Facility: MS # 2 Date of Examination: WRITTEN 10/25/02 VALIDATION 11/12/02 OPERATING 12/16/02

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)	[illegible]
-120	2. NRC examiners and facility contact assigned (C.1.d; C.2.e) GOAL- 6/29	6/4 [illegible]
-120	3. Facility contact briefed on security & other requirements (C.2.c) GOAL 6/29	6/4 [illegible]
-120	4. Corporate notification letter sent (C.2.d) GOAL 6/29	6/4 [illegible]
[-90]	[5. Reference material due (C.1.e; C.3.c)] GOAL 7/26	[illegible]
-75	6. Integrated examination outline(s) due (C.1.e & f; C.3.d) GOAL 8/7	7/19 [illegible]
-70	7. Examination outline(s) reviewed by NRC and feedback provided to facility licensee (C.2.h; C.3.e) GOAL 8/12	[illegible] 8/13
-45	8. Proposed examinations, supporting documentation, and reference materials due (C.1.e, f, g & h; C.3.d) GOAL 9/9	8/21 Written [illegible] 8/22-8/28 OPS [illegible]
-30	9. Preliminary license applications due (C.1.l; C.2.g; ES-202) 9/25	[illegible]
-14	10. Final license applications due and assignment sheet prepared (C.1.l; C.2.g; ES-202) 10/11	[illegible]
-14	11. Examination approved by NRC supervisor for facility licensee review (C.2.h; C.3.f)	[illegible]
-14	12. Examinations reviewed with facility licensee (C.1.j; C.2.f & h; C.3.g)	[illegible]
-7	13. Written examinations and operating tests approved by NRC supervisor (C.2.i; C.3.h)	[illegible]
-7	14. Final applications reviewed; assignment sheet updated; waiver letters sent (C.2.g, ES-204)	[illegible]
-7	15. Proctoring/written exam administration guidelines reviewed with facility licensee and authorization granted to give written exams (if applicable) (C.3.k)	[illegible]
-7	16. Approved scenarios, job performance measures, and questions distributed to NRC examiners (C.3.i)	[illegible]

* 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.

[ ] Applies only to examinations prepared by the NRC.

Facility: Date of Examination:

Item	Task Description	Initials a	Initials b*	Initials c
1. WRITTEN	a. Verify that the outline(s) fit(s) the appropriate model per ES-401.	RNS	MJW	JA
	b. Assess whether the outline was systematically and randomly prepared in accordance with Section D.1 of ES-401 and whether all knowledge and ability categories are appropriately sampled.	RNS	MJW	JA
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	RNS	MJW	JA
	d. Assess whether the repetition from previous examination outlines is excessive.	RNS	MJW	JA
2. SIM	a. Using Form ES-301-5, verify that the proposed scenario sets cover the required number of normal evolutions, instrument and component failures, and major transients.	RNS	MJW	JA
	b. Assess whether there are enough scenario sets (and spares) to test the projected number and mix of applicants in accordance with the expected crew composition and rotation schedule without compromising exam integrity; ensure each applicant can be tested using at least one new or significantly modified scenario, that no scenarios are duplicated from the applicants' audit test(s)*, and scenarios will not be repeated over successive days.	RNS	MJW	JA
	c. To the extent possible, assess whether the outline(s) conform(s) with the qualitative and quantitative criteria specified on Form ES-301-4 and described in Appendix D.	RNS	MJW	JA
3. W/T	a. Verify that: (1) the outline(s) contain(s) the required number of control room and in-plant tasks, (2) no more than 30% of the test material is repeated from the last NRC examination, (3)* no tasks are duplicated from the applicants' audit test(s), and (4) no more than 80% of any operating test is taken directly from the licensee's exam banks.	RNS	MJW	JA
	b. Verify that: (1) the tasks are distributed among the safety function groupings as specified in ES-301, (2) one task is conducted in a low-power or shutdown condition, (3) 40% of the tasks require the applicant to implement an alternate path procedure, (4) one in-plant task tests the applicant's response to an emergency or abnormal condition, and (5) the in-plant walk-through requires the applicant to enter the RCA.	RNS	MJW	JA
	c. Verify that the required administrative topics are covered, with emphasis on performance-based activities.	RNS	MJW	JA
	d. Determine if there are enough different outlines to test the projected number and mix of applicants and ensure that no items are duplicated on successive days.	RNS	MJW	JA
4. GENERAL	a. Assess whether plant-specific priorities (including PRA and IPE insights) are covered in the appropriate exam section.	RNS	MJW	JA
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.	RNS	MJW	JA
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	RNS	MJW	JA
	d. Check for duplication and overlap among exam sections.	RNS	MJW	JA
	e. Check the entire exam for balance of coverage.	RNS	MJW	JA
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	RNS	MJW	JA

