

NRC INSPECTION MANUAL

IRAB

INSPECTION MANUAL CHAPTER 1245 APPENDIX B

GENERAL PROFICIENCY-LEVEL TRAINING AND QUALIFICATION JOURNAL

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CONTENTS

Introduction	1
Required General Proficiency Training Courses.....	1
General Proficiency Individual Study and On-the-Job Activities:	1
(ISA-General-1) Quality Assurance Program for Power Reactors	4
(ISA-General-1a) Construction QA Program Requirements (Construction Inspectors only).....	6
(ISA-General-2) CAP (for power reactor and construction inspectors only).....	8
(ISA-General-3) Technical and Regulatory Issues (for power reactor & construction only).....	9
(ISA-General-4) Safety Culture	12
(OJT-General-1) Emergency Drill/Exercise Observation (for power reactor & construction) ..	16
General Proficiency-Level Signature Card and Certification	19
Form 1: General Proficiency-Level Equivalency Justification	F1-1
Attachment 1: Revision History for IMC 1245 Appendix B.....	Att1-1

INTRODUCTION

You may complete the General Proficiency requirements together with the Technical Proficiency requirements for your specific inspector classification.

REQUIRED GENERAL PROFICIENCY TRAINING COURSES

NOTE: You DO NOT have to finish Appendix A before taking the courses below. It is RECOMMENDED that you complete the Effective Communication for NRC Inspectors course before the Gathering Information for Inspectors through Interviews course.

- “Effective Communication for NRC Inspectors,” (instructor-led course in the Talent Management System (TMS))
- “Gathering Information for Inspectors through Interviews,” (instructor-led course in TMS)
- “Media Training Workshop,” (instructor-led course in TMS)
- ISA-3 Technical and Regulatory Issue training items in TMS, Nuclepedia, and in the Agencywide Documents Access and Management System (ADAMS)

NOTE: It is RECOMMENDED that you complete Appendix A and receive Basic Inspector Certification before beginning the courses listed below.

Before signing up for any course, be sure that you have checked and meet any prerequisites.

These courses should be completed in the order listed:

- Root Cause/Incident Investigation Workshop (G-205)
- Field Techniques and Regulatory Processes (G-103)

GENERAL PROFICIENCY INDIVIDUAL STUDY AND ON-THE-JOB ACTIVITIES:

The individual study activities are knowledge and comprehension-based exercises that are designed to direct and focus your efforts as you begin reviewing documents that will be important to the performance of your job. Each study activity begins with a “purpose” statement informing you of why the activity is important and how it relates to the job of an inspector. The “level of effort” has been noted so that you have an idea of how much effort should be expended in completing the activity. (Of course, the times are estimates. You may need a little more or a little less time.) The “evaluation criteria” are listed up front so that you will review them first and better understand what you are expected to achieve as a result of completing the activity. Use

the evaluation criteria to help you focus on what is most important. The “tasks” outline the things you must do to successfully address the evaluation criteria.

The General Proficiency on-the-job activities are designed to increase your understanding of an important NRC function (event response) by requiring you to perform more challenging application-based level tasks. Similar to the individual study activities, the on-the-job activities begin with a “purpose” statement informing you of why the activity is important and how it relates to the job of an inspector. The “level of effort” has been noted so that you have an idea of how much effort should be expended in completing the activity. (Of course, the time is an estimate. You may need a little more or a little less time.) The “evaluation criteria” is listed up front so that you will review them first and better understand what you are expected to achieve as a result of completing the activity. Use the evaluation criteria to help you focus on what is most important. The “tasks” outline the things you must do to successfully address the evaluation criteria.

Individual Study Activity

(ISA-General-1) Quality Assurance Program for Power Reactors

PURPOSE:

This activity will provide you with a working knowledge of the contents of Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Processing Plants," to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities," industry standards, and the associated licensee programs and documents that collectively establish the basis for the licensee's quality assurance (QA) program. *This activity will provide you with an understanding of how the QA program prevents, identifies, and mitigates Counterfeit, Fraudulent, and Suspect Items (CFSI) risks.* [C3]

Note that QA program requirements for construction inspectors are addressed in ISA-1a of this Appendix. QA program requirements for research and test reactors are addressed in IMC 1245 Appendix C5, ISA-RT-1, under ANSI/ANS 15.8 and RG 2.5.

