



NUREG-2216

# **Standard Review Plan for Transportation Packages for Spent Fuel and Radioactive Material**

Final Report

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# **Standard Review Plan for Transportation Packages for Spent Fuel and Radioactive Material**

## **Final Report**

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## ABSTRACT

This Standard Review Plan (SRP) provides guidance to the U.S. Nuclear Regulatory Commission (NRC) staff for reviewing an application for package approval issued under Title 10 of the *Code of Federal Regulations* (10 CFR), Part 71, "Packaging and Transportation of Radioactive Material." NRC approval of a package design typically results in issuance of a certificate of compliance (CoC) or a letter amendment for a transportation package.

The objectives of this SRP are to assist the NRC staff in its reviews by

- providing a basis that promotes uniform quality and a consistent regulatory review of an application for a CoC for a transportation package
- presenting a basis for the review's scope
- identifying acceptable approaches to meeting regulatory requirements
- suggesting possible evaluation findings that can be used in the safety evaluation report

This SRP was published for public comment, and the responses to those comments are available at ML20023A361. This SRP may be revised and updated as the need arises on a chapter-by-chapter basis to clarify the content, correct errors, or incorporate modifications approved by the Director of the NRC Division of Spent Fuel Management. Comments, suggestions for improvement, and notices of errors or omissions should be sent to and will be considered by the Director, Division of Spent Fuel Management, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.



# TABLE OF CONTENTS

|  |             |
|--|-------------|
| <b>ABSTRACT .....</b>  | <b>iii</b>  |
| <b>TABLE OF CONTENTS.....</b>  | <b>v</b>    |
| <b>LIST OF FIGURES.....</b>  | <b>xv</b>   |
| <b>LIST OF TABLES .....</b>  | <b>xvii</b> |
| <b>ABBREVIATIONS AND ACRONYMS .....</b>  | <b>xix</b>  |
| <b>INTRODUCTION.....</b>   | <b>xxv</b>  |
| <b>1 GENERAL INFORMATION EVALUATION.....</b>   | <b>1-1</b>  |
| 1.1 Review Objective .....   | 1-1         |
| 1.2 Areas of Review.....   | 1-1         |
| 1.3 Regulatory Requirements and Acceptance Criteria.....                             | 1-2         |
| 1.3.1 Drawings .....   | 1-3         |
| 1.3.2 Quality Assurance .....  | 1-4         |
| 1.4 Review Procedures.....   | 1-4         |
| 1.4.1 Package Design Information.....  | 1-5         |
| 1.4.1.1 Purpose of application.....  | 1-5         |
| 1.4.1.2 Proposed use and contents.....   | 1-6         |
| 1.4.1.3 Package type and model number .....  | 1-6         |
| 1.4.1.4 Package category and maximum activity.....                                   | 1-6         |
| 1.4.1.5 Codes and standards .....  | 1-7         |
| 1.4.1.6 Criticality safety index.....  | 1-7         |
| 1.4.1.7 Quality assurance program .....  | 1-7         |
| 1.4.2 Package Description.....   | 1-7         |
| 1.4.2.1 Packaging .....  | 1-7         |
| 1.4.2.2 Operational features.....  | 1-8         |
| 1.4.2.3 Contents of packaging.....   | 1-9         |
| 1.4.3 Summary of Compliance with 10 CFR Part 71.....                                 | 1-11        |
| 1.4.3.1 General requirements of 10 CFR 71.43.....                                    | 1-11        |
| 1.4.3.2 Condition of package after tests in 10 CFR 71.71 and<br>10 CFR 71.73.....    | 1-11        |
| 1.4.3.3 Structural, Thermal, Containment, Shielding,<br>Criticality, Materials ..... | 1-11        |
| 1.4.3.4 Operational procedures, acceptance tests, and<br>maintenance .....           | 1-11        |
| 1.4.4 Certification Approach for Commercial Spent Nuclear Fuel .....                 | 1-11        |
| 1.4.5 Drawings .....   | 1-12        |
| 1.4.6 Appendix .....   | 1-14        |
| 1.5 Evaluation Findings.....   | 1-15        |
| 1.6 References .....   | 1-16        |

|          |  |            |
|----------|--|------------|
| <b>2</b> | <b>STRUCTURAL EVALUATION.....</b>  | <b>2-1</b> |
| 2.1      | Review Objective .....   | 2-1        |
| 2.2      | Areas of Review.....   | 2-1        |
| 2.3      | Regulatory Requirements and Acceptance Criteria.....                                     | 2-2        |
| 2.4      | Review Procedures.....   | 2-2        |
| 2.4.1    | Description of Structural Design .....   | 2-3        |
| 2.4.1.1  | General .....  | 2-3        |
| 2.4.1.2  | Identification of codes and standards for package design .....                           | 2-5        |
| 2.4.2    | General Requirements for All Packages .....  | 2-7        |
| 2.4.2.1  | Minimum package size.....  | 2-7        |
| 2.4.2.2  | Tamper-indicating feature .....  | 2-7        |
| 2.4.2.3  | Positive closure.....  | 2-7        |
| 2.4.2.4  | Package valve.....   | 2-7        |
| 2.4.3    | Lifting and Tie-Down Standards for All Packages .....                                    | 2-8        |
| 2.4.3.1  | Lifting devices .....  | 2-8        |
| 2.4.3.2  | Tie-down devices .....   | 2-8        |
| 2.4.4    | General Considerations for Structural Evaluation of Packaging.....                       | 2-9        |
| 2.4.4.1  | Evaluation by analysis.....  | 2-9        |
| 2.4.4.2  | Evaluation by test.....  | 2-10       |
| 2.4.5    | Normal Conditions of Transport.....  | 2-12       |
| 2.4.5.1  | Heat .....   | 2-12       |
| 2.4.5.2  | Cold .....   | 2-13       |
| 2.4.5.3  | Reduced external pressure .....  | 2-13       |
| 2.4.5.4  | Increased external pressure .....  | 2-13       |
| 2.4.5.5  | Vibration and fatigue .....  | 2-14       |
| 2.4.5.6  | Water spray.....   | 2-14       |
| 2.4.5.7  | Free drop .....  | 2-14       |
| 2.4.5.8  | Corner drop.....   | 2-14       |
| 2.4.5.9  | Compression.....   | 2-14       |
| 2.4.5.10 | Penetration.....   | 2-15       |
| 2.4.6    | Hypothetical Accident Conditions .....   | 2-15       |
| 2.4.6.1  | Free drop .....  | 2-16       |
| 2.4.6.2  | Crush .....  | 2-16       |
| 2.4.6.3  | Puncture.....  | 2-16       |
| 2.4.6.4  | Thermal.....   | 2-17       |
| 2.4.6.5  | Immersion—fissile material .....   | 2-17       |
| 2.4.6.6  | Immersion—all packages .....   | 2-17       |
| 2.4.7    | Air Transport Accident Conditions for Fissile Material.....                              | 2-17       |
| 2.4.7.1  | Free drop .....  | 2-18       |
| 2.4.7.2  | Crush test.....  | 2-18       |
| 2.4.7.3  | Puncture test.....   | 2-18       |
| 2.4.7.4  | Thermal Test.....  | 2-18       |
| 2.4.7.5  | 90-meter-per-second Impact .....   | 2-18       |
| 2.4.8    | Special Requirement for Type B Packages Containing More Than $10^5$ A <sub>2</sub> ..... | 2-18       |
| 2.4.9    | Air Transport of Plutonium .....   | 2-19       |
| 2.4.10   | Appendix .....   | 2-19       |
| 2.5      | Evaluation Findings.....   | 2-20       |
| 2.6      | References .....   | 2-21       |



