Facility: MP3 Date of Examination: 8/9-15/02

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)	
-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)]	(N/A)
-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.l; C.2.g; ES-202)	
-14	10. Final license applications due and assignment sheet prepared (C.1.l; 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)	

* 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: Millstone Unit 3 Date of Examination: 8/12/02

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.	R	mkw	✓
	b. Assess whether the outline was systematically and randomly prepared in accordance with Section D.1 of ES-401 and whether all K/A categories are appropriately sampled.	R	mkw	✓
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	R	mkw	✓
	d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.	R	mkw	✓
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.	JD	mkw	✓
	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.	JD	mkw	✓
	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.	JD	mkw	✓
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.	JD	mkw	✓
	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.	JD	mkw	✓
	c. Verify that the required administrative topics are covered, with emphasis on performance-based activities.	JD	mkw	✓
	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.	JD	mkw	✓
4. GENERAL	a. Assess whether plant-specific priorities (including PRA and IPE insights) are covered in the appropriate exam section.	T/JD	mkw	✓
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.	R/JD	mkw	✓
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	R/JD	mkw	✓
	d. Check for duplication and overlap among exam sections.	R/JD	mkw	✓
	e. Check the entire exam for balance of coverage.	R/JD	mkw	✓
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	R/JD	mkw	✓

	Printed Name / Signature	Date
a. Author	Robert S. Royce RR Royce Steve Jackson SJ	5/15/02
b. Facility Reviewer (*)	MICHAEL WILSON mkw	5/16/02
c. NRC Chief Examiner (#)	J. D'Antonio JD	6/13/02
d. NRC Supervisor	Richard V. Conte RVC	6/13/02

Note: * Not applicable for NRC-developed examinations.
Independent NRC reviewer initial items in Column "c;" chief examiner concurrence required.

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of Aug 12 2002 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 Aug 12, 2002. 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)	DATENOTE
1.	Robert S. Royce	Operator Instructor / Exam Writer		1-22-02		8-15-02
2.	Steve Jackson	Operator Instructor / Exam Write		1-22-02		8/15/02
3.	Michael G. Manolakis	Site Services Administrator		1/24/02		8/28/02
4.	Heidi Cannon	Sr. NDA / Administrative		1/24/02		8/19/02
5.	Linda Peduzzi	NDA / Clerical		1/28/02		8-15-02
6.	R-F. MARTIN	SM / OPs Representative	R-F Martin	2/14/02	R-F Martin	8-19-02
7.	T.L. Tollman	SOA		3/2/02		8/15/02
8.	David Ritter	HW Tech		3/13/02		8/16/02
9.	MICHAEL WILSON	MANAGER NUCLEAR TRAINING		5/14/02		8/16/02
10.	Timothy C Bonner	SRO OPS Representative		05/28/02		8/19/02
11.	John W Salvatore	Unit Supervisor / Ops Rep		5-28-02		8-19-02
12.	Richard C Sadler	Unit Supervisor / OPS Rep		5/28/02		8/29/02
13.	Michael Baughman	Unit Sup / OPS		6/6/02		8/29/02
14.	Todd Fisher	Control operator / Ops		6/10/02		8/29/02
15.	Robert Iliff	Control Operator Ops		6/10/02		8/19/02

NOTES:

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of Aug 12, 2002 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 Aug 12, 2002. 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.	Richard N Spurr	Senior Instructor		6/13/02		8-20-02	
2.	JOHN R. UEARHART	OPERATOR		7/24/02		8/19/02	
3.	Steve Bass	EOF Coordinator		7/24/02		8-16-02	
4.	HK Covin	OPS Engineer		7-29-02		8-19-02	
5.	James G.	Control Room Operator		8/13/02		8/16/02	
6.	CALVIN ACKLEY	US		8-14-02		8/14-02	
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							

NOTES:

Facility: Millstone Unit 3 Date of Examination: Aug. 12, 2002 Operating Test Number:

	1. GENERAL CRITERIA	Initials a	b*	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 · reasonable and 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.	N/A	N/A	N/A
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	STEVE JACKSON /	6/15/02
b. Facility Reviewer(*)	M. T. WILSON /	6/19/02
c. NRC Chief Examiner (#)	/ J. [illegible]	8/1/02
d. NRC Supervisor	R.J. Conte /	8/1/02

NOTE: * The facility signature is not applicable for NRC-developed tests.
Independent NRC reviewer initial items in Column "c;" chief examiner concurrence required.

