

REGION II TRAINING MANAGERS CONFERENCE



Enhancing Efficiency and Communications

REGION II TRAINING MANAGER CONFERENCE AGENDA
Sam Nunn Atlanta Federal Center
(Bridge Conference Room B)

ENHANCING EFFICIENCY AND COMMUNICATIONS

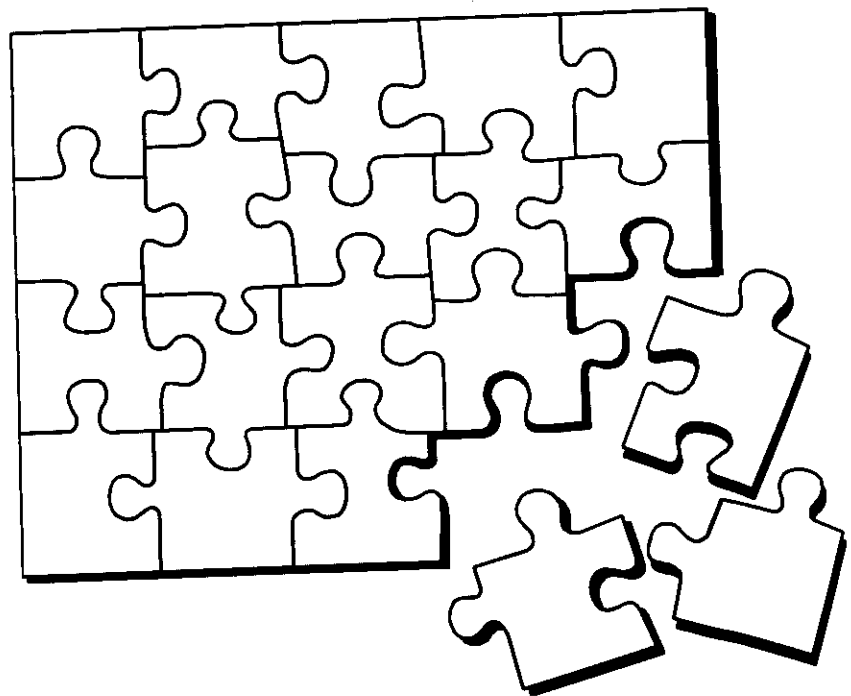
Thursday, April 25, 2002

7:30 - 8:00 a.m.	Registration	
8:00 - 9:15 a.m.	Introduction	L. Reyes B. Dean C. Casto
9:15 - 9:30 am	NRC Staff and Principal Examiners	M. Ernstes
9:30 - 10:00 a.m.	Break/Meet Examiners	
10:00- 10:30 a.m.	Planning Guide/Schedule	M. Ernstes
10:30- 10:45 a.m.	Improving Communications	M. Ernstes/G. Hopper
10:45 - 11:15 a.m.	Exam Week Scheduling	G. Hopper/R. Baldwin
11:15 - 12:30 p.m.	Lunch Break	
12:30 - 1:30 p.m.	New Initiatives and Future Prospects	G. Ludlum
1:30 - 1:45 p.m.	Break	
1:45 - 2:15 p.m.	Electronic Submission of Information To NRC	L. Miller
2:15 - 2:45 p.m.	Requalification Issues/SDP	K. O'Donohue
2:45 - 3:00 p.m.	Break	
3:00 - 4:00 p.m.	OL Issues	M. Ernstes/D. Trimble
4:00 - 4:30 p.m.	Open Forum	M. Ernstes/G. Hopper

Friday, April 26, 2002

8:00 - 8:15 a.m.	Day 2 Opening Remarks	M. Ernstes
8:15 - 8:45 a.m.	Test Formatting	S. Rose
8:45 -9:15 a.m.	Operating Test Level of Detail	G. Laska
9:15 - 9:30 a.m.	Break	
9:30- 10:15 a.m.	Exam Security issues	R. Aiello
10:15 - 10:45 a.m.	Summary/Closing Remarks	M. Ernstes

EXAMINATION SCHEDULING



FY 2002 - 2005 Region II Exam Schedule
(Revised April 23, 2002)

<u>Date</u>	<u>Plant</u>	<u>RO</u>	<u>SROI</u>	<u>SROU</u>	<u>Development</u>
1/28/02+	Crystal	4	5	3	Facility
2/4/02+	Oconee	3	4	3	Shared
2/11/02	McGuire	3	2	2	Facility
3/18/02	Surry	5	3	3	NRC*
6/4/02+	North Anna	6	2	5	NRC*
7/29/02	Robinson	7	2	2	Facility
8/26/02	Harris	3	3	2	Facility
9/9/02	Summer	0	1	5	NRC

FY 2002: 4 Facility exams; 3 NRC exams; 1 shared (78 applicants)

10/7/02 +	T. Point	9	1	2	NRC
10/21/02	Hatch	2	9	2	NRC
12/2/02	Sequoyah	7	0	3	Facility
12/2/02+	Vogtle	6	8	2	NRC
12/2/02	Watts B.	2	7	1	NRC
12/16/02	Browns F.	5	0	5	NRC
2/03/03	Brunswick	6	3	3	NRC
3/31/03	Catawba +	9	4	4	Facility
5/19/03	Farley	6	6	0	NRC
6/13/03	McGuire +	6	2	4	Facility
6/16/03	Oconee	2	8	2	Shared
8/25/03	Crystal River	4	1	1	Facility

FY 2003: 3 Facility exams; 7 NRC exams; 2 shared (148 applicants)

1/19/04	Harris	4	2	2	Facility
3/8/04	Robinson	6	3	3	Facility
3/29/04	Browns F.	4	2	2	NRC
3/29/04	St. Lucie +	5	12	3	NRC
5/3/04	Summer	6	0	3	NRC
6/4/04+	North Anna	8	2	6	NRC
6/14/04	Oconee	2	8	2	NRC
7/12/04	Vogtle	4	6	2	NRC
8/02/04	Watts Bar	2	2	2	NRC
8/04	Catawba	4	2	3	Facility
8/04	Hatch	5	5	2	NRC

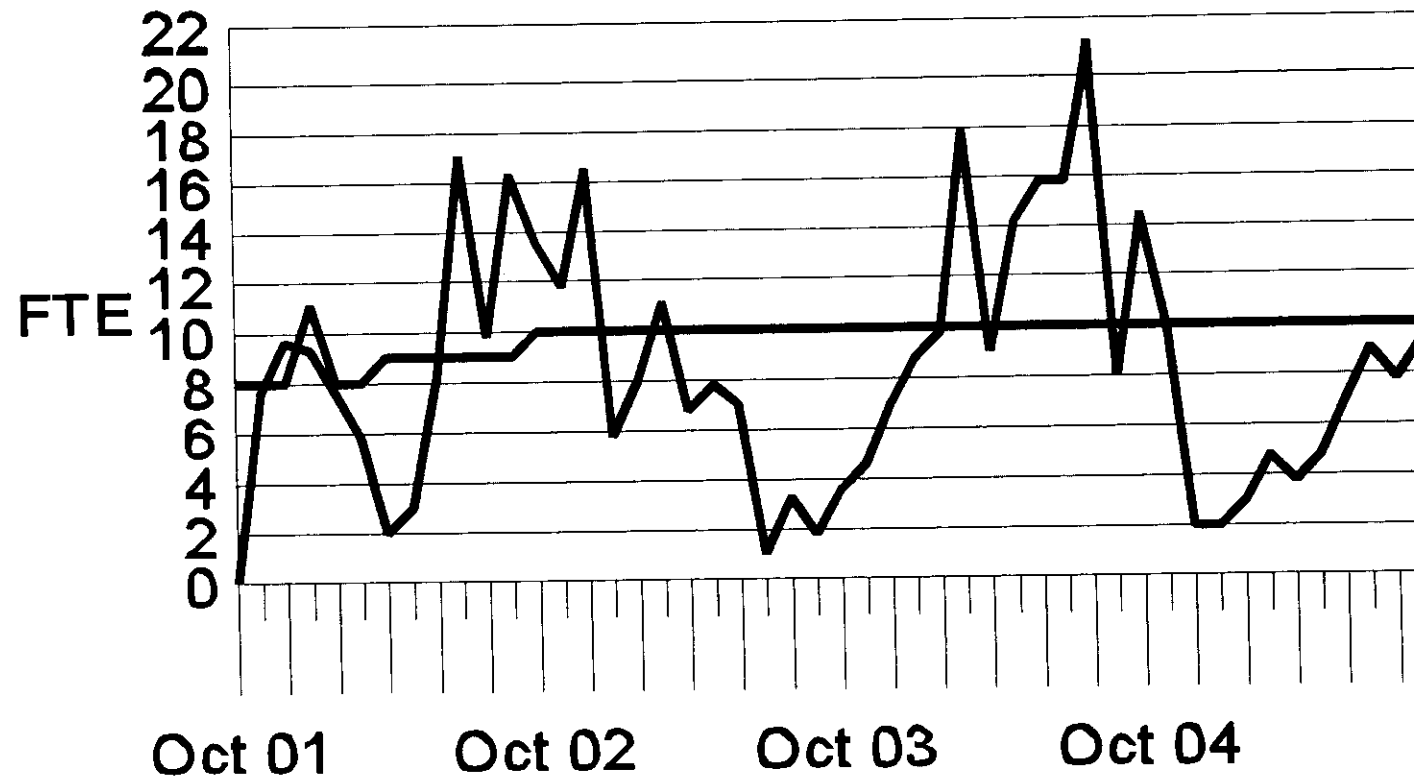
FY 2004: 3 Facility exams; 8 NRC exams (119 applicants)

10/04	Turkey Pt.	4	8	3	NRC
10/04	McGuire	6	0	0	Facility
10/04	Surry	8	2	4	NRC
10/8/04	Sequoyah	9	0	6	Facility
11/04	Farley	6	6	1	NRC
2/7/05	Brunswick	6	3	3	NRC
3/28/05	St. Lucie	0	0	6	NRC
6/13/05	Oconee	2	8	2	NRC
7/25/05	Robinson	6	3	3	Facility
9/16/05	Summer	3	0	6	NRC
9/05	Catawba	4	2	3	Facility

FY 2005: 4 Facility exams; 7 NRC exams (123 exams)

10/24/05	B. Ferry	0	4	4	NRC
10/17/05	Sequoyah	9	0	6	Facility

Workload



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Examiner Needs

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OLHP Qualified Examiners

2001 - 2002 INITIAL EXAM LABOR RATES

Exam Author	Applicants	HOURS
NRC	20	1402
NRC	13	1103
NRC	9	1372
NRC	12	960
NRC	11	1270
NRC	7	870
NRC Ave.	12	1163
Facility	6	490
Facility	13	652
Facility	10	638
Facility	15	976
Facility	11	553
Facility	12	482
Facility	7	545
Facility Ave.	10.5	619

4. Section 170.20 is revised to read as follows:

§170.20 Average cost per professional staff-hour.

Fees for permits, licenses, amendments, renewals, special projects, part 55 re-qualification and replacement examinations and tests, other required reviews, approvals, and inspections under §§170.21 and 170.31 will be calculated using the following applicable professional staff-hour rates:

Reactor Program (\$170.21 Activities)	\$156 per hour
Nuclear Materials and Nuclear Waste Program (\$170.31 Activities)	\$152 per hour

5. In §170.21, the introductory text, Category J, Category K, and footnotes 1, 2, and 3, to the table are revised to read as follows:

§170.21 Schedule of fees for production and utilization facilities, review of standard referenced design approvals, special projects, inspections, and import and export licenses.

Applicants for construction permits, manufacturing licenses, operating licenses, import and export licenses, approvals of facility standard reference designs, re-qualification and replacement examinations for reactor operators, and special projects and holders of construction permits, licenses, and other approvals shall pay fees for the following categories of services.

SCHEDULE OF FACILITY FEES
(See footnotes at end of table)

Facility Categories and Type of Fees	Fees ^{1, 2}
--------------------------------------	----------------------

J. Special projects:

Approvals and preapplication/licensing activities	Full Cost
Inspections ³	Full Cost

K. Import and export licenses:

Licenses for the import and export only of production and utilization facilities or the export only of components for production and utilization facilities issued under 10 CFR Part 110.

1. Application for import or export of reactors and other facilities and exports of components which must be reviewed by the Commissioners and the Executive Branch, for example, actions under 10 CFR 110.40(b).

Application-new license	\$9,900
Amendment	\$9,900

**CR-3 2002 CHIEF EXAMINER PROJECT PLAN
FOR FACILITY DEVELOPED EXAMINATIONS**

	Task	Output	Resp.	Target Date	Done
1	Contact facility		LSM	5/14/01	5/14
2	Develop Schedule		LSM	9/14/01	9/14
3	Complete Project Plan		LSM	9/14/01	9/14
4	120-day letter	ES-201-1 issued	LSM	9/14/01	9/14
5	Outline received		Facility	11/05/01	11/5
6	Chief Outline review	sign ES 201-2, line "c."	LSM	11/13/01	11/6
7	Branch Chief outline approval	sign ES 201-2, line "d."	BC	11/19/01	11/7
8	Facility outline feedback		LSM	11/20/01	11/8
9	Exams received		Facility	12/05/01	
10	Review Written	ES-401-9	LSM	12/07/01	11/23
11	BC approval of written comments	Initial ES-201-1, line 11.	BC	12/18/01	11/28
12	Facility Written feedback		LSM	12/19/01	12/19
13	Written comments resolved	sign ES 401-7, line "c."	LSM	12/21/01	12/19
14	Branch Chief Final Written Exam approval	sign ES 401-7, line "d."	BC	12/31/01	
15	Review walkthroughs		LSM	12/5/01	12/5
16	Review scenarios		LSM	12/19/01	12/15
17	BC approval of Op. Test comments		BC	12/31/01	12/5
18	Facility W/T feedback		LSM	12/31/01	12/5
19	Facility scenario feedback		LSM	1/3/02	12/15

Facility-developed

20	W/T comments resolved	sign ES 301-3, line "c."	LSM	1/5/02	12/5
21	Scenario comments resolved	sign ES 301-3, line "c."	LSM	1/17/02	12/5
22	Draft Applications			12/28/01	12/28
23	Prep week		N/A	1/7/02	1/8/2
24	Examiner Prep		LSM	01/02	12/21
25	Branch Chief Final Operating Exam approval	sign ES 301-3, line "d."	BC	1/17/02	1/17/02
26	Approve applications	sign 398	LSM	1/17/02	1/14
27	Assignment Sheet		LSM	1/17/02	1/14
28	Copy Exam Materials		CR 3	TBD	N/A
29	Administer Written Exam		LSM	1/25/02	1/25/02
30	Administer Operating Test			1/28-2/8	2/1/02
31	Exit		LSM	2/8/02	2/1/02
32	Post-exam Comments		Facility	2/12/02	N/A
33	Post-exam comment resolved	Attachment to exam report		2/15/02	N/A
34	Grade Written Exam	ES-403-1 sign ES-301-1	BC	2/1/02	2/1/02
35	Grade Operating Test	sign ES-301-1		2/20/02	2/13/02
36	Chief Grading Review	sign ES-301-1	LSM	2/21/02	2/15/02
37	Branch Chief Review			2/23/02	2/18/02
38	Issue Licenses/Denials			2/25/02	2/20/02
39	Exam Report			3/15/02	2/20/02
40	Compile Exam Documentation			3/17/02	3/8/02
41	Mail Certificates			5/25/02	4/10/02

