

Mailing Address

Alabama Power Company
600 North 18th Street
Post Office Box 2641
Birmingham, Alabama 35291
Telephone 205 783-6050

R. P. McDonald

Senior Vice President
Flintridge Building



Alabama Power

the southern electric system

Docket No. 50-348

August 16, 1984

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

Attention: Mr. S. A. Varga

**Joseph M. Farley Nuclear Plant - Unit 1
Inservice Inspection Program for ASME
Code Class 1, 2 and 3 Components**

Gentlemen:

Alabama Power Company's Inservice Inspection (ISI) Program has been previously submitted to the NRC along with requests for relief where certain ASME Code requirements were found to be impractical. The NRC reviewed the ISI Program and granted relief as discussed in letters dated December 7, 1979, August 24, 1983 and February 10, 1984.

Alabama Power Company has performed a detailed review of the ISI Program and the Safety Evaluations transmitted with the NRC letters referenced above. As a result, it has been determined that three additional relief requests are needed. One relief request was previously granted, however, Alabama Power Company has subsequently determined that a portion of the alternative examination is impractical. The two remaining relief requests were not identified at the time of the previous submittals for Unit 1.

The NRC Safety Evaluation dated December 7, 1979, item I.B.6 granted relief to perform the volumetric examination of the charging pump casing weld whenever the pumps are disassembled for maintenance reasons. Upon additional review, Alabama Power Company has determined that the geometrical configuration of the casing weld is such that a meaningful volumetric examination cannot be performed. It is requested that the alternative examination originally granted be revised to permit surface and visual examinations to be performed in lieu of the volumetric examination. The revised relief request incorporating this proposed change is included as Attachment 1.

8408300169 840806
PDR ADDCK 05000348
PDR
Q

AOA? w/1/150⁰⁰
#470292
11

Docket No. 50-348
Director, Nuclear Reactor Regulation
August 16, 1984
Page 2

The ASME Code, Section XI, 1974 Edition through the Summer 1975 Addenda, requires that a surface examination be performed on 100% of the major load bearing components of the charging pump integrally welded supports. Upon additional review, Alabama Power Company has determined that the geometrical configuration of the charging pump supports is such that a 100% surface examination is impossible to perform. At least 80% of each support is accessible for surface examination, which will be performed in accordance with the ASME Code. A summary of the relief request is included as Attachment 2. This same relief request was granted for Unit 2 by Item II.B.7 of the NRC Safety Evaluation dated September 22, 1983.

The ASME Code, Section XI, 1974 Edition through the Summer 1975 Addenda, requires Class 2 components to be hydrostatically tested for four hours at $1.25 P_D$. Item II.B.7 of the NRC Safety Evaluation dated February 10, 1984 granted relief from the hydrostatic test requirements for Class 2 components based on the 1980 Edition through the Winter 1980 Addenda of the ASME Code, Section XI. This relief permits the reduction of hydrostatic test pressure from $1.25 P_D$ to $1.25 P_{sv}$ where P_D is the design pressure and P_{sv} is the lowest safety valve setting for the system. In addition it is noted that for the secondary side of the steam generator, Westinghouse recommends holding the hydrostatic test pressure at $1.25 P_D$ (1356 psi) for a maximum of 30 minutes, and then reducing the pressure to $1.0 P_D$ (1085 psi) for the remainder of the required four-hour hold time. The safety valve setting (1075 psi) for the secondary side of the steam generator is only 10 psi lower than the design pressure (1085 psi). The hydrostatic test pressure at $1.25 P_{sv}$ (1343 psi) is only slightly less than $1.25 P_D$ (1356 psi). Therefore, additional relief is requested to perform the hydrostatic test at $1.25 P_{sv}$ for up to 30 minutes and reduce the pressure to $1.0 P_D$ for the remainder of the four-hour hold time based on the previously granted relief for Class 2 components and on the current Westinghouse recommendations. Westinghouse has developed this recommended hydrostatic testing procedure to prevent undue stress on the steam generator. A summary of the relief request is included in Attachment 3.

