APPENDIX B1

TRAINING REQUIREMENTS AND QUALIFICATION JOURNAL FOR

SPENT FUEL STORAGE AND TRANSPORTATION

PROJECT MANAGER AND TECHNICAL REVIEWER

1. **TRAINING REQUIREMENTS**
2. Applicability

The training described below is required for all project managers and technical reviewers assigned to perform activities related to spent fuel storage and transportation facilities. Section II, “Qualification Journal,” of this Appendix includes instructions to complete the requirements for the qualification of a project manger and/or a technical reviewer in the Division of Spent Fuel Storage and Transportation (SFST).

B. Training

 1. Required Initial Training.

 a) Self-Study and On-The-Job Training:

 (1) NRC Orientation.

 (2) Code of Federal Regulations.

 (3) NRC Management Directives.

 (4) NMSS/SFST Orientation Reading.

 (5) Regulatory Guidance.

 (6) Formal Training.

 (7) Directed Review of Selected Case Work.

 (8) Inspection Accompaniments.

 (9) Review of Discipline-Specific Documentation.

 b) Core Training. These courses establish minimum formal classroom training requirements. Refer to Section 1246-09 for exceptions to these requirements.

 (1) “NMSS Radiation Worker Training” (H-102), or “Site Access Training” (H-100)

 2. Specialized Training. Depending on the employee's previous work experience and planned activities, additional courses or reading may be required in order to gain knowledge necessary for specialized activities. Management will make this determination on an individual basis.

1. **QUALIFICATION JOURNAL**

A. Applicability

This of Office Nuclear Material Safety and Safeguards (NMSS) Qualification Journal for the Division of Spent Fuel Storage and Transportation (SFST) (hereafter, the SFST Qualification Journal) implements U.S. Nuclear Regulatory Commission (NRC) Inspection Manual Chapter (IMC) 1246, by establishing the minimum training requirements for a new project manager or technical reviewer in SFST. These requirements provide a basis of knowledge for:

 1. Performing technical reviews of various types of radioactive material package and spent fuel storage cask designs;

 2. Managing license reviews for radioactive material package and spent fuel storage applications; and

 3. Performing activities associated with the storage of spent fuel.

The SFST Qualification Journal serves as a guideline for the development of a Program Office Qualification Journal, and establishes the minimum training requirements consistent with NRC IMC 1246. The Program Office Qualification Journal must provide traceable documentation to show that minimum requirements are met for each SFST staff member. The employees supervisor has the discretion to modify the requirements, as needed, based on the employees previous experience, education, and course availability. The employees supervisor may add, delete, or substitute with alternate material, for course(s) that will not be available during the qualification period. For exceptions to the SFST qualification process (e.g., grandfathering and individuals qualified under other NRCs divisions), refer to section 8 of the introduction of IMC 1246 and SFST Office Instruction number six (SFST-06). For post qualification training, refer to section 6 of the introduction of IMC 1246 and Appendix A, of this IMC.

The SFST Qualification Journal consists of a series of qualification cards and signature cards. Each signature card is used to document task completion, as indicated by the appropriate signature block(s). The corresponding qualification guide establishes the minimum knowledge levels or areas of study that must be completed for each signature card. Employees to be qualified as project managers (PMs) or technical reviewers (TRs) should follow the guidance in Appendices A and B1, of NRCs IMC 1246, while employees to be qualified as inspectors should follow Appendices A and B2, of IMC 1246.

B. Discussion

This SFST Qualification Journal contains a qualification summary sheet, qualification guides, and signature cards. The supervisor should discuss the scope of this SFST Qualification Journal and expected knowledge level, as described later in this SFST Qualification Journal, with the staff member before the staff member starts the qualification process. Each new staff member should complete signature cards 1 through 8, regardless of assigned work group. Signature Card 9 is specific to the various disciplines of technical reviewers within SFST. The new staff member is expected to complete only the signature card(s) applicable to his/her assigned work group. It may not be necessary to complete every requirement. At the supervisors discretion, requirements may be deleted, or other requirements added, depending on the new staff members previous experience and/or training, etc. To support the review of upper-tier documents, programs, and policies, the supervisor should consider assigning the staff member one or more review cases that involve NRC licensees and/or certificate of compliance licensing actions. The staff would work with a PM or Technical Mentor and his/her supervisor, as part of the qualification process. The selection of the case(s) is intended to provide the staff members management with the ability to tailor the qualification process to the experience and training level of the staff member, and to meet SFST’s needs.

