

POOR ORIGINAL

SARGENT & LUNDY
ENGINEERS
55 EAST MONROE STREET
CHICAGO, ILLINOIS 60603
TELEPHONE 312-269-2000

September 29, 1980
Project No. 0037-00

Sargent & Lundy Topical Report
SL-TR-1A, Revision 5
Quality Assurance Program

Notification of Proposed Changes

Mr. W. P. Haass
Chief, Quality Assurance Branch
Division of Project Management
U. S. Nuclear Regulatory Commission
7920 Norfolk Avenue
Bethesda, MD 20014

Dear Mr. Haass:

Submitted herewith for your review and acceptance are four copies of Draft 7 of proposed Revision 6 of S&L Topical Report, SL-TR-1A. The number of copies and format of the submittal are as requested by your Mr. J. Spraul in a recent telephone conversation with Mr. H. S. Taylor of S&L.

Attached to this letter is a detailed summary of the proposed changes. Major changes include the following:

1. Areas have been changed to be in compliance with the criteria contained in Revision 1, dated February, 1979, of the Standard Review Plan, NUREG-75/087, Section 17.1.
2. A description of quality related activities of the Construction Management Division has been added.
3. A description of the S&L Standards and Procedures System used to control quality related activities has been added.
4. A description of a new system of defining design documents into two categories for the purpose of design verification has been added.

COPY

8010030423

C

POOR ORIGINAL

SARGENT & LINDY
ENGINEERS
CHICAGO

Mr. W. P. Haass
Chief, Quality Assurance Branch

September 29, 1980
Page Two

All changes are identified by a vertical black line in the left hand margin adjacent to the revised text.

Your earliest attention to this request for review and acceptance of the proposed revision will be greatly appreciated. If any additional information is required, you may contact either myself, telephone number (312) 269-6370, or Mr. H. S. Taylor, telephone number (312) 269-6371.

Yours very truly,

J. E. McFARLAND

J. E. McFarland
Head, Quality Assurance Division

JEM:bg
In duplicate
Enclosures
Copies:

J. Spraul	(1/1)
R. W. Patterson	(1/1)
L. E. Ackmann	(1/1)
W. A. Chittenden	(1/1)
R. N. Bergstrom	(1/1)
W. G. Hegener	(1/1)
D. C. McClintock	(1/1)
J. M. McLaughlin	(1/1)

COPY

Summary of Proposed Changes for Revision 6, Draft 7,
of the Topical Report,

SL-TR-1A

1. Section 00.00, page 00-2, line 06 (Section 00.00, page 00-2, line 47)* - The verb "shall be" was changed to "is." Editorial change.
2. Section 00.00, page 00-2, lines 15 and 16 (Section 00.00, page 00-2, lines 58 and 59) - The word "prior" preceding the word "commitment" was deleted and the acronym PSAR was generalized to SAR.
3. Section 00.00, page 00-2, lines 18 through 33; page 00-3, lines 01 through 14; page 00-4, lines 01 through 14 and 20 through 24 (Section 00.00, page 00-2, lines 60 through 63; page 00-3, lines 86 through 88) - Areas revised to state S&L's commitment to the applicable provisions of the regulatory guides listed in Part V, Section 17.1 of NUREG-75/087, "Standard Review Plan."
4. Section 00.00, page 00-4, lines 23 and 25 (Section 00.00, page 00-4, lines 97 and 100) - The verb "shall be" was changed to "is" and "are" respectively.
5. Section 01.01, page 01-1, line 05 (Section 01.01, page 01-1, line 04) - The term "safety-related activities" was changed to "quality related activities."
6. Section 01.01, page 01-1, line 30 (Section 01.01, page 01-3, lines 42 through 44) - The following sentence was deleted: "The Manager, Technical Services Department exercises administrative control over the Quality Control Division and support services divisions." The sentence was deleted since the organizational structure of the company is already shown in Figure 01-01.1, S&L Organization Chart.
7. Section 01.01, page 01-3, lines 01 through 05 (Section 01.01, page 01-3, lines 50 through 55) - Last two sentences of paragraph were rewritten and combined for clarity. Editorial change.

