

NRC INSPECTION MANUAL

IRAB

INSPECTION MANUAL CHAPTER 1245, APPENDIX C10

OPERATOR LICENSING (OL) EXAMINER TECHNICAL PROFICIENCY
TRAINING AND QUALIFICATION JOURNAL

TABLE OF CONTENTS

Introduction	1
General Requirements	1
Equivalencies:	2
Required OL Examiner Training Courses	2
OL Limited Examiner Individual Study Activities	4
(ISA-OLE-1) (L) Navigating the NRC’s Operator Licensing Web Pages	6
(ISA-OLE-2) (L) History and Organization of the Operator Licensing Program	8
(ISA-OLE-3) (L) Initial Operator Licensing Process	10
(ISA-OLE-4) (L) Operator Licensing Operating Tests	12
(ISA-OLE-5) (L) Technical Specifications	15
(ISA-OLE-6) (L) Operability	17
(ISA-OLE-7) (L) Shutdown Operations	20
(ISA-OLE-8) (L) Operator Licensing Appeals and Hearings	22
(ISA-OLE-9) (L) Simulation Facilities	24
OL Limited Examiner On-the-Job Training (OJT) Activities	26
(OJT-OLE-1) (L) Observe Two Initial Licensing Examinations	28
(OJT-OLE-2) (L) Conduct of Operations	30
(OJT-OLE-3) (L) Administer and Grade an Operating Test	32
OL Examiner Individual Study Activities	34
(ISA-OLE-10) License Eligibility Requirements and Guidelines	35
(ISA-OLE-11) Overview of Generic Concepts Related to Written Examination Development	37
(ISA-OLE-12) Operator Licensing Written Examinations	38
(ISA-OLE-13) Systems Approach to Training (SAT)	41
(ISA-OLE-14) Licensed Operator Requalification and Other License Conditions	43
OL Examiner On-the-Job Training Activities	45
(OJT-OLE-4) Prepare an Operating Test	46
(OJT-OLE-5) Prepare, Administer, and Grade a Written Examination	48
(OJT-OLE-6) Requalification Inspection	50
Chief Examiner OJT Activities	51
(OJT-OLE-7) Participate on Two Licensing Examination Teams (as a fully-qualified OL Examiner)	53
(OJT-OLE-8) Lead an Initial Examination Team (under instruction)	54
Signature and Certification Cards	56
OL Limited Examiner Signature and Certification Card	57
OL Examiner Signature and Certification Card	59
OL Chief Examiner Signature and Certification Card	60
Form 1: OL Limited Examiner Technical Proficiency Level Equivalency Justification	61
Form 2: OL Examiner Technical Proficiency Level Equivalency Justification	63
Attachment 1: Revision History for IMC 1245 Appendix C10	Att1-1

INTRODUCTION

This Appendix establishes the program for initial qualification of Operator Licensing (OL): **Limited Examiners**, **Examiners**, and **Chief Examiners** through Individual Study Activities (ISAs), formal classroom instruction, and on-the-job training (OJT).

The Appendix contains three distinct qualifications: **Limited Examiner**, **Examiner** (the official title for the full qualification level, sometimes referred to as full examiner), and **Chief Examiner**. **Limited Examiners** are only qualified to assist with the administration and grading of operating tests (including validation activities). In addition to the tasks of a **Limited Examiner**, **Examiners** are qualified to prepare, administer, and grade both operating tests and written examinations.

An individual may qualify as a **Limited Examiner** by completing only the **Limited Examiner** qualification card requirements. To qualify as an **Examiner**, both the **Limited Examiner** and **Examiner** cards must be completed. **Examiner** qualification is a prerequisite for **Chief Examiner** qualification.

GENERAL REQUIREMENTS

Do not begin the activities in this qualification journal until you have completed the following IMC 1245 Appendix A, Basic-Level Individual Study Activities (ISAs): 1 through 6, 14 through 16, and 19. You should complete the General Proficiency (IMC 1245, Appendix B) ISAs in parallel with the Technical Proficiency requirements outlined in this journal. Some of the Appendix B training courses are not required for OL Examiner **qualification** and may be deferred until subsequent qualification as a Reactor Operations Inspector in accordance with IMC 1245, Appendix C1.

Examiners must complete all the required training courses, ISAs, and OJT activities within 24 months after assignment to the regional (or Program Office) OL Branch. **While limited and full examiner qualification will normally be completed in parallel, resource needs may warrant completing the qualification in series (limited followed by full) to enable branch staff to assist with operating tests prior to completing full examiner qualification.**

In accordance with IMC-1245, supervisors are expected to certify that the required training ISA and OJT activities have been successfully completed by signing, electronically or otherwise, the items on the appropriate Signature and Certification Card. However, given that the OL branch chief (BC) may not be examiner-qualified, they may delegate **the** evaluation of the required activities to a **qualified** Examiner, who would initial the items on the card prior to certification by the OL BC. **Although regional OL BCs are encouraged to complete the OL Examiner qualification program, it is not required.**

Although a qualification board is not required, every OL **Limited** Examiner must satisfactorily administer **and grade** a complete operating test pursuant to OL Examiner OJT Activity (3) prior to limited **qualification**. This **qualification** test must be evaluated by a **qualified** Chief Examiner, who will assess and document the Limited Examiner candidate's performance on all the individual attributes identified in Section 02.02 of IMC 0102, "Oversight and Objectivity of Inspectors and Examiners at Reactor Facilities." The evaluator will provide a written recommendation (via memorandum or email) whether to **qualify** the **limited** examiner candidate, including the need for any remedial training, to the Chief of the regional (or program office) OL Branch with a copy to the individual's BC, as appropriate.

The Chief of the regional (or program office) OL Branch and the Director of the applicable Regional Division that is responsible for licensed operator oversight (or NRR Division of Reactor Oversight (DRO)) will document their concurrence with the evaluator's recommendation for qualification by signing the individual's applicable OL Examiner **Qualification** Card.

An examiner's **qualification** will automatically extend to multiple reactor technologies upon satisfactorily completing the full course series or the cross-training course for the applicable reactor technology.

Chief Examiner **qualification will** be completed at the discretion of the OL BC. **Examiners who are chief qualified but are not assigned to a regional or program office OL branch** will generally not be assigned duties as Chief Examiner.

The Chief Examiner **qualification** is based on a written recommendation by the Chief of the Regional **or program office** OL Branch; a qualification board is not required. The OL BC (or the designated Chief Examiner during OJT activities (6) and (7)) will assess and document the Chief Examiner candidate's performance on all the individual attributes identified in Section 03.03 of IMC 0102, "Oversight and Objectivity of Inspectors and Examiners at Reactor Facilities." The OL BC will provide a written recommendation **of** whether to certify the Chief Examiner candidate, including the need for any remedial training, to the Director of the Regional Division that is responsible for the Operator Examiner program (**or NRR DRO**) for concurrence.

EQUIVALENCIES:

The **OL BC** that is responsible for licensed operator oversight, (or DRO, as applicable) can approve alternate methods for meeting selected training, study, and OJT requirements in this appendix. Justifications for accepting alternate methods (e.g., previously holding a RO or SRO license may substitute for the technology series on the same vendor, but a refresher course may be appropriate depending on recency) must be documented on Form 1 and are subject to review by the OL program office.

Individuals who were previously licensed or SRO certified at a facility or were assigned as a resident/senior resident inspector at a facility may be able to justify the completion of ISA-OLE-5, ISA-OLE-6, ISA-OLE-7, and OJT-OLE-2 based on their experience. This should be briefly documented in Form 1 as an alternate method for meeting the requirements of these training activities.

Individuals with previous experience as a facility exam author (or equivalent) may be able to justify reduction of the requirement to prepare 50 percent of the operating test and written **examination**, as required by OJT activities OJT-OLE-4 and OJT-OLE-5. In this circumstance, preparation of the written exam may be satisfied by the individual demonstrating the ability to successfully prepare a sample of RO questions in all four tiers and a sample of SRO questions in all three tiers. Similarly, sample job performance measures (JPMs) and scenarios may be used to justify competency in preparation of the operating test.

REQUIRED OL EXAMINER TRAINING COURSES

Before signing up, ensure that you have met the prerequisites for the course.

- Power Plant Engineering Directed Self-Study Course (E-110)
- Reactor Technology Series (Basic, Advanced, and Simulator)

- BWR Series R-304B, R-504B, and R-624B and/or
- PWR Series R-304P, R-504P, and R-624P
- Technology Cross-Training Courses (as applicable)
 - Combustion Engineering (CE) (R-325C)
 - Babcock and Wilcox (B&W) (R-326C)
 - Westinghouse AP1000 (R-327C)
- Examination Techniques Course (G-107)
 - Operating Tests
 - Written Examinations
- Personal and interpersonal skills courses
 - Effective Communication for NRC Inspectors
 - Gathering Information for Inspectors through Interviews
 - Media Training Workshop

In order to qualify as an Examiner (limited or full), candidates must complete a technology course. For those without prior experience, either the BWR or PWR Reactor Technology series courses must be completed to qualify on GE or Westinghouse technologies. For candidates with prior experience, an exemption can be made for either the Technologies series and/or the applicable Cross-Training course. The Reactor Technology Series (Basic, Advanced, and Simulator) should normally be completed before attending the Examination Techniques Course. Examiner candidates should also complete ISA (5) and (6) before attending the written portion of the course (if applicable), and they should additionally complete ISA (7) and one initial examination observation trip OJT Activity (1) before attending the operating test techniques training.

Document completion of the reactor technology courses on the Signature Card as well as the Signature Card in Appendix C1, "Reactor Operations Inspector Technical Proficiency Training and Qualification Journal."

The Examination Techniques Course (G-107) includes separate courses for the operating test and written examination techniques and is conducted through the NRC's Technical Training Center (TTC). The operating test techniques portion of the course is required for all Examiners (including those seeking limited qualification). The written techniques portion of the course is only required for examiners seeking full qualification.

Examiner candidates must complete all the personal and interpersonal skills courses listed above prior to certification as an Examiner (limited or full). However, completion of the General Proficiency (Appendix B) training courses (Root Cause/Incident Investigation Workshop (G-205), and Field Techniques and the Regulatory Processes (G-103)), may be deferred until the examiner prepares to qualify as a Reactor Operations Inspector pursuant to Appendix C1.

OL Limited Examiner Individual Study Activities

The Individual Study Activities (ISAs) outline the Operator Licensing program reference materials that will enable examiner candidates to develop the specialized knowledge required to become **qualification Limited** Examiners, **Examiners**, and Chief Examiners. Reference materials that can be accessed via the OL web site are hyperlinked for the trainees' convenience.