Facility-developed

EXAMINER STAFFING BY VENDOR TYPE

Chief Examiners			B&W	CE	GE	West.
Ron Aiello	rfa@nrc.gov	(404) 562-4641	✓	✓	✓	✓
Rick Baldwin	rsb2@nrc.gov	(404) 562-4642	✓	✓	✓	✓
George Hopper	gth1@nrc.gov	(404) 562-4645	✓	✓	✓	✓
Lee Miller	lm@nrc.gov	(404) 562-4676			✓	✓
Edwin Lea	exl2@nrc.gov	(404) 562-4567			✓	✓
Kathleen O'Donohue	kfo@nrc.gov	(404) 562-4555			✓	✓
Examiners						
Tim Kolb	tck@nrc.gov	(404) 562-4665			10/02	
Gerry Laska	gwl1@nrc.gov	(404) 562-4626			✓	✓
Bob Monk	rlm2@nrc.gov	(404) 562-4671				✓
Steve Rose	sdr2@nrc.gov	(404) 562-4609		✓		✓
Part-time Examiners						
Jonathan Bartley	jhb1@nrc.gov	(423) 365-5487	✓		✓	✓
Bobby Holbrook	blh1@nrc.gov	(404) 562-4632			✓	✓
Larry Mellen	lsm@nrc.gov	(404) 562-4531	✓		✓	✓
Charlie Payne	dcp@nrc.gov	(404) 562-4669	✓	✓	✓	✓
Others						
Chuck Casto	cac1@nrc.gov	(404) 562-4600	✓	✓	✓	✓
Pat Davenport	pmd@nrc.gov	(404) 562-4622				
Mike Ernstes	mee@nrc.gov	(404) 562-4638	✓	✓	✓	✓
Beverly Michael	btm2@nrc.gov	(404) 562-4640				

PRINCIPAL EXAMINERS: (Facility point of contact)

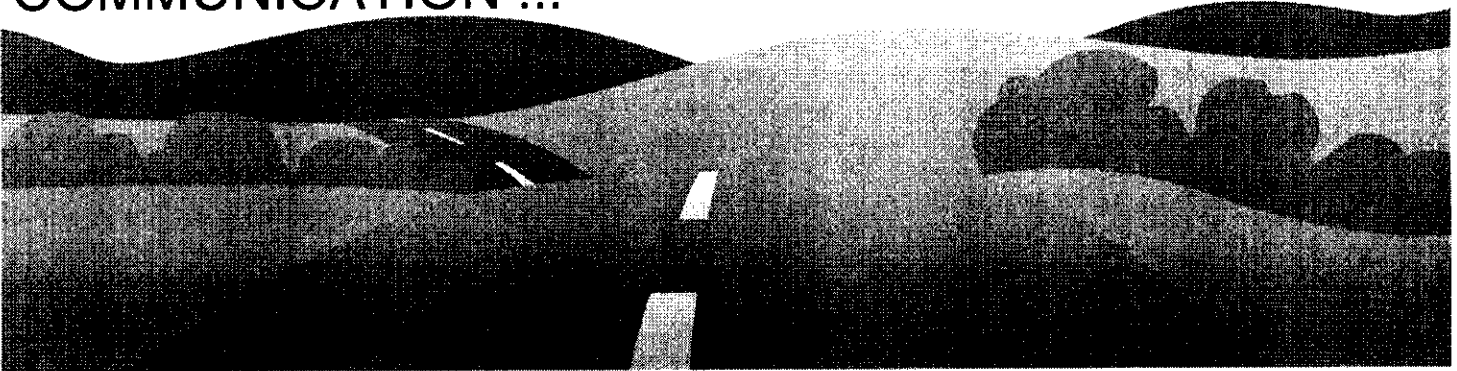
Gerry Laska	[Catwaba, McGuire, Oconee]
Steve Rose:	[Farley, Hatch, Vogtle]
Ron Aiello:	[Crystal River, St. Lucie, Turkey Point]
Kathleen O'Donohue:	[Brunswick, Harris, Robinson]
Lee Miller:	[North Anna, Summer, Surry]
Bob Monk:	[Browns Ferry, Sequoyah, Watts Bar]

**Good judgement comes from
experience and a lot of that comes
from bad judgement.**

Will Rogers

THE ROAD TO SUCCESS

COMMUNICATION !!!



COMMUNICATING



- A basic skill we tend to take for granted, one we rarely train on or think about while we are engaged in it and yet.....
- Can result in serious problems when not performed effectively.

Communication

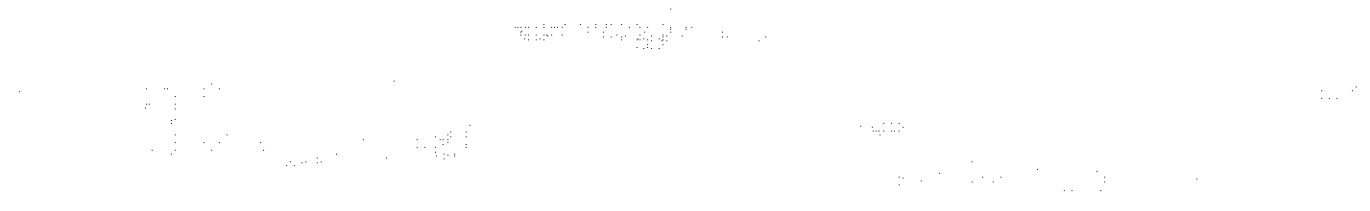
Why don't we get what we want ?

- We are different observers and listeners. Everyone involved in the exam process may hear the same thing but comprehend something different.
- We aren't always clear in our communications, especially in our requests and promises.
- We often state our opinions as if they were facts.

ACTIVE LISTENING

- Of all the skills in communication, the most difficult is listening. Listening, as distinguished from hearing, is an act of caring or being concerned. It involves the expenditure of energy.
- The easiest way to create problems in the exam development process is to not actively listen to your counterpart or exam team member.

Improving Communication



- Understand that we all see things differently and work on considering other viewpoints.
- Remember, your discussions don't just describe things; they make things happen.
- Make clear requests and promises. Keep a record of your discussions. (E-Mail)
- Understand the difference between Opinions and Facts.
- Listen carefully. Avoid the trap of making inferences.
- Recap/Summarize Action Items

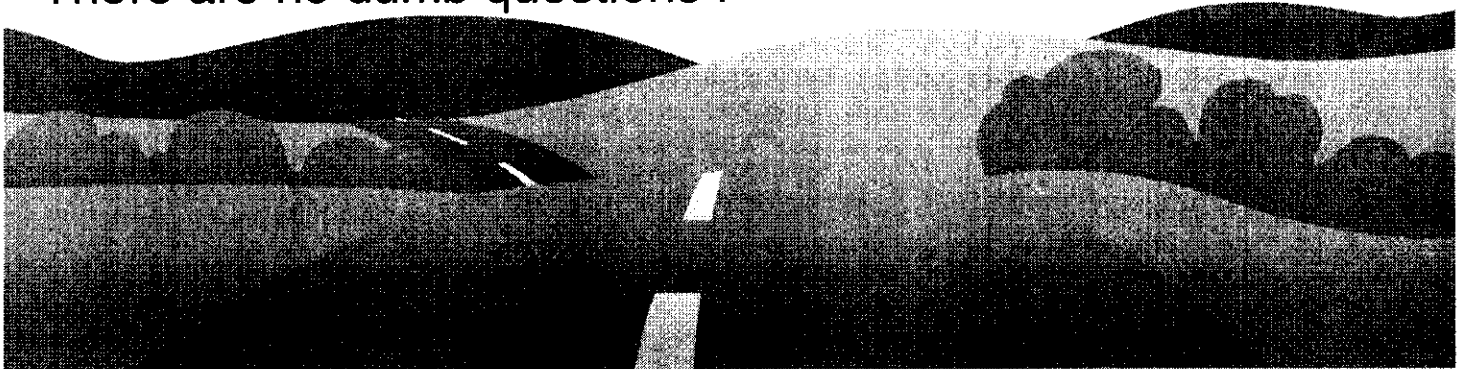
That's not what I assumed.

- Inferences are made any time - before during and after communication or observation.
- Inferences go beyond what one hears or observes.
- They usually generate disagreement or problems.
- Are unlimited in number.

Questions ?

A question not asked is a missed opportunity.
Don't make assumptions, ask questions.

There are no dumb questions !



Facility: _____		Date of Examination: _____
Examinations Developed by: Facility / NRC (circle one)		
Target Date*	Task Description / Reference	Chief Examiner's Initials
-180	1. Examination administration date confirmed (C.1.a; C.2.a & b)	
-120	2. NRC examiners and facility contact assigned (C.1.d; C.2.e)	
-120	3. Facility contact briefed on security & other requirements (C.2.c)	
-120	4. Corporate notification letter sent (C.2.d)	
[-90]	[5. Reference material due (C.1.e; C.3.c)]	
-75	6. Integrated examination outline(s) due (C.1.e & f; C.3.d)	
-70	7. Examination outline(s) reviewed by NRC and feedback provided to facility licensee (C.2.h; C.3.e)	
-45	8. Proposed examinations, supporting documentation, and reference materials due (C.1.e, f, g & h; C.3.d)	
-30	9. Preliminary license applications due (C.1.i; C.2.g; ES-202)	
-14	10. Final license applications due and assignment sheet prepared (C.1.i; C.2.g; ES-202)	
-14	11. Examination approved by NRC supervisor for facility licensee review (C.2.h; C.3.f)	
-14	12. Examinations reviewed with facility licensee (C.1.j; C.2.f & h; C.3.g)	
-7	13. Written examinations and operating tests approved by NRC supervisor (C.2.i; C.3.h)	
-7	14. Final applications reviewed; assignment sheet updated; waiver letters sent (C.2.g, ES-204)	
-7	15. Proctoring/written exam administration guidelines reviewed with facility licensee and authorization granted to give written exams (if applicable) (C.3.k)	
-7	16. Approved scenarios, job performance measures, and questions distributed to NRC examiners (C.3.i)	
<p>* ** Target dates are keyed to the examination date identified in the corporate notification letter. They are for planning purposes and may be adjusted on a case-by-case basis in coordination with the facility licensee.</p> <p>[] ** Applies only to examinations prepared by the NRC.</p>		

EXAM WEEK

SCHEDULING

EXAM WEEK SCHEDULING

Efficient exam scheduling is crucial for reducing student stress, optimizing resource allocation, and ensuring high-quality assessments.

**Maximize Efficiency to Reduce Burden
and Fatigue While Maintaining Exam
Quality**

GOALS

In an effort to reduce examination preparation effort, the same operating test may be used to examine multiple applicants and simulator crews. Depending on the number and license level of the applicants being examined, it might be possible to use the same set of JPMs and scenarios to examine all of the applicants if the operating test is administered in multiple segments (e.g., single scenarios or two-four JPMs) each of which can be given to all of the applicants in a single day. The facility licensee and the NRC chief examiner shall discuss the options and reach agreement on the process before developing the operating tests.

- Ensure Requirements of Nureg 1021 Achieved
- ***Increase Efficiency and Effectiveness***
- Decrease Unnecessary Regulatory Burden

OPERATING TEST NO.:

Applicant Type	Evolution Type	Minimum Number	Scenario Number			
			1	2	3	4
RO	Reactivity	1				
	Normal	1				
	Instrument / Component	4				
	Major	1				
As RO	Reactivity	1				
	Normal	0				
	Instrument / Component	2				
	Major	1				
SRO-I As SRO	Reactivity	0				
	Normal	1				
	Instrument / Component	2				
	Major	1				
SRO-U	Reactivity	0				
	Normal	1				
	Instrument / Component	2				
	Major	1				

- Instructions: (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution type.
- (2) Reactivity manipulations may be conducted under normal or controlled abnormal conditions (refer to Section D.4.d) but must be significant per Section C.2.a of Appendix D.
- (3) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

Author: → _____

Chief Examiner: → _____

Competencies	Applicant #1 RO/SRO-I/SRO-U				Applicant #2 RO/SRO-I/SRO-U				Applicant #3 RO/SRO-I/SRO-U			
	SCENARIO				SCENARIO				SCENARIO			
	1	2	3	4	1	2	3	4	1	2	3	4
Understand and Interpret Annunciators and Alarms												
Diagnose Events and Conditions												
Understand Plant and System Response												
Comply With and Use Procedures (1)												
Operate Control Boards (2)												
Communicate and Interact With the Crew												
Demonstrate Supervisory Ability (3)												
Comply With and Use Tech. Specs. (3)												
Notes: (1) Includes Technical Specification compliance for an RO. (2) Optional for an SRO-U. (3) Only applicable to SROs.												

Instructions:

Circle the applicant's license type and enter one or more event numbers that will allow the examiners to evaluate every applicable competency for every applicant.

Author: ** _____

Chief Examiner: _____

AXIOMS

- Number of scenario runs = 1 + next highest number:
 $8I + 4RO + 1U = 12$
 $7I + 5RO + 6U = 13$
- 1 Run \approx 2 Hours
- Maximum number runs = 4/day
- Mon AM / Fri PM Travel
- 10 or more applicants will typically be examined over 2 weeks
- Schedule should maximize simultaneous use of resources: simulator, control room, in-plant
- Minimize use of surrogates in simulator
- Time scheduled for JPMS should be > validated time.
- Typically 1 examiner can evaluate 18-20 JPMS per day

EFFICIENCY COMPARISON

U1R1R2	U1R2R1	9 APPLICANTS / 6 RUNS
U2R3R4	U2R4R3	
U3R5R6	U3R6R5	

U1R1R2	U5R2R1	12 APPLICANTS / 6 RUNS
U2R3R4	U6R4R3	
U3R5R6	U7R6R5	

U1I1R1	I1R1U1	9 APPLICANTS / 6 RUNS
U2I2R2	I2R2U2	
U3I3R3	I3R3U3	

ABOVE CAN BE DONE WITH 2 SCENARIOS

I1I2I3 etc.	9 APPLICANTS / 9 RUNS
-------------	-----------------------

I4I5I6	3 SCENARIOS
--------	-------------

I7I8I9

U1U2U3	6 APPLICANTS / 6 RUNS
--------	-----------------------

U4U5U6	3 SCENARIOS
--------	-------------

3I, 3RO, 3U

6 Runs

- 5 sim, 2cr, 3ip JPMs
- $6 \times 10 = 60 + 15 = 75 / 18 \times 3 = 1.5$ days for JPM administration.
- Monday Travel AM/ Admin and JPMs
- Tues: 3 Simulator runs / admin
- Wed: 3 Simulator runs / JPM
- Thurs: JPMs
- Fri: finish JPMs / Travel

INCREASING EFFICIENCY

- Use of Station keeping can be used where large transit times are involved between simulator and plant/large numbers of applicants are involved.
- Administrative JPMS can be conducted in group setting with proctoring provided each each applicant has the opportunity to explain his answer to an examiner and the examiner has the opportunity to ask follow-up questions.
- Crews of three upgrades can be evaluated using only two examiners in the simulator.

■

REDUCED BURDEN

■

- Use of surrogate operators : Same surrogate operator can be used for multiple crews and individuals do not have to be licensed.

EXAM MATERIAL

SUBMISSION

Exam Material Submission

Not to be confused with Electronic Information Exchange

Material format received?

- 1. Hard copy
- 2. Word - text
- 3. WordPerfect - text
- 4. Word - questions in table format
- 5. PDF - image
- 6. PDF - text (normal)

How Material is Received?

- Electronic copy
 - ▶ CD
 - ▶ E-mail
 - other than exam security materials via Internet
 - exam security materials via Resident Inspector
- Hardcopy

What happens to the material?