Facility: Millstone Unit 3 Date of Exam: Aug 12, 02 Scenario Numbers: 1 / 2 / 3 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.			
2.	The scenarios consist mostly of related events.			
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)			
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.			
5.	The events are valid with regard to physics and thermodynamics.			
6.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.			
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.			
8.	The simulator modeling is not altered.			
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.			
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.			
11.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).			
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).			
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.			

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

Facility: Millstone Unit 3 Date of Exam: Aug 12, '02 Scenario Numbers: 41 / 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.			
2.	The scenarios consist mostly of related events.			
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)			
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.			
5.	The events are valid with regard to physics and thermodynamics.			
6.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.			
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.			
8.	The simulator modeling is not altered.			
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.			
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.			
11.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).			
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).			
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.			

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

SECTION 8
MILLSTONE UNIT 3
SIMULATOR SCENARIO ATTRIBUTES CHECKLIST
FORM ES-301-4

Exam Title: ATWS with Faulted S/G

ID Number: 2K2 NRC-001 Revision: 0

Assessor: Steve Jackson

QUALITATIVE ATTRIBUTES

___Y__1. The initial conditions are realistic, in that some equipment and/or instrumentation may be out of service, but it does not cue the crew into expected events.

___Y__2. The scenario consists mostly of related events.

___Y__3. Each event description consists of:

- the point in the scenario when it is to be initiated
- the malfunctions(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)

___Y__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.

___Y__5. The events are valid with regard to physics and thermodynamics.

___Y__6. Sequencing/timing of events is reasonable, and allows for the examination team to obtain complete evaluation results commensurate with the scenario objectives.

_N/A__7. If time compression techniques are used, scenario summary clearly so indicates. Operators have sufficient time to carry out expected activities without undue time constraints. Cues are given.

___Y__8. The simulator modeling is not altered.

___N__9. The scenario has been validated. Any open simulator performance deficiencies have been evaluated to ensure functional fidelity is maintained while running the scenario.

___Y__10. Every operator will be evaluated using at least one new or significantly modified scenario. All other scenarios have been altered IAW Section D.4 of ES301

___Y__11. All individual operator competencies can be evaluated, as verified using form ES-301-6.

___Y__12. Each operator will be significantly involved in the minimum number of transients and events specified on Form ES-301-5. (Form submitted with simulator scenarios).

___Y__13. Level of difficulty is appropriate to support licensing decisions for each crew position.

SECTION 8
MILLSTONE UNIT 3
SIMULATOR SCENARIO ATTRIBUTES CHECKLIST
FORM ES-301-4

Exam Title: SGTR WITHOUT PZR PRESSURE CONTROL

ID Number: 2K2 NRC-002 Revision: 0

Assessor: Steve Jackson

QUALITATIVE ATTRIBUTES

___Y__1. The initial conditions are realistic, in that some equipment and/or instrumentation may be out of service, but it does not cue the crew into expected events.

___Y__2. The scenario consists mostly of related events.

___Y__3. Each event description consists of:

- the point in the scenario when it is to be initiated
- the malfunctions(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)

___Y__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.

___Y__5. The events are valid with regard to physics and thermodynamics.

___Y__6. Sequencing/timing of events is reasonable, and allows for the examination team to obtain complete evaluation results commensurate with the scenario objectives.

_N/A__7. If time compression techniques are used, scenario summary clearly so indicates. Operators have sufficient time to carry out expected activities without undue time constraints. Cues are given.

___Y__8. The simulator modeling is not altered.

___N__9. The scenario has been validated. Any open simulator performance deficiencies have been evaluated to ensure functional fidelity is maintained while running the scenario.

___Y__10. Every operator will be evaluated using at least one new or significantly modified scenario. All other scenarios have been altered IAW Section D.4 of ES301

___Y__11. All individual operator competencies can be evaluated, as verified using form ES-301-6.

___Y__12. Each operator will be significantly involved in the minimum number of transients and events specified on Form ES-301-5. (Form submitted with simulator scenarios).

