

Mailing Address
Alabama Power Company
600 North 18th Street
Post Office Box 2641
Birmingham, Alabama 35291
Telephone 205 783-6090

R. P. McDonald
Senior Vice President
Flintridge Building



Alabama Power
the southern electric system

April 19, 1985

Docket Nos. 50-348
50-364

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

Attention: Mr. S. A. Varga

Joseph M. Farley Nuclear Plant - Units 1 and 2
Containment Vent and Purge Operation

Gentlemen:

Alabama Power Company is undertaking herein to respond to the NRC letter dated January 31, 1985 entitled "Containment Vent and Purge Operation-Joseph M. Farley Nuclear Plant Units 1 and 2". The NRC letter requested that Alabama Power Company provide additional Technical Specifications for leakage tests of the 8-inch and 48-inch containment purge valves at three and six month intervals, and provide a completion schedule for a study to reduce containment building purging. Alabama Power Company feels it is important to explore with the NRC Staff Management the background of this matter since modifications completed in accordance with the Unit 2 Full Power License are considered to have resolved the issues associated with containment purge and vent operation.

Alabama Power Company now understands that NRC Staff personnel have considered the containment purge and vent operation issue to have been an open issue since the NRC November 28, 1978 letter on the subject. In that letter and similar letters which Alabama Power Company understands were sent to other licensees, the NRC raised the containment vent and purge issue as a generic matter with all licensees. At that time, the Operating License for Unit 1 of the Farley Nuclear Plant had been issued, as had the Construction Permit for Unit 2.

In the November 28, 1978 letter, two alternative courses were presented to licensees which would satisfy NRC concerns:

8504220051 850419
PDR ADOCK 05000348
P PDR

A001
110

(1) The licensee could propose revisions in the Technical Specifications for its plant which would result in a limitation on purging operations (i.e., valves closed during MODES 1-4) at the plant; or

(2) The licensee could justify "unlimited purging" by demonstrating that four criteria were met. As to this point, the letter stated:

"...[P]urging during normal operation may be permitted if the purge isolation valves are capable of closing against the dynamic forces of a design basis loss-of-coolant accident. Also, basis for unlimited purging must include an evaluation of the impact of purging during operation on ECCS performance, an evaluation of the radiological consequences of any design basis accident requiring containment isolation occurring during purge operations, and an evaluation of containment purge and isolation instrumentation and control circuit designs."

At the Farley Nuclear Plant, it is considered essential to continue operation with unlimited purging to preclude excessive containment pressurization and to minimize the buildup of containment radiation levels. Because of the threat to operation and reliability which would result from the elimination of continuous purging, Alabama Power Company chose to respond to the November 28, 1978 NRC letter by following the second alternative presented in that letter. The criteria stated by the NRC Staff to be necessary to justify unlimited purging were addressed in studies and discussions between Alabama Power Company and the NRC Staff in the period between November 1978 and March 1981.

As a result of these discussions, and notwithstanding the expense associated with the redesign and equipment modifications which were involved, Alabama Power Company agreed to the following voluntary actions in order to resolve this issue.

- (1) The 48-inch valves were closed during reactor operation.
- (2) The 18-inch valves were blocked at 50 degrees for an interim period.
- (3) Alabama Power Company committed to replace the 18-inch valves with 8-inch valves in Unit 2 and this commitment became a part of the Unit 2 Operating License.
- (4) Alabama Power Company also committed to backfit Unit 1 with 8-inch valves as replacements for the 18-inch valves.

It was Alabama Power Company's understanding at the time these commitments were made that these actions resolved the containment vent and purge issue. The Operating License for Unit 2 was issued in March 1981 and neither the License nor the associated SER Supplement identified the need for an operational goal or any other relevant open issues.

Following these commitments by Alabama Power Company, the NRC Staff wrote its August 5, 1981 letter. Apparently, the NRC Staff currently views this August 1981 letter as a reinterpretation of the November 28, 1978 letter. The August 1981 letter described Enclosure 2 to the letter as a "restatement" of the salient features of the position concerning containment venting and purging "as interpreted by the Staff". Enclosure 2 states a philosophy that purging and venting should be minimized during reactor operation while the November 28, 1978 letter had clearly and unambiguously acknowledged the opportunity for a licensee to justify unlimited purging during reactor operation. Enclosure 2 to the August 5, 1981 letter, therefore, took a position that unlimited purging would not be permitted. The August 5, 1981 letter also discussed valve leakage testing. With respect to additional leakage tests, as stated in previous letters to the NRC, the Farley Nuclear Plant Containment Purge System has been evaluated and determined to comply with 10CFR100 limits and the provisions of 10CFR50 Appendix J; therefore, additional leakage tests are unnecessary. Alabama Power Company believes that the current Technical Specifications which require periodic seal replacement and leakage testing "prior to startup after each cold shutdown if not performed in the previous 3 months ..." to adequately address the NRC testing concerns.

In previous correspondence with the NRC, Alabama Power Company has addressed all NRC requests for information and has provided justification for continuous purging with the 8-inch valves. In particular, it should be noted that Alabama Power Company letter dated December 20, 1983 stated that the 8-inch purge system is operated continuously to preclude excessive containment pressurization and to minimize the buildup of containment radiation levels.

Alabama Power Company is also concerned that the plant modifications which would be required to abandon the unlimited purge mode of operations would be expensive and not justified for safety reasons. The modifications to the plant which were accomplished in order to satisfy the concerns addressed during the period between November 1978 and March 1981 were expensive in their own right. To now incur additional expense for additional backfitting of these units has not been justified. All that has been presented is a one-page attachment to the August 5, 1981 letter purporting to reinterpret the November 28, 1978 letter in a manner which makes unlimited purging unacceptable.

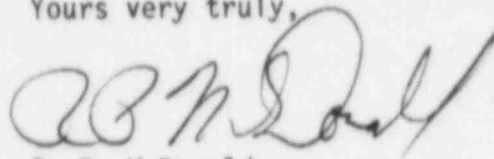
Mr. S. A. Varga
U. S. Nuclear Regulatory Commission

April 19, 1985
Page 4

For these reasons, Alabama Power Company considers the request in the January 31, 1985 letter for the establishment of additional leakage testing and a schedule for a study to reduce containment building purging as the initiation of a requirement for the backfitting of Units 1 and 2 of the Farley Nuclear Plant. If this is the intent of the letter, Alabama Power Company would respectfully request a meeting with the appropriate NRC Staff Management to determine the regulatory basis for this requirement.

If there are any questions, please advise.

Yours very truly,



R. P. McDonald

RPM/BDM:gri-D38

cc: Mr. L. B. Long
Dr. J. N. Grace
Mr. E. A. Reeves
Mr. W. H. Bradford