COMPETENCY AREA: INSPECTION

LEVEL OF EFFORT: 14 hours

REFERENCES:

1. Appendix B to 10 CFR Part 50
2. 10 CFR Part 21
3. Regulatory Guide (RG) 1.28, "Quality Assurance Program Criteria"
4. RG 1.33, "Quality Assurance Program Requirements"
5. Licensee QA program documentation
6. *Regulatory Issue Summary 2015-08, "Oversight of Counterfeit, Fraudulent, and Suspect Items in the Nuclear Industry"* [C3]
7. *Electric Power Research Institute (EPRI) Technical Report (TR)-1019163, "Plant Support Engineering: Counterfeit, Fraudulent and Substandard Items- Mitigating the Increasing Risk," Revision 1, ADAMS Accession No. ML14245A079.* [C3]

EVALUATION CRITERIA:

At the completion of this activity, you should be able to do the following:

1. Discuss the general content of Appendix B to 10 CFR Part 50 and the 18 criteria contained in the Appendix.
2. Describe the relationship between the plant license, the final safety analysis report (FSAR), the plant technical specifications, and Appendix B to 10 CFR Part 50.

3. Outline the key elements of an effective QA program, and the licensee's implementation of those elements at your reference site.
4. *Discuss which key elements of a licensee's QA program will support prevention, identification, and mitigation of CFSI risks. [C3]*

TASKS:

1. Review and discuss the 18 criteria of Appendix B with your supervisor or qualified inspector and communicate an understanding of their content and general application to field inspections.
2. Review the regulations that require a QA program. Review industry standards related to QA. Find where the FSAR, technical specifications, and plant license address QA. Review a licensee QA program and the implementing procedures.
3. *Review the regulations and guidance that address CFSI and be able to define CFSI. Review NRC and EPRI guidance in Reference 6 and 7 on CFSI and be able to discuss the relationship between a substandard basic component and CFSI. [C3]*
4. At a site, gain a general understanding of the licensee's QA program through a combination of discussions with a qualified resident inspector and review of assessments/reports prepared by the licensee QA organization.
5. Discuss how NRC regulations governing reporting, establish criteria for reporting events to the NRC within a specified amount of time.
6. Meet with your supervisor or a qualified inspector to discuss any questions that you may have as a result of this activity and demonstrate that you can meet the evaluation criteria listed above.

DOCUMENTATION: General Proficiency Qualification Signature Card Item ISA-General-1

(ISA-General-1a) Construction Quality Assurance Program Requirements
(Construction Inspectors only)

PURPOSE:

The purpose of this activity is to familiarize inspectors with the regulatory provisions that require licensees to have a quality assurance program. In addition to inspections that support the determination that Inspections, Tests, Analysis, and Acceptance Criteria (ITAAC) have been met, additional inspections will be needed to provide assurance that the licensee's processes for oversight of construction activities are effective. The successful implementation of a comprehensive QA program by the licensee will be an important indicator of the licensee's ability to manage the various activities associated with a large construction project. This activity will highlight the relationship between Part 52 and the requirements in Part 50 that relate to quality assurance.

COMPETENCY AREA: INSPECTION

LEVEL OF EFFORT: 20 hours

REFERENCES:

1. 10 CFR Part 50, Appendix B, "A Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants"
2. Inspection Procedure (IP) 35007, "Quality Assurance Program Implementation During Construction"
3. IP 35017, "Quality Assurance Implementation Inspection"
4. 10 CFR 50.55, "Conditions of Construction Permits" (Note: the applicable provisions of 10 CFR 50 have been incorporated into Part 52 by reference and not all the requirements of Part 50.55 pertaining to construction permits will apply to Part 52)
5. RG 1.28, "Quality Assurance Program Criteria (Design and Construction)"
6. ASME NQA-1, "A Quality Assurance Requirements for Nuclear Facility Application Issue"
7. NUREG-1055, "Improving Quality and the Assurance of Quality in the Design and Construction of Nuclear Power Plants, (A Report to Congress), March, 1987"

EVALUATION CRITERIA:

At the completion of this activity, and as determined by the supervisor, inspectors should be able to:

1. Explain how 10 CFR Part 50 requirements are invoked by 10 CFR Part 52.

2. Identify the Appendix B criteria and describe how an inspection would verify that they are correctly implemented during construction activities.
3. Discuss when applicants or licensees have to implement Appendix B requirements and which inspection procedures are used at the various stages.
4. Discuss the American National Standards (ANSI) and American Society of Engineers (ASME) guidance that is endorsed by RG 1.28 and explain the exceptions to the guidance (contained in RG 1.28) which are required to be met in order for a licensee or vendor to use the endorsement.
5. Describe the applicability of ASME NQA-1 and explain the content of the various parts.
6. Discuss the conclusions of NUREG-1055 and describe how the recommendations have been addressed in new construction both within the NRC and the Industry.