___Y__13. Level of difficulty is appropriate to support licensing decisions for each crew position.

SECTION 8
MILLSTONE UNIT 3
SIMULATOR SCENARIO ATTRIBUTES CHECKLIST
FORM ES-301-4

Exam Title: STEAM LINE BREAK AND FR-H.1

ID Number: 2K2 NRC-003 Revision: 0

Assessor: Steve Jackson

QUALITATIVE ATTRIBUTES

___Y__1. The initial conditions are realistic, in that some equipment and/or instrumentation may be out of service, but it does not cue the crew into expected events.

___Y__2. The scenario consists mostly of related events.

___Y__3. Each event description consists of:

- the point in the scenario when it is to be initiated
- the malfunctions(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)

___Y__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.

___Y__5. The events are valid with regard to physics and thermodynamics.

___Y__6. Sequencing/timing of events is reasonable, and allows for the examination team to obtain complete evaluation results commensurate with the scenario objectives.

_N/A__7. If time compression techniques are used, scenario summary clearly so indicates. Operators have sufficient time to carry out expected activities without undue time constraints. Cues are given.

___Y__8. The simulator modeling is not altered.

___N__9. The scenario has been validated. Any open simulator performance deficiencies have been evaluated to ensure functional fidelity is maintained while running the scenario.

___Y__10. Every operator will be evaluated using at least one new or significantly modified scenario. All other scenarios have been altered IAW Section D.4 of ES301

___Y__11. All individual operator competencies can be evaluated, as verified using form ES-301-6.

___Y__12. Each operator will be significantly involved in the minimum number of transients and events specified on Form ES-301-5. (Form submitted with simulator scenarios).

___Y__13. Level of difficulty is appropriate to support licensing decisions for each crew position.

SECTION 8
MILLSTONE UNIT 3
SIMULATOR SCENARIO ATTRIBUTES CHECKLIST
FORM ES-301-4

Exam Title: INTER-SYSTEM LOCA

ID Number: 2K2NRC-004 (SPARE) Revision: 0

Assessor: Steve Jackson

QUALITATIVE ATTRIBUTES

___Y__1. The initial conditions are realistic, in that some equipment and/or instrumentation may be out of service, but it does not cue the crew into expected events.

___Y__2. The scenario consists mostly of related events.

___Y__3. Each event description consists of:

- the point in the scenario when it is to be initiated
- the malfunctions(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)

___Y__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.

___Y__5. The events are valid with regard to physics and thermodynamics.

___Y__6. Sequencing/timing of events is reasonable, and allows for the examination team to obtain complete evaluation results commensurate with the scenario objectives.

_N/A__7. If time compression techniques are used, scenario summary clearly so indicates. Operators have sufficient time to carry out expected activities without undue time constraints. Cues are given.

___Y__8. The simulator modeling is not altered.

___N__9. The scenario has been validated. Any open simulator performance deficiencies have been evaluated to ensure functional fidelity is maintained while running the scenario.

___Y__10. Every operator will be evaluated using at least one new or significantly modified scenario. All other scenarios have been altered IAW Section D.4 of ES301

___Y__11. All individual operator competencies can be evaluated, as verified using form ES-301-6.

___Y__12. Each operator will be significantly involved in the minimum number of transients and events specified on Form ES-301-5. (Form submitted with simulator scenarios).

___Y__13. Level of difficulty is appropriate to support licensing decisions for each crew position.

SECTION 8
MILLSTONE UNIT 3
SIMULATOR SCENARIO ATTRIBUTES CHECKLIST
FORM ES-301-4

Lesson Title: ATWS

ID Number: 2K2 NRC-001 Revision: 0

Note: Following criteria list scenario traits that are numerical (QUANTITATIVE) in nature.