	Printed Name / Signature	Date
a. Author	Richard N Spurr	6/5/02
b. Facility Reviewer(*)	MICHAEL J. WILSON	6/17/02
c. Chief Examiner	JOHN G. CAMUSO	8/8/02
d. NRC Supervisor	R.J. Conte	8/11/02

(*) Not applicable for NRC-developed examinations.

2002 Millstone 2 Initial Exam

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of _____ as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC.Furthermore, I am aware of the physical security measures and requirements (as documented in the facility licensee's procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of _____. From the date that I entered into this security agreement until the completion of examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations, except as specifically noted below and authorized by the NRC.

PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE/NOTE
1. Michael G. Manolakis	Site Services Admin.		1/14/02		1/6/03
2. Richard N. Spurr	OTB2 Senior Instructor		1/14/02		12/28/02
3. Richard J. Ashey	OTB2 Senior Instructor		1/14/02		12/30/02
4. PETE PAHLSSON	ADMIN SUPPORT		1-16-02		12/30/02
5. Jacqueline M. McCray	Process Consultant III	Jacqueline M. McCray	1-17-02	Jacqueline M. McCray	12/23/02
6. William H. Souder, III	MP2 SOM		4/10/02		12/30/02
7. MICHAEL J. WILSON	MANAGER NUCLEAR TRNG		6/12/02		1/2/03
8. MARTIN EWERS	UNIT Supervisor.		7/23/02		1/23/03
9. Leonard E. Mausteller	Control Operator		7/25/02		1-13-03
10. H. Gary Huang	SCE Engineer		8/8/02		12/30/02
11. Mark Munro	SCE Tech		8/8/02		12/30/02
12. ARTHUR A. WICKSON	SCE ENGINEER		8/8/02		12/30/2002
13. Todd Perkins	Control Operator		8/12/02		12/30/02
14. Shih K CHANG	SCE engineer		8/26/02		12/23/02
15. Robert Royce	Millstone 3 Instructor		8-28-02		1-2-3

NOTES:

** In-house written administered 10/25/02
Operating test administered 12/16 → 12/20/02

* Tentative Schedule
In-house exams 9/23/02
NRC written 11/12/02

2002 Millstone 2 Initial Exam

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of * as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC.Furthermore, I am aware of the physical security measures and requirements (as documented in the facility licensee's procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of _____ From the date that I entered into this security agreement until the completion of examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations, except as specifically noted below and authorized by the NRC.

	PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE	NOTE
1.	MIKE SIEBERT	SM	MJST	9/5/02	MJST	1/2/03	
2.	CATHY L SANDERS	control operator	Cathy L Sanders	10/14/02	see attachment		①
3.	BRIAN GRAYNICK	NUCLEAR UNIT SUPERVISOR	[illegible]	11/13/02	[illegible]	1/13/03	
4.	Zachary [illegible]	2/US	[illegible]	11/13/02	[illegible]	1/6/03	②
5.	Timothy L Hall	U2 CO	[illegible]	11/19/02	[illegible]	1/2/03	
6.	Douglas Funk	Reactor Operator	[illegible]	11/19/02	[illegible]	1/6/03	
7.	Brad Horner	Supervisor	[illegible]	11/20/02	[illegible]	12/23/02	
8.	Bruce Ferguson	US	[illegible]	11/26/02	[illegible]	1/13/02	
9.	[illegible]	Instructor	[illegible]	12/17/02	[illegible]	12/23/02	
10.	Stephen M. Dean	Instructor	[illegible]	12/17/02	[illegible]	12/23/02	
11.	John W. [illegible]	Instructor	[illegible]	12/17/02	[illegible]	12/23/02	
12.	Pete Strickland	U.S.	[illegible]	12-17-2	[illegible]	12/30/2	
13.	Cha-Hsiang Tan	Software Engineer	Cha-Hsiang Tan	12/18/02	Cha-Hsiang Tan	12/30/02	
14.	Timothy E. Crowley	U2 Inst.	Timothy E Crowley	12/18/02	Timothy E Crowley	1/6/03	
15.	Scott R Howes	Control OP	Scott R Howes	12-16-02	Scott R Howes	12-30-02	

