



Integrated Nuclear Services

October 23, 1996
EAM/96.172

Mr. Robert M. Gallo, Chief
Special Inspection Branch
Division of Inspection and Support Programs
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

SUBJ: Reply to NRC Inspection Report 99901300/96-01 and Notice of Nonconformance

REF: (a) NRC (Robert M. Gallo) Letter to Framatome Technologies, Inc., dated Sept. 25, 1996
(b) NRC Inspection Report No. 99901300/96-01

Dear Mr. Gallo:

NRC letter, reference (a), forwarded the report of your inspection of our Lynchburg facility on July 9-12, 1996. Your report, reference (b), indicated that during the inspection you found areas where it appeared that implementation of our QA Program failed to meet certain NRC requirements. These areas were specifically addressed by your attached Notice of Nonconformance (99901300/96-01-01).

We have reviewed the information contained in references (a) and (b), and we have attached hereto our response to the identified area of nonconformance. In addition, you will find responses to the areas of concern identified in the Inspection Report. Our responses include corrective and preventative action where appropriate. While we acknowledge that some actions are appropriate to improve our program, we do not believe that all concerns necessarily represent weaknesses in our safety-related eddy current activities for the reasons stated in our attached response.

FTI would like to thank the team for the professional manner in which this inspection was conducted and the constructive input for opportunities to improve our program.

Should you have questions concerning this response you may contact me at (804) 832-3752 or Emily Mayhew, Director, FTI Quality Assurance at (804) 832-3331.

Sincerely,

Lyle H. Bohn, Executive Vice President
Integrated Nuclear Services

EAM/dsd
Attachment

cc: U.S. NRC Document Control Desk

WM Boudreaux

RB Gill

TA Richards

SR Wilson

CC England

EA Mayhew

NA Simile

9610300044 961023
PDR GA999 EMVBW
99901300 PDR

155 Mill Ridge Road, Lynchburg, VA 24502-4341
Telephone: 804-832-3700 Fax: 804-832-0622
Internet: <http://www.framatech.com>

10/11
ID&R-13 vendor Insp
x RD-8-2 Framatome

FTI RESPONSE TO NRC INSPECTION REPORT 99901300/96-01**I. NOTICE OF NONCONFORMANCE - 99901300/96-01-01**

FTI does not have an established procedure to control and ensure repeatable results regarding the development of safety-related eddy current computer data screening (CDS) techniques used by data analysts.

FTI Response to this Nonconformance:

In the absence of a written procedure for development of CDS Sort Logic, all CDS applications that have been performed by FTI for the evaluation of eddy current data from steam generator tubing examinations have been confirmed to be acceptable through three basic processes:

1. Development of the CDS Sort Logic is performed only by Level III personnel who are experienced with this software. This development process considers all damage mechanisms sought or expected in the particular type/model of steam generator for which development is being performed. Previous operating history and eddy current examination results for the specific unit and similar type units are reviewed to ensure those areas of interest are addressed in the Sort Logic for flaw types whose detection capability is within the parameters of the bobbin probe technique. CDS Sorts are always subdivided into specific regions along the tube length to optimize the software programs investigative capabilities. Specific sort routines are tailored for the various regions of interest such as the tubesheet crevice, top of tubesheet interface or transition region, freespan tube sections, tube support plates, U-Bend regions, AVB intersections, and cold leg preheater regions. Actual plant data is used for qualification during the development phase. This data may be from the steam generators for which the sorts are intended or from similar type units. CDS Sorts are only applied to the review of Bobbin probe data and only when a manual analysis is being performed in parallel.
2. CDS Sort Logic is required to successfully complete the same site specific performance demonstration as the manual data analyst. Considering this and the training data used during the development phase, CDS has been qualified on a larger data set than the analyst, thereby demonstrating more confidence in its performance.
3. CDS is monitored during the field examinations by the analyst who implements the program, the resolution analysts and Lead Level III. Each of these activities has the opportunity to evaluate the effectiveness of the Sorts and note any deficiencies in its' performance. Noted deficiencies and/or changes in the data analysis guidelines can be corrected for immediate implementation during the field examination. CDS performance is documented in the resolution process for each tube examined. This documentation is recorded on the Resolution Comparison Sheets generated for each Calibration Group resolved. This promotes a means by which CDS performance can be reviewed with respect to indications which are both flagged and missed and for statistical evaluation of CDS performance against the manual analyst.

