

July 23, 2003

LICENSEE: Entergy Operations, Inc. (Entergy or the licensee)

FACILITY: Arkansas Nuclear One, Unit 2 (ANO-2)

SUBJECT: SUMMARY OF JUNE 17, 2003, CATEGORY 1 MEETING WITH ENTERGY, TO DISCUSS ITS MAY 8, 2003, REQUEST FOR RELAXATION FROM THE VESSEL HEAD INSPECTION ORDER (TAC NO. MB8927)

On June 17, 2003, a public meeting was held between the U.S. Nuclear Regulatory Commission (NRC), and representatives of Entergy, at NRC Headquarters, One White Flint North, 11555 Rockville Pike, Rockville, MD. The purpose of the meeting was to discuss: (1) Entergy's May 8, 2003, request for relaxation from NRC's vessel head inspection Order, Section IV.C.(1)(a), (2) NRC's subsequent request for additional information regarding the May 8, 2003, request, and (3) additional requests from Entergy (one dated June 11, 2003, and the other planned for submittal) for relaxation from Section IV.C.(1)(b) of the Order.

The NRC staff opened the meeting by providing the following background. By letter dated May 8, 2003, Entergy requested relaxation from Section IV.C.(1)(a) of the vessel head inspection Order. As an alternative to the bare metal visual examination of the head, Entergy proposed an augmented ultrasonic testing (UT) examination that looks 0.060-of-an-inch into the J-groove weld from the inside diameter of the vessel head penetration. However, in a request for additional information from the NRC on May 30, 2003, as further discussed during a telephone call on June 5, 2003, the NRC indicated that while the augmented UT exam proposed by Entergy is in addition to the UT required by the Order, it is not diverse and complementary to the non-visual examination requirements of Order Section IV.C.(1)(b). At this point, Entergy requested to meet with the NRC.

The licensee's presentation discussed the hardships of performing a bare metal visual examination of the reactor vessel head, their inspection plans for the head, why they believe that their inspection plans are diverse and complimentary, and the other relaxation requests. Regarding hardships with the bare metal visual examination, the licensee indicated that (1) the control element drive mechanism (CEDM) cooling/insulation system was not designed to allow access to the reactor vessel head nozzles, (2) the ANO-2 CEDM cooling system design is unique, and (3) there will be a significant dose impact and risk of damage to equipment.

Regarding the inspection plans for the next refueling outage (2R16, Fall 2003), the licensee plans to augment the inspection plan discussed in their May 8, 2003, relief request with a bare metal visual examination of the incore instrument (ICI) nozzles, and a low frequency eddy current examination of the CEDMs and the vent line. The licensee believes that (1) the combination of supplementary visual examination above the CEDM cooling shroud and a bare metal visual examination of the ICI nozzles, (2) the volumetric examinations of the CEDM nozzles/J-welds, and (3) the low frequency eddy current examinations of the CEDM/vent line, are diverse and complimentary examinations which ensure quality and safety.

Regarding the other relaxation requests, the licensee indicated that (as discussed in their June 11, 2003, relaxation request) their CEDM nozzles cannot be inspected to the bottom due to the threads at the bottom of the nozzles. However, their analyses show that all nozzles are acceptable for greater than one cycle of operation. In addition, another relaxation request will be submitted regarding inspection of the ICI nozzles at the counter bore region and at the tip of the nozzle.

The staff queried the licensee regarding the details of several of the above items, and described several specific items that the licensee should address to provide justification for their relaxation requests. For some of the details, the licensee indicated that they would need to get back to the staff with the information. The staff also indicated that it would review the information presented during the meeting and provide the licensee with feedback.

At the close of the meeting, the licensee indicated that while they believe that their current inspection plans ensure quality and safety, they do not believe that these plans are a permanent solution for the vessel head. The licensee indicated that a replacement head is being considered; however, this is subject to funding and approval from their senior management.

Members of the public were in attendance; however, they did not desire to receive the public meeting feedback forms.

A list of meeting attendees is attached. A copy of the licensee's slides presented at the meeting has been placed in the NRC Agencywide Documents Access and Management System (Accession Numbers ML031740334 for color, or ML031690190 for black-and-white).

Please direct any inquiries to Tom Alexion at 301-415-1326, or [twalexion@nrc.gov](mailto:twalexion@nrc.gov).

**/RA/**

Thomas W. Alexion, Project Manager, Section 1  
Project Directorate IV  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-368

Attachment: List of attendees

cc w/att: See next page

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\*see previous concurrence NRC-001

OFFICE	PDIV-1/PM	PDIV-1/LA	EMCB/SC	PDIV-1/SC
NAME	TAlexion	DJohnson	TChan*	RGramm
DATE	7/21/2003	7/21/2003	07/16/03	7/16/2003

OFFICIAL RECORD COPY

MEETING ON ENTERGY'S REQUEST FOR RELAXATION FROM  
NRC'S VESSEL HEAD INSPECTION ORDER  
ARKANSAS NUCLEAR ONE, UNIT 2  
JUNE 17, 2003

ATTENDEES

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S. Bennett	Entergy
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Z. Kuljis	Westinghouse
D. Horner	McGraw-Hill
D. Raleigh	LIS, Scientech
W. Bateman	NRC
T. Chan	NRC
A. Hiser	NRC
R. Davis	NRC
J. Collins	NRC
T. Steingass	NRC
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Arkansas Nuclear One

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