**ATTACHMENT 2A COMPUTATIONAL MODELING SOFTWARE TECHNICAL REVIEW GUIDANCE ..... 2-25**

**3 THERMAL EVALUATION..... 3-1**

3.1 Review Objective .....3-1

3.2 Areas of Review.....3-1

3.3 Regulatory Requirements and Acceptance Criteria.....3-2

3.3.1 Description of the Thermal Design.....3-2

3.3.2 Material Properties and Component Specifications.....3-2

3.3.3 General Considerations for Thermal Evaluations.....3-4

3.3.4 Evaluation of Accessible Surface Temperatures.....3-4

3.3.5 Thermal Evaluation Under Normal Conditions of Transport.....3-4

3.3.6 Thermal Evaluation Under Hypothetical Accident Conditions .....3-4

3.4 Review Procedures.....3-5

3.4.1 Description of the Thermal Design.....3-7

3.4.1.1 Packaging design features .....3-7

3.4.1.2 Codes and standards .....3-8

3.4.1.3 Content heat load specification .....3-8

3.4.1.4 Summary tables of temperatures.....3-8

3.4.1.5 Summary tables of pressures in the containment system.....3-9

3.4.2 Material Properties and Component Specifications.....3-9

3.4.2.1 Material thermal properties.....3-9

3.4.2.2 Specifications of components.....3-11

3.4.2.3 Thermal design limits of package materials and components .....3-11

3.4.3 General Considerations for Thermal Evaluations.....3-11

3.4.3.1 Evaluation by analyses.....3-12

3.4.3.2 Evaluation by Tests .....3-13

3.4.3.3 Confirmatory analyses.....3-15

3.4.3.4 Effects of uncertainties .....3-15

3.4.3.5 Conservatisms .....3-15

3.4.4 Evaluation of Accessible Surface Temperatures.....3-16

3.4.5 Thermal Evaluation Under Normal Conditions of Transport.....3-16

3.4.5.1 Heat and cold .....3-16

3.4.5.2 Maximum normal operating pressure .....3-17

3.4.6 Thermal Evaluation Under Hypothetical Accident Conditions .....3-19

3.4.6.1 Initial conditions.....3-19

3.4.6.2 Fire test.....3-19

3.4.6.3 Maximum temperatures and pressures .....3-20

3.4.7 Appendix .....3-21

3.4.7.1 Radioactive materials .....3-21

3.4.7.2 Spent nuclear fuel .....3-23

3.5 Evaluation Findings.....3-25

3.6 References .....3-26

**4 CONTAINMENT EVALUATION..... 4-1**

4.1 Review Objective .....4-1

4.2 Areas of Review.....4-1

4.3 Regulatory Requirements and Acceptance Criteria.....4-1

|       |  |      |
|-------|--|------|
| 4.3.1 | General Requirements .....   | 4-2  |
| 4.3.2 | Containment Under Normal Conditions of Transport .....                 | 4-3  |
| 4.3.3 | Containment Under Hypothetical Accident Conditions .....               | 4-4  |
| 4.4   | Review Procedures.....   | 4-4  |
| 4.4.1 | Description of the Containment System.....                             | 4-4  |
|       | 4.4.1.1 Containment boundary .....                                     | 4-4  |
|       | 4.4.1.2 Codes and standards .....                                      | 4-7  |
|       | 4.4.1.3 Special requirements for damaged spent nuclear fuel .....      | 4-7  |
| 4.4.2 | General Considerations for Containment Evaluations.....                | 4-7  |
|       | 4.4.2.1 Type AF fissile packages .....                                 | 4-7  |
|       | 4.4.2.2 Type B packages .....  | 4-7  |
|       | 4.4.2.3 Combustible-gas generation.....                                | 4-8  |
| 4.4.3 | Containment Evaluation under Normal Conditions of Transport.....       | 4-9  |
|       | 4.4.3.1 Type B transportation packages .....                           | 4-9  |
|       | 4.4.3.2 Spent nuclear fuel transportation packages.....                | 4-9  |
|       | 4.4.3.3 Compliance with containment design criteria.....               | 4-10 |
| 4.4.4 | Containment Evaluation Under Hypothetical Accident<br>Conditions ..... | 4-11 |
|       | 4.4.4.1 Type B transportation packages.....                            | 4-11 |
|       | 4.4.4.2 Spent nuclear fuel transportation packages.....                | 4-12 |
|       | 4.4.4.3 Compliance with containment design criterion.....              | 4-12 |
| 4.4.5 | Leakage Rate Tests for Type B Packages.....                            | 4-12 |
| 4.4.6 | Appendix .....   | 4-13 |
| 4.5   | Evaluation Findings.....   | 4-13 |
| 4.6   | References .....   | 4-14 |

## **5 SHIELDING EVALUATION..... 5-1**

|       |   |      |
|-------|---|------|
| 5.1   | Review Objective .....  | 5-1  |
| 5.2   | Areas of Review.....  | 5-1  |
| 5.3   | Regulatory Requirements and Acceptance Criteria.....              | 5-1  |
| 5.4   | Review Procedures.....  | 5-5  |
| 5.4.1 | Description of Shielding Design .....                             | 5-6  |
|       | 5.4.1.1 Shielding design features .....                           | 5-7  |
|       | 5.4.1.2 Summary tables of maximum external radiation levels ..... | 5-10 |
| 5.4.2 | Radioactive Materials and Source Terms .....                      | 5-12 |
|       | 5.4.2.1 Source-term calculation methods .....                     | 5-14 |
|       | 5.4.2.2 Gamma sources.....  | 5-16 |
|       | 5.4.2.3 Neutron sources.....                                      | 5-18 |
| 5.4.3 | Shielding Model and Model Specifications.....                     | 5-20 |
|       | 5.4.3.1 Configuration of source and shielding .....               | 5-20 |
|       | 5.4.3.2 Material properties .....                                 | 5-22 |
| 5.4.4 | Shielding Evaluation .....  | 5-23 |
|       | 5.4.4.1 Methods .....   | 5-23 |
|       | 5.4.4.2 Code input and output data .....                          | 5-26 |
|       | 5.4.4.3 Fluence-rate-to-radiation-level conversion factors .....  | 5-27 |
|       | 5.4.4.4 External radiation levels .....                           | 5-28 |
|       | 5.4.4.5 Confirmatory analyses.....                                | 5-31 |
| 5.4.5 | Appendix .....  | 5-32 |
| 5.5   | Evaluation Findings.....  | 5-32 |
| 5.6   | References .....  | 5-33 |