Note:

- * The location of each proposed change is first identified for Revision 6, Draft 7 of the Topical Report. The information in parenthesis is the location of the proposed change in Revision 5.

8. Section 01.01, page 01-3, line 17 (Section 01.01, page 01-5, lines 70 and 71) - The following sentence was deleted:
"Project personnel have overall responsibility for project performance." Responsibility for project performance with respect to the QA Program is assigned in the previous sentence.
9. Section 01.01, page 01-3, line 20 (Section 01.01, page 01-5, lines 75 and 76) - The words "and industry practices" were deleted from the end of the sentence since the item is not a definable entity such as a code or standard.
10. Section 01.01, page 01-3, lines 24 through 30; page 9, lines 01 and 02 (Section 01.01, page 01-5, lines 81 through 89) - Paragraph was rewritten to delete Figure 01.01-3, "Typical QA/QC Lines of Communication," and to further describe in writing what this Figure represented.
11. Section 01.01, page 01-5, lines 08 and 09 (Section 01.01, page 01-7, lines 99 and 100) - The words "providing programmatic policy and directions on quality assurance" have been added to the sentence to further define responsibilities of the Head, Quality Assurance Division.
12. Section 01.02, page 01-5, lines 30 and 31 (Section 01.02, pages 07-1 and 01-9, lines 128 through 130) - The second sentence of the paragraph was revised to add procurement and field activities.
13. Section 01.02, page 01-7, lines 17 through 20 (Section 01.02, page 01-9, lines 149 and 155) - Item d. was revised to require any division's procedures controlling quality control activities to be reviewed and approved by the Head, Quality Assurance Division as opposed to just procedures from the Quality Control Division. Item e. was revised to delete the approval of project instructions. Project instructions are reviewed and signed by the Quality Assurance Coordinator assigned to the project by the Head, Quality Assurance Division. For this reason, the approval signature of the Head, Quality Assurance Division was deleted.
14. Section 01.02, page 01-7, line 28 (Section 01.02, page 01-10, line 165) - The abbreviation "S&L" was inserted prior to the word personnel and the term safety-related was changed to quality related.
15. Section 01.02, page 01-8, lines 04 and 05 (Section 01.02, page 01-10, lines 173 through 177) - Item j. was revised to add site activities and to change audits of projects and divisions to audits of design and procurement activities. The last two sentences of item j. were deleted since this information is continued in Section 18.

16. Section 01.02, page 01-8, line 23 and 30 (Section 01.02, page 01-11, line 199 and 208) - Changed the word "subcontractor" to "contractor". Editorial change.
17. Section 01.02, page 01-8, line 28 (Section 01.02, page 01-11, line 206) - Changed "safety-related" to "quality related."
18. Section 01.02, page 01-9, lines 02 through 13 (Section 01.02, pages 01-11 and 01-12, lines 213 through 238) - This section was revised to delete the sentence from line 219 through 227 since this information was basically redundant with the information contained in the next sentence (lines 230 through 242).
19. Section 01.02, page 01-9, lines 18 through 20, line 23 and 27 (Section 01.02, pages 01-12 and 01-13, lines 245 through 262) - Paragraph rewritten for clarity. Editorial change.
20. Section 01.02, page 01-10, line 01 (Section 01.02, page 01-13, lines 265 through 271) - Paragraph rewritten for clarity and relocated to page 01-12, line 20. Editorial change.
21. Section 01.02, page 01-10, lines 22, 23 and 26 (Section 01.02, page 01-15, lines 304 and 305) - First sentence was revised to delete the words "a Client may delegate" and the last sentence of the paragraph was added to indicate stop work authority is defined by procedures.
22. Section 01.02, page 01-10, lines 29 and 30 (Section 01.02, page 01-15, lines 312 and 313) - The words "which identifies the applicable regulatory requirements, codes and standards" were added so this area would be defined in the agreed scope of activities.
23. Section 01.02, page 01-12, line 17 (Section 01.02, page 01-16, line 333) - The verb "shall be" was changed to "are."
24. Section 01.02, pages 01-12, lines 26 through 31, and pages 01-13, 01-14 and 01-15 - These areas were added to define the quality related activities of the Construction Management Division.
25. Section 02.01, page 02-2, line 02 (Section 02.01, page 02-2, line 40) - The term "safety-related" was changed to "quality related."
26. Section 02.01, page 02-2, lines 08 and 10 (Section 02.01, page 02-2, lines 48 and 50) - The words "as established by the Senior Partner" were added and the term "safety-related" was changed to "quality related."
27. Section 02.02, page 02-2, line 13 (Section 02.02, page 02-2, line 54) - Field services activities were included with design and procurement activities.

