

August 11, 2016

Mr. Randall L. Kurtz  
Quality Assurance Manager  
Sargent & Lundy, LLC  
55 East Monroe Street  
Chicago, IL 60603-5780

SUBJECT: DRAFT SAFETY EVALUATION FOR SARGENT & LUNDY, LLC TOPICAL  
REPORT SL-TR-1A, REVISION 23 (TAC NO. MF6775)

Dear Mr. Kurtz:

By letter dated August 14, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15274A456), Sargent & Lundy, LLC (S&L) submitted the updated, S&L "Nuclear Quality Assurance Program," Topical Report (TR) SL-TR-1A, Revision 23 (hereafter referred to as the quality assurance TR), to the U.S. Nuclear Regulatory Commission (NRC) staff. Enclosed for S&L's review and comment is a copy of the NRC staff's draft safety evaluation (SE) for the TR. Twenty working days are provided to you to comment on any factual errors or clarity concerns contained in the SE. The final SE will be issued after making any necessary changes and will be made publicly available. The NRC staff's disposition of your comments on the draft SE will be discussed in the final SE.

To facilitate the NRC staff's review of your comments, please provide a marked-up copy of the draft SE showing proposed changes and provide a summary table of the proposed changes.

If you have any questions, please contact Holly D. Cruz at 301-415-1053.

Sincerely,

*/RA/*

Kevin Hsueh, Chief  
Licensing Processes Branch  
Division of Policy and Rulemaking  
Office of Nuclear Reactor Regulation

Enclosure:  
Draft SE

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**NRR-106**

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1 **U. S. NUCLEAR REGULATORY COMMISSION**

2 **DRAFT SAFETY EVALUATION FOR SARGENT & LUNDY**

3 **NUCLEAR QUALITY ASSURANCE PROGRAM TOPICAL REPORT**

4 **SL-TR-1A, REVISION 23**

5  
6  
7 1.0 **INTRODUCTION**

8  
9 By letter dated August 18, 2015, as supplemented by letter dated February 19, 2016,  
10 (References 1 and 2), Sargent and Lundy, LLC (S&L) submitted a change to Topical Report  
11 (TR) SL-TR-1A, "Nuclear Quality Assurance Program." The purpose of this proposed change is  
12 to use the latest guides for electronic records, storage, and management. Specifically, the  
13 following Nuclear Information and Records Management Association (NIRMA) Technical Guides  
14 (TGs) are being requested for use:

15  
16 TG 11-2011, "Authentication of Records and Media,"  
17 TG 15-2011, "Management of Electronic Records,"  
18 TG 16-2011, "Software Quality Assurance Documentation and Records," and  
19 TG 21-2011, "Required Records Protection, Disaster Recovery and Business Continuation."

20  
21 This proposed change allows use of the 2011 NIRMA TGs instead of the older 1998 versions,  
22 listed in Attachment 1 of Regulatory Issue Summary (RIS) 2000-018, "Guidance on Managing  
23 Quality Assurance Records in Electronic Media."

24  
25 2.0 **REGULATORY EVALUATION**

26  
27 The proposed change is for the electronic records, storage, and management program. The  
28 current regulatory bases for the quality assurance (QA) record program are listed below.

29  
30 The Commission's regulatory requirements related to QA programs are set forth in Appendix B,  
31 "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," pursuant  
32 to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50 and 10 CFR 50.54(a).

33 Appendix B to 10 CFR Part 50 establishes QA requirements for the design, construction, and  
34 operation of structures, systems, and components (SSCs) of the facility. The pertinent  
35 requirements for QA records are contained in Criterion XVII which states that "Sufficient  
36 records shall be maintained to furnish evidence of activities affecting quality. The records  
37 shall include at least the following: operating logs and the results of reviews, inspections, tests,  
38 audits, monitoring of work performance, and materials analyses. The records shall also  
39 include closely-related data such as qualifications of personnel, procedures, and equipment.  
40 Inspection and test records shall, as a minimum, identify the inspector or data recorder, the  
41 type of observation, the results, the acceptability, and the action taken in connection with any  
42

ENCLOSURE

1 deficiencies noted. Records shall be identifiable and retrievable. Consistent with applicable  
2 regulatory requirements, the applicant shall establish requirements concerning record  
3 retention, such as duration, location, and assigned responsibility.”  
4

5 Section 50.4(b)(7)(ii) of 10 CFR states that a change to an NRC-accepted quality assurance TR  
6 from non-licensees (i.e., architect/engineers, nuclear steam supply system suppliers, fuel  
7 suppliers, constructors, etc.) must be submitted to the NRC.  
8

9 The NRC accepted practices for the collection, storage, and maintenance of QA records for  
10 nuclear power plants are described in the following documents:  
11

- 12 • American National Standards Institute (ANSI) N45.2.9-1974, “Requirements for  
13 Collection, Storage and Maintenance of Quality Assurance Records for Nuclear Power  
14 Plants,” as endorsed by Regulatory Guide 1.88, “Collection, Storage and Maintenance of  
15 Nuclear Power Plant Quality Assurance Records,” Revision 2 and  
16
- 17 • ANSI/American Society of Mechanical Engineers, (ANSI/ASME) NQA-1-2008 and the  
18 NQA-1a-2009 addenda, “Quality Assurance Program Requirements for Nuclear  
19 Facilities,” as endorsed by Regulatory Guide 1.28, “Quality Assurance Program  
20 Requirements (Design and Construction),” Revision 4.  
21

