

Facility: <u>Millstone Unit 3</u>		Date of Examination: <u>12/4/2017</u>
Developed by: Written: Facility <input checked="" type="checkbox"/> NRC <input type="checkbox"/> // Operating: Facility <input checked="" type="checkbox"/> NRC <input type="checkbox"/>		
Target Date*	Task Description (Reference)	Chief Examiner's Initials
-240	1. Examination administration date confirmed (C.1.a; C.2.a-b). For NRC-prepared exams, arrangements are made for the facility to submit reference materials (C.1.e; C.3.c; Attachment 3).	RES 4/8/2017 AS
-210	2. NRC examiners and facility contact assigned (C.1.d; C.2.f).	RES 5/8/2017 AS
-210	3. Facility contact briefed on security and other requirements (C.2.c). As applicable, the facility contact submits to the NRC any prescreened K/As for elimination from the written examination outline, with a description of the facility's prescreening process (ES-401, D.1.b).	RES 5/8/2017 AS
-210	4. Reference material due for NRC-prepared exams (C.1.e; C.3.c; Attachment 3).	RES 5/8/2017 AS
-210	5. Corporate notification letter sent (C.2.e).	RES 5/8/2017 AS
-195	6. NRC-developed written examination outline (ES-401-1/2 or ES-401N-1/2 and ES-401-3 or ES-401N-3) sent to facility contact (must be on the exam security agreement) (C.1.e-f; C.2.h; C.3.d-e).	RES 5/23/2017 AS
-150	7. Operating test outline(s) and other checklists due, including Forms ES-201-2, ES-201-3, ES-301-1, ES-301-2, ES-301-5, and ES-D-1, as applicable (C.1.e-f; C.3.d-e).	RES 7/7/2017 AS
-136	8. Operating test outline(s) reviewed by the NRC and feedback provided to facility licensee (C.2.h; C.3.d-e).	RES 7/21/2017 AS
-75	9. Proposed examinations (written, JPMs, and scenarios, as applicable) and outlines (Forms ES-301-1, ES-301-2, ES-D-1, ES-401-1/2 or ES-401N-1/2, and ES-401-3 or ES-401N-3); supporting documentation (including Forms ES-301-3, ES-301-4, ES-301-5, ES-301-6, ES-401-6, ES-401N-6, and any Form ES-201-2 and ES-201-3 updates); and reference materials due (C.1.e-h; C.3.d).	RES 9/20/2017 AS
-75	10. Examinations prepared by the NRC are approved by the NRC supervisor and forwarded for facility licensee review (C.1.i; C.2.h; C.3.f-g).	N/A 9/20/2017
-60	11. Preliminary waiver/excusal requests due (C.1.m; C.2.c; ES-202).	RES 10/5/2017 AS
-50	12. Written exam and operating test reviews completed (C.3.f).	RES 10/15/2017 AS
-35	13. Examination review results discussed between the NRC and facility licensee (C.1.i; C.1.k-l; C.2.h; C.3.g). The NRC and the facility licensee conduct exam preparatory week.	RES 10/30/2017 AS
-30	14. Preliminary license applications and waiver/excusal requests, as applicable (NRC Form 398) due (C.1.m; C.2.i; ES-202).	RES 11/4/2017 AS
-14	15. Final license applications and waiver/excusal requests, as applicable (NRC Form 398), due and Form ES-201-4 prepared (C.1.m; C.2.k; ES-202).	RES 11/20/2017 AS
-7	16. Written examinations and operating tests approved by the NRC supervisor (C.2.j-k; C.3.h).	RES 11/27/2017 AS
-7	17. Request facility licensee management feedback on the examination (C.2.l).	RES 11/27/2017 AS
-7	18. Final applications reviewed; one or two (if more than 10) applications audited to confirm qualifications/eligibility; and examination approval and waiver/excusal letters sent (C.2.k; Attachment 5; ES-202, C.3.j; ES-204).	RES 11/27/2017 AS
-7	19. Proctoring/written exam administration guidelines reviewed with facility licensee (C.3.k).	RES 11/27/2017 AS
-7	20. Approved scenarios and job performance measures distributed to NRC examiners (C.3.i).	RES 11/27/2017 AS
* Target dates are based on facility-prepared examinations and the examination date identified in the corporate notification letter. These dates are for planning purposes and may be adjusted on a case-by-case basis in coordination with the facility licensee.		

