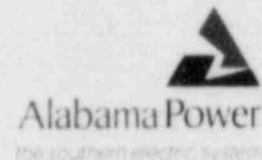


Mailing Address
Alabama Power Company
600 North 18th Street
Post Office Box 2641
Birmingham, Alabama 35291
Telephone 205 783-6090

R. P. McDonald
Senior Vice President
Fintridge Building

Docket Nos. 50-348
50-364



March 11, 1986

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

Attention: Mr. L. S. Rubenstein

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

Gentlemen:

Alabama Power Company has reviewed the remaining inservice inspection activities requiring completion by the end of the first ten year interval for Farley Nuclear Plant Unit 1. Based on this review, it has been determined that four additional reliefs are needed where the ASME Code required examinations are impractical to perform. These four reliefs, which are also applicable to Unit 2, were not identified at the time of the previous submittals.

The ASME Code, Section XI inspection requirements for Class 1 valves include the volumetric examination of pressure-retaining valve body welds and the visual examination of the internal pressure boundary surfaces on valves exceeding four inches in nominal pipe size. These examinations are to be performed on one valve in each group of valves of the same constructional design, manufacturing method and manufacturer that perform similar functions in the system. Since the volumetric examination of valve body welds may require valve disassembly, the ASME Code permits the required visual examination to be performed on these same valves.

For Farley Nuclear Plant Units 1 and 2, a valve from each of five groups in each unit would require examination. These groups include the RHR suction gate valves, pressurizer safety valves, high head safety injection check valves, low head safety injection check valves and the accumulator discharge check valves. Since all of the valves in each of these five groups are made from one piece forgings and do not contain

8603180104 860311
PDR ADDCK 05000348
G PDR

AO47
/1

Rec'd w/ check \$150.00

pressure-retaining welds, no valves will require disassembly for the purpose of performing the volumetric examination normally required by Section XI. The valves in these systems are routinely tested in accordance with Technical Specification and Inservice Testing (IST) Program requirements. One accumulator discharge check valve is disassembled every outage for full stroke testing and will receive the visual examination of the internal pressure boundary surface as required by the ASME Code. The valves in the four remaining groups are not routinely disassembled for maintenance, testing, or inspection. The radiation exposure required to disassemble, inspect, perform valve internals maintenance necessitated by valve disassembly and reassemble the four valves in the remaining groups is estimated to be 13 to 49 man-rem. Therefore, the disassembly of one valve in each of these four groups solely for the purpose of visually examining the internal pressure boundary surface is impractical.

The RHR suction gate valves are closed during normal operation and are opened only for limited service during shutdowns; therefore, degradation of these valves due to service is not anticipated. Furthermore, experience with this type of valve at other plants has shown that the complete disassembly required for performance of the visual examination may lead to degradation of valve seating capability. The valve manufacturer, Copes Vulcan, neither recommends nor requires valve disassembly for the performance of routine maintenance or inspection. During each refueling outage, the RHR suction gate valve scheduled for inspection is also subjected to local leakage rate testing as a containment isolation valve, RCS pressure isolation valve testing and stroke time measurement as required by the Technical Specification and IST Program.

During normal operation, the high head safety injection check valves remain in the closed position to isolate RCS pressure from the safety injection system piping. These valves are stroked open only during high head safety injection system testing performed during refueling outages. Due to their limited service, degradation of these valves is not anticipated. The valve manufacturer, Velan Engineering Company, neither recommends nor requires valve disassembly for the performance of routine maintenance or inspections. During each refueling outage, the check valve which is scheduled for inspection is subjected to RCS pressure isolation valve testing and full stroke exercising as required by the Technical Specification and IST Program.

During normal operation, the low head safety injection check valves remain in the closed position to isolate RCS pressure from the safety injection system piping. These valves are stroked to the full open position only during low head safety injection system testing performed during refueling outages. Due to their limited service, degradation of these valves is not anticipated. The valve manufacturer, Velan

Engineering Company, neither recommends nor requires valve disassembly for the performance of routine maintenance or inspections. During each refueling outage, the check valve which is scheduled for inspection is subjected to RCS pressure isolation valve testing and full stroke exercising as required by the Technical Specification and IST Program.