The SFST staff member is expected to use the most current version or revision of each document cited in this SFST Qualification Journal. Most of the documentation is readily available either on the: (1) IMC 1246 (NRCs internal web site); (2) NRCs Agency-wide Documents Access and Management System (ADAMS); or (3) SFST library. Unless otherwise indicated, the staff member is to initial and date each appropriate requirement sign-off and insert the appropriate revision number after the reference.

It is recognized that some of the required formal training courses may not be immediately available. The supervisor may substitute an alternate course, provide another method to meet the requirement, or delete the requirement altogether. Any such change should be documented in this SFST Qualification Journal. In addition, it should be noted that the supervisor and secretaries will provide each new employee with an NRC indoctrination checklist, apart from this qualification journal. The purpose of the list is to familiarize the new employee with NRC processes; however, it is not part of the formal qualification program.

The time necessary to complete this SFST Qualification Journal will vary, depending the new staff members previous experience and education. SFST management expectation is that this qualification journal should be completed within 18 months. However, the availability of required training courses and the new staff members assigned workload may prolong this anticipated time frame.

NMSS SFST QUALIFICATION SUMMARY SHEET

PROJECT MANAGER AND TECHNICAL REVIEWER

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Position Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Branch: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date Training Started: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Complete the following signature cards for a Spent Fuel Storage and Transportation project manager (PM) or technical reviewer (TR) as they may apply to you. All sign-offs shall include the signature of the responsible reviewer and the date. Maintain these cards in a notebook (hard copies of background or written material, required by the program, may also be kept for reference purposes). This notebook will comprise your NRC PM/TR Qualification Journal.

SIGNATURE CARDS

 Supervisor Date

CARD 1. NRC ORIENTATION \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

CARD 2. CODE OF FEDERAL REGULATIONS \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

CARD 3. NRC MANAGEMENT DIRECTIVES \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

CARD 4. NMSS/SFST ORIENTATION \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

 READING

CARD 5. REGULATORY GUIDANCE \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

CARD 6. FORMAL TRAINING \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

CARD 7. DIRECTED CASE WORK \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

CARD 8. INSPECTION ACCOMPANIMENTS \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

NMSS SFST QUALIFICATION SUMMARY SHEET

PROJECT MANAGER AND TECHNICAL REVIEWER

(CONT.)

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Position Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Branch: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date Training Started: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

SIGNATURE CARDS

 Supervisor Date

CARD 9. REVIEW OF DISCIPLINE-SPECIFIC \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

 DOCUMENTATION

CARD 9A. CONTAINMENT/CONFINEMENT \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

CARD 9B. CRITICALITY \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

CARD 9C. MATERIALS \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

CARD 9D. SHIELDING/RAD PROTECTION \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

CARD 9E. STRUCTURAL \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

CARD 9F. THERMAL \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

QUALIFICATION BOARD CERTIFICATION

IMC 1246, Section 05.02, Final Qualification Activity, provides guidance on conduct of the Oral Qualification Board that should be used by the Board members. Additional guidance is provided below, on documenting possible Board outcomes.

Board Recommendations

The Board will document the results of its assessment, in writing, as follows, to the Division Director, each time a Board examines an individual:

 a. If the Boards assessment is favorable, the recommendation will be to grant Full Qualification. The individual must complete any areas where he/she requires additional review (look up items) and an assigned member of the Board must verify this completion before forwarding the Boards decision to the division director.

 b. If the Board has identified areas of weakness requiring formal remediation, the Board will identify the areas for improvement in writing and recommend that the individual appear before a Board for re-examination, when the remediation activities are complete. The Board and the individuals supervisor will agree on a schedule for re-examination.

 c. If the Board has identified performance deficiencies that could not be successfully addressed with a remediation effort, the Board will document the full scope of the deficiencies and recommend that the individual not be remediated nor re-examined.

 d. A copy of each Qualification Boards results, identifying any weaknesses and deficiencies, will be placed in the individuals personnel file. The employee will receive a copy of the Boards findings and recommendation.

Re-examination Board: A Re-examination Board must include at least one individual from the original Board. The Board questioning during re-examination will focus on only the areas of identified weakness.

Board Documentation: The Boards decisions are forwarded to the Division Director, for information. The form on the following page shall be used to document the Boards decision.