28. Section 02.03, page 02-2, lines 17 through 22 - This paragraph was added to control the use of computer programs.
29. Section 02.04, page 02-3, lines 01 through 03 (Section 02.03, page 02-2, lines 59 through 62) - End of first sentence revised. Verb, "will be" in second sentence changed to "are." Intent of paragraph is the same. Editorial change.
30. Section 02.04, page 02-3, lines 05 through 25 - Three paragraphs were added to define the system of standards and procedures used to control quality related activities at S&L.
31. Table 02.04.1, page 02-4 (Table 02.04-1, page 02-4) - Table was revised to add two new QA procedures.
32. Section 02.06, page 02-5, lines 14 through 17 (Section 02.05, page 02-5, lines 100 through 105) - In the third sentence from the end of the paragraph the verb "shall be" was changed to "is", the words "or divisions, as applicable" were added after the word "departments" and the term "safety-related" was changed to "quality related." In the sentence preceding the last sentence the words "or Division Heads" was added after the words "Department Managers" and the verb "shall be" was changed to "is to be." In the last sentence the verb "shall be" was changed to "are."
33. Section 02-07, page 02-5, lines 20 through 23 (Section 02.06, page 02.05, lines 109 through 114) - First sentence was revised to include Technical Services Department. Second sentence was rewritten to delete the Head, Quality Assurance Division and to have resolution requested by the Director of Services and the Director of Engineering.
34. Section 02.08, page 02-5, lines 27 through 32, page 02-6, lines 01 through 13 (Section 02.07, pages 02-5, 02-6 and 02-7, lines 120 through 169) - This area has been revised to reflect how management regularly assesses the scope, status and adequacy of the QA program. Some of the specific details contained in this section were deleted since they are documented in the implementing procedures to the program.
35. Section 03.01, page 03-1, line 05 (Section 03.01, page 03-1, line 03) - Quality Assurance procedures were added to the list of procedures and standards controlling design activities.
36. Section 03.01, page 03-1, lines 08 through 11 (Section 03.01, page 03-1, line 08) - The sentence which begins "Organization responsibilities are described....." was added to further define what responsibilities are required and described.

