

Examination Process

NUREG 1021, Rev. 9
ES-201, Initial Operator Licensing Process

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How do we know when you want an exam?

- Regulatory Issue Summary (RIS)
- Facility exam projection over next 4 years
- Ask who will prepare the exam
- Number of applicants
- Primary exam date
- Backup exam date
- Proposed number of GFE candidates
- RIS is accessed from the NRC public web in the electronic reading room under document collections, generic communications, regulatory issue summaries.

Building the Schedule

- From the RIS responses we build the schedule and devote resources
- Facility or NRC prepared
- Number of applicants and license level determines amount of exam material to develop
- Number of applicant will determine exam duration (1 week or 2 weeks)
- Also look at impact of Holiday weeks and in some cases NASCAR schedule.

1ST Quarter FY07

July 12, 2006

2006	WK #1	WK #2	WK #3	WK #4	WK #5	WK #6	WK #7	WK #8	WK #9	WK #10	WK #11	WK #12	WK #13
	Chief Review				<u>Prep</u> 3,3,3			<u>Exam</u>	do				
					Prep			Exam	doc				
					Prep			Exam	doc				
	Develop Written Exam										To facility ~ 30 days before exam		Prep
								Chief Review					<u>Prep</u> 4,3,2
							Develop Op Test (Outline 1 week)			To facility ~ 30 days before prep			Prep
					Prep			Exam	doc	Exam	doc		
	Chief Review				<u>Prep</u> 6,5,4			<u>Exam</u>	doc	<u>Exam</u>	doc		
					Prep			Exam	doc	Exam	doc		

NRC Prepared Exams

- Typically assign an single examiner as the primary writer of the exam
- Works well for NRC to develop the written and operating test outline and the facility provide the operating test details
- NRC plans on 8-10 weeks to write the exam

NRC Prepared Exams

- Attempt to get the operating test outline to the facility as soon as their schedule will support the dedication of individuals to the security agreement (at least 4 weeks prior to prep week)
- Goal is to have the written exam for review six weeks prior to administration

Initial Contact

- The chief examiner will contact the facility approximately 180 days (5-6 months) prior to the exam
- Will confirm projected date of the exam
- Confirm exam development
- Ask about anticipated waivers

Exam Specifics

- The chief examiner will contact the facility approximately 120 days (4 months) prior to the exam
- Confirm the dates
 - Prep week
 - Exam week(s)
 - Applications due
 - Exam submittal/review
- Confirms job responsibilities and simulator availability
- Requests reference material

Reference Material

ES-201, Attachment #2

- Item #2 - Complete index of procedures
- Item #7 - Surveillance procedures (weekly)
- Item #10 - Radiation manuals (which cover releases and release permits)
- Item # 14 - Plant curves
- Question banks both initial and requal

Contact Documentation

- The chief examiner documents this 120 day contact and arrangements in a corporate notification letter to the site VP
- If the NRC is preparing the exam, we may make these arrangements much in advance of the 120 day mark in order to get the reference material needed for exam development

Written Exam Outline

- Random and systematic sample
- We can generate the outline for the facility
- All changes to the outline must have prior approval from the chief examiner

Written Outline Documents

- Form ES-401-1/2, BWR/PWR Examination Outline
- Form ES-401-3, Generic Knowledge and Abilities Outline (Tier 3)
- Form ES-401-4, Record of Rejected K/As
 - Living document
 - Document all changes to the outline
 - From development of the outline
 - To completion of the question writing

Written Exam Quality Assurance

- Form ES-201-2, Examination Outline Quality Checklist
- Form ES-201-3, Examination security agreement

JPM Outline

- Should be developed ~75 days prior to exam
- Form ES-201-2 applies here also
- Form ES-301-1, Administrative Topics Outline
- Form ES-301-2, Control Room/In-Plant Systems Outline

Scenario Outlines

- Should be developed ~75 days prior to exam
- Form ES-201-2 applies here also
- Form ES-D-1, Scenario Outline
- Form ESS-301-5, Transient and Event Checklist

Chief Review of Outlines

- The chief examiner will review the outlines within 5 days of receiving them
- Can but should not start the exam development prior to getting chief examiner outline approval
- Chief examiner can review and approve to outlines in advance of the 75 days to facilitate exam development

Exam Submittal

- The initial exam submittal in the DRAFT
- Should be received ~45 days prior to the exam
- Supporting documentation (Reference Material)

Examination Forms Required

- ES-301-3, Operating Test Quality Checklist
- ES-301-4, Simulator Scenario Quality Checklist
- ES-301-5, Transient and Event Checklist
- ES-301-6, Competencies Checklist
- ES-401-6, Written Examination Quality Checklist
- Form ES-401-4, Record of Rejected K/As

Schedule

- Typically two weeks between the prep week and the start of the exam
- 10 or more applicants will typically take more than a week to examine
- The written exam is typically to greatest challenge for development, therefore, usually given after the operating test. This allows increased time for comment resolution.

Prep Week

- Run scenarios
 - Verifiable actions for malfunctions
 - Sufficient scenario details
 - Verification of critical tasks
- Run JPMs
 - Sufficient details
 - Verification of critical steps
- Table top the admin JPMs
 - Answer keys
 - Acceptance ranges

Written Exam

- Form ES-401-9, Written Examination Review Worksheet, to document comments
- Comment incorporation
 - Face to face
 - NRC Office
 - On-site during prep week
 - Teleconference
- Given within 30 days of the operating test

Exam Approval

- Comments incorporated from reviews and prep week
- All Quality Assurance sheets complete
- NRC Branch Chief approval
- Minimal changes after approval
- Typically occurs the week before the exam is administered