

March 13, 2008

Mr. William R. Campbell, Jr.
Chief Nuclear Officer and
Executive Vice President
Tennessee Valley Authority
6A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

SUBJECT: BROWNS FERRY NUCLEAR PLANT, UNIT 3 – REQUEST FOR ADDITIONAL
INFORMATION FOR THIRD 10-YEAR INTERVAL INSERVICE INSPECTION
PROGRAM PLAN RELIEF REQUEST RR-3-ISI-23 (TAC NO. MD6749)

Dear Mr. Campbell:

By letter dated August 24, 2007, the Tennessee Valley Authority (TVA, the licensee) requested relief from the American Society of Mechanical Engineers (ASME) Code, Section XI, Table IWB-2500-1, Examination Category B-D, Item Nos. B3.90 and B3.100 and ASME Code Case N-648-1 *Alternative Requirements for Inner Radius Examination of Class 1 Reactor Vessels, Section XI, Division 1* requirements based on it being impractical to perform the required examinations. The U.S. Nuclear Regulatory Commission (NRC) staff requires additional information in order to complete its evaluation of Request for Relief 3-ISI-23.

A response to the enclosed Request for Additional Information is needed before the NRC staff can complete the review. This request was discussed with Mr. James Emens of your staff on March 11, 2007, and it was agreed that TVA would respond by March 28, 2008.

If you have any questions, please contact me at (301) 415-2315.

Sincerely,

/RA/

Eva A. Brown, Senior Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-296

Enclosure: Request for Additional Information

cc w/enclosure: See next page

March 13, 2008

Mr. William R. Campbell, Jr.
Chief Nuclear Officer and
Executive Vice President
Tennessee Valley Authority
6A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

SUBJECT: BROWNS FERRY NUCLEAR PLANT, UNIT 3 – REQUEST FOR ADDITIONAL
INFORMATION FOR THIRD 10-YEAR INTERVAL INSERVICE INSPECTION
PROGRAM PLAN RELIEF REQUEST RR-3-ISI-23 (TAC NO. MD6749)

Dear Mr. Campbell:

By letter dated August 24, 2007, the Tennessee Valley Authority (TVA, the licensee) requested relief from the American Society of Mechanical Engineers (ASME) Code, Section XI, Table IWB-2500-1, Examination Category B-D, Item Nos. B3.90 and B3.100 and ASME Code Case N-648-1 *Alternative Requirements for Inner Radius Examination of Class 1 Reactor Vessels, Section XI, Division 1* requirements based on it being impractical to perform the required examinations. The U.S. Nuclear Regulatory Commission (NRC) staff requires additional information in order to complete its evaluation of Request for Relief 3-ISI-23.

A response to the enclosed Request for Additional Information is needed before the NRC staff can complete the review. This request was discussed with Mr. James Emens of your staff on March 11, 2007, and it was agreed that TVA would respond by March 28, 2008.

If you have any questions, please contact me at (301) 415-2315.

Sincerely,

/RA/

Eva A. Brown, Senior Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-296

Enclosure: Request for Additional Information

cc w/enclosure: See next page

DISTRIBUTION

PUBLIC
RidsAcrsAcnw&mMailCenter
RidsNrrLABClayton (Hard Copy)

LPL2-2 R/F
RidsOgcRp
RidsNrrDciCvib(MMitchell)

RidsNrrDorlLpl2-2
RidsRgn2MailCenter

RidsNrrPMEBrown
TMcLellan

ADAMS Accession No.: ML080590376

NRR-088

OFFICE	LPL2-2/PM	LPL2-2/LA	DCI/CVIB /BC	LPL2-2/BC
NAME	EBrown	BClayton	MMitchell By memo dated	TBoeye
DATE	03 / 13 /08	03 / 12 /08	01 / 31/08	03 / 13 /08

OFFICIAL RECORD COPY

REQUEST FOR ADDITIONAL INFORMATION

RELIEF REQUEST 3-ISI-23

TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT, UNIT 3

DOCKET NO. 50-296

American Society of Mechanical Engineers (ASME) Boiler & Pressure Vessel Code, Section XI, Table IWB-2500-1, Examination Category B-D, Item No. B3.90 requires a volumetric examination of essentially 100 percent of the reactor pressure vessel (RPV) nozzle welds as depicted in ASME Code, Section XI, Figure IWB-2500-7(a). ASME Code, Section XI, Table IWB-2500-1, Examination Category B-D, Item No. B3.100 requires a volumetric examination of essentially 100 percent of the RPV nozzle inner radius as depicted in ASME Code, Section XI, Figure IWB-2500-7(a). The licensee invoked ASME Code Case N-648-1, which allows one to perform an enhanced VT-1 visual examination of the inner radius of the RPV nozzles in lieu of a volumetric examination as required by the ASME Code, Section XI, Table IWB-2500-1, Examination Category B-D, Item No. B3.100.