Facility:		Date of Examination: 12/4/17		
Item	Task Description	Initials		
		a	b*	c**
WRITTEN	a. Verify that the outline(s) fit(s) the appropriate model in accordance with ES-401 or ES-401N.	TCS	M/A	AS
	b. Assess whether the outline was systematically and randomly prepared in accordance with Section D.1 of ES-401 or ES-401N and whether all K/A categories are appropriately sampled.	TCS	M/A	AS
	c. Assess whether the outline overemphasizes any systems, evolutions, or generic topics.	TCS	M/A	AS
	d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.	TCS	M/A	AS
SIMULATOR	a. Using Form ES-301-5, verify that the proposed scenario sets cover the required number of normal evolutions, instrument and component failures, technical specifications, and major transients.	R	MC	TCS AS
	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, and ensure that 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 that scenarios will not be repeated on subsequent days.	R	MC	TCS AS
	c. To the extent possible, assess whether the outline(s) conforms with the qualitative and quantitative criteria specified on Form ES-301-4 and described in Appendix D and in Section D.5, "Specific Instructions for the 'Simulator Operating Test,'" of ES-301 (including overlap).	R	MC	TCS AS
WALKTHROUGH	a. Verify that the systems walkthrough outline meets the criteria specified on Form ES-301-2: (1) The outline(s) contains the required number of control room and in-plant tasks distributed among the safety functions as specified on the form. (2) Task repetition from the last two NRC examinations is within the limits specified on the form. (3) No tasks are duplicated from the applicant's audit test(s). (4) The number of new or modified tasks meets or exceeds the minimums specified on the form. (5) The number of alternate-path, low-power, emergency, and radiologically controlled area tasks meets the criteria on the form.	R	MC	TCS AS
	b. Verify that the administrative outline meets the criteria specified on Form ES-301-1: (1) The tasks are distributed among the topics as specified on the form. (2) At least one task is new or significantly modified. (3) No more than one task is repeated from the last two NRC licensing examinations.	R	MC	TCS AS
	c. Determine whether there are enough different outlines to test the projected number and mix of applicants and ensure that no items are duplicated on subsequent days.	R	MC	TCS AS
GENERAL	a. Assess whether plant-specific priorities (including probabilistic risk assessment and individual plant examination insights) are covered in the appropriate exam sections.	R	MC	TCS AS
	b. Assess whether the 10 CFR 55.41, 55.43, and 55.45 sampling is appropriate.	R	MC	TCS AS
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	R	MC	TCS AS
	d. Check for duplication and overlap among exam sections and the last two NRC exams.	R/AS	MC	TCS AS
	e. Check the entire exam for balance of coverage.	R	MC	TCS AS
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	R	MC	TCS AS
a. Author	Printed Name/Signature		Date	
b. Facility Reviewer (*)	Robert Royce / <i>[Signature]</i> David L. Minnich / <i>[Signature]</i>		7/3/17 7/5/17	
c. NRC Chief Examiner (#)	Michael COTE / <i>[Signature]</i> Thomas Berman / <i>[Signature]</i> Peter Resby / <i>[Signature]</i>		12/1/17	
d. NRC Supervisor	Donald Jackson / <i>[Signature]</i>		12/1/17	
* Not applicable for NRC-prepared examination outlines. # The independent NRC reviewer initials items in column "c"; the chief examiner's concurrence is required.				

1. Pre-Examination

2/2/17

I acknowledge that I have acquired specialized knowledge about the U.S. Nuclear Regulatory Commission (NRC) licensing examinations scheduled for the week(s) of 4 Dec 17 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's 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 (e.g., acting as a simulator booth operator or communicator is acceptable if the individual does not select the training content or provide direct or indirect feedback). 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's 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 12/4-12/11, 2017 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.