TASKS:

1. Read 10 CFR 52.17, 52.47, and 52.79 to determine the requirements to apply quality assurance.
2. Review 10 CFR Part 50, Appendix B and Inspection Procedures 35007 and 35017. Compare the criteria with the inspection attributes in the IPs and pay particular attention to the IP guidance.
3. Review RG 1.28 and focus on the additions and modifications to ANSI/ASME NQA-1 identified in Section C, "Regulatory Position."
4. Review ASME NQA-1.
5. Read NUREG-1055 and note the root causes for past construction problems.
6. If able, participate on a programmatic NRC QA inspection (this can also satisfy the inspection training requirements for IMC 1245 Appendix C-15 OJT-1, Construction Inspection Accompaniment).
7. Meet with your supervisor, mentor, or a qualified construction inspector to discuss any questions you may have as a result of this activity. Discuss the answers to the questions listed under the Evaluation Criteria section of this study guide with your supervisor.

DOCUMENTATION: General Proficiency-Level Qualification Signature Card Item
 ISA-General-1a.

(ISA-General-2) Corrective Action Program
(for power reactor and construction inspectors only)

PURPOSE:

This activity will provide you with a working knowledge of the licensee programs and documents that were established to meet the requirements for an effective problem identification and corrective action program, as outlined in Criterion XVI of Appendix B to 10 CFR Part 50.

COMPETENCY AREA: INSPECTION

LEVEL OF EFFORT: 23 hours

REFERENCES:

1. IP 71152, "Problem Identification and Resolution"
2. IP 35007, "Quality Assurance Program Implementation During Construction and Pre-Construction Activities" (construction inspectors only)
3. Site-specific documents that describe the licensee's corrective action program
4. Criterion XVI of Appendix B to 10 CFR Part 50

EVALUATION CRITERIA:

At the completion of this activity, you should be able to discuss the principal steps in your reference site's corrective action program (CAP) with respect to identification of a condition adverse to quality through final resolution.

TASKS:

1. At your reference site, gain a general understanding of the licensee's CAP through a combination of discussions with a qualified resident inspector and attendance at routine CAP meetings.
2. Using IP 71152 (IP 35007, Appendix 16 for construction inspectors) for guidance, review a sample of about six issues entered into the licensee's CAP within the past month and compare the licensee's actions with regulatory requirements. Discuss the resolution of the issues with the resident inspector. This review should include the resolution of potential operability issues, if available.
3. Meet with your supervisor or a qualified operations resident inspector (or qualified construction resident inspector for construction inspectors) to discuss any questions that you may have as a result of this activity and demonstrate that you can meet the evaluation criteria listed above.

DOCUMENTATION: General Proficiency Qualification Signature Card Item ISA-General-2

(ISA-General-3) Technical and Regulatory Issues
(for power reactor and construction inspectors only)

PURPOSE:

This activity will familiarize you with several power reactor related events and subject areas that significantly impacted the domestic nuclear power industry.

COMPETENCY AREA: INSPECTION

LEVEL OF EFFORT: Various

REFERENCES:

1. NRC produced technical training courses:
 - a. Effects of Corrosion course in TMS
 - b. Fukushima Lessons Learned course in TMS
2. INPO produced videos:
 - a. Browns Ferry Fire (ML15070A065)
 - b. Crystal River 3 Loss of Instrument Power (ML15070A069)
 - c. Davis Besse Loss of Feed (ML15070A078)
 - d. LaSalle 2 Scram on High Neutron Flux (ML15070A083)
 - e. Nine Mile Point 1 Turbine Damage During Torsional Test (ML15070A094)
 - f. Oconee 3 Letdown Storage Tank Inadvertently Drained (ML15070A102)
 - g. Salem Marsh Grass and Non-Conservative Decision-Making Leads to Scram and Pressure Control Issues (ML15070A103)
 - h. Salem Anticipated Transient without a Scram (ML15070A113)
 - i. Chernobyl Accident - Excerpt from "The Special Characteristic of Nuclear Power" (ML15070A126)
 - j. TMI Accident - Excerpt from "The Special Characteristics of Nuclear Power" (ML15070A128)
 - k. Vogtle 1 Station Blackout (ML15070A133)

Note: the above videos are INPO proprietary information for NRC internal use only, not for public distribution or viewing.