The following ISAs required for **qualification** as an Examiner are similar to **ISAs** contained in **IMC 1245** Appendix C1, "Reactor Operations Inspector Technical Proficiency Training and Qualification Journal:"

- ISA-OLE-5, "Technical Specifications," parallels ISA-OPS-2
- ISA-OLE-6, "Operability," parallels ISA-OPS-3
- ISA-OLE-7, "Shutdown Operations," parallels OJT-OPS-9
- OJT-OLE-2, "Conduct of Operations," parallels OJT-OPS-2

You should document completion of equivalent activities on both Signature Cards which would eliminate the need to later repeat these activities when certifying as a Reactor Operations Inspector.

The following general guidance applies as you complete the ISAs **contained in this qualification**:

- The activities should generally be completed in the order in which they are presented, unless otherwise directed by the regional (or program office) OL BC.
- **Individuals qualifying as Examiner can work on Limited Examiner and Examiner activities in parallel.**
- All parts of each activity must be completed.
- The regional (or program office) OL BC will act as a resource as you complete each activity. Discuss any questions you may have about how a task must be done or how the guidance is applied. The OL BC may also designate a qualified Chief Examiner to work with you as you complete the various activities.
- You are responsible for keeping track of what tasks you have completed. Be sure that you have completed all aspects of an activity before you meet with the regional (or program office) OL BC **or a qualified examiner** for evaluation.

(ISA-OLE-1) (L) Navigating the NRC's Operator Licensing Web Pages

PURPOSE:

The purpose of this activity is to familiarize you with the navigation and content of the NRC's OL web pages. Operator Licensing Examiners must routinely access and review a variety of documents to support their work activities. This individual Study Activity will familiarize you with the web locations of those documents.

COMPETENCY AREA: INFORMATION TECHNOLOGY

LEVEL OF EFFORT: 2 hours

REFERENCES:

1. Operator Licensing Home Page (<http://www.nrc.gov/reactors/operator-licensing.html>)
2. Operating Licensing and Human Factors SharePoint Website (<https://usnrc.sharepoint.com/teams/NRR-Operator-Licensing-Branch>)

EVALUATION CRITERIA:

There are no specific evaluation criteria for this activity. Use the regional (or program office) OL BC or another OL Examiner as a resource as you complete this activity.

TASKS:

1. Open your web browser and go to the OL Home Page. Add a bookmark for future reference.

Familiarize yourself with the general layout. Navigate through each of the pages accessible from the home page and try out some of the embedded hyperlinks to the various documents related to the OL program:

- Regulations, Guidance and Communications,
- Licensing Process,
- Examination Schedule and Results,
- Oversight Program,
- Public Involvement,
- Related Documents and Other Resources,
- Generic Communications Related to Operator Licensing,
- Operator Licensing Program Feedback,
- Contact us About Operator Licensing.

2. **Ensure you are familiar with** the document locations as you will need to refer to many of them while completing the remainder of the OL Examiner training and qualification program and after you are **qualified** as an OL Examiner.

3. Open the Feedback page and familiarize yourself with its layout.
4. Familiarize yourself with the information available at the New Reactor Operator Licensing Home Page and the Operator Licensing and Training SharePoint site. The SharePoint site is used as a repository to store information for internal staff use.

DOCUMENTATION: **OL Limited** Examiner Signature and Certification Card Item ISA-OLE-1

(ISA-OLE-2) (L) History and Organization of the Operator Licensing Program

PURPOSE:

The purpose of this activity is to familiarize you with the evolution of the OL program and the statutory / regulatory framework under which it functions.

COMPETENCY AREA: REGULATORY FRAMEWORK

LEVEL OF EFFORT: 16 hours

REFERENCES:

1. Section 107 of the Atomic Energy Act of 1954 (p. 60/150)
2. Section 306 of the Nuclear Waste Policy Act of 1982 (p. 144/192)
3. 10 CFR Part 55, "Operators' Licenses"
4. 1987 final rule; NUREG-1262 (p. 154 -170)
5. 10 CFR 50.54(i) - (m)
6. OL Program Chronology (ADAMS Accession Number ML16060A123) and History 1979 - 1994 (ML16084A726)
7. OL Program Fact Sheet (<http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/operator-licensing.html>)
8. NRC Organization Charts and Delegation of Authority
9. OL Manual Chapters (ADAMS non-public folder location - ([/NRR/NRR-DRO/NRR-DRO/IOLB/MANUAL CHAPTERS \(OLMC\)](#)))

EVALUATION CRITERIA:

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

1. Discuss the statutory requirements for the OL program as stated in the Atomic Energy Act of 1954.
2. Discuss the statutory and regulatory changes put into effect by the Nuclear Waste Policy Act of 1982, including the 1987 final amendment to 10 CFR Part 55.
3. Discuss the layout and major Subparts of 10 CFR Part 55.
4. Outline the major offices having OL responsibilities and briefly describe the functioning of the following: the NRR Operator Licensing program office; the Director, Division of

Reactor Oversight (DRO); the Atomic Safety and Licensing Board; the NRC Regional Offices.

5. Describe the region's OL organization and its relationship to and interaction with the NRR OL program office.

TASKS:

1. On the OL Website, locate and review the statutory requirements for the OL program (i.e., references 1 and 2).
2. Locate and read a copy of 10 CFR Part 55 (it is available in digital format on the web, and in various applications that are available for use on a smartphone, but a paper copy might be useful). Become familiar with its overall layout and format.
3. Locate and review the Federal Register Notice (FRN) for the 1987 amendment to 10 CFR Part 55, which implemented Section 306 of the NWPA of 1982. A copy of the FRN is in NUREG-1262. Briefly review some of the questions and answers in the NUREG to get a sense for its content, as it will be a useful reference in the future. (Note that NUREG-1262 provides a useful historical perspective but that some of the answers have been overtaken by changes in the OL regulations, policies, and guidance.)
4. Locate a copy of **10 CFR** Part 50 and review the license conditions applicable to the OL program.
5. Find the OL program history / chronology on the OL web site and familiarize yourself with the major events since the accident at TMI, which initiated a round of changes in the OL and training areas.
6. Review the Office of Public Affairs' OL Program Fact Sheet on the web site. This provides a brief overview of the major program changes since 1995.
7. Locate and review an NRC organization chart, with emphasis on the regional operator licensing organization and how it fits into the NRR OL program.
8. Locate and review the NRR OL program office manual chapters that describe the regional audit and oversight functions including the Report on Interaction (ROI) process.

DOCUMENTATION: OL **Limited** Examiner Signature and Certification Card Item ISA-OLE-2

(ISA-OLE-3) (L) Initial Operator Licensing Process

PURPOSE:

The purpose of this activity is to familiarize you with the initial OL process, including examination scheduling and coordination, and post-examination activities. It also provides exposure to the Reactor Program System – Operator Licensing (RPS-OL), Operator Digital Docket, and docket files.

COMPETENCY AREA: INSPECTION ASSESSMENT
ENFORCEMENT

LEVEL OF EFFORT: 16 hours

REFERENCES:

1. 10 CFR 55.40; “Implementation” and 55.49,” Integrity of Examinations and Tests”
2. SECY-98-266, “Final Rule - Requirements for Initial Operator Licensing Examinations”
3. ES-1.3, ES-2.1, and ES-5.1 of NUREG-1021
4. OLMC-510, Operator Licensing Examination Reports
5. OLMC-520, Operator Licensing Examination Records and Documentation
6. Associated Feedback, additional guidance, and ROIs issued since the last revision of NUREG-1021
7. IN 98-15, “Integrity of Initial Operator License Examinations”
8. Latest **Regulatory Issue Summary (RIS)** Requesting Schedule Inputs (e.g., RIS 2020-01)
9. **IP-21** Operator Licensing Schedules (RPS Report No. 21)
10. **Operator Digital Docket (ODD)** (<https://adamsicm.nrc.gov/ODD/>) and associated user guides (located in the non-public ODD system under the “Help” tab) **Reactor Program Systems – Operator Licensing** (<https://rps.nrc.gov/OLTS/Home/OL>) non-public

EVALUATION CRITERIA:

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

1. Discuss the regulatory requirements regarding the implementation of facility-prepared exams (55.40 and 55.49) and the associated vulnerabilities.
2. Discuss the NRC’s expectations regarding examination security.
3. Enumerate and describe the major tasks associated with scheduling, coordinating, and developing an initial licensing examination.

4. Describe the major tasks associated with documenting an initial licensing examination, such as processing the licensing actions and proposed denials, writing the examination report, and maintaining the associated examination records.

TASKS:

1. Review SECY-98-266 (including all attachments) and 10 CFR 55.40 and 55.49 to familiarize yourself with the regulatory basis for the most recent Part 55 rule change that gave facility licensees the option of preparing their own examinations. Pay particular attention to the discussion of vulnerabilities associated with the new examination process.
2. Review ES-2.1 of NUREG-1021 to familiarize yourself with the responsibilities and major tasks associated with an initial licensing examination. Pay particular attention to the personnel restrictions and examination security guidelines in ES-1.3. (Do not spend a lot of time on the Examination Outline Quality Checklist (Form 2.3-1) because that will be covered in later activities.)
3. Obtain and review a summary of recent examination security incidents (search titles in ADAMS for "examination security.")
4. Review the latest RIS requesting examination schedule information and the regional examination schedules on RPS and the OL web site.
5. Review ES-5.1 of NUREG-1021 to familiarize yourself with the responsibilities and major tasks associated with documenting an initial licensing examination, such as processing licensing actions, proposed denials, examination report (see OLMC-510) and associated examination records (see OLMC-520).
6. Locate and review a facility examination file to familiarize yourself with its contents; match the contents with the list in OLMC-510. Note which items are available to the public and which ones are protected by the Privacy Act.
7. Obtain read/write access to ODD and RPS-OL, if necessary, by contacting the operator licensing assistant (OLA) for ODD access and RPSSupport@nrc.gov for RPS-OL access. Review desktop and user guides for the systems using links within each system (under the "help" button).
8. Discuss the process to use ODD with a qualified examiner and obtain a demonstration of how to electronically sign necessary examination documents. Discuss the process for using RPS-OL with the OLA and obtain a demonstration of key functions.
9. Request access to the regional digital docket files from the OLA and review a sample of docket files to familiarize yourself with their contents.

DOCUMENTATION: OL Limited Examiner Signature and Certification Card Item ISA-OLE-3

(ISA-OLE-4) (L) Operator Licensing Operating Tests

PURPOSE:

The purpose of this activity is to familiarize you with the development, administration, and grading of initial OL operating tests.