RESULT OF QUALIFICATION BOARD

FOR PROJECT MANAGER OR TECHNICAL REVIEWER

Date of Oral Board: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Successful or Unsuccessful (circle outcome) Completion of Oral Board:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Chairperson Date

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Member Date

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Member Date

Qualification Completion Certification Memo Issued:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Supervisor Date

Qualification Completion Certificate Issued/Ordered:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Supervisor Date

The documentation review requirements, specified in the following Cards, reflect the minimum information that should be reviewed, understood, and successfully applied to perform technical review and project management activities in SFST. It is recognized that some subjects require different levels of understanding to adequately perform assignments in SFST. Accordingly, the training and documentation are marked with the following guidelines, to indicate the level of knowledge and understanding that is expected in the qualification process. As discussed below, the employee should use a graded approach in reviewing and applying the document. Similarly, qualification questions should be consistent with the prescribed knowledge level.

(F) Familiarity: The individual is knowledgeable of the document’s purpose and general content. The individual is expected to have paged through the document, but not to have read it word-for-word. Knowledge of specific contents is not expected.

(B) Basic: The individual is knowledgeable of the document’s purpose and scope, the major topical areas, and relationship to the roles, responsibilities, and assignments of position for which he/she is qualifying. The individual is expected to have read the document and understand how it is used and/or the role it plays in the regulatory process.

(I) In-Depth: The individual is expected to have read and studied the document. Although rote memorization is not required, the individual should be able to describe basic requirements of the regulations and/or industry standards, guidance contents (within the individual’s area of qualification), analytical techniques and processes consistent with the individual’s grade level, and any associated limitations, and how the document is used in the review process. Because rote memorization is not required, reference to the document is expected for complex questions concerning its content and use.

CARD 1

NRC ORIENTATION

(ALL STAFF)

The following documentation should be read to develop a general understanding of the U.S. NRC, as an organization, and from where its regulatory authority is derived. This information should be discussed with the qualifying individuals (i.e., staff members) supervisor (or as directed).

 Employee Supervisor Date

 NUREG-1614 U.S. NRC Strategic Plan -

 Vol. 4 (Purpose and

 Strategic Goals) (32 pages) \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

The following training courses should be taken to develop a general understanding of NRC as an organization and to familiarize the individual with general tasks that the staff performs.

Orientation Classes Offered by Professional Development Center

 Employee Supervisor Date

“NRC: What It Is and What It Does” (2 days) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

“Regulatory Process” (2 days) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

Training Offered On NRC Website

 Employee Supervisor Date

“Allegations” (3 hrs) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

(Management Directive 8.8)

“Information Security Awareness” (INFOSEC) (3 hrs) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

CARD 1

NRC ORIENTATION

(ALL STAFF)

(CONT.)

Other Orientation Material

 Employee Supervisor Date

 “Open, Collaborative, Work Environment” (3 hrs)

 (Orientation Seminar or presentation slides at

 NRC’s internal website: \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

 <http://www.internal.nrc.gov/OE/dva/index.html>)

“Regulatory Review Philosophy” (1 hr)\* \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

\*This training course is an orientation session to discuss practices that an NRC employee should follow when reviewing licensing documentation to make a regulatory decision.

CARD 2

CODE OF FEDERAL REGULATIONS

(ALL STAFF)

The qualifying individual should become familiar with the following sections of the Code of Federal Regulations (CFRs) as they are applicable to his/her area of expertise. After the qualifying individuals completion of the self-study of the listed CFR Parts, he/she will discuss them with his/her supervisor. To the extent possible, the supervisor should emphasize recent application of various sections, new regulatory initiatives, and current industry issues.

 Employee Supervisor Date

 10 CFR Part 71 “Packaging and Transportation

 of Radioactive Material” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

 (~54 pages)

 10 CFR Part 72 “Licensing Requirements for the

 Independent Storage of Spent

 Nuclear Fuel, High-Level

 Radioactive Waste, and Reactor –

 Related Greater than Class C

 Waste” (~58 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

B 10 CFR Part 20 “Standards for Protection

 Against Radiation” – Overview

 of Subparts A Through K \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_ (~27 pages)

F 10 CFR Part 2 “Rules of Practice for Domestic

 Licensing Proceedings and

 Issuance of Orders” or On-line

 Training - Overview of Types of

 Hearings and 2.390 \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F 10 CFR Part 21 “Reporting of Defects and

 Noncompliance”(~7 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F 10 CFR Part 51 “Environmental Protection

 Regulations for Domestic

 Licensing and Related

 Regulatory Functions” –

 Overview of Sections 1,

 21-22, 25-35, 45, and 70 \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_ (~10 pages)

