

# NRC INSPECTION MANUAL

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## INSPECTION PROCEDURE 83523

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### RADIATION PROTECTION, PLANT CHEMISTRY, RADWASTE, TRANSPORTATION AND ENVIRONMENTAL: TRAINING AND QUALIFICATIONS

PROGRAM APPLICABILITY: 2513, 2515, and 2525

#### 83523-01 INSPECTION OBJECTIVE

To determine whether the licensee ensures that plant employees, contractors, and visitors are adequately trained and qualified to control radiation, radioactive material, and plant chemistry.

#### 83523-02 INSPECTION REQUIREMENTS

##### 02.01 Training and Qualifications Program

- a. Identify and evaluate corporate and plant responsibilities for ensuring that employees, contractors, and visitors are trained, retrained, and qualified in radiation protection, plant chemistry, radwaste, transportation, and environmental matters.
- b. Review the general employee training program, radiation worker training program, and health physics staff training program. Identify and evaluate corporate and plant training and qualification policies, goals, programs, and methods related to the radiation protection, plant chemistry, radwaste, transportation, and environmental programs.
- c. Review the applicable education and experience qualifications of each person who instructs in the above areas.

##### 02.02 Education and Experience

- a. Review the applicable education and experience qualifications of corporate, plant, and contractor employees working in the radiation protection, plant chemistry, radwaste, transportation, and environmental programs.
- b. Review the applicable radiation protection education and experience qualifications of representative workers and supervisors in other organizations (e.g., Operations, Maintenance, and I&C) affected by the radiation protection, plant chemistry, and radwaste programs.

02.03 Adequacy. Using the findings of 02.01 and 02.02, determine whether the licensee could be expected to achieve and maintain an adequate level and quality of training for employees, contractors, and visitors.

### 33523-03 INSPECTION GUIDANCE

#### 03.01 Training and Qualification Program

- a. Are responsibilities clearly identified, documented, and understood? Do responsible individuals actually support training programs?
- b. For each of the three training programs (general employee, radiation workers, and health physics staff), are training and qualification policies, goals, programs, and methods clearly defined and documented? If not, get completion schedules from responsible individuals. If convenient, attend a portion of training classes to observe the quality of instruction, training aids, and handout material.
- c. No guidance offered.

#### 03.02 Education and Experience

- a. Select a sample of employees in each program. For those records reviewed, have the individuals completed required training/qualification programs? Are they appropriately qualified for their assigned responsibilities? Discuss apparent weaknesses with the Radiation Protection Manager, the Chemistry Manager, the Radwaste Manager, the Environmental Manager, and the Training Manager. See Regulatory Guide 1.8. If the staff seems lacking in nuclear power plant experience, consider the licensee's plans to send employees to other plants for experience and to obtain experienced temporary help when needed.
- b. Discuss with plant management and, as appropriate, with the managers listed in 03.02a, above. Will all employees be required to complete the radiation worker training program before entering radiation areas?

03.03 Adequacy. Consider whether responsibilities have been assigned and accepted and whether assignees have implemented programs to train and retrain this spectrum of people in matters essential to their roles in controlling radiation, radioactive material, and plant chemistry. Consider whether the licensee will satisfy FSAR and other commitments before OL issuance.

### 83523-04 REFERENCES

10 CFR 19.12, "Instructions to Workers."

49 CFR 173.1(b), "Purpose and Scope."

Technical Specifications, Section 6, "Administrative Controls."

FSAR Chapters 12, "Radiation Protection," and 13, "Conduct of Operations."

Regulatory Guide 1.8, "Personnel Selection and Training" (endorses ANSI N18.1-1971).

Regulatory Guide 8.8, "Information Relevant to Ensuring That Occupational Radiation Exposures at Nuclear Power Stations Will Be As Low As Is Reasonably Achievable."

Regulatory Guide 8.10, Operating Philosophy for Maintaining Occupational Radiation Exposures As Low As Is Reasonably Achievable (Nuclear Power Reactors)."

Regulatory Guide 8.13, "Instruction Concerning Prenatal Radiation Exposure."

Regulatory Guide 8.27, "Radiation Protection Training for Personnel at Light-Water-Cooled Nuclear Power Plants."

Regulatory Guide, 8.29, "Instruction Concerning Risks From Occupational Radiation Exposure."

NUREG-0041, "Manual of Respiratory Protection Against Airborne Radioactive Materials," Chapter 8, "Training," September 1976.

NUREG-0761, "Radiation Protection Plans for Nuclear Power Reactor Licensees" (Draft for Comment), March 1981.

ANSI/ANS 3.1-1981, "Selection, Qualification and Training of Personnel for Nuclear Power Plants" (Supersedes ANSI N18.1-1971-77).

INPO Good Practice 82-001-OEN-06, "Selection of Contract Radiological Protection Technicians," April 1982 (Preliminary).

INPO Guideline 82-004, "General Employee Training," February 1982.

INPO Guideline 82-006, "Radiological Protection Technician Qualifications," February 1982.

INPO Guideline 82-007, "Chemistry Technician Training," September 1982.

NCRP Report No. 71, "Operational Radiation Safety-Training," March 1983.

"Clarification of 'Equivalent' in Description of Radiation Protection Manager," memorandum from Victor Stello, Jr., NRR, to Harold Thornburg, IE, July 14, 1977.

"Requirements for Training, Qualification, and Re-Training of Power Reactor Health Physics Technicians," memorandum from George H. Smith, Region I, to James H. Sniezek, IE, July 29, 1980.

"Radiation Protection Organization, Staffing and Qualification," memorandum from D. M. Collins, NRR, to Radiation Protection Section, NRR, April 4, 1981.

"Qualification of Radiation Protection Technicians," memorandum from L. J. Cunningham, IE, to D. M. Collins, NRR, January 21, 1982.

"Qualification for Radiation Protection Manager (RPM)," memorandum from L. J. Cunningham, IE, to E. G. Greenman, Region I, August 5, 1982.

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