NOTES: ① See attached addendum re: limited area of knowledge
② lines are swapped

* In-house written scheduled 10/25/02
Operating test scheduled for 12/16/02 thru 12/20/02

For Comment and Use

1

MP2 LOIT 2002 Security Agreement Addendum

Cathy Sanders, an RO licensed Control Operator on MP2, signed onto the MP2 LOIT 2002 Security Agreement on 10/14/2002 for the purpose of reviewing the written exam.

She has had no access to any of the materials that comprise the Operating Test, (scenarios, in-plant JPMs, simulator JPMs, and Admin JPMs).

With the written exam completed she no longer possesses specialized knowledge about the NRC licensing exam.

She may therefore sign off of the security agreement and participate in practice sessions with the license candidates on the simulator.

Per telecon between Rich Spurr of MP2 OTB and the lead NRC examiner, John Caruso on 11/26/02, this issue was discussed and agreed to be acceptable.

Cathy L Sanders
12/13/02

ES-301 Operating Test Quality Checklist Form ES-301-3

Facility: Millstone Unit 2 Date of Examination: 12/6-12/20/02 Operating Test Number: SRO

	1. GENERAL CRITERIA	Initials a	Initials b	Initials c
a.	The operating test conforms with the previously approved outline; changes are consistent with sampling requirements (e.g., 10 CFR 55.45, operational importance, safety function distribution).	RN	[illegible]	[illegible]
b.	There is no day-to-day repetition between this and other operating tests to be administered during this examination.	RN	[illegible]	[illegible]
c.	The operating test shall not duplicate items from the applicants' audit test(s)(see Section D.1.a).	RN	[illegible]	[illegible]
d.	Overlap with the written examination and between operating test categories is within acceptable limits.	RN	[illegible]	[illegible]
e.	It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.	RN	[illegible]	[illegible]
	2. WALK-THROUGH (CATEGORY A & B) CRITERIA	–	–	–
a.	Each JPM includes the following, as applicable: · initial conditions · initiating cues · references and tools, including associated procedures · validated time limits (average time allowed for completion) and specific designation if deemed to be time critical by the facility licensee · specific performance criteria that include: - detailed expected actions with exact criteria and nomenclature - system response and other examiner cues - statements describing important observations to be made by the applicant - criteria for successful completion of the task - identification of critical steps and their associated performance standards - restrictions on the sequence of steps, if applicable	RN	[illegible]	[illegible]
b.	The prescripted questions in Category A are predominantly open reference and meet the criteria in Attachment 1 of ES-301.	RN	[illegible]	[illegible]
c.	Repetition from operating tests used during the previous licensing examination is within acceptable limits (30% for the walk-through) and do not compromise test integrity.	RN	[illegible]	[illegible]
d.	At least 20 percent of the JPMs on each test are new or significantly modified.	RN	[illegible]	[illegible]
	3. SIMULATOR (CATEGORY C) CRITERIA	–	–	–
a.	The associated simulator operating tests (scenario sets) have been reviewed in accordance with Form ES-301-4 and a copy is attached.	RN	[illegible]	[illegible]

	Printed Name / Signature	Date
a. Author	Richard N Spurr	12/9/02
b. Facility Reviewer(*)	M Jackson	12/10/02
c. NRC Chief Examiner (*)	J. Carusso	12/9/02
d. NRC Supervisor (*)	R.J. Caute	12/12/02

(*) The facility signature is not applicable for NRC-developed tests; two independent NRC reviews are required.