- ADAMS
- PDF Format Image or Text
 - ▶ Image (Tiff) file - can not search by keywords, must be converted to text
- Exam packages will be put in ADAMS in PDF - text format.

Conversion Hardspots

- Inserted Tables
- Special characters
- Use of semi-colon

What is provided to INPO?

- INPO is provided that accession number.
- Current INPO activity with the exam bank.

Reference Material Guidelines

ES-201 Attachment 2

- 16 item list of materials to be sent to NRC Regional Office
- List may be modified by the Chief Examiner
 - ▶ Complete Index of materials
 - ▶ Exam Banks

INPO EXAM BANK

Access Data Base

- Queries
 - ▶ KA number
 - ▶ part of the question
 - ▶ Station
- Form
 - ▶ KA number
 - ▶ Selected text
- Report

THE SIGNIFICANCE DETERMINATION PROCESS
AND
REQUALIFICATION INSPECTION FINDINGS

The Significance Determination Process and Requalification Inspection Findings

The Significance Determination Process

- NRC Inspection Manual, Manual Chapter 0610*, "Power Reactor Inspection Reports"

This provides guidance for the inspectors report, including Appendix B, "Thresholds for Documentation"

Inspectors answer three groups of questions for determining if an issue should be documented in an inspection report. Once the inspector identifies an issue, it should first be determine whether the issue has sufficient significance to warrant further analysis or documentation. This is done by determining whether the issue is minor. Minor issues should not be documented in inspection reports.

- Manual Chapter 0612, "Power Reactor Inspection Reports"

Currently in the final draft stage, this is the revised 0610* and contains very much the same topics as found in 0610*, revised to incorporate the lessons learned from the last couple of years.

- Appendix I, "Operator Requalification Human Performance Significance Determination Process (SDP)"

Appendix I contains the flowchart and matrix which comprise the proposed process for determining the risk importance of issues identified during an inspection.

This process (App. I) covers only those issues related to the operator requalification program.

Each issue should first be screened by using the documentation screening questions of Inspection Manual Chapter 0612 (formerly IMC 0610*), Appendix B to determine whether it is a minor concern.

This SDP starts when an operator requalification issue is identified and screened by an inspector based on IP 71111.11. It can be related to the programmatic aspects (e.g. exam grading, exam quality, exam security) or to the performance of licensed operators during the written exam or the annual operating test.

This SDP is applicable to requalification issues related to all licensed operators, including both shift and staff crews, with either active or inactive licenses. The process is applicable to all license holders.

A crew is defined as any group of individuals evaluated as a single entity by the licensee on the basis of its performance on the dynamic simulator.

Manual Chapter 0609, Appendix B, Group 1 questionsMinor Issues/Violations

If the answer to any of the below questions is "YES", the issue can be considered greater than minor and the inspector should review group 2 questions to determine if the issue impacts a cornerstone.

If the answers to all Group 1 questions are "NO", the issue can be considered minor.

- 1) Does the issue have an actual or credible impact on safety?
- 2) Could the issue be reasonably viewed as a precursor to a significant safety concern?
- 3) If left uncorrected, would the same issue under the same conditions become a more significant safety concern?
- 4) Does the issue relate to collecting or reporting performance indicators that would have caused a PI to exceed a threshold?

Manual Chapter 0609, Appendix B, Group 2 questionsIssues Affecting CornerstonesReactor Safety—Initiating Events, Mitigating Systems, & Barrier Integrity

If the answer to any Group 2 question is "YES", the issue should be analyzed by the SDP process, assigned a color, and documented in the inspection report.

- (1) Is the finding associated with an increase in the likelihood of an initiating event?
- (2) Is the finding associated with the operability, availability, reliability, or function of a system or train in a mitigating system?
- (3) Is the finding associated with the integrity of fuel cladding, the reactor coolant system, reactor containment or control room envelope?
- (4) Is the finding associated with degraded conditions that could concurrently influence any mitigation equipment and an initiating event?
- (5) Is the finding associated with or involve impairment or degradation of a fire protection feature?

Requalification Inspection Findings**1. Requalification Operating Test Failures: Yellow and Green finding**

- During the biennial operating exams, the licensee failed 4 out of 7 crews
- 2/4 crews were comprised of on shift operation personnel
- 2/4 crews were comprised of staff personnel
- 2/4 crews failed due to not meeting critical competencies
- 2/4 crews failed due to licensee defined competencies
- 10/42 individuals were failed for a combination of causes

2. Requalification Written Test Integrity Compromised: White and Green Finding

- First 7 weeks of 2000 Biennial Requalification Written Examinations used to review and then test a crew
- The first 3 days spent on review
- The fourth day spent validating the next week's exam: Week 1 crew would validate the Week 2 test and so on
- Biennial exam taken on the fifth day
- NRC inspector review identified that the repeat of similar questions from week to week was > 50%
- Identified that the similarity of the questions appeared strong enough to result in a failure to administer the exam in an equitable and consistent manner.
- Review of the exam scores proved the concern
- Evaluation of each question resulted in 6 questions identified as "compromised" to the point that they should have been disqualified
- 2 licensed personnel failed due to the 6 questions being disqualified, but were on shift. Therefore these individuals had returned to licensed (shift) duties without being retrained and re-evaluated.

Simulator Operational Evaluation

September 21, 2000

Number of Crews
with
UNSAT Performance in the
Annual Operating Test

Number of Crews
that took the
Annual Operating
Test
(Includes Dual Units)

	1	2	3	4	5	6	7	8
4	G	W	Y	Y	NA	NA	NA	NA
5	G	W	Y	Y	Y	NA	NA	NA
6	NF	G	W	Y	Y	Y	NA	NA
7	NF	G	W	Y	Y	Y	Y	NA
8	NF	G	W	W	Y	Y	Y	Y
9	NF	G	G	W	Y	Y	Y	Y
10	NF	G	G	W	W	Y	Y	Y
11	NF	NF	G	W	W	Y	Y	Y
12	NF	NF	G	G	W	W	Y	Y
13	NF	NF	G	G	W	W	Y	Y
14	NF	NF	G	G	W	W	W	Y
15	NF	NF	G	G	G	W	W	Y
16	NF	NF	NF	G	G	W	W	W

NF = < 20% Failure Rate - No Finding

G = 20 - 34% Failure Rate

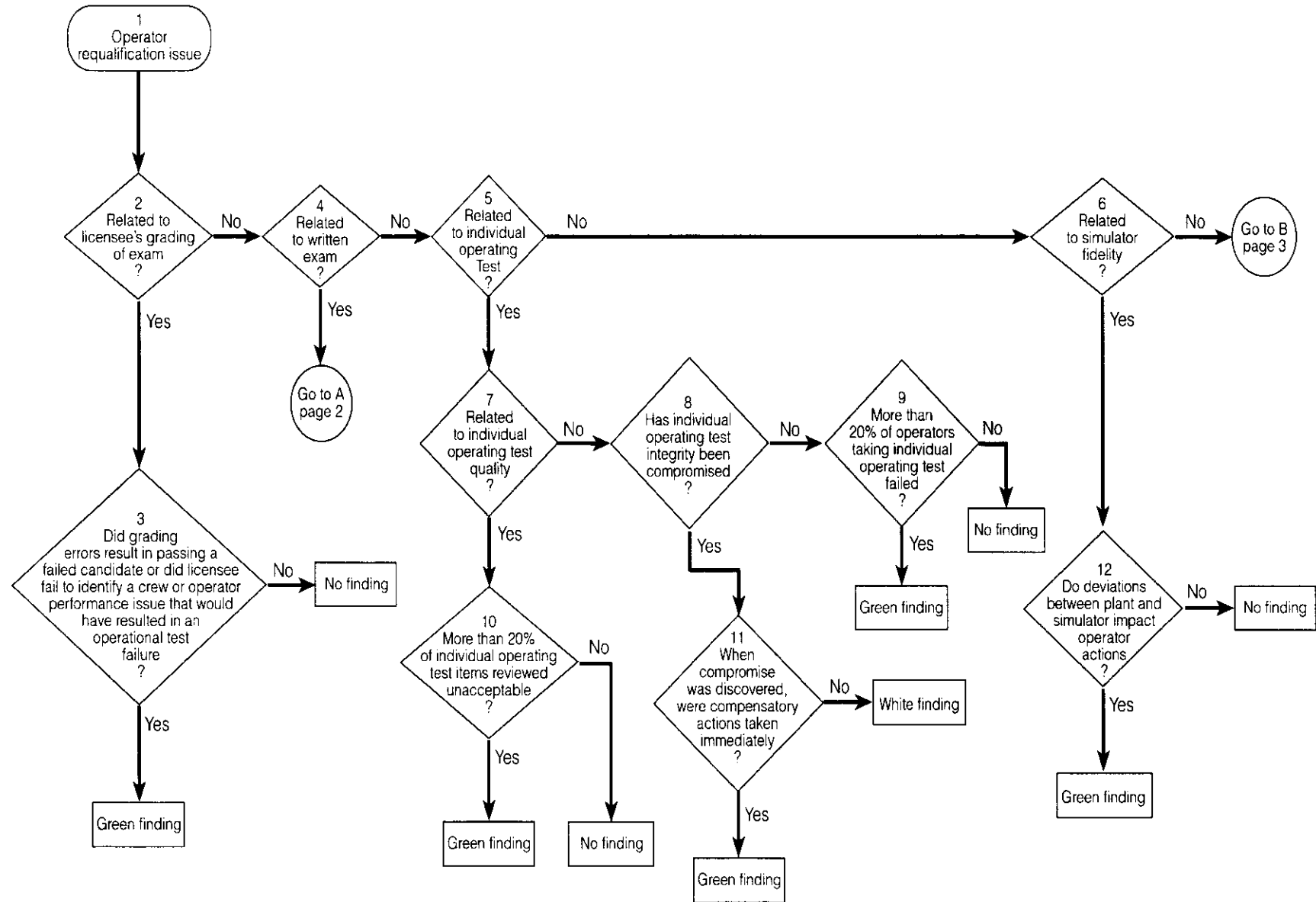
W = >34 - 50% Failure Rate (NUREG-1021, Rev 8 - UNSAT Requalification Program)

Y = >50% Failure Rate

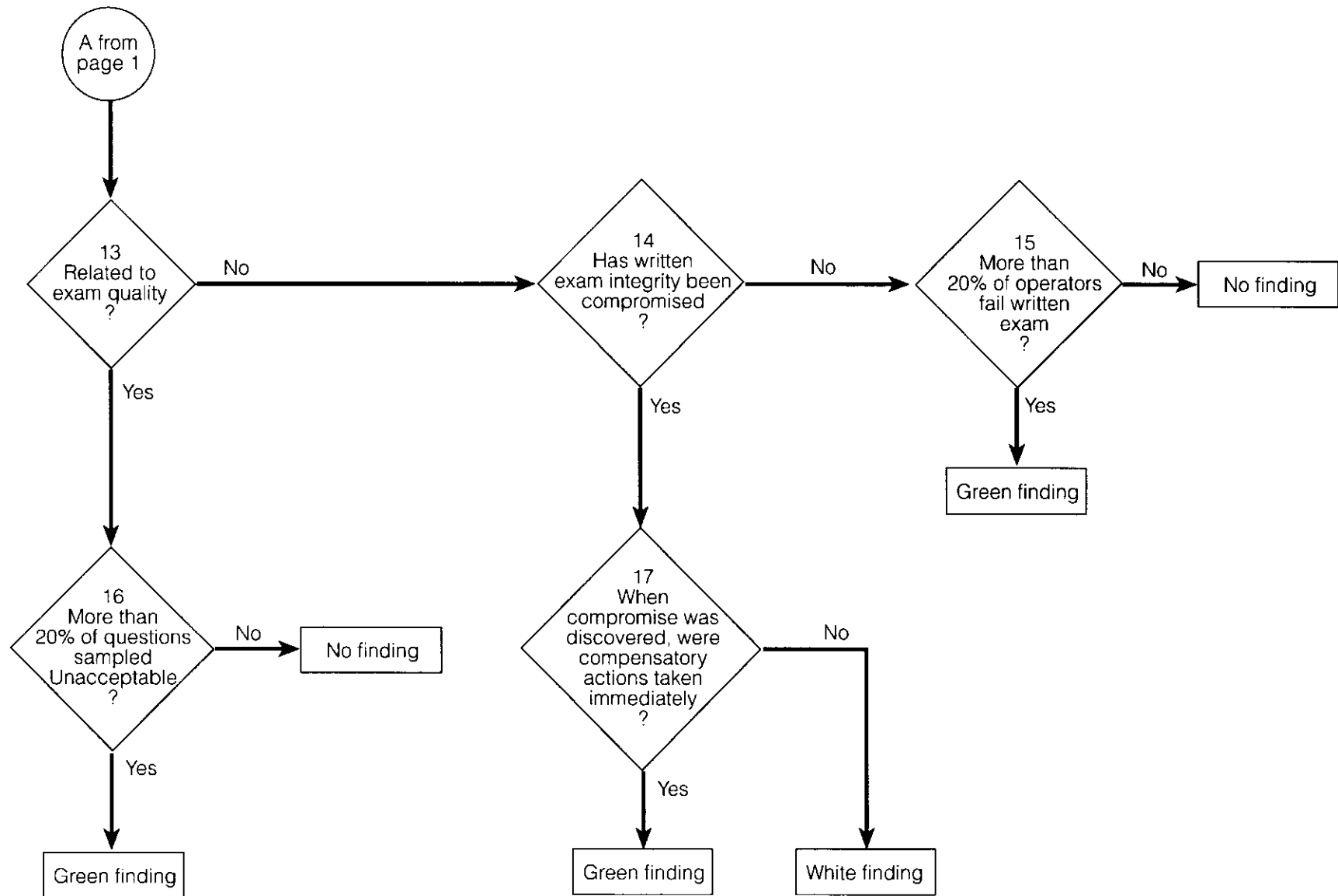
NA = Not Applicable

Note: If more than 16 crews are tested, or more than 8 crews are UNSAT in a given cycle, use the percentages above to determine the appropriate color.

