



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

March 28, 2011

Mr. R. M. Krich
Vice President, Nuclear Licensing
Tennessee Valley Authority
3R Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

SUBJECT: BROWNS FERRY NUCLEAR PLANT, UNIT 2 - REQUEST FOR ADDITIONAL INFORMATION REGARDING 2-ISI-1, UPDATED RISK-INFORMED INSERVICE INSPECTION PROGRAM (TAC NO. ME3720)

Dear Mr. Krich:

In Attachment 10 of letter dated March 31, 2010 (Agencywide Documents Access and Management System Accession No. ML100920542), Tennessee Valley Authority requested authorization to use a risk-informed process as an alternative for the selection of Class 1 and Class 2 piping welds for examination.

Based on our review of your submittal, the U. S. Nuclear Regulatory Commission staff finds that a response to the enclosed request for additional information is needed before we can complete the review.

This request was discussed with Mr. Thomas Mathews of your staff on March 7, 2011, and it was agreed that a response would be provided by May 6, 2011 (60 days).

If you have any questions, please contact me at (301) 415-1055.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris Gratton".

Christopher Gratton, Senior Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-260

Enclosure: Request for Additional Information

cc w/encl: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION

REQUEST FOR RELIEF 2-ISI-1

UPDATED RISK INFORMED INSERVICE INSPECTION PROGRAM

TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT, UNIT 2

DOCKET NO. 50-260 (TAC NO. ME3720)

1. The March 31, 2010, submittal (Agencywide Documents Access and Management System Accession No. ML100920542) states that the revised risk-informed inservice inspection (RI-ISI) program represents a reduction in risk with regard to core damage frequency (CDF) and large early release fraction (LERF). There are other risk criteria in Section 4.4.2 of WCAP-14572, Revision 1-NP-A, "Westinghouse Owners Group Application of Risk-Informed Methods to Piping Inservice Inspection Topical Report," February 1999 (WCAP), that must also be met. Please provide the results of your evaluation that will allow you to state that the risk/safety evaluation criteria in 4.4.2 of the WCAP are met.
2. Attachment 10, page 6, of the submittal clearly lists 51 previous RI-ISI examinations for R1.16. The value(s) provided for the revised program are unclear. Please clarify how many examinations are listed as R1.16 for the revised RI-ISI program.
3. Attachment 10, page 3, of the submittal states:

"A new Delta Risk Evaluation was performed, and the revised RI-ISI program continues to represent a risk reduction when compared to the last deterministic ASME Section XI inspection program. The revised RI-ISI program represents a reduction of 1.869E-05 in regards to CDF and 1.596E-07 in regards to LERF."

- A) Per letter dated October 16, 2000, the Tennessee Valley Authority reported an increase in CDF and LERF for the previous RI-ISI program when compared to the last deterministic American Society of Mechanical Engineers (ASME), Section XI inspection program. The estimated change in risk was in the third and fourth significant digits for the estimated LERF and CDF; therefore, the RI-ISI program was considered risk neutral. Please clarify the above statement to properly reflect the change in risk of the previous RI-ISI program
- B) Please provide additional information and clarification for how a decrease in volumetric examinations associated with thermal fatigue and intergranular stress corrosion cracking, when compared to the last RI-ISI program, can produce a very significant risk decrease when compared to the last deterministic ASME, Section XI inspection program. In addition, please provide a table comparing CDF and LERF for "without ISI," "Section XI," and "Risk-Informed" programs.

Enclosure

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/RA/

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