3. NRC Documents

- a. NUREG 1789, "10 CFR Part 52 Construction Inspection Program Framework Document," Appendix B (construction inspectors only)
- b. NRC Bulletin 2011-01, "Mitigating Strategies"
- c. Near Term Report and Recommendations for Agency Actions Following the Events in Japan (ML1186A950).
- d. Mitigation Strategies Order EA-12-049. (ML12054A735)
- e. Reliable Hardened Containment Vents Order EA-13-109. (ML13130A067)
- f. Spent Fuel Pool Instrumentation Order EA-12-051 (ML12056A044)
- g. SECY-15-0137, "Proposed Plans for Resolving Open Fukushima Daiichi Tier 2 and 3 recommendations," (ML15254A006)
- h. SECY-16-0144, "Proposed Resolution of Remaining Fukushima Daiichi Tier 2 and 3 Recommendations," (ML16286A586)
- i. <https://www.nrc.gov/about-nrc/cfsi/guidance.html> [C3]
- j. *Regulatory Information Summary (RIS) 2015-08, "Oversight of Counterfeit, Fraudulent, and Suspect Items in the Nuclear Industry"* [C3]
- k. [Seabrook Station Security Event in Nuclepedia \(Required for C-4 Inspectors Only\)](#)
- l. [Overview of the Three Mile Island Vehicle Intrusion Event in Nuclepedia](#) (Required for C-4 Inspectors Only)
- m. NUREG-1904 "Review Team Findings with Respect to Inattentive Security Officers at Peach Bottom" (ML080420566) (Required for C-4 Inspectors Only)
- n. Nuclepedia page: The NRC after 9/11: Response, Reinforcement, and Regulation (Required for C-4 Inspectors Only)
- o. [History of Emergency Planning Regulations/Guidance for Commercial Nuclear Power Reactors](#) (Required for C-6 Inspectors Only)
- p. [Concepts in EP: Environmental Justice & Emergency Preparedness - Whole Community Approach to EP, Including Non-English-Speaking Communities](#) (Required for C-6 Inspectors Only)
- q. [History of NRC–FEMA REP Program](#) (Required for C-6 Inspectors Only)

- r. Evolution of the U.S. Nuclear Regulatory Commission/Federal Emergency Management Agency (NRC/FEMA) Memorandum of Understanding and Establishment of the Steering Committee on Emergency Preparedness Overview of the Three Mile Island Vehicle Intrusion Event in Nuclepedia (Required for C-6 Inspectors Only)

EVALUATION CRITERIA:

At the completion of this activity, you should be able to do the following:

1. Discuss the general topical matters presented in the applicable NRC and INPO Web-based references and exhibit a basic knowledge and understanding of the technical/regulatory issues and their application to the NRC.
2. Discuss the construction inspection lessons learned documented in SECY-06-0114 Enclosures 1 and 2, and in NUREG 1789, Appendix B (construction inspectors only).
3. Discuss the actions the NRC took in response to the Fukushima Daiichi event regarding mitigating strategies. (For C-1 and C-2 Inspectors and C-10 Examiners only.)

TASKS:

1. Watch and complete all of the NRC and INPO produced Web-based training courses/videos that are referenced above. (For C-1 and C-2 Inspectors and C-10 Examiners only.) (Other inspector types only need to watch and complete the two NRC-developed training items.)
2. Gain a general understanding of the technical/regulatory issues and their applications to the NRC. Regarding the Fukushima information, be able to discuss, the accident, and regulatory actions the NRC took to minimize the possibility of a similar event occurring at domestic nuclear plant sites (for C-1 and C-2 Inspectors and C-10 Examiners only).
3. Discuss the purpose of Severe Accident Management Guidelines (SAMGs), when they would be used, and their relationship to the Fukushima accident (for C-1 and C-2 Inspectors and C-10 Examiners only).
4. *Review the guidance on the website in Reference 11 and discuss the implications of the NRC regulatory framework related to CFSI on your inspection program [C3].*
5. For C-4 and C-6 qualified inspectors only, skim the applicable reference items and watch the applicable knowledge management videos. Identify the lessons-learned from those events and how the NRC has modified the power reactor inspection and communication protocols to ensure the significant issues that were discussed would not readily occur again.
6. *Meet with your supervisor or a qualified inspector to discuss any questions that you may have as a result of this activity and demonstrate that you can meet the evaluation criteria listed above. [C1]*

DOCUMENTATION: General Proficiency Qualification Signature Card Item ISA-General-3

(ISA-General-4) Safety Culture

PURPOSE:

This activity will provide you with a working knowledge of the NRC safety culture policy statement and safety culture common language initiative, how safety culture weaknesses have contributed to performance issues and significant events within and outside the nuclear industry, and how safety culture issues are assessed and dispositioned and how it is addressed in the Reactor Oversight Process (ROP) and Construction Reactor Oversight Process (cROP). This ISA will also introduce you to one of the NRC Safety Culture Assessors and obtain an understanding of their role in the safety culture assessment process.