COMPETENCY AREA: INSPECTION ASSESSMENT
ENFORCEMENT TECHNICAL AREA EXPERTISE

LEVEL OF EFFORT: 40 hours

REFERENCES:

1. 10 CFR 55.45, "Operating Tests"
2. ES-2.3, ES-3.1, ES-3.4, **ES-3.5, ES-3.6** and ES-5.1 of NUREG-1021
3. ES-1.2, ES-3.2, and ES-3.3 of NUREG-1021
4. ES-7.1 of NUREG-1021
5. Associated Feedback, additional guidance, and ROIs issued since the last revision of NUREG-1021
6. Sections 1 - 4 of the Knowledge and Abilities Catalog for the applicable reactor type (NUREG-1122, 1123, 2103, or 2104)

EVALUATION CRITERIA:

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

1. Explain the regulatory basis for the operating test.
2. Explain the breakdown in responsibilities for the parties involved in developing, administering, and grading the operating tests.
3. Explain how the walk-through and dynamic simulator operating tests are prepared, including development of the test outline, the selection/development of test items, and measures taken to maintain validity and quality. **Explain how using an outline to develop the operating test ensures an objective evaluation of the candidate.**
4. Describe the components of a job performance measure (JPM) and the characteristics of an alternate path JPM. **This includes task standard, initial conditions, initiating cue, validation time, termination criteria, critical step, and verifiable action.**
5. Describe the qualitative and quantitative attributes used to establish a basis for simulator scenario validity, including the elements of a critical task. **This includes normal evolutions, instrument failures, component failures, reactivity manipulations, and major**

plant transients. Explain the distribution of events/evolutions by license level and why is it important.

6. Describe the competencies and rating factors used to evaluate the performance of RO and SRO applicants on the dynamic simulator operating test.
7. Explain the procedures and policies regarding administration of the walk-through and dynamic simulator operating tests, including measures to protect exam security and integrity.
8. Explain the procedures for grading the walk-through and dynamic simulator operating tests, including quality reviews and licensing recommendations.

TASKS:

1. Review 10 CFR 55.45 to familiarize yourself with the regulatory basis for the operating test.
2. Review the operating test development guidance in ES-2.3, ES-3.1, and ES-3.2 of NUREG-1021 to gain an understanding of the requirements for preparing the walk-through and simulator operating test outline, implementing the outline using a combination of bank, modified, and new test items, and reviewing the outline and the draft operating tests to ensure quality.
3. Review ES-3.2 of NUREG-1021 to familiarize yourself with the principles and policies for developing valid JPMs and dynamic simulator scenarios.
4. Review ES-3.2, ES-3.3, and ES-3.5, and Parts C, D, and E of ES-1.2 to gain an understanding of the procedures and policies regarding administration of the operating tests, including measures to protect test security and integrity.
5. Review ES-3.6 and ES-5.1 of NUREG-1021 to familiarize yourself with the procedures for grading the walk-through and dynamic simulator operating tests, including quality reviews and making licensing recommendations.
6. Locate and review the operating test documentation (Form 5.1-2, Form 3.6-2, Form 3.6-3, and Form 3.6-4) for an applicant who failed the job performance measure portion of the operating test and for an applicant who failed the simulator scenario portion of the operating test.
7. Using scenario and JPM examples provided by your branch chief or responsible chief examiner, document the basis for a licensing decision—JPM failure(s), scenario PDs (including identifying the correct rating factor), and scenario failures—on Form 5.1-2 for both an RO applicant and an SRO applicant. Discuss the results with your branch chief or responsible Chief Examiner.
8. Locate and review a recently completed (i.e., using the current, applicable revision of NUREG-1021) operating test for the type of facility on which you plan to certify, including copies of the facility licensee's submittal, the reviewing examiners' comments, the final approved test, and all the associated quality checklists. Pay particular attention to the types of technical and psychometric issues that were identified and corrected by the

reviewing examiner(s). Discuss any questions you might have with the responsible Chief Examiner.

9. Review ES-7.1 of NUREG-1021 to familiarize yourself with the differences between a regular SRO operating test and the one that is used to license SROs whose responsibilities are limited to fuel handling.
10. Review the remaining reference materials for additional background information.

DOCUMENTATION: OL Limited Examiner Signature and Certification Card Item ISA-OLE-4

(ISA-OLE-5) (L) Technical Specifications

PURPOSE:

The NRC requires that licensees operate their facilities in compliance with the technical specifications (TS) approved by the NRC. The TS provide the limits for facility operation that the licensee must comply with or receive NRC approval to deviate from the requirements. For this reason, it is mandatory that all examiners gain a detailed knowledge of the content of the TS.

This activity will provide you with detailed knowledge of the contents of the TS, where a requirement exists for any specific topic, and how to apply the TS requirements to the facility designated by your supervisor. This activity will also introduce you to another document, the Technical Requirements Manual (TRM).

COMPETENCY AREA: INSPECTION
REGULATORY FRAMEWORK

LEVEL OF EFFORT: 26 Hours

REFERENCES:

1. The **technical specifications (TS)** for a facility designated by your supervisor: <https://usnrc.sharepoint.com/teams/LIBRARY>
2. Standard TSs for the vendor of your designated facility
3. Plant Technical Specifications External Site: <https://www.nrc.gov/reactors/operating/list-power-reactor-units>
4. 10 CFR 50.36, "Technical Specifications"
5. Risk Informed Completion Time Technical Specification Initiative external website: <https://www.nrc.gov/reactors/operating/licensing/techspecs>
6. The TRM for your assigned facility. (If applicable)
7. NRC Knowledge Management Session: "History and Evolution of the Technical Requirements Manual" available in Nuclepedia at the following, non-public url: [https://nuclepedia.usalearning.gov/index.php/Coordinated_Regional_\(Reactor\)_Weekly_Knowledge_Management_Training_Seminars](https://nuclepedia.usalearning.gov/index.php/Coordinated_Regional_(Reactor)_Weekly_Knowledge_Management_Training_Seminars)

EVALUATION CRITERIA:

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

1. For the facility TS, as designated by your supervisor, be able to identify each TS section, discuss the general content of the requirements contained in each section, and the basis for issuing the requirements. Be able to discuss how the format and layout of the plant specific TS differs from the vendor standard TS. Note: depending on the licensee, the

differences may not be significant if the licensee has adopted a recent edition of the Improved TS.

2. Discuss the following with respect to the operating license: legal basis, purpose, license conditions, and how the license can be changed.
3. Discuss the definition of the terms found in the TS.
4. Discuss the safety limits and limiting safety system settings listed and the significance of these limits.
5. Discuss the requirements for limiting conditions for operation (LCO) and surveillance **requirements**, and what actions are required if the requirements are not met.
6. Discuss the different sections of LCOs and the reason for the basis section provided with each LCO section.
7. Discuss the Design Features section of the TS and the types of information located in this section.
8. Discuss the Administrative Controls section of the TS and the types of information located in this section.
9. Identify and discuss the risk informed TS initiatives that **may** have been implemented at your assigned plant.
10. For the TRM, discuss the: purpose, legal basis of using as a violation source document, and how requirements contained in the TRM can be changed by the licensee.

TASKS:

1. Locate a copy of the TS for the facility designated by your supervisor.
2. Review the various sections of the TS, as listed in the Evaluation Criteria section.
3. Watch the Knowledge Management Session regarding the history of the Technical Requirements Manual located in Nuclepedia. Review the content of the TRM at your assigned plant or other document referenced by the TS to determine the types of requirements contained in the document. (Note: some licensees do not have a TRM)
4. On the NRC External Web, locate the NRC Inspection Manual Part 9900, Technical Guidance, STS Chapters. Review the chapters that were designated by your supervisor.
5. Meet with your supervisor or a qualified OL Examiner 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: OL **Limited** Examiner Signature **and Certification** Card Item ISA-OLE-5

(ISA-OLE-6) (L) Operability

PURPOSE:

The process of ensuring that structures, systems and components (SSCs), described in the TS and credited for safe operation at nuclear power plants can perform their specified safety function. Operability determination is continuous and primarily consists of observations, verification by surveillance testing and assessments of conditions which may impact the performance of a specified safety function. Whenever a condition has a substantive impact on the ability of an SSC to perform its specified safety function licensees should be able to demonstrate to the reasonable assurance standard that the affected SSC will perform the required specified safety function. It is important that NRC operations inspectors can effectively understand the basis for the licensee decision that the SSC remains operable; and that unrecognized increases in risk have not occurred.

This activity will familiarize you with the overall approach for reviewing operability determinations (evaluations) and the reference materials available to assist you in these reviews.

COMPETENCY AREA: INSPECTION

LEVEL OF EFFORT: 20 hours

REFERENCES

1. RIS 2005-20, Rev 2 "Revision to NRC Inspection Manual Part 9900 Technical Guidance, "Operability Determinations & Functionality Assessments for Resolution of Degraded or Nonconforming Conditions Adverse to Quality or Safety"
2. IMC 0326, "Operability Determinations": <https://www.nrc.gov/reading-rm/doc-collections/insp-manual/manual-chapter/index>
3. Inspection Procedure (IP) 71111.15, "Operability Determinations and Functionality Assessments": <https://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index>
4. NEI 18-03, "Operability Determinations" and reference or assigned site (licensee) procedures addressing operability determinations
5. Information Notice (IN) 97-78, "Crediting of Operator Actions in Place of Automatic Actions and Modifications of Operator Actions, Including Response Time," dated October 23, 1997
6. RIS 2001-09, "Control of Hazard Barriers," dated April 2, 2001

EVALUATION CRITERIA:

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

1. Discuss the following terms and provide examples of each:
 - a. operable/operability
 - b. presumption of operability
 - c. substantive functional impact
 - d. specified function –specified safety function
 - e. timing of operability determinations
 - f. single failure
 - g. consequential failure
 - h. required support system
 - i. compensatory measures
 - j. current licensing basis
 - k. reasonable assurance/expectation
2. Describe the licensee's process to address operability issues for safety or safety support systems.
3. Describe what the applicable NRC guidance indicates should be included in formal operability determinations.
4. Discuss the actions that should be taken if a licensee is unable to demonstrate equipment operability.
5. Perform the inspection described in IP 71111.15, including effectiveness review of the technical adequacy of an operability evaluation and development of a conclusion on whether the operability is justified.

TASKS:

1. Locate the listed references for your facility. NRC-developed documents can be found in the Electronic Reading Room on the NRC external Web site.
2. Review the references to develop an understanding of the actions specified in the NRC guidance and licensee procedures to be completed when an operability question is identified.
3. Review at least two recently completed operability evaluations involving a risk-significant system, support system, or component. Compare the evaluations to the reference material guidance.
4. Verify that the licensee considered other existing degraded conditions as compensating measures and determine whether the measures are in place, will work as intended, and are appropriately controlled. Verify that the licensee's intended long-term resolution of any conditions meets the regulatory guidance.

5. Meet with your supervisor or a qualified OL Examiner to discuss the operability evaluations. Discuss some questions you could ask to help you verify that the evaluations properly support the operability decision. In addition, discuss any questions that you have as a result of this activity and demonstrate that you can meet the evaluation criteria listed above.