ES-301 Operating Test Quality Checklist Form ES-301-3

Facility: Millstone Unit 2 Date of Examination: 12/16-12/20/02 Operating Test Number: RO

	1. GENERAL CRITERIA	Initials a	Initials b	Initials c
a.	The operating test conforms with the previously approved outline; changes are consistent with sampling requirements (e.g., 10 CFR 55.45, operational importance, safety function distribution).			
b.	There is no day-to-day repetition between this and other operating tests to be administered during this examination.			
c.	The operating test shall not duplicate items from the applicants' audit test(s)(see Section D.1.a).			
d.	Overlap with the written examination and between operating test categories is within acceptable limits.			
e.	It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.			
	2. WALK-THROUGH (CATEGORY A & B) CRITERIA	–	–	–
a.	Each JPM includes the following, as applicable: · initial conditions · initiating cues · references and tools, including associated procedures · validated time limits (average time allowed for completion) and specific designation if deemed to be time critical by the facility licensee · specific performance criteria that include: - detailed expected actions with exact criteria and nomenclature - system response and other examiner cues - statements describing important observations to be made by the applicant - criteria for successful completion of the task - identification of critical steps and their associated performance standards - restrictions on the sequence of steps, if applicable			
b.	The prescripted questions in Category A are predominantly open reference and meet the criteria in Attachment 1 of ES-301.			
c.	Repetition from operating tests used during the previous licensing examination is within acceptable limits (30% for the walk-through) and do not compromise test integrity.			
d.	At least 20 percent of the JPMs on each test are new or significantly modified.			
	3. SIMULATOR (CATEGORY C) CRITERIA	–	–	–
a.	The associated simulator operating tests (scenario sets) have been reviewed in accordance with Form ES-301-4 and a copy is attached.			

	Printed Name / Signature	Date
a. Author	Richard N Squier	12/9/02
b. Facility Reviewer(*)	M Tillinson	12/9/02
c. NRC Chief Examiner (*)	J. Comuso	12/9/02
d. NRC Supervisor (*)	RO Conte	12/12/02

(*) The facility signature is not applicable for NRC-developed tests; two independent NRC reviews are required.

Facility: Millstone Unit 2 Date of Exam: 12/16/02 Scenario Numbers: 1, 2, 4 Operating Test No.:

	QUALITATIVE ATTRIBUTES	Initials a	Initials b	Initials c
1.	The initial conditions are realistic, in that some equipment and/or instrumentation may be out of service, but it does not cue the operators into expected events.	RNS	MHW	JA
2.	The scenarios consist mostly of related events.	RNS	MHW	JA
3.	Each event description consists of · the point in the scenario when it is to be initiated · the malfunction(s) that are entered to initiate the event · the symptoms/cues that will be visible to the crew · the expected operator actions (by shift position) · the event termination point (if applicable)	RNS	MHW	JA
4.	No more than one non-mechanistic failure (e.g., pipe break) is incorporated into the scenario without a credible preceding incident such as a seismic event.	RNS	MHW	JA
5.	The events are valid with regard to physics and thermodynamics.	RNS	MHW	JA
6.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.	RNS	MHW	JA
7.	If time compression techniques are used, the scenario summary clearly so indicates. Operators have sufficient time to carry out expected activities without undue time constraints. Cues are given.	N/A	N/A	N/A
8.	The simulator modeling is not altered.	RNS	MHW	JA
9.	The scenarios have been validated. Any open simulator performance deficiencies have been evaluated to ensure that functional fidelity is maintained while running the planned scenarios.	RNS	MHW	JA
10.	Every operator will be evaluated using at least one new or significantly modified scenario. All other scenarios have been altered in accordance with Section D.4 of ES-301.	RNS	MHW	JA
11.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).	RNS	MHW	JA
12.	Each applicant will be significantly involved in the minimum number of transients and events specified on Form ES-301-5 (submit the form with the simulator scenarios).	RNS	MHW	JA
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.	RNS	MHW	JA

	TARGET QUANTITATIVE ATTRIBUTES (PER SCENARIO; SEE SECTION D.4.D)	Actual Attributes	–	–	–
1.	Total malfunctions (5-8)	7, 6, 8	RNS	MHW	JA
2.	Malfunctions after EOP entry (1-2)	4, 2, 4	RNS	MHW	JA
3.	Abnormal events (2-4)	2, 3, 2	RNS	MHW	JA
4.	Major transients (1-2)	2, 1, 2	RNS	MHW	JA
5.	EOPs entered/requiring substantive actions (1-2)	4, 2, 2	RNS	MHW	JA
6.	EOP contingencies requiring substantive actions (0-2)	4, 1, 1	RNS	MHW	JA
7.	Critical tasks (2-3)	3, 3, 2	RNS	MHW	JA

