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June 5, 1981
Project No. 0037-00

Sargent & Lundy Response to
NRC Inspection Report
Number 99900507/81-02

Mr. Karl V. Seyfrit
Director, Region IV
U.S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76011

Dear Mr. Seyfrit:

This letter is in response to the findings identified in your inspection report no. 99900507/81-02 received in our office with your letter dated May 11, 1981.

In your letter you indicated you were particularly concerned about the conditions which necessitated the issuance of Item B in the enclosed Notice of Nonconformance. Item B indicates the S&L internal audit system is deficient in a number of areas.

Sargent & Lundy management is committed to the establishment and maintenance of an effective audit system. The present Sargent & Lundy audit system was established in February of 1974 (Prior to that time a less formal system was in place.). During the intervening years, the audit system was subjected to scores of client audits and at least a dozen NRC inspections. These audits and inspections, plus our own periodic reviews, brought the system into very close conformance with the Sargent & Lundy QA Program requirements. The findings resulting from the subject NRC inspection are, therefore, of great concern to us. We have investigated each nonconformance carefully to determine why the effectivity of our audit system should be questioned. The results of our investigations indicate the need for improvement in:

1. timeliness of audits and
2. addressing the generic aspects of identified nonconformances across department and project lines.

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We believe that the corrective and preventative actions described below will provide the necessary improvement in the system.

Your inspection report findings of reported nonconformances and Sargent & Lundy responses are as follows:

1. NRC Nonconformance A

"Criteria III, XV, and XVI of 10 CFR Part 50, Appendix B, require the control and prompt identification and correction of items deviating from, or not conforming to, design criteria. Revision 5 of the Sargent & Lundy (S&L), QA Program Topical Report (SL-TR-1A) states in Section 16.00, '. . . procedures require any person who detects an apparent nonconformance to notify the Head, Quality Assurance Division by memorandum . . . if the Head, Quality Assurance Division determines that a nonconformance does not exist, he so notifies the initiator. If a nonconformance does exist, he notifies the Quality Assurance Division Auditing Section to initiate a corrective action report. Nonconformances may be detected during audits, the review process, or by other means.'

"Contrary to the above, the applicable Electrical Project Engineering Division procedures do not require notification of the Head, QA Division when an apparent nonconformance is identified. During the design review process, cables on the Zimmer Project were identified as apparently nonconforming in that they exceeded the design heat load criteria; however, the Head, Quality Assurance was not notified. Consequently, a prompt determination of nonconformance was not made, a CAR was not initiated, neither was the item effectively controlled or promptly corrected.

"This programmatic nonconformance appears to be generic to other projects in the Electrical Division and potentially generic to other engineering divisions."

Response

The apparent nonconformance of the two cables on the Zimmer Project was based on the fact that there was no formal procedure to control the disposition of the matter. The final data confirmed the engineer's original judgment that the conservative ampere loadings used in the original design were sufficient to preclude an actual overload. Thus, there was a procedural nonconformance, but not a design error.

a) Description of action to correct the nonconformance and scheduled or actual completion date

To correct this nonconformance, a new Quality Assurance Procedure, GQ-16.03, Revision 0, has been written. The procedure, dated June 1, 1981, requires each engineering department to establish a departmental procedure to control the documentation and correction of errors and deficiencies found in Sargent & Lundy design documents which have been approved for

fabrication or construction and to those design documents used as input for documents approved for fabrication or construction. The department procedures will include the requirement that possible nonconformances be reported to the Head, Quality Assurance Division in accordance with Quality Assurance Procedure GQ-16.01. The department procedures will be in place by June 30, 1981.

b) Description of action to prevent recurrence of nonconformance and scheduled or actual completion date

Implementation of the new departmental procedures will generically prevent recurrence of the nonconformance within the engineering departments. To assure effective implementation, training will be given in accordance with the department standards to all appropriate personnel within each engineering department. This training will be completed by August 15, 1981.

Auditing for these requirements will be incorporated into the next quarterly revision (scheduled to be issued July 1, 1981) of the audit schedule.

2. Nonconformance B

"Criteria XVIII of 10 CFR Part 50, Appendix B, requires the establishment of a comprehensive audit system to determine the effectiveness of the QA program. The S&L QA topical report, SL-TR-1A, describes the audit system in Section 18.00, expanding the description further by committing to the requirements of ANSI N45.2.12 in Section 00.00. Among the audit system requirements in the endorsed ANSI standard are:

Scheduling - Auditing shall be initiated as early as practicable in the life of an activity to assure timely implementation of QA requirements and the effectiveness of the implementation. Regularly scheduled audits are to be supplemented when (1) significant changes are made in functional areas such as reorganization, procedure development or revision, or changes in scope of work; (2) it is suspected that quality is in jeopardy due to identified nonconformances.

Performance - Objective evidence shall be examined to assure compliance with QA program requirements. Audit sample size shall be that which is necessary to assure effective QA program implementation. When nonconformances are identified, the audited organization shall determine the cause and effect of the nonconformance and the extent of corrective action required, and then initiate actions appropriate to prevent recurrence.

"Contrary to the above, the S&L internal audit system is deficient in a number of areas, resulting in a reduction in its comprehensiveness and effectiveness. This is evidenced by the number and significance of nonconformances being identified by others, such as NRC and licensee audits and inspections and repeated failure to take effective generic corrective and preventive actions regarding identified nonconformances. Specific examples are identified in paragraphs E. and I. of the Details Section."

Response

a) Description of action to correct the nonconformance and scheduled or actual completion date

In order to correct the deficient areas you feel exist in the S&L internal audit system, Quality Assurance Procedure GQ-18.01, Revision 9, will be revised and issued by July 31, 1981 for control and guidance in the determination of the need for supplemental project or generic audits and the scheduling for such audits. Specifically, regularly scheduled audits will be supplemented, where necessary, by audits for one or more of the following conditions:

(1) When significant changes are made in functional areas of the Quality Assurance Program such as significant reorganization or procedure revisions.

(2) When it is suspected that the quality of the item is in jeopardy due to nonconformance(s).

(3) When verification of corrective action implementation is necessary.

(4) When a systematic independent assessment of the quality assurance/program or procedures is considered necessary.

Also, procedures will be written to:

(1) Require the review of identified nonconformances for their effect on other projects or possible trends.

(2) Provide guidance to auditors relative to sample sizing both in the determination of original sampling and extended sampling if required by the results of initial samples.

These procedures will be issued by July 31, 1981.

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b) Description of action to prevent recurrence of nonconformance and scheduled or actual completion date

Recurrence of this nonconformance should be prevented by the implementation of the new and revised procedures discussed in part a) of this response. Training will be given by August 15, 1981 to all QA Auditors on these revised requirements. The specific findings of this inspection report will also be discussed during the training sessions for the QA Auditors.

It is our understanding that our response to your inspection report should only address the two cited nonconformances. The problems identified in your inspection report as occurring on the Zimmer Project will be addressed in our Client's response to NRC Region III.

If there are any questions regarding our responses, please do not hesitate to contact me.

Yours very truly,

J. E. McFarland
Head, Quality Assurance Division

JEM/HST:dg
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