37. Section 03.1, page 03-1, lines 14 and 15 (Section 03.01, page 03-1, line 13) - The words in parenthesis "including commitments of the SAR" were added to the sentence after the words "design basis." The sentence on page 03-2, Revision 5, lines 33 and 34, which read "The PSAR is used as a design basis source document" was deleted after including the words discussed in the last sentence.
38. Section 03.02, page 03-2, line 03 (Section 03.02, page 03-2, lines 41 through 43) - The sentence "During detailed design, lists such as Equipment List, Instrument List, Cable Tabulation, etc. are developed" was deleted, since the subject matter of the sentence was out of place in the paragraph and the sentence does not convey any pertinent information.
39. Section 03.04, page 03-2, lines 28 through 31; page 03-3, lines 01 through 32; and page 03-4, lines 01 and 02 (Section 03.04, page 03-3, line 81) - This section was revised to add a new system for defining design documents into two categories for the purpose of design verification. One category allows design verification reviews by the preparer's supervisor; while the other category follows the requirements of Regulatory Guide 1.64, Revision 2, concerning the use of the supervisor for performance of design reviews. The other restrictions as established by the Regulatory Guide are met for both categories.
40. Section 03.04, page 03-4, lines 12 through 17 (Section 03.04, page 03-3, line 95) - A paragraph was added to establish when design document reviews must be completed.
41. Section 03.04, page 03-4, lines 21 through 24 (Section 03.04, page 03-4, lines 101 through 107) - The second and third sentence of the paragraph were revised and combined into one sentence. The sentence was generalized to state that design documents are reviewed against all requirements of the applicable design criteria as opposed to just the requirements of the PSAR.
42. Section 03.04, page 03-4, line 29 (Section 03.04, page 03-04, line 114) - The word "interface" was inserted prior to the word "comment" in the sentence for clarity. Editorial change.
43. Section 03.04, page 03-5, lines 16 through 20 (Section 03.04, page 03-5, lines 139 through 150) - The paragraph was rewritten to reassign the responsibility for evaluation of experience reports on problems originating at other plants from the Nuclear Safeguards & Licensing Division to the appropriate department.

44. Section 03.05, page 03-5, lines 31 and 32 (Section 03.05, page 03-6, lines 165 through 167) - The word "qualified" was inserted prior to the word "individual" and the words "who is independent of the preparer" were deleted since qualification requires independence of the preparer.
45. Section 03.05, page 03-6, line 21 (Section 03.05, page 03-7, line 196) - The words "file room or area" were replaced with the word "facility" to more accurately describe how QA records are stored. Records were previously stored in a 2-hour rated file room whereas they are now stored in a 4-hour rated vault located within a controlled room.
46. Section 03.05, page 03-6, lines 32 and 33; page 03-7, line 09 (Section 03.05, page 03-7, lines 213 and 224) - The words "and revisions thereto" were deleted from item e. and added to the lead-in sentence.
47. Section 03.05, page 03-7, line 13 (Section 03.05, page 03-8, line 230) - The word "requirements" was added after the words "the same distribution" for clarity.
48. Section 03.07, page 03-8, lines 07 and 11 (Section 03.07, page 03-9, lines 271, 272 and 277) - The verb "shall be" was replaced by the verb "are." Editorial change.
49. Section 03.08, page 03-8, lines 22 and 24 (Section 03.08, pages 03-9, and 03-10, lines 293 and 296) - The verb "shall be" was replaced by the verb "is." Editorial change.
50. Section 04.01, page 04-1, line 14 (Section 04.01, page 04-1, line 14) - The words "as appropriate" were deleted since they were redundant with the lead-in sentence.
51. Section 04.02, page 04-2, lines 22, 23 and 29 (Section 04.02, page 04-2, line 62; page 04-3, line 72) - In the first sentence the word document was made plural and the verb "will be" was changed to "are." In line 29 the word "shall" was deleted prior to the words "contain necessary." Editorial changes.
52. Section 04.02, page 04-3, lines 07 through 09 (Section 04.02, page 04-3, lines 85 through 88) - The words in parenthesis "independent of a Specification Division" were deleted and the word "qualified" was inserted prior to "engineer." The words "as appropriate" were added to the end of item b.

