

ORGANIZATION: NUCLEAR QUALIFICATION SERVICES
ASSONET, MASSACHUSETTS

REPORT NO.: 99900926/83-01	INSPECTION DATE(S) 7/19-20/83	INSPECTION ON-SITE HOURS: 30
CORRESPONDENCE ADDRESS: Nuclear Qualification Services ATTN: Mr. M. W. Randall President Myricks Airport 168 Padelford Street Assonet, Massachusetts 02702 ORGANIZATIONAL CONTACT: Mr. M. W. Randall, President TELEPHONE NUMBER: (617) 822-2457		
PRINCIPAL PRODUCT: Seismic analysis. NUCLEAR INDUSTRY ACTIVITY: Nuclear Qualification Services (NQS) is a seismic analysis organization that performs seismic qualification of safety-related equipment for nuclear power generating stations.		
ASSIGNED INSPECTOR: <u>G. T. Hubbard</u> G. T. Hubbard, Equipment Qualification Section (EQS)		<u>9-26-83</u> Date
OTHER INSPECTOR(S): H. S. Phillips, EQS J. J. Benson, Sandia National Laboratories		
APPROVED BY: <u>H. S. Phillips</u> H. S. Phillips, Chief, EQS		<u>9-23-83</u> Date
INSPECTION BASES AND SCOPE: A. <u>BASES</u> : 10 CFR Part 50, Appendix B and 10 CFR Part 21. B. <u>SCOPE</u> : This inspection consisted of: (1) a review of the 18 criteria of 10 CFR Part 50, Appendix B described in the NQS Quality Assurance Manual (QAM); (2) verification that the applicable criteria of the quality assurance (QA) program had been implemented in compliance with their QAM; and (3) 10 CFR Part 21 inspection.		
PLANT SITE APPLICABILITY: Not identified.		
DESIGNATED ORIGINAL Certified By: <u>Phelanne Clark</u>		

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A. VIOLATIONS:

1. Contrary to Section 21.21(a) of 10 CFR Part 21, NQS had not developed or adopted the required procedures for projects 1086, 1134, and 1027.
2. Contrary to Section 21.6 of 10 CFR Part 21, NQS had failed to post the required documents.
3. Contrary to Section 21.31 of 10 CFR Part 21, NQS did not impose the requirements of 10 CFR Part 21 on subcontract purchase order (PO) 1027-1, dated May 6, 1983.

B. NONCONFORMANCES:

1. Contrary to Criterion II of Appendix B to 10 CFR Part 50, NQS's documented QA program, as described in the QAM, neither addresses all criteria nor describes how some of the criteria will be implemented. Examples are as follows:
 - a. The QAM does not describe NQS's organizational structure and the duties associated with the positions.
 - b. The QAM does not describe the training or qualification requirements for personnel performing activities affecting quality.
 - c. The QAM does not describe how design and QA requirements, contained in incoming purchase orders (POs) and their changes are incorporated in analytical efforts and final reports.
 - d. The QAM does not give a detailed description of how POs and their changes are issued and controlled to assure that appropriate QA and technical specification requirements are included in them.
 - e. The QAM does not describe how obsolete documents are controlled to prevent their use.
 - f. The QAM does not give a detailed description identifying who is responsible for vendor selection and how vendor selection is accomplished.
 - g. The QAM does not describe how vendor efforts are controlled to assure vendor work is in compliance with POs.

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- h. The QAM does not describe how deficiencies in analytical efforts are identified and controlled.
- i. The QAM does not describe how corrective action is controlled.
- j. The QAM does not require the use of checklists for performing internal audits.

