



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

June 4, 2014

Vice President, Operations
Arkansas Nuclear One
Entergy Operations, Inc.
1448 S.R. 333
Russellville, AR 72802

SUBJECT: ARKANSAS NUCLEAR ONE, UNIT NO. 1 - REQUEST FOR ADDITIONAL
INFORMATION REGARDING PROPOSED EXEMPTION FOR ALTERNATIVE
INITIAL REFERENCE TEMPERATURE VALUES (TAC NO. MF3700)

Dear Sir or Madam:

By letter dated March 20, 2014 (Agencywide Documents Access and Management System Accession No. ML14083A640), Entergy Operations, Inc., submitted an exemption request for Arkansas Nuclear One, Unit 1 (ANO-1). The exemption is from certain requirements in Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.61, "Fracture toughness requirements for protection against pressurized thermal shock events," and 10 CFR 50, Appendix G, "Fracture Toughness Requirements," for the proposed use of alternative initial reference temperature values for Linde 80 welds used in fabricating the ANO-1 reactor vessel.

The Nuclear Regulatory Commission staff has reviewed the submittal and determined that additional information is needed to complete its review. The specific question is found in the enclosed request for additional information (RAI). The question was sent via electronic transmission on May 20, 2014, to Mr. Robert Clark, of your staff. The draft question was sent to ensure that the question was understandable, the regulatory basis was clear, and to determine if the information was docketed previously. The RAI was reviewed with Mr. Clark and it was agreed that a response to this RAI would be submitted within 30 days of the date of this letter.

If you have any questions, please contact me at (301) 415-2833 or by e-mail at Peter.Bamford@nrc.gov.

Sincerely,

A handwritten signature in cursive script that reads "Jennie Rater for".

Peter J. Bamford, Project Manager
Plant Licensing Branch IV-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-313

Enclosure:
Request for Additional Information

cc w/encl: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION
EXEMPTION REQUEST REGARDING ALTERNATIVE INITIAL
REFERENCE TEMPERATURE VALUES FOR CERTAIN WELDS
ENERGY OPERATIONS, INC.
ARKANSAS NUCLEAR ONE, UNIT 1
DOCKET NO. 50-313

By letter dated March 20, 2014 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14083A640), Entergy Operations, Inc., submitted an exemption request for Arkansas Nuclear One, Unit 1 (ANO-1). The exemption is from certain requirements in Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.61, "Fracture toughness requirements for protection against pressurized thermal shock events," and 10 CFR 50, Appendix G, "Fracture Toughness Requirements," for the proposed use of alternative initial reference temperature values for Linde 80 welds used in fabricating the ANO-1 reactor vessel. In order for the U.S. Nuclear Regulatory Commission (NRC) staff to complete its review of the exemption, a response to the following request for additional information is requested.

1. The request dated March 20, 2014, does not explain values of chemistry factor used to calculate the reference temperatures (RT_{NDT}). The NRC needs this information to confirm that the ΔRT_{NDT} calculation is in accordance with the conditions and limitations in AREVA, Inc. Topical Report BAW-2308, Revision 1-A and 2-A, "Initial ΔRT_{NDT} of Linde 80 Weld Materials," regarding chemistry factors. Please provide the values of the chemistry factor used, along with the detailed calculations for ΔRT_{NDT} .

Enclosure

June 4, 2014

Vice President, Operations
Arkansas Nuclear One
Entergy Operations, Inc.
1448 S.R. 333
Russellville, AR 72802

SUBJECT: ARKANSAS NUCLEAR ONE, UNIT NO. 1 - REQUEST FOR ADDITIONAL INFORMATION REGARDING PROPOSED EXEMPTION FOR ALTERNATIVE INITIAL REFERENCE TEMPERATURE VALUES (TAC NO. MF3700)

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Sincerely,
/RA/
Peter J. Bamford, Project Manager
Plant Licensing Branch IV-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-313

Enclosure:
Request for Additional Information

cc w/encl: Distribution via Listserv

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***via email**

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NAME	PBamford	JBurkhardt	SRosenberg	MMarkley	PBamford
DATE	5/27/14	5/29/14	5/15/14	6/4/14	6/4/14

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