

NRC INSPECTION MANUAL

NSIR/DSO

INSPECTION MANUAL CHAPTER 1245 APPENDIX C11

SECURITY RISK ANALYST TECHNICAL PROFICIENCY
TRAINING AND QUALIFICATION JOURNAL

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INTRODUCTION

Complete Inspection Manual Chapter (IMC) 1245, Appendix A, “Basic Inspector Certification Journal” before completing any activities or courses in this journal. You may complete the General Proficiency requirements contained in Appendix B together with the Technical Proficiency requirements outlined in this journal.

This journal includes the certification requirements for security risk analysts (SRA)s that conduct target set inspections. To be qualified under this qualification journal (i.e., Appendix C11), a qualification board is required, unless the individual has already completed a qualification board under a different IMC 1245 appendix.

References contained in the individual study activities (ISA) and on-the-job training (OJT) activities may be publicly available, Official Use Only – Security Related Information (OUO-SRI), or Safeguards Information (SGI) depending on the content of the reference. Agencywide Document Access and Management System (ADAMS) accession numbers, Safeguards Information Local Area Network and Electronic Safe (SLES) numbers, or links will be provided for OUO-SRI and SGI references to ensure the proper references are located. Many of the references can be found on the Security Oversight and Support Branch SharePoint page here: [NSIR DSO SOSB \(internal\)](#).

A fully qualified Regional SRA inspector must complete either the Boiling Water Reactor (BWR) course series (R-304B, R-504B, and R-624B) or the Pressurized Water Reactor (PWR) course series (R-304P, R-504P, and R-624P). Due to variations in design, operation, and emergency response, consideration should be made for completion of the second series.

Regional SRA inspectors should be limited to inspections of the reactor type for which they are qualified. However, coordination with the site resident inspection staff for technical support during a target set inspection can compensate for inspection of alternate technologies. This approach has the potential to negatively impact the resource estimate for the inspection procedure and should be limited to the extent practicable.

A fully qualified Headquarters SRA must complete the BWR course series (R-304B, R-504B, and R-624B), PWR course series (R-304P, R-504P, and R-624P), and applicable AP1000 cross training course (i.e., R-327C). However, an individual qualifying as a Headquarters SRA can hold an interim SRA qualification, if they have completed one entire reactor series (i.e., PWR or BWR). Individuals that hold an interim qualification can only conduct inspections at the type of reactor they have been qualified until they complete their full SRA qualification.

Required Reactor SRA Training Courses for both headquarters and regional Inspectors:

- Power Plant Engineering (E-110 self-study)
- BWR Technology Series (R-304B, R-504B, and R-624B)
- PWR Technology Series (R-304P, R-504P, and R-624P) (either PWR or BWR series, or both for regional SRA inspectors)
- Westinghouse AP1000 Cross Training (R-327C) (recommended but not required for regional SRA inspectors)
- Perspectives on Reactor Safety (R-800)

- Security Fundamentals Course (S-301)
- Explosives, Blast Effects, and Breaching Field Course (S-502)
- Online Introduction to the Design and Evaluation Process Outline (DEPO) for Nuclear Security, Self-Study (S-118S)

Appropriate equivalency justification for any or all of the above courses can be applied as discussed in IMC 1245, "Qualification Program for Reactor Inspectors."

Security Risk Analyst Technical Proficiency
Individual Study Activities

(ISA-SRA-1) Title 10 of the *Code of Federal Regulations* (10 CFR)

PURPOSE:

The Nuclear Regulatory Commission (NRC) requires power reactor licensees comply the physical protection requirements in 10 CFR 73. It provides the content and scope with which various licensees must comply or receive NRC approval to deviate from the requirements. For this reason, it is important that all Security Risk Analysts (SRA)s gain a general and comprehensive knowledge of applicable security requirements in the 10 CFR 73. This activity will provide the SRA with detailed knowledge of the requirements and how to apply specific security regulation requirements to target sets.