Pursuant to the requirements of 10CFR50.55 a(g)(6)(i), Alabama Power Company hereby requests that relief be granted from certain requirements of the ASME Code, Section XI, 1974 Edition through the Summer 1975 Addenda. It is respectfully requested that these relief

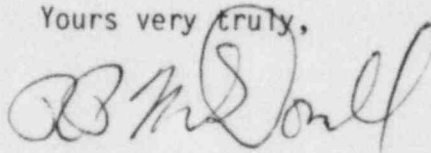
Docket No. 50-348
Director, Nuclear Reactor Regulation
August 16, 1984
Page 3

requests be granted by March 1, 1985. The ISI activities required to be performed during the Unit 1 sixth refueling outage, tentatively scheduled to begin April 5, 1985, may include some of these impractical inspections.

This relief request is designated as a required approval in accordance with 10CFR170.21 requirements. Enclosed is the application fee of \$150.

If you have any questions or need additional information, please advise.

Yours very truly,

A handwritten signature in cursive script, appearing to read "R. P. McDonald".

R. P. McDonald

RPM/STB:drs/D-338

Attachments

cc: Mr. L. B. Long
Mr. J. P. O'Reilly
Mr. E. A. Reeves
Mr. W. H. Bradford

ATTACHMENT 1

RELIEF REQUEST - RELIEF IS REQUESTED FROM THE VOLUMETRIC EXAMINATION OF THE CHARGING PUMP CASING WELDS. (ITEM C3.1, CATEGORY C-F OR C-G)

EXAMINATION REQUIREMENT:

Table IWC-2600 Item C3.1 requires volumetric examination of pump casing pressure retaining welds.

BASIS FOR RELIEF:

The pressure retaining welds in the charging pump casings are not normally accessible for examination as required by IWC-2600. Examination of the charging pump casing weld, Item C3.1, by ultrasonic, radiographic or surface examination requires complete disassembly of the pump casing and removal of the inboard seal housing and rotor assembly. It has been recently determined that, due to geometrical limitations of the casing weld (i.e., weld crown), volumetric examinations cannot be performed.

ALTERNATIVE EXAMINATION:

Surface and visual examinations of each pump casing weld will be conducted, once per inspection interval, when a pump is disassembled for maintenance reasons. If no such occasion arises, the examinations will be performed at or near the end of the ten year interval.

ATTACHMENT 2

RELIEF REQUEST - RELIEF IS REQUESTED FROM PERFORMING 100% SURFACE EXAMINATION ON THE INTEGRALLY WELDED SUPPORTS OF THE CHARGING PUMPS. (ITEM C3.3, CATEGORY C-E-1)

EXAMINATION REQUIREMENT:

Table IWC-2520, Category C-E-1 and IWC-2600, Item C3.3 require surface examination of 100 percent of the major load bearing elements of the integrally welded supports.

BASIS FOR RELIEF:

Due to component and support designs, approximately 20 percent of each integrally welded support is inaccessible for examination.

ALTERNATIVE EXAMINATION:

The accessible portion of each support will receive visual and surface examinations.

ATTACHMENT 3

RELIEF REQUEST - RELIEF IS REQUESTED FROM THE HYDROSTATIC TEST OF THE CLASS 2 PORTIONS OF THE STEAM GENERATORS AND RELATED PIPING AT 1.25 P_D

EXAMINATION REQUIREMENTS:

IWC-5220 of the ASME Code, Section XI, 1974 Edition through Summer 1975 Addenda requires that the hydrostatic test pressure be at least 1.25 P_D for Class 2 components.

BASIS FOR RELIEF:

In order to prevent undue stress on the steam generators, Westinghouse recommends that the hydrostatic test of the secondary side of the steam generators be conducted at 1.25 P_D for a minimum of 10 minutes and maximum of 30 minutes, and then reduced to operating pressure, 1.0 P_D for the balance of the four-hour holding period. The related Class 2 piping is hydrostatically tested along with the steam generator.

ALTERNATIVE EXAMINATION:

The hydrostatic test of the Class 2 portions of the steam generator and related piping will be hydrostatically tested at 1.25 P_{sv} (based on previously granted relief for 1.25 P_{sv} vice 1.25 P_D) for a minimum of 10 minutes and a maximum of 30 minutes. The test pressure will then be reduced to 1.0 P_D for the remainder of the required four-hour holding time.