DOCUMENTATION: OL Limited Examiner Signature and Certification Card Item ISA-OLE-6

(ISA-OLE-7) (L) Shutdown Operations

PURPOSE:

The purpose of this activity is to provide you with detailed knowledge of shutdown operations that impose risks to public health and safety even though the facility is shutdown. When vital structures, systems, and components are removed from service for maintenance or refueling, risks to the facility can become high. The systems and activities that impose the greatest risk include decay heat removal systems, containment isolation systems, reduced water inventory periods (i.e., mid-loop in PWRs), switchyard work, refueling operations, and any transient activity (i.e., cooldown, heat-up, startup, etc.).

COMPETENCY AREA: INSPECTION TECHNICAL AREA EXPERTISE

LEVEL OF EFFORT: 30 Hours

REFERENCES:

1. Technical Specifications for your assigned facility designated by your supervisor
2. Licensee procedures for loss of decay heat removal, reactivity control, containment integrity, and refueling for your assigned facility
3. Regional policy and instructions, if available
4. Inspection Procedure 71111.20, "Refueling and Other Outage Activities"
5. NUREG-1449, "Shutdown and Low-Power Operation at Commercial Nuclear Power Plants in the United States"
6. Information Notice 95-57, "Risk Impact Study Regarding Maintenance During Low-Power Operation and Shutdown"
7. Information Notice 93-72, "Observations From Recent Shutdown Risk and Outage Management Pilot Team Inspections"
8. IMC-0609, Appendix G, "Shutdown Operations Significance Determination Process"

EVALUATION CRITERIA:

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

1. Discuss the risks of shutdown operations.
2. Discuss the importance of maintaining decay heat removal during shutdown.
3. Discuss the methods of reactivity control during core alterations both in the core and in the spent fuel pool.

4. Discuss the requirements for containment/reactor building integrity during shutdown, refueling, and maintenance activities that require large equipment to be moved into and out of the reactor building/containment.
5. Discuss the importance of mode changes and what constitutes a mode change.
6. Discuss the risks involved with reduced inventory operations.
7. Discuss the risk involved with electrical work both in the plant and in the switchyard.
8. Discuss what type of items should be reviewed when reviewing the outage schedule.
9. Discuss the various means of monitoring vessel level and the importance of knowing the level.
10. Discuss the purpose of a PWR containment and BWR drywell/torus closeout walkdown(s).
11. Briefly discuss the purpose of IMC 0609, Appendix G, "Shutdown Operations Significance Determination Process," and who primarily uses it.

TASKS:

1. Review your designated facility licensee's TS and procedures for loss of decay heat removal, reactivity control, containment integrity, and refueling for your assigned facility.
2. Review the requirements of Inspection Procedure 71111.20, as designated by your supervisor.
3. Meet with your supervisor or a qualified OL Examiner 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: OL Limited Examiner Signature and Certification Card Item ISA-OLE-7

(ISA-OLE-8) (L) Operator Licensing Appeals and Hearings

PURPOSE:

The purpose of this activity is to familiarize you with the procedures for conducting informal administrative reviews and formal hearings in response to applicant appeals of proposed license denials.

COMPETENCY AREA: REGULATORY FRAMEWORK

LEVEL OF EFFORT: 6 hours

REFERENCES:

1. 10 CFR 2.103 and Subpart L
2. ES-2.2, ES-5.1, and ES-5.2 of NUREG-1021
3. Associated Feedback, additional guidance, and ROIs issued since the last revision of NUREG-1021
4. OL Manual Chapter 500 ([ML20230A201 found here: OL Manual Chapters \(ADAMS non-public folder location - \(/NRR/NRR-DRO/NRR-DRO/IOLB/MANUAL CHAPTERS \(OLMC\)\)](#))
5. Atomic Safety and Licensing Board (ASLB) Initial Decision: Denial of Senior Reactor Operator License (ML14077A573)
6. Operator Licensing Implementation Team Action Plan (ML14336A172)

EVALUATION CRITERIA:

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

1. Discuss the regulatory basis for the appeal and hearing process.
2. Explain the responsibilities of the various parties involved in the appeal and hearing process.
3. Describe the informal administrative review procedures for application denials and proposed examination failures.
4. Describe the OL appeal hearing process used by the Atomic Safety and Licensing Board Panel (ASLBP).
5. Describe the issues raised by the ASLB that led them to overturn the staff's denial of a senior reactor operator license for an applicant from the Vogtle Electric Generating Plant in 2014.

TASKS:

1. Review 10 CFR 2.103 and Subpart L to familiarize yourself with the regulatory basis for the appeal / hearing process.
2. Review ES-2.2, ES-5.1, and ES-5.2 of NUREG-1021 to familiarize yourself with the proposed denial and appeal process and the responsibilities of the parties involved.

Review OL Manual Chapter 500 to familiarize yourself with the NRR OL Program Office and ASLB procedures for handling appeals.

3. Review the Operator Licensing Implementation Team Action Plan and the ASLB Initial Decision referenced above. Discuss any questions with a Chief Examiner recommended by the branch chief.

DOCUMENTATION: OL Limited Examiner Signature and Certification Card Item ISA-OLE-8

(ISA-OLE-9) (L) Simulation Facilities

PURPOSE:

The purpose of this activity is to familiarize you with the NRC's regulations and policies regarding the use of simulation facilities for the administration of operating tests and plant-referenced simulators to meet experience requirements for operator and senior operator licenses.

COMPETENCY AREA: ASSESSMENT AND ENFORCEMENT
INSPECTION ASSESSMENT
REGULATORY FRAMEWORK

LEVEL OF EFFORT: 8 hours

REFERENCES:

1. 10 CFR 55.4 and 55.46
2. SECY-01-0125
3. Regulatory Guide 1.149
4. IP 71111.11
5. ES-1.3 and ES-3.5 of NUREG-1021
6. OLMC-510, attachment 2
7. The Simulator section of the Operator Licensing Program Feedback: <https://www.nrc.gov/reactors/operator-licensing/prog-feedback.html>
8. ANSI/ANS 3.5 (2018, 2009, 1998, 1993, and 1985 versions)
9. IP 41502, "Nuclear Power Plant Simulation Facilities"
10. NRC Knowledge Management Session: "Power Reactor Simulators" available in Nuclepedia at the following, non-public url: <https://nuclepedia.usalearning.gov/index.php/Calendar Year 2021 Knowledge Management Seminar Presentations>

EVALUATION CRITERIA:

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

1. Discuss the regulatory basis for the NRC's policies regarding the use of simulation facilities.

2. Discuss the methods acceptable to the NRC staff for complying with the regulations associated with the use of simulation facilities in operator training and license examinations.
3. Discuss the guidance to examiners regarding simulator operability and security while administering operating tests.

TASKS:

1. Watch the video titled "Power Reactor Simulators" to obtain an overview of the history regarding simulator use in the NRC. Review 10 CFR 55.4, 55.46 and SECY-01-0125 to familiarize yourself with the regulatory basis behind the NRC's policies regarding the use of power plant simulation facilities.
2. Review RG 1.149 (Revisions 1, 2, 3 and 4) and ANSI/ANS 3.5 (2018, 2009, 1998, 1993, and 1985 versions) to familiarize yourself with acceptable methods for complying with the regulations regarding the use of simulation facilities for operator training and examinations.
3. Review the simulator requirements in 10 CFR 55.46 that establish simulator scope and fidelity, and the continuous assurance of fidelity.
4. Review Section F of ES.1.3, and Sections A and F of ES-3.5 to familiarize yourself with possible indications of an inoperable simulator and security considerations for administering simulator tests.
5. Review OLMC-510, attachment 2 to familiarize yourself with the requirements for documenting simulator fidelity problems in the examination report.

DOCUMENTATION: OL Limited Examiner Signature and Certification Card Item ISA-OLE-9

OL Limited Examiner On-the-Job Training (OJT) Activities

The OJT activities require OL Examiner candidates to conduct examination-related work, under supervision, at reactor facilities and in the regional or headquarters office. These activities are designed to allow examiner candidates to observe and perform key examiner tasks under controlled circumstances. Like the ISAs, each of the OJT activities indicates why the activity is important, how much time it might take to complete the assignment, and what is expected to be completed successfully during the activity.

Participation in a licensed operator requalification program inspection (IP 71111, Attachment 11) pursuant to **IMC 1245, Appendix A**, OJT Activity (5), "Inspection Activities," also satisfies the criteria of OL Examiner OJT Activity (5) "Requalification Inspection." Examiner candidates who did not participate in a requalification program inspection as part of their Basic Inspector Qualification must repeat Basic-Level OJT Activity (5) during a requalification inspection.

OJT Activity (2), "Conduct of Operations," is similar to OJT-OPS-2 in Appendix C1, "Reactor Operations Inspector Technical Proficiency Training and Qualification Journal." You may document completion of equivalent activities on both Signature Cards.

The following general guidance applies as you complete the OL Examiner OJT Activities:

- The activities should generally be completed in the order in which they are presented, unless otherwise directed by the regional or program office OL BC.
- All parts of each activity must be completed.
- The regional or program office OL BC will act as a resource as you complete each activity. Discuss any questions you may have about how a task must be done or how the guidance is applied. The OL BC may also designate a qualified Chief Examiner to work with you as you complete the various activities.
- You are responsible for keeping track of what tasks you have completed. Be sure that you have completed all aspects of an OJT activity before you meet with the regional or program office OL BC **or designated chief examiner** for evaluation.

(OJT-OLE-1) (L) Observe **Two** Initial Licensing Examinations

PURPOSE:

The purpose of this activity is to familiarize you with the on-site activities performed by operator license examiners. This on-the-job training will prepare you to conduct initial OL examinations in accordance with NUREG-1021.

COMPETENCY AREA: INSPECTION

LEVEL OF EFFORT: 160 hours

REFERENCES:

1. NUREG-1021, "Operator Licensing Standards for Power Reactors"
2. Proposed examinations and operating tests
3. **ES-1.2, ES-3.5, ES-3.6, ES-4.3** of NUREG-1021
4. Licensed operator examination reports

EVALUATION CRITERIA:

Complete the activities outlined in this guide and meet with the regional **or program office** OL BC to discuss any questions you may have. Upon completion of the tasks in this guide, you should be able to:

1. Describe the procedure for reviewing / validating draft OL examinations with the facility licensee.
2. Describe the miscellaneous on-site activities associated with the administration of OL examinations, including the entrance and exit meetings, applicant briefings, and proctoring the written examination.
3. Describe the policies and procedures for conducting, documenting, and evaluating all aspects of the operating test.