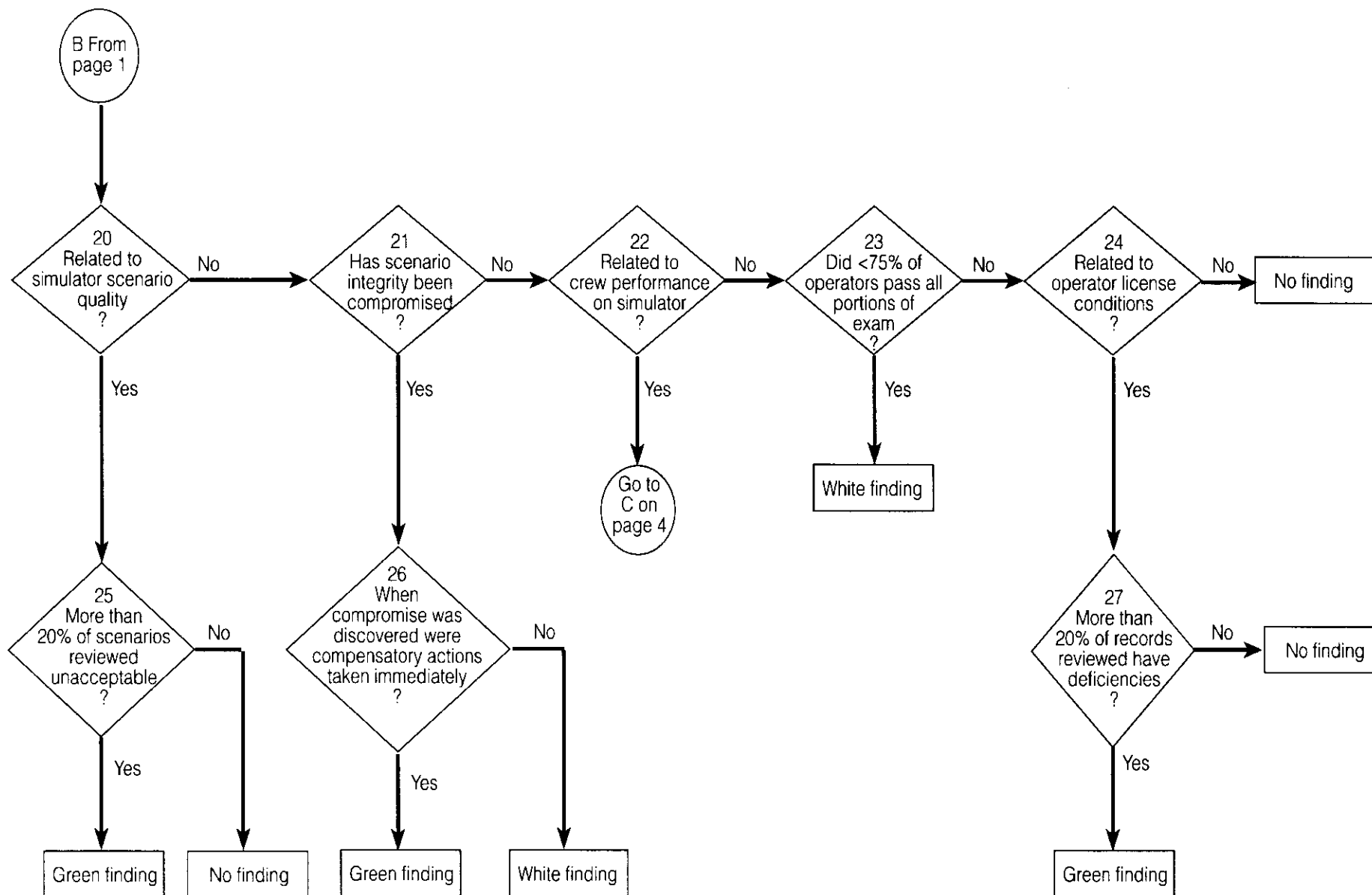
Operator Requalification Human Performance SDP
(February 15, 2002)
Page 1



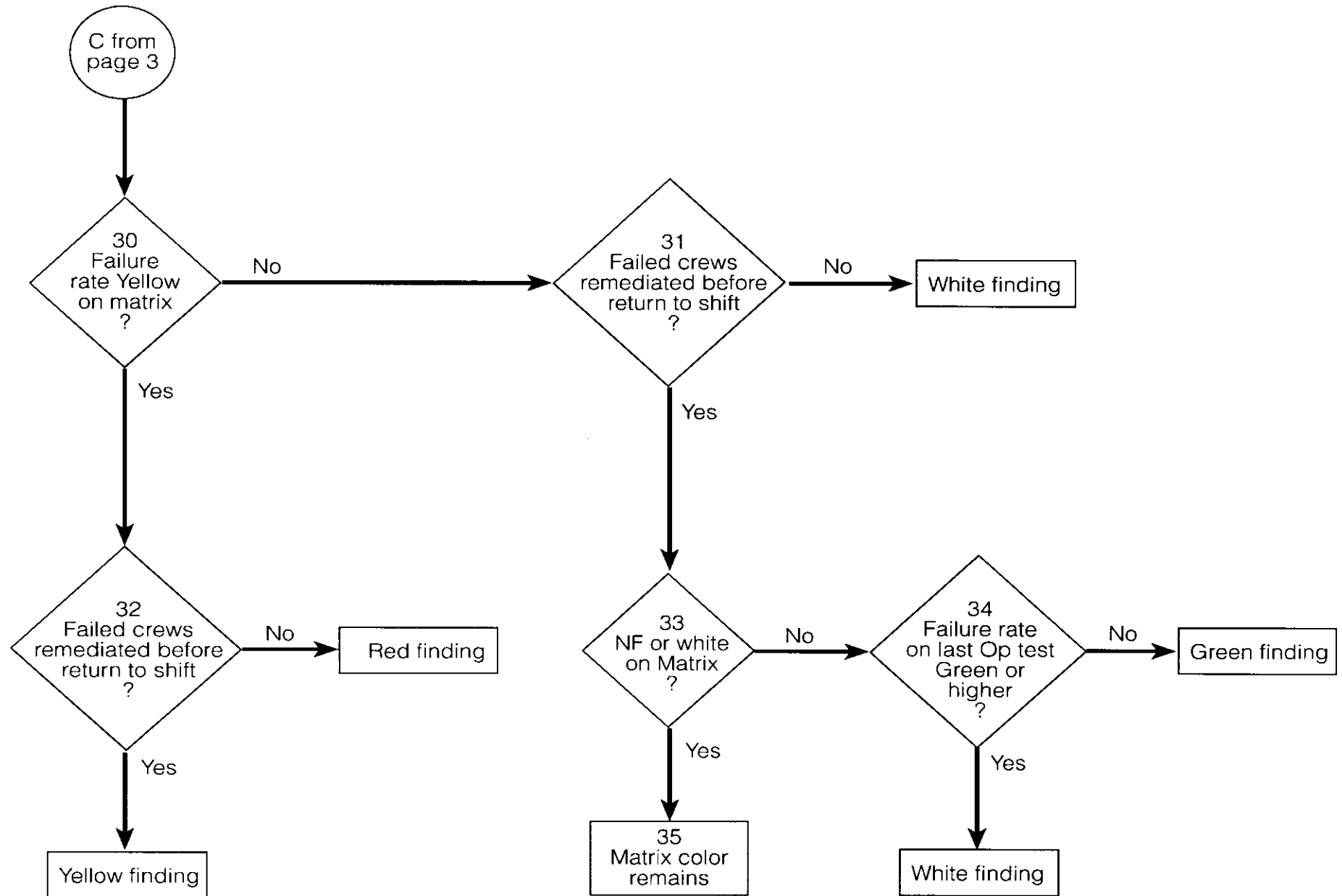
Operator Requalification Human Performance SDP
(February 15, 2002)
Page 2



Operator Requalification Human Performance SDP
(February 15, 2002)
Page 3



Operator Requalification Human Performance SDP
(February 15, 2002)
Page 4



Operating Tests and Level of Detail

Operating Tests and Level of Detail

Gerry Laska



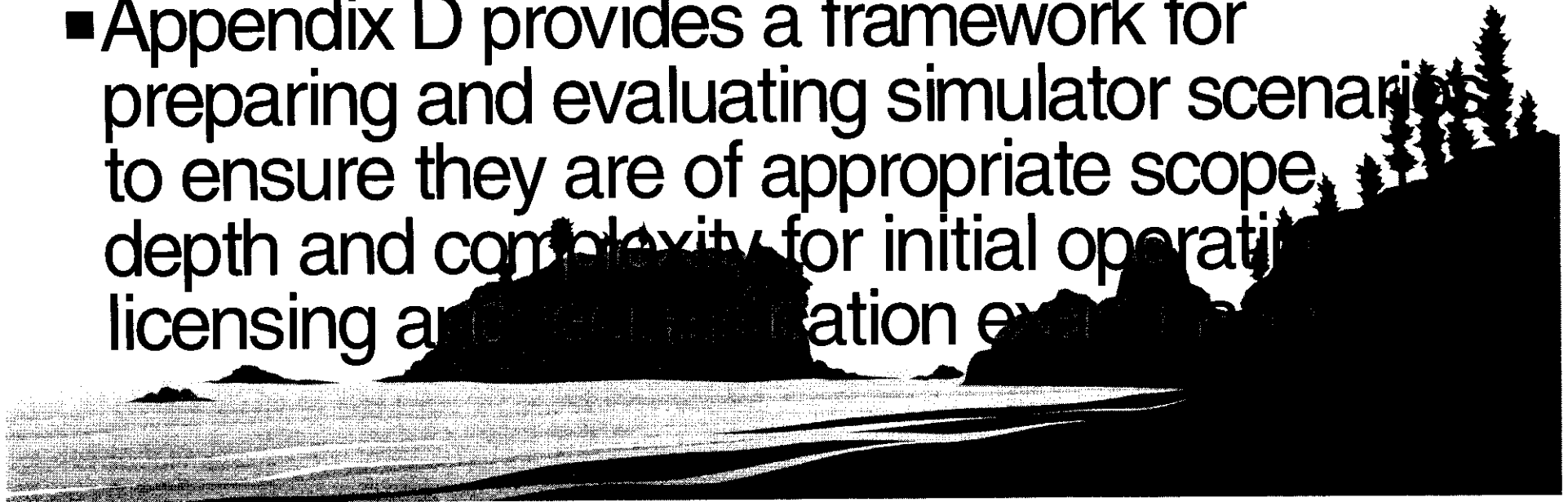
Operating Tests and Level of Detail

- ES-301
- Form ES-D-1
- Form ES-D-2



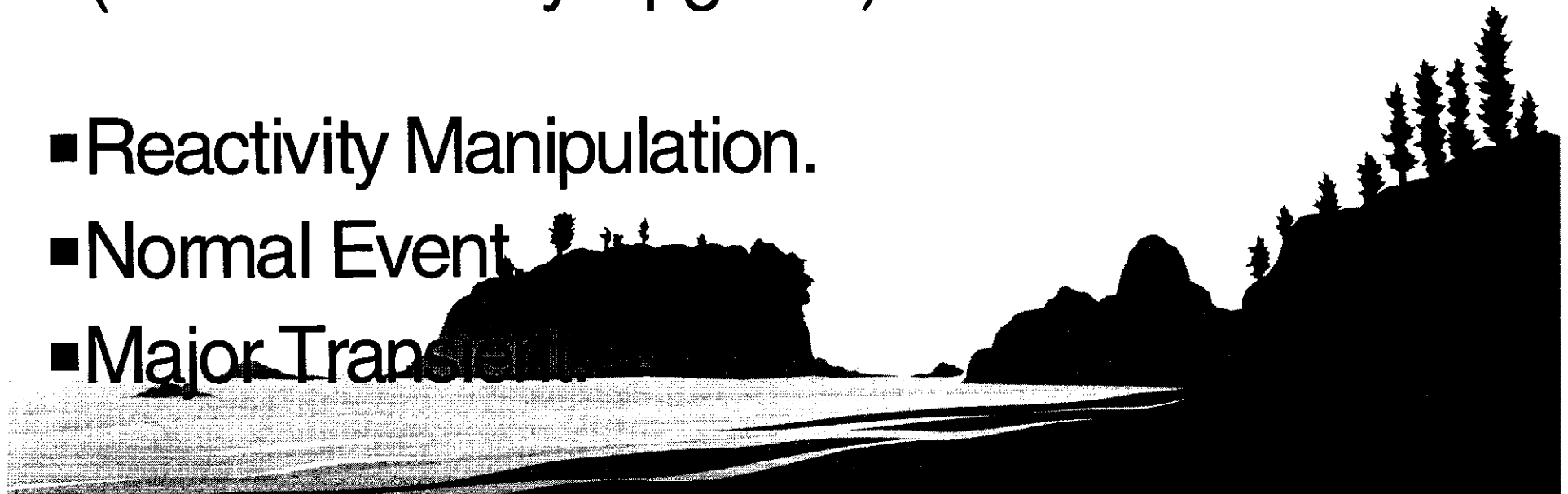
Operating Tests and Level of Detail

- ES-301 Gives us the major guidance for preparing initial operating tests.
- Appendix D provides a framework for preparing and evaluating simulator scenarios to ensure they are of appropriate scope, depth and complexity for initial operating licensing and certification evaluation.



What is required to be in a Scenario?

- Currently:
- Either two component malfunctions or instrument failures for each of the RO's and BOP positions, or a combination of both.
(Unless filled by Upgrade)
- Reactivity Manipulation.
- Normal Event
- Major Transients



What is required to be in a Scenario?

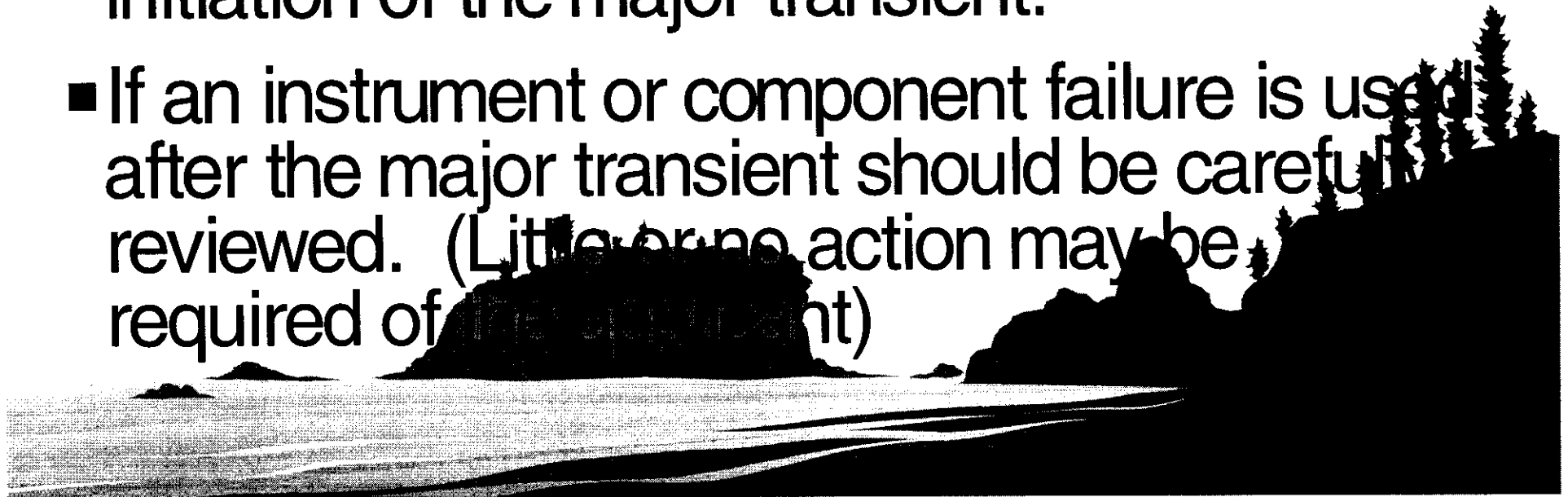
- The instrument or component malfunction must have verifiable actions to be performed by the applicant.