ES-201, Page 31 of 31

PRINTED NAME	JOB TITLE/RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE	NOTE
1. <u>David Minnich</u>	<u>Exam Author</u>	<u>[Signature]</u>	<u>4/24/17</u>	<u>[Signature]</u>	<u>12/20/17</u>	<u>(1)</u>
2. <u>Kurt Bessier</u>	<u>BLOG MANAGER</u>	<u>[Signature]</u>	<u>4/25/17</u>	<u>[Signature]</u>	<u>12/13/17</u>	
3. <u>Christine Cahral</u>	<u>Q-Vision Coordinator</u>	<u>[Signature]</u>	<u>4/25/17</u>	<u>[Signature]</u>	<u>12/13/17</u>	
4. <u>Robert Rayce</u>	<u>Exam Author</u>	<u>[Signature]</u>	<u>5/11/17</u>	<u>[Signature]</u>	<u>12/12/17</u>	
5. <u>Michael Cote</u>	<u>EPM</u>	<u>[Signature]</u>	<u>5/13/17</u>	<u>[Signature]</u>	<u>12/13/17</u>	
6. <u>Kathleen Loubier</u>	<u>Training Administrator</u>	<u>[Signature]</u>	<u>5/14/17</u>	<u>[Signature]</u>	<u>12/13/17</u>	
7. <u>ERIC BRODEUR</u>	<u>MP3 SHIFT MANAGER</u>	<u>[Signature]</u>	<u>5/16/17</u>	<u>[Signature]</u>	<u>12/15/17</u>	
8. <u>SHIH-KATU CHANG</u>	<u>Simulator software engineer</u>	<u>[Signature]</u>	<u>5/24/17</u>	<u>[Signature]</u>	<u>12/15/17</u>	
9. <u>CHA-HSIANG TAN</u>	<u>Simulator Software Engineer</u>	<u>[Signature]</u>	<u>6/1/17</u>	<u>[Signature]</u>	<u>12/14/17</u>	
10. <u>Mark Whippo</u>	<u>Sim Hardware Tech</u>	<u>[Signature]</u>	<u>6/1/17</u>	<u>[Signature]</u>	<u>12/15</u>	
11. <u>PAUL MALZAHN</u>	<u>SNCC</u>	<u>[Signature]</u>	<u>6/5/17</u>	<u>[Signature]</u>	<u>12/20/17</u>	<u>(3)</u>
12. <u>Michael B. Cow</u>	<u>Sim Hardware</u>	<u>[Signature]</u>	<u>6/5/17</u>	<u>[Signature]</u>	<u>12/14/17</u>	
13. <u>Nathan KURTZ</u>	<u>Sim Software</u>	<u>[Signature]</u>	<u>6/5/17</u>	<u>[Signature]</u>	<u>12/12/17</u>	
14. <u>STEVE MYERS</u>	<u>SIM TEST TECH.</u>	<u>[Signature]</u>	<u>6/6/17</u>	<u>[Signature]</u>	<u>12/19/17</u>	
15. <u>Edwin Michael Socha</u>	<u>Sim Test Tech</u>	<u>[Signature]</u>	<u>6/6/17</u>	<u>[Signature]</u>	<u>12/19/17</u>	

NOTES:

1. Pre-Examination

2K17

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2. Post-Examination

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ES-201, Page 31 of 31

PRINTED NAME	JOB TITLE/RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE	NOTE
1. <u>Cristalle Walsh</u>	<u>Supt Nuc Training Ops</u>	<u>C. Walsh</u>	<u>6-14-17</u>	<u>C. Walsh</u>	<u>12-13-17</u>	
2. <u>Ken Hajnal</u>	<u>Instructor</u>	<u>K.W. Hajnal</u>	<u>6-21-17</u>	<u>K.W. Hajnal</u>	<u>12-12-17</u>	
3. <u>B. Pinkowski</u>	<u>Instructor</u>	<u>B. Pinkowski</u>	<u>6-22-17</u>	<u>B. Pinkowski</u>	<u>12-13-17</u>	
4. <u>CAL ACKLEY</u>	<u>INSTRUCTOR</u>	<u>Cal Ackley</u>	<u>6-23-17</u>	<u>Cal Ackley</u>	<u>12-14-17</u>	
5. <u>Jeffrey Langan</u>	<u>Mgr - Licensing</u>	<u>Jeffrey Langan</u>	<u>8/6/2017</u>	<u>Jeffrey Langan</u>	<u>12/19/2017</u>	
6. <u>Robert L. Cimmino, Jr.</u>	<u>Exam Admin Validator</u>	<u>Robert Cimmino Jr.</u>	<u>8/24/2017</u>	<u>Robert Cimmino Jr.</u>	<u>12/19/2017</u>	
7. <u>James A. Kelly</u>	<u>MP3 Unit Supervisor</u>	<u>James A. Kelly</u>	<u>8-30-17</u>	<u>James A. Kelly</u>	<u>12-15-17</u>	
8. <u>STEPHAN P. LAMBERT Sr</u>	<u>MP3 UNIT SUPERVISOR</u>	<u>Stephan P. Lambert Sr.</u>	<u>8-31-17</u>	<u>Stephan P. Lambert Sr.</u>	<u>12-18-17</u>	
9. <u>John Robinson</u>	<u>MP3 Reactor Operator</u>	<u>John Robinson</u>	<u>9/5/17</u>	<u>John Robinson</u>	<u>12-20-17 (4)</u>	
10. <u>Robert Mello</u>	<u>MP3 Reactor Operator</u>	<u>Robert Mello</u>	<u>9-5-17</u>	<u>Robert Mello</u>	<u>12-15-17</u>	
11. <u>EDWARD MURIANI</u>	<u>MP3 UNIT SUPERVISOR</u>	<u>Edward Muriani</u>	<u>9/25/17</u>	<u>Edward Muriani</u>	<u>12/15/17</u>	
12. <u>PAUL LUDINGTON</u>	<u>MP3 REACTOR OPERATOR</u>	<u>Paul Ludington</u>	<u>9/25/17</u>	<u>Paul Ludington</u>	<u>12/15/17</u>	
13. <u>William M. Forest</u>	<u>Instructor</u>	<u>William M. Forest</u>	<u>9/25/17</u>	<u>William M. Forest</u>	<u>12/15/17</u>	
14. <u>ALISON M. DAVENPORT</u>	<u>MP3 REACTOR OPERATOR</u>	<u>Alison M. Davenport</u>	<u>9/26/17</u>	<u>Alison M. Davenport</u>	<u>12/19/17</u>	
15. <u>Linda Peduzzi</u>	<u>Training Admin</u>	<u>Linda Peduzzi</u>	<u>9/26/17</u>	<u>Linda Peduzzi</u>	<u>12/12/17</u>	

