



GENERAL NUCLEAR SYSTEMS, INC.

A CHEM-NUCLEAR COMPANY

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March 4, 1985

Mr. Leland C. Rouse, Chief
Advanced Fuel and Spent Fuel
Licensing Branch
Division of Fuel Cycle and Material Safety
U.S. Nuclear Regulatory Commission (NRC)
Washington, D.C. 20555

Subject: General Nuclear Systems, Inc. (GNSI) Quality Assurance Plan for
Dry Spent Fuel Storage and Transport Cask

- References:
- 1.) U.S. NRC letter dated Nov. 13, 1984 to Gesellschaft für
Nuklear-Service, mbH (GNS) Project M-34 and 71-0510
 - 2.) Appendix 7, Topical Safety Analysis Report for CASTOR cask
V/21, Revision 1 (Project M-37)
 - 3.) Appendix of Topical Safety Analysis Report for CASTOR Cask
1C, Revision 3 (Project M-34)

Gentlemen:

Enclosed for your review and approval are fifty eight (58) copies of the subject GNSI Quality Assurance Plan. Twenty five (25) copies of the GNSI Quality Assurance Plan are for Reference 2), Twenty five (25) copies are for Reference 3) and eight (8) copies for 71-0510 (10 CFR Part 71). GNSI, the applicant and a United States company have consolidated the Quality Assurance Program to be implemented in this Plan.

The GNSI Quality Assurance Plan includes the Revision 2 of GNS Quality Assurance Handbook (QAH) which incorporates the NRC's comments described in Reference 1). The following are the detailed responses of GNS on the comments described in Reference 1):

1. The GNS functional organization chart shown as (Figure 1-1) should identify a specific position of "Company Management" such as plant manager or vice president - operations, etc. (1.5)*

GNS COMPANY IS GOVERNED BY A BOARD OF DIRECTORS. IT IS A COMMON PRACTICE IN THE FEDERAL REPUBLIC OF GERMANY THAT ORGANIZATIONS ARE RUN BY A BOARD OF DIRECTORS. THEREFORE THE "COMPANY MANAGEMENT" OF GNS IS THE BOARD OF DIRECTORS WHICH HAVE THREE(3) MEMBERS.

THE ORGANIZATION CHART, COVER PAGE AND STATEMENT OF AUTHORITY WERE REVISED TO CLARIFY AND DEFINE "COMPANY MANAGEMENT".

2. Describe the qualification requirements for the position of Quality Assurance Manager. (1.9)*

PARAGRAPH 2.5.2 WAS REVISED TO INCORPORATE QUALITY ASSURANCE MANAGER QUALIFICATION REQUIREMENTS.

3. Provide a list of QA procedures, matrixed to 10 CFR Part 50 Appendix B, which indicates that Appendix B provisions are implemented. With respect to those activities "important to safety" not yet initiated a brief description of the proposed implementing procedures and estimates of the date for completion should be identified. (II.8 and V.3)*

THE INTRODUCTION WAS REVISED AND A MATRIX IS ATTACHED TO THE HANDBOOK.

4. It appears that "access" in section 2.1.1.F of the Handbook should be "assess". Please clarify.

SECTION 2.1.1.F IS CORRECTED

5. Expand paragraph 2.5.1 "Indoctrination, Training, and Qualification of Personnel" to add that such training should be completed prior to engaging in activities "important to safety".

PARAGRAPH 2.5.1 IS EXPANDED TO ADD THE STATEMENT.

6. Training records discussed in section 2.5.6 of the Handbook should include test results. Please clarify that this is the case.

PARAGRAPH 2.5.8 WAS REVISED FOR CLARIFICATION

7. Describe measures which assure that materials, parts, and equipment which are standard, commercial (off-the-shelf) or which have been previously approved for a different application are reviewed for suitability prior to selection. (III.10)*

SEE PARAGRAPH 3.3.3 FOR DESCRIPTION OF MEASURES.

8. Clarify that QA review of purchase requisitions verifies that quality requirements are correctly stated, inspectable, and controllable and that there are adequate acceptance and rejection criteria. (IV.2)*

SEE PARAGRAPH 4.3.3 FOR CLARIFICATION

9. The first sentence of Handbook Section 6.1.1 uses the words, "design and production". It appears that "construction" (as defined in the glossary) would be a better term. Please clarify.

SECTION 6.1.1 WAS REVISED TO READ "CONSTRUCTION"

10. Describe measures which assure that approved changes are included in documents before implementing the changes (VI.4)* and that documents are available where work is to be done before the work is initiated. (VI.6)*

SEE PARAGRAPH 6.3.2 FOR DESCRIPTION OF MEASURES.