Scenario Design

ES-301

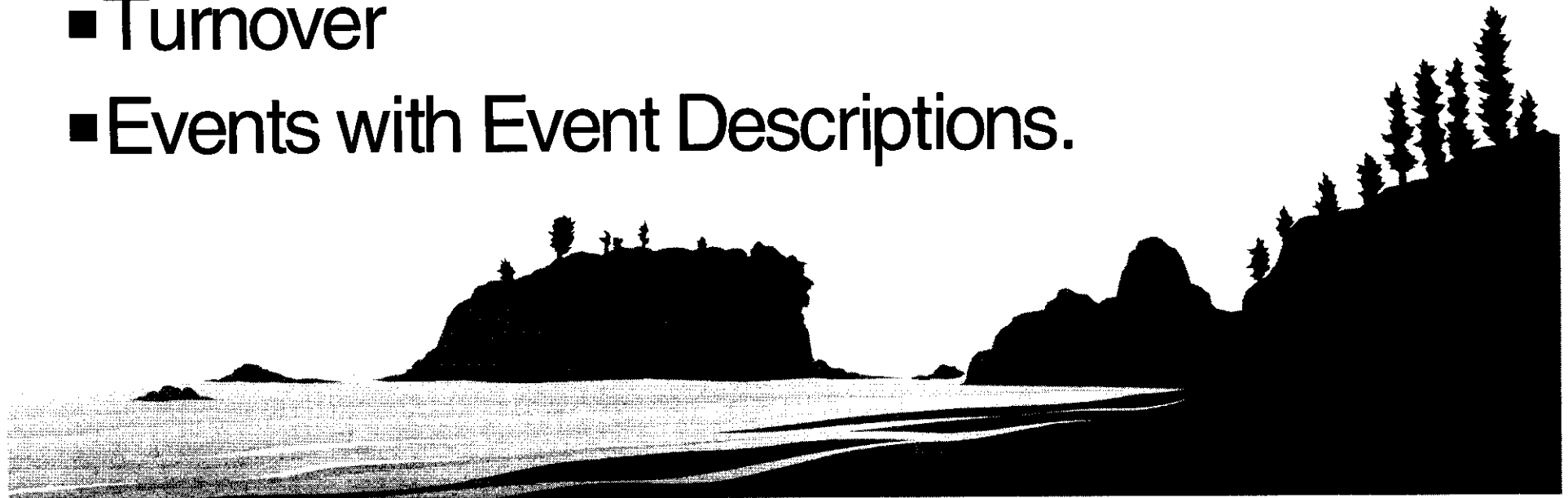
- All of the component malfunctions and/or instrument failures, that we are required to evaluate for an individual, should be prior to initiation of the major transient.
- If an instrument or component failure is used after the major transient should be carefully reviewed. (Little or no action may be required of the applicant)



Operating Tests and Level of Detail

Form ES-D-1

- Form ES-D-1 contains:
- Initial Conditions
- Turnover
- Events with Event Descriptions.



Facility: _____ Scenario No.: 1 Op-Test No.: A

Examiners: _____ Operators: _____

Initial Conditions: (IC-14) 70%, MOL, Xenon increasing, B train on service
Power increase in progress

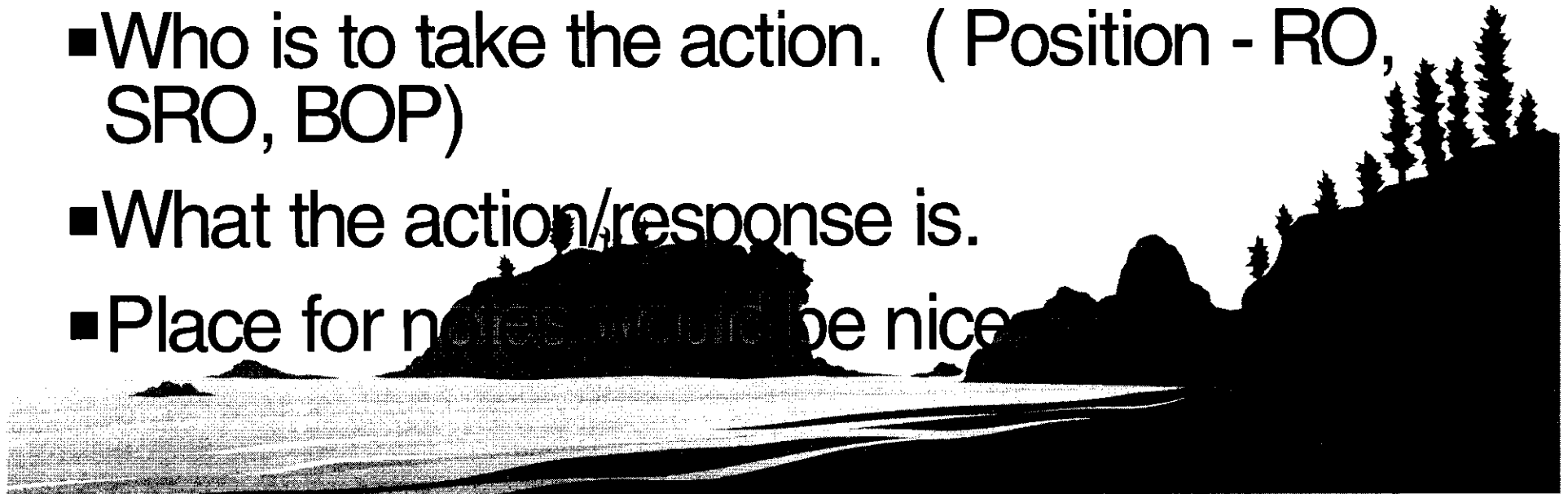
Turnover: Diesel Gen 1-2A OOS for brush repair (OOS 1 hr, ETR 4 hrs)
1A MDAFWP OOS for bearing replacement (OOS 4 hr, ETR 12 hrs)
 1A S/G has 10 gpd tube leakage – steady for 2 weeks
 Thunderstorm warning in effect for southeast Alabama
 Operations Manager directs a power increase at 2 MW/min

Event No.	Malf. No.	Event Type*	Event Description
1	N/A	N/R	Increase Power to 100% at 2 MW/min
2	IMF/PRESS/PRZR	I(RO)	PT-444 Set=100%; Ramp 0s, :PRZR Pressure Xmtr PT-444 Fails HIGH
3	IMF/MISC/SGFP Speed Control	I(BOP)	

Form ES-D-2

Operator Actions

- What do we need on the operator action forms?
- Time block or space for time.
- Who is to take the action. (Position - RO, SRO, BOP)
- What the action/response is.
- Place for notes would be nice.



Form ES-DS-2

Operator Actions

- We need an operator action sheet for every event. (Some events make take more than one sheet)



Op-Test No.: A

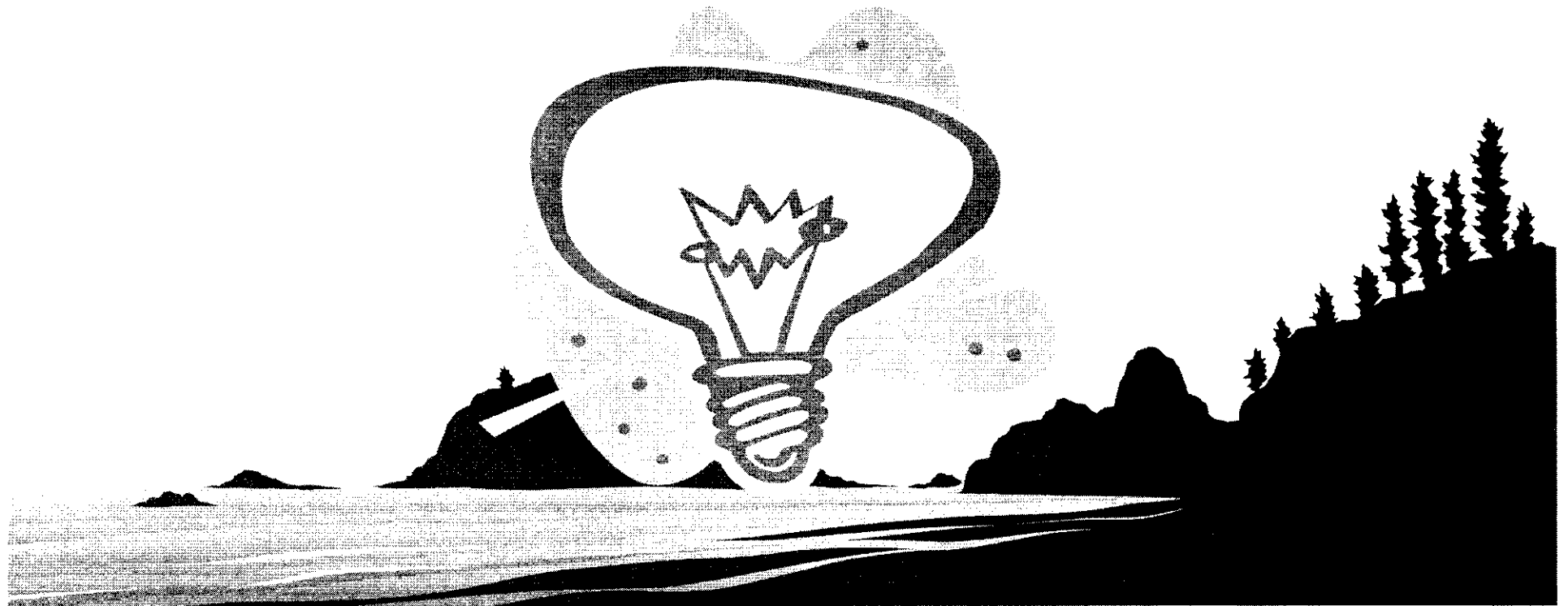
Scenario No.: 2

Event No.: 1

Event Description: Increase power to 100% as directed by Ops Manager.

Time	Position	Applicant's Actions or Behavior
	SRO	Direct ramp of power to 100% at 2 MW/min in accordance with UC Operations, Section 5.1.5
	RO	Initiate dilution: Determine existing RCS boron concentration Determine magnitude of required boron concentration decrease from curves Determine volume of makeup water req'd from dilution nomograph If necessary, adjust LTDN TO VCT FLOW setpoint to prevent com space Set reactor makeup water flow controller and batch integrator to the flow rate and quantity values Place the MAKEUP MODE CONT SWITCH to STOP Position the MKUP MODE SEL SWITHCH to DIL

Several Ideas on Operator Action Sheets!!



Time	Position	Applicant's Actions or Behavior
	SRO	Direct ramp of power to 100% at 2 MW/min in accordance with UC Operations, Section 5.1.5
	RO	<p>Initiate dilution:</p> <p>Determine existing RCS boron concentration</p> <p>Determine magnitude of required boron concentration decrease from curves</p> <p>Determine volume of makeup water req'd from dilution nomograph</p>

Several lines on the bottom of a page
allows us to write as we go.

Op-Test No.: A		Scenario No.: 2	Event No.: 2	Page 1 of 1
Event Description: Pzr pressure Xmtr PT-444 fails HIGH				
Time	Position	Applicant's Actions or Behavior		
	RO	Recognize failure of Pzr pressure Xmtr PT-444 <ul style="list-style-type: none"> - All przr heaters deenergized - Both spray valves open - PORV PCV-444B opens Annunciators: <ul style="list-style-type: none"> - PRZR PORV TEMP HI (HA5) - PRZR PRESS HI-LO (HC1) - PRZR HI-LO PRESS ALERT (HC2) - PRZR CONT PRESS OUTPUT HI (HD3) - REL VLV 444B/445A OPEN (HE1) - PRT TEMP HI (HE3) 		
	SRO	Ensure board operators take immediate actions per ARPs Direct subsequent actions per ARPs		

Large spaces can be left between positions or steps.

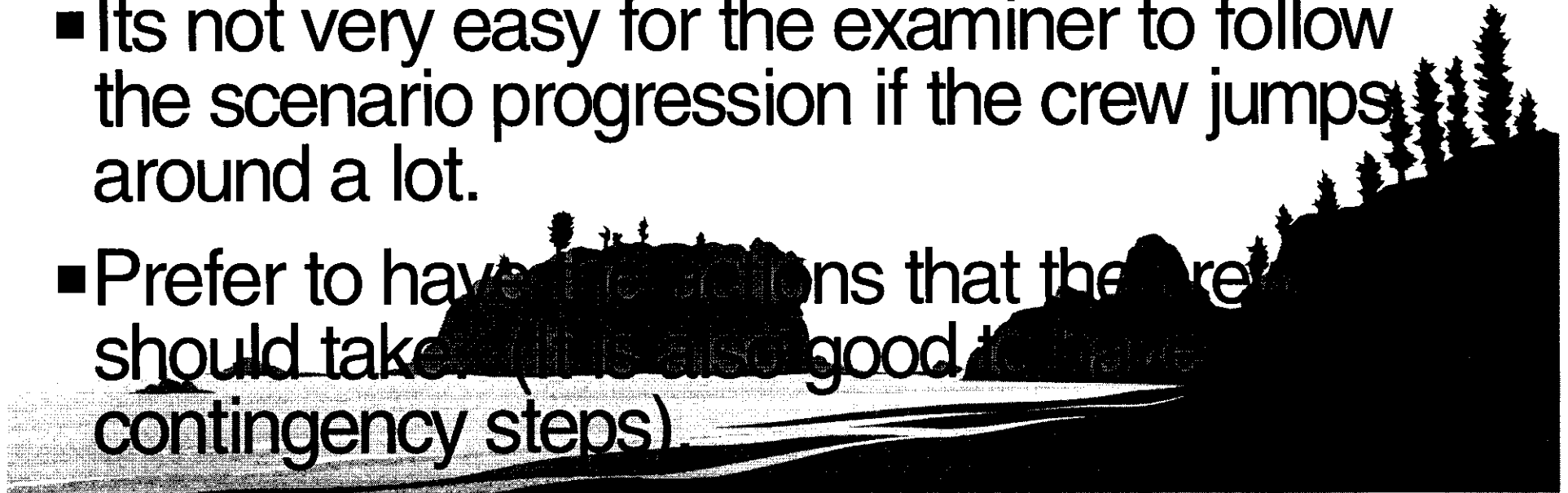
	RO	<p>Determine actual Pzr pressure</p> <p>Close PORV PCV-444B or Block Valve</p> <p>Take manual control of heaters and spray valves; close spray valves</p> <p>Monitor actual pressure against DNB LCO (2209 psig)</p> <p>Return actual pressure to the normal band</p>
	SRO	<p>Notify I&C to determine the cause and correct the fault</p> <p>Refer to LCOs 3.3.1, 3.3.2, and 3.4.1 for actions</p>

Must have a verifiable Action.

Form ES-D-2

Operator Actions

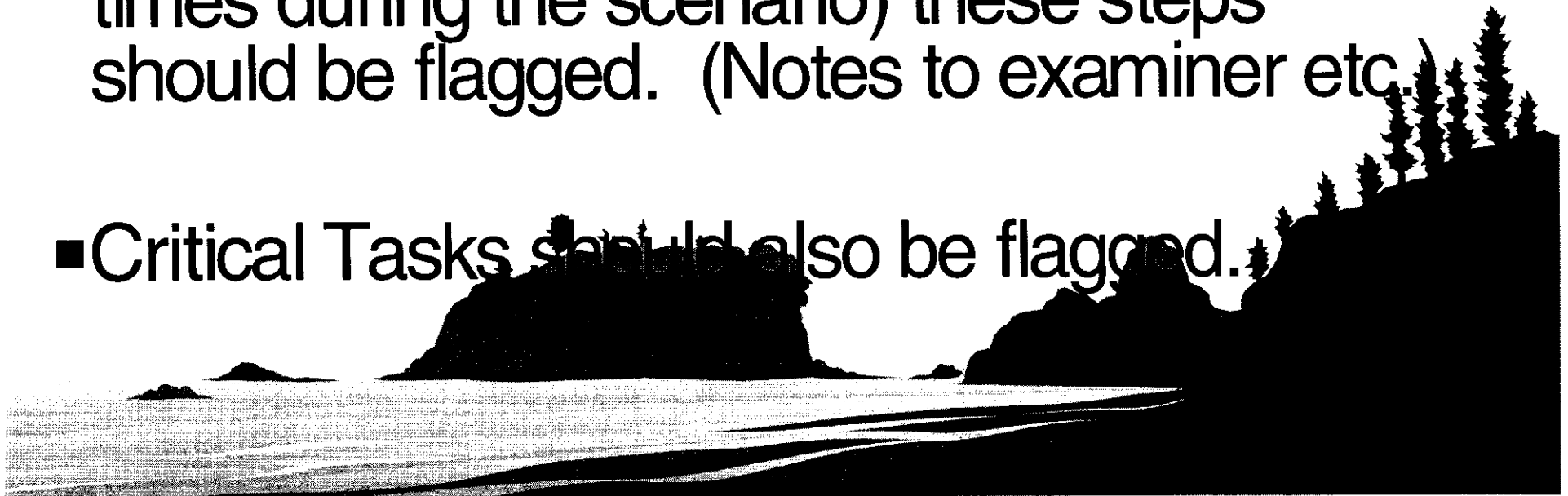
- Use of Procedures in development of D-2 forms.
- Just putting procedures after the events does not really work very well.
- Its not very easy for the examiner to follow the scenario progression if the crew jumps around a lot.
- Prefer to have the actions that the crew should take. (It is also good to have contingency steps).