53. Section 04.02, page 04-3, lines 13 through 16 (Section 04.02, pages 04-3, and 04-4, lines 93 through 109) - Items d. and e. were combined and generalized into one new item d. Specific assignment of responsibility is done by the implementing procedures to the QA program.
54. Section 04.03, page 04-3, lines 27, 28 and 31 (Section 04.03, pages 04-4, and 04-5, lines 124 and 129) - The term "safety-related" was replaced by "quality related" and the words "when S&L is responsible for procurement or upon request by a Client" were added to the end of the sentence. In line 31 the words "purchase order award" were change to "contract award" so the terminology would agree with ANSI.
55. Section 05.01, page 05-1, lines 03 and 04 (Section 05.01, page 05-1, line 02) - The words "field services" were added to the sample list of activities controlled by procedures.
56. Section 06.01, page 06-1, line 05 (Section 06.01, page 06-1, line 04) - The last word of the sentence "safety" was changed to "quality." The word quality is more correct in this usage.
57. Section 06.02, page 06-1, lines 25 and 26 (Section 06.01, page 06-2, lines 31 and 32) - The words "and inclusion of quality requirements" were inserted after the word "adequacy" and the words "for use" were added to the end of item a.
58. Section 06.02, page 06-2, lines 11, 19 and 20 (Section 06.01 pages 06-2 and 06-3, lines 55 and 67) - On line 11, the word "design" was inserted prior to the word "documents" and on lines 19 and 20 the words "on design activities" were added after the word "procedures." The change was made to clarify these items pertain to design activities.
59. Section 06.03, page 06-2, lines 26 and 27 (Section 06.02, page 06-3, lines 76 through 78) - On line 26 the words "other planning documents" were changed to "design documents" and the term "safety-related" was changed to "quality related." Editorial change.
60. Section 06.03, page 06-3, line 24 (Section 06.02, page 06-4, lines 106, 108 and 114) - Items k., l. and n. were deleted from the list of typical quality related document types that the QA Division is responsible for.
61. Section 06.03, page 06-4, lines 19 through 32; page 06-5, lines 01 through 07 (Section 06.02, page 06-5, line 145) - This paragraph was added to describe the typical quality related document types for the Construction Management Division.

62. Section 06.03, page 06-5, line 31 (Section 06.02, page 06-5, line 169) - The term "design reports" was changed to "engineering reports."
63. Section 06.03, page 06-6, line 07 (Section 06.02, pages 06-5 and 06-6, lines 177 through 183) - Items p. and q. were deleted and item o. was changed to system functional descriptions since the licensee would be responsible for as-constructed drawings.
64. Section 07.01, page 07-1, lines 06, 09, 11 and 12 and 15 (Section 07.01, page 07.1, lines 04, 09 and 10 and 15) - The word "contractors" was added to line 06, 09 and 11 to distinguish between a vendor of equipment and a site contractor. In line 15 the word "supplier" was replaced by the words "vendor, contractor or technical service consultants."
65. Section 07.01, page 07-1, line 20 (Section 07.01, page 07-1, line 21) - Construction management personnel were added to the list of those responsible for evaluation of procurement sources.
66. Section 07.01, page 07-1, lines 26 through 30, page 07-2, lines 01 and 02 (Section 07.01, pages 07-1 and 07-2, lines 27 through 35) - The last part of item a. was changed from "product delivery" to "on-time performance." The word "contractor" was added to item b. and the words "quality assurance manual" were replaced with "quality assurance program and procedures." The word "contractor" was added to item c.
67. Section 07.01, page 07-2, line 07 (Section 07.01, page 07-2, line 41) - The word "contractors" was added to describe potential suppliers.
68. Section 07.01, page 07-2, lines 09 and 10 (Section 07-01, page 07-2, line 44) - "ASME Section III, Division 1 and 2," was added to the list of applicable criteria.
69. Section 07.01, page 07-2, lines 14 and 15 (Section 07.01, page 07-2, lines 50 through 53) - The words at the end of the sentence "by the appropriate engineering division; and the Quality Assurance Division for Technical Consultants or the Quality Control Division for vendors other than Technical Consultants" have been replaced by the more generalized words "by the appropriate divisions."
70. Section 07.01, page 07-2, line 21 (Section 07.01, page 07-3, line 61) - The words "contractor, or technical service consultant" were added to the type of suppliers.

