

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

August 4, 1980

Mr. Walter P. Haass, Chief
Quality Assurance Branch
Division of Program Management
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Haass:

In response to your May 20, 1980, letter regarding proposed Revision 4 to Tennessee Valley Authority's (TVA) Topical Report TVA-TR75-1A, "Quality Assurance Program Description for Design, Construction, and Operation of TVA Nuclear Power Plants," four copies of the revised pages and a response to the questions are enclosed.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager
Nuclear Regulation and Safety

Enclosures

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RESPONSES TO NRC REQUEST FOR ADDITIONAL INFORMATION
ON PROPOSED REVISION 4 OF TVA-TR75-1A

1. Question:

The proposed revision to TVA-TR75-1 includes a new term, "fuel-related components." The QA responsibilities for these components are assigned to the Division of Fuels which apparently has no QA organization, per se. Identify what items fall within the category of "fuel-related components" and discuss the involvement (or justify the lack of same) of TVA's QA organization(s) in the QA program for these items. Also, page 17.2-7 assigns the responsibility for "qualifying vendors for supplying nuclear fuel and fuel-related components" to the Nuclear Fuels Planning Branch. Discuss as above the involvement of TVA's QA organization(s) in this activity.

Response:

For definition of "fuel-related components," see revised Section 17.2.1.1.7. For involvement of QA organizations, see Tables 17.2-1 and 17.2-2.

2. Question:

The paragraph which ends at the top of page 17.2-11 indicates that the Chief, QA Staff reviews and concurs with plant standard practices which "implement the requirements of OQAM." Item V of Table 17.2-2 is similar. However, the TVA letter of January 30, 1980, indicates he reviews and concurs with plant standard practices which "affect quality." Discuss the difference, if any, in these commitments.

Response:

There is no difference between the two commitments.

3. Question:

Without an organization chart of the Nuclear Power Quality Assurance Staff, it is not clear whether the Chief, Quality Assurance Staff mentioned at the top of page 17.2-11 is or is not the same as the Supervisor, Quality Assurance Staff mentioned in the next paragraph. Please clarify.

Response:

See revised text on page 17.2-11.

4. Question:

TVA-TR75-1 states that the Plant Quality Assurance Staff is responsible for certifying plant personnel who perform receiving inspection. The proposed Revision 4 states that they may either certify or verify certification (page 17.2-13). It is the staff position that personnel outside quality assurance who perform QC functions be certified by quality assurance. Indicate that TVA meets this position or provide an alternative for our evaluation. See also part 17.2.7.4 concerning certification of those performing receipt inspection.

Response:

In most cases, QC inspections will be performed by personnel of the Nuclear Power QA Staff or the plant QA Staff. Such personnel will be certified by the Nuclear Power QA Staff. On occasions, however, QC inspections may be performed by non-QA personnel. These personnel will be certified by the plant QA Staff supervisor. All TVA personnel who perform QC inspections will be certified by a quality assurance organization. See revised text on page 17.2-13 and 17.2-14.

5. Question:

Discuss the involvement of the Manager of Power and the Assistant Manager of Power in the operational quality assurance program.

Response:

See revised section 17.2.1.1.1 as to Manager of Power responsibilities. See revised text on page 17.2-48. The Assistant Manager of Power involvement in the QA program is only administrative in nature and is described in Section 17.2.1.1.2.

6. Question:

Discuss the significance of the second change indicated on page 17.2-18 of Rev. 4 which states that Nuclear Power is responsible for "reviewing inspection and testing requirements" whereas Rev. 3 stated the P PROD is responsible for "reviewing verification inspection and testing."

Response:

We will reinsert original words. See revised text on page 17.2-19.

7. Question:

Discuss the significance of the third change indicated on page 17.2-18 of Rev. 4 which states that "CSSC modifications shall be received by the PORC" whereas Rev. 3 states that "all modifications shall be reviewed by the PORC." Also, in the last paragraph, discuss the change to "or approved documents" from "equipment manuals, or vendor drawings" which require a DCR or FCR for proposed modifications.

Response:

The QA program only applies to SCCS items (see Section 17.2.2). Therefore, PORC is only required to review modifications relating to CSSC items. Also see revised text on page 17.2-19.

The phrase "equipment manuals or vendor drawings" was replaced with the term "approved documents" for increased accuracy. Some equipment manuals are for information only and are not controlled. Portions of these manuals may not apply to TVA installed equipment and their revision would not require an ECN or FCR. Consequently, the use of "approved documents" is more appropriate.

8. Question:

Discuss the significance of the change on page 17.2-23 of Rev. 4 which states that an affected organization shall "concur with the proposed procedure or instruction" whereas Rev. 3 states it shall "review and evaluate the proposed procedure or instruction and submit in writing their comments and/or concurrence to the originating organization before issuance and approval."

Response:

We believe the revised text is a strengthening of the process and is consistent with the January 30 and March 3, 1980, letters from L. M. Mills to W. P. Haass on the subject of review and concurrence of quality-affecting procedures.