Applicant Type	Evolution Type	Minimum Number	Scenario Numbers			
			1	2	3	4
RO	Reactivity	1	2, 3	5	N/A	5
	Normal	1	1	1	N/A	1
	Instrument / Component	4	4, 6, 7, 9	2, 8	N/A	2, 3, 4, 7, 8, 10
	Major	1	5, 8	6	N/A	6, 9
SRO-I						
As RO	Reactivity	1	N/A	5	N/A	N/A
	Normal	0	N/A	N/A	N/A	N/A
	Instrument / Component	2	N/A	3, 4, 7	N/A	N/A
	Major	1	N/A	6	N/A	N/A
As SRO	Reactivity	0	N/A	N/A	N/A	N/A
	Normal	1	1	N/A	N/A	1
	Instrument / Component	2	4, 6, 7, 9	N/A	N/A	2, 3, 4, 7, 8, 10
	Major	1	5, 8	N/A	N/A	6, 9
SRO-U	Reactivity	0	N/A	N/A	N/A	N/A
	Normal	1	N/A	N/A	N/A	N/A
	Instrument / Component	2	N/A	N/A	N/A	N/A
	Major	1	N/A	N/A	N/A	N/A

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: Richard N. Spurr

NRC Reviewer:

Competencies	RO Applicants #R1,2,3,4,5				RO Applicants #R6,7				N/A			
	Scenario				Scenario							
Position / Scenario #	1	SPO 2	3	PPO 4	PPO 1	2	3	SPO 4				
Understand and Interpret Annunciators and Alarms		2, 3		2	2, 5			3, 4				
Diagnose events and Conditions		8		2, 8, 9, 10	2, 5			3, 4, 10				
Understand Plant and System Response		6		9	5			5				
Comply With and Use Procedures (1)		3, 5, 6		2, 5, 8	3, 5			1, 3, 5				
Operate Control Boards (2)		1, 5, 8		2, 8, 9	3, 5			1, 3, 5				
Communicate and Interact With the Crew		5, 8		2, 8, 9	2, 5			3, 4, 5, 6				
Demonstrate Supervisory Ability (3)		N/A		N/A	N/A			N/A				
Comply With and Use Tech. Specs. (3)		N/A		N/A	N/A			N/A				

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: Richard N. Spurr

NRC Reviewer:

Competencies	SRO-I Applicants #S1, 2				SRO-I Applicants #S3, 4, 5				N/A			
	Scenario				Scenario							
Position / Scenario	US 1	PPO 2	3	4	1	US 2	3	PPO 4				
Understand and Interpret Annunciators and Alarms	2, 5	4, 6				3, 6		2, 9				
Diagnose events and Conditions	2	4, 7				3, 6		2, 9, 10				
Understand Plant and System Response	2, 6	4, 7				3, 6		7, 9				
Comply With and Use Procedures (1)	3, 6, 8	3, 4, 6				5, 6		3, 6				
Operate Control Boards (2)	N/A	4, 7				N/A		2, 5, 8, 9				
Communicate and Interact With the Crew	3, 8	4, 6, 7				3, 6		2, 5, 8, 9				
Demonstrate Supervisory Ability (3)	3, 8, 9	N/A				5, 7, 8		N/A				
Comply With and Use Tech. Specs. (3)	2	N/A				3, 4		N/A				

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: Richard N. Spurr

NRC Reviewer:

Facility: Millstone Unit 2 Date of Exam: 10/21/02 Exam Level: RO/SRO

	Item Description	Initial a	Initial b*	Initial c#
1.	Questions and answers technically accurate and applicable to facility	RNS	MJW	JL
2.	a. NRC K/As referenced for all questions b. Facility learning objectives referenced as available	RNS	MJW	JL
3.	RO/SRO overlap is no more than 75 percent, and SRO questions are appropriate per Section D.2.d of ES-401	RNS	MJW	JL
4.	Question selection and duplication from the last two NRC licensing exams appears consistent with a systematic sampling process			
5.	Question duplication from the license screening/audit exam was controlled as indicated below (check the item that applies) and appears appropriate: __ the audit exam was systematically and randomly developed; or __ the audit exam was completed before the license exam was started; or __ the examinations were developed independently; or X the licensee certifies that there is no duplication; or __ other (explain)	RNS	MJW	JL
6.	Bank use meets limits (no more than 75 percent from the bank at least 10 percent new, and the rest modified); enter the actual question distribution at right (RO/SRO) — Bank: ~~75~~ 72 / 11; Modified: ~~82~~ 74 / 17; New: ~~69~~ 67 / 74 / 12	RNS	MJW	JL
7.	Between 50 and 60 percent of the questions on the exam (including 10 new questions) are written at the comprehension/analysis level; enter the actual question distribution at right (RO/SRO) — Memory: ~~46~~ 48 / 45 ~~43~~; C/A: ~~54~~ 53 / 55 ~~52~~	RNS	MJW	JL
8.	References/handouts provided do not give away answers	RNS	MJW	JL
9.	Question content conforms with specific K/A statements in the previously approved examination outline and is appropriate for the Tier to which they are assigned; deviations are justified	① RNS	MJW	JL
10.	Question psychometric quality and format meet ES, Appendix B, guidelines	RNS	MJW	JL
11.	The exam contains 100, one-point, multiple choice items; the total is correct and agrees with value on cover sheet	RNS	MJW	JL

	Printed Name / Signature	Date
a. Author	Richard N. Spurr	9/3/02
b. Facility Reviewer (*)	MICHAEL J. WILSON RNSpurr for MJW	9/6/02
c. NRC Chief Examiner (#)	JOHN G. CARUSO	10/17/02
d. NRC Regional Supervisor	Richard J. Conte	10/21/02

Note: * The facility reviewer's initials/signature are not applicable for NRC-developed examinations.
Independent NRC reviewer initial items in Column "c;" chief examiner concurrence required.

① One K/A (RO+SRO) replaced due to inability to develop a question capable of discriminating between competent and incompetent operator.

See attached - licensee replaced to reflect changes made / resolution of comments for Blks #6 & #7. JG Caruso 10/23/02

Facility: Millstone Unit 2 Date of Exam: 10/25/02 Exam Level: RO/SRO

	Item Description	Initial a	Initial b*	Initial c#
* 1.	Questions and answers technically accurate and applicable to facility	RNS	RNS for	JA
2.	a. NRC K/As referenced for all questions b. Facility learning objectives referenced as available	RNS	MJW	JA
3.	RO/SRO overlap is no more than 75 percent, and SRO questions are appropriate per Section D.2.d of ES-401	RNS	MJW	JA
4.	Question selection and duplication from the last two NRC licensing exams appears consistent with a systematic sampling process			JA
5.	Question duplication from the license screening/audit exam was controlled as indicated below (check the item that applies) and appears appropriate: __ the audit exam was systematically and randomly developed; or __ the audit exam was completed before the license exam was started; or __ the examinations were developed independently; or ✓ the licensee certifies that there is no duplication; or __ other (explain)	RNS	MJW	JA
6.	Bank use meets limits (no more than 75 percent from the bank at least 10 percent new, and the rest modified); enter the actual question distribution at right — Bank: 12; Modified: 21; New: 67	RNS	MJW	JA
7.	Between 50 and 60 percent of the questions on the exam (including 10 new questions) are written at the comprehension/analysis level; enter the actual question distribution at right — Memory: 48; C/A: 52	RNS	MJW	JA
8.	References/handouts provided do not give away answers	RNS	MJW	JA
9.	Question content conforms with specific K/A statements in the previously approved examination outline and is appropriate for the Tier to which they are assigned; deviations are justified	RNS	MJW	JA
10.	Question psychometric quality and format meet ES, Appendix B, guidelines	RNS	MJW	JA
11.	The exam contains 100, one-point, multiple choice items; the total is correct and agrees with value on cover sheet	RNS	MJW	JA

	Printed Name / Signature	Date
a. Author	Richard N Spurr	10/18/02
b. Facility Reviewer (*)	MICHAEL J. WILSON	10/18/02
c. NRC Chief Examiner (#)	JOHN G. CAMUSO	10/23/02
d. NRC Regional Supervisor	RJ Conte /	10/23/02

Note: * The facility reviewer's initials/signature are not applicable for NRC-developed examinations.
Independent NRC reviewer initial items in Column "c;" chief examiner concurrence required.