01. Total Malfunctions (TM) - Include EM's- 5 to 8 required — Total: 7
Loss of RCP B Cooling water Supply, Charging Flow Control Failure, MSI Fails to Auto Actuate, Main Steam Line D Rupture Inside CTMT, Loss of Instrument Bus VIAC-3, A S/G Feed Reg Valve Failure, SIH Fails to Align on SIS

02. Malf's after EOP entry (EM's)- 1 to 2 required — Total: 2
SIH Fails to Align on SIS, MSI Fails to Auto Actuate,

03. Abnormal Events (AE)-2 to 4 required — Total: 3
Loss of RCP B Cooling water Supply, Loss of Instrument Bus VIAC-3, A S/G Feed Reg Valve Failure

04. Major Transients (MT)-1 to 2 required — Total: 2
ATWS/32N Fails to De-energize, Main Steam Line D Rupture Inside CTMT

05. EOP's (EU) entered/requiring substantive actions 1 to 2 required — Total: 2
E-0, E-2

06. EOP Contingencies requiring substantive actions [ECAs/FRs](EC) 0 to 2 required — Total: 2
FR-S.1, FR-Z.1

07. Critical Task (CT) - 2 to 3 required — Total: 3

E-0—J:	*Establish flow from at least one SI pump before completion of the check of E-0, steps 1-14 in FR-S.1.*
E-0—P:	*Manually actuate MSI or close MSIV's before completion of FR-S.1 step 10.*
E-2—A:	*Isolate the faulted S/G before transition out of E-2*

08. Approximate Scenario Run Time: 45 to 60 min. (One scenario may approach 90 minutes) — Total: 70 min

09. EOP run time: — Total: 40 min

10. Technical Specifications are exercised during the scenario. — (Y/N) Y

NOTES: Reactivity Manipulation: Rapid Downpower to Remove RCP

SECTION 8
MILLSTONE UNIT 3
SIMULATOR SCENARIO ATTRIBUTES CHECKLIST
FORM ES-301-4

Lesson Title: SGTR WITHOUT PZR PRESSURE CONTROL

ID Number: 2K2 NRC-002 Revision: 0

Note: Following criteria list scenario traits that are numerical (QUANTITATIVE) in nature.

01. Total Malfunctions (TM) - Include EM's- 5 to 8 required — Total: 8

PORV failed closed, CTMT IAS valve will not open, S/G Tube Leak / Rupture, DPRI Data A Failure, Continuous Rod Insertion, Service Water Pumps Fail to Auto Start, Loss of Offsite Power , MSIV Fails Closed

02. Malf's after EOP entry (EM's)- 1 to 2 required — Total: 2

PORV failed closed, MSIV Fails Closed

03. Abnormal Events (AE)-2 to 4 required — Total: 4

Service Water Pumps Fail to Auto Start, S/G Tube Leak, DPRI Data A Failure, Continuous Rod Insertion

04. Major Transients (MT)-1 to 2 required — Total: 2

S/G Tube Rupture / Loss of Offsite Power

05. EOP's (EU) entered/requiring substantive actions 1 to 2 required — Total: 2

E-0, E-3

06. EOP Contingencies requiring substantive actions [ECAs/FRs](EC) 0 to 2 required — Total: 1

ECA-3.3

07. Critical Task (CT) - 2 to 3 required — Total: 3

E-3—A:	Isolate feedwater flow to and steam flow from ruptured S/G before a transition to ECA-3.1 occurs at step 3 of E-3. (MSIV fails)
E-3—C:	Identify and Isolate ruptured S/G before narrow range level reaches 29%.
ECA-0.0--F:	Manually start the A Train Service Water Pump before transitioning from E-0.

08. Approximate Scenario Run Time: 45 to 60 min. (One scenario may approach 90 minutes) — Total: 60 min

09. EOP run time: — Total: 30 min

10. Technical Specifications are exercised during the scenario. — (Y/N)__Y__

NOTES: Reactivity Manipulation: Rapid Downpower due to S/G Tube Leak

SECTION 8
MILLSTONE UNIT 3
SIMULATOR SCENARIO ATTRIBUTES CHECKLIST
FORM ES-301-4

Lesson Title: STEAM LINE BREAK AND FR-H.1

ID Number: 2K2 NRC-003 (SPARE) Revision: 0

Note: Following criteria list scenario traits that are numerical (QUANTITATIVE) in nature.