- 2. Contrary to Criterion V of Appendix B to 10 CFR Part 50 and paragraph 4.1 of the QAM, dated May 16, 1983, NQS failed to stamp all the required numbers on drawings received and filed in project file No. 1038.
- 3. Contrary to Criterion V of Appendix B to 10 CFR Part 50 and paragraph 4.2 of the QAM, dated May 16, 1983, there was no documented objective evidence that technical report (TR) No. 1063, Revision 2, was subjected to the same review as the original report.
- 4. Contrary to Criterion V of Appendix B to 10 CFR Part 50 and paragraph 5.0 of the QAM, dated May 16, 1983, critical data necessary for seismic analysis on project No. 1086 was not retrievable from NQS files during this NRC inspection.

C. UNRESOLVED ITEMS:

None

D. OTHER FINDINGS OR COMMENTS:

- 1. Quality Assurance Manual: The QA program is described in the QAM, which established a QA program in accordance with the applicable 18 criteria of 10 CFR Part 50, Appendix B. The NRC inspection team's review of the QA program consisted of an examination and evaluation of the QAM. The review determined that the following criteria were not applicable to the NQS operation: (1) Identification of Materials, Parts, and Components; (2) Control of Special Processes; (3) Inspection; (4) Test Control; (5) Control of Measuring and Test Equipment; (6) Handling, Storage, and Shipping; and (7) Inspection, Test, and Operating Status. The NRC inspection team identified the nonconformance described in paragraph B.1 during the QAM review.
- 2. Supplemental Procedures Review: The NRC inspector's review of the QA program determined that NQS did not have procedures that supplemented any QAM procedures and that such procedures were not necessary for their operations.

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3. QA Program Implementation Review: Since NQS did have QAM implementing procedures for all the applicable criteria of 10 CFR Part 50, Appendix B, the NRC inspectors only evaluated QA program implementation for the areas that NQS had established QAM implementing procedures. The NRC inspectors evaluated these areas by examining representative records and conducting interviews with the president of NQS.

Findings concerning the implementation of the evaluated criteria of 10 CFR Part 50, Appendix B, as described in the QAM, are as follows:

- a. Organization: The NRC inspector did not evaluate the implementation of this criterion since the QAM did not describe the organizational structure and associated position duties (see nonconformance described in paragraph B.1). Discussions with the president did identify that NQS is a small organization with five to six employees. The president is responsible for the QA program and essentially serves as the QA manager. Implementation of this criterion will be evaluated during a future NRC inspection.
- b. QA Program: The NRC inspector evaluated this criterion to the extent possible by verifying that a QA program was implemented by the QAM and by verifying the implementation of the criteria of 10 CFR Part 50, Appendix B that NQS had implemented. The total implementation of this criterion will be evaluated during a future NRC inspection after NQS has developed and implemented procedures for the applicable criteria of Appendix B. The NRC inspector was not able to evaluate personnel qualification requirements, since none had been described in the QAM (see nonconformance described in paragraph B.1).
- c. Design Control: The NRC inspector did not evaluate this criterion since the QAM did not implement adequate procedures detailing how design and QA requirements from incoming POs and their changes are incorporated into analytical efforts and final reports (see nonconformance described in paragraph B.1). Implementation of this criterion will be evaluated during a future NRC inspection.

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<p>d. <u>Procurement Document Control</u>: The NRC inspector did not evaluate this criterion since the QAM did not implement procedures describing how POs and their changes are issued and controlled so that appropriate QA and technical specification requirements are included in them (see nonconformance described in paragraph B.1). Implementation of this criterion will be evaluated during a future NRC inspection.</p> <p>e. <u>Instructions, Procedures, and Drawings</u>: The NRC inspector's evaluation determined that this criterion was applicable to the NQS operations to the extent that the issuance of the QAM and its revisions are controlled. The inspector's review determined that the QAM and its five revisions had been approved by the president, as required by the QAM.</p> <p>No nonconformances were identified.</p> <p>f. <u>Document Control</u>: The NRC inspector reviewed three test reports, one project file including customer drawings, and two customer specifications to verify compliance with QAM procedures. The two nonconformances described in paragraphs B.2 and B.3 were identified during the evaluation of this criterion.</p> <p>g. <u>Control of Purchased Material, Equipment, and Services</u>: The NRC inspector did not evaluate the implementation of this criterion since the QAM did not implement procedures in the following areas: (1) identification of who is responsible for vendor selection and how vendor selection is accomplished; and (2) description of how vendor efforts are controlled to assure that vendor work is in compliance with the PO requirements (see nonconformances described in paragraph B.1). Implementation of this criterion will be evaluated during a future NRC inspection.</p> <p>h. <u>Nonconforming Materials, Parts, or Components</u>: The NRC inspector did not evaluate the implementation of this criterion since the QAM did not implement procedures describing how deficiencies in analytical efforts are identified and controlled (see nonconformance described in paragraph B.1). Implementation of this criterion will be evaluated during a future NRC inspection.</p>			