COMPETENCY AREA: REGULATORY FRAMEWORK

LEVEL OF EFFORT: 40 hours

REFERENCES:

1. 10 CFR 73.1, "Purpose and Scope"
2. 10 CFR 73.2, "Definitions"
3. 10 CFR 73.21, "Protection of Safeguards Information: Performance Requirements"
4. 10 CFR 73.22, "Protection of Safeguards Information: Specific Requirements"
5. 10 CFR 73.54, "Protection of Digital Computer and Communication Systems and Networks"
6. 10 CFR 73.55, "Physical Protection Requirements for Nuclear Power Reactors":
 - a. 10 CFR 73.55(b)(4)
 - b. 10 CFR 73.55(b)(10)
 - c. 10 CFR 73.55(f), "Target Sets"
 - d. 10 CFR 73.55(m), "Security Program Reviews"
7. 10 CFR 73.58, "Safety/Security Interface Requirements for Nuclear Power Reactors"
8. Statement of Considerations for the "Power Reactor Security Requirements; Final Rule," dated March 27, 2009, pages 13940, 13960, 13974, and 13987 ([74 FR 13925](#))

EVALUATION CRITERIA:

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

1. Identify, recognize, and locate specific security-related topics presented in 10 CFR 73 and appendices referenced above.
2. Describe the general objective of a licensee's security program with a focus on design basis threat (DBT).
3. Discuss and interpret the definitions of terms and security processes identified in 10 CFR 73 and appendices referenced above.
4. Discuss activities regarding the proper control of safeguards information and other sensitive information both for NRC licensees and NRC employees.
5. Discuss and describe the applicable regulations related to target sets and when they apply.
6. Discuss the insights to target sets that the 10 CFR Part 73 final rule's statement of considerations provide (i.e., six criteria for operator actions and definition of target sets).

TASKS:

1. Locate, review, and identify the security regulations described in the 10 CFR 73.
2. Review the definition of safeguards information and other sensitive information and determine the appropriate control measures for the information.
3. Review all the security regulations described in the reference section and be able to describe, at a high level, security requirements for power reactor licensees described in 10 CFR 73.55(b).
4. Review the information in the 10 CFR related to target sets, safety/security interface, and security program reviews.
5. Locate and review the definition of a target set.
6. Locate and review the six criteria that must be achieved to have a credited operator action within a target set.
7. Meet with your supervisor, a regional security branch chief, or a qualified **security** SRA to discuss any questions you may have as a result of this activity.

DOCUMENTATION:

Obtain your supervisor's or designated reviewer's signature in the line item for Security Risk Analyst Technical Proficiency Level Qualification Signature **Card Item** ISA-SRA-1.

(ISA-SRA-2) Target Set Regulatory Guidance and Framework

PURPOSE:

The NRC requires that licensees establish a documented process to develop and maintain target sets. The NRC develops regulatory guides and other documents to provide guidance to licensees on one acceptable method to meeting regulations. For this reason, it is incumbent on all SRAs to understand what regulatory guidance and other information published or issued by the NRC to licensees regarding target sets.

COMPETENCYAREA: INSPECTION REGULATORY FRAMEWORK

LEVEL OF EFFORT: 10 Hours

REFERENCES:

1. Regulatory Guide 5.81, "Target Set Identification and Development for Nuclear Power Reactors," (OUO-SRI Rev. 0 ML102720056, OUO-SRI Rev. 1 ML19253C754)
2. Regulatory Guide 5.74, "Managing the Safety/Security Interface"
3. Regulatory Guide 5.76, "Physical Protection Systems at Nuclear Reactors," (SGI Rev. 0 NS105997, SGI Rev. 1 NS125707)
4. Regulatory Guide 5.69, "Guidance for the Application of the Radiological DBT in the Design, Development, and Implementation of a Physical Security Protection Program that Meets 10 CFR 73.55 Requirements," (SGI Rev. 0 NS107322, SGI Rev. 1 NS125514)
5. Regulatory Guide 5.71, "Cyber Security Programs for Nuclear Facilities"
6. Inspection Procedure 71130.14, "Review of Power Reactor Target Sets," (OUO-SRI [Digital City \(internal\)](#))
7. Inspection Procedure 81000.14, "Review of New Reactor Target Sets," (OUO-SRI [Digital City \(internal\)](#))
8. Inspection Procedure 81200.14, "Review of Decommissioning Reactor Target Sets," (OUO-SRI [Digital City \(internal\)](#))
9. NEI 13-05, "Target Set Template," Revision 0, dated March 2014 (ML14087A059)
10. U.S. Army Corps of Engineers Study, PDC-TR 01-01, Revision 1, "Structural Assessment of Spent Fuel Pools Attacked with Unsophisticated Sabotage Threat," (SGI NS113057)
11. U.S. Army Corps of Engineers Study, PDC-NRC 14-01, "Structural Assessment for Sabotage Threats," (SGI NS113131)

EVALUATION CRITERIA:

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

1. Define a target set and the sections of a typical licensee target set analysis.
2. Define the six criteria for operator actions and provide examples of operator actions that satisfy the six criteria.
3. Describe the process described in RG 5.76 and RG 5.81 on identifying and documenting target sets.
4. Define Reasonable Assurance of Protection Time (RAPT) and how RAPT could be accounted for in a licensee's target sets.
5. Describe how licensees evaluate target sets for changes in operational mode and equipment configuration.
6. Describe how and for which target sets the U.S. Army Corps study applies.
7. Describe the applicable regulatory guidance associated with target sets.
8. Understand and describe the elements within the DBT and associated guidance.
9. Describe the boundaries/constraints of the DBT associated with target sets and adversary capabilities.
10. Describe cyber requirements and guidance in relation to target sets (i.e., RG 5.71, and in RG 5.81).