71. Section 07.01, page 07-2, lines 26 through 28 (Section 07.01, page 07-3, line 65) - A new paragraph was added stating the policy for performing surveillances and audits of suppliers.
72. Section 07.01, page 07-3, lines 01 through 07 (Section 07.01, page 07-3, lines 85 through 91) - Item a. was revised to increase, but not limit, the type of example items that require special process procedures. Item b. was revised to change the word "customer" to "vendor or contractor." Item c. was revised to add the word "regulations."
73. Section 07.01, page 07-3, line 12 (Section 07.01, page 07-4, lines 99 through 106) - Paragraph was deleted since the information in the paragraph is redundant with information throughout Section 07.00.
74. Section 07.01, page 07-3, lines 13 through 23 (Section 07.01, page 07-4, lines 109 through 123) - At the beginning of the sentence the wording was made more generalized by changing "The S&L Quality Control Division" to "The appropriate S&L Division." The last part of Item a., "audit of the various special process operations," was deleted from this item and included as part of Item b. Item c. was also included as part of Item b. The word "contractor" was added to the new Item c.
75. Section 07.01, page 07-4, lines 05 through 07 (Section 07.01, page 07-5, lines 141 through 143) - The paragraph was changed to discuss product or installation checklists either to release equipment for shipment to the site or to permit further construction activity.
76. Section 07.01, page 07-4, lines 09 through 20 (Section 07.01, page 07-5, lines 146 through 156) - In lines 09 and 10 the term "contractor" was added to the type of surveillances. In line 13 the term "contractor" was added. In line 16 the words "or upon completion of field erection" were added to the end of the sentence. In line 18 "certificates of conformance" were added to the types of documentation.
77. Section 07.02, page 07-4, lines 25 and 28 (Section 07.02, page 07-5, lines 164 and 167) - In line 25 the term "contractor" was added. In line 28 the word "construction" was added to the type of activities.
78. Section 07.03, page 07-5, lines 01 through 13 - A new paragraph was added describing receiving inspection activities.

79. Section 08.00, page 08-1, line 03 (Section 08.01, page 08-1, lines 01 through 03) - First sentence of the paragraph was deleted.
80. Section 08.01, page 08-1, line 08 (Section 08.01, page 08-1, line 08) - The words "of materials, equipment, parts and components" were added to the sentence following the words "identification requirements" for clarification.
81. Section 08.01, page 08-1, lines 12 and 13 (Section 08-1, page 08-1, lines 14 and 15) - The last sentence was revised to require the review of vendor and contractor quality assurance programs to assure inclusion of the requirement that location and method of identification do not degrade the item.
82. Section 08.01, page 08-1, lines 16 through 21 (Section 08.01, page 08.1, lines 19 through 27) - The first sentence was rewritten for clarity-editorial change. The second sentence of the paragraph was revised to allow audits and surveillances to be performed by qualified personnel from other divisions as opposed to just personnel from the Quality Control Division.
83. Section 08.01, page 08-1, lines 23 through 27 - A new paragraph was added describing the verification for the identification and control of materials, parts and components during receipt inspection.
84. Section 09.01, page 09-1, lines 10 and 11 (Section 09.01, page 09-1, lines 09 and 10) - In line 10 "plant construction" was added to the list of activities at the end of the sentence. Also, in line 10 the word "trained" was inserted prior to personnel so that the sentence now reads "trained and qualified S&L personnel." In line 11 the sentence has been rewritten to delete the words "Quality Control Division" and allow surveillances to be done by trained and qualified individuals from other divisions.
85. Section 09.01, page 09-1, lines 18 through 28 (Section 09.01, page 09-1, lines 19 through 28; page 09-2, lines 31 through 33) - In line 18 the words "for vendors and contractors" were added. In line 19 the words "but not limited to" were added to indicate the types of special processes described are not limited to just those. In line 20 the word "coating" was added to the list of special processes. In line 22 the word "standards" was added. The last two sentences of the paragraph were rewritten - editorial change.