1. The volumetric examinations for all the RPV nozzle-to-vessel welds and the enhanced VT-1 visual examinations of the inner radii of all the RPV nozzles provided in Table 1 of the original submittal and Weld Examination Report R-057 appear to be inconsistent. Further, the information in Table 1 and Weld Examination Report R-057 appear to be inconsistent with the list of RPV nozzle-to-vessel welds and RPV nozzle inner radii listed on page E2-4 of the relief request (RR) as components addressed under RR 3-ISI-23.

Provide two separate tables listing the results of the volumetric examinations for all the RPV nozzle-to-vessel welds and the enhanced VT-1 visual examinations of the inner radii of all the RPV nozzles.

2. In reviewing the examination results, it appears that the volumetric examination coverages were in the range of 22 to 42 percent and a number of enhanced VT-1 visual examination results were in the 40 percent range. If this is correct, provide further basis why these limited examinations provide reasonable assurance of structural integrity of the subject welds and components. As part of this basis, address whether there are any mechanisms that may be expected to cause service-induced degradation of the subject components.

Enclosure

Tennessee Valley Authority

BROWNS FERRY NUCLEAR PLANT

cc:

Mr. Ashok S. Bhatnagar
Senior Vice President
Nuclear Generation Development
and Construction
Tennessee Valley Authority
6A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

Mr. Steven M. Douglas
General Manager
Browns Ferry Site Operations
Browns Ferry Nuclear Plant
Tennessee Valley Authority
P.O. Box 2000
Decatur, AL 35609

Mr. James R. Douet
Vice President
Nuclear Support
Tennessee Valley Authority
3R Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

Ms. Beth A. Wetzel, Manager
Corporate Nuclear Licensing
and Industry Affairs
Tennessee Valley Authority
4X Blue Ridge
1101 Market Street
Chattanooga, TN 37402-2801

Mr. H. Rick Rogers
Vice President
Nuclear Engineering & Technical Services
Tennessee Valley Authority
3R Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

Mr. James E. Emens, Jr., Interim Manager
Licensing and Industry Affairs
Browns Ferry Nuclear Plant
Tennessee Valley Authority
P.O. Box 2000
Decatur, AL 35609

Mr. D. Tony Langley, Manager
Licensing and Industry Affairs
Browns Ferry Nuclear Plant
Tennessee Valley Authority
P.O. Box 2000
Decatur, AL 35609

James B. Baptist
Browns Ferry Senior Project Engineer
Division of Reactor Projects, Branch 6
U.S. Nuclear Regulatory Commission
61 Forsyth Street, SW.
Suite 24T85
Atlanta, GA 30303-8931

General Counsel
Tennessee Valley Authority
6A West Tower
400 West Summit Hill Drive
Knoxville, TN 37902

Tomy A. Nazario
Browns Ferry Project Engineer
Division of Reactor Projects, Branch 6
U.S. Nuclear Regulatory Commission
61 Forsyth Street, SW.
Suite 24T85
Atlanta, GA 30303-8931

Mr. John C. Fornicola, General Manager
Nuclear Assurance
Tennessee Valley Authority
3R Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

Senior Resident Inspector
U.S. Nuclear Regulatory Commission
Browns Ferry Nuclear Plant
10833 Shaw Road
Athens, AL 35611-6970

State Health Officer
Alabama Dept. of Public Health
RSA Tower - Administration
Suite 1552
P.O. Box 303017
Montgomery, AL 36130-3017

Chairman
Limestone County Commission
310 West Washington Street
Athens, AL 35611

Mr. Larry E. Nicholson, General Manager
Performance Improvement
Tennessee Valley Authority
3R Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

Mr. Michael A. Purcell
Senior Licensing Manager
Nuclear Power Group
Tennessee Valley Authority
4X Blue Ridge
1101 Market Street
Chattanooga, TN 37402-2801

Mr. Michael D. Skaggs
Site Vice President
Browns Ferry Nuclear Plant
Tennessee Valley Authority
P.O. Box 2000
Decatur, AL 35609

Mr. William R. Campbell, Jr.
Chief Nuclear Officer and
Executive Vice President
Tennessee Valley Authority
6A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801