TASKS:

1. In preparation for the on-site activities, review ES-1.2, ES-3.5, ES-3.6, ES-4.3, and the proposed examinations and operating tests, including the NRC's review comments.
2. Participate in operating test reviews / validations with a facility **licensee. Discuss any observations and questions you may have with the Chief Examiner or OL BC.**
3. Participate in at least two examination site visits, with different Chief Examiners; observation trips to exams in other regions are encouraged. **At least one exam site visit**

must include attending the onsite validation visit. Observe all significant on-site activities including the entrance briefing (if one is requested), the applicant briefings, all examination team discussions, and the exit meeting. Discuss any observations and questions you may have with the Chief Examiner or OL BC.

4. While on-site, observe as many complete operating test administrations as possible, including at least one RO, one instant SRO, and one upgrade SRO, as available, and administered by as many different examiners as possible. During each test, try to anticipate the need for follow-up questions based on the applicant's performance of the task. Discuss any observations and questions you may have with the examiner of record after the test is complete.
5. For the worst-performing applicant you observed during each exam assignment, independently evaluate, and document the applicant's performance in accordance with ES-3.6. Discuss your **write-up** with the Chief Examiner. Also, review the operating test documentation for each applicant whose test you observed, and discuss the results with the examiner of record.

DOCUMENTATION: OL **Limited** Examiner Signature and Certification Card Item OJT-OLE-1

(OJT-OLE-2) (L) Conduct of Operations

PURPOSE:

The overall conduct of operations is an essential element in the safe operation of a nuclear power plant. Operator attentiveness and professionalism, control room environment, shift turnover, configuration controls, and the conduct of evolutions are typically addressed in licensee procedures. This activity will familiarize you with the various licensee procedural controls over these activities and applicable regulatory requirements.

COMPETENCY AREA: INSPECTION TECHNICAL AREA EXPERTISE

LEVEL OF EFFORT: 40 Hours

REFERENCES:

1. Licensee procedures addressing the conduct of operations. This typically involves procedures addressing such issues as: Use of Procedures, Independent Verification, Responsibilities of Licensed Operators, Definition of "at the controls," Shift Manning and Turnover, Control of Evolutions, Equipment Status and Alignment, Tagging, Annunciator Controls, and Entry into TS Limiting Conditions for Operation.
2. Plant Operating License and Technical Specifications
3. IMC 2515 Appendix D, "Plant Status"
4. Inspection Procedure 71715, "Sustained Control Room and Plant Observations"
5. Regulatory Guide 1.33, "QA Program Requirements (Operations)"
6. ANSI/ANS-3.2-1994, "Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants"

EVALUATION CRITERIA:

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

1. Describe the licensee's processes for conduct of operations. The description should include activities such as: Use of Procedures, Independent Verification, Responsibilities of Licensed Operators, Definition of "at the controls" or other control room areas, Shift Manning and Turnover, Control of Evolutions, Equipment Status and Alignment, Annunciator Controls, and Entry into TS Limiting Conditions for Operation. Where applicable, explain the regulatory requirements which require the development and implementation of these procedures.
2. Be able to identify active technical specifications (TS) limiting conditions for operation (LCOs) and major equipment out of service through reviews of control room documentation or status boards.

3. Tour the control room, observe operating practices, and determine if procedural guidance is being implemented correctly, operators are maintaining shift professionalism, and activities are properly controlled and coordinated.
4. Evaluate the adequacy of control room shift turnovers, response to annunciators, and control room communications.
5. Verify that procedures for annunciator controls such as disabled annunciators and nuisance alarms are implemented properly.

TASKS:

1. Locate the listed references for your assigned or reference facility.
2. Review the licensee's procedures and develop an understanding of the licensee's expectations for the conduct of operations. These efforts should include comparison to implementation such as control room logs, equipment out-of-service logs, standing orders, night orders, operator work-arounds, work control center activities, and briefings.
3. Observe at least two different shift turnovers, including RO and SRO turnover and verify that activities are conducted in accordance with procedures.
4. Observe the implementation of tagging procedures, including development and review of at least one tagout, the placement of tags, verifications of tags, and removal and restoration activities.
5. Observe portions of a valve alignment/alignment verification involving an important system as necessary to understand the licensee's processes.
6. Perform the activities described in IMC 2515, Appendix D, "Plant Status."

Meet with your supervisor or a qualified Operations inspector to discuss any questions that you may have as a result of these activities and demonstrate that you can meet the evaluation criteria listed above.

DOCUMENTATION: OL Limited Examiner Signature and Certification Card Item OJT-OLE-2

(OJT-OLE-3) (L) Administer and Grade an Operating Test

PURPOSE:

The purpose of this activity is to familiarize you with the procedures for administering and grading an operating test in accordance with NUREG-1021.

COMPETENCY AREA: INSPECTION ASSESSMENT
ENFORCEMENT

LEVEL OF EFFORT: 50-100 hours

REFERENCES:

1. ES-2.1, ES-2.3, and ES-3 series of NUREG-1021
2. Knowledge and Abilities Catalog for the applicable reactor type (NUREG-1122, 1123, 2103, or 2104)
3. Facility reference materials

EVALUATION CRITERIA:

Complete the activities outlined in this guide and meet with the regional (or program office) OL BC to discuss any questions you may have. Upon completion of the tasks in this guide, you will have:

1. Demonstrated your understanding of operating test administration procedures and techniques by satisfactorily administering a complete RO or instant SRO operating test.
2. Demonstrated your understanding of the operating test grading and documentation procedures by satisfactorily grading and documenting your applicant's performance during the operating test. Review your licensing recommendations with the Chief Examiner and the regional OL BC.

TASKS:

1. In coordination with the designated Chief Examiner, review and validate the proposed operating test materials with the facility licensee by participating in validation week activities.
2. In coordination with the designated Chief Examiner, discuss the results of the Operating Test Exam Review as documented on NUREG 1021 Form 2.3-3, Operating Test Review Worksheet, for the examination that you will be administering and grading. Be able to discuss any unsatisfactory items and how they were resolved.
3. In coordination with the designated Chief Examiner, administer a complete RO or instant SRO, or upgrade SRO operating test in accordance with ES-3.5. Note that the entire

operating test must be reviewed by a qualified Chief Examiner (preferably the OL BC if they are qualified on the technology in question), who will step in if necessary, to ensure that a valid licensing decision can be made. The reviewer will provide verbal and written feedback regarding your test administration but should NOT discuss information that might bias your independent assessment of the applicant's performance.

4. In coordination with a qualified Chief Examiner, discuss what constitutes a significant performance deficiency (SPD) and a critical performance deficiency (CPD) and how to correctly grade and document each one in accordance with ES 3.3, 3.5, and 3.6. Review an example of a documented CPD and a documented SPD.
5. As soon as possible after administering the operating test, evaluate and document your applicant's performance and make an independent licensing recommendation in accordance with ES-3.6. Submit Forms 3.6-1 through 3.6-6 and any supporting documentation to your Chief Examiner for review and approval.
6. If your applicant did not fail any JPMs and/or have performance deficiencies during a scenario, the Chief Examiner will provide you with sufficient information related to another applicant to allow you to evaluate and document that applicant's performance.

DOCUMENTATION: OL Limited Examiner Signature and Certification Card Item OJT-OLE-3

OL Examiner Individual Study Activities

(ISA-OLE-10) License Eligibility Requirements and Guidelines

PURPOSE:

The purpose of this activity is to familiarize you with the regulatory requirements, regulatory guidelines, and industry standards related to NRC reactor operator and senior operator license eligibility.

COMPETENCY AREA: REGULATORY FRAMEWORK

LEVEL OF EFFORT: 14 hours

REFERENCES:

1. Subparts B, C, and D of 10 CFR 55; 55.47
2. NRC Forms 398 and 396
3. Technical Specifications (TS) and Final Safety Analysis (FSAR)
4. RIS 2001-01
5. Regulatory Guide 1.8, "Qualification and Training of Personnel for Nuclear Power Plants"
6. ANSI/ANS 3.1, "Selection, Qualification, and Training of Personnel at Nuclear Power Plants"
7. NRC Operator License Eligibility Requirements (National Academy of Nuclear Training Guideline Summary): <https://www.nrc.gov/docs/ML2114/ML21144A141.pdf>
8. Regulatory Guide 1.134, "Medical Examination of Personnel at Nuclear Power Plants"
9. INs 91-08, 94-14, 97-67, 98-37, and 04-20
10. ANSI/ANS 3.4, "Medical Certification and Monitoring of Personnel Requiring Operator Licenses for Nuclear Power Plants"
11. ES-2.2 of NUREG-1021
12. Associated Feedback, additional guidance, and ROIs issued since the last NUREG-1021 revision
13. NEI 06.13A, "Template for an Industry Training Program Description"

EVALUATION CRITERIA:

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

1. Discuss the regulatory requirements for operator license eligibility, including medical fitness, waivers and exemptions, the license application process, and facility licensing basis (TS and FSAR) documents.
2. Discuss the background documents (ANSI, RG, etc.) that provide guidance regarding licensed operator experience and training.
3. Discuss the background documents (ANSI and RG) that provide guidance regarding licensed operator medical qualifications.
4. Discuss the implementation of the license application and waiver processes, including applicant and regional responsibilities, the handling of forms, establishment of docket files, and the making of RPS-OL entries. This includes the use of ODD.
5. Discuss the types of waivers, who has the authority to approve them, and how they are documented.

TASKS:

1. Review Subparts B, C, and D of Part 55, which cover the regulatory requirements for operator license eligibility, including medical fitness, exemptions, and the license application process. Also review Section 55.47 regarding examination waivers.
2. Review INs 97-67 and 98-37 and RIS 2001-01 on the OL web site. Obtain a copy of and review the background documents (ANSI 3.1, ACAD 10-001 Summary document, and RG 1.8) that provide guidance regarding licensed operator experience and training. Familiarize yourself with the guidelines for other staff positions, but focus primarily on licensed operators and senior operators. Although you should focus primarily on the current version of each document, peruse previous versions (i.e., ANSI N18.1-1971 and 3.1-1981, and RG 1.8, Rev. 2) to get a sense of the evolutionary changes affecting licensed operators.
3. Obtain and review copies of the background documents (ANSI 3.4-1996, RG 1.134, revision 2, and INs 91-08, 94-14 and 04-20) that provide guidance regarding licensed operator medical qualifications. Many licensees are still using the previous version of each document, so review them as well.
4. Review the license application and waiver process located in ES-2.2 of NUREG-1021. Familiarize yourself with the applicant's and regional office's responsibilities, the handling of forms, establishment of docket files, and the approval and documentation of waivers.
5. Review the OL web site for feedback related to license eligibility and review any related ROIs issued since the last revision of NUREG-1021 was published.