TASKS:

1. Locate and read all the documents referenced above.
2. Review the description and application of the DBT characteristics.
3. Review the process for identifying and documenting target sets.
4. Review the six criteria for crediting operator actions.
5. Review the description and application of RAPT.
6. Review the physical protection requirements and cyber protection requirements for target set critical digital assets.
7. Meet with your supervisor, a regional security branch chief, or a qualified security SRA to discuss any questions you may have as a result of this activity.

DOCUMENTATION:

Obtain your supervisor's or designated reviewer's signature in the line item for Security Risk Analyst Technical Proficiency Level Qualification Signature Card Item ISA-SRA-2.

(ISA-SRA-3) Technical Specifications, Operability, and
Updated Final Safety Analysis Report

PURPOSE:

The NRC requires that licensees operate their facilities in compliance with the NRC-approved technical specifications (TS). The TS provides the limits for facility operation with which the licensee must comply or receive NRC approval to deviate from the requirements. For this reason, it is mandatory that all SRAs possess a general knowledge of the content of the TS. This activity will provide an analyst with general knowledge of the contents of the TS (i.e., standard tech. specs vs. site specific). This level of knowledge is equivalent to the required TS specific knowledge level to successfully complete either the Boiling Water Reactor (BWR) or Pressurized Water Reactor (PWR) series of instruction. Additionally, NRC requires that licensees update and maintain their Final Safety Analysis Report (FSAR) at a required frequency. The FSAR describes important structure, systems, and components at a site and can provide useful information for a target set inspection. For this reason, it is important for all SRAs to be able to locate and review a licensee's updated FSAR (UFSAR) before a target set inspection.

COMPETENCY AREA: INSPECTION REGULATORY FRAMEWORK:

LEVEL OF EFFORT: 10 Hours

REFERENCES:

1. The TSs for the PWR or BWR series course attended
2. The NRC's [Licensee Information Basic Reference Artifact Repository \(The LIBRARY \(internal\)\)](#)
3. [Plant Risk Information Book \(PRIB\) \(internal\)](#) and/or [Standardized Plant Analysis Risk \(SPAR\) model](#) for a site
4. IMC 0326, "Operability Determinations"

EVALUATION CRITERIA:

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

1. For the TS used during the PWR/BWR series instruction, identify each TS section, and discuss the general content of the requirements contained in each section.
2. Discuss the definition of the terms found in the TS.
3. Discuss the safety limits and limiting safety system settings listed and the significance of these limits.
4. Define operability.

5. Discuss the initial assumptions regarding operability of equipment and TS action statements during target set inspections.
6. Describe the contents of a FSAR/UFSAR and what information can be obtained from the report.
7. Describe how the FSAR/UFSAR can be useful in preparation for a target set inspection.
8. Describe any system or equipment interdependences identified while reviewing a site's **PRIB or SPAR**.

TASKS:

1. Locate a copy of the TSs for the BWR or PWR series course attended or for a site designated by your supervisor.
2. Review the various sections of the TSs, as listed in the evaluation criteria section.
3. Review the contents of the technical requirements manual or other document referenced by the TS to determine the types of requirements contained in these documents.
4. Discuss the relationship between TS and operability of equipment and their applicability to target sets.
5. Review the contents of a site's FSAR/UFSAR and identify any unique site-specific structures, systems, and components that may affect the site's target sets. Also, review the report for site familiarization and nomenclature.
6. Review the contents of a site's **PRIB or SPAR**.
7. Meet with your supervisor, a regional security branch chief, or a **security** qualified SRA to discuss any questions you may have as a result of this activity.