The processes described above provide adequate assurance that work which has been performed using the CDS methodology in the absence of a written procedure for development of Sort Logic is acceptable. In addition, all work performed with CDS has been done in accordance with written analysis guidelines which control the implementation aspects and indirectly assure that the development of the applied sorts was performed acceptably.

FTI RESPONSE TO NRC INSPECTION REPORT 99901300/96-01

I. NOTICE OF NONCONFORMANCE - 99901300/96-01-01 (Continued)

FTI Response to this Nonconformance (continued)

Since the NRC Inspection, FTI has used CDS for only one examination at a nuclear facility. These sorts were developed by an FTI Level III and implemented as secondary analyses by Zetec. Two eddy current certified Level III's from two independent companies reviewed and approved the sort logic used for this examination.

While we believe our practices have been effective, prior to any further application of this software for the evaluation of tube degradation in steam generator examinations, a written procedure will be developed to control and ensure repeatable results regarding the development of safety-related eddy current computer data screening techniques used by data analysts. This procedure will be implemented and followed each time a new CDS Sort Logic is developed. This procedure will be in place by January 30, 1997.

II. AREAS OF CONCERN

Section 3 - Inspection Findings and Other Comments

Paragraph 3.2.1 - Control of Data Analysts Activities

FTI does not have any overall procedures, instructions or written guidance for controlling eddy current analyst activities. The team concluded that FTI had not established adequate written guidance nor specificity in this area and it was considered as a weakness.

The report goes on to say that, although FTI had not established formal procedures governing the control of data analysts, it appeared to have implemented effective practices for managing its analysts, and the team found that good communication existed between the NDE staff and its supervision. Consequently, the team concluded that this area appears to be effectively implemented. The benefit of having established FTI procedures to ensure continued effectiveness was discussed with FTI staff.

FTI Response to this Area of Concern:

The Department is always striving to improve those management techniques applied to eddy current data analyst activities in order to ensure continued effectiveness and will consider the benefit of having established procedures.

Paragraph 3.5 - Eddy Current Software

FTI had not established written controls for the Zetec software receipt inspection activities considering the importance of the SG tube eddy current test activities utilizing this software. The team recommended to FTI that it consider establishing a formal mechanism to internally report and track software problems or recommended changes that it identifies or is transmitted to Zetec.

FTI RESPONSE TO NRC INSPECTION REPORT 99901300/96-01**II. AREAS OF CONCERN (Continued)****Paragraph 3.5 - Eddy Current Software (continued)****FTI Response to this Area of Concern:**

An FTI procedure has been developed for the purchase, test and control of software used in the inspection of safety-related steam generators. This procedure addresses the purchase and receipt testing, control of the medium containing the software, problem reporting, records and notification processes. The procedure is currently in review and is expected to be in place by December 31, 1996.

Paragraph 3.5.4 - Audits of Zetec's Software Development Process

FTI accepted the audit report for Zetec, performed by a member of the Nuclear Industry Assessment Committee (NIAC). The Inspection Team felt this report lacked sufficient detail to make an assessment of the adequacy of Zetec's establishment and implementation of its software controls.

FTI Response to this Area of Concern:

FTI concurs that this audit provided little evidence of checkout, acceptance and control of software. However, as is stated in footnote 3 on page 8 of the NRC Report, FTI does not list Eddynet software as part of the scope of approval for Zetec. The NRC Report further confirms through review of procurement documents that the Eddynet software is procured as non-safety without 10CFR50 Appendix B applied.

The NIAC charter requires that each vendor provide, to the auditing entity, a list of their needs to be included in the scope for review. Since multiple companies share the audit, sometimes the scope includes items for which some of the sharing companies do not use the vendor. It is the responsibility of the company accepting the audit to review and determine if the scope for which they are using the vendor is adequately addressed.

In the case of Zetec, the acceptance by FTI was only for the safety related products or services that Zetec supplies to FTI. Specifically, these include NDE equipment, NDE personnel, calibration and calibration standards. The NRC report in both footnote 3 on page 8 and in Section 3.5.4 confirms this as being the scope of approval for safety-related use of Zetec listed on the FTI Approved Suppliers List.

FTI trusts that this explanation will assist in a better understanding of the use of NIAC in general and the Zetec audit specifically.