The pressurizer safety valves isolate the RCS from the pressurizer relief tank and therefore remain closed during normal operation as well as during plant shutdown (except for partial stroking during testing). Due to this infrequent operation, degradation of the safety valves is not anticipated. The valve manufacturer, Crosby Valve and Gage Company, neither recommends nor requires valve disassembly for the performance of routine maintenance or inspections. The valve is periodically lifted for the purpose of checking the relief setpoint in accordance with Technical Specification and IST Program requirements.

In consideration of the absence of need for valve disassembly for performing the volumetric examination of valve body welds or vendor recommended maintenance or inspection on these valves, the rigorous valve testing requirements currently imposed by the Technical Specifications and IST Program and the potential for excessive radiation exposure which could be encountered, disassembly of the four valves in these remaining groups solely for the purpose of visually examining the internal pressure boundary surface is impractical. As an alternative, and in addition to the regularly scheduled testing, Alabama Power Company will visually examine the exterior of each of the four valves as required by the ASME Code, Section XI, Subsection IWA-5000 during performance of the RCS hydrostatic test. A visual examination, not to exceed once per interval, will be performed on the internal pressure boundary surface of one valve in each of the four groups as required by Table IWB-2600, Item B6.7 and Table IWB-2500, Category B-M-2 if maintenance or operational problems are encountered which require disassembly and complete removal of the valve internals.

Summaries of the relief requests, ASME Code examination requirements, bases for relief and proposed alternative examinations for the RHR gate valve, high head safety injection check valve, low head safety injection check valve and pressurizer relief valve are included in Attachments 1, 2, 3 and 4, respectively. Pursuant to the requirements of 10CFR50.55a(g)(6)(i), Alabama Power Company herewith 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 requests be granted by August 29, 1986, since the ISI activities scheduled to be performed during the Unit 1 seventh refueling outage, scheduled to begin October 3, 1986, include these impractical examinations.

Director, Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission

March 11, 1986
Page 4

This relief is designated as a required approval in accordance with 10CFR170.21 requirements. Enclosed is the required application fee of \$150.00

Yours truly,



R. P. McDonald

RPM/STB:drs/D-374

Attachments

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

bc: Mr. W. O. Whitt
Mr. W. G. Hairston, III
Mr. J. D. Woodard
Mr. J. W. McGowan
Mr. C. D. Nesbitt
Mr. R. G. Berryhill
Mr. D. E. Mansfield
Mr. J. E. Garlington
Mr. J. A. Ripple
Mr. E. L. Stephenson
Mr. J. K. Osterholtz
Mr. D. B. Hartline
Mr. J. R. Crane
Mr. T. N. Epps
Mr. R. T. Davis
Mr. K. C. Gandhi

ATTACHMENT 1

RELIEF REQUEST - RELIEF IS REQUESTED FROM THE VISUAL EXAMINATION OF THE INTERNAL PRESSURE BOUNDARY SURFACE OF ONE RHR SUCTION GATE VALVE (ITEM B6.7, CATEGORY B-M-2).

Code Examination Requirement:

Table IWB-2600, Item B6.7 and Table IWB-2500, Category B-M-2 of the 1974 Edition through the Summer 1975 Addenda of the ASME Code, Section XI, require visual examination of the internal pressure boundary surface of one valve in each group of valves of the same constructional design, manufacturing method and manufacturer that perform similar functions in the system. This requirement applies to Class 1 valves exceeding four inches in nominal pipe size.