COMPETENCY AREA: INSPECTION

LEVEL OF EFFORT: 20 hours

REFERENCES:

1. *Safety Culture ROP Training in TMS. Material can also be accessed at* (<http://papaya.nrc.gov/safetyculture/index.html>) (non-public)
2. *"Review of the Columbia Space Shuttle Accident," computer-based training found in TMS.*
3. *NUREG/BR-0500, "Safety Culture Policy Statement" (<https://www.nrc.gov/reading-rm/doc-collections/nuregs/brochures/br0500/index.html>)*
4. *"Safety Culture Policy Statement and Federal Register Notice" (<https://www.nrc.gov/docs/ML1114/ML11146A047.pdf>)*
5. *Safety Culture Policy Statement Educational Resource Booklet (<https://www.nrc.gov/docs/ML1919/ML19190A155.pdf>)*
6. *NUREG-2165, "Safety Culture Common Language" (<https://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr2165/index.html>)*
7. *Inspector Safety Culture Training SharePoint site (<https://usnrc.sharepoint.com/teams/InspectorSafetyCultureTraining>) (non-public)*
8. *Safety culture on the NRC's public website (<https://www.nrc.gov/about-nrc/safety-culture.html>)*
9. *RIS 2006-13 "Information on the Changes Made to the Reactor Oversight Process to More Fully Address Safety Culture" (<https://www.nrc.gov/reading-rm/doc-collections/gen-comm/reg-issues/2006/ri200613.pdf>)*
10. *IPs 40100, "Independent Safety Culture Assessment Follow-up" and 93100, "Safety Conscious Work Environment Issue of Concern Follow-up"*

11. *Safety culture and safety conscious work environment parts of IPs 71152, "Problem Identification and Resolution"; 71153, "Follow up of Events and Notices of Enforcement Discretion"; 93800, "Augmented Inspection Team"; and 93812, "Special Inspection"*
12. *Inspection Manual Chapters 0305, "Operating Reactor Assessment Program," 0310, "Aspects Within the Cross-Cutting Areas," 0611, "Power Reactor Inspection Reports," and 0612 Appendix B, "Issue Screening Directions." (for power reactor inspectors)*
13. *Safety culture and safety conscious work environment parts of IPs 40100, "Independent Safety Culture Assessment Follow-up," 71152, "Problem Identification and Resolution"; 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area"; 95002, "Supplemental Inspection Procedure for One Degraded Cornerstone or Any Three White Inputs in a Strategic Performance Area"; and 95003, "Supplemental Inspection Procedure Repetitive Degraded Cornerstone or Multiple Degraded Cornerstones, Multiple Yellow Inputs, or One Red Input"; (for power reactor inspectors)*
14. *IMC 0613, Appendix F, "Construction Cross-Cutting Areas and Aspects" (for construction inspectors)*
15. *Safety culture and safety conscious work environment parts of IPs 35007, Appendix 16, "Inspection of Criterion XVI – Correction Action"; 40100, "Independent Safety Culture Assessment Follow-up"; 90001, "Construction Regulatory Response Column Inspections"; 90002, "Construction Degraded Performance Column Inspections"; and 90003, "Construction Multiple/Repetitive Degraded Cornerstone Column Inspections" (for construction inspectors)*

EVALUATION CRITERIA:

At the completion of this activity, you should be able to:

1. *Define safety culture and safety conscious work environment (SCWE) and discuss why they are important, how they are different, and how they support each other.*
2. *Discuss the safety culture traits and aspects in NUREG-2165 and examples of how safety culture can impact performance.*
3. *Recognize where to find data or information from licensee programs that provide positive or negative indicators of safety culture.*
4. *Explain the relationship of the ROP (or cROP) cross-cutting areas with the safety culture aspects. (For power reactor and construction inspectors only.)*
5. *Use NUREG-2165 and IMC 0310 (or IMC 0613 for construction inspectors) to identify an appropriate cross-cutting aspect for a more-than-minor performance deficiency. (For power reactor and construction inspectors only.)*
6. *Describe the graded ROP (cROP for construction inspectors) approach to recognizing recognize potential weaknesses in licensee safety culture and taking appropriate agency actions. (For power reactor and construction inspectors only.)*