*Block #1 signed for Martin Ewers per Telecon 10/21/02

Facility: Millstone Unit 2 Date of Exam: 10/25/02 Exam Level: RO/SRO

	Item Description	Initial a	Initial b*	Initial c#
* 1.	Questions and answers technically accurate and applicable to facility	RNS	RNS for	JH
2.	a. NRC K/As referenced for all questions b. Facility learning objectives referenced as available	RNS	MJW	JH
3.	RO/SRO overlap is no more than 75 percent, and SRO questions are appropriate per Section D.2.d of ES-401	RNS	MJW	JH
4.	Question selection and duplication from the last two NRC licensing exams appears consistent with a systematic sampling process			JH
5.	Question duplication from the license screening/audit exam was controlled as indicated below (check the item that applies) and appears appropriate: __ the audit exam was systematically and randomly developed; or __ the audit exam was completed before the license exam was started; or __ the examinations were developed independently; or ✓ the licensee certifies that there is no duplication; or __ other (explain)	RNS	MJW	JH
6.	Bank use meets limits (no more than 75 percent from the bank at least 10 percent new, and the rest modified); enter the actual question distribution at right — Bank: 11; Modified: 17; New: 72	RNS	MJW	JH
7.	Between 50 and 60 percent of the questions on the exam (including 10 new questions) are written at the comprehension/analysis level; enter the actual question distribution at right — Memory: 45; C/A: 55	RNS	MJW	JH
8.	References/handouts provided do not give away answers	RNS	MJW	JH
9.	Question content conforms with specific K/A statements in the previously approved examination outline and is appropriate for the Tier to which they are assigned; deviations are justified	RNS	MJW	JH
10.	Question psychometric quality and format meet ES, Appendix B, guidelines	RNS	MJW	JH
11.	The exam contains 100, one-point, multiple choice items; the total is correct and agrees with value on cover sheet	RNS	MJW	JH

	Printed Name / Signature	Date
a. Author	Richard N Spurr	10/18/02
b. Facility Reviewer (*)	MICHAEL J. WILSON	10/18/02
c. NRC Chief Examiner (#)	JOHN G. CARUSO	10/22/02
d. NRC Regional Supervisor	R J Conte	10/23/02

Note: * The facility reviewer's initials/signature are not applicable for NRC-developed examinations.
Independent NRC reviewer initial items in Column "c;" chief examiner concurrence required.

*Block #1 signed for Martin Ewers per Telecon 10/21/02

Facility: Millstone Unit 2 Date of Exam: 10/25/02 Exam Level: RO/SRO

Item Description	Initials a	Initials b	Initials c
1. Answer key changes and question deletions justified and documented	RNS	RJC	JL
2. Applicants' scores checked for addition errors (reviewers spot check > 25% of examinations)	RNS	RJC	JL
3. Grading for all borderline cases (80% +/- 2%) reviewed in detail	RNS	RJC	JL
4. All other failing examinations checked to ensure that grades are justified	RNS	RJC	N/A
5. Performance on missed questions checked for training deficiencies and wording problems; evaluate validity of questions missed by half or more of the applicants	RNS	RJC	JL

	Printed Name / Signature	Date
a. Grader	Richard N Spurr Richard N Spurr	11/1/02
b. Facility Reviewer(*)	Richard J. Ashley R.J. Ashley	11/2/02
c. NRC Chief Examiner (*)	John Carus John Carus	11/26/02
d. NRC Supervisor (*)	RJ Conte RJ Conte	1/8/03

(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.

ES-403 | Written Examination Grading Quality Checklist | Form ES-403-1

Facility: Millstone Unit 2 Date of Exam: 10/25/02 Exam Level: RO/SRO

Item Description	Initials a	Initials b	Initials c
1. Answer key changes and question deletions justified and documented	RNS	RA	JL
2. Applicants' scores checked for addition errors (reviewers spot check > 25% of examinations)	RNS	RA	JL
3. Grading for all borderline cases (80% +/- 2%) reviewed in detail	RNS	RA	JL
4. All other failing examinations checked to ensure that grades are justified	RNS	RA	NA
5. Performance on missed questions checked for training deficiencies and wording problems; evaluate validity of questions missed by half or more of the applicants	RNS	RA	JL

	Printed Name / Signature	Date
a. Grader	Richard N Spurr	11/1/02
b. Facility Reviewer(*)	Richard J. Ashley	11/1/02
c. NRC Chief Examiner (*)	JOHN CARUSO	11/26/02
d. NRC Supervisor (*)	R.J. Conte	1/8/03

(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.