SARGENT & LUNDY
ENGINEERS
CHICAGO

86. Section 10.00, pages 10-1 and 10-2 (Section 10.00, pages 10-1 and 10-2) - This section has been rewritten in accordance with the Standard Review Plan to describe S&L's inspection activities. S&L did not previously perform inspection activities.
87. Section 11.00, pages 11-1, 11-2, and 11-3 (Section 11.00, pages 11-1 through 11-3) - This section has been rewritten in accordance with the Standard Review Plan to describe S&L's test control activities. S&L did not previously engage in direct activities which required a QA Program for control of tests.
88. Section 12.00, pages 12-1 and 12-2 (Section 12.00, page 12-1) - This section has been rewritten in accordance with the Standard Review Plan to describe S&L's control of measuring and test equipment. S&L did not previously engage in these activities.
89. Section 13.00, page 13-1 (Section 13.00, page 13-1) - This section has been rewritten in accordance with the Standard Review Plan to describe S&L's involvement with handling, storage and shipping activities. S&L did not previously engage in direct activities which required a QA program for handling, storage and shipping of materials, components and systems.
90. Section 14.00, page 14-1 (Section 14.00, page 14-1) - This section has been rewritten in accordance with the Standard Review Plan to describe S&L's inspection and test activities at a construction site. S&L did not previously engage in direct activities which required a QA Program for inspection and testing activities.
91. Section 15.00, page 15-1 (Section 15.00, page 15-1) - This section has been rewritten in accordance with the Standard Review Plan to describe S&L's activities for identifying, documenting and controlling nonconforming items identified during the performance of inspection and/or testing activities. S&L did not previously engage in direct activities which required a QA Program for nonconforming items.
92. Section 16.00, page 16-1 (Section 16.00, pages 16-1 and 16-2) - This section has been rewritten in accordance with the Standard Review Plan to describe S&L's corrective action program for design, procurement and construction management activities. This section, as previously written, only applied to design activities.

93. Section 17.01, page 17-1, lines 06 and 08 (Section 17.01, page 17-1, lines 05 and 08) - In line 06 "construction site" activities were added to the type of activities. In line 08 the word "appropriate" was inserted prior to the word "safety-related."
94. Section 17.01, page 17-1, lines 11 through 17 (Section 17.01, page 17-1, lines 11 through 20) - More examples have been added to the list of safety-related records. The last two sentences of the paragraph were deleted since Section 17.02 requires the identification of records.
95. Section 17.03, page 17-1, line 31 (Section 17.03, page 17-2, line 40) - The words "and satisfy the requirements described in Regulatory Guide 1.88" have been added to the sentence.
96. Section 17.04, page 17-2, line 01 (Section 17.04, page 17-2, line 43) - The first sentence was revised to indicate records are stored in an appropriate facility as opposed to only the S&L storage facility in Chicago.
97. Section 17.04, page 17-2, line 04 (Section 17.04, line 17-2, lines 48 and 49) - The last sentence of the paragraph was deleted since S&L is not responsible for the records after transmittal to the Client.
98. Section 18.01, page 18-1, lines 08, 12 and 13 (Section 18.01, page 18-1, lines 08 and 13) - Item a. was revised for clarification and added "S&L departments" as an organization subject to audits. Item c. was revised to add "constructors at a construction site" as an organization subject to audit.
99. Section 18.02, page 18-1, line 29 (Section 18.02, page 18-2, line 35) - The term "safety-related" was changed to "quality related."
100. Section 18.0, page 18-2, lines 13 and 14 and lines 18 and 19 (Section 18.02, page 68, lines 53 and 54 and line 59) - The first sentence of the paragraph was revised to clarify what areas are audited. The words "support divisions and each nuclear project" were revised to read "support division's work and records and each nuclear project team's work." A new sentence was also added to the end of the paragraph discussing the audit schedule prepared each year.
101. Section 18.02, page 18-3, lines 05 through 07 (Section 18.02, page 18-3, lines 83 through 85) - Distribution of the audit report has been clarified in that the Project Director and Project Manager of the project audited only receive copies.