|          |  |            |
|----------|--|------------|
| <b>6</b> | <b>CRITICALITY EVALUATION.....</b>   | <b>6-1</b> |
| 6.1      | Review Objective .....   | 6-1        |
| 6.2      | Areas of Review.....   | 6-1        |
| 6.3      | Regulatory Requirements and Acceptance Criteria.....                                   | 6-2        |
| 6.4      | Review Procedures.....   | 6-4        |
| 6.4.1    | Description of Criticality Design .....  | 6-5        |
| 6.4.1.1  | Packaging design features .....  | 6-5        |
| 6.4.1.2  | Codes and standards .....  | 6-6        |
| 6.4.1.3  | Summary table of criticality evaluations.....  | 6-7        |
| 6.4.1.4  | Criticality safety index.....  | 6-7        |
| 6.4.2    | Contents.....  | 6-8        |
| 6.4.3    | General Considerations for Criticality Evaluations .....                               | 6-11       |
| 6.4.3.1  | Model configuration .....  | 6-11       |
| 6.4.3.2  | Material properties .....  | 6-12       |
| 6.4.3.3  | Analysis methods and nuclear data.....   | 6-13       |
| 6.4.3.4  | Demonstration of maximum reactivity.....   | 6-14       |
| 6.4.3.5  | Confirmatory analyses.....   | 6-15       |
| 6.4.3.6  | Moderator exclusion under hypothetical accident<br>conditions.....                     | 6-15       |
| 6.4.4    | Single Package Evaluation .....  | 6-16       |
| 6.4.4.1  | Configuration.....   | 6-16       |
| 6.4.4.2  | Results.....   | 6-17       |
| 6.4.5    | Evaluations of Package Arrays.....   | 6-17       |
| 6.4.5.1  | Package arrays under normal conditions of transport.....                               | 6-17       |
| 6.4.5.2  | Evaluation of package arrays under hypothetical<br>accident conditions.....            | 6-17       |
| 6.4.5.3  | Package arrays results and criticality safety index.....                               | 6-18       |
| 6.4.6    | Benchmark Evaluations .....  | 6-18       |
| 6.4.6.1  | Experiments and applicability .....  | 6-19       |
| 6.4.6.2  | Bias determination .....   | 6-19       |
| 6.4.7    | Burnup Credit Evaluation for Commercial Light-Water Reactor<br>Spent Nuclear Fuel..... | 6-20       |
| 6.4.7.1  | Limits for the certification basis .....   | 6-22       |
| 6.4.7.2  | Model assumptions .....  | 6-22       |
| 6.4.7.3  | Code validation— <i>isotopic depletion</i> .....                                       | 6-24       |
| 6.4.7.4  | Code validation— <i>k<sub>eff</sub> determination</i> .....                            | 6-25       |
| 6.4.7.5  | Loading curve and burnup verification .....  | 6-27       |
| 6.4.8    | Appendix .....   | 6-29       |
| 6.5      | Evaluation Findings.....   | 6-29       |
| 6.6      | References .....   | 6-31       |

**ATTACHMENT 6A TECHNICAL RECOMMENDATIONS FOR THE CRITICALITY  
SAFETY REVIEW OF PRESSURIZED-WATER REACTOR  
SPENT NUCLEAR FUEL TRANSPORTATION PACKAGES  
AND STORAGE CASKS THAT USE BURNUP CREDIT..... 6-35**

|          |  |            |
|----------|--|------------|
| <b>7</b> | <b>MATERIALS EVALUATION .....</b>                    | <b>7-1</b> |
| 7.1      | Review Objective .....                               | 7-1        |
| 7.2      | Areas of Review.....                                 | 7-1        |
| 7.3      | Regulatory Requirements and Acceptance Criteria..... | 7-2        |

|        |   |      |
|--------|---|------|
| 7.4    | Review Procedures.....  | 7-4  |
| 7.4.1  | Drawings .....  | 7-4  |
| 7.4.2  | Codes and Standards.....  | 7-6  |
|        | 7.4.2.1 Usage and endorsement .....   | 7-7  |
|        | 7.4.2.2 ASME code components .....  | 7-7  |
|        | 7.4.2.3 Code case use/acceptability.....  | 7-7  |
|        | 7.4.2.4 Non-ASME code components .....  | 7-8  |
| 7.4.3  | Weld Design and Inspection .....  | 7-8  |
|        | 7.4.3.1 Moderator exclusion for commercial spent nuclear fuel<br>packages under hypothetical accident conditions..... | 7-9  |
| 7.4.4  | Mechanical Properties .....   | 7-9  |
|        | 7.4.4.1 Tensile properties.....   | 7-9  |
|        | 7.4.4.2 Fracture resistance .....   | 7-10 |
|        | 7.4.4.3 Tensile properties and creep of aluminum alloys at<br>elevated temperatures.....                              | 7-11 |
|        | 7.4.4.4 Impact limiters .....   | 7-12 |
| 7.4.5  | Thermal Properties of Materials.....  | 7-12 |
| 7.4.6  | Radiation Shielding.....  | 7-12 |
|        | 7.4.6.1 Neutron-shielding materials.....  | 7-13 |
|        | 7.4.6.2 Gamma-shielding materials.....  | 7-13 |
| 7.4.7  | Criticality Control .....   | 7-14 |
|        | 7.4.7.1 Neutron-absorbing (poison) material specification.....  | 7-14 |
|        | 7.4.7.2 Computation of percent credit for boron-based neutron<br>absorbers .....                                      | 7-15 |
|        | 7.4.7.3 Qualifying properties not Associated with attenuation.....  | 7-16 |
| 7.4.8  | Corrosion Resistance .....  | 7-18 |
|        | 7.4.8.1 Environments .....  | 7-19 |
|        | 7.4.8.2 Carbon and low-alloy steels .....   | 7-19 |
|        | 7.4.8.3 Austenitic stainless steel .....  | 7-19 |
| 7.4.9  | Protective Coatings .....   | 7-20 |
|        | 7.4.9.1 Review guidance.....  | 7-20 |
|        | 7.4.9.2 Scope of coating application.....   | 7-20 |
|        | 7.4.9.3 Coating selection.....  | 7-20 |
|        | 7.4.9.4 Coating qualification testing.....  | 7-21 |
| 7.4.10 | Content Reactions .....   | 7-21 |
|        | 7.4.10.1 Flammable and explosive reactions .....  | 7-21 |
|        | 7.4.10.2 Content chemical reactions, outgassing, and corrosion.....   | 7-22 |
| 7.4.11 | Radiation Effects .....   | 7-23 |
| 7.4.12 | Package Contents .....  | 7-24 |
| 7.4.13 | Fresh (Unirradiated) Fuel Cladding.....   | 7-24 |
| 7.4.14 | Spent Nuclear Fuel.....   | 7-25 |
|        | 7.4.14.1 Spent fuel classification.....   | 7-25 |
|        | 7.4.14.2 Uncanned spent fuel .....  | 7-26 |
|        | 7.4.14.3 Canned spent fuel .....  | 7-33 |
| 7.4.15 | Bolting Material.....   | 7-34 |
| 7.4.16 | Seals .....   | 7-34 |
|        | 7.4.16.1 Metallic seals.....  | 7-35 |
|        | 7.4.16.2 Elastomeric seals .....  | 7-35 |
| 7.5    | Evaluation Findings.....  | 7-36 |
| 7.6    | References .....  | 7-37 |

**ATTACHMENT 7A CLARIFICATIONS, GUIDANCE, AND EXCEPTIONS TO ASTM STANDARD PRACTICE C1671-15 ..... 7-43**

**ATTACHMENT 7B FUEL SELECTION..... 7-49**

**8 OPERATING PROCEDURES EVALUATION..... 8-1**

- 8.1 Review Objective .....8-1
- 8.2 Areas of Review.....8-1
- 8.3 Regulatory Requirements and Acceptance Criteria .....8-1
  - 8.3.1 Package Loading.....8-1
  - 8.3.2 Package Unloading .....8-2
  - 8.3.3 Preparation of Empty Package for Transport.....8-2
  - 8.3.4 Other Procedures .....8-2
- 8.4 Review Procedures.....8-2
  - 8.4.1 Package Loading.....8-3
    - 8.4.1.1 Preparation for loading.....8-3
    - 8.4.1.2 Loading of contents.....8-4
    - 8.4.1.3 Preparation for transport .....8-4
  - 8.4.2 Package Unloading .....8-6
    - 8.4.2.1 Receipt of package from carrier .....8-6
    - 8.4.2.2 Preparations for unloading .....8-6
    - 8.4.2.3 Removal of contents.....8-7
  - 8.4.3 Preparation of Empty Package for Transport.....8-7
  - 8.4.4 Other Procedures .....8-7
- 8.5 Evaluation Findings.....8-7
- 8.6 References .....8-8

