ANSI/ANS-57.10-1996

ERRATUM ISSUED

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American Nuclear Society

design criteria for consolidation of LWR spent fuel

an American National Standard

REAFFIRMED

July 7, 2016 ANSI/ANS-57.10-1996 (R2016) July 6, 2006 ANSI/ANS-57.10-1996 (R2006) This standard has been reviewed and reaffirmed with the recognition that it may reference other standards and documents that may have been superseded or withdrawn. The requirements of this document will be met by using the version of the standards and documents referenced herein. It is the responsibility of the user to review each of the references and to determine whether the use of the original references or more recent versions is appropriate for the facility. Variations from the standards and documents referenced in this standard should be evaluated and documented. This standard does not necessarily reflect recent industry initiatives for risk informed decision-making or a graded approach to guality assurance. Users should consider the



use of these industry initiatives in the application of this standard.

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ERRATA

ANSI/ANS-57.10-1996; R2006 Design Criteria for Consolidation of LWR Spent Fuel

The following typographical errors have been identified in this standard:

Reference [1] ANSI/ANS-57.7-1992 should be ANSI/ANS-57.7-1988; R1997

Reference [3] ANSI/ANS-57.2-1992 should be ANSI/ANS-57.2-1983

Reference [9] ANSI/ANS-8.17-1989 should be ANSI/ANS-8.17-1984; R1997

Please note that subsequent to the issuance of this standard, all three of the above standards were withdrawn. ANSI/ANS-57.7-1988; R1997 and ANSI/ANS-57.2-1983 were administratively withdrawn by the American National Standards Institute for noncompliance of maintenance within the required ten year period following approval. ANSI/ANS-8.17-1984; R1997 was superseded by ANSI/ANS-8.17-2004. The user is advised to review each reference to determine whether it, a more recent version, or a replacement document is the most pertinent for each application. When alternate documents are used, the user is advised to document this decision and its basis.

For future clarification, contact the ANS Standards Administrator at standards@ans.org.

March 2008

American National Standard Design Criteria for Consolidation of LWR Spent Fuel

Secretariat American Nuclear Society

Prepared by the American Nuclear Society Standards Committee Working Group ANS-57.10

Published by the American Nuclear Society 555 North Kensington Avenue La Grange Park, Illinois 60526 USA

Approved May 7, 1996 by the **American National Standards Institute, Inc.**

American National Standard

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Comments on this standard are encouraged and should be sent to Society Headquarters.

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Foreword (This Foreword is not a part of American National Standard Design Criteria for Consolidation of LWR Spent Fuel, ANSI/ANS-57.10-1996.)

This standard provides design criteria for the equipment and systems comprising the rod consolidation process for commercial light water reactor (LWR) spent fuel assemblies. The criteria are applicable to wet and dry, and horizontal and vertical, consolidation concepts.

The standard does not include storage of the spent nuclear fuel either prior to consolidation or upon completion of the process. There is a section in the standard which identifies interface considerations of the process with the facility or installations in which consolidation will take place.

The rod consolidation process is intended to produce canisters filled with full-length fuel rods that have been removed from spent nuclear fuel. The process removes those components that maintain rod spacing and, thereby, allows the individual fuel rods to be reconfigured into a close packed array. This is intended to result in more efficient spent fuel management.

The standard is intended to be consistent with the requirements of the regulations in Title 10, "Energy," Code of Federal Regulations, Part 50, "Domestic Licensing of Production and Utilization Facilities," and Part 72, "Licensing Requirements for the Storage of Spent Fuel in an Independent Spent Fuel Storage Installation (ISFSI)."

The revision was part of periodic, routine maintenance. It includes updated references and clarifications.

The membership of Working Group ANS-57.10 of the Standards Committee of the American Nuclear Society, during the development of this revision, was as follows:

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| Contents | Section | Page |
|----------|---|---|
| | 1. Intro 1.1 1.2 1.3 1.4 1.5 | duction and Scope1Introduction1Scope1Limits of Application1Overall Design Considerations1Format of Standard2 |
| | 2. Defin | itions2 |
| | 3. Proce | ess Functions |
| | $4.1 \\ 4.2 \\ 4.3 \\ 4.4 \\ 4.5 \\ 4.6 \\ 4.7$ | ess Description4End Fitting Removal4Rod Removal4Rod Array Reconfiguration4Consolidated Rod Packaging4Nonfuel-Bearing Component (NFBC) Handling4Off-Normal Rod Handling4Auxiliary Operations4ess Performance5End Fitting Removal5Rod Array Reconfiguration5Consolidated Rod Packaging5Nonfuel-Bearing Component (NFBC) Handling6Off-Normal Rod Handling6Array Reconfiguration5Consolidated Rod Packaging5Nonfuel-Bearing Component (NFBC) Handling6Off-Normal Rod Handling6Auxiliary Operations6Facility or Installation Interfaces6 |
| | 6. Proce 6.1 6.2 6.3 6.4 6.5 6.6 6.7 6.8 6.9 6.10 6.11 6.12 6.13 6.14 7. Refer | ess Design6End Fitting Removal6Rod Removal8Rod Array Reconfiguration9Consolidated Rod Packaging11Nonfuel-Bearing Component (NFBC) Handling12Off-Normal Rod Handling13Auxiliary Operations15Facility or Installation Interfaces16Nuclear Safety and Radiological Protection17Structural Analysis18Thermal Criteria18Accountability and Safeguards19Decommissioning19Quality Assurance19rences20 |
| | Appendice Appe | ndix A Illustrative Diagram21 |
| | | |

| Appendix B | Nuclear Criticality Safety | 2 |
|------------|--|----|
| Appendix C | Physical Characteristics of LWR | |
| | Nuclear Fuel Assemblies2 | 26 |
| Appendix D | Considerations for Handling and Disposal | |
| | of Nonfuel-Bearing Components3 | 0 |
| | | |

Figures

| Figure A-1 | Rod Consolidation Process Illustrative Flow Diagram21 |
|------------|---|
| Figure B-1 | Number of 0.33-in. Diameter Rods as a Function |
| | of Water-to-Fuel Volume Ratio25 |
| Figure D-1 | Structural Cobalt-60 |

Tables

| Table B-1 | Estimated Minimum Critical Number |
|-----------|--|
| | of Slightly Enriched UO ₂ Fuel Rods22 |
| Table B-2 | Comparison of Critical Parameters for PWR and BWR |
| | Assemblies and Loose Fuel Rods23 |
| Table B-3 | PWR Fuel Rod Description |
| Table C-1 | Principal Characteristics of Representative PWR |
| | Nuclear Fuels from Babcock & Wilcox and |
| | Combustion Engineering26 |
| Table C-2 | Principal Characteristics of Representative PWR |
| | Nuclear Fuels from Westinghouse |
| Table C-3 | Principal Characteristics of Representative PWR |
| | Nuclear Fuels from Siemens and Babcock & Wilcox 28 |
| Table C-4 | Principal Characteristics of Representative PWR |
| | Nuclear Fuels from General Electric and Siemens29 |
| Table D-1 | Fuel Assembly Structural Materials |
| Table D-2 | 10 CFR 61 Class C Limits |
| Table D-3 | Ratio of Calculated Specific Activity |
| | of 10 CFR 61 Limits |