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**Craig Anderson**  
Vice President  
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2CAN020304

February 28, 2003

Annette L. Vietti-Cook, Secretary  
Office of the Secretary of the Commission  
U.S. Nuclear Regulatory Commission  
ATTN: Rulemakings and Adjudications Staff  
Washington, DC 20555

**SUBJECT:** Arkansas Nuclear One, Unit 2  
Docket No. 50-368  
Entergy Operations, Inc. – Answer to Issuance of Order Establishing  
Interim Inspection Requirements for Reactor Pressure Vessel Heads at  
Pressurized Water Reactors

Dear Ms Vietti-Cook,

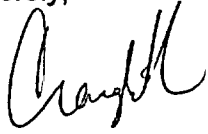
In accordance with 10 C.F.R. § 2.202(a)(2), Entergy Operations, Inc. ("Entergy"), hereby submits for filing its answer to the February 11, 2003, Order Establishing Interim Inspection Requirements for Reactor Pressure Vessel Heads at Pressurized Water Reactors and a related Certificate of Service in the captioned matter. Entergy does not request a hearing on the Order. Entergy consents to the Order modifying the license as delineated in Section IV thereof.

As directed in the Order and pursuant to the procedure specified in Section IV.F thereof, Entergy will submit a separate request to deviate from certain requirements of the Order, describing the basis for the proposed alternative as a result of current design limitations with the reactor vessel head insulation and the design of the nozzle. Additionally, in Footnote 1 of the Order, the NRC referenced certain guidance to address flaw evaluations. As explained in the answer to the Order, Entergy plans to use other guidance to evaluate crack growth for the reactor vessel head penetration nozzle base metal comprising the inside surface and the portion of the outside surface protruding below the attachment J-groove weld.

In a letter dated August 26, 2002, Entergy responded to NRC Bulletin 2002-02, "Reactor Pressure Vessel Head and Vessel Head Penetration Nozzle Inspection Programs" (August 9, 2002). Entergy committed to provide the information requested in Bulletin 2002-02 concerning the inspection program for outage 2R16 (Fall 2003) by March 28, 2003. Inasmuch as the Order requires specific inspection techniques and frequencies, and NRC approval for any deviations from those requirements, Entergy's consent to the Order supersedes the previous commitment. Entergy will comply with the requirement in the Order to submit a report detailing the inspection results within sixty days after returning the plant to operation. As stated in Section IV.E of the Order (fn. 4), this reporting requirement supersedes the 30-day report requested by Bulletin 2002-02.

This letter does not include any new commitments. If you have any questions or require additional information, please contact Steve Bennett at 479-858-4626.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Bennett", written in a cursive style.

CGA/sab

**Attachments:**

1. Licensee's Answer to February 11, 2003 Commission Order Modifying License Establishing Interim Inspection Requirements for Reactor Pressure Vessel Heads at Pressurized Water Reactors
2. Certificate of Service

**Attachment 1**

**2CAN020304**

**Licensee's Answer to February 11, 2003 Commission Order Modifying License  
Establishing Interim Inspection Requirements for Reactor Pressure Vessel Heads at  
Pressurized Water Reactors**

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
Entergy Operations, Inc.	)	Docket No. 50-368
	)	License No. NPF-6
Arkansas Nuclear One, Unit 2	)	

LICENSEE'S ANSWER TO FEBRUARY 11, 2003  
COMMISSION ORDER MODIFYING LICENSE  
ESTABLISHING INTERIM INSPECTION REQUIREMENTS  
FOR REACTOR PRESSURE VESSEL HEADS AT  
PRESSURIZED WATER REACTORS