CARD 3

NMSS/NRC MANAGEMENT DIRECTIVES

(ALL STAFF)

The first-line supervisor should select some currently applicable NRC Management Directive (MD) references and discuss the application of the selected NRC MDs with the qualifying individual. (The first line supervisor should also discuss where MDs are located including how to access these documents in NRC’s internal website.) These references should include those listed below and be documented. The qualifying individual should be expected to have a general knowledge of the topics addressed in the references. He/she may learn the information by studying, study-quizzes, briefings, or discussions. The selection should include:

 Employee Supervisor Date

B NRC MD 10.131 “Protection of NRC

 Employees against

 Ionizing Radiation”

 (76 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F NRC MD 3.1 “Freedom of Information

 Act” (97 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F NRC MD 3.5 “Attendance at NRC Staff -

 Sponsored Meetings” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

 (50 pages)

(Management directives can be found in the following link in NRCs internal website: <http://www.internal.nrc.gov/ADM/DAS/cag/Management_Directives/index.html>.)

CARD 4

NMSS/SFST ORIENTATION READING

(ALL STAFF)

The qualifying individuals supervisor should discuss these policies and practices with the employee to ensure that he/she has a general understanding of the material.

General Overview

 Employee Supervisor Date

F “Enforcement Policy” (Introduction and Purpose)

 (2 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

(<http://www.nrc.gov/about-nrc/regulatory/enforcement/enforc-pol.pdf>)

SFST Reading

 Employee Supervisor Date

B “SFST Office Instructions” (ADAMS Document

 Manager Folder: NMSS/NMSS-SFPO/Office

 Instructions) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F “U.S. DOT/NRC Memorandum of Understanding,”

 dated 7/02/79 (FRN 44FR38690) (9 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F “U.S. OSHA/NRC Memorandum of Understanding”

 (see IMC 1007, “Interfacing Activities Between

 Regional Offices of NRC and OSHA,” and \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_ <http://r12k3web.nrc.gov/dnms/Training/MOU06_2003.htm>)

NRC Inspection Manual Chapter

 Employee Supervisor Date

F IMC 1201 “Conduct of Employees” (35 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

CARD 4

NMSS/SFST ORIENTATION READING

(ALL STAFF)

(CONT.)

The qualifying individuals supervisor should discuss these policies and practices with the employee to ensure that he/she has a general understanding of the material.

Policy and Procedures Letters

The following NMSS’ Policy and Procedure Letters (P&PLs) should be discussed with the qualifying individual to develop a general understanding of NMSS as an organization and to familiarize the individual with general tasks that the staff performs. (The first line supervisor should also discuss where P&PLs are located in ADAMS.)

 Employee Supervisor Date

F P&PL1-13 “Signature Level on NMSS

 Correspondence”

 (Revised Nov99, 1 page) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

 (ML032180768)

F P&PL1-28 “Preparation of Responses to

 Congressional Inquiries”

 (01/1993; 1 page) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

 (ML032230067)

F P&PL1-39 “Review of Speeches, Papers and

 Journal Articles Revised”

 (Sept 99; 2 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

 (ML032240298)

F P&PL1-84 “10 CFR Part 72 Backfit Guidance

 for NMSS” (11/6/04; 45 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

 (ML040330332, ML050350399)

F P&PL1-85 “Handling Requests to Withhold

 Proprietary Information from Public

 Disclosure” (3/3/05; 15 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

 (ML050340352)

CARD 5

REGULATORY GUIDANCE

(ALL STAFF)

The supervisor should select currently applicable regulatory guidance related to the individuals tasks. These references should include those listed below and should be documented. The qualifying individual should be expected, as appropriate, to have a general knowledge of the topics in the references. The level of knowledge of standard review plans (SRPs) may be caveated with respect to PMs and TRs roles. In terms of SRPs, PMs and TRs will need in-depth knowledge of some chapters, and familiarity with others. The individual can review the topics by self-study, study-quizzes, briefings, or discussions.