NOTES:

1. Pre-Examination

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2. Post-Examination

ES-201, Page 31 of 31 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 12/4-12/11, 2017 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. <u>TIM BUNKELMAN</u>	<u>UNIT SUPERVISOR MP3</u>	<u>[Signature]</u>	<u>9-27-17</u>	<u>[Signature]</u>	<u>12/20/17</u>	<u>(2)</u>
2. <u>KARLA HAJEK</u>	<u>ADMIN ASST.</u>	<u>[Signature]</u>	<u>10/31/17</u>	<u>[Signature]</u>	<u>12/14/17</u>	
3. <u>Kelly Underwood</u>	<u>Senior Instructor</u>	<u>[Signature]</u>	<u>11-16-17</u>	<u>[Signature]</u>	<u>12/12/17</u>	
4. <u>Michael J. Sibilio</u>	<u>Reactor Operator</u>	<u>[Signature]</u>	<u>11-17-17</u>	<u>[Signature]</u>	<u>12/15/17</u>	
5. <u>Jeremy Susco</u>	<u>Unit Supervisor</u>	<u>[Signature]</u>	<u>11/17/17</u>	<u>[Signature]</u>	<u>12/13/17</u>	
6. <u>Bob McDonald</u>	<u>Senior Instructor</u>	<u>[Signature]</u>	<u>11-17-17</u>	<u>[Signature]</u>	<u>12-3-17</u>	
7. <u>Timothy Buttrick</u>	<u>Senior Instructor</u>	<u>[Signature]</u>	<u>12/1/17</u>	<u>[Signature]</u>	<u>12/12/17</u>	
8. <u>Jim Co</u>	<u>Training Supervisor</u>	<u>[Signature]</u>	<u>12-1-17</u>	<u>[Signature]</u>	<u>12/12/17</u>	
9. <u>David Bradley</u>	<u>Senior Instructor</u>	<u>[Signature]</u>	<u>12/1/17</u>	<u>[Signature]</u>	<u>12/12/17</u>	
10. <u>JOHN FOLLETT</u>	<u>SR INSTRUCTOR</u>	<u>[Signature]</u>	<u>12/7/17</u>	<u>[Signature]</u>	<u>12/12/17</u>	
11. _____	_____	_____	_____	_____	_____	_____
12. _____	_____	_____	_____	_____	_____	_____
13. _____	_____	_____	_____	_____	_____	_____
14. _____	_____	_____	_____	_____	_____	_____
15. _____	_____	_____	_____	_____	_____	_____

NOTES: (1) w. Forrestt signed per telecon discussion w/ Dave Minnich on 12/20/17.  
 (2) w. Forrestt signed per telecon discussion w/ Tim Bunkelman on 12/20/17.  
 (3) w. Forrestt signed per telecon discussion w/ Paul Malzahn on 12/20/17.  
 (4) w. Forrestt signed per telecon discussion w/ John Robinson on 12/20/17.