Basis for Relief:

The ASME Code, Section XI, permits the visual examination of the valve internal pressure boundary surface to be performed on the same valve disassembled for the purpose of performing the required volumetric examination of pressure-retaining welds in the valve body. The RHR suction gate valve body is a one piece forging and therefore does not contain pressure-retaining welds. Since the valve does not require disassembly for volumetric weld examination, disassembly of the valve solely for the purpose of visually examining the interior surface is not prudent. Due to the limited operation of the RHR system, degradation of this valve is not anticipated. The valve manufacturer, Copes-Vulcan, Inc., neither recommends nor requires valve disassembly for the performance of routine maintenance or inspections. There is a potential for degradation of the valve seating capability as a result of the complete disassembly required to perform the inspection. This concern was verified during discussions with another utility which experienced leakage in a similar valve following performance of this inspection. In addition, an estimated 0.6 to 1.6 man-rem of radiation exposure will be required to complete the operation.

During each refueling outage, the RHR suction gate valve which is scheduled for inspection is subjected to RCS pressure isolation testing, stroke time measurement and local leakage rate testing in relation to its function as a containment isolation valve as required by the Technical Specifications and IST Program. In the absence of the need for volumetric weld examination or required maintenance and considering the potential for valve degradation and ALARA considerations, visual examination of the internal pressure boundary surface is unjustified.

Proposed Alternative Examination:

As required by Section XI, IWA-5000, the exterior of this valve body will be visually examined during the RCS hydrostatic test. A visual examination, not to exceed once per interval, will be performed on the internal pressure boundary surface of one RHR suction gate valve as required by Item B6.7 and Category B-M-2 if maintenance or operational problems are encountered which require disassembly and complete removal of the valve internals.

ATTACHMENT 2

RELIEF REQUEST - RELIEF IS REQUESTED FROM THE VISUAL EXAMINATION OF THE INTERNAL PRESSURE BOUNDARY SURFACE OF ONE HIGH HEAD SAFETY INJECTION CHECK VALVE (ITEM B6.7, CATEGORY B-M-2).

Code Examination Requirements:

Table IWB-2600, Item B6.7 and Table IWB-2500, Category B-M-2 of the 1974 Edition through the Summer 1975 Addenda of the ASME Code, Section XI, require visual examination of the internal pressure boundary surface of one valve in each group of valves of the same constructional design, manufacturing method and manufacturer that perform similar functions in the system. This requirement applies to Class 1 valves exceeding four inches in nominal pipe size.

Basis for Relief:

The ASME Code, Section XI, permits the visual examination of the valve internal pressure boundary surface to be performed on the same valve disassembled for the purpose of performing the required volumetric examination of pressure-retaining welds in the valve body. The high head safety injection check valve body is a one piece forging and therefore does not contain pressure-retaining welds. Since the valve does not require disassembly for volumetric weld examination, the disassembly of the valve solely for the purpose of visually examining the interior surface is not prudent. Due to the limited operation of the high head safety injection system, the check valves would usually remain closed; therefore, degradation of these valves is not anticipated. The valve manufacturer, Velan Engineering Company, neither recommends nor requires valve disassembly for the performance of routine maintenance or inspections. In addition, an estimated 0.72 to 1.44 man-rem of radiation exposure will be required to complete the operation.

During each refueling outage, the high head safety injection check valve which is scheduled for inspection is subjected to RCS pressure isolation testing and full stroke exercising as required by the Technical Specification and IST Program. In the absence of the need for volumetric weld examination or required maintenance and considering ALARA commitments, visual examination of the internal pressure boundary surface is unjustified.

Proposed Alternative Examination:

As required by Section XI, IWA-5000, the exterior of this valve body will be visually examined during the RCS hydrostatic test. A visual examination, not to exceed once per interval, will be performed on the internal pressure boundary surface of one high head safety injection check valve as required by Item B6.7 and Category B-M-2 if maintenance or operational problems are encountered which require disassembly and complete removal of the valve internals.

ATTACHMENT 3

RELIEF REQUEST - RELIEF IS REQUESTED FROM THE VISUAL EXAMINATION OF THE INTERNAL PRESSURE BOUNDARY SURFACE OF ONE LOW HEAD SAFETY INJECTION CHECK VALVE (ITEM B6.7, CATEGORY B-M-2).