**9 ACCEPTANCE TESTS AND MAINTENANCE PROGRAM EVALUATION .... 9-1**

- 9.1 Review Objective .....9-1
- 9.2 Areas of Review.....9-1
- 9.3 Regulatory Requirements and Acceptance Criteria.....9-1
  - 9.3.1 Acceptance Tests.....9-2
  - 9.3.2 Maintenance Program .....9-2
- 9.4 Review Procedures.....9-2
  - 9.4.1 Acceptance Tests.....9-3
    - 9.4.1.1 Visual inspections and measurements .....9-3
    - 9.4.1.2 Weld examinations.....9-3
    - 9.4.1.3 Structural and pressure tests.....9-4
    - 9.4.1.4 Leakage tests.....9-5
    - 9.4.1.5 Component and material tests.....9-5
    - 9.4.1.6 Neutron-absorber and moderator tests.....9-5
    - 9.4.1.7 Shielding tests.....9-6
    - 9.4.1.8 Thermal tests .....9-6
  - 9.4.2 Maintenance Program .....9-6
    - 9.4.2.1 Structural and pressure tests.....9-6
    - 9.4.2.2 Leakage tests.....9-6
    - 9.4.2.3 Component and materials tests.....9-7
    - 9.4.2.4 Neutron-absorber and moderator tests.....9-7
    - 9.4.2.5 Shielding tests.....9-7
    - 9.4.2.6 Thermal tests .....9-7

|                   |  |             |
|-------------------|--|-------------|
|                   | 9.4.2.7 Miscellaneous tests .....  | 9-7         |
| 9.5               | Evaluation Findings.....   | 9-8         |
| 9.6               | References .....   | 9-8         |
| <b>10</b>         | <b>QUALITY ASSURANCE EVALUATION.....</b>   | <b>10-1</b> |
| 10.1              | Review Objective .....   | 10-1        |
| 10.2              | Areas of Review.....   | 10-1        |
| 10.3              | Regulatory Requirements and Acceptance Criteria.....   | 10-1        |
| 10.4              | Review Procedures.....   | 10-2        |
|                   | 10.4.1 Quality Assurance Organization .....  | 10-3        |
|                   | 10.4.2 Quality Assurance Program.....  | 10-4        |
|                   | 10.4.3 Package Design Control.....   | 10-5        |
|                   | 10.4.4 Procurement Document Control .....  | 10-6        |
|                   | 10.4.5 Instructions, Procedures, and Drawings .....  | 10-7        |
|                   | 10.4.6 Document Control.....   | 10-8        |
|                   | 10.4.7 Control of Purchased Material, Equipment, and Services .....  | 10-8        |
|                   | 10.4.8 Identification and Control of Materials, Parts, and Components.....   | 10-10       |
|                   | 10.4.9 Control of Special Processes.....   | 10-11       |
|                   | 10.4.10 Internal Inspection .....  | 10-11       |
|                   | 10.4.11 Test Control.....  | 10-12       |
|                   | 10.4.12 Control of Measuring and Test Equipment.....   | 10-13       |
|                   | 10.4.13 Handling, Storage, and Shipping Control.....   | 10-13       |
|                   | 10.4.14 Inspection, Test, and Operating Status.....  | 10-14       |
|                   | 10.4.15 Nonconforming Materials, Parts, or Components .....  | 10-14       |
|                   | 10.4.16 Corrective Action .....  | 10-15       |
|                   | 10.4.17 Quality Assurance Records .....  | 10-15       |
|                   | 10.4.18 Audits .....   | 10-16       |
| 10.5              | Evaluation Findings.....   | 10-17       |
| 10.6              | References .....   | 10-18       |
| <b>11</b>         | <b>GLOSSARY .....</b>  | <b>11-1</b> |
| <b>APPENDIX A</b> | <b>DESCRIPTION, SAFETY FEATURES, AND AREAS OF REVIEW<br/>FOR DIFFERENT TYPES OF RADIOACTIVE MATERIAL<br/>TRANSPORTATION PACKAGES .....</b> | <b>A-1</b>  |
| <b>APPENDIX B</b> | <b>DIFFERENCES BETWEEN THERMAL AND RADIATION<br/>PROPERTIES OF MIXED OXIDE AND LOW-ENRICHED<br/>URANIUM RADIOACTIVE MATERIALS .....</b>    | <b>B-1</b>  |
| <b>APPENDIX C</b> | <b>DIFFERENCES BETWEEN THERMAL AND RADIATION<br/>PROPERTIES OF MIXED OXIDE AND LOW-ENRICHED<br/>URANIUM SPENT NUCLEAR FUEL .....</b>       | <b>C-1</b>  |
| <b>APPENDIX D</b> | <b>BENCHMARK CONSIDERATIONS FOR MIXED OXIDE<br/>RADIOACTIVE MATERIALS AND SPENT NUCLEAR FUEL.....</b>                                      | <b>D-1</b>  |

|                     |   |             |
|---------------------|---|-------------|
| <b>APPENDIX E</b>   | <b>DESCRIPTION AND REVIEW PROCEDURES FOR<br/>IRRADIATED TRITIUM-PRODUCING BURNABLE<br/>ABSORBER RODS PACKAGES .....</b> | <b>E-1</b>  |
| <b>ATTACHMENT A</b> | <b>PHYSICAL AND CHEMICAL PROPERTIES OF TRITIUM.....</b>   | <b>E-35</b> |
| <b>ATTACHMENT B</b> | <b>BIOLOGICAL PROPERTIES OF TRITIUM AND TRITIUM<br/>HEALTH PHYSICS.....</b>   | <b>E-51</b> |





## LIST OF FIGURES

|             |  |      |
|-------------|--|------|
| Figure 1-1  | Overview of General Information Evaluation.....  | 1-5  |
| Figure 2-1  | Information Flow for the Structural Evaluation .....   | 2-4  |
| Figure 3-1  | Information Flow for the Thermal Evaluation .....  | 3-6  |
| Figure 4-1  | Information Flow for the Containment Evaluation .....  | 4-5  |
| Figure 5-1  | Information Flow for the Shielding Evaluation .....  | 5-7  |
| Figure 5-2  | Illustration of Surfaces to Which Regulatory Radiation Limits Apply for Exclusive-Use and Non-Exclusive-Use Shipments .....  | 5-11 |
| Figure 5-3  | Cutaway Images Depicting Package Surfaces and Radiation Level Limits for Packages with Complex Surfaces.....   | 5-29 |
| Figure 6-1  | Information Flow for the Criticality Evaluation .....  | 6-6  |
| Figure 6A-1 | Reactivity Behavior In The GBC-32 As A Function Of Cooling Time For Fuel With 4.0 Weight Percent Uranium-235 Initial Enrichment And 40 Gwd/MTU Burnup.....   | 6-40 |
| Figure 6A-2 | Reactivity Effect Of Fuel Temperature During Depletion On $K_{inf}$ In An Array Of Poisoned Storage Cells; Results Correspond To Fuel With 5.0 Weight Percent Initial Uranium-235 Enrichment .....           | 6-42 |
| Figure 6A-3 | Reactivity Effect Of Moderator Temperature During Depletion On $K_{inf}$ In An Array Of Poisoned Storage Cells; Results Correspond To Fuel With 5.0 Weight Percent Initial Uranium-235 Enrichment .....      | 6-42 |
| Figure 6A-4 | Reactivity Effect Of Soluble Boron Concentration During Depletion On $K_{inf}$ In An Array Of Poisoned Storage Cells; Results Correspond To Fuel With 5.0 Weight Percent Initial Uranium-235 Enrichment..... | 6-43 |
| Figure 6A-5 | Reactivity Effect Of Specific Power During Depletion On $K_{inf}$ In An Array Of Fuel Pins (Actinides Only) .....  | 6-44 |
| Figure 6A-6 | Reactivity Effect Of Specific Power During Depletion On $K_{inf}$ In An Array Of Fuel Pins (Actinides And Fission Products) .....  | 6-45 |
| Figure 6A-7 | Effect Of Axial Burnup Distribution On $K_{eff}$ In The GBC-32 For Actinide-Only Burnup Credit And Various Cooling Times For Fuel With 4.0 Weight Percent Initial Enrichment.....                            | 6-47 |
| Figure 6A-8 | Representative Loading Curves And Discharged PWR Population .....  | 6-58 |