Facility: <u>Milstone 3</u>		Date of Examination: <u>12/13/17</u>		Operating Test Number: <u>2K17</u>	
1. General Criteria		Initials			
		a	b*	c#	
a.	The operating test conforms to the previously approved outline; changes are consistent with sampling requirements (e.g., 10 CFR 55.45, operational importance, safety function distribution).	<u>RM</u>	<u>MC</u>	<u>TCS</u> <u>AD</u>	
b.	There is no day-to-day repetition between this and other operating tests to be administered during this examination.	<u>RM</u>	<u>MC</u>	<u>TCS</u> <u>AD</u>	
c.	The operating test shall not duplicate items from the applicants' audit test(s) (see Section D.1.a.).	<u>RM</u>	<u>MC</u>	<u>TCS</u> <u>AD</u>	
d.	Overlap with the written examination and between different parts of the operating test is within acceptable limits.	<u>RM</u>	<u>MC</u>	<u>TCS</u> <u>AD</u>	
e.	It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.	<u>RM</u>	<u>MC</u>	<u>TCS</u> <u>AD</u>	
2. Walkthrough Criteria		--	--	--	
a.	Each JPM includes the following, as applicable: <ul style="list-style-type: none"> <li>• initial conditions</li> <li>• initiating cues</li> <li>• references and tools, including associated procedures</li> <li>• reasonable and validated time limits (average time allowed for completion) and specific designation if deemed to be time critical by the facility licensee</li> <li>• operationally important specific performance criteria that include—                         <ul style="list-style-type: none"> <li>– detailed expected actions with exact criteria and nomenclature</li> <li>– system response and other examiner cues</li> <li>– statements describing important observations to be made by the applicant</li> <li>– criteria for successful completion of the task</li> <li>– identification of critical steps and their associated performance standards</li> <li>– restrictions on the sequence of steps, if applicable</li> </ul> </li> </ul>	<u>RM</u>	<u>MC</u>	<u>TCS</u> <u>AD</u>	
b.	Ensure that any changes from the previously approved systems and administrative walkthrough outlines (Forms ES-301-1 and ES-301-2) have not caused the test to deviate from any of the acceptance criteria (e.g., item distribution, bank use, repetition from the last two NRC examinations) specified on those forms and Form ES-201-2.	<u>RM</u>	<u>MC</u>	<u>TCS</u> <u>AD</u>	
3. Simulator Criteria		--	--	--	
The associated simulator operating tests (scenario sets) have been reviewed in accordance with Form ES-301-4, and a copy is attached.		<u>RM</u>	<u>MC</u>	<u>TCS</u> <u>AD</u>	
	Printed Name/Signature	Date			
a.	Author <u>Dave Minnich</u>	<u>8/18/17</u>			
b.	Facility Reviewer (*) <u>M. J. COTE</u>	<u>8/18/17</u>			
c.	NRC Chief Examiner (#) <u>THOMAS SEREN</u>	<u>12/11/17</u>			
d.	NRC Supervisor <u>Donna Jackson</u>	<u>12/1/17</u>			
* The facility licensee signature is not applicable for NRC-developed tests.					
# The independent NRC reviewer initials items in column "c"; the chief examiner concurrence is required.					