102. Section 18.03, page 18-3, lines 09 through 13 (Section 18.03, page 18-3, lines 88 through 95) - This paragraph has been revised to clarify that external audits may be performed by the Quality Assurance Division, Quality Control Division or Construction Management Division.
103. Section 18.04, page 18-3, lines 17 through 21 (Section 18.04, pages 18-3 and 18-4, lines 99 through 107) - The sentence describing the audit plan has been clarified. The sentence requiring approval of the audit checklist by the Senior Auditor has been deleted. A sentence was added to the paragraph requiring audits to be performed in accordance with written procedures or checklists.
104. Section 18.04, page 18-4, lines 01 and 10 (Section 18.04, page 18-3, lines 119 and 130) - Item d. was revised to provide a description of each nonconformance. Item g. was revised to add the words "as appropriate" to the item since each audit may not require recommendations for improvement of the Program.
105. Section 18.04, page 18-4, lines 17 and 19 (Section 18.04, page 18-5, lines 141 and 144) - In line 17 the verb "shall" was deleted following the word "audited" - editorial change. In line 19 the time limit of reauditing scheduled completion of corrective action within 30 days was changed to "on a timely basis."
106. Section 18.05, page 18-4, lines 23 through 25 (Section 18.05, page 18-5, lines 151 through 155) - This paragraph was revised to only discuss the audit of the Quality Assurance Division by management personnel. The other information contained in this paragraph is now located in Section 02.08, page 02-5.

Summary of Proposed Changes for Figures and Tables

1. Section 01.01, Figure 01.01-1, "S&L Organization Chart" - The changes to this figure are as follows:
 - a. The position of Assistant Manager in the Structural, Mechanical and Electrical Departments has been deleted from this chart. It is felt this degree of detail is not necessary on this chart.
 - b. The General Analytical Division is no longer part of the Technical Services Department, but reports directly to the Director of Engineering.

1. Section 01.01, Figure 01.01-1, "S&L Organization Chart" - The changes to this figure are as follows: (Cont'd)
 - c. The title of the Nuclear Field Services Division, which is a division of the Technical Services Department, has been changed to the Construction Management Division.
 - d. The box titled Business Services, which reports to the Director of Services has been changed to Sargent & Lundy, Inc., Los Angeles.
 - e. The title of the Personnel Division which is part of the Administrative Services Department, has been changed to Employee Relations Division.
2. Section 01.01 Figure 01.01-2, "Typical Project Organization Chart" - The changes to this figure are as follows:
 - a. The position of Assistant Manager in the Structural, Mechanical and Electrical Departments has been deleted from this chart for the same reason as was done in Figure 01.01-1.
 - b. The General Analytical Division and the Planning and Scheduling Division have been included in the project organization. The General Analytical Division is no longer a part of the Technical Services Department.
 - c. The two boxes representing the Senior Project Engineer and the Project Engineer in the Project Engineering Division, Structural Department, have been combined into one box.
 - d. The two boxes representing the Project Engineer and the Mechanical Engineers in the Project Management Division, Mechanical Department, have been combined into one box.
 - e. The two boxes representing the Senior Project Engineer, Project Engineer and Electrical Engineers in the Project Engineering Division, Electrical Department, have been combined into one box.
 - f. The title of the Nuclear Field Services Division, Technical Services Department, has been changed to the Construction Management Division.
3. Section 01.02, Figure 01.02-1, "Quality Assurance Division" - The new position of QA Training Assistant in the Training Section has been established and shown on the chart.

4. Section 01.02, Figure 01.02-2, "Quality Control Division " - The new position of Assistant Head has been established and shown on the chart.
5. Section 01.02, Figure 01.02-3, "Construction Management Division" - The chart is new and represents the organization of the Construction Management Division.
6. Section 02.04, Table 02.04-1, "List of General Quality Assurance Procedures" - Two new procedures GQ-2.07, "Project Instruction Training," and GQ-3.16, "System Functional Descriptions," were added to the list of procedures. Also, the last two columns (identified as Applicable ANSI Standard and Original Procedure Number) have been deleted.