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<p>i. <u>Corrective Action</u>: The NRC inspector did not evaluate the implementation of this criterion since the QAM did not implement procedures describing how corrective action is controlled (see nonconformance described in paragraph B.1). Implementation of this criterion will be evaluated during a future NRC inspection.</p> <p>j. <u>Quality Assurance Records</u>: The NRC inspector evaluated the implementation of QAM procedures for this criterion by review of four project files. One nonconformance (described in paragraph B.4) was identified during the evaluation of this criteria.</p> <p>k. <u>Audits</u>: The NRC inspector verified the implementation of QAM audit procedures by evaluation of two vendor audits and the audit log sheet. Evaluation of internal audit checklists was not performed since internal audit checklists were not required by QAM procedures (see nonconformance described in paragraph B.1). Implementation of internal audit checklists will be evaluated during a future NRC inspection.</p> <p>4. <u>10 CFR Part 21 Implementation</u>: The NRC inspector determined that NQS had not: (1) adopted 10 CFR part 21 procedures; (2) posted the required documents; or (3) included the 10 CFR Part 21 requirement in a subcontract or PO (see violations described in paragraphs A.1, A.2, and A.3).</p>			

PERSONS CONTACTED

Company Nuclear Qualification Services

Dates July 19, 1983

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Inspector

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✓ Pre-Inspection Conference

Post-Inspection Conference

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Inspector G. Hubbard & J. Benson

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NAME(Please Print)

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ORGANIZATION(Please Print)

M. W. Randall

President

Nuclear Qualification Services

DOCUMENTS EXAMINED

1	2	TITLE/SUBJECT	3	4
1	5	Incoming P.O. # SC-SQ-5875-547 Q, Project 01102	6-14-1983	
2	5	Incoming P.O. # SC-SQ-8328-1, Project 01086	10-22-82	
3	8	Technical Report 1086	4-30-83	
4	8	Technical Report 1134	5-23-83	
5	5	Incoming P.O. # K-60658, Project 01134	3-31-83	
6	7	Letter from Vendor on QA program certification, QA File	11-8-82	
7	8	Vendor Audit Dated	5-19-83	
8	8	Vendor Audit	1-25-82	
9	4	Quality Assurance Manual	5-16-83	Rev 4
10	8	Technical Report 1063	11-27-82	Rev 2
11	5	Incoming P.O. # P16713, Project 1027	9-28-82	
12	8	Purchase Order Change Order 1, Project 1027	12-22-82	
13	8	Purchase Order Change Order 2, Project 1027	4-7-83	
14	5	Outgoing Subcontractor P.O. 1027-1	5-6-83	
15	8	Audit Log Sheet	—	

Document Types:

- | | |
|------------------|---------------------------------|
| 1. Drawing | 5. Purchase Order |
| 2. Specification | 6. Internal Memo |
| 3. Procedure | 7. Letter |
| 4. QA Manual | 8. Other (Specify-if necessary) |

Columns:

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|-----------------------------|
| 1. Sequential Item Number |
| 2. Type of Document |
| 3. Date of Document |
| 4. Revision (If applicable) |

