

October 24, 1995

1CAN109503

U. S. Nuclear Regulatory Commission Document Control Desk Mail Station P1-137 Washington, DC 20555

Subject:

Arkansas Nuclear One - Unit 1

Docket No. 50-313 License No. DPR-51

Additional Information for Inservice Inspection Relief Request 95-001

Gentlemen:

On May 31, 1995, Entergy Operations submitted Relief Request 95-001 to the Arkansas Nuclear One, Unit 1 (ANO-1), inservice inspection program for NRC review and approval (1CAN059508). This relief request provided the basis for supporting elimination of the required ultrasonic examination of the reactor vessel transition-piece-to-bottom-head weld and described the alternative examinations to be performed. Subsequent discussions with the staff identified three questions regarding the relief request which require a written response. The questions and their responses are included in the attachment to this letter.

Should you have any questions regarding this submittal, please contact me.

Very truly yours,

Dwight C. Mims

Director, Nuclear Safety

DCM/jjd

attachment

3000I1



U. S. NRC October 24, 1995 1CAN1'09503 Page 2

cc: Mr. Leonard J. Callan
Regional Administrator
U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

NRC Senior Resident Inspector Arkansas Nuclear One P.O. Box 310 London, AR 72847

Mr. George Kalman NRR Project Manager Region IV/ANO-1 & 2 U. S. Nuclear Regulatory Commission NRR Mail Stop 13-H-3 One White Flint North 11555 Rockville Pike Rockville, MD 20852

RESPONSE TO QUESTIONS CONCERNING RELIEF REQUEST 95-001

1. "The licensee stated that the subject weld was examined 100% preservice and approximately 10% during the first 10-year interval. IWB-2200 states that preservice examinations should be conducted under conditions to be employed for subsequent inservice examinations. How was the preservice examination of the subject reactor pressure vessel (RPV) performed to obtain 100% coverage? What Code edition was applicable for the first 10-year interval? It is noted that the 74/S75 Code only required 10% coverage for longitudinal welds and 5% coverage for circumferential RPV welds."

Weld 01-005 was examined 100% during the preservice examination when the RPV was still in a shop environment being fabricated. After the RPV wall had been completed, but before the various lugs and instrumentation nozzles were added, the entire circumference of this weld was examined manually from the outside surface of the vessel using ultrasonic equipment. Performing the examination at this time provided access that would not ever be available again. A full preservice examination of this weld was determined to be desirable and beneficial.

Arkansas Nuclear One, Unit 1 (ANO-1), was committed to two different editions of American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code for inservice inspections during the first 10-year interval. During the first period (approximately three years) of the first 10-year interval, inservice inspections were performed to the 1971 edition with addenda through the summer 1972 (71-S72). For the last two periods of the first 10-year interval, ANO-1 was committed to the 1974 edition with addenda through the summer 1975 (74-S75). While the 74-S75 Code required only 5% coverage of this circumferential weld, all accessible portions of the weld were examined to the fullest extent possible.

2. "What is the length of the subject weld?"

The length of Weld 01-006 is approximately 40 feet on the outside diameter of the RPV.

3. "Based on a review of the reactor pressure vessel sketch provided with the relief request, it is not apparent that there are scanning limitations above the subject weld. It is noted that incore instrumentation nozzles are located below the weld that may interfere with scanning. Please provide detailed information on the scanning limitations presented in the request for relief."

Attachment to 1CAN109503 Page 2 of 2

On the interior of the RPV, two sets of lugs are attached to the cladding by welding. The 12 flow stabilizer lugs are located on and above the subject weld. These lugs are especially restrictive to the examinations since they are mounted in the vessel at a 30-degree angle to the vertical. In addition, immediately above the flow stabilizer lugs are the 12 guide lugs, also called core stop lugs. Although these lugs are farther from the weld, they still interfere with the manipulator arm and transducer head of the inspection tool while it attempts to examine the required base metal adjacent to the weld. Detailed drawings of the lower head and lower shell areas are attached.

OVERSIZE DOCUMENT PAGE PULLED

SEE APERTURE CARDS

NUMBER OF OVERSIZE PAGES FILMED ON APERTURE CARDS 3

9511030095

APERTURE CARD/HARD COPY AVAILABLE FROM

RECORDS AND REPORTS MANAGEMENT BRANCH