TASKS:

1. *Complete the Safety Culture ROP training in TMS. Discuss what you learn about safety culture and safety conscious work environment with a qualified Safety Culture Assessor, including how safety culture is reviewed as part of the NRC inspection program and Safety Culture how safety culture issues are documented and assessed.*
2. *Complete the "Review of the Columbia Space Shuttle Accident," training in TMS. Meet with a qualified Safety Culture Assessor and discuss the safety culture issues that led to the Columbia Space Shuttle Accident. Discuss how those issues could develop and progress at an NRC licensed facility and the potential safety consequences.*
3. *Review the safety culture policy statement educational resource booklet (ML19190A155) and safety culture common language in NUREG-2165. Meet with a qualified Safety Culture Assessor and discuss the traits of a healthy safety culture, including where to find data or information from licensee programs that provide indicators of safety culture (e.g., corrective action program, independent or self-assessments, employee concerns program), and positive or negative examples of safety culture in a licensee facility.*
4. *Locate the inspector safety culture training SharePoint site. With the guidance of a qualified Safety Culture Assessor select two of the reports that are located on the site that assessed a site's safety culture and discuss with the Safety Culture Assessor the major issues/concerns that were documented in the report. Provide your perspective regarding the issues documented in the report and how you would resolve the items if you were operating the facility.*
5. *Review the cross-cutting aspects listed in IMC 0310 (or IMC 0613 for construction inspectors), and the corresponding examples found in NUREG-2165. With the guidance of a qualified Safety Culture Assessor select at least two actual or hypothetical inspection findings and discuss how the cross-cutting aspects would be identified and documented. (For power reactor and construction inspectors only.)*
6. *Review IP 95001, 95002, and 95003. Meet with a qualified Safety Culture Assessor and discuss the agency's graded approach to dealing with potential safety culture issues as licensee performance declines. (For power reactor and construction inspectors only.)*
7. *Meet with a qualified Safety Culture Assessor to discuss any questions that you may have as a result of this activity and demonstrate that you can meet the evaluation criteria listed above. [C2]*

DOCUMENTATION: General Proficiency Qualification Signature Card Item ISA-General-4

General Proficiency
On-the-Job Activities

(OJT-General-1) Emergency Drill/Exercise Observation
(for power reactor and construction inspectors only)

PURPOSE:

The conduct of an emergency drill/exercise allows the licensee to assess emergency response performance and the effective correction of previously identified weaknesses. It permits the evaluation of the level of quality of emergency response training, emergency plan implementing procedures, facility and equipment readiness, personnel performance, organizational and management changes, and communications equipment readiness. This activity will permit you, the observer, to realize the scope of involvement of your particular discipline during a declared emergency at a nuclear power facility.

Note that observations of drills for research and test reactors are addressed in IMC 1245, Appendix C5, OJT-RT-1.

**COMPETENCY AREAS: REGULATORY FRAMEWORK
INSPECTION**

LEVEL OF EFFORT: 24 hours

REFERENCES:

1. IP 71114.01, "Exercise Evaluation"
2. IP 71114.06, "Drill Evaluation"
3. IP 71114.07, "Exercise Evaluation - Hostile Action (HA) Event"
4. IP 71114.08, "Exercise Evaluation – Scenario Review"
5. Section IV.F of Appendix E, "Emergency Planning and Preparedness for Production and Utilization Facilities," to 10 CFR Part 50
6. 10 CFR 50.47(b)

EVALUATION CRITERIA:

At the completion of this activity, you should be able to do the following:

1. Discuss the Federal guidance for drill/exercise observations as described in IP 71114.01, IP 71114.06, IP 71114.07, and IP 71114.08.
2. Identify activities that will occur with regard to your discipline during the performance of an emergency drill/exercise.
3. Discuss the NRC and licensee processes for documenting and handling weaknesses and deficiencies identified during a drill/exercise.

4. Discuss the NRC's method of evaluating licensee performance during an emergency drill/exercise to determine whether it has met the planning standards of 10 CFR 50.47(b).
5. Discuss the NRC's method for evaluating licensee performance during a drill/exercise to determine whether it has demonstrated the capability of providing reasonable assurance that adequate protective measures can be taken in the event of a declared emergency.