Facility: <u>MP3</u>		Date of Exam: <u>Dec 17</u>		Scenario Numbers: <u>112314</u>		Operating Test No.: <u>2K17</u>	
QUALITATIVE ATTRIBUTES			Initials				
			a	b*	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.		<u>JM</u>	<u>ML</u>	<u>RS</u>		
2.	The scenarios consist mostly of related events.		<u>JM</u>	<u>ML</u>	<u>RS</u>		
3.	Each event description consists of the following: <ul style="list-style-type: none"> <li>• the point in the scenario when it is to be initiated</li> <li>• the malfunction(s) or conditions that are entered to initiate the event</li> <li>• the symptoms/cues that will be visible to the crew</li> <li>• the expected operator actions (by shift position)</li> <li>• the event termination point (if applicable)</li> </ul>		<u>JM</u>	<u>ML</u>	<u>RS</u>		
4.	The events are valid with regard to physics and thermodynamics.		<u>JM</u>	<u>ML</u>	<u>RS</u>		
5.	Sequencing and timing of events is reasonable and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.		<u>JM</u>	<u>ML</u>	<u>RS</u>		
6.	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.		<u>JM</u>	<u>ML</u>	<u>RS</u>		
7.	The simulator modeling is not altered.		<u>JM</u>	<u>ML</u>	<u>RS</u>		
8.	The scenarios have been validated. Pursuant to 10 CFR 55.46(d), any open simulator performance deficiencies or deviations from the referenced plant have been evaluated to ensure that functional fidelity is maintained while running the planned scenarios.		<u>JM</u>	<u>ML</u>	<u>RS</u>		
9.	Scenarios are new or significantly modified in accordance with Section D.5 of ES-301.		<u>JM</u>	<u>ML</u>	<u>RS</u>		
10.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).		<u>JM</u>	<u>ML</u>	<u>RS</u>		
11.	The scenario set provides the opportunity for each applicant to be evaluated in each of the applicable rating factors. (Competency rating factors as described on Forms ES-303-1 and ES-303-3.)		<u>JM</u>	<u>ML</u>	<u>RS</u>		
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).		<u>JM</u>	<u>ML</u>	<u>RS</u>		
13.	Applicants are evaluated on a similar number of preidentified critical tasks across scenarios, when possible.		<u>JM</u>	<u>ML</u>	<u>RS</u>		
14.	The level of difficulty is appropriate to support licensing decisions for each crew position.		<u>JM</u>	<u>ML</u>	<u>RS</u>		
Target Quantitative Attributes per Scenario (See Section D.5.d)		Actual Attributes	--	--	--		
1.	Malfunctions after EOP entry (1-2)	<u>4 121412</u>	<u>JM</u>	<u>ML</u>	<u>RS</u>		
2.	Abnormal events (2-4)	<u>4 131413</u>	<u>JM</u>	<u>ML</u>	<u>RS</u>		
3.	Major transients (1-2)	<u>1 121111</u>	<u>JM</u>	<u>ML</u>	<u>RS</u>		
4.	EOPs entered/requiring substantive actions (1-2)	<u>2 131212</u>	<u>JM</u>	<u>ML</u>	<u>RS</u>		
5.	Entry into a contingency EOP with substantive actions (≥ 1 per scenario set)	<u>1 111112</u>	<u>JM</u>	<u>ML</u>	<u>RS</u>		
6.	Preidentified critical tasks (≥ 2)	<u>3 121312</u>	<u>JM</u>	<u>ML</u>	<u>RS</u>		
* The facility licensee signature is not applicable for NRC-developed tests. # An independent NRC reviewer initials items in column "c"; chief examiner concurrence is required.							

Facility: Millstone Unit 3			Date of Exam: 12/04/17			Operating Test No.: 2K17												
A P P L I C A N T	E V E N T  T Y P E	Scenarios (Rev 1)												T O T A L	M I N I M U M (*)			
		1			2			3 (DELETED)			4 (SPARE)							
		CREW POSITION			CREW POSITION			CREW POSITION			CREW POSITION							
		S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P					
<b>RO-1</b> <input checked="" type="checkbox"/> X SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/>	RX		3									(1)	(1)		1	1	1	0
	NOR					2								(1)	1	1	1	1
	I/C		1,2,6, 8			1						(2,3)	(3,6)	(2,4 7)	5	4	4	2
	MAJ		5			3,7						(5)	(5)	(5)	3	2	2	1
	TS											(2,3)				0	2	2
<b>RO-2,3</b> <input checked="" type="checkbox"/> X SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/>	RX				2										1	1	1	0
	NOR			3											1	1	1	1
	I/C			2,7, 8		4,5, 6									6	4	4	2
	MAJ			5		3,7									3	2	2	1
	TS															0	2	2
<b>RO-4</b> <input checked="" type="checkbox"/> X SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/>	RX				2										1	1	1	0
	NOR			3											1	1	1	1
	I/C			2,7, 8		4,5, 6									6	4	4	2
	MAJ			5		3,7									3	2	2	1
	TS															0	2	2
Instructions:																		
1. Check the applicant level and enter the operating test number and Form ES-D-1 event numbers for each event type; TS are not applicable for RO applicants. ROs must serve in both the at-the-controls (ATC) and balance-of-plant (BOP) positions. Instant SROs (SRO-I) must serve in both the SRO and the ATC positions, including at least two instrument or component (I/C) malfunctions and one major transient, in the ATC position. If an SRO-I <i>additionally</i> serves in the BOP position, one I/C malfunction can be credited toward the two I/C malfunctions required for the ATC position