01. Total Malfunctions (TM) - Include EM's- 5 to 8 required — Total: 8

Main Generator Overheating, PT-505 failed "as-is", 3CHS*MV8104 Fails to Open, "B" CCP Pump Trips, Main Steam Break, AFW Malfunctions (AFW Pump B Fail to auto start, AFW Pump A discharge valve shut, Terry Turbine Trip), CDA Auto Actuation Failure, RCP Fails to Trip from MB4

02. Malf's after EOP entry (EM's)- 1 to 2 required — Total: 2

CDA Auto Actuation Failure, RCP Fails to Trip from MB4

03. Abnormal Events (AE)-2 to 4 required — Total: 4

Rapid Downpower, , Main Generator Overheating, Instrument Failure Response (PT-505), AFW Malfunctions

04. Major Transients (MT)-1 to 2 required — Total: 2

Main Steam Break, Loss of Auxiliary Feed

05. EOP's (EU) entered/requiring substantive actions 1 to 2 required — Total: 1

E-0

06. EOP Contingencies requiring substantive actions [ECAs/FRs](EC) 0 to 2 required — Total: 2

FR-H.1, FR-Z.1

07. Critical Task (CT) - 2 to 3 required — Total: 2

FR-H.1--E: Establish 530 gpm AFW flow to the SGs before bleed and feed is required.

E-0—E: Manually actuate CDA or start at least one Quench Spray Pump before transition out of E-0 to FR-H.1.

08. Approximate Scenario Run Time: 45 to 60 min. (One scenario may approach 90 minutes) — Total: 60 min

09. EOP run time: — Total: 30 min

10. Technical Specifications are exercised during the scenario. — (Y/N)__Y__

NOTES: Reactivity Manipulation: Downpower directed by Main Gen. ARP

SECTION 8
MILLSTONE UNIT 3
SIMULATOR SCENARIO ATTRIBUTES CHECKLIST
FORM ES-301-4

Lesson Title: INTER-SYSTEM LOCA

ID Number: 2K2NRC-004 Revision: 0

Note: Following criteria list scenario traits that are numerical (QUANTITATIVE) in nature.

01. Total Malfunctions (TM) - Include EM's- 5 to 8 required — Total: 5

Power Range NI Fails High, Leak in LP Feedwater Heater, RCP Hi Motor Temp (CCP Leak to Oil Reservoir), Inter-System LOCA,, ESF Auto Actuation Failure (ESF Bldg Ventilation)

02. Malf's after EOP entry (EM's)- 1 to 2 required — Total: 2

ESF Auto Actuation Failure (ESF Bldg Ventilation), Inter-System LOCA

03. Abnormal Events (AE)-2 to 4 required — Total: 4

Power Range NI Fails High, Operation with One Feedwater String Isolated, RCP Hi Motor Temp (CCP Leak to Oil Reservoir), ESF Auto Actuation Failure (ESF Bldg Ventilation)

04. Major Transients (MT)-1 to 2 required — Total: 2

Rapid Downpower/Plant Trip, Inter-system LOCA

05. EOP's (EU) entered/requiring substantive actions 1 to 2 required — Total: 1

E-O

06. EOP Contingencies requiring substantive actions [ECAs/FRs](EC) 0 to 2 required — Total: 1

ECA-1.2, LOCA Outside CTMT

07. Critical Task (CT) - 2 to 3 required — Total: 2

ECA-1.2 -- A	Isolate the LOCA outside containment before transition out of ECA-2.1
E.1-C	Trip all RCPs before Orange Path

08. Approximate Scenario Run Time: 45 to 60 min. (One scenario may approach 90 minutes) — Total: 60 min

09. EOP run time: — Total: 30 min

10. Technical Specifications are exercised during the scenario. — (Y/N)__Y__

NOTES: **Reactivity Manipulation**: Power Range High Failure/RCP High Temp

Applicant Type	Evolution Type	Minimum Number	Scenario Numbers			
			1	2	3	4
RO	Reactivity	1				
	Normal	1				
	Instrument / Component	4				
	Major	1				
As RO	Reactivity	1	1	1	1	1
	Normal	0	1	1	0	1
	Instrument / Component	2	4	4	5	4
	Major	1	2	2	1	1
SRO-I						
As SRO	Reactivity	0	1	1	1	1
	Normal	1	1	1	0	1
	Instrument / Component	2	6	5	7	4
	Major	1	2	2	1	1
SRO-U	Reactivity	0	0	0	1	1
	Normal	1	1	1	0	1
	Instrument / Component	2	6	5	7	4
	Major	1	2	2	1	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: _____