9. Question:

The fourth paragraph on page 17.2-24 of Rev. 4 indicates that "documents are available at the location during performance of the work." Clarify that the documents will be at the location where the activity will be performed prior to commencing the work.

Response:

See revised text on page 17.2-25.

10. Question:

The fifth paragraph on page 17.2-24 of Rev. 4 indicates that NUC PR receives as-built drawings from CONST upon receipt of the operating license. Describe how NUC PR verifies the accuracy of these drawings. Rev. 4 implies that EN DES is not responsible for as-built drawings after the operating license has been received. Clarify whether this is indeed the case. Describe in more detail how as-built drawings are maintained current and the checks and balances on this activity.

Response:

See revised text on pages 17.2-25 and 17.2-26.

Prior to the receipt of the operating license as-built drawings are prepared and maintained by the Division of Construction in accordance with their quality assurance program as described in Chapter 17 of the appropriate SAR. NUC PR depends on the CONST QA program to assure that as-built drawings are correct. NUC PR and not EN DES is responsible for the preparation, approval, and distribution of as-built drawings after receipt of operating license.

11. Question:

Describe the controls which prevent the use of an item which is installed before receipt of associated documentation.

Response:

See revised text on page 17.2-29.

12. Question:

Indicate the involvement of the NUC PR quality assurance personnel in the approval of contractors' quality assurance programs as specified in the fourth paragraph on page 17.2-34.

Response:

See revised text on page 17.2-35.

13. Question:

Discuss the significance of the rewrite of the first paragraph of part 17.2.14.

Response:

See revised text in Section 17.2.14.

14. Question:

Discuss the significance of limiting tests performed per instructions reviewed by the PORC and approved by the plant superintendent to "operational" tests as was done at the top of page 17.2-40.

Response:

See revised text on page 17.2-41.

15. Question:

Discuss the significance of the new and revised exceptions to ANSI N45.2.12 (Draft 3, Rev. 4 - February 1974) given on sheet 5 of Table 17.2-5.

Response:

We will delete the new exceptions to ANSI N45.2.12. See revised Table 17.2-5 (Sheet 5).

16. Question:

Define "active records" as used on sheet 6 of Table 17.2-5.

Response:

See revised Table 17.2-5 (Sheet 6)

17. Question:

Numerous deletions from the operations portion of the NRC approved version (Rev. 3) of the TVA topical report on quality assurance have been made. In total, these deletions appear to weaken the commitments. Please reinstate or justify the deletions quoted below:

Rev. 4 Page

Deletion

1. 17.2-1

"The Manager of Power has overall responsibility for quality assurance during startup and operation of the plant." (If this responsibility is assigned to someone else, indicate to whom by position title.)

Response:

See revised Section 17.2.1.1.1.

2. 17.2-4

The QA Manager develops, coordinates, and maintains the "Operational Quality Assurance Program." (Item k)

Response:

See new Item o in Section 17.2.1.1.4.

3. 17.2-5

The Quality Audit Section is responsible for conducting "preaward surveys."

Response:

This responsibility has been reassigned to NUC PR QA Staff, Quality Control Section. (See page 17.2-12).

4. 17.2-5

"Reviewing supplier and contractor quality assurance programs."

Response:

This responsibility has been reassigned to NUC PR QA Staff, Quality Control Section. However, QA&AS is responsible for conducting audits of vendors and contractors performing activities "onsite" at TVA's nuclear plants. (See page 17.2-5).

5. 17.2-6

Section 4. Training.

Response:

There has been no change in training programs. See pages 17.2-5 (second paragraph) and 17.2-17 (first two paragraphs).

Rev. 4 Page

Deletion

6. 17.2-11 The Supervisor, Quality Assurance Staff's primary responsibility is to assure that the "quality assurance program for operation and maintenance of TVA nuclear plants fulfills the NRC and the Office of Power requirements for quality assurance."

Response:

This sentence was removed in error and will be reinserted. See text on page 17.2-11.

7. 17.2-13 List of responsibilities of the PORC.

Response:

The responsibilities of PORC are delineated in detail in the technical specifications of each plant. The PORC charters for each plant differ slightly and this makes it difficult to come up with a single list of responsibilities. Also, it is difficult to maintain the list current in the various documents. Therefore, we believe the detailed PORC responsibilities should not be listed in the topical. See revised text on page 17.2-13.

8. 17.2-14 The plant quality assurance staff's responsibility to advise the plant superintendent of "failure of plant equipment to meet technical specification requirements or other" nonconforming aspects of operations.

Response:

See revised text on page 17.2-14.

9. 17.2-16 "The requirements of the Office of Power Quality Assurance Program also apply to instruments and devices used in the measurement of the Official personnel radiation dose and to the equipment used to calibrate them." (Top of page 17.2-17 of Rev. 3).

Response:

These instruments and devices used in measurement of official personnel radiation dose do not fall under 10 CFR Appendix B. They are used in measuring occupational exposure and do not have any effect on health and safety of the public.

Rev. 4 Page

Deletion

10. 17.2-16

"This training program shall provide seminars to present TVA's quality assurance program internally and industry-sponsored training courses or schools to train and maintain the proficiency of quality assurance personnel."

