



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

JUN 05 1979

FCTR:RHO  
71-6198

Nuclear Fuel Services, Inc.  
ATTN: Mr. James R. Clark  
6000 Executive Boulevard, Suite 600  
Rockville, MD 20852

Gentlemen:

This refers to your application dated October 9, 1978 requesting approval of your Quality Assurance (QA) program as meeting the QA program requirements of 10 CFR §71.51.

In connection with our review, we need the information identified in the enclosure to this letter. Please submit seven copies of your response to the enclosed request for additional information within 30 days following receipt of this letter.

If you have any questions regarding this request, please feel free to contact Mr. Jim Conway at (301) 492-7741.

Sincerely,

*RH Odgaard*

for Charles E. MacDonald, Chief  
Transportation Branch  
Division of Fuel Cycle and  
Material Safety, NMSS

Enclosure:  
Request for Additional  
Information

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NUCLEAR FUEL SERVICES (71-0198)

Request for Additional Information

1. Describe the qualification requirements for the position of Quality Assurance and Licensing Manager.  
(1.1)
2. Provide a statement that management (i.e., above or outside the QA organization) regularly assesses the scope, status, implementation, and effectiveness of the QA program to assure that the program is adequate and complies with 10 CFR Part 71, Appendix E criteria.  
(1.2)
3. Give a brief summary of NFS's corporate QA policies, goals, and objectives.  
(1.2)
4. Provide a statement that provisions are established for communicating to all responsible organizations and individuals that quality policies, QA manuals, and procedures are mandatory requirements.  
(1.2)
5. Provide a matrix of the QA procedures cross referenced to each criterion of Appendix E to 10 CFR Part 71.  
(1.2)
6. Identify the safety-related structures, systems, and components controlled by the QA program.  
(1.2)
7. Describe how disputes involving quality, arising from a difference of opinion between QA/QC personnel and other department (engineering, procurement, manufacturing, etc.) personnel, are resolved.  
(1.2)
8. Provide a statement that measures are established to correctly translate the applicable regulatory requirements and design bases into specifications, drawings, written procedures, and instructions.  
(1.3)
9. Provide a statement that quality standards are specified in the design documents, and deviations and changes from these quality standards are controlled.  
(1.3)
10. Provide a statement that suitable design controls are applied to such activities as stress, thermal, hydraulic, radiation, and accident analyses; compatibility of materials; and accessibility for inservice inspection, maintenance, and repair.  
(1.3)
11. Provide a statement that designs are reviewed to assure that (1) design characteristics can be controlled, inspected, and tested and (2) inspection and test criteria are identified.  
(1.3)
12. Provide a statement that proper selection and accomplishment of design verification or checking processes such as by design reviews, alternate calculations, or qualification testing are performed. When a test program is used to verify the adequacy of a design, a qualification test of a prototype unit under adverse design conditions shall be used.  
(1.3)

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13. (1.3) Provide a statement that individuals or groups responsible for design verification are other than the original designer and the designer's immediate supervisor.
14. (1.3) Provide a statement that errors and deficiencies in the design, including the design process, that could adversely affect safety-related structures, systems, and components are documented and corrective action is taken to preclude repetition.
15. (1.3) Provide a statement 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.
16. (1.3) Identify the positions or groups responsible for design reviews and other design verification activities.
17. (1.4) Provide a statement that the review and approval of procurement documents are documented prior to release and are available for verification.
18. (1.5) Provide a statement that the QA organization reviews and concurs with inspection plans; test, calibration, and special process procedures; drawings and specifications; and changes thereto or acceptable alternatives are described.
19. (1.5) Provide a statement that a master list or equivalent is established to identify the current revision number of instructions, procedures, specifications, drawings, and procurement documents. This list is updated and distributed to predetermined, responsible personnel to preclude use of superseded documents.
20. (1.6) Identify the documents that are controlled under this subsection. As a minimum this should include:
  - a. Design specifications.
  - b. Design, manufacturing, construction, and installation drawings.
  - c. Procurement documents.
  - d. QA manuals.
  - e. Manufacturing, inspection, and testing instructions.
  - f. Test procedures.
  - g. Design change requests.
  - h. Nonconformance reports.
21. (1.7) Provide a statement that the evaluation of suppliers is based on one or more of the following:
  - a. The supplier's capability to comply with the elements of 10 CFR Part 71, Appendix E that are applicable to the type of material, equipment, or service being procured.
  - b. A review of previous records and performance of suppliers who have provided similar articles of the type being procured.
  - c. A survey of the supplier's facilities and QA program to determine his capability to supply a product which meets the design, manufacturing, and quality requirements.