10 CFR Part 71

 Employee Supervisor Date

I NUREG-1609 SRP for Transportation Packages

 for Radioactive Material -

 Selected Portions (149 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

I NUREG-1617 SRP for Transportation Packages

 for Spent Nuclear Fuel -

 Selected Portions (162 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F NUREG/ Engineering Drawings for

 CR-5502 10 CFR 71 Package Approvals \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_ http://www.rampac.com/NRCinfo/NUREG\_5502.pdf

F IAEA Safety Regulations for the Safe

 Standard, Transport of Radioactive

 No. TS-R-1 Material [Types B(U) and B(M)

 2005 Only] - IAEA Safety Standards

 Section I; Section VI – pages 81-83;

 86; 89-92; Section VII –

 pages 99-105; 108 (top);

 Section VIII – pages 111-126,

 general (~48 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F RAMREG Radioactive Material

 XXX-XX Regulations Review (U.S.DOT)

 (formerly Sections I-V, and X-XII \_\_\_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_\_

 RAMREG- (~57 pages)

 001-98)

CARD 5

REGULATORY GUIDANCE (CONT.)

(ALL STAFF)

(CONT.)

10 CFR Part 72

 Employee Supervisor Date

I Regulatory Guidance for Implementation of

 Guide 3.72 10 CFR 72.48, Changes, Tests,

 and Experiments (7 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 (ML010710153)

I NUREG-1536 SRP for Dry Cask Storage

 Systems-Selected Portions \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 (232 pages)

I NUREG-1567 SRP for Spent Fuel Dry

 Storage Facilities-

 Selected Portions (410 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

I NUREG 1745 Standard Format and

 Content for Technical

 Specifications for 10 CFR

 Part 72 Cask Certificates

 of Compliance \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

F NUREG 1748 Environmental Review Guidance

 for Licensing Actions Associated

 with NMSS Programs -

 Introduction \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

Interim Staff Guidance

 Employee Supervisor Date

I Interim Staff Guidance (ISG) memoranda

 (Selected Reading) (http://www.nrc.gov/reading-

 rm/doc-collections/isg/spent-fuel.html) (B for PMs) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

CARD 5

REGULATORY GUIDANCE (CONT.)

(ALL STAFF)

(CONT.)

Quality Assurance (if applicable – Rules, Inspections, and Operations Branch only)

 Employee Supervisor Date

F Regulatory Establishing Quality Assurance

 Guide 7.10 Programs for Packaging Used

 in the Transport of Radioactive

 Material \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 (28 pages) – ML050540330

Generic Communications

 Employee Supervisor Date

F IN 91-039, “Compliance with 10 CFR Part 21,

 Reporting of Defects and Noncompliance \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 (4 pages)

F IN 95-029, Oversight of Design and Fabrication

 Activities for Metal Components Used in Spent

 Fuel Dry Storage Systems (4 pages) \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

F IN 97-051, Problems Experienced Loading and

 Unloading Spent Nuclear Fuel Storage and

 Transportation Casks (5 pages) \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

F IN 97-057, Leak Testing of Packaging

 Used in the Transport of Radioactive

 Material (4 pages) \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

F IN 99-029, Authorized Contents of Spent

 Fuel Casks(1-2 pages) \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

F IN 2004-13, Quality Assurance of Transportation

 Packages (9 pages) \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

F IN 2005-10, Changes to Part 71 Packages \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 (3 pages)

CARD 5

REGULATORY GUIDANCE (CONT.)

(ALL STAFF)

(CONT.)

Generic Communications

 Employee Supervisor Date

F RIS 2006-22 Lessons Learned from Recent 10

 CFR Part 72 Dry Cask Storage Campaigns \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 (10 pages)

F RIS 2007-09, Examples of Recurring Requests

 for Additional Information (RAIs) for 10 CFR Part

 71 and 72 Applications (20 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

B RIS 2005-27, Rev. 1, “NRC Timeliness Goals,

 Prioritization of Incoming License

 Applications and Voluntary Submittal of

 Schedule for Future Actions for NRC

 Review” (9 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

F BL 96-04, Chemical, Galvanic, or Other

 Reactions in Spent Fuel Storage and

 Transportation Casks (9 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

CARD 6

FORMAL TRAINING

(ALL STAFF)

A. CORE TRAINING

 Employee Supervisor Date

“Site Access Training” (H-100) or “NMSS Radiation

Worker Training” (H-102) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

B. SPECIALIZED TRAINING

Other specialized training and/or courses required for PMs or TRs in performing regulatory activities in specific areas.

CARD 7

DIRECTED CASE STUDY

Complete the Directed Case Study card as applicable to PMs or TRs. At the completion of the assignment, lessons learned should be discussed with the experienced PM and/or supervisor. These tasks can be performed either individually or in groups of two or three individuals, depending on the availability of case studies.