DOCUMENTATION: OL Examiner Signature and Certification Card Item ISA-OLE-10

(ISA-OLE-11) Overview of Generic Concepts Related to Written Examination Development

PURPOSE:

The purpose of this activity is to familiarize you with the concepts of examination validity and reliability and other generic psychometric principles.

COMPETENCY AREA: INSPECTION TECHNICAL AREA EXPERTISE

LEVEL OF EFFORT: 4 hours

REFERENCES:

1. Appendices A, B, and ES-4.2 of NUREG-1021
2. Knowledge and Abilities Catalog for the applicable reactor type (NUREG-1122, 1123, 2103, or 2104)

EVALUATION CRITERIA:

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

1. Explain the three principal aspects of examination validity and the techniques that the NRC uses to maintain the validity of its examinations.
2. Explain the concept of examination reliability and how it is maintained on NRC examinations.
3. Explain the generic psychometric principles that examination authors should observe when preparing NRC examinations.

TASKS:

1. Review Appendix A of NUREG-1021 to familiarize yourself with the concepts of examination validity and reliability.
2. Review Appendix B and ES-4.2 of NUREG-1021 to familiarize yourself with the generic psychometric principles that help enhance the validity of NRC examinations.
3. Review Section 1 of the Knowledge and Abilities Catalog (NUREG 1122, 1123, 2103, or 2104) depending on the type of reactor on which you will be certifying) to familiarize yourself with the organization of the catalog. Briefly review the remainder of the catalog to get a sense for the types of knowledge and abilities covered in the generic, plant systems, emergency and abnormal plant evolutions, components, and theory sections.

DOCUMENTATION: OL Examiner Signature and Certification Card Item ISA-OLE-11

(ISA-OLE-12) Operator Licensing Written Examinations

PURPOSE:

The purpose of this activity is to familiarize you with the development, administration, and grading of the written site-specific initial licensing examination.

COMPETENCY AREA: INSPECTION TECHNICAL AREA EXPERTISE

LEVEL OF EFFORT: 40 hours

REFERENCES:

1. 10 CFR 55.41, "Written Examinations: Operators," and 55.43, "Written Examination"
2. ES-2.3, ES-4.1, ES-4.3, and ES-5.1 of NUREG-1021
3. Form 2.3-1 of NUREG-1021
4. IN 98-28, "Development of a Systematic Sample Plan for Operator Licensing Examinations"
5. ES-1.2, ES-4.2, and Appendix B of NUREG-1021
6. Associated Feedback, additional guidance, and ROIs issued since the last NUREG-1021 revision
7. Sections 1 - 6 of the Knowledge and Abilities Catalog for the applicable reactor type (NUREG-1122, 1123, 2103, or 2104)
8. Operating Licensing and Training SharePoint Website:
<https://usnrc.sharepoint.com/teams/NRR-Operator-Licensing-Branch>
9. Checklist for Transmitting and Receiving NRC Exam Material over the Internet (ML12033A083)
10. ES-7.1 of NUREG-1021

EVALUATION CRITERIA:

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

1. Explain the regulatory basis for the site-specific written examination and the content differences between the RO and SRO exams.
2. Explain the responsibilities of all parties involved in developing, administering, and grading the written examinations.

3. Explain how the written examination is prepared, including development of the examination outline, the selection / development of questions, and measures taken to maintain validity and quality.
4. Explain the principles and policies for developing psychometrically sound multiple-choice questions. Explain the differences in question focus between each Tier of the examination (emergency and /abnormal plant evolutions, plant systems, generic, and theory).
5. Explain the procedures and policies regarding administration of the written examination, including measures to protect exam security and integrity.
6. Explain the procedures for grading the written examinations, including quality reviews and the resolution of post-examination comments.

TASKS:

1. Review 10 CFR 55.41 and 55.43 to familiarize yourself with the regulatory basis for the site-specific written examination and the content differences between the RO and SRO exams.
2. Review the written examination development guidance in ES-4.1 of NUREG-1021 to gain an understanding of the requirements for preparing a valid and unbiased examination outline, implementing the outline using a combination of bank, modified, and new questions, and reviewing the outline and the draft examination to ensure quality.
3. Review ES-4.2, and Appendix B of NUREG-1021 to reinforce the principles and guidelines for developing psychometrically sound multiple-choice questions, including the differences in the question focus for the four tiers (emergency and /abnormal plant evolutions, plant systems, generic, and theory).
4. Review ES-4.3 of NUREG-1021 and Parts A and B of ES-1.2 to gain an understanding of the procedures and policies regarding administration of the written examination, including measures to protect exam security and integrity. Review the OL examiner checklist (on the Operator Licensing SharePoint Web site) for transmitting and receiving NRC exam material over the Internet.
5. Review Section C of ES-4.3, and ES-4.4 of NUREG-1021 to familiarize yourself with the procedures for grading the written examinations, including quality reviews, the resolution of post-examination comments, and making licensing recommendations.
6. Locate and review a recently completed (i.e., using the current, applicable revision of NUREG-1021) RO and SRO written examination for the type of facility on which you plan to certify, including copies of the facility licensee's submittal, the reviewing examiners' comments, the final examination, all the associated quality checklists, and any post-exam comments / resolutions. Pay particular attention to the types of technical and psychometric issues that were identified and corrected by the reviewing examiner(s) and the differences between the RO and SRO examinations, as well as the differences in question focus between the four tiers of questions. Discuss any questions you might have with the responsible Chief Examiner.

7. Review ES-7.1 of NUREG-1021 to familiarize yourself with the differences between a regular SRO written examination and one that is used to license SROs whose responsibilities are limited to fuel handling.
8. Review the remaining reference materials for additional background information.

DOCUMENTATION: OL Examiner Signature and Certification Card Item ISA-OLE-12

(ISA-OLE-13) Systems Approach to Training (SAT)

PURPOSE:

The purpose of this activity is to familiarize you with the training rule and the SAT process.

COMPETENCY AREA: ASSESSMENT AND ENFORCEMENT
REGULATORY FRAMEWORK

LEVEL OF EFFORT: 8 hours

REFERENCES:

1. Section 306 of the Nuclear Waste Policy Act of 1982 (ML13274A489)
2. 10 CFR 50.120, "Training and Qualification of Nuclear Plant Personnel"
3. 10 CFR 55.4, "Definitions"
4. Training Rule History (ML16257A453)
5. IP 41500, "Training and Qualification Effectiveness"
6. NUREG-1220, "Training Review Criteria and Procedures"
7. Examiner Training: [What is the \(SAT\) Process](#)

EVALUATION CRITERIA:

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

1. Explain the statutory and regulatory bases for the systems approach to training.
2. Describe the five elements of a systems approach to training.
3. Discuss the major events in the development of the NRC's policy on the training and qualification of nuclear power plant workers.

TASKS:

1. Review Section 306 of the NWPA, 10 CFR 50.120, and 55.4 to familiarize yourself with the statutory and regulatory bases for the systems approach to training.
2. Review the history of the training rule on the OL web site to gain an understanding of the significant events that shaped the NRC's current training policy.
3. Review NUREG-1220 and IP 41500 to familiarize yourself with the five elements of a systems approach to training and guidance to the staff for reviewing nuclear power training programs to verify compliance with the regulations.

4. Watch the SAT Training video: [What is the \(SAT\) Process](#)

DOCUMENTATION: OL Examiner Signature and Certification Card Item ISA-OLE-13

(ISA-OLE-14) Licensed Operator Requalification and Other License Conditions

PURPOSE:

The purpose of this activity is to familiarize you with the NRC's program for overseeing licensed operator requalification training programs and monitoring and enforcing operators' compliance with other license conditions.

COMPETENCY AREA: ASSESSMENT AND ENFORCEMENT
REGULATORY FRAMEWORK
INSPECTION

LEVEL OF EFFORT: 16 hours

REFERENCES:

1. Subparts F, G, and H of 10 CFR 55
2. ES-5.1 and ES-5.3 of NUREG-1021
3. ES-6 series of NUREG-1021
4. IP 71111.11, "Licensed Operator Requalification Program and Licensed Operator Performance"
5. Associated Feedback, additional guidance, and ROIs issued since the last NUREG-1021 revision
6. Licensed Operator Requalification Program Significance Determination Process (IMC 0609 Appendix I)
7. Regulatory Guide 1.114, "Guidance to Operators at the Controls and to Senior Operators in the Control Room of a Nuclear Power Unit"
8. IP 41502, "Nuclear Power Plant Simulation Facilities"

EVALUATION CRITERIA:

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

1. Discuss the regulatory conditions with which licensed operators must comply, including expiration, renewal, and requalification.
2. Discuss the conditions under which the NRC could revoke, modify, or suspend an operator's license and those under which it could take enforcement action.
3. Describe the NRC's program for overseeing licensed operator requalification training programs, including periodic inspections and NRC-conducted examinations and the conditions under which each would be performed.

4. Describe the NRC's guidance on acceptable methods of complying with the regulations that require operators to be present at the controls.

TASKS:

1. Review 10 CFR 55.53, Letter 5.1-2 of ES-5.1, Section A and B of ES-5.3, and discuss special license conditions with the Operator Licensing Assistant (OLA) to familiarize yourself with the license conditions applicable to nuclear power plant operators.
2. Review 10 CFR 55.55, 55.57, and Section C of ES-5.3 to familiarize yourself with the requirements related to the expiration and renewal of operators' licenses.
3. Review 10 CFR 55.59 to familiarize yourself with the requirements for licensed operator requalification programs.
4. Review IP 71111.11 and the associated Significance Determination Process (SDP) to familiarize yourself with the NRC's procedure for evaluating licensed operator requalification training programs at power reactor facilities.
5. Review ES-6.1, ES-6.2, ES-6.3, and ES-6.4 to familiarize yourself with the procedures the NRC would use to conduct for-cause requalification examinations.
6. Review RG 1.114 to gain an understanding of the NRC's expectations regarding being an operator at the controls of a nuclear power plant.

DOCUMENTATION: OL Examiner Signature and Certification Card Item ISA-OLE-14

OL Examiner On-the-Job Training Activities

(OJT-OLE-4) Prepare an Operating Test

PURPOSE:

The purpose of this activity is to familiarize you with the procedures for preparing an operating test in accordance with NUREG-1021.

COMPETENCY AREA: INSPECTION ASSESSMENT AND ENFORCEMENT

LEVEL OF EFFORT: 50-100 hours

REFERENCES:

1. ES-2.1, ES-2.3, and ES-3 series of NUREG-1021
2. Knowledge and Abilities Catalog for the applicable reactor type (NUREG-1122, 1123, 2103, or 2104)
3. Facility reference materials

EVALUATION CRITERIA:

Complete the activities outlined in this guide and meet with the regional (or Program Office) OL BC to discuss any questions you may have. Upon completion of the tasks in this guide, you will have:

1. Demonstrate your understanding of the operating test development procedures by preparing an operating test that meets the requirements of NUREG-1021 and obtaining approval from the regional OL BC to administer the test. (Note that the regional OL BC can approve partial or shared examinations on a case-by-case basis to accommodate resource or scheduling needs, but the examiner must participate in all activities at a ≥ 50 percent level and demonstrate acceptable proficiency.)