Form ES-D-2

Operator Actions

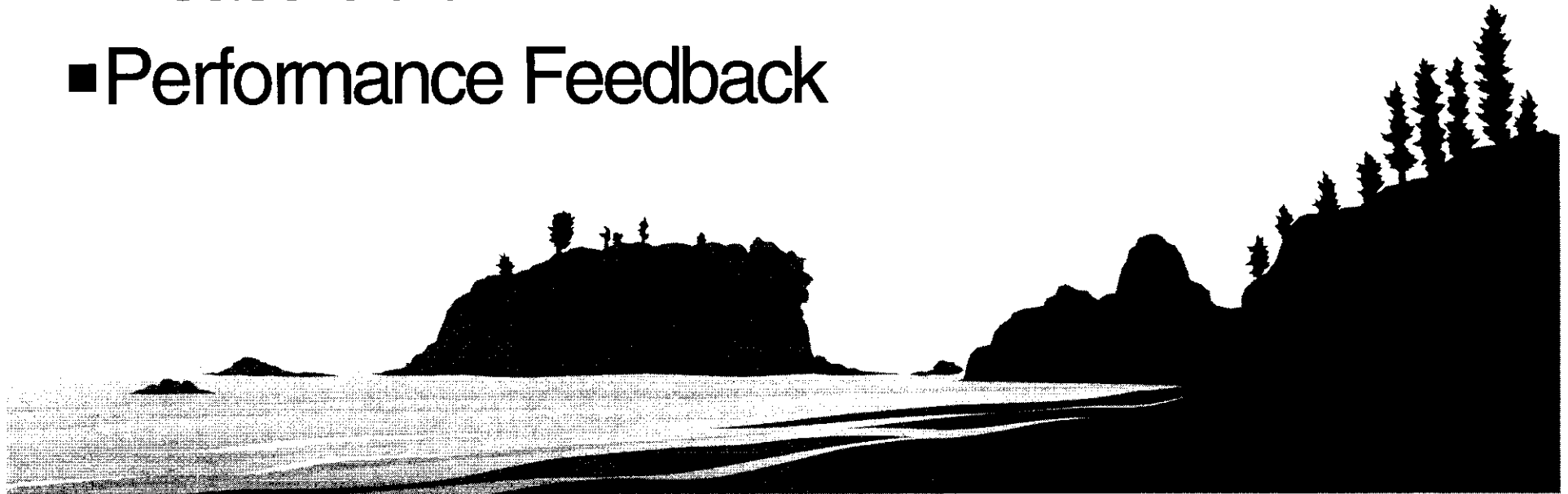
- Actions should be in chronological order.
- However, certain actions may be called for at different times during the scenario, (or several times during the scenario) these steps should be flagged. (Notes to examiner etc.)
- Critical Tasks should also be flagged.



Critical Tasks.

Must Include:

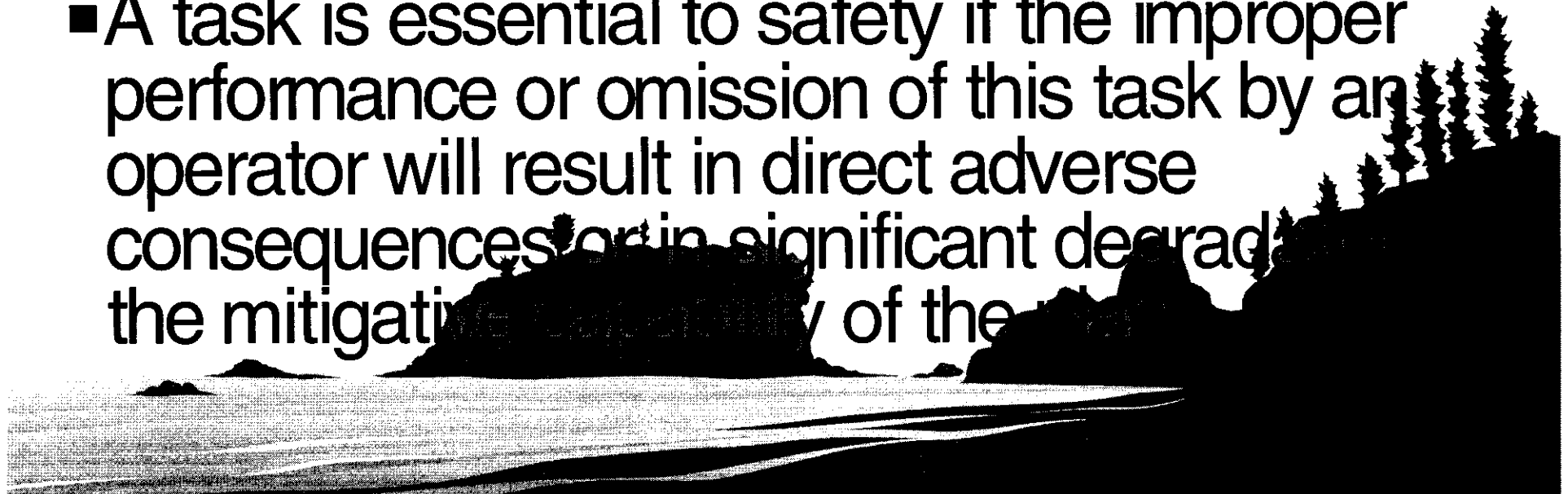
- Safety Significance
- Cuing
- Measurable Performance Indicators
- Performance Feedback



Critical Tasks.

Safety Significance

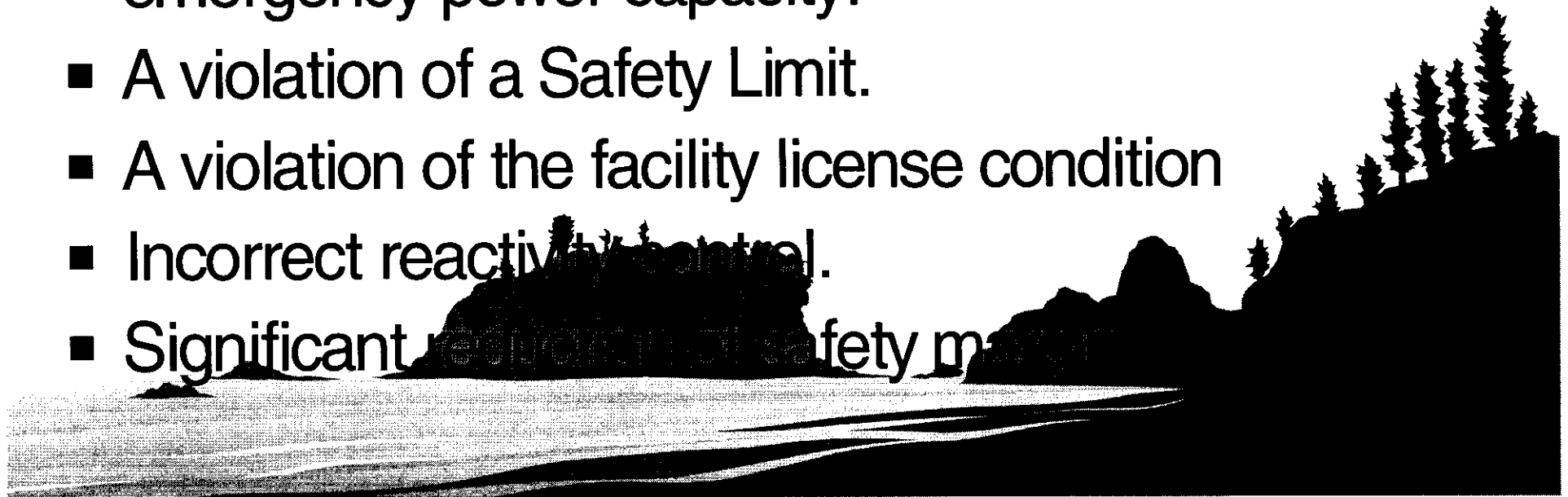
- Each proposed Critical Task should be assessed to ensure that it is essential to safety.
- A task is essential to safety if the improper performance or omission of this task by an operator will result in direct adverse consequences or in significant degradation of the mitigative capability of the system.



Critical Tasks.

Examples

- Degradation of any barrier to fission product release.
- Degraded emergency core cooling system or emergency power capacity.
- A violation of a Safety Limit.
- A violation of the facility license condition
- Incorrect reactivity control.
- Significant reduction of safety margin



Critical Tasks.

Cuing

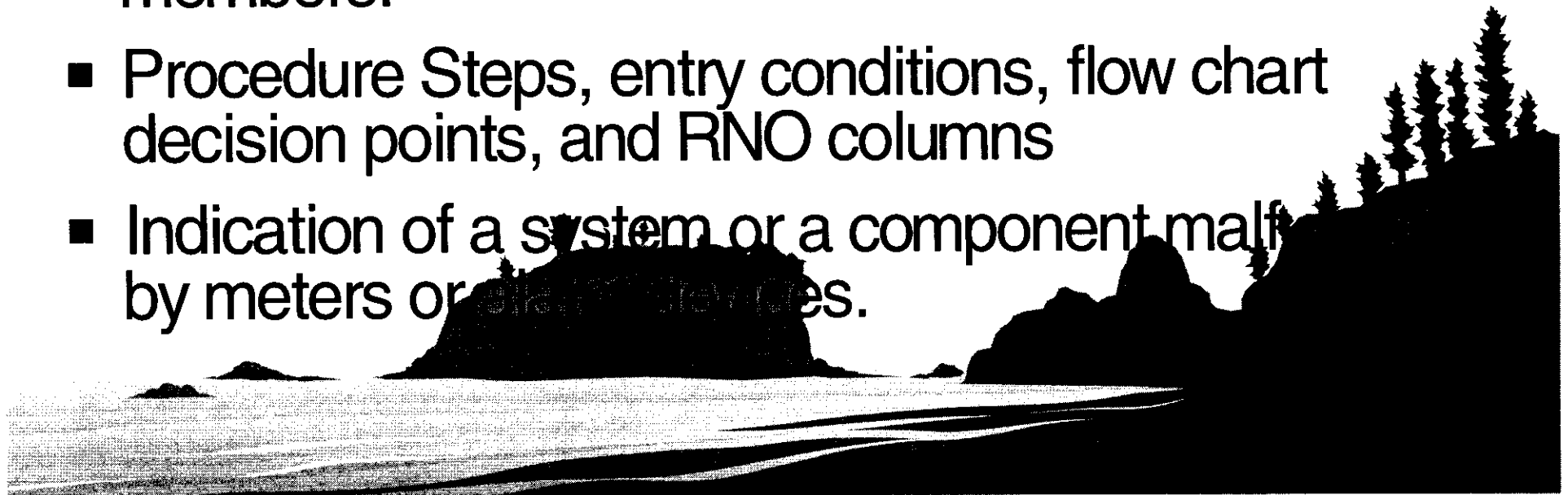
- For a Critical Task to be valid, an external stimulus prompts at least one operator to perform the task.



Critical Tasks.

Cuing

- Appropriate Cues:
- Verbal Direction by, or reports from other crew members.
- Procedure Steps, entry conditions, flow chart decision points, and RNO columns
- Indication of a system or a component malfunction by meters or displays.



Critical Tasks.

Measurable Performance Indicators

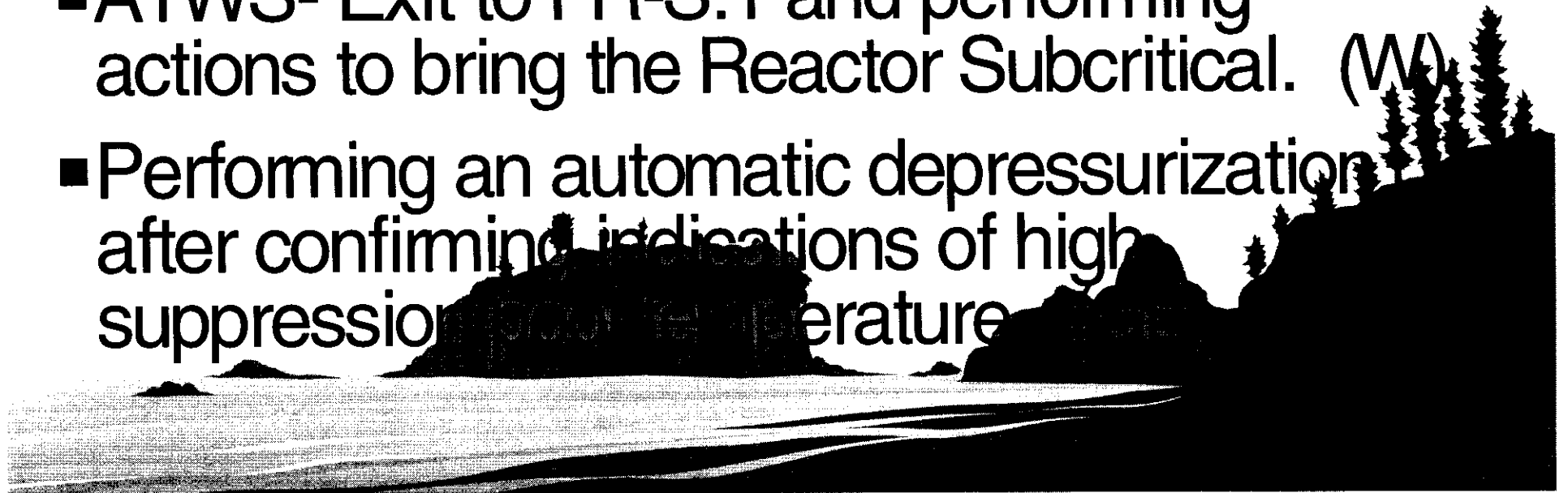
- A measurable performance indicator consists of Positive Actions, that an observer can objectively identify, taken by at least one member of the crew.



Critical Tasks.

Measurable Performance Indicators

- **Examples:**
- Actions taken as the result of transitioning in emergency operating procedures.
- ATWS- Exit to FR-S.1 and performing actions to bring the Reactor Subcritical. (W)
- Performing an automatic depressurization after confirming indications of high suppression pool temperature.

