



Idaho Operations Office
151 N. Ridge Ave.
Suite 250
Idaho Falls, ID 83402
Phone: (208) 523-3774
Fax: (208) 523-8228

COURSE DESCRIPTION

- Course Title:** Review and Approval of Nuclear Facility Safety Basis and Specific Administrative Controls (SACs)
- Course Length:** 24 hours
- Course Limit:** 30 students
- Intended Audience:** Personnel responsible for (1) development, review, and approval of nuclear facility safety basis documents and/or (2) identification, formulation, implementation, and/or maintenance of SACs or the DOE/NNSA assessment of these functions. The course can be tailored to fit the experience and functional job skill needs of the students.
- Course Description:** Part 1 (Day 1) of the course discusses the requirements and guidance for developing nuclear facility safety basis documents contained in 10 CFR 830 and its implementation guides. It also discusses the guidance and expectations in DOE-STD-1186-2004, *Specific Administrative Controls*, for identifying, formulating, implementing, maintaining, and assessing SACs. Part 2 (Day 2) of the courses discusses the requirements and guidance in 10 CFR 830 and DOE-STD-1104-96, *Review and Approval of Nuclear Facility Safety Basis Documents*, for review and approval of safety basis documents. Emphasis is placed on management and coordination of the review, the evaluation process, the development of the Safety Evaluation Report, and risk evaluation. Part 3 (Day 3) covers approved safe harbor methodologies for developing safety basis documents per applicable DOE orders, manuals, guides, and standards. The students will also review examples, which demonstrate fundamental concepts. The combined course offers the advantage of showing how new SACs guidance fits with prior guidance on hazard control development and implementation.
- Supporting Material:** 10 CFR 830, DOE-STD-1104-96, and DOE-STD-1186-2004
- Evaluation:** Written exam available upon request
- Prerequisites:** Familiarity with DOE-STD-1104-96 and DOE-STD-1186-2004
- Cost:** Available upon request
- Attachments:** Course outline
- Point of Contact:** Bill Lapsansky
Deputy Director, NOEMS
blapsansky@epsilonsystems.com

Epsilon Systems Solutions, Inc.

COURSE OUTLINE

Course Title: Review & Approval of Nuclear Facility Safety Basis / Specific Administrative Controls

Outline:

Part 1/Day 1—Introduction/Background

1. Introduction

- a. Course Agenda and Instructors
- b. Administrative Matters
- c. RANFSB/SAC Crs. Development History
- d. Related Epsilon Courses
- e. Course Objectives, Design, & Organization

2. Course Terminology, Overview, & Concepts

- a. Module Primary & Enabling Objectives
- b. Key Terminology
- c. Course Overview
- d. Review & Approval General Concepts

3. Criteria for Safety Basis Documents

- a. Module Primary & Enabling Objectives
- b. DOE HQ Requirements & Guidance
- c. Additional Requirements & Guidance
- d. 10 CFR 830 Requirements & Guidance
- e. Guidance on Hazard Categorization
- f. Guidance on PDSA / DSA Development
- g. Guidance on TSR Development
- h. DOE-STD-1186-2004 Guidance
- i. Guidance on DOE Review & Approval

4. Implementation/Maintenance of Hazard Controls

- a. Module Primary & Enabling Objectives
- b. Configuration Management
- c. Conduct of Operations
- d. Instrumentation, Controls, and Equipment
- e. Training and Qualification
- f. Failure Analysis
- g. Violation Reporting

Part 2/Day 2—Review/Approval Process

5. Functions, Responsibilities, & Authorities

- a. Module Primary & Enabling Objectives
- b. Functions, Responsibilities, & Authorities
- c. Independent Review
- d. Interfaces between Reviewers & Preparers

6. Management & Coordination of Review

- a. Module Primary & Enabling Objectives
- b. Basic Concepts of Chapter 1 of DOE-STD-1104, Management & Coordination
- c. Suggested Good Practices

7. Evaluation of Safety Basis Documents

- a. Module Primary & Enabling Objectives
- b. DOE-STD-1104 Overview
- c. Basic Concepts of Chapter 2 of DOE-STD-1104, Approval Bases for DSAs

- d. Basic Concepts of Chapter 3 of DOE-STD-1104, Approval Bases for TSRs
- e. Review and Approval of SACs

8. Development of Safety Evaluation Reports

- a. Module Primary & Enabling Objectives
- b. Basic Concepts of Chapter 4 of DOE-STD-1104, Safety Evaluation Reports

9. Evaluating Risk

- a. Module Primary & Enabling Objectives
- b. Definition of Risk
- c. Requirements
- d. Concepts for Evaluating Risk

Part 3/Day 3 Selected Safe Harbor Methodologies

10A. DOE-STD-3009-94 Safe Harbor

- a. Module Primary & Enabling Objectives
- b. Safe Harbor Provisions
- c. Safety Analysis & Documentation
- d. DSA Executive Summary
- e. DSA Chapters 1 through 5
- f. DSA Chapters 6 – 17 Safety Management
- g. DSA for Hazard Category 3 Facility

10B. NRC Regulatory Guide 1.70 Safe Harbor

- a. Module Primary & Enabling Objectives
- b. Safety Harbor Provisions
- c. NRC Regulatory Guide 1.70

10C. DOE-STD-3011-2002 Safe Harbor

- a. Module Primary & Enabling Objectives
- b. Facility with Limited Operational Life DSA
- c. DSA for Deactivation of Nuclear Facility
- d. Transition Surveillance & Maintenance DSA

10D. DOE-STD-1120-98 Safe Harbor

- a. Module Primary & Enabling Objectives
- b. Health & Safety Plan
- c. DSA for Environmental Restoration Activity
- d. DSA for Decommissioning Activity

10E. DOE-STD-3016-99 Safe Harbor

- a. Module Primary & Enabling Objectives
- b. DSA for Nuclear Explosive Operations
- c. Hazard Controls

10F. Transportation Activities Safe Harbor

- a. Module Primary & Enabling Objectives
- b. Offsite and Onsite Operations
- c. Transportation DSA and Controls

11. Final Exam