Code Examination Requirements:

Table IWB-2600, Item B6.7 and Table IWB-2500, Category B-M-2 of the 1974 Edition through the Summer 1975 Addenda of the ASME Code, Section XI, require visual examination of the internal pressure boundary surface of one valve in each group of valves of the same constructional design, manufacturing method and manufacturer that perform similar functions in the system. This requirement applies to Class 1 valves exceeding four inches in nominal pipe size.

Basis for Relief:

The ASME Code, Section XI, permits the visual examination of the valve internal pressure boundary surface to be performed on the same valve disassembled for the purpose of performing the required volumetric examination of pressure-retaining welds in the valve body. The low head safety injection check valve body is a one piece forging and therefore does not contain pressure-retaining welds. Since the valve does not require disassembly for volumetric weld examination, the disassembly of the valve solely for the purpose of visually examining the interior surface is not prudent. Due to the limited operation of the low head safety injection system, the check valves would usually remain closed; therefore, degradation of these valves is not anticipated. The valve manufacturer, Velan Engineering Company, neither recommends nor requires valve disassembly for the performance of routine maintenance or inspections. In addition, an estimated 0.72 to 1.44 man-rem of radiation exposure will be required to complete the operation.

During each refueling outage, the low head safety injection check valve which is scheduled for inspection is subjected to RCS pressure isolation testing and full stroke exercising as required by the Technical Specification and IST Program. In the absence of the need for volumetric weld examination or required maintenance and considering ALARA commitments, visual examination of the internal pressure boundary surface is unjustified.

Proposed Alternative Examination:

As required by Section XI, IWA-5000, the exterior of this valve body will be visually examined during the RCS hydrostatic test. A visual examination, not to exceed once per interval, will be performed on the internal pressure boundary surface of one low head safety injection check valve as required by Item B6.7 and Category B-M-2 if maintenance or operational problems are encountered which require disassembly and complete removal of the valve internals.

ATTACHMENT 4

RELIEF REQUEST - RELIEF IS REQUESTED FROM THE VISUAL EXAMINATION OF THE INTERNAL PRESSURE BOUNDARY SURFACE OF ONE PRESSURIZER SAFETY VALVE (ITEM B6.7, CATEGORY B-M-2).

Code Examination Requirements:

Table IWB-2600, Item B6.7 and Table IWB-2500, Category B-M-2 of the 1974 Edition through the Summer 1975 Addenda of the ASME Code, Section XI, require visual examination of the internal pressure boundary surface of one valve in each group of valves of the same constructional design, manufacturing method and manufacturer that perform similar functions in the system. This requirement applies to Class 1 valves exceeding four inches in nominal pipe size.

Basis for Relief:

The ASME Code, Section XI, permits the visual examination of the valve internal pressure boundary surface to be performed on the same valve disassembled for the purpose of performing the required volumetric examination of pressure-retaining welds in the valve body. The pressurizer safety valve body is a one piece forging and therefore does not contain pressure-retaining welds. Since the valve does not require disassembly for volumetric weld examination, disassembly of the valve solely for the purpose of visually examining the interior surface is not prudent. Because operation of this valve would not be expected during normal plant operation, degradation of the valve is not anticipated. The valve manufacturer, Crosby Valve and Gage Company, neither recommends nor requires valve disassembly for the performance of routine maintenance or inspections. In addition, an estimated 10.8 to 45.0 man-rem of radiation exposure will be required to complete the operation.

This pressurizer safety valve is subjected to periodic lift setpoint tests in accordance with the Technical Specification and IST Program. In the absence of the need for volumetric weld examination or required maintenance and considering ALARA commitments, visual examination of the internal pressure boundary surface is unjustified.

Proposed Alternative Examination:

As required by Section XI, IWA-5000, the exterior of this valve body will be visually examined during the RCS hydrostatic test. A visual examination, not to exceed once per interval, will be performed on the internal pressure boundary surface of one pressurizer safety valve as required by Item B6.7 and Category B-M-2 if maintenance or operational problems are encountered which require disassembly and complete removal of the valve internals.