DOCUMENTATION: **Obtain your supervisor's or designated reviewer's signature in the line item for Security Risk Analyst Technical Proficiency Level Qualification Signature Card Item ISA-SRA-3.**

(ISA-SRA-4) Target Set Flowchart and Baseline Security
Significance Determination Process (BSSDP)

PURPOSE:

The Significance Determination Process (SDP), as described in Appendix E of IMC 0609, aids NRC inspectors, SRAs, and staff in determining the safety significance of inspection findings. Target set findings are assessed through the Target Set Flowchart of IMC 0609, Appendix E, Part I. While this flowchart focuses on the areas applicable to target sets, including target set processes, consideration of cyberattacks, and target set oversight, it also provides a link to the BSSDP Flowchart and cybersecurity SDP, when applicable. The baseline worksheets and cybersecurity worksheets are used to determine the risk-significance of target set findings that either resulted in a change to the protective strategy or impacted the cybersecurity program. The purpose of this activity is for the SRA to gain the requisite knowledge, understanding, and practical ability, such that upon completion of this activity, the SRA will be able to use the appropriate SDP to determine the safety significance of target set findings.

COMPETENCY AREA: REGULATORY FRAMEWORK
TECHNICAL AREA EXPERTISE
INSPECTION
PROBLEM ANALYSIS
ASSESSMENT AND ENFORCEMENT

LEVEL OF EFFORT: 8 Hours

REFERENCES:

1. IMC 0609, "Significance Determination Process"
2. IMC 0609, Appendix E, Part I, "Baseline Security Significance Determination Process for Power Reactors"
3. IMC 0609, Appendix E, Part IV, "Cyber Security Significance Determination Process for Power Reactors"
4. IMC 0612, Appendix B, "Issue Screening Directions"
5. IMC 0612 Appendix E, "Examples of Minor Issues"
6. Security Issues Forum (SIF) Charter, Revision 4 dated January 2023 (ML23017A082)

EVALUATION CRITERIA:

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

1. Identify the most risk significant target sets findings that will require assessment through the BSSDP or cybersecurity SDP.

2. Screen a target set related finding through IMC 0609, Appendix E, Part I.
3. Discuss the thresholds for increasing significance of target set findings/violations.
4. Discuss the **SIF and under what conditions inspectors should bring findings to the SIF for review.**

TASKS:

1. **Locate and review the references above.**
2. Obtain from your supervisor or a qualified SRA at least three (3) actual target set inspection findings (at least 2 of which **should be more-than-minor**), or obtain from your supervisor or a qualified senior security inspector at least three (3) BSSDP case studies and perform the following:
 - a. Utilizing IMC 0612 Appendices B and E, **screen the examples against the more-than-minor criteria.**
 - b. Utilizing IMC 0609, Appendix E, **Part I, section 0609EI-08 and figure 6**, screen the target set finding.
 - c. Compare your conclusions with those provided by the actual findings or case studies.
 - d. Discuss your results with your supervisor, a regional security branch chief, or a qualified SRA.
3. Discuss with a qualified SRA how they would determine if a licensee must change their protective strategy to account for the changes in their target sets to assist in determining the significance of a finding/violation.
4. Meet with your supervisor, a regional security branch chief, or a qualified **security** SRA to discuss any questions you may have as a result of this activity.

DOCUMENTATION: **Obtain your supervisor's or designated reviewer's signature in the line item for Security Risk Analyst Technical Proficiency Level Qualification Signature Item ISA-SRA-4.**

(ISA-SRA-5) Licensee Protective Strategy

PURPOSE:

The NRC requires that a licensee be able to adequately defend the site against the DBT or radiological sabotage as defined in 10 CFR 73.1. The general performance objectives of a licensee's physical protection program are provided in 10 CFR 73.55(b). Each licensee shall design its physical protection program in a manner that accounts for site-specific conditions and applies defense in depth to ensure that the physical protection program maintains at all times the capabilities to detect, assess, interdict, and neutralize threats. Consistent with 10 CFR 73.55(b)(4), the licensee shall analyze and identify site-specific conditions, including target sets, that may affect the specific measures needed to implement the requirements of 10 CFR 73.55 and shall account for these conditions in the design of the physical protection program. This activity will provide SRAs with familiarity of licensee physical protection programs and the relationship to site specific target sets.

COMPETENCY AREAS: TECHNICAL AREA EXPERTISE:

LEVEL OF EFFORT: 24 hours

REFERENCES:

1. 10 CFR 73.1, "Purpose and Scope"
2. 10 CFR 73.55(b), "General Performance Objectives"
3. RG 5.76, "Physical Protection Programs at Nuclear Power Reactors," (SGI Rev. 0 NS105997, SGI Rev. 1 NS125707)
4. Regulatory Guide 5.69 "Guidance for the Application of the Radiological DBT in the Design, Development, and Implementation of a Physical Security Protection Program that Meets 10 CFR 73.55 Requirements," (SGI Rev. 0 NS107322, SGI Rev. 1 NS125514)
5. RG 5.81, "Target Set Identification and Development for Nuclear Power Reactors," (OUO-SRI Rev. 0 ML102720056, OUO-SRI Rev. 1 ML19253C754)
6. Licensee supplied target set information (SGI)
7. Licensee/Site Protective Strategy Brief (SGI)

EVALUATION CRITERIA:

At the completion of this activity, you should be able to perform the following for the facility designated by your supervisor:

1. Discuss the regulatory requirements for the design, development, and implementation of a security protective strategy.