A. PROJECT MANAGERS

Job Performance Measures

Perform one (1) project management assignment under the oversight of an experienced PM.

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Project Manager

B. TECHNICAL REVIEWER

DISCIPLINE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Job Performance Measures

Perform at least one technical review that is moderate to complex in nature, either related to 10 CFR Part 71, or to 10 CFR Part 72. The individual should lead the development of a request for additional information (RAI), a safety evaluation report (SER), and other interactions with the applicant, as appropriate. The review should be performed under the oversight of the appropriate technical specialty individual and/or supervisor, in the employees assigned technical discipline. As appropriate, within certain technical disciplines, the supervisor may require completion of additional technical reviews (or portions) to qualify the individual for review methods and acceptance criteria that may be unique to either a Part 71 or Part 72 licensing action.

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Supervisor or Assignee

Participate in, and assist, the licensing process, from the receipt of a licensing request (e.g., developing schedules, arranging meetings, coordinating reviews, briefing and updating management documentation; new package and new certificate of compliance application request; and/or amendment to an existing certificate of compliance) by working with an experienced PM.

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Project Manager

CARD 8

INSPECTION ACCOMPANIMENTS

(ALL STAFF)

The qualifying individual should accompany staff on at least one site visit or inspection of a fabrication facility or certificate holder. These tasks can be performed either individually or in groups, depending on the availability of site visits or inspections. The following is a guide for material that the individual may discuss, as applicable, with the lead staff member of the site visit or lead inspector before/after/during the accompaniment:

1. Type of facility
2. Applicability to staff’s duties
3. Logistics (e.g., scheduling and preparation of site visits or inspections)
4. Inspection program
	1. Entrance and exit interviews
	2. Accumulation of data
	3. Importance of inspection procedures and reports (e.g., Form 591S)
5. Post-site visit or post-inspection activities

The individuals supervisor may also discuss these items, as appropriate, after the accompaniment.

Record of Accompaniments

 Location/Facility: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Date(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Type (71/72): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Successful Completion: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Staff Member/Supervisor

CARD 9

REVIEW OF DISCIPLINE-SPECIFIC DOCUMENTATION

WORK GROUP SPECIALTY TRAINING

The following signature cards contain the specialty training requirements for the following technical branches in SFST:

Structural, Mechanics, and Materials Branch (SMMB)

Criticality, Shielding, and Dose Assessment Branch (CSDAB)

Thermal and Containment Branch (TCB)

Work group specialty training is performed in addition to the requirements in qualification cards 1 through 8. Each signature card may contain a mixture of reading and formal classroom instruction. The employees supervisor has the discretion to modify the requirements, as needed, based on the employees previous experience, education, and course availability.

There are six technical specialty disciplines comprising the bulk of the technical evaluations performed by the technical review staff: (1) containment/confinement; (2) criticality; (3) materials; (4) shielding/radiological/security assessment protection; (5) structural; and (6) thermal. The employees supervisor will assign the employee one or more technical specialty disciplines. The employees supervisor and/or the technical specialty individual, if so designated, will determine what training within a technical specialty discipline is required based on the employees educational background and experience. The technical specialty training listed here may not be all-inclusive, and may be adjusted as desired by the employees supervisor. To the extent practical, knowledge of some of the required documents may be demonstrated, in part, through discussion and completion of the job performance measures described in Card 7. For each specialty card, the technical reviewer should have an appropriate level of knowledge (as marked) of the following documents, in order to be qualified to independently perform technical reviews in that area for his or her grade level.

CARD 9A

CONTAINMENT/CONFINEMENT

 Employee Supervisor Date

 NUREG/ Containment Analysis for Type B

 CR-6487 Packages with Various Contents \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

A NSI N14.5 Leakage Tests on Packages for

 Shipment \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

B ASME, “Containment Systems and

 Section III, Transport Packaging” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

 Division 3

B ANSI N14.1 “UF6 Packages” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F Regulatory Atmospheric Dispersion Models for

 Guide 1.145 Potential Accident Consequence

 Assessments at Nuclear Power

 Plants \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F Regulatory Leakage Tests on Packages for

 Guide 7.4 Shipment of Radioactive Material\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F NUREG 1736 Consolidated Guidance: 10 CFR

 Part 20, Standards for Protection

 Against Radiation \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

Training Courses.