22 RIS 2000-018, “Guides on Managing Quality Assurance Records,” and Generic Letter 88-18,  
23 “Plant Record Storage on Optical Discs,” provide guidance for the maintenance of QA records in  
24 electronic media. RIS 2000-018 states that four NIRMA guides (TG 11-1998, TG 15-1998,  
25 TG 16-1998, and TG 21-1998) provide an acceptable basis for complying with the  
26 recordkeeping requirements of 10 CFR Part 31, Part 32, Part 34, Part 40, Appendix B to 10  
27 CFR Part 50, Part 60, Part 70, Part 71, Part 72, or Part 76.  
28

### 29 3.0 TECHNICAL EVALUATION

30  
31 The NRC staff reviewed S&L’s request by comparing the difference between the newer 2011  
32 NIRMA TGs to the 1998 NIRMA TGs. The proposed revision is a similar request to a submittal  
33 for a nuclear operating company documented in a staff safety evaluation dated May 26, 2015  
34 (Reference 3).  
35

36 In RIS 2000-018, the NRC staff determined that NIRMA TG 11-1998, “Authentication of Records  
37 and Media,” TG 15-1998, “Management of Electronic Records,” TG 16-1998, “Software  
38 Configuration Management and Quality Assurance,” and TG 21-1998, “Electronic Records  
39 Protection and Restoration,” provided acceptable methods for managing QA records in  
40 electronic media. NIRMA updated these four TGs in 2011 to reflect the best practices for  
41 managing electronic records.  
42

43 The updated 2011 NIRMA TGs provide supplemental guidance for electronic records to ensure  
44 the records are identifiable and retrievable for their required retention period. The updated  
45 NIRMA TGs provide detailed guidance in the areas of records authentication, software quality  
46 assurance, and disaster recovery. These changes are based on the development and  
47 implementation of enterprise content management systems, web-based technologies, and  
48

1 higher capacity LAN/WAN networks. The key difference between the 1998 and 2011 NIRMA  
2 TGs is that the updated guides provide better understanding and controls for an integrated  
3 approach to the creation, capture, and maintenance of records using electronic tools.  
4

5 The change to SL-TR-1A primarily affects Section 17, for the management of electronic records  
6 and commitments to NRC RIS 2000-18 listed in the introduction chapter. The revised TR  
7 includes the following controls on quality:  
8

- 9 (a) No deletion or modification of records unless authorized pursuant to the  
10 regulations for record retention, and guidance in ASME NQA-1,  
11 Supplement 17S-1, Sections 2.7, 2.8, and 2.9.
- 12 (b) Redundancy (system backup, dual storage, etc.) is met.
- 13 (c) Legibility is required of each record.
- 14 (d) Records media is properly maintained.
- 15 (e) Periodic inspections to ensure no degradation of records.
- 16 (f) Records are acceptably converted into any new system before the old system is  
17 taken out of service.  
18

19 The NRC staff has reviewed the revision to SL-TR-1A, and finds that the four 2011 NIRMA TGs  
20 referenced above in Section 1.0 provide adequate guidance for electronic records, storage, and  
21 management. Based on these findings, the NRC staff concludes that there is reasonable  
22 assurance that the requirements of Criterion XVII of Appendix B continue to be met. Therefore,  
23 the NRC staff finds the proposed changes acceptable.  
24

#### 25 4.0 CONCLUSION

26

27 The NRC staff evaluated TR SL-TR-1A, Revision 23, (Reference 1) and the supplemental  
28 information provided (Reference 2) and concludes that S&L's QA program continues to satisfy  
29 the QA requirements of Appendix B to 10 CFR Part 50. Specifically, the update 2011 version of  
30 the NIRMA TGs provide additional implementing details that continue to meet the quality  
31 assurance record requirements contained in Appendix B, Criterion XVII. The proposed change  
32 is acceptable.  
33

#### 34 5.0 REFERENCES

35

- 36 1. Sargent and Lundy, LLC submittal Dated August 14, 2015 (Agencywide Documents  
37 Access and Management System (ADAMS) Accession No. ML1527A456).  
38
- 39 2. Sargent and Lundy, LLC to the NRC, Response to Request for Additional Information  
40 Regarding Change to Topical Report SL-TR-1A, Revision 23, Dated February 19, 2016,  
41 (ADAMS Accession No. ML16062A171).  
42
- 43 3. SER dated May 26, 2015 related to Duke Energy Quality Assurance Topical Report  
44 (ADAMS Accession No. ML15138A347).  
45
- 46 4. NRC Regulatory Issue Summary 2000-018, "Guidance on Managing Quality Assurance  
47 Records in Electronic Media," dated October 23, 2000.  
48
- 49 5. NIRMA TG 11-2011, "Authentication of Records and Media"

- 1 6. NIRMA TG 15-2011, "Management of Electronic Records"
- 2
- 3 7. NIRMA TG 16-2011, "Software Quality Assurance Documentation and Records"
- 4
- 5 8. NIRMA TG 21-2011, "Required Records Protection, Disaster Recovery and Business
- 6 Continuation."
- 7
- 8 9. NRC Generic Letter, 88-18, "Plant Record Storage on Optical Disks," dated October 20,
- 9 1988.

10  
11 Principal Contributor: Andrea Keim

12  
13 Date: August 11, 2016

14