478  
309

22. (1.7) Provide a statement that the results of supplier evaluations are documented and filed.
23. (1.7) Provide a statement that surveillance of suppliers during fabrication, inspection, testing, and shipment of materials, equipment, and components is planned and performed in accordance with written procedures to assure conformance to the purchase order requirements. These procedures provide for:
  - a. Instructions that specify the characteristics or processes to be witnessed, inspected or verified, and accepted; the method of surveillance and the extent of documentation required; and those responsible for implementing these instructions.
  - b. Audits and surveillance which assure that the supplier complies with the quality requirements. Surveillance is performed on those items where verification of procurement requirements cannot be determined upon receipt.
24. (1.7) Provide a statement that the effectiveness of the control of quality by suppliers is assessed by NFS at intervals consistent with the importance, complexity, and quantity of the item.
25. (1.8) Provide a statement that the location and the method of identification do not affect the fit, function, or quality of the item being identified.
26. (1.10) Provide a statement that inspectors are qualified in accordance with applicable codes, standards, and company training programs; and their qualifications and certifications are kept current.
27. (1.10) Provide a statement that provisions are established that identify mandatory inspection hold points for witness by an inspector.
28. (1.11) Provide a statement that written test procedures incorporate or reference:
  - a. Instructions for performing the test.
  - b. Mandatory inspection hold points for witness by owner, contractor, or inspector.
  - c. Acceptance and rejection criteria.
  - d. Methods of documenting or recording test data and results.
29. (1.12) Provide a statement that measuring and test equipment is traceable to the calibration test data.
30. (1.12) Provide a statement that measuring and test equipment is labeled or tagged to indicate date of the next calibration.
31. (1.12) Provide a statement that measures are taken and documented to determine the validity of previous inspections performed when measuring and test equipment is found to be out of calibration.
32. (1.12) Provide a statement that calibrating standards have an uncertainty (error) requirement of no more than 1/4th of the tolerance of the equipment being calibrated. A greater uncertainty may be acceptable when limited by the "state-of-the-art."

478  
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33. (1.13) Provide a statement that special handling, preservation, storage, cleaning, packaging, and shipping requirements are established and accomplished by qualified individuals in accordance with predetermined work and inspection instructions.
34. (1.13) Provide a statement that procedures are prepared which control the cleaning, handling, storage, packaging, shipping, and preservation of materials, components, and systems in accordance with design and specification requirements to preclude damage, loss, or deterioration by environmental conditions such as temperature or humidity.
35. (1.14) Provide a statement that bypassing of required inspections, tests, and other critical operations is procedurally controlled under the cognizance of the QA organization.
36. (1.15) Provide a statement that documentation identifies the nonconforming item; describes the nonconformance, the disposition of the nonconformance, and the inspection requirements; and includes signature approval of the disposition.
37. (1.15) Identify those individuals or groups delegated the responsibility and authority for the disposition and approval of nonconforming items.
38. (1.15) Provide a statement that nonconformance reports dispositioned "accept as is" or "repair" are made part of the inspection records and forwarded with the hardware to NFS for review and assessment.
39. (1.15) Provide a statement that nonconformance reports are periodically analyzed to show quality trends, and the results are reported to management for review and assessment.
40. (1.16) Provide a statement that follow-up reviews are conducted to verify proper implementation of corrective actions and to close out the corrective action documentation.
41. (1.17) Provide a statement that inspection and test records contain the following where applicable:
- a. A description of the type of observation.
  - b. Evidence of completing and verifying a manufacturing, inspection, or test operation.
  - c. The date and results of the inspection or test.
  - d. Information related to conditions adverse to quality.
  - e. Inspector or data recorder identification.
  - f. Evidence as to the acceptability of the results.
42. (1.17) Provide a statement that record storage facilities are constructed, located, and secured to prevent destruction of the records by fire, flooding, theft, and deterioration by environmental conditions such as temperature or humidity.

43. Provide a statement that audits are performed in accordance with preestablished (1.18) written procedures or check lists and conducted by trained personnel not having direct responsibilities in the areas being audited.
44. Provide a statement that audit results are documented and then reviewed with (1.18) management having responsibility in the area audited.

478

~~467~~ 312