On February 11, 2003, the Nuclear Regulatory Commission ("NRC" or "Commission") issued an immediately effective order in the captioned matter entitled Order Modifying Licenses (Effective Immediately) ("Order") to, *inter alia*, Entergy Operations, Inc. ("Entergy"). The Order stated that recent experience indicated that current inspection requirements in Section XI of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code ("ASME Code") and related NRC regulations do not provide adequate assurance that reactor coolant pressure boundary integrity will be maintained for all combinations of construction materials, operating conditions, and operating histories at pressurized water reactors ("PWRs"). The Commission stated that long-term resolution of reactor pressure vessel ("RPV") head penetration inspection requirements is expected to involve changes to the ASME Code and NRC regulations, specifically 10 C.F.R. § 50.55a. Consequently, the Commission stated that it was necessary to establish a minimum set of RPV head inspection requirements, as a supplement to existing inspection and other requirements in the ASME Code and NRC regulations, through the issuance of the Order. Therefore, the Commission imposed interim inspection requirements set

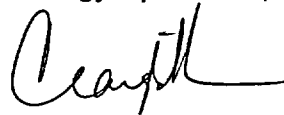
forth in Section IV of the Order pending the development of consensus standards and incorporation of revised inspection requirements into 10 C.F.R. § 50.55a, directly or through reference to a future version of the ASME Code.

Pursuant to 10 C.F.R. § 2.202(d), Entergy consents to the Order modifying the license as set forth in Section IV of the Order for performing inspections of the Arkansas Nuclear One, Unit 2, reactor pressure vessel head. Entergy does not request a hearing on the Order. In accordance with Section IV.F of the Order, Entergy herein notifies the Commission that for Arkansas Nuclear One, Unit 2, Entergy is unable to fully comply with Section IV.C(1)(a) of the Order because of the current design of the Arkansas Nuclear One, Unit 2, reactor pressure vessel head insulation. Additionally, Entergy is unable to comply with the examination scope specified in Section IV.C(1)(b) due to the design of the nozzles (e.g. threaded nozzle lower ends). As directed in the Order, Entergy will submit a separate request to deviate from the requirements of the Order pursuant to the procedure specified in Section IV.F of the Order, describing the basis for the proposed alternative.

Footnote 1 of the Order cites a November 21, 2001, letter from J. Strosnider, NRC, to A. Marion, Nuclear Energy Institute, for guidance to address flaw evaluation. In lieu of the cited guidance, Entergy intends to use the guidance in Electric Power Research Institute Report MRP-55, Revision 1, "Materials Reliability Program Crack Growth Rates for Evaluating Primary Water Stress Corrosion Cracking ("PWSCC") of Thick Wall Alloy 600 Material" (EPRI-TR-1006695), to evaluate PWSCC crack growth for the reactor vessel head penetration nozzle base metal comprising the inside surface and the portion of the outside surface protruding below the attachment J-groove weld.

I declare under penalty of perjury that the foregoing is true and correct. Executed on  
February 28, 2003.

Respectfully submitted,  
Entergy Operations, Inc.

A handwritten signature in black ink, appearing to read "C.G. Anderson", written in a cursive style.

C.G. Anderson  
Vice President, Operations  
Arkansas Nuclear One

**Attachment 2**

**2CAN020304**

**Certificate of Service**

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
Entergy Operations, Inc.	)	Docket No. 50-368
	)	License No. NPF-6
Arkansas Nuclear One, Unit 2	)	

CERTIFICATE OF SERVICE

I hereby certify under penalty of perjury that copies of the ANSWER TO FEBRUARY 11, 2003, COMMISSION ORDER MODIFYING LICENSE ESTABLISHING INTERIM INSPECTION REQUIREMENTS FOR REACTOR PRESSURE VESSEL HEADS AT PRESSURIZED WATER REACTORS in the captioned action have been served on the following by deposit in the United States mail, first class, and in addition, by overnight delivery (as indicated by an asterisk "\*\*") or by facsimile as directed in Section V of the Order (as indicated by a double asterisk "\*\*\*"), this 28th day of February 2003.

Annette L. Vietti-Cook, Secretary\*\*  
Office of the Secretary of the Commission  
U.S. Nuclear Regulatory Commission  
ATTN: Rulemakings and  
Adjudications Staff  
Washington, DC 20555-0001

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C.G. Anderson  
Vice President, Operations  
Arkansas Nuclear One