INSPECTION MANUAL CHAPTER 1245 APPENDIX B

GENERAL PROFICIENCY-LEVEL TRAINING AND QUALIFICATION JOURNAL

Effective Date: 12/19/2016

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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 100 in iLearn)
- Gathering Information for Inspectors through Interviews (instructor led, course 135 in iLearn)
- Media Training Workshop (instructor led, course 571 in iLearn)
- Technical training in iLearn (Web-based, course numbers listed in ISA 3)

> 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 have met any prerequisites.

These courses should be completed in the order listed:

- Root Cause/Incident Investigation Workshop (G-205) (instructor led, course 461 in iLearn)
- Field Techniques and Regulatory Processes (G-103) (instructor led, course 454 in iLearn)

General Proficiency Individual Study Activities

The individual study activities 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.

General Proficiency Individual Study Activity

TOPIC: (ISA-General-1) Quality Assurance Program (for power reactor and construction inspectors only as quality assurance 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)

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 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.

COMPETENCY AREA: INSPECTION

LEVEL OF EFFORT: 12 hours

REFERENCES:

1. Appendix B to 10 CFR Part 50
2. Regulatory Guide 1.28, "Quality Assurance Program Criteria"
3. Regulatory Guide 1.33, "Quality Assurance Program Requirements"
4. Licensee QA program documentation

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.

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 basic 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. 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.

4. 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

General Proficiency Individual Study Activity

TOPIC: (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: 20 hours

REFERENCES:

1. Inspection Procedure (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 XVl of Appendix B to 10 CFR Part 50

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

1. Discuss the principle 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

General Proficiency Individual Study Activity

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

PURPOSE: This activity will familiarize you with various topics of interest that have proven problematic in the past.

COMPETENCY AREA: INSPECTION

LEVEL OF EFFORT: Various

REFERENCES:

1. The Effects of Corrosion (course 2007 in iLearn)

2. INPO 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 (Introduction of OPRM)	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 Characteristics 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. SECY-06-0114, “Description of the Construction Inspection Program for Plants Licensed Under 10 CFR Part 52,” Enclosures 1 and 2 (construction inspectors only)

4. NUREG 1789, “10 CFR Part 52 Construction Inspection Program Framework Document,” Appendix B (construction inspectors only)

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

1. Discuss the general topics presented in task one and exhibit a basic knowledge of the technical/regulatory issues and their application to the U.S. Nuclear Regulatory Commission (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).

TASKS:

1. Complete the Web-based training course and view the INPO videos that are referenced above.

2. Gain a general understanding of the technical/regulatory issues and their applications to the NRC.

3. *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.* [C-1]

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

General Proficiency Individual Study Activity

TOPIC: (ISA-General-4) Safety Culture

PURPOSE: This activity will provide you with a working knowledge of the NRC safety culture initiative and how it is addressed in the Reactor Oversight Process (ROP) and Construction Reactor Oversight Process (cROP).

COMPETENCY AREA: INSPECTION

LEVEL OF EFFORT: 20 hours

REFERENCES: For power reactor inspectors:

1. *Safety Culture ROP Training and the Review of the Columbia Space Shuttle Accident computer-based training found in iLearn.*

2. *Inspection Manual Chapters 0305, "Operating Reactor Assessment Program," 0310, "Aspects Within the Cross-Cutting Areas," and 0612, "Power Reactor Inspection Reports"*

3. *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"; 95003, "Supplemental Inspection Procedure Repetitive Degraded Cornerstone or Multiple Degraded Cornerstones, Multiple Yellow Inputs, or One Red Input"; 71153, "Event Follow-up"; 93800, "Augmented Inspection Team"; and 93812, "Special Inspection"*

4. *SECY-06-122, "Safety Culture Initiative Activities to Enhance the Reactor Oversight Process and Outcomes of the Initiatives" at http://www.nrc.gov/reading-rm/doc-collections/commission/secys/2006/secy2006-0122/2006-0122scy.pdf (ADAMS Accession No. ML061320282)*

5. *Safety Culture Policy Statement and Federal Register Notice (ML11146A047)*

6. *Safety Culture Case Study User Guide (http://pbadupws.nrc.gov/docs/ML1119/ML11195A352.pdf) and Educational Material (*http://www.nrc.gov/about-nrc/safety-culture/sc-outreach-edu-materials.html*)*

7. *NUREG-2165, "Safety Culture Common Language"*

For research and test reactor inspectors:

1. *Safety Culture ROP Training (http://papaya.nrc.gov/safetyculture/index.html)*

2. *Review of the Columbia Space Shuttle Accident computer-based training module, a case study in safety culture, found in iLearn*

3. *Review of the Safety Culture Case Study User Guide (http://pbadupws.nrc.gov/docs/ML1119/ML11195A352.pdf) and Educational Material (http://www.nrc.gov/about-nrc/safety-culture/sc-outreach-edu-materials.html)*