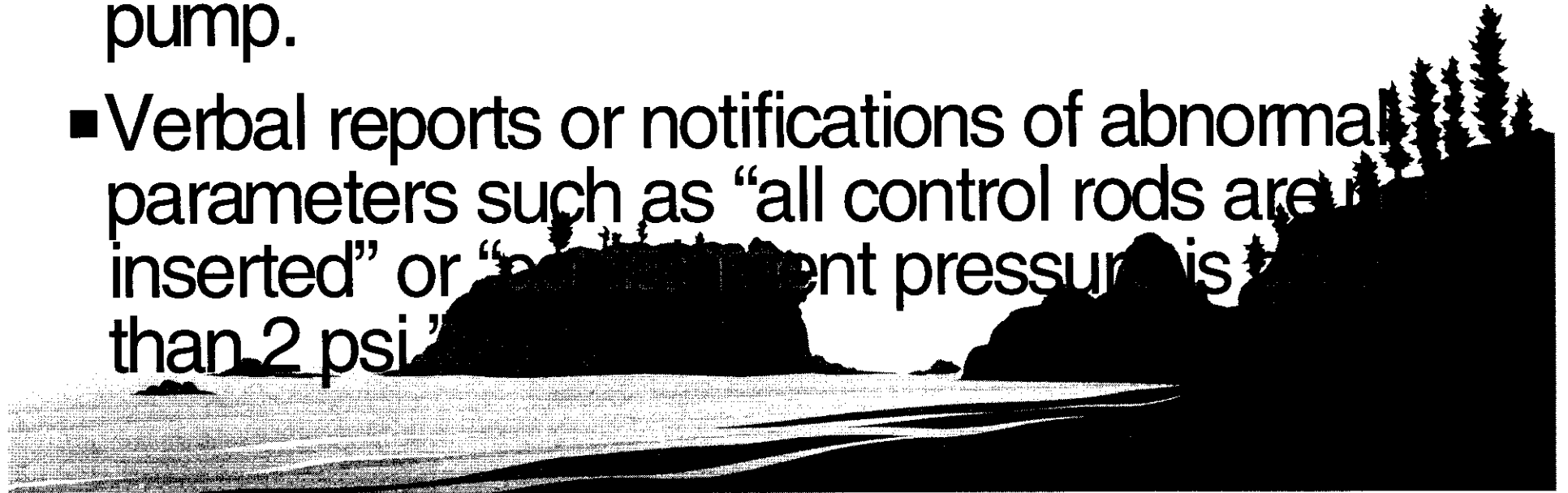


Critical Tasks.

Measurable Performance Indicators

■ Examples:

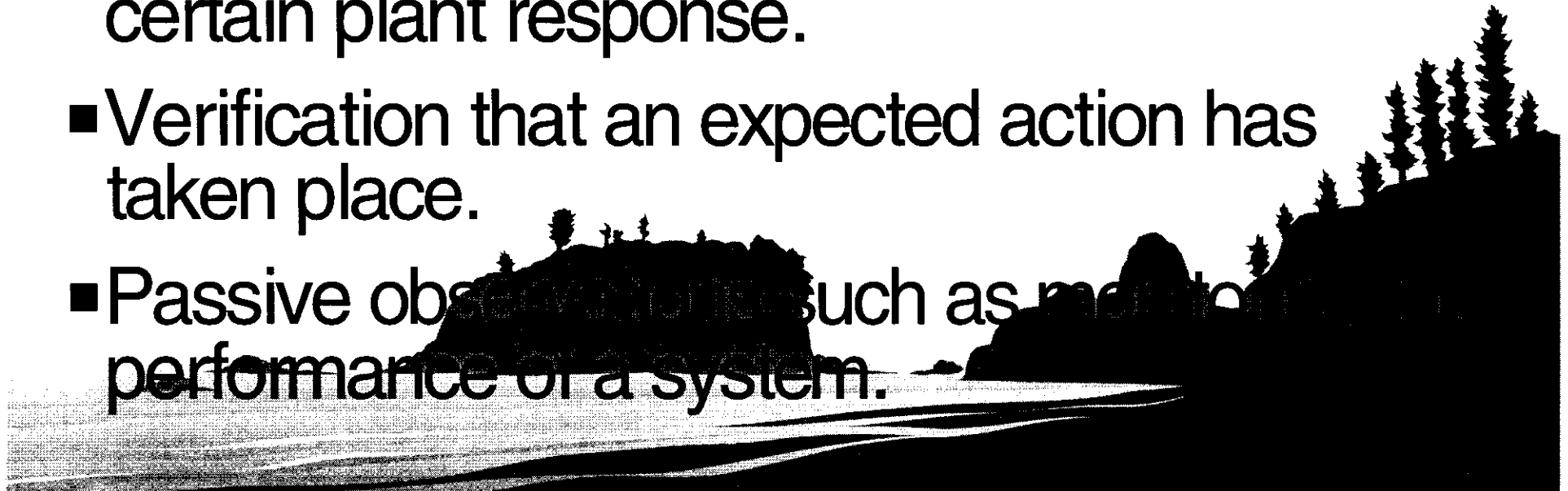
- Control Manipulations such as a required reactor trip/scram, or start of a needed ECCS pump.
- Verbal reports or notifications of abnormal parameters such as “all control rods are inserted” or “primary pressure is less than 2 psi.”



Critical Tasks.

Measurable Performance Indicators

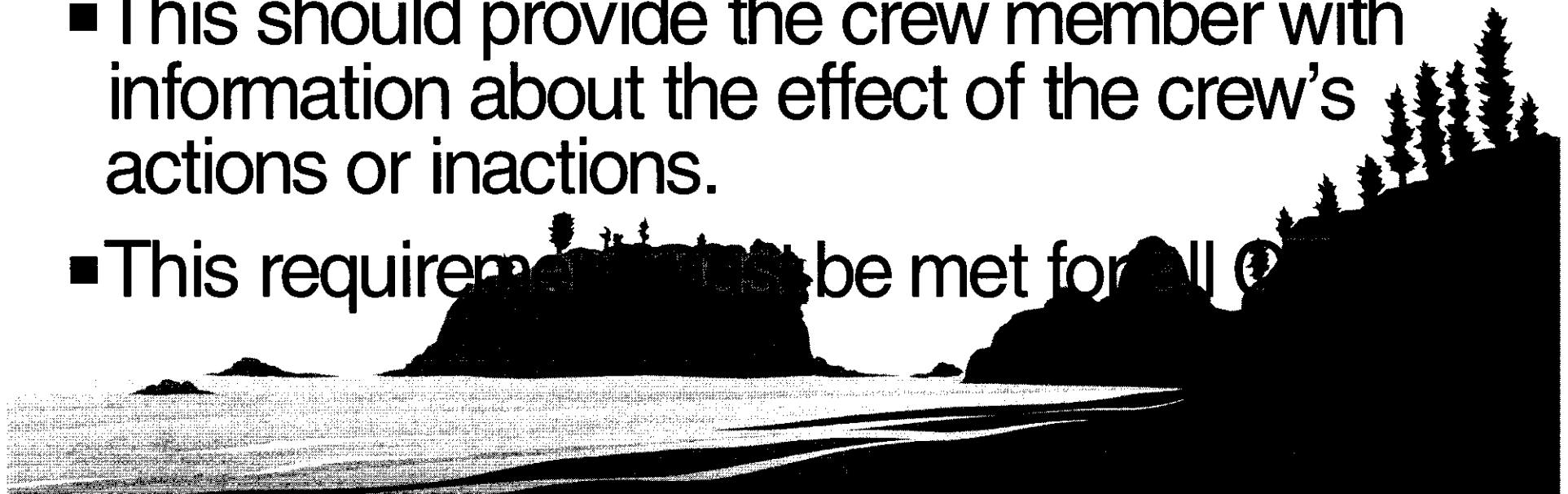
- Examples of indicators that cannot be measured objectively:
- Understanding, such as the significance of a certain plant response.
- Verification that an expected action has taken place.
- Passive observations such as monitoring the performance of a system.



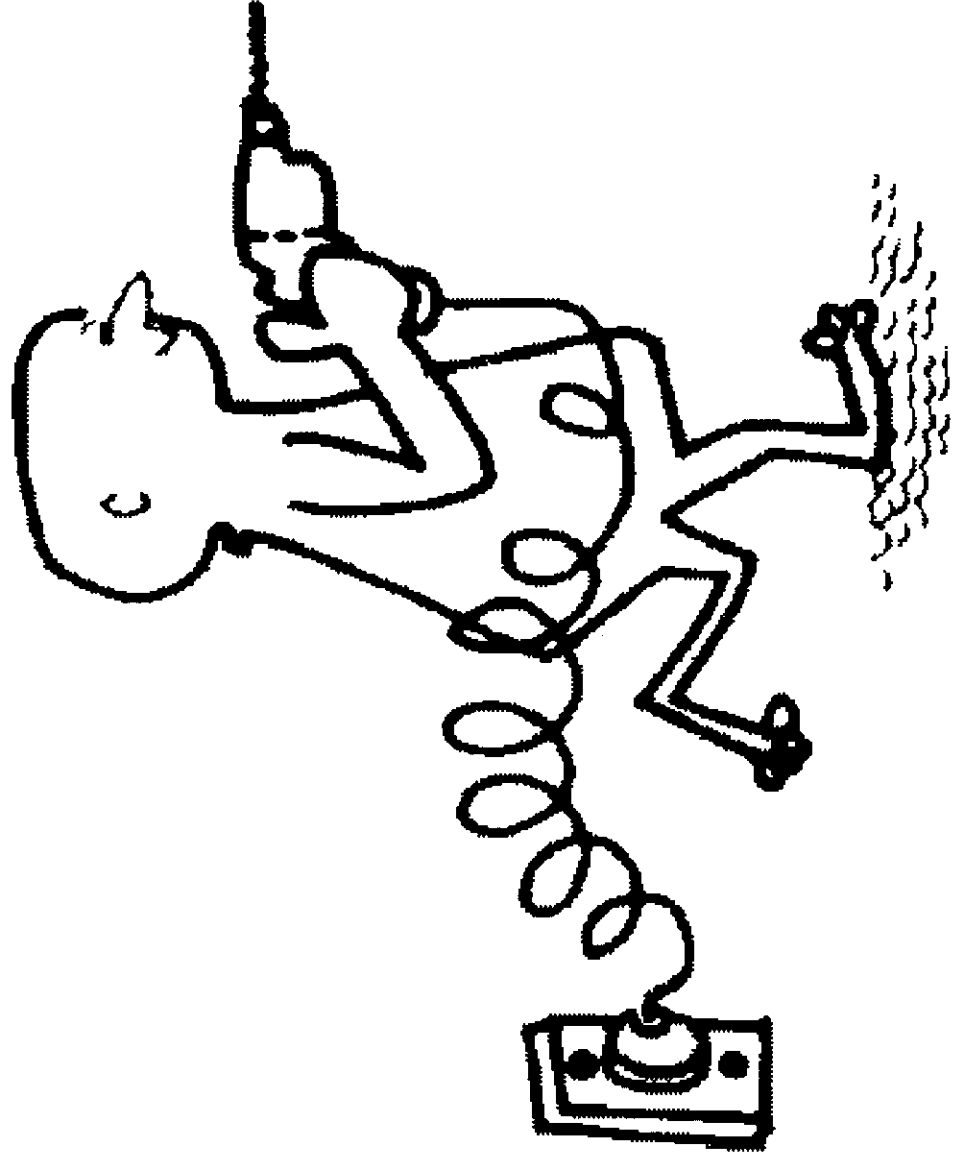
Critical Tasks.

Performance Feedback

- Each CT (critical task) must provide at least one member of the crew with performance feedback.
- This should provide the crew member with information about the effect of the crew's actions or inactions.
- This requirement must be met for all CTs.



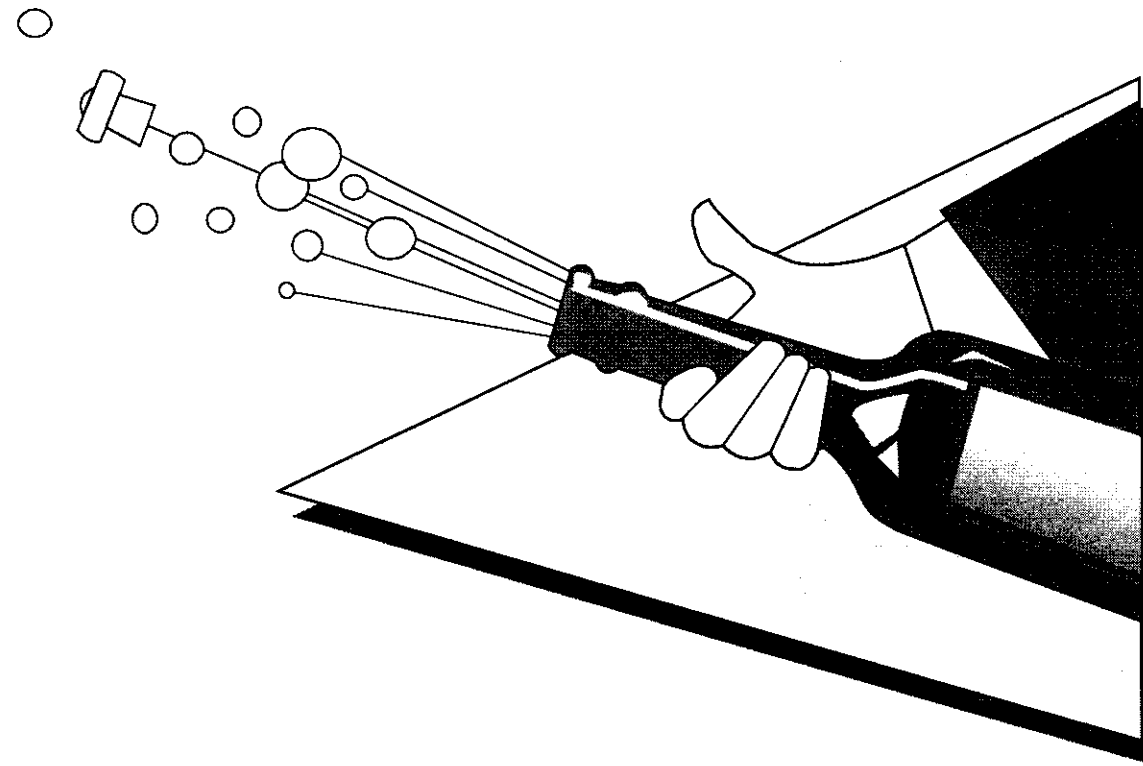
JPM's



JPM,s

- Cue's.
- Standards.
- Critical Steps.





Time to Celebrate !!



INITIAL EXAM

SECURITY



Initial Exam Security

Examples and Documentation in Exam Reports

Ronald F. Aiello, R II OL&HPB

Training Manager's Conference, April 2002

Types of Initial Exam Security Incidents

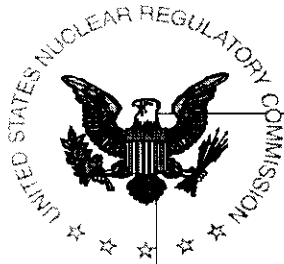
- - Materials not properly locked up or signed out. Loss of Control of Exam Material -Most Events.
- - Materials left unattended - hardcopies, diskettes, Xerox Machines.
- - Use of LAN connected computers.
- - Inadvertent videotaping of prep week activities (and the tape not secured).
- - Non-secure simulator.

- Inappropriate contact between persons w/exam knowledge and license applicants.
- - Sign-Offs, Checkouts, OJT.
- - Training of applicants.
- - Evaluation of applicants.
- Unauthorized personnel entry into the simulator during prep or exam week.