TASKS:

1. Using ES-2.1, ES-2.3, ES-3.2, ES-3.3, ES-3.4, and the reference material provided by the facility licensee, prepare a complete RO or instant SRO operating test outline, including the administrative topics, control room and facility walk-through, and dynamic simulator operating test categories. Submit the outline and all the forms and checklists required by ES-2.3, ES-3.2, ES-3.3, and ES-3.4 to the designated Chief Examiner for review and approval, then incorporate whatever changes are necessary prior to seeking supervisory approval to proceed with test development.
2. Upon approval by the regional OL BC, use ES-2.1, ES-2.3, ES-3.2, ES-3.4, and the reference material provided by the facility licensee to prepare test items (job performance measures and dynamic simulator scenarios) and quality checklists required to implement the approved test outline. Submit the test items and checklists required by

ES-2.3, ES-3.2, ES-3.3, and ES-3.4 to the designated Chief Examiner for review and approval, then incorporate whatever changes are necessary prior to seeking supervisory approval to review the proposed test with the facility licensee.

3. In accordance with ES-2.1 and ES-2.3, upon approval by the regional OL BC, and with the assistance of the designated Chief Examiner, review and validate the proposed operating test materials with the facility licensee.
4. Review the facility licensee's comments, incorporate changes in the test materials, as appropriate, and submit the final operating test and associated checklists to the designated Chief Examiner and regional OL BC for review and approval.

DOCUMENTATION: OL Examiner Signature and Certification Card OJT-OLE-4

(OJT-OLE-5) Prepare, Administer, and Grade a Written Examination

PURPOSE:

The purpose of this activity is to familiarize you with the procedures for preparing, administering, and grading an initial OL written examination in accordance with NUREG-1021.

COMPETENCY AREA: INSPECTION ASSESSMENT AND ENFORCEMENT

LEVEL OF EFFORT: 300-500 hours

REFERENCES:

1. ES-2.1, ES-2.3, and ES-4 series of NUREG-1021
2. Knowledge and Abilities Catalog for the applicable reactor type (NUREG-1122, 1123, 2103, or 2104)
3. Facility reference materials

EVALUATION CRITERIA:

Complete the activities outlined in this guide and meet with the regional (or program office) OL BC to discuss any questions you may have. Upon completion of the tasks in this guide, you will have:

1. Demonstrated your understanding of the written examination development procedures by preparing a written examination that meets the requirements of NUREG-1021 and obtaining approval from the regional OL BC to administer the examination. (Note that the regional OL BC can approve partial or shared examinations on a case-by-case basis to accommodate resource or scheduling needs, but the examiner must participate in all activities at a ≥ 50 percent level and demonstrate acceptable proficiency.)
2. Demonstrated your understanding of written examination administration procedures.
3. Demonstrated your understanding of the written examination grading procedures by satisfactorily grading and documenting the applicants' performance on the written examination you prepared and obtaining the regional OL BC's concurrence with your licensing recommendations.

TASKS:

1. Using ES-2.1, ES-2.3, ES-4.1, and the reference material provided by the facility licensee, prepare a RO and SRO written examination outline. Submit the outline and all the forms and checklists required by the ES to the designated Chief Examiner for review and approval, then incorporate whatever changes are necessary prior to seeking supervisory approval to proceed with examination development.

2. Upon approval by the regional OL BC, use ES-4.1, ES-4.2, and the reference material provided by the facility licensee to select or prepare questions to implement the approved exam outline. Submit the proposed examination and checklists required by ES-2.3 and ES-4.2 to the designated Chief Examiner for review and approval, then incorporate whatever changes are necessary prior to seeking supervisory approval to review the proposed exam with the facility licensee.
3. In accordance with ES-2.3 and ES-4.2 upon approval by the regional OL BC, and with the assistance of the designated Chief Examiner, review the proposed examination with the facility licensee.
4. Review the facility licensee's comments, incorporate question changes, as appropriate, and submit the final examination and associated checklists to the designated Chief Examiner and regional OL BC for review and approval.
5. In coordination with the designated Chief Examiner, administer the written examination in accordance with ES-4.3. If the facility licensee will be administering the written exam, review the proctoring instructions with the facility contact as specified in section B of ES-1.2, and per section A.2 of ES-4.3, inspect the exam facilities and act as point of contact in the regional office while the exams are in progress.
6. Grade the examinations in accordance with ES-4.4. Develop and document proposed resolutions for any post-examination comments received from the facility licensee, complete the grading quality checklist, and forward the examination package to the Chief Examiner for review and approval.

DOCUMENTATION: OL Examiner Signature and Certification Card OJT-OLE-5

(OJT-OLE-6) Requalification Inspection

PURPOSE:

The purpose of this activity is to familiarize you with inspector actions required to prepare and implement a requalification inspection in accordance with IP 71111.11.

COMPETENCY AREA: INSPECTION ASSESSMENT AND ENFORCEMENT

LEVEL OF EFFORT: 50 hours

REFERENCES:

1. IP 71111.11, "Licensed Operator Requalification Program"
2. IMC 0609, Appendix I, "Licensed Operator Requalification Significance Determination Process"
3. The Requalification Inspection section of the Operator Licensing Program Feedback (<https://www.nrc.gov/reactors/operator-licensing/prog-feedback.html>)
4. IP 41502, "Nuclear Power Plant Simulation Facilities"

EVALUATION CRITERIA:

Demonstrate your understanding of how to evaluate a licensee's requalification program by conducting an inspection in accordance with IP 71111.11.

TASKS:

1. Review OJT-5 in IMC 1245, Appendix A to familiarize yourself with inspector actions to prepare and implement baseline inspections.
2. Observe one requalification inspection, including the entrance meeting, debriefs, and requalification program inspection activities performed per IP 71111.11 by the examiners. If you are IMC 1245 Appendix A qualified, perform some inspection activities under the supervision of a fully-qualified examiner or inspector.
3. Review the references and refer any questions to a qualified OL examiner.

DOCUMENTATION: OL Examiner Signature and Certification Card OJT-OLE-6

Chief Examiner OJT Activities

These additional OJT activities require Chief Examiner candidates to oversee examination-related work at reactor facilities and in the regional office. These activities are designed to allow Chief Examiner candidates to observe and perform key tasks under controlled circumstances.

The following general guidance applies **during completion of** the Chief Examiner OJT activities:

- The activities should generally be completed in the order in which they are presented, unless otherwise directed by the regional or program office OL BC.
- All parts of each activity must be completed.
- The regional or program office OL BC will act as a resource **during the completion of** each activity. **Direct** any questions **regarding** how a task must be **completed** or how the guidance is applied **to the regional BC or program office OL BC**. The OL BC may also designate a qualified Chief Examiner to work with you as you complete the various activities.

(OJT-OLE-7) Participate on Two Licensing Examination Teams
(as a fully-qualified OL Examiner)

PURPOSE:

This OJT activity is intended to increase the Chief Examiner candidate's proficiency in implementing the OL examination procedures.

COMPETENCY AREA: INSPECTION ASSESSMENT AND ENFORCEMENT

LEVEL OF EFFORT: 300 hours

REFERENCES: NUREG-1021

EVALUATION CRITERIA:

Candidates should be engaged in and satisfactorily perform all aspects of the assigned examinations as determined by the regional OL BC. No detailed evaluation criteria have been developed.

TASKS:

Candidates should be engaged in and satisfactorily perform all aspects of the assigned examinations as determined by the OL BC. No detailed activities have been developed. Participation on minimum of two examination teams, including validation and administration activities, must be completed after certification as an Examiner.

DOCUMENTATION: OL Chief Examiner Signature and Certification Card OJT-OLE-7

(OJT-OLE-8) Lead an Initial Examination Team (under instruction)

PURPOSE:

The purpose of this activity is to familiarize you with the procedures for coordinating and leading an initial OL examination assignment in accordance with NUREG-1021.

COMPETENCY AREA: INSPECTION ASSESSMENT AND ENFORCEMENT

LEVEL OF EFFORT: 200 hours

REFERENCES: NUREG-1021

EVALUATION CRITERIA:

Complete the activities outlined in this guide and meet with the regional or program office OL BC to discuss any questions you may have. Upon completion of the tasks in this guide, you should be able to:

1. Coordinate all the administrative activities involved in preparing for an initial examination assignment.
2. Coordinate all on-site activities with the examination team members, the resident inspectors, and the facility contact.
3. Coordinate all the administrative activities associated with documenting and issuing the examination results.

TASKS:

1. In accordance with Sections C and D of ES-2.1 and under the direction of a **qualified** Chief Examiner, coordinate all administrative activities associated with preparing for an initial examination assignment. These activities should include completing the **210**-day phone call, preparing the official examination confirmation letter to the facility licensee, coordinating review and approval of the examinations and tests, reviewing the license applications, resolving any waiver requests, preparing the assignment sheet, reviewing the operating test administration schedule, and coordinating the travel arrangements.

In accordance with ES-3.5 and ES-4.3 and under the direction of a **qualified** Chief Examiner, oversee all on-site activities associated with the administration of the written examinations and operating tests. This should include coordinating all interactions between the examination team members, the resident inspectors, and the facility contact, such as arranging to review and validate the examination, scheduling the entrance and exit meetings, ensuring that examination security is maintained, implementing the operating test schedule, ensuring that the written examination is properly administered, and keeping the regional OL BC informed of any problems.

2. In accordance with ES-3.6, ES-4.4, ES-5.1 and ES-5.2, and under the direction of a **qualified** Chief Examiner, coordinate all the administrative activities associated with documenting and issuing the examination results. This should include resolving the facility comments, grading and reviewing the written exams and operating tests, preparing the license, denial, and notification letters, preparing the examination report in accordance with OLMC-510, and ensuring that the required examination files are generated in accordance with OLMC-520.