|             |  |      |
|-------------|--|------|
| Figure 7-1  | Information Flow for the Materials Evaluation .....  | 7-5  |
| Figure 7A-1 | Plot of the Effective Neutron Multiplication Factor, $k_{eff}$ , as a Function of Heterogeneity Size ..... | 7-46 |
| Figure 8-1  | Information Flow for the Operating Procedures Evaluation .....   | 8-5  |
| Figure 9-1  | Information Flow for the Acceptance Tests and Maintenance Program Evaluation .....                         | 9-4  |

## LIST OF TABLES

|            |  |        |
|------------|--|--------|
| Table 1    | Interim Staff Guidance (ISGs) Incorporated Into This Standard Review Plan .....  | xxviii |
| Table 1-1  | Relationship of Regulations and Areas of Review for Transportation Packages .....  | 1-3    |
| Table 1-2  | Summary of Approaches for Demonstrating Subcriticality of SNF Under the Requirements of 10 CFR 71.55(e) .....  | 1-13   |
| Table 2-1  | Relationship of Regulations and Areas of Review for Transportation Packages .....  | 2-3    |
| Table 3-1  | Relationship of Regulations and Areas of Review for Transportation Packages .....  | 3-3    |
| Table 4-1  | Relationship of Regulations and Areas of Review for Transportation Packages .....  | 4-2    |
| Table 4-2  | Release Fractions and Specific Activities for the Contributors to the Releasable Source Term for Packages Designed to Transport Irradiated Fuel Rods <sup>a,b</sup> .....                  | 4-11   |
| Table 5-1  | Relationship of Regulations and Areas of Review for Transportation Packages .....  | 5-2    |
| Table 5-2  | Package and Vehicle External Radiation Level Limits <sup>a</sup> .....   | 5-2    |
| Table 6-1  | Relationship of Regulations and Areas of Review for Transportation Packages .....  | 6-3    |
| Table 6-2  | Recommended Set of Nuclides for Burnup Credit .....  | 6-23   |
| Table 6-3  | Isotopic $k_{eff}$ Bias Uncertainty ( $\Delta k_i$ ) for the Representative PWR SNF System Model Using ENDF/B-VII Data ( $\beta_i = 0$ ) as a Function of Assembly Average Burnup .....    | 6-26   |
| Table 6-4  | Isotopic $k_{eff}$ Bias ( $\beta_i$ ) and Bias Uncertainty ( $\Delta k_i$ ) for the Representative PWR SNF System Model Using ENDF/B-V Data as a Function of Assembly Average Burnup ..... | 6-26   |
| Table 6-5  | Summary of Code Validation Recommendations for Isotopic Depletion .....  | 6-26   |
| Table 6-6  | Summary of Minor Actinide and Fission Product Code Validation Recommendations for $k_{eff}$ Determination .....  | 6-28   |
| Table 6-7  | Summary of Burnup Verification Recommendations .....   | 6-30   |
| Table 6A-1 | Recommended set of nuclides for actinide-only burnup credit .....  | 6-39   |

|            |   |      |
|------------|---|------|
| Table 6A-2 | Recommended set of additional nuclides for actinide and fission product burnup credit.....  | 6-39 |
| Table 6A-3 | Isotopic $k_{eff}$ bias uncertainty ( $\Delta k_i$ ) for the representative PWR SNF system model using ENDF/B-VII data ( $\beta_i = 0$ ) as a function of assembly-average burnup.....    | 6-56 |
| Table 6A-4 | Isotopic $k_{eff}$ bias ( $\beta_i$ ) and bias uncertainty ( $\Delta k_i$ ) for the representative PWR SNF system model using ENDF/B-V data as a function of assembly-average burnup..... | 6-56 |
| Table 6A-5 | Fission product reactivity worth for “typical” burnup in generic burnup credit cask (GBC-32) with 4 weight percent uranium-235 Westinghouse 17×17 OFA, burned to 40 GWd/MTU.....          | 6-57 |
| Table 7-1  | Relationship of Regulations and Areas of Review for Transportation Packages.....  | 7-3  |
| Table 8-1  | Relationship of Regulations and Areas of Review for Transportation Packages.....  | 8-2  |
| Table 9-1  | Relationship of Regulations and Areas of Review for Transportation Packages.....  | 9-2  |

## ABBREVIATIONS AND ACRONYMS

|                  |   |
|------------------|---|
| ADAMS            | Agencywide Documents Access and Management System           |
| Ag               | silver  |
| AISC             | American Institute of Steel Construction                    |
| ALARA            | as low as is reasonably achievable (radiation exposure)     |
| Am               | americium   |
| ANL              | Argonne National Laboratory                                 |
| ANS              | American Nuclear Society                                    |
| ANSI             | American National Standards Institute                       |
| ASNT             | American Society for Nondestructive Testing                 |
| APSR             | axial power shaping rod                                     |
| ASME             | American Society of Mechanical Engineers                    |
| ASTM             | American Society for Testing and Materials                  |
| AWS              | American Welding Society                                    |
| AWRE             | Atomic Weapons Research Establishment                       |
|                  |   |
| B <sub>4</sub> C | boron carbide   |
| B&PV             | Boiler and Pressure Vessel (ASME Code)                      |
| BPR              | burnable poison rod   |
| BPRA             | burnable poison rod assembly                                |
| BWR              | boiling-water reactor                                       |
|                  |   |
| CE               | Combustion Engineering                                      |
| CE-PWR           | Combustion Engineering System 80+ Pressurized-Water Reactor |
| CFR              | Code of Federal Regulations                                 |
| c.g.             | center of gravity   |
| CH <sub>4</sub>  | methane   |
| CISCC            | chloride-induced stress corrosion cracking                  |
| CMS              | computational modeling software                             |
| CoC              | certificate of compliance                                   |
| CR               | control rod   |
| CRC              | commercial reactor critical                                 |
| Cs               | cesium  |
| CSI              | criticality safety index                                    |
| CVCM             | collected volatile condensable materials                    |
|                  |   |
| D                | deuterium (chemical symbol)                                 |
| D <sub>2</sub>   | deuterium gas   |
| D <sub>2</sub> O | deuterium oxide, heavy water                                |
| DOE              | U.S. Department of Energy                                   |
| DOT              | U.S. Department of Transportation                           |
| DSFM             | Division of Spent Fuel Management (NRC)                     |
| DT               | deuterium tritium   |
| DTO              | tritiated heavy water                                       |
|                  |   |
| EALF             | energy of average neutron lethargy-causing fission          |
| EIA              | Energy Information Administration                           |
| EPR              | ethylene propylene rubber                                   |
| EPRI             | Electric Power Research Institute                           |
| Er               | erbium  |