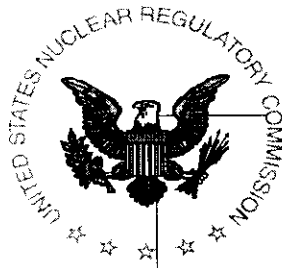
Why Document Exam Security in Exam Reports?

- Commitment made to document Exam Security in response to a OIG audit of OL done in 2000.
- NUREG-1021 ES-501 E.3.a requires reporting exam security issues; Supplement 1 requires a more broad reporting on exam security.
- If exam security findings rise to the level of a 55.49 violation, then documentation is required.
- MC 0610* (0612) would NOT require reporting non-violation exam security findings.



What if the exam is incident free

- NUREG-1021 (Supp. 1) ES-501 E.3.a states that an overview of exam security measures and activities is to be documented.
- Consistent with the OIG audit response and MC0610*, identify within the “Scope” section those security items and activities that were inspected.
- If the exam was “free” of any security issues or incidents, then in the “Findings” section, report “no findings.”
- This is consistent with 0610* and the documentation in *Inspection* reports.



What if a Security Incident (or Issue) Occurs?

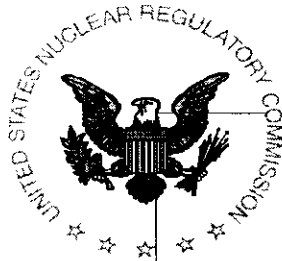
- Regardless of reporting criteria, do what is best to protect the integrity of the exam -including contacting IOLB where warranted.
- First decision point - 55.49 violation or not? (55.49 will be discussed on the following slides)
- For non-violations, we are *considering* documenting any security incidents or issues in the “Findings” section.



- This is where *exam* (not *inspection*) reports are allowed to deviate from MC 0610*. This deviation is justified due to an OIG audit commitment and NUREG-1021 requirements.
- These “non-violation” findings have no color, do not go in the cover letter, do not go in the “Summary of Findings”, and do not go in the PIM.



- To our knowledge, only one exam has ever been “affected,” i.e., a case where *only after* the exam has been given do we discover some kind of unfair advantage.
- NRC and licensee’s take action at the “**could**” level (we replace test items if an applicant “**could**” have learned about the exam) to avoid the possibility of “**would**”.
- If an incident occurs where we feel strongly that an unfair advantage **would** have occurred or **has** occurred, then we would proceed with a violation.
- **Consistent with Requal SDP:** Inadvertent compromise and test items replaced BEFORE the exam - NO finding or violation in Requal.



Security Incidences

Date: 3/20/98

Location: Clinton, IR 50-461/97313

Description:

During validation and administration of the examination, a maintenance contractor entered the simulator, bypassing signs on the simulator door that restrict entry to authorized personnel only.

Examination materials were open; however, the contractor was removed from the simulator without viewing any portion of examination material.



Security incidences

- Location: Clinton, IR 50-461/97313 (Continued)

Corrective action:

The contractor was removed from the simulator without viewing any portion of examination material.



Security incidences

- Date: 4/13/98
Location: Quad Cities, IR 50-254/98303
Discription:

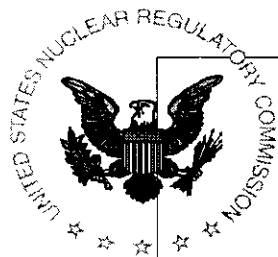
A QCNPS trainer was assigned to develop an Admin JPM. The trainer signed into his password protected hard drive on the QCNPS Local Area Network (LAN) computer and began work on the assignment. At the end of the day the trainer saved his work in a computer file and signed off the LAN computer. When the trainer returned to work and tried to access the computer file, the trainer was unable to locate the file.



Security incidences

- Location: Quad Cities, IR 50-254/98303 (Continued)

Since the trainer was unable to locate the file, and the trainer was using the LAN, the assumption was made that the JPM was uncontrolled and a different Admin JPM was developed to ensure examination integrity.



Security incidences

- Location: Quad Cities, IR 50-254/98303 (Continued)

Discription:

Subsequent to the development and use of the replacement JPM, the trainer located the missing file within his password protected area of the LAN.

- Corrective Action:

A different Admin JPM was developed to ensure examination integrity.



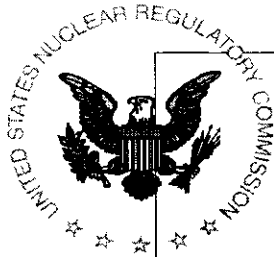
Security incidences

- Date: 10/25/99
Location: Beaver Valley, IR 50-334/99009

Discription:

Overlap of REQUALIFICATION exams between crews. The facility had administered identical written and operating exam “packages” to multiple crews spread out over multiple weeks.

- Package “A”: administered to three different operating crews during different exam weeks.
- Package “B”: administered to three different staff crews during different exam weeks.



Security incidences

- Location: Beaver Valley, IR 50-334/99009, (Continued)

Discription:

Package "C": administered to two different operating crews on different weeks and was scheduled to be given to a third operating crew.

- Package "D": administered to two different staff crews during different weeks, and was scheduled to be given to a third staff crew.
- Package "E": was scheduled to be given to only one staff crew.



Security incidences

- Location: Beaver Valley, IR 50-334/99009 (Continued)

Discription:

Although there was no evidence of any actual compromise, operators stated that they felt no restrictions on discussing the contents of their exams with other operators on other crews who had not yet taken an exam. A potential for exam compromise existed, due to the licensee's repetition of exam materials to multiple crews over multiple weeks.



Security incidences

- Location: Beaver Valley, IR 50-334/99009 (Continued)

Corrective Action:

NRC issued an NCV, for a violation of 10 CFR 55.49.

- Licensee revised the content of the exams yet to be given.
- Licensee entered this into their corrective action program.



Security incidences

■ Date: 11/15/99

Location: St. Lucie

Discription:

Licensee personnel lost material for an upcoming exam in an Atlanta hotel lobby. Licensee personnel from St. Lucie reviewed an upcoming exam with Region II personnel in the Region II office. The licensee personnel brought the completed written exam, sample plans, and other exam info with them. After meeting with Region II personnel, the St. Lucie personnel checked into an Atlanta hotel.



Security incidences

- Location: St. Lucie (Continued)

Discription:

While checking in, one of the licensee persons placed a binder with half of the written exam questions, and the written exam sample plans on an end table in the hotel lobby.

- The licensee personnel then proceeded to their hotel rooms, leaving the binder on the end table in the lobby. At check-out the following morning, the licensee realized that the binder was missing, commenced a search, and notified hotel management/security.



Security incidences

- Location: St. Lucie (Continued)

Discription:

The binder was never located, and the licensee informed the resident inspector and Region II Operations Branch.

- Corrective Action:

After discussions between Region II, Headquarters, and St. Lucie, one half of the missing questions were replaced.



Security incidences

■ Date: 3/22/00

Location: Duane Arnold

Description:

Access was inadvertently allowed to previously restricted computer files. The licensee performed software changes on a mainframe computer that inadvertently allowed access to previously restricted files. The software changes were done on a Sunday, and the licensee discovered on Monday the ability to access the files. The content of these files included:



Security incidences

- Location: Duane Arnold (Continued)

Discription:

- an old licensed operator question bank, that had since been closed out.
- - current exam question banks for other groups (e.g., maintenance personnel)
- The current licensed operator bank is maintained on a separate stand alone computer, so this was not really a licensed operator concern.



Security incidences

- Location: Duane Arnold (Continued)

Corrective Action:

The licensee was checking to see who, if anyone, accessed these previously restricted files.

- No additional followup was conducted by the NRC.



Security incidences

- Date: 12/28/99, 1/27/00, 2/1/00

Location: Fermi

Discription:

Three Exam Security Events

- 1. An Exam Room locker was found unlocked (12/28/99). The locker was inside the locked exam room. The licensee inventoried the locker, and found no exam material missing or disturbed. Also, the licensee verified that there were no door alarms for the exam room. The licensee notified Chief Examiner.



Security incidences

- Location: Fermi (Continued)

Description:

2. A diskette containing simulator exam material was inadvertently left in the simulator (1/27/00). The diskette was left in the simulator workstation by the facility simulator operator who had just finished scenario validation with the NRC. On the following morning, a different simulator operator noticed the diskette while starting up the simulator. The licensee notified the region that the diskette containing scenario information had inadvertently been left in the workstation, and had not been properly secured.



Security incidences

■ Location: Fermi (Continued)

Discription:

3. An unauthorized person entered the simulator during an NRC exam, violating posted signs. The person was not on the security agreement. The person was immediately escorted out of the simulator by licensee personnel.



Security incidences

- Location: Fermi (Continued)

Corrective Action:

The facility developed new scenarios, to replace those on the improperly secured diskette. Region III examiners went to the station one day prior to the start of the exam to validate and quality check the new scenarios.

- The NRC issued NCV (10CFR 55.49). Licensee entered these exam security issues into their corrective action program.



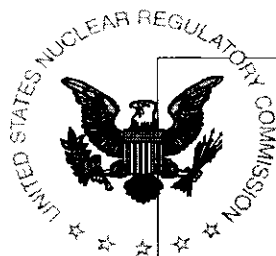
Security incidences

■ Date: 5/30/00

Location: Clinton

Discription:

Exam prep activities in the simulator were inadvertently videotaped. On 5/30/00, the licensee started videotaping a training session, which occurred prior to the start of that day's NRC exam validation activities. However, the video machine was not stopped after the training session, which resulted in several hours of NRC exam validation being inadvertently recorded.



Security incidences

- Location: Clinton (Continued)

Discription:

On 5/31/00, a licensee trainer not on the security agreement reviewed the videotape, and discovered that NRC exam validation activities had been inadvertently recorded.



Security incidences

- Location: Clinton (Continued)

Discription:

After discovering the videotape, the licensee secured the tape and all other simulator videotapes. The chief examiner reviewed the tape

- Corrective Action:

The NRC was satisfied that only the prep of JPMs was taped, the licensee developed new JPMs. These new JPMs were subsequently validated by the NRC.



Security incidences

- Location: Clinton(Continued)

Corrective Action:

The NRC issued NCV (10CFR 55.49) -Green Finding.
The Licensee entered this issue into their corrective action program.



Security incidences

- Date: 8/31/00
Location: Vermont Yankee

Discription:

The Systems JPM Outline was unsecured following NRC validation of an upcoming exam, an NRC inspector (conducting requal inspection) discovered the one-page Systems JPM outline in an unsecured room in the training building. The NRC inspector notified the licensee and a member of the NRC exam team. The facility licensee could not demonstrate that access to the room where the outline was found was controlled or restricted.



Security incidences

- Location: Vermont Yankee(Continued)

Corrective Action:

The NRC examiners and the facility developed 10 new system JPMs.



Security incidences

■ Date: 9/16/00

Location: Waterford

Discription:

A licensee representative with knowledge of an upcoming NRC exam, and was signed on to Exam Security, signed off five signatures on an applicant's qual. card. Some of the items signed off included the applicant's knowledge of Conduct of Ops procedure. The licensee investigated this issue and informed the NRC.



Security incidences

- Location: Waterford (Continued)

Corrective Action:

The Licensee determined that the sign-offs could possibly effect admin topic A.1 and one written exam question. The test items were replaced.

- The NRC documented this observation in the exam report, but no “color” or NCV was issued.



Security incidences

- Date: Various, 9/22/00

Location: Calvert Cliffs

Discription:

Four Exam Security Issues

- 1. A licensee instructor made copies of the NRC SRO exam, to be administered later that day. The SRO exam was left unattended in the copy machine, and discovered by a secretary ten minutes later. The secretary returned the exam to the training department. The NRC was notified ten minutes later.



Security incidences

- Location: Calvert Cliffs (Continued)

Discription:

The NRC determined that no compromise had occurred, and that only a very low *potential* for compromise had occurred, since the exam was left unattended for only ten minutes, the Xerox room was in a low traffic area, and the applicants were apparently not in the vicinity of the Xerox room.



Security incidences

- Location: Calvert Cliffs (Continued)

Discription:

2. On 9/13 a hard copy of the simulator scenarios was signed out and removed from a locked cabinet in the exam development room. These scenarios were reviewed on 9/13, 9/14, and 9/20. Although the scenarios were apparently returned to the locked cabinet at the end of each day, the scenarios were not signed back in until 9/20.

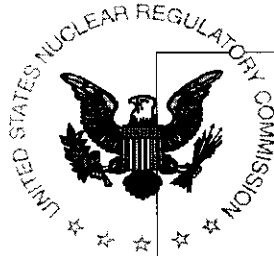


Security incidences

- Location: Calvert Cliffs (Continued)

Discription:

Contrary to facility procedures, the scenarios were not properly logged when removed from the exam room, to indicate the scenarios' custodian, location, and duration of removal from the exam room. The NRC determined that no compromise had occurred, and that only a very low *potential* for compromise had occurred, since the scenarios appeared to be either in somebody's custody or in the locked cabinet from 9/13 to 9/20.



Security incidences

■ Location: Calvert Cliffs (Continued)

Discription:

3. A licensee scenario writer used his desktop LAN connected computer to develop and store scenarios for an upcoming NRC exam. The scenario writer stored the scenarios on the C drive, and later deleted the scenarios on the C drive. Although the computer's C drive showed no scenarios, all 5 scenarios were located in the computer's recycle bin.



Security incidences

- Location: Calvert Cliffs (Continued)

Discription:

The NRC determined that no compromise had occurred, and that only a very low *potential* for compromise had occurred, since it would require very specialized computer knowledge to access this computer's C drive from a remote location.

- 4. Exam materials are password protected - this would require very specialized computer knowledge to obtain unauthorized access.



Security incidences

- Location: Calvert Cliffs (Continued)

Corrective Action:

The Licensee investigated, and entered these issues into their corrective action program.

- *For issues 1 through 3*

The NRC identified three findings of no color and three NCVs (10 CFR 55.49); one for each issue.

- *For issue 4*

NRC identified a minor violation (10 CFR 55.49) associated with the requl. training exam materials.



Security incidences

- Date: Date: June 20 - July 27, 2000

Location: Cooper Nuclear Station

Discription:

The licensee's development of the biennial requalification examinations and subsequent validation methodology resulted in an inadvertent compromise of the examinations.



Security incidences

- Location: Cooper Nuclear Station (Continued)

Discription:

Additionally, the licensee failed to take appropriate corrective actions following identification of the compromise. In August, 2000, the licensee performed a review of the examinations due to an identified potential for examinee pre-conditioning based on the validation of the examinations, but failed to identify that the results of several examination questions supported the conclusion that an actual compromise did take place for several questions.



Security incidences

- Location: Cooper Nuclear Station (Continued)

Discription:

The correct action would have been to remove questions where the results indicated a compromise may have occurred, and regrade the affected examinations. Failure to take this action resulted in at least two licensed operators (who would have failed the biennial requalification examination) being returned to shift without retraining and reevaluation as required.



Security incidences

- Location: Cooper Nuclear Station (Continued)

Corrective Action:

Between June 20 and July 27, 2000, the facility licensee compromised the integrity of the requalification biennial written examinations required by 10 CFR 55.59.

Specifically, the facility licensee developed weekly requalification examinations that were similar to each other, then allowed some operators to validate at least 50 percent of the next weekly examination the day before taking their own examination. This affected the equitable and consistent administration of the examination.



Security incidences

- Location: Cooper Nuclear Station (Continued)

Corrective Action:

This violation is associated with a white significance determination process finding (50-298/0112-01).

- The Notice of Violation is considered escalated enforcement action because it is associated with a white finding.