DOCUMENTATION: OL Chief Examiner Signature and Certification Card OJT-OLE-8

Signature and Certification Cards

OL Limited Examiner Signature and Certification Card

Examiner's Name: _____	Employee Initials/ Completion Date	OL Branch Chief Signature/Date
Prerequisites:		
IMC 1245 Appendix A: ISAs: 1 – 6, 14 – 16, 19		
IMC 1245 Appendix B: ISAs 1 – 4		
A. Training Courses		
Power Plant Engineering Directed Self-Study (E-110) (As determined necessary by the regional OL BC.)		
(Reactor Technology Full Series (Basic, Advanced, and Simulator) for: <ul style="list-style-type: none"> • Westinghouse, or • General Electric Or enter Advanced technology cross-qualification: <ul style="list-style-type: none"> • (CE, BW, AP1000) 	_____ _____ _____	_____ _____ _____
Effective Communication for NRC Inspectors		
Gathering Information for Inspectors through Interviews		
Media Training Workshop		
Examination Techniques Course (G-107): Operating		
B. Individual Study Activities		
ISA-OLE-1: Navigating the NRC's Operator Licensing Web Pages		
ISA-OLE-2: History and Organization of the Operator Licensing Program		
ISA-OLE-3: Initial Operator Licensing Process		
ISA-OLE-4: Operator Licensing Operating Tests		
ISA-OLE-5: Technical Specifications (Parallels ISA-OPS-2)		
ISA-OLE-6: Operability (Parallels ISA-OPS-3)		

<u>Examiner's Name:</u> _____	<u>Employee Initials/</u> <u>Completion Date</u>	<u>OL Branch Chief</u> <u>Signature/Date</u>
ISA-OLE-7: Shutdown Operations (Parallels OJT-OPS-9)		
ISA-OLE-8: Operator Licensing Appeals and Hearings		
ISA-OLE-9: Simulation Facilities		
C. <u>On-the-Job Training Activities</u>		
OJT-OLE-1: a. Observe Initial Licensing Examination b. Observe Initial Licensing Examination	_____ _____	_____ _____
OJT-OLE-2: Conduct of Operations (Parallels OJT-OPS-2)		
OJT-OLE-3: Administer and Grade an Operating Test		
NOTE: For ISAs 5, 6, and 7 and OJT-2, you may document completion of equivalent activities on both Signature Cards. Treating ISA-OLE-7 as an OJT activity would eliminate the need to later repeat the activity to certify as a Reactor Operations Inspector.		

(Note: If the individual is qualifying OL Examiner and not pursuing Limited Examiner qualifications, N/A the below signatures and include the OL Limited Examiner Signature and Certification Card with the OL Examiner Signature and Certification Card.)

The Chief Examiner's signature below indicates that the individual has successfully completed an operating exam as a limited examiner. The Chief Examiner must send a memorandum to the individual's management (including OD/RA) indicating successful completion of the Limited Examiner Qualification Program. This completed signature and certification form should be attached to the memorandum.

Chief Examiner Certification: _____ Date: _____

The individual's supervisor signature below indicates successful completion of all required courses and activities listed in this appendix and Division Director approves qualification.

OL Branch Chief Recommendation: _____ Date: _____

Division Director Approval: _____ Date: _____

Copies to: Examiner
Supervisor

OL Examiner Signature and Certification Card

Examiner's Name: _____	<u>Employee Initials/ Completion Date</u>	<u>OL Branch Chief Signature/Date</u>
<u>Prerequisites:</u>		
OL Limited Examiner Qualification Card Complete: (see note)		
<u>A. Training Courses</u>		
Examination Techniques Course (G-107): Written		
<u>B. Individual Study Activities</u>		
ISA-OLE-10: License Eligibility Requirements and Guidelines		
ISA-OLE-11: Overview of Generic Concepts Related to Written Examination Development		
ISA-OLE-12: Operator Licensing Written Examinations		
ISA-OLE-13: Systems Approach to Training (SAT)		
ISA-OLE-14: Licensed Operator Requalification and Other License Conditions		
<u>C. On-the-Job Training Activities</u>		
OJT-OLE-4: Prepare an Operating Test		
OJT-OLE-5: Prepare, Administer, and Grade a Written Examination		
OJT-OLE-6: Requalification Inspection		

(Note: If the individual is qualifying OL Examiner and not qualifying Limited Examiner, complete the OL Limited Examiner and OL Examiner Signature and Certification Cards for approval.

The Chief Examiner's signature below indicates that the individual has successfully completed an operating exam as a limited examiner. The Chief Examiner must send a memorandum to the individual's management (including OD/RA) indicating successful completion of the Limited Examiner Qualification Program. This completed signature and certification form should be attached to the memorandum.

Chief Examiner Certification: _____ Date: _____

The candidate's supervisor's signature below indicates successful completion of all required courses and activities listed in this appendix and Division Director approves qualification.

OL Branch Chief Recommendation: _____ Date: _____

Division Director Approval: _____ Date: _____

Copies to: Examiner
 Supervisor

OL Chief Examiner Signature and Certification Card

<u>Examiner's Name:</u> _____	<u>Employee Initials/ Completion Date</u>	<u>OL Branch Chief Signature/Date</u>
-------------------------------	---	---

<u>C. Chief Examiner OJT Activities</u>		
OJT-OLE-7: a. Participate on an Exam Team		
b. Participate on an Exam Team		
OJT-OLE-8: Lead an Initial Examination Team (under instruction)		

(The electronic signature card, which is located on the Digital City and other internal NRC websites is also acceptable.) Record completion in TMS by sending a request to TrainingSupport.Resource@nrc.gov

Form 1: OL Limited Examiner Technical Proficiency Level Equivalency Justification

<p>Examiner's Name: _____</p>	<p>Identify equivalent training and experience for which the examiner is to be given credit.</p>
<p>A. Training Courses</p>	
<p>Power Plant Engineering Directed Self-Study (E-110) (As determined necessary by the OL BC.)</p>	
<p>(Reactor Technology Full Series (Basic, Advanced, and Simulator) for:</p> <ul style="list-style-type: none"> • Westinghouse, or • General Electric <p>Or enter advanced technology qualified: _____ (CE, BW, AP1000)</p>	
<p>Effective Communication for NRC Inspectors</p>	
<p>Gathering Information for Inspectors through Interviews</p>	
<p>Media Training Workshop</p>	
<p>Examination Techniques Course (G-107): Operating</p>	
<p>B. Individual Study Activities</p>	
<p>ISA-OLE-1 - Navigating the NRC's Operator Licensing Web Pages</p>	
<p>ISA-OLE-2 - History and Organization of the Operator Licensing Program</p>	
<p>ISA-OLE-3 - Initial Operator Licensing Process</p>	
<p>ISA-OLE-4 - Operator Licensing Operating Tests</p>	
<p>ISA-OLE-5 – Technical Specification (Parallels ISA-OPS-2)</p>	
<p>ISA-OLE-6 - Operability (Parallels ISA-OPS-3)</p>	
<p>ISA-OLE-7 - Shutdown Operations (Parallels OJT-OPS-9)</p>	
<p>ISA-OLE-8 – Operator Licensing Appeals and Hearings</p>	
<p>ISA-OLE-9 - Simulation Facilities</p>	

C. <u>On-the-Job Training Activities</u>	
OJT-OLE-1: a. Observe Initial Licensing Examination b. Observe Initial Licensing Examination	_____ _____
OJT-OLE-2: Conduct of Operations (Parallels OJT-OPS-2)	
OJT-OLE-3: Administer and Grade an Operating Test	

Supervisor's Approval: Signature / Date _____

Copies to: Examiner
 Supervisor

Form 2: OL Examiner Technical Proficiency Level Equivalency Justification

Employee's Name: _____	Identify equivalent training and experience for which the examiner is to be given credit.
A. <u>Training Courses</u>	
Examination Techniques Course (G-107): Written	
B. <u>Individual Study Activities</u>	
ISA-OLE-10: License Eligibility Requirements and Guidelines	
ISA-OLE-11: Overview of Generic Written Examination Concepts	
ISA-OLE-12: Operator Licensing Written Examinations	
ISA-OLE-13: Systems Approach to Training (SAT)	
ISA-OLE-14: Licensed Operator Requalification and Other License Conditions	
C. <u>On-the-Job Training Activities</u>	
OJT-OLE-4: Prepare an Operating Test	
OJT-OLE-5: Prepare, Administer, and Grade a Written Examination	
OJT-OLE-6: Requalification Inspection	

Supervisor's Approval: Signature / Date _____

Copies to: Examiner
 Supervisor

Attachment 1: Revision History for IMC 1245 Appendix C10

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	ML062400479 10/31/06 CN 06-032	To clarify signature requirements, update reference lists, and incorporate minor editorial changes. Completed 4-year historical CN search.	None	ML062890456
N/A	ML090270047 07/08/09 CN 09-017	This appendix is revised to update ISA-OLE-12, OJT-OLE-3, OJT-OLE-4, and to move refresher training requirements to Appendix D1. Specifically, a reference (NRR Process Standard for Administrative Reviews and Hearings) in Task 3 of ISA-OLE-12, is removed as the document was under development for a time but never completed. OJT-OLE-3 and OJT-OLE-4 are both revised to afford regional Operator Licensing Branch Chiefs the resource and scheduling flexibility to certify examiners based on partial tests and examinations without having to seek training deviations from the program office. Similar deviations have been approved in the past based on the examiners participating in all activities at the 50+% level and demonstrating acceptable proficiency. OJT-OLE-3, Task 2, also refers to "pre-scripted questions" that are no longer used in the operating test.	None	ML091590710
N/A	ML11105A165 12/29/11 CN 11-044	This revision updates references, adds links to Web pages, updates operability definitions and activities in ISA-10, and adds guidance to ensure the qualification standard is applicable to new reactor licensees.	None	ML11312A113

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	ML121650252 08/27/12 CN 12-018	Removed the requirement that requalification inspections must be led by examiners also qualified as a Reactor Operations Inspector. The latest revision to IP 71111.11 states who can lead requalification inspections.	None	Closed FF: 1245-1757 ML12240A210
N/A	ML15181A337 10/21/15 CN 15-020	This revision updates format, references, and adds training to ISA-4 on the decision by the ASLB to overturn the staff's denial of a senior reactor operator license.	None	ML15195A192
N/A	ML20112F349 07/06/20 CN 20-030	This revision updated the format of the appendix and references. Changes to the OLB program such as the use of digital license files and new OLB SharePoint sites were reflected in this update. ISA-OLE-10 was significantly revised to reflect new NRC guidance regarding Operability.	None	ML20112F454
N/A	ML21209A462 09/29/21 CN 21-033	This change was made to reflect changes to the operator licensing program as described in NUREG 1021 Revision 12. It also updated the addresses of several websites and the names of several NRC divisions.	None	
	ML23198A054 08/28/23 CN 23-026	This change updated the addresses of several websites and the names of several NRC divisions and provided additional information regarding how to credit previous experience towards completion of the qualification process.	None	N/A
	ML25196A155 02/20/26 CN 26-007	Defined and distinguished the three tier levels within the C10 qual. Added clarity to requirements between limited examiner and full examiner qualification expectations based on job task analysis conducted (ML25209A467). Deleted signature for DD on equivalency forms as BCs now have the approval authority for equivalencies		ML25204A115 1245C10-2533 ML24173A265