|                                |   |
|--------------------------------|---|
| Er <sub>2</sub> O <sub>3</sub> | erbium oxide  |
| Eu                             | europium  |
| FG                             | fuel grade  |
| GBC                            | generic burnup credit cask  |
| GCI                            | grid convergence index  |
| Gd                             | gadolinium  |
| Gd <sub>2</sub> O <sub>3</sub> | gadolinium oxide  |
| GE                             | General Electric  |
| H                              | hydrogen, protium (chemical symbol)   |
| H <sub>2</sub>                 | hydrogen gas  |
| H <sub>2</sub> O               | water   |
| HD                             | hydrogen deuteride  |
| HDO                            | hydrogen-deuterium oxide  |
| HPS                            | Health Physics Society  |
| HT                             | tritium gas   |
| HTC                            | Haut Taux de Combustion   |
| HTO                            | tritiated water vapor, tritium oxide  |
| H/X                            | hydrogen-to-fissile atom ratios   |
| IAEA                           | International Atomic Energy Agency  |
| IBA                            | integral burnable absorber  |
| ICRP                           | International Commission on Radiological Protection                           |
| IHECSBE                        | International Handbook of Evaluated Criticality Safety Benchmark Experiments  |
| IN                             | information notice (NRC)  |
| INMM                           | Institute for Nuclear Materials Management                                    |
| ISG                            | interim staff guidance  |
| <i>k<sub>eff</sub></i>         | “k” effective-neutron multiplication factor or effective thermal conductivity |
| LEU                            | low-enriched uranium  |
| lfpm                           | linear feet per minute  |
| LiAlO <sub>2</sub>             | lithium aluminate   |
| LSA                            | low specific activity   |
| LWR                            | light-water reactor   |
| MMC                            | metal matrix composite  |
| MNOP                           | maximum normal operating pressure   |
| Mo                             | molybdenum  |
| MOX                            | mixed oxide   |
| N <sub>2</sub>                 | nitrogen gas  |
| NASA                           | National Aeronautics and Space Administration                                 |
| Nd                             | neodymium   |
| NDE                            | nondestructive examination  |
| NDT                            | nondestructive testing  |
| NFH                            | nonfuel hardware  |
| NIST                           | National Institute of Standards and Technology                                |

|                 |  |
|-----------------|--|
| NMSS            | NRC Office of Nuclear Material Safety and Safeguards |
| Np              | neptunium  |
| NRC             | U.S. Nuclear Regulatory Commission                   |
| NRR             | Office of Nuclear Reactor Regulation (NRC)           |
| NSA             | neutron-source assembly                              |
| O               | oxygen   |
| O <sub>2</sub>  | oxygen gas   |
| OCRWM           | Office of Civilian Radioactive Waste Management      |
| OFA             | optimized fuel assembly                              |
| ORNL            | Oak Ridge National Laboratory                        |
| UO <sub>2</sub> | uranium dioxide                                      |
| PEEK            | polyetheretherketone                                 |
| PG              | power grade  |
| PNNL            | Pacific Northwest National Laboratory                |
| Pu              | plutonium  |
| PVC             | polyvinyl chloride                                   |
| PWR             | pressurized-water reactor                            |
| QA              | quality assurance                                    |
| QAPD            | quality assurance program description                |
| QARD            | quality assurance requirements document              |
| RAC             | Respiratory Advisory Committee (DOE)                 |
| RAI             | request for additional information                   |
| RAM             | radioactive material                                 |
| RCA             | radiochemical assay                                  |
| RES             | Office of Nuclear Regulatory Research (NRC)          |
| RG              | regulatory guide (NRC)                               |
| Rh              | rhodium  |
| RIS             | regulatory issue summary                             |
| RSICC           | Radiation Safety Information Computational Center    |
| Ru              | ruthenium  |
| SAR             | safety analysis report                               |
| SBR             | styrene-butadiene                                    |
| SCO             | surface contaminated object                          |
| SER             | safety evaluation report                             |
| SFPO            | Spent Fuel Project Office (NRC)                      |
| SI              | International System of Units                        |
| Sm              | samarium   |
| SNF             | spent nuclear fuel                                   |
| SRP             | standard review plan                                 |
| SRS             | Savannah River Site                                  |
| SSCs            | structures, systems, and components                  |
| STP             | standard temperature and pressure                    |
| T               | tritium (chemical symbol)                            |
| T <sub>2</sub>  | molecular tritium, tritium gas                       |

|                  |  |
|------------------|--|
| T <sub>2</sub> O | tritium oxide                            |
| Tc               | technetium                               |
| TI               | transportation index                     |
| TML              | total mass loss                          |
| TPBARs           | Tritium-Producing Burnable Absorber Rods |
| TVA              | Tennessee Valley Authority               |
| U                | uranium                                  |
| UF <sub>6</sub>  | uranium hexafluoride                     |
| UO <sub>2</sub>  | uranium dioxide                          |
| UT               | ultrasonic testing                       |
| WG               | weapons grade                            |
| WREC             | Westinghouse Reactor Evaluation Center   |
| X/Q              | atmospheric dispersion                   |



## UNITS

|                         |   |
|-------------------------|---|
| A/g                     | Specific activity per gram                            |
| atm                     | atmosphere  |
| Bq                      | Becquerel   |
| C                       | Celsius   |
| °C                      | degrees Celsius                                       |
| Ci                      | curie   |
| Ci/cm <sup>3</sup>      | curies per cubic centimeter                           |
| Ci/liter                | curie per liter                                       |
| Ci/yr                   | curies per year                                       |
| cm                      | centimeter  |
| cm <sup>-1</sup>        | per centimeter  |
| cm <sup>2</sup>         | square centimeter                                     |
| cm <sup>3</sup>         | cubic centimeter                                      |
| dpm/100 cm <sup>2</sup> | disintegrations per minute per 100 square centimeters |
| eV                      | electron volt   |
| F                       | Fahrenheit  |
| °F                      | degrees Fahrenheit                                    |
| ft                      | foot  |
| ft <sup>2</sup>         | square foot   |
| ft <sup>3</sup>         | cubic foot  |
| g                       | gravitational unit                                    |
| gm                      | gram  |
| GWd/MTU                 | gigawatt days per metric ton uranium                  |
| GWd/MTHM                | gigawatt days per metric ton of heavy metal           |
| Gy                      | gray  |
| hr                      | hour  |
| in.                     | inch  |
| K                       | Kelvin  |
| keV                     | kilo electron volt                                    |
| kg                      | kilogram  |
| km                      | kilometer   |
| kPa                     | kilopascal  |
| ksi                     | thousand pounds per square inch                       |
| L                       | liter   |
| lb                      | pound   |
| m                       | meter   |
| m <sup>2</sup>          | square meter  |
| m <sup>3</sup>          | cubic meter   |