11. Section 7.1.1 and other sections of the Handbook refer to the Quality Assurance Program of the GNS Subcontractor. These sections indicate that this program will be or has been evaluated and accepted by GNS. Identify the basis of the evaluation and the GNS organization(s) responsible for the evaluation. Please clarify that this evaluation is documented. (VII and others)*

SUB SECTION 4.2 WAS REVISED TO DESCRIBE EVALUATION AND APPROVAL OF GNS SUBCONTRACTORS.

THE FOLLOWING PARAGRAPHS WERE REVISED FOR CLARIFICATION

7.1.1
8.1.1
9.1.3
12.1.1
13.1.1
14.1.1

12. Describe measures which assure that hardware identification requirements are determined during the generation of specifications and design drawings. (VIII.2)*

THE DEFINITION OF "IDENTIFICATION" WAS REVISED FOR CLARIFICATION

13. Describe measures which assure that nonconformance reports and audit data are periodically analyzed to show quality trends and that the results are reported to GNS management for appropriate action. (XV.7 and XVIII.6)*

SEE PARAGRAPHS 15.2.4 AND 18.4.4 FOR DESCRIPTION OF MEASURES.

14. Expand paragraph 18.2.1 to add a provision for "Management Audits" designated to assess overall effectiveness of the implementation of the in-house QA program, by top GNS management.

SUB SECTION 18.5 WAS REVISED FOR CLARIFICATION

15. Describe requirements for audit team membership including lead auditor. Also describe responsibilities of audit team members and lead auditor with respect to evaluation, issuance, and follow-up of audit reports.

SEE PARAGRAPH 18.2.3 FOR AUDIT TEAM REQUIREMENTS INCLUDING LEAD AUDITOR.

16. Describe measures which assure that inspection and test records contain the following were applicable:

- a. A description of the type of observation.
- b. The data and results of the inspection or test.
- c. Information related to conditions adverse to quality.
- d. Inspector or data recorder identification.
- e. Evidence as to the acceptability of the results.

SEE SECTION 11.3.4 FOR DESCRIPTION OF MEASURES.

17. The definition of rework in the Glossary of the Handbook should reflect the fact that a reworked item should meet the original design requirements. Please clarify.

DEFINITION OF "REWORK" WAS REVISED FOR CLARIFICATION. SEE ITEM 23 OF GLOSSARY.

18. Describe measures to be taken by GNS-United States to conduct audits of GNS-Germany to ensure themselves compliance with the NRC approved OA program.

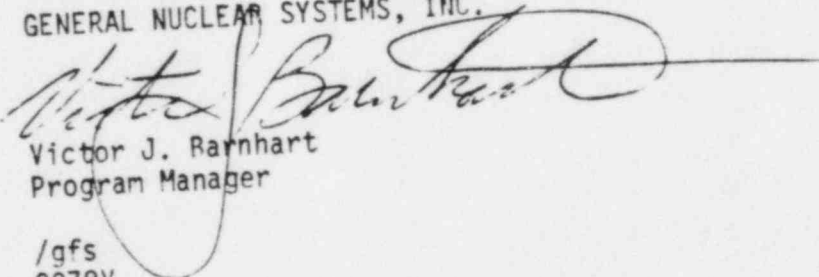
THE GNSI QA PLAN DESCRIBES THE QUALITY ASSURANCE MEASURES AND RESPONSIBILITIES OF GNSI. GNS SHALL BE RESPONSIBLE FOR THEIR COMPLIANCE TO THE QAH AND APPLICABLE FEDERAL REGULATIONS. THE GERMAN COMPETENT AUTHORITY, BUNDESANSTALT FÜR MATERIALPRÜFUNG (BAM), SHALL BE RESPONSIBLE FOR COMPLIANCE ASSURANCE MEASURES IN FEDERAL REPUBLIC OF GERMANY.

ALSO, THE PURCHASER (UTILITIES, USER, ETC.) SHALL BE RESPONSIBLE TO CONDUCT AUDITS AND VERIFY GNS IMPLEMENTATION OF THEIR QAH IN FEDERAL REPUBLIC OF GERMANY.

We hope that the above documents will satisfy the regulatory requirements. If you have any questions or need more information, please do not hesitate to contact the undersigned.

Very truly yours,

GENERAL NUCLEAR SYSTEMS, INC.



Victor J. Barnhart
Program Manager

/gfs
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cc: Charles E. MacDonald, Chief
Transportation Certification Branch

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