<p>NOTE: Whenever possible, observe a drill or exercise at a site and focus on activities related to your technical discipline.</p>

TASKS:

1. Review IP 71114.01, IP 71114.06, IP 71114.07, and IP 71114.08 to identify the inspection attributes provided for drill/exercise performance evaluations. Discuss any questions with a senior emergency preparedness inspector.
2. Review the regulatory requirements with regard to emergency preparedness contained in 10 CFR 50.47(b) and section IV.F of Appendix E to 10 CFR Part 50.
3. Obtain an emergency drill/exercise schedule for the applicable region. Coordinate your observation of an upcoming emergency drill/exercise with your supervisor, applicable regional senior emergency preparedness inspector, and site senior resident inspector. If possible, observe the drill at the site.
4. Become familiar with the applicable licensee emergency plan and implementing procedures. In particular, review those instructions for your discipline's activities and involvement during a declared emergency and develop an understanding of their successful implementation.
5. Review IP 71114.07 to identify the inspection attributes provided for exercise scenario reviews. Obtain and review a copy of the applicable licensee's emergency drill/exercise scenario. Identify activities that will occur with regard to your discipline during the performance of the emergency drill/exercise and note the licensee expectations for success versus failure.
6. Perform an independent observation of an emergency drill/exercise. Observe activities at several of the licensee emergency response facility locations, if possible (e.g., control room, operations support center, technical support center, emergency operations facility, joint information center, field activities). Take care not to interfere with licensee performance or evaluation of the drill/exercise. Do not prompt licensee participants or evaluators or provide your observations or conclusions regarding weaknesses or deficiencies during drill/exercise performance. Findings must be held confidential until after the formal licensee critique.
7. During performance of the drill/exercise, note any possible weaknesses and/or deficiencies you observe. To aid in future discussions, obtain documentation of licensee activities during questionable performance.

8. Based on your observations, form an opinion as to whether the licensee has still met the planning standards of 10 CFR 50.47(b) in spite of any deficiency or weakness.
9. Based on your observations, form an opinion as to whether the licensee has demonstrated the capability of providing reasonable assurance that adequate protective measures can be taken in the event of a declared emergency.
10. Discuss your emergency drill/exercise observations and opinions with the lead NRC inspector and provide your recommendation on whether licensee demonstrated the capability of providing reasonable assurance that adequate protective measures can be taken in the event of a declared emergency and if it has met the planning standards of 10 CFR 50.47(b).
11. Meet with your supervisor and/or a qualified senior emergency preparedness inspector to discuss any questions that you may have as a result of this activity and demonstrate that you can meet the evaluation criteria listed above.

DOCUMENTATION: General Proficiency Qualification Signature Card Item OJT-General-1

General Proficiency-Level Signature Card and Certification

Inspector Name: _____	Employee Initials/Date	Supervisor's Signature/Date
<u>A. Training Courses</u>		
G-205, Root Cause/Incident Investigation Workshop		
G-103, Field Techniques and Regulatory Processes		
Effective Communication for NRC Inspectors		
Gathering Information for Inspectors through Interviews		
Media Training Workshop		
Technical Training (ISA 3)		
<u>B. Individual Study Activities</u>		
(ISA-General-1) Quality Assurance Program (for power reactor inspectors only)		
(ISA-General-1a) Construction Quality Assurance Requirements (for construction inspectors only)		
(ISA-General-2) Corrective Action Program (for power reactor and construction inspectors only)		
(ISA-General-3) Technical and Regulatory Issues (for power reactor and construction inspectors only)		
(ISA-General-4) Safety Culture		
<u>C. On-the-Job Activity</u>		
OJT-General-1 Emergency Drill/Exercise Observation (for power reactor and construction inspectors only)		

Supervisor's Certification

For Basic Inspector Qualification Signature/Date _____

This signature card and certification must be accompanied by the appropriate Form 1, Basic Level Equivalency Justification, if applicable. (The electronic signature card, which is located on the Digital City SharePoint website is also acceptable.) Record completion in TMS by sending a request to TrainingSupportResource@nrc.gov.