ORIGEN - ARP/TRITON Course (F368) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

CARD 9B

CRITICALITY

 Employee Supervisor Date

 NUREG/ Recommendations for Preparing

 CR-5661 Criticality Safety Evaluations of

 Transportation Packages \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

 ANSI/ANS-8.1 Nuclear Criticality Safety in

 Operations with Fissionable

 Material Outside Reactors \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

 ANSI/ANS-8.15 Nuclear Criticality Control of

 Special Actinide Elements \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

 ANSI/ANS-8.17 Handling, Storage, and Transport

 of LWR Fuel Outside Reactors \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

B NUREG/ Criticality Benchmark Guide for

 CR-6361 Light-Water Reactor Fuel in

 Transportation and Storage

 Packages \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_

B NUREG/ Experience with the Scale

 CR-6686 Criticality Safety Cross-Sections

 (ORNL/TM- Libraries 1999/322) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

B ANSI/ANS-8.21 Fixed Neutron Absorbers \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_

B NEA/NCS/ International Handbook

 DOC (95)03 of Evaluated Criticality Safety

 Benchmark Experiments- NEA

 Nuclear Science Committee \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F 10 CFR Part 50 “Domestic Licensing of Production

 and Utilization Facilities” - Overview

 of Section 59 and Appendix B

 (Section 68; Criticality only)

 (~6 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_

F NUREG/ Adequacy of the 123-Group

 CR-6328 Cross-Section Library for Criticality

 (ORNL/TM- Analyses of Water-Moderated

 12970) Uranium Systems \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_

CARD 9B

CRITICALITY

(CONT.)

 Training Courses

 Employee Supervisor Date

 SCALE Training Course (e.g., KENO-5, KENO-6) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_

 MCNP Training Course \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_

CARD 9C

MATERIALS

 Employee Supervisor Date

B ASME B&PVC Specifications for Welding Rods

 Section II, Electrodes, and Filler Metal \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

 Part C

F NUREG/ “Recommendations for Protecting

 BR-1815 Against Failure by Brittle Fracture

 in Ferritic Shipping Containers…”\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F NUREG/ Engineering Drawings for

 CR-5502 10 CFR 71 Package Approvals \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_ http://www.rampac.com/NRCinfo/NUREG\_5502.pdf

F ASME B&PVC Material Properties \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_

 Section II,

 Part D

F ASTM (Supervisor selected reading)\* \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

 Specifications

F ACI-318-XX “Building Code requirements for

 Structural Concrete” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_

Training Courses

ASM: “Stainless Steels” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_

NACE: “Basic Corrosion” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_

\* The level of understanding [i.e., familiarity (F), basic (B), or in-depth (I)] will depend on the section selected by the supervisor for self-study.

CARD 9D

SHIELDING/RADIOLOGICAL PROTECTION/SECURITY ASSESSMENT

 Employee Supervisor Date

 NUREG/ Recommendations for Shielding

 CR-6802 Evaluations for Transport and

 Storage Packages” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

 ANSI/ANS 6.1.1 Flux to Dose Rate Conversion

 Factors \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

 “Supplement to the Communication Plan for the

 Security Assessment of Materials and Research

 and Test Reactor Licensees” (ML070890305) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

 “Guidance for Security Assessments of Storage

 and Transportation of Radioactive Material”

 (ML073110136) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

 B 10 CFR “Occupational Radiation

 Part 835 Protection” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

B Regulatory Information Relevant to Ensuring

 Guide 8.8 the Occupational Radiation Exposures

 at Nuclear Power Stations Will Be

 As Low As Reasonably

 Achievable \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

B ANSI N14.1 UF6 Packages \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F 49 CFR “Shippers - General Requirements

 Part 173 for Shippers,” Subpart I \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F 40 CFR “Radiation Protection Programs” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

 Part 190

F Regulatory Operating Philosophy for Maintaining

 Guide 8.10 Occupational Radiation Exposures

 As Low As Reasonably

 Achievable \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F NUREG 1736 Consolidated Guidance: 10 CFR

 Part 20-Standards for Protection

 Against Radiation \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

CARD 9D

SHIELDING/RADIOLOGICAL PROTECTION/SECURITY ASSESSMENT

(CONT.)