For construction inspectors:

1. *Safety Culture ROP Training (Note that the treatment of safety culture in the cROP is essentially the same as the treatment of safety culture in the ROP) (http://papaya.nrc.gov/safetyculture/index.html)*

2. *Review of the Columbia Space Shuttle Accident computer-based training module, a case study in safety culture, found in iLearn*

3. *Review of the Safety Culture Case Study User Guide (http://pbadupws.nrc.gov/docs/ML1119/ML11195A352.pdf) and Educational Material (http://www.nrc.gov/about-nrc/safety-culture/sc-outreach-edu-materials.html)*

4. *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"; 90003, "Construction Multiple/Repetitive Degraded Cornerstone Column Inspections"; "Augmented Inspection Team"; and 93812, "Special Inspection"*

5. *Safety Culture Policy Statement and Federal Register Notice (ML11146A047)*

6. *NUREG-2165, "Safety Culture Common Language)*

7. *IMC 0613, Appendix F, "Construction Cross-Cutting Areas and Aspects"*

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

1. *Discuss general safety culture aspects and the graded ROP (cROP for construction inspectors) approach to recognizing potential weaknesses in licensee safety culture and taking appropriate agency actions.*

TASKS:

1. *Review referenced Safety Culture Training.*

2. *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.*

3. *Explain the relationship of the cross-cutting areas with the safety culture aspects. (For power reactor and construction inspectors only.)*

4. *Discuss how the causes and cross-cutting aspects would be identified and documented for several current or hypothetical inspection findings. (For power reactor and construction inspectors only.)*

5. *Review the Safety Culture Policy Statement. Discuss the nine traits listed in that policy along with the cross-cutting aspects listed in IMC 0310, and the corresponding examples found in NUREG-2165. The construction cross-cutting aspects are listed in IMC 0613, Appendix F for construction inspectors)*

6. *Discuss the agency's graded approach to dealing with potential safety culture issues as licensee performance declines.*

7. *Meet with your supervisor, a qualified operations resident inspector, or a qualified Safety Culture Assessor (or a 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. [C-2]*

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

General Proficiency On-the-Job Activity

General Proficiency On-the-Job Activity

TOPIC: (OJT-General-1) Emergency Drill/Exercise Observation (for power reactor and construction inspectors only as observations of drills for research and test reactors are addressed in IMC 1245, Appendix C5, OJT-RT-1)

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.

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.

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

TASKS:

1. Obtain and review a copy of IP 71114.08 and the applicable licensee's emergency drill/exercise scenario. Ensure the licensee submitted exercise scenario provides opportunities to demonstrate the licensee's capability to adequately perform key skills in principal functional areas to protect public health and safety. 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.

2. Review IP 71114.01, IP 71114.06, and IP 71114.07 to identify the inspection attributes provided for drill/exercise performance evaluations. Discuss any questions with a senior emergency preparedness inspector.

3. 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.

4. 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.

5. 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.

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 or during the post drill/exercise critiques. Items of concern 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
A. Training Courses		
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)		
B. Individual Study Activities		
ISA-General-1 Quality Assurance Program (for power reactor and 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		
C. On-the-Job Activity		
OJT-GENERAL-1 Emergency Drill/Exercise Observation (for power reactor and construction inspectors only)		

This signature card must be accompanied by the appropriate Form 1, "General Profiency-Level Equivalency Justification," if applicable.

Supervisor's signature indicates successful completion of all required courses and activities listed in this journal.

Supervisor's Signature: _____ Date: _____

Form 1: General Proficiency-Level Equivalency Justification	
Inspector Name:_____	Identify equivalent training and experience for which the inspector is to be given credit
A. Training Courses	
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)	
B. Individual Study Activities	
ISA-General-1 Quality Assurance Program (for power reactor and 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	
C. On-the-Job Activity	
OJT-GENERAL-1Emergency Drill/Exercise Observation (for power reactor and construction inspectors only)	

Supervisor's Recommendation Signature/Date_____

Division Director's Approval Signature/Date_____

Revision History Sheet 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 and Feedback Resolution Accession Number (Pre-Decisional, Non-Public)
C-1	06/29/04	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 C-2	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

Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Description of Training Required and Completion Date	Comment and Feedback Resolution Accession Number (Pre-Decisional, Non-Public)
N/A	01/10/08 CN 08-001	Updated a reference in ISA-General-1.	None	ML073510727
N/A	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	12/29/11 CN 11-044 ML11168A201	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

Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Description of Training Required and Completion Date	Comment and Feedback Resolution Accession Number (Pre-Decisional, Non-Public)
N/A	ML16301A162 12/19/16 CN 16-034	This revision adds INPO videos to expand the number of technical issues addressed in ISA-3 and updates OJT-1 (emergency drills).	None	ML16301A339 Closed FF: 1245B-2030 ML16049A417 1245B-2199 ML16166A010