Copies to: Inspector
 Supervisor

Form 1: General Proficiency-Level Equivalency Justification

Inspector Name: _____	Identify equivalent training and experience for which the inspector is to be given credit
<u>A. Training Courses</u>	
G-205, Root Cause/Incident Investigation Workshop	
G-103, Field Techniques and Regulatory Processes	
Media Training Workshop	
Effective Communication for NRC Inspectors	
Gathering Information for Inspectors through Interviews	
Technical Training (ISA 3)	
<u>B. Individual Study Activities</u>	
(ISA-General-1) Quality Assurance Program (for power reactor inspectors only)	
(ISA-General-1a) Construction Quality Assurance Requirements (for construction inspectors only)	
(ISA-General-2) Corrective Action Program (for power reactor and construction inspectors only)	
(ISA-General-3) Technical and Regulatory Issues (for power reactor and construction inspectors only)	
(ISA-General-4) Safety Culture	
<u>C. On-the-Job Activity</u>	
OJT-General-1 Emergency Drill/Exercise Observation (for power reactor and construction inspectors only)	

Supervisor's Recommendation Signature/Date _____

Division Director's Approval Signature/Date _____

Copies to: Inspector
 Supervisor

Attachment 1: Revision History for IMC 1245 Appendix B

Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Description of Training Required and Completion Date	Comment Resolution and Closed Feedback Form Accession Number (Pre-Decisional, Non-Public Information)
C1	ML041950504 06/29/04 CN 04-019	Added training (ISA-General-3) to reinforce expectations to managers and staff to maintain a questioning attitude. Reference: Davis Besse Lessons Learned Task Force (Recommendation 3.3.3.1) and associated Effectiveness Review (ML042110287) Recommendation-17	None	N/A
N/A C2	ML062400469 10/31/06 CN 06-032	Added training on safety culture, updated references, and incorporated minor editorial changes. Completed 4-year historical CN search. Added training on safety culture. The reference SECY requires that "In the longer term, the staff will work with the Technical Training Center (TTC) to incorporate aspects of the safety culture initiative into initial training for new inspectors and continuing training for existing inspectors." Reference: SECY-06-0122 (page 2) and OIG-05-A-06, Recommendation 2 (page 2)	None	ML062890456
N/A	ML073520677 01/10/08 CN 08-001	Updated a reference in ISA-General-1.	None	ML073510727

Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Description of Training Required and Completion Date	Comment Resolution and Closed Feedback Form Accession Number (Pre-Decisional, Non-Public Information)
N/A	ML090360502 07/08/09 CN 09-017	Updated references and increased flexibility of course prerequisites, by recommending, vice requiring, completion of Appendix A before taking G-105, G-205, and G-103 training.	None	ML091590710
N/A	ML11168A201 12/29/11 CN 11-044	This revision updates safety culture training and moves online courses into iLearn to correct hyperlinks and simplify record retention.	None	ML11322A091
N/A	ML15177A298 01/13/16 CN 16-002	This revision incorporates the qualification of construction inspectors (IMC 1252), and updates references, required courses, IMC format, and safety culture training.	None	ML15195A147 Closed FF: 1245B-1902 ML13207A186 1245B-2031 ML14149A264 1245B-2107 ML15009A305 1245B-2125 ML14099A006
N/A	ML16049A279 02/24/16 CN 16-008	This revision updates the link to safety culture training in ISA-3 and 4.	None	N/A
N/A	ML17072A336 08/24/17 CN 17-015	This revision creates ISA-General-1a, Construction Quality Assurance Requirements, which is needed to coordinate qualification objectives with Appendix C-15, construction inspector qualification.	None	ML17089A363

Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Description of Training Required and Completion Date	Comment Resolution and Closed Feedback Form Accession Number (Pre-Decisional, Non-Public Information)
N/A	ML18047A126 07/30/18 CN 18-023	This revision accounts for the creation of IMC 0611.	None	ML18065A651 Closed FF: 1245B-2263 ML18134A013
N/A	ML20077L273 08/12/20 CN 20-038	This changed was an administrative update that removed references to out-of-date procedures and applications. It also incorporated recommendations contained in feedback form 1245B-2283 which contained the requirements to meet Commission direction provided in the SRM to SECY-15-0137 for post-Fukushima IMC 1245 qualification program revisions.	None	ML20079E415 Closed FF: 1245B-2283. ML20105A293
N/A	ML21166A348 09/24/21 CN 21-032	This change corrected format errors and identified that TMS is the repository for qualification training activities.	None	ML21173A075
C3	ML23037A835 05/18/23 CN 23-014	This change incorporates CFSI guidance and aligns with the new IMC style guide. The CFSI guidance was included in this IMC as part of the response to OIG Audit-22-A-06 of the NRC CFSI program.	None	N/A
	ML24341A114 04/16/25 CN 25-007	Added additional reference training material course to ISA-3 in response to Feedback Form (FF) 1245B-2525. Rewrote ISA-4 in response to an October 18, 2024, safety culture working group study conducted by DRO and RES. Reference ML24277A260.	None	ML25034A269 FBF 1245B-2525 ML24080A299