Training Course

 Employee Supervisor Date

 “Shielding Code Training Code” (e.g.,

 MCNP, SCALE) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

CARD 9E

STRUCTURAL

 Employee Supervisor Date

 NUREG/ Engineering Drawings for

 CR-5502 10 CFR 71 Package Approvals \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_ http://www.rampac.com/NRCinfo/NUREG\_5502.pdf

B Regulatory “Design of an ISFSI

 Guide 3.60 (Dry Storage)” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

B Regulatory “Leakage Tests for Packages for

 Guide 7.4 Shipments of Radioactive

 Materials” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

B Regulatory Design Criteria for the Structural

 Guide 7.6 Analysis of Shipping Cask

 Containment Vessels \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

B Regulatory Load Combinations for the

 Guide 7.8 Structural Analysis of Shipping

 Casks for Radioactive Material \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

B NUREG/ Recommendations for Protecting

 CR-1815 Against Failure by Brittle Fracture in

 Ferritic Steel Shipping Containers

 Up to Four Inches Thick \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

B NUREG/ Stress Analysis of Closure Bolts

 CR-6007 for Shipping Casks \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

B NUREG/ “Transporting Spent Fuel” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_ BR-0111

B ACI-318-XX, Building Code Requirements

 (As Directed) for Structural Concrete \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F NUREG/ SCANS (Shipping Cask Analysis

 CR-4554 System) A Microcomputer-Based

 Analysis System for Shipping

 Cask Design Review \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F ASME “Containment Systems and

 Section III Transport Packaging” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

CARD 9E

STRUCTURAL

(CONT.)

 Employee Supervisor Date

F IN 97-057, Leak Testing of Packaging Used in

 the Transport of Radioactive Material (4 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

Training Course

 Employee Supervisor Date

Introduction to ANSYS \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

CARD 9F

THERMAL

 Employee Supervisor Date

B NUREG/ “Spent Fuel Transportation

 CR-6886, Package Response to the Baltimore

 Rev. 1 Tunnel Fire Scenario” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

 PNNL-15313

B NUREG/ “Spent Fuel Transportation Package

 CR-6894, Response to the Caldecott Tunnel

 Rev. 1 Fire Scenario” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

 PNNL-15364

B CFD Analysis and Validation for Ventilated Concrete

 Cask,” Internal Report, for Official Use Only, Prepared

 for SFST by Office of Nuclear Regulatory Research

 (ML0729505470 ) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F Regulatory Spent Fuel Heat Generation in an

 Guide 3.54 Independent Spent Fuel Storage

 Installation” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F ASTM E Standard Practice for Thermal

 2230-02 Qualification of Type B Packages

 or Radioactive Material \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F PNNL-14962 “Analysis Package for the

 Transnuclear TN-24P Cask”

 (ML0506106170) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F PNNL-14930 “Analysis Package for the

 VSC-17 Ventilated Concrete

 Cask” (ML0506106360) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F PNNL-14863 “Analysis Package for the

 CASTOR-V/21 Cask”

 (ML0506106460) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F Spent Nuclear Fuel Effective Thermal Conductivity

 Report,” July 11, 1966. Prepared for the Department

 of Energy by TRW Environmental Safety Systems \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F The TN-24P Spent Fuel Storage Cask: Testing and

 Analyses,” EPRI NP-5128, PNL-6054, UC-85

 (April 1987) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

CARD 9F

THERMAL

(CONT.)

 Employee Supervisor Date

Training Courses (any TWO of the listed courses)

“Introduction to FLUENT/GAMBIT” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

“Introduction to ANSYS/ICEM-CFD Course” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

“Introduction to STAR-CCM+/STAR-CD Course” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

Attachment 1

Revision History for IMC 1246 B1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Commitment Tracking Number | Document Accession Number and Issue Date | Description of Change | Training Needed | Training Completion Date | Comment Resolution Accession Number |
| N/A | ML05346001705/25/06 | Added additional guidance for qualification board conduct and documentation | N/A | N/A | N/A |
| N/A | ML08128008209/24/08CN 08-027 | Complete rewrite of IMC 1246 A06 and change title name. IMC 1246 A06 was also divided into two qualification journals (i.e, SFST project managers and technical reviewers, and SFST inspectors). A total of four documents were created during this revision; attachments were created within IMC 1246 A06 and new titles were assigned to these attachments. The section and title of this document should be the following: IMC 1246 B06, Attachment 1, “Office of Nuclear Material Safety and Safeguards Qualification Journal for Spent Fuel Storage and Transportation Project Manager and Technical Reviewer” | N/A | N/A | ML081280089 |
| N/A | ML11230B31010/26/11CN 11-022 |  Combined Appendix A06, Attachment 1 with Appendix B06, Attachment 1 and renamed as Appendix B1. Added “training requirements” section from Appendix A06, Attachment 1. | N/A | N/A | ML112351097 |