NRC Reviewer: _____

Competencies	Applicant #1 SRO-U				Applicant #2 SRO-I				Applicant #3 RO			
	Scenario				Scenario				Scenario			
	1	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**
Understand and Interpret Annunciators and Alarms	2,2a, 3, 4, 5, 6, 7, 8, 9	2, 3, 3a, 4, 5, 6, 8	All	All	2,2a, 3, 4, 5, 6, 7, 8, 9	2, 3, 3a, 4, 5, 6, 8	All	All	1, 2, 2a, 3, 5, 7, 8, 9	2, 3, 3a, 5, 6, 8	1, 3, 4, 6, 8	All
Diagnose events and Conditions	2, 3, 4, 5, 6, 7, 8, 9	2, 3, 4, 5, 6, 7, 8	All	2, 3, 4, 5, 6	2, 3, 4, 5, 6, 7, 8, 9	2, 3, 4, 5, 6, 7, 8	All	2, 3, 4, 5, 6	2, 3, 5, 6, 7, 8, 9	2, 3, 4, 5, 6, 8	1, 2, 3, 4, 6, 8, 9	2, 3, 4, 5, 6
Understand Plant and System Response	All	All	All	All	All	All	All	All	All	All	1, 2, 3, 4, 6, 7, 8, 9	All
Comply With and Use Procedures (1)	All	All	All	All	All	All	All	All	All	1, 2, 3, 3a 4, 5, 6, 8	1, 2, 3, 4, 6, 7, 8, 9	All
Operate Control Boards (2)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	All	1, 2, 3,3a, 4, 5, 6, 8	1, 2, 3, 4, 6, 7, 8, 9	All
Communicate and Interact With the Crew	All	All	All	All	All	All	All	All	All	All	All	All
Demonstrate Supervisory Ability (3)	All	All	All	All	All	All	All	All	N/A	N/A	N/A	N/A
Comply With and Use Tech. Specs. (3)	3, 4	2, 3	3	2	3, 4	2, 3	3	2	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: _____

NRC Reviewer: _____

Facility: Millstone 3 Date of Exam: August 12, 2002 Exam Level: RO (SRO)

	Item Description	Initial a	Initial b*	Initial c#
1.	Questions and answers technically accurate and applicable to facility	R	[illegible]	[illegible]
2.	a. NRC K/As referenced for all questions b. Facility learning objectives referenced as available	R	[illegible]	[illegible]
3.	RO/SRO overlap is no more than 75 percent, and SRO questions are appropriate per Section D.2.d of ES-401	R	[illegible]	[illegible]
4.	Question selection and duplication from the last two NRC licensing exams appears consistent with a systematic sampling process			[illegible]
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)	R	[illegible]	[illegible]
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: 46 Modified: 15 New: 39	R	[illegible]	[illegible]
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	R	[illegible]	[illegible]
8.	References/handouts provided do not give away answers	R	[illegible]	[illegible]
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	R	[illegible]	[illegible]
10.	Question psychometric quality and format meet ES, Appendix B, guidelines	R	[illegible]	[illegible]
11.	The exam contains 100, one-point, multiple choice items; the total is correct and agrees with value on cover sheet	R	[illegible]	[illegible]

	Printed Name / Signature	Date
a. Author	Robert S. Royce / [illegible]	6-18-02
b. Facility Reviewer (*)	R.F. MARTIN / [illegible] / M. WILSON / [illegible]	6-13-02 / 6/19/02
c. NRC Chief Examiner (#)	J. O'Hara / [illegible]	8/1/02
d. NRC Regional Supervisor	R.J. Conte / [illegible]	8/1/02

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.

Facility: Millstone 3 Date of Exam: 8-9-02 Exam Level: RO/(SRO)

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

	Printed Name / Signature	Date
a. Grader	Robert S. Royce / Robert S. Royce	8-12-02
b. Facility Reviewer(*)	DALE BRODSKY	8-12-02
c. NRC Chief Examiner (*)	JOSEPH D'ANTONIO / Joseph D'Antonio	8/21/02
d. NRC Supervisor (*)	R.J. Conte / RJ Conte	8/26/02

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