2. Discuss how licensees design the protective strategy to address target set equipment and locations including: (a) the interactions between a licensee's operations and security departments in establishing priorities for protecting equipment; (b) the overall protective strategies used; and (c) modifications implemented to account for RAPT (if applicable).
3. Discuss a licensee's established target sets and its responsiveness and effectiveness in implementing its strategy to protect these sets.
4. Discuss the background of RAPT and how a licensee could apply this concept.

TASKS:

1. Locate and review the references above (licensee target sets and protective strategy briefings can be acquired from NSIR force on force teams).
2. In conjunction with your supervisor or a qualified SRA, review the licensee supplied target set information focusing on locations of identified equipment.
3. Obtain a site protective strategy brief to understand a licensee's protective strategy and how it protects target sets.
4. Meet with a FOF team lead, or regional senior security inspector to discuss licensee protective strategies and the relationship to targets sets.
5. Meet with your supervisor, a regional security branch chief, or a qualified security SRA to discuss any questions that you may have as a result of this activity.

DOCUMENTATION: Obtain your supervisor's or designated reviewer's signature in the line item for Security Risk Analyst Technical Proficiency Level Qualification Signature Card Item ISA-SRA-5.

Security Risk Analyst Technical Proficiency
On-the-Job Training Activities

(OJT-SRA-1) Target Set Review

PURPOSE:

The purpose of this activity is to familiarize an SRA with the proper method for reviewing licensee supplied target set information and plant specific system information prior to a target set inspection. This is equivalent to the in-office preparation for the target set inspection.

COMPETENCY AREA: INSPECTION:

LEVEL OF EFFORT: 40 hours:

REFERENCES:

1. Inspection Procedure 71130.14, "Review of Power Reactor Target Sets," (OUO-SRI [Digital City \(internal\)](#))
2. Licensee supplied target set information (SGI)
3. Piping and instrumentation drawings for each selected system as needed
4. Licensee system emergency procedures and operations security emergency procedures
5. Final safety analysis report (FSAR) or updated final safety analysis report (UFSAR) for assigned facility ([The LIBRARY \(internal\)](#))
6. Site Information (any other applicable documents such as additional prints, drawings, site probabilistic risk assessment (PRA) notebook(s), or procedures necessary for target set review)
7. RG 5.81, "Target Set Identification and Development for Nuclear Power Reactors," (OUO-SRI Rev. 0 ML102720056, OUO-SRI Rev. 1 ML19253C754)

EVALUATION CRITERIA:

When you have completed this activity, you will be able to do the following:

1. Discuss the accident response functions of each selected system.
2. Discuss the "stand alone" ability of each target set element to prevent significant core damage.
3. Validate operator actions meet established criteria to be included in the target set or should be identified as mitigative actions.
4. Ensure that any target sets that are screened out are unachievable per the restraints of the DBT. Additionally, if the licensee used a reasonable assurance of protection time (RAPT) to screen out unachievable target sets, ensure it is in screened and documented in accordance with RG 5.76.

5. Ensure the licensee is adequately identifying target sets, use guidance provided in RG 5.81 for target set identification as one acceptable method a licensee can use to perform target set identification.
6. Identify that the submitted target set information contains the required information for a reviewer to ensure target sets are complete and accurate.

TASKS:

1. In conjunction with a qualified SRA or your supervisor review the background plant information to validate the licensee supplied target set information.
2. In conjunction with a qualified SRA or your supervisor review the proposed operator actions allow inclusion of components in the target set per the six criteria.
3. In conjunction with a qualified SRA participate via secure phone or through face-to-face communications with licensee personnel to validate assumptions made in the preparation of the target set submittal and basis document.
4. Ensure that if the licensee identifies any cyber critical digital assets that relate to a target set element and location are included in the documented target sets.
5. In conjunction with a qualified SRA, ensure the submitted target set information has all the information necessary to conduct a target set inspection. NOTE: Licensees are not required to conform to the format as described in IP 71130.14, RG 5.81, or RG 5.76.
6. Meet with your supervisor, a regional security branch chief, or a qualified **security** SRA to discuss any questions that you may have as a result of this activity.