Response:

The QA training requirements have not been decreased by the deletion. However, we feel that it is inappropriate to specify particular methods of providing this training in the topical report.

11. 17.2-16

Proficiency is maintained "by retraining, reexamining, and/or recertifying." (Item d)

Response:

We will reinsert original words. See revised text on page 17.2-17.

12. 17.2-18

Reference to part 17.1A.3 in part 17.2.3.3.

Response:

We will revise to original text. See revised text on page 17.2-19.

13. 17.2-22

"Procedures shall be written to provide a uniform method within the Office of Power for preparing, reviewing, changing, and approving procedures and instructions."

Response:

See revised text on page 17.2-23.

14. 17.2-22

The plant superintendent approves, issues, and controls "changes to plant instructions and drawings."

Response:

See revised text on page 17.2-23.

- | <u>Rev. 4 Page</u> | <u>Deletion</u> |
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| 15. 17.2-22 | "The plant quality assurance staff supervisor prepares and implements site quality assurance instructions for the performance of his assigned functions." |

Response:

We will reinsert the original words. See revised text on page 17.2-23.

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| 16. 17.2-24 | The recipient of revised documents shall "discard" obsolete copies. |
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Response:

See revised text on page 17.2-25.

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| 17. 17.2-26 | "Proposals (bids or quotations) by suppliers are reviewed to ensure that no exceptions are taken which would violate safety or quality requirements." |
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Response:

Original words will be reinserted in Section 17.2.7.1.

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| 18. 17.2-27 | "Additionally, the Quality Assurance and Audit Staff may independently conduct inprocess inspections of suppliers of major CSSC items." |
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Response:

The responsibilities for surveillance and audits have been reassigned as follows:

- (a) The NUC PR QA Staff is responsible for conduct of audits, inspections, and surveillance at vendors or suppliers. (See Section 17.2.7);
- (b) The Nuclear Fuel Planning Branch is responsible for surveillance of suppliers of fuel and fuel-related components (see Section 17.2.7); and
- (c) QA&AS is responsible for in-process audits of vendors or contractors who perform activities affecting the CSSC at the nuclear plant site (see page 17.2-5).

- | <u>Rev. 4 Page</u> | <u>Deletion</u> |
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| 19. 17.2-27 | All inspections and audits are conducted "in accordance with accepted standards for this activity." |
| <u>Response:</u>
Table 17.2-5 establishes the detailed standards which apply to this activity and thus, these words are unnecessary. | |
| 20. 17.2-32 | Control of the "calibration" program. |
| <u>Response:</u>
See revised text on page 17.2-33. | |
| 21. 17.2-33 | "Additional monitoring of plant activities is provided by audits of the Office of Power Quality Assurance and Audit Staff on a periodic basis." |
| <u>Response:</u>
The QA&AS audit program is described in considerable detail in Section 17.2.18 and these particular activities are listed in item 1.2 on page 17.2-51. | |
| 22. 17.2-33 | "The <u>Nuclear Fuels Quality Assurance Manual</u> documents the requirements for surveillance inspections at vendor facilities during fuel procurement." |
| <u>Response:</u>
See revised text on page 17.2-28. | |
| 23. 17.2-35 | The plant quality assurance staff " shall review to ensure the incorporation of or reference to the proper requirements and acceptance limits." |
| <u>Response:</u>
See revised text on page 17.2-36. | |

Rev. 4 Page

Deletion

24. 17.2-36 Controlled measuring and test equipment is to be used on CSSC items "or supporting items" of TVA's plants.

Response:

The control system established for measuring and testing equipment in Section 17.2.12 applies to measuring and testing equipment utilized in or related to items on the CSSC list. See revised text on page 17.2-37.

25. 17.2-45 The records control system "meets applicable codes and standards" and includes a records checklist designating the required quality assurance records "(those records sufficient to furnish objective evident of activities affecting quality)."

Response:

Table 17.2-5 establishes the detailed standards which apply to the records control system and these standards define QA records, etc.

26. 17.2-47 The Quality Audit Supervisor is responsible to analyze audit data "for quality trends and effectiveness of quality assurance."

Response:

We will reinsert the original words. See revised text on page 17.2-48.

27. 17.2-48 Audit procedures "require evaluation of work areas, activities, processes, goods, services, and the review of documents and records for quality-related practices, procedures, and instructions to determine the effectiveness of the implementation of the Office of Power Quality Assurance Program and compliance with 10 CFR 50, Appendix B."

Response:

We will reinsert the original words. See revised text on page 17.2-49.

- | <u>Rev. 4 Page</u> | <u>Deletion</u> |
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| 28. 17.2-48 | A designated leader shall be responsible "to assure that unsatisfactory conditions are resolved." |

Response:

We will reinsert the original word. See revised text on page 17.2-49.

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| 29. Table 17.2-5
(Sheet 6) | The TVA operations division would "refer to the construction division for actual work performance." |
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Response:

This deletion was necessary to provide the flexibility for the use of other TVA organizations to perform the modification.

ENCLOSURE

TVA TOPICAL REPORT TR75-1A

REVISION 4