a reactor whose results would be applicable to Farley 2.

Alabama Power Company hereby requests, in accordance with 10CFR50.90, an amendment to NPF-8 license to delete condition 2.C.9(b) since the basic results of this test have been verified by other plants similar to Farley Unit 2 and since the completion of license condition 2.C.12.(c) will include the verification of this sequence.

Currently with Farley Unit 1 shutdown for major repairs to the turbine generator, Alabama Power Company, as a member of the Southern Company Power Pool, will be a net purchaser of both capacity and energy during the fourth quarter of 1981. Major maintenance on other generating units is scheduled during this period. The shutdown of Unit 2 to complete this test would further exacerbate this condition of purchasing power and/or delaying necessary maintenance on other units in preparation for winter load requirements.

It is requested that action on this amendment to the operating license be taken by October 1, 1981 in order that appropriate planning can be made with respect to this letter.

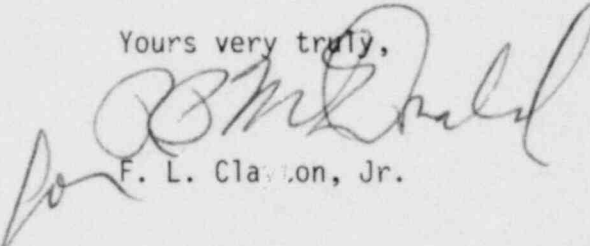
Alabama Power Company's Plant Operation Review Committee and Nuclear Operations Review Board have reviewed this proposed amendment and have determined that such amendment does not involve an unreviewed safety question as shown in the safety evaluation bases included as Attachment 1.

The class of this item in this proposed amendment is designated as Class III for Unit 2 in accordance with 10CFR170.22 requirements. Enclosed is a check for \$4,000 to cover the total amount of fees required.

In accordance with 10CFR50.30(c)(1)(i), three signed originals and thirty-seven (37) additional copies of this proposed amendment request are enclosed.

If you have any questions, please advise.

Yours very truly,



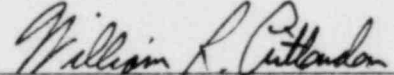
F. L. Clayton, Jr.

FLCjr/RLG:de

Attachment

cc: Mr. R. A. Thomas (w/att.)
Mr. G. F. Trowbridge (w/att.)
Mr. J. P. O'Reilly (w/att.)
Mr. E. A. Reeves (w/att.)
Mr. W. H. Bradford (w/att.)

SWORN TO AND SUBSCRIBED BEFORE
ME THIS 16th DAY OF
September, 1981.



Notary Public

My Commission Expires:

My Commission Expires

Attachment 1

Safety Evaluation Bases

Amendment to FNP Unit 2 NPF-8 License To Delete Condition 2.C.9.(b)

The "Natural Circulation Cooldown with Boron Mixing" Test, which demonstrates the plant capability to mix boron and cooldown over a limited range when in natural circulation conditions, may be deleted with no impact on the Farley Unit 2 Safety Analysis since similar tests have been performed at Sequoyah Unit 1 and Salem, Unit 2, with acceptable results. It has been determined that the Farley Unit 2 Test would also result in acceptable test performance.

In addition, it has been concluded that the results of the "Natural Circulation Cooldown with Boron Mixing" test will be demonstrated by the Diablo Canyon type test in that the range of boron concentration increase and cooldown temperature decrease exceeds that specified in the present Farley, Unit 2 Natural Circulation Cooldown with Boron Mixing Test. This Diablo Canyon type test is required to be conducted on Farley Unit 2 by the first refueling unless such test is successfully run on a reactor whose results would be applicable to Farley Unit 2.