DOCUMENTATION: Obtain your supervisor's or designated reviewer's signature in the line item for Security Risk Analyst Technical Proficiency Level Qualification Signature **Card Item** OJT-SRA-1.

(OJT-SRA-2) Site System Reviews and Walk Downs

PURPOSE:

The purpose of this activity is to familiarize SRAs with the proper method for validating target set information on the physical plant site and conducting walk downs of target set elements. This verification is one means of ascertaining that a target set element can perform its intended stand-alone accident response functions and that operator actions meet the established criteria. This is equivalent to the on-site review of target sets.

COMPETENCY AREA: INSPECTION:

LEVEL OF EFFORT: 40 hours:

REFERENCES:

1. Inspection Procedure 71130.14, "Review of Power Reactor Target Sets," ([OUO-SRI Digital City \(internal\)](#))
2. Licensee supplied target set information (SGI)
3. Piping and instrumentation drawings for each selected system, as needed
4. Licensee system emergency procedures and operations security emergency procedure
5. Updated Final Safety Analysis Report (UFSAR) for assigned facility ([The LIBRARY \(internal\)](#))
6. Site information (any other applicable documents such as additional prints, drawings, or procedures necessary for target set review)

EVALUATION CRITERIA:

Upon completion of the tasks, you should be able to:

1. Discuss the accident response functions of each selected system and supporting systems necessary for proper system function.
2. Discuss the stand-alone ability of each target set element.
3. During a tour, with the site operations personnel, of each target set element locate the major components.
4. During a tour of each target set element, evaluate if there are any additional methods or locations that the licensee did not identify that could be used to prevent an element from providing accident response functions.
5. Demonstrate the ability to walk down an operator action within a target set and be able to determine if it does or does not meet the six criteria to be a credited operator action

and the rationale. If applicable, walk down any target set elements screened out and/or added to a target set based on RAPT.

TASKS:

1. In conjunction with a qualified SRA, a site resident inspector, or your supervisor perform a walk down of target set elements to verify the background plant information provided in the licensee supplied target set information.
2. In conjunction with a qualified SRA, a site resident inspector, or your supervisor perform a walk down of target set elements to validate the proposed operator actions allow inclusion of remote components in the target set per the inspection criteria.
3. In conjunction with a qualified SRA, or your supervisor, evaluate possible alternate methods to disable target set elements from providing accident response functions.
4. Meet with your supervisor, a regional security branch chief, or a qualified **security** SRA to discuss any questions that you may have as a result of this activity.

DOCUMENTATION: Obtain your supervisor's or designated reviewer's signature in the line item for Security Risk Analyst Technical Proficiency Level Qualification Signature Card Item OJT-SRA-2.

(OJT-SRA-3) Safety and Security Interface

PURPOSE:

The purpose of this activity is to familiarize SRAs with the proper method for performing the safety and security interface aspect of the target set inspection procedure. This review ensures that the plant operations staff is not adversely affected by the security measures currently in place and that site safety and security personnel are aware of what the other departments are doing. During this review, the licensee's operations staff should verify they can effectively perform the actions required for safe shutdown of the facility and no critical operator timelines are affected by security measures. The review must also verify that operations staff are informed in a timely manner of a possible or current security threat to the site, so that operations staff may begin any applicable actions and safely perform these actions without being adversely affected by plant security equipment or barriers.

COMPETENCY AREAS: INSPECTION:

LEVEL OF EFFORT: 10 hours:

REFERENCES:

1. Inspection Procedure 71130.14, "Review of Power Reactor Target Sets," ([OUO-SRI Digital City \(internal\)](#))
2. 10 CFR 73.58, "Safety/Security Interface Requirements for Nuclear Power Reactors"
3. Regulatory Guide 5.74, "Managing the Safety/Security Interface"
4. Licensee supplied target set information (SGI)
5. Piping and instrumentation drawings for each selected system as needed
6. Licensee system emergency procedures, operations security emergency procedure, and safety/security interface procedures
7. Final safety analysis report (FSAR) or updated final safety analysis report (UFSAR) for assigned facility ([The LIBRARY \(internal\)](#))
8. Site information (any other applicable documents such as additional prints, drawings, or procedures necessary for target set review)

EVALUATION CRITERIA:

Upon completion of this activity, you should be able to:

1. Discuss the need for the operations staff to rapidly access plant equipment.

2. Discuss the method that operators use to access plant equipment during plant emergency conditions such as Loss of Offsite Power (LOOP), Station Blackout (SBO), Extend Loss of AC Power (ELAP), and security emergency conditions.
3. Discuss any effects of security equipment or barriers may have on operator actions.