|                    |   |
|--------------------|---|
| mb                 | millibar                                    |
| mCi                | millicurie                                  |
| mCi/hr             | millicuries per hour                        |
| mCi/m <sup>3</sup> | millicuries per cubic meter                 |
| mCi/(TPBAR-hr)     | millicuries per TPBAR per hour              |
| MeV                | mega electron volt                          |
| mg                 | milligram (one-thousandth of a gram)        |
| mg/cm <sup>2</sup> | milligrams per square centimeter            |
| mi                 | mile  |
| mJ                 | millijoule                                  |
| ml                 | milliliter                                  |
| mm                 | millimeter (one-thousandth of a meter)      |
| MPa                | megapascal (million pascals)                |
| mph                | miles per hour                              |
| mrem               | millirem                                    |
| ms                 | millisecond                                 |
| mSv                | millisievert                                |
| MT                 | metric ton                                  |
| MTHM               | metric tons of heavy metal                  |
| MW                 | megawatt                                    |
| MWd                | megawatt days                               |
| MWd/MTU            | megawatt days per metric ton uranium        |
| MWd/MTHM           | megawatt days per metric ton of heavy metal |
|                    |   |
| N                  | newton                                      |
| nCi                | nanocurie                                   |
|                    |   |
| Pa                 | Pascal                                      |
| PBq                | petabecquerel                               |
| ppm                | parts per million                           |
| psf                | pounds per square foot                      |
| psi                | pounds per square inch                      |
| psig               | pounds per square inch gauge                |
|                    |   |
| rad                | radiation-absorbed dose                     |
|                    |   |
| s                  | second                                      |
| Sv                 | sievert                                     |
|                    |   |
| Tbq                | terabecquerel                               |
|                    |   |
| μCi                | microcurie                                  |
| μm                 | micrometer                                  |
|                    |   |
| W                  | watt  |
| wt%                | weight percent                              |
|                    |   |
| yr                 | year  |

# INTRODUCTION

## Purpose of the Standard Review Plan

The Standard Review Plan for Transportation Package Approval (referred to herein as the SRP) provides guidance to the U.S. Nuclear Regulatory Commission (NRC) staff for reviewing applications for approval of package designs used for the transport of radioactive materials under Title 10 of the U.S. *Code of Federal Regulations* (10 CFR) Part 71. It is not intended as an interpretation of NRC regulations. Nothing contained in this SRP may be construed as having the force and effect of NRC regulations (except where the regulations are cited), or as indicating that applications supported by safety analyses and prepared in accordance with Regulatory Guide (RG) 7.9, "Standard Format and Content of Part 71 Applications for Approval of Packages for Radioactive Material," will necessarily be approved, or as relieving any person from the requirements of 10 CFR Part 71 as well as other pertinent regulations, including but not limited to the following:

- 10 CFR Part 20, "Standards for Protection Against Radiation"
- 10 CFR Part 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material"
- 10 CFR Part 40, "Domestic Licensing of Source Material"
- 10 CFR Part 60, "Disposal of High-Level Radioactive Wastes in Geologic Repositories"
- 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material"

Three major objectives of this SRP include the following:

- summarize the regulatory requirements for package approval
- describe the procedure by which the staff determines that the requirements have been satisfied
- document the practices the NRC developed in previous package certifications

This SRP complements RG 7.9, which provides guidance to applicants on the standard format and content of applications for package approval. Unless specified, all acceptance criteria and review guidance in this SRP is applicable to all packages. Appendix A, "Description, Safety Features, and Areas of Review for Different Types of Radioactive Material Transportation Packages," to this SRP describes different types of packages for different types of contents and provides specific information on reviewing each package type. Note that Appendix A does not contain guidance specific to spent nuclear fuel packages.

## Applicability

This SRP provides guidance for the NRC staff's review and approval of certificates of compliance for packaging used to transport radioactive materials (RAM).

Appendix E, "Description and Review Procedures for Irradiated Tritium-Producing Burnable Absorber Rods Packages," to this SRP provides supplemental general information and

guidance for reviewing applications for packaging used in the shipment of irradiated tritium-producing burnable absorber rods (TPBARs).

### Organizational Structure

The SRP is organized to correlate with the recommended content for an application, as detailed in RG 7.9, which will be revised in the future to harmonize with this SRP. The individual sections of each chapter address the matters that are reviewed, the basis for the review, how the review is accomplished, and the conclusions that are sought and follow a common outline of subsections, as described below. In conjunction with the SRP, the NRC staff developed several interim staff guidance (ISG) documents related to package approvals under 10 CFR Part 71. An ISG addresses emergent review issues. This SRP combines and updates NUREG-1609, "Standard Review Plan for Transportation Packages for Radioactive Material," issued September 1997, and NUREG-1617, "Standard Review Plan for Transportation Packages for Spent Nuclear Fuel," issued March 2000, and their supplements and incorporates applicable ISGs, as shown in Table 1.

| <b>Table 1 Interim Staff Guidance (ISGs) Incorporated Into This Standard Review Plan</b> |   |                            |
|--|---|----------------------------|
| <b>ISG # &amp; Rev.</b>  | <b>Title</b>  | <b>Affected Chapter(s)</b> |
| ISG 1<br>Rev. 2  | Damaged Fuel  | 2, 4, 5, 6, 7              |
| ISG 6  | Establishing Minimum Initial Enrichment for the Bounding Design Basis Fuel Assembly(s)  | 5                          |
| ISG 7  | Potential Generic Issue Concerning Cask Heat Transfer in a Transportation Accident  | 3                          |
| ISG 8<br>Rev. 3  | Burnup Credit in the Criticality Safety Analyses of PWR Spent Fuel in Transport and Storage Casks   | 6                          |
| ISG 11<br>Rev. 3   | Cladding Considerations for the Transportation and Storage of Spent Fuel  | 7                          |
| ISG 15   | Materials Evaluation  | 5, 6, 7                    |
| ISG 19   | Moderator Exclusion Under Hypothetical Accident Conditions and Demonstrating Subcriticality of Spent Fuel Under the Requirements of 10 CFR 71.55(e)   | 1, 3, 6                    |
| ISG 20   | Transportation Package Design Changes Authorized Under 10 CFR Part 71 Without Prior NRC Approval  | 1, 3, 5, 6, 8, 9           |
| ISG 21   | Use of Computational Modeling Software  | 2, 3                       |
| ISG 22   | Potential Rod Splitting Due to Exposure to an Oxidizing Atmosphere During Short-Term Cask Loading Operations in LWR or Other Uranium Oxide Based Fuel | 3, 8                       |
| ISG 23   | Application of ASTM Standard Practice C1671-07 When Performing Technical Reviews of Spent Fuel Storage and Transportation Packaging Licensing Actions | 3, 5, 6, 7, 9              |

Because of the large variety of packages and the many different approaches that can be taken to evaluate these package designs, no single review plan can address in detail every situation that might be applicable to a review. The staff may therefore need to modify or expand the guidance in this review plan to adapt to specific package designs. The following areas of 10 CFR Part 71 are not within the scope of this SRP:

- Qualification and shipment of low-specific-activity material and surface-contaminated objects
- Qualification of special form radioactive material
- Reports, records, notifications, violations, and criminal penalties
- Exemptions and general licenses
- Requirements incorporated into 10 CFR Part 71 by reference to other regulations, (e.g., 10 CFR Parts 20, 21, 30, 40, 70, 73, and DOT or U.S. Postal Service regulations)

### Technical Review Oversight

Certificate holders are responsible for demonstrating that the package design meets the requirements in 10 CFR Part 71, Subparts D, “Application for Package Approval,” and E, “Package Approval Standards,” and performing the preliminary determination, as required by 10 CFR 71.85, “Preliminary Determinations.” Licensees are responsible for complying with the general license in accordance with 10 CFR 71.17, “General License: NRC-Approved Package,” for safe operation and for complying with appropriate regulations during shipment. The NRC mission as the regulator is to confirm that the package design provides adequate protection of public health and safety and the environment. The value of the NRC review team is its independent expertise in identifying and ensuring the resolution of potential design or operational deficiencies, analytical errors, nonconservatisms or significant uncertainties in novel design approaches, or other issues that hinder the NRC’s ability to ensure compliance with the regulations. If otherwise left unchecked by the licensee and the regulator, these issues could potentially lead to the unsafe or noncompliant use of the package.

Several considerations may influence the depth and rigor that is needed for a reasonable assurance determination of both safety and compliance. These include, but are not limited to, the novelty of the design (as compared to existing designs), safety margins, operational experience, and defense-in-depth. Any aspect of the design or procedures that the NRC determines the certificate holder should not change, without prior NRC approval, should be placed as a condition in the certificate. The design is specified in the certificate of compliance (CoC) (by reference) with drawings, operating procedures, acceptance tests and maintenance programs, and with other relevant documentation as needed. The staff and applicant should ensure that the CoC conditions include the appropriate level of detail that could also allow for appropriate minor changes to the package but still be within the design specified in the CoC (e.g., tolerances that are bounding of variations that can be seen in package fabrication).

### Review Process

The reviews of the application are performed by reviewers with expertise in the technical areas described in this SRP. Because of the dependence between technical information in different sections of the application, coordination among the different disciplines is important to ensure a consistent, uniform, and high-quality review. As shown in the flow charts contained in each chapter of this SRP, technical issues are interwoven among the disciplines, and many rely on input from multiple areas.

When reviewing an amendment to a package design, the staff should consult the SERs of previous amendments, if applicable, as well as the SERs for similar, approved packages to

understand past NRC determinations regarding analyses affecting or similar to those in the application under review. In conducting reviews, the staff should confirm that the application properly applies NRC regulatory guidance, when endorsed by reference. While applicants are not required to comply with NRC guidance, the use of NRC guidance facilitates the staff's review process in evaluating package designs and confirming compliance with NRC regulations.

For amendments, the staff should review the entire amendment to ensure that the applicant has identified all the changes to the certificate of compliance. Amendments may range from minor changes in the design, contents, or operations to adding new major component designs or contents. Some amendments are based upon the design and methodologies the NRC previously reviewed for that package. Evaluations of amendment changes are often based on the performance of the package as an integrated system. As a result, the staff may reexamine portions of previously approved components, contents, or methodologies in the application to ensure that the design and operations, as modified under the amendment proposal, meet 10 CFR Part 71 requirements. During the audit review of an amendment, the staff may occasionally find errors or other safety questions that affect part of the previously approved design. The staff may need to review that part of the application and ask questions to assure the design remains safe and compliant with applicable regulations. The questions should be limited to understanding and resolving the specific technical issue and should consider past precedents, regulatory guidance, and risk significance, as appropriate. The staff should also consider other processes (e.g., inspections, enforcement actions, generic issue program) to resolve these types of potential safety questions with a previously approved design.

If the information provided in the application is not properly justified, the reviewer may develop and then forward to the applicant questions requesting clarification of technical issues via a request for additional information (RAI). The staff should review the applicant's response to the RAI, together with a supplemented application, for acceptability. The RAI process is repeated, as necessary, until the applicant demonstrates that the package design meets 10 CFR Part 71, or until the NRC terminates the application review or the applicant withdraws the application.

### Safety Evaluation Report and Content

The NRC staff documents the results of an application review in a safety evaluation report (SER). Although the NRC Project Manager for the review will make the final determination of the organization of an SER, the SER typically is organized in the same manner as this SRP and contains the following information:

- a general description of the package, including the design and operational features, and content specifications
- a summary of the approach the applicant used to demonstrate compliance with the regulations, and a description of the reviews that the staff performed to confirm compliance
- comparison of systems, components, analyses, data, or other information important in the review analysis to the acceptance criteria, in addition to staff conclusions (including the bases for those conclusions) regarding the acceptability, suitability, or appropriateness of this information to provide reasonable assurance the acceptance criteria have been met

- summary of aspects of the review that were selected or emphasized, aspects of the design or contents that were modified by the applicant, aspects of the design that deviated from the criteria stated in the SRP, and the bases for any deviations from the SRP
- summary statements for evaluation findings at the end of each chapter

### Content of this Standard Review Plan

Each chapter of the SRP is organized into the following sections:

- Review Objective
- Areas of Review
- Regulatory Requirements and Acceptance Criteria
- Review Procedures
- Evaluation Findings
- References

Review Objective This section provides the purpose and scope of the review and establishes the major review objectives for the chapter. The reviewer should obtain reasonable assurance during the review that the objectives are met.

Areas of Review This section lists the areas of review. Each area of review encompasses systems, components, analyses, data, or other information and provides the organizational structure for the rest of the chapter.

Regulatory Requirements and Acceptance Criteria The regulatory requirements portion of this section summarizes the regulatory requirements for 10 CFR Part 71 pertaining to the given chapter and can also list other significant regulatory requirements, such as those for 49 CFR Part 173, “Shippers—General Requirements for Shipments and Packagings.” This list is not all-inclusive, and the reviewer should refer to the regulations to ensure all relevant requirements are addressed in the application.

This subsection includes the regulatory requirements by reference and identifies other criteria to demonstrate that the package meets the regulatory requirements in 10 CFR Part 71 that apply to the given chapter. In most chapters, the acceptance criteria are organized similar to the review areas established in the “Areas of Review” section of the specific chapter and identify the type and level of information that should be in the application.

This section typically sets forth the solutions and approaches that staff reviewers have previously determined to be acceptable for demonstration of compliance with the regulations and addressing specific safety concerns or design areas that are important to safety. These solutions and approaches are discussed in this SRP so that the reviewers can implement consistent and well-understood positions as similar safety issues arise in future cases. These solutions and approaches are acceptable to the staff, but they are not the only possible method for meeting the regulations.

Substantial staff time and effort has gone into developing these acceptance criteria. Consequently, a corresponding amount of time and effort may be required to review and accept new or different solutions and approaches. Thus, applicants proposing new solutions and approaches to safety issues or analytical techniques other than those described in the SRP may

experience longer review times. An alternative for the applicant is to propose new methods on a generic basis, apart from a CoC. Such an alternative proposal could consist of a submittal of a topical report.

Review Procedures This section presents a general approach that reviewers typically follow to establish reasonable assurance that the applicable acceptance criteria have been met. As an aid to the reviewer, this section may also provide information on what has been found acceptable in past reviews. This section identifies standards that have been found acceptable in particular reviews, or that are desirable but not specifically identified in existing regulatory documents. Since many reviews of applications are interdisciplinary, the reviewers should coordinate with each other, as necessary, to identify issues in other chapters. The section includes a flow chart figure to depict the coordination that may be necessary to conduct reviews. In addition, the reviewer may provide discussions on conditions of the approval. In these cases, the reviewer should include a discussion of each condition and the reasons for the addition of the condition in the relevant sections of the SER.

Evaluation Findings This section provides example evaluation findings and summary statements to be incorporated into the SER. The reviewer prepares the evaluation findings based on the applicant's satisfaction of the regulatory requirements. The findings are published in the SER.

References This section lists the NRC documents, codes, specifications, standards, regulations, and other technical documents referenced in the chapter.