TASKS:

1. In conjunction with a qualified SRA or your supervisor interview several licensee senior reactor operators (SROs) regarding any possible effects of security equipment or barriers on the ability to safely operate the plant during normal and emergency conditions.
2. In conjunction with a qualified SRA or your supervisor interview several licensee SROs regarding how the operators can access equipment required to be operated during LOOP, SBO, ELAP, and security emergency conditions.
3. In conjunction with a qualified SRA or your supervisor interview several licensee SROs regarding the ability to effectively perform operator actions with the existing security equipment or barriers.
4. Review the licensee's procedure on safety and security interface and review the types of interactions the two departments have on-site.
5. Meet with your supervisor, a regional security branch chief, or a qualified security SRA to discuss any questions that you may have as a result of this activity.

DOCUMENTATION: Obtain your supervisor's or designated reviewer's signature in the line item for Security Risk Analyst Technical Proficiency Level Qualification Signature OJT-SRA-3.

Regional Security Risk Analyst Technical Proficiency Level Signature Card and Certification

Inspector's Name:	Employee's Initials/Date	Supervisor's Initials/Date
<u>Required Training Courses</u>		
Power Plant Engineering (E-110 self-study)		
BWR Technology R-304B or PWR Technology R-304P or equivalent		
BWR Technology R-504B or PWR Technology R-504P or equivalent		
BWR Technology R-624B or PWR Technology R-624P or equivalent		
Perspectives on Reactor Safety (R-800)		
Online Introduction to the Design and Evaluation Process Outline (DEPO) for Nuclear Security, Self-Study (S-118S)		
Security Fundamentals Course (S-301)		
Explosives, Blast Effects, and Breaching Field Course (S-502)		
<u>Individual Study Activities</u>		
ISA-SRA-1 <i>Code of Federal Regulations</i> (CFR)		
ISA-SRA-2 Target Set Regulatory Guidance and Framework		
ISA-SRA-3 Technical Specifications, Operability, and Updated Final Safety Analysis Report		
ISA-SRA-4 Target Set Flowchart and Baseline Security Significance Determination Process (BSSDP)		
ISA-SRA-5 Licensee <i>Protective Strategy</i>		
<u>On-the-Job Activities</u>		
OJT-SRA-1 Pre-Site Visit Target Set Review		
OJT-SRA-2 Site System Reviews and Walk Downs		
OJT-SRA-3 Safety and Security Interface		

Supervisor's signature indicates successful completion of all required courses and activities listed in this journal for the individual to be qualified as a Regional Security Risk Analyst for (circle one) the BWR Technology, PWR Technology, or Both. Additionally, the supervisor's signature below indicates the individual's readiness to appear before the Oral Board if the individual has not previously completed an oral board.

Supervisor's Signature: _____ Date: _____

Headquarters Security Risk Analyst Technical Proficiency Level
Signature Card and Certification

Inspector's Name:	Employee's Initials/Date	Supervisor's Initials/Date
<u>Required Training Courses</u>		
Power Plant Engineering (E-110 self-study)		
BWR Technology R-304B		
BWR Technology R-504B		
BWR Technology R-624B		
PWR Technology R-304P		
PWR Technology R-504P		
PWR Technology R-624P		
Perspectives on Reactor Safety (R-800)		
Westinghouse AP1000 Cross Training (R-327C)		
Online Introduction to the Design and Evaluation Process Outline (DEPO) for Nuclear Security, Self-Study (S-118S)		
Security Fundamentals Course (S-301)		
Explosives, Blast Effects, and Breaching Field Course (S-502)		
<u>Individual Study Activities</u>		
ISA-SRA-1 Code of Federal Regulations (CFR)		
ISA-SRA-2 Target Set Regulatory Guidance and Framework		
ISA-SRA-3 Technical Specifications, Operability, and Updated Final Safety Analysis Report		
ISA-SRA-4 Target Set Flowchart and Baseline Security Significance Determination Process (BSSDP)		
ISA-SRA-5 Licensee Protective Strategy		
<u>On-the-Job Activities</u>		
OJT-SRA-1 Target Set Review		
OJT-SRA-2 Site System Reviews and Walk Downs		
OJT-SRA-3 Safety and Security Interface		

Supervisor's signature indicates that the individual has completed the requirements to hold an interim Headquarters Security Risk Analyst qualification for the (circle one) PWR Technology or

BWR Technology. The other series still needs to be completed for the individual to be fully qualified.

Supervisor's Signature: _____ Date: _____

Supervisor's signature indicates successful completion of all required courses and activities listed in this journal to achieve a fully qualified Headquarters Security Risk Analyst. Additionally, the supervisor's signature below indicates the individual's readiness to appear before the Oral Board if the individual has not previously completed an oral board.

Supervisor's Signature: _____ Date: _____

Regional Security Risk Analyst Technical Proficiency Level Equivalency or Waiver Justification

Inspector Name:	Identify equivalent training and/or experience for which the inspector is to be given credit.
<u>Required Training Courses</u>	
Power Plant Engineering (E-110 self-study)	
BWR Technology R-304B or PWR Technology R-304P or equivalent	
BWR Technology R-504B or PWR Technology R-504P or equivalent	
BWR Technology R-624B or PWR Technology R-624P or equivalent	
Perspectives on Reactor Safety (R-800)	
Online Introduction to the Design and Evaluation Process Outline (DEPO) for Nuclear Security, Self-Study (S-118S)	
Security Fundamentals Course (S-301)	
Explosives, Blast Effects, and Breaching Field Course (S-502)	
<u>Individual Study Activities</u>	
ISA-SRA-1 Code of Federal Regulations (CFR)	
ISA-SRA-2 Target Set Regulatory Guidance and Framework	
ISA-SRA-3 Technical Specifications, Operability, and Updated Final Safety Analysis Report	
ISA-SRA-4 Target Set Flowchart and Baseline Security Significance Determination Process (BSSDP)	
ISA-SRA-5 Licensee Protective Strategy	
<u>On-the-Job Activities</u>	
OJT-SRA-1 Target Set Review	
OJT-SRA-2 Site System Reviews and Walk Downs	
OJT-SRA-3 Safety and Security Interface	

Supervisor's Recommendation: Signature / Date: _____

Division Director's Approval: Signature / Date: _____

Copies to: Inspector and official training file

Headquarters Security Risk Analyst Technical Proficiency Level
Equivalency or Waiver Justification

Inspector Name:	Identify equivalent training and/or experience for which the inspector is to be given credit.
<u>Required Training Courses</u>	
Power Plant Engineering (self-study)	
BWR Technology R-304B	
BWR Technology R-504B	
BWR Technology R-624B	
PWR Technology R-304P	
PWR Technology R-504P	
PWR Technology R-624P	
Perspectives on Reactor Safety (R-800)	
Westinghouse AP1000 Cross Training (R-327C)	
Online Introduction to the Design and Evaluation Process Outline (DEPO) for Nuclear Security, Self-Study (S-118S)	
Security Fundamentals Course (S-301)	
Explosives, Blast Effects, and Breaching Field Course (S-502)	
<u>Individual Study Activities</u>	
ISA-SRA-1 <i>Code of Federal Regulations</i> (CFR)	
ISA-SRA-2 Target Set Regulatory Guidance and Framework	
ISA-SRA-3 Technical Specifications, Operability, and Updated Final Safety Analysis Report	
ISA-SRA-4 Target Set Flowchart and Baseline Security Significance Determination Process (BSSDP)	
ISA-SRA-5 Licensee Protective Strategy	
<u>On-the-Job Activities</u>	
OJT-SRA-1 Target Set Review	
OJT-SRA-2 Site System Reviews and Walk Downs	
OJT-SRA-3 Safety and Security Interface	

Supervisor's Recommendation: Signature / Date: _____

Division Director's Approval: Signature / Date: _____

Copies to: Inspector and official training file

END

Attachment 1: Revision History for IMC 1245 Appendix C11

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)
		Updated as part the RG periodic review and to address recent changes related to target set identification (RG 5.81 and RG 5.76) and to address the removal of a target set inspector from the force-on-force inspection team.	None	
N/A	04/09/09 CN-09-011	Initial public issuance. Updated course curriculum to coincide with newly revised security procedures related to Force-on-Force	None	N/A
N/A	ML13218B311 08/30/13 CN-13-019	Entire rewrite of the qualification journal to include qualification requirements for regional security risk analysts and headquarters security risk analysts. Additionally, the qualification was updated to include changes to NRC requirements regarding target sets.	None	ML13218B322
	ML20220A302 11/05/20 CN 20-059	Major re-write. Entire rewrite of the qualification journal to include qualification requirements for regional security risk analysts and headquarters security risk analysts. Additionally, the qualification was updated to include changes to NRC requirements regarding target sets.	None	ML20220A301
NA	ML22265A209 12/16/22 CN 22-027	Editorial changes to align with required course title change implemented at the TTC	None	
NA	ML23115A196 09/08/23 CN 23-027	Revised to clarify guidance related to Regional SRA inspector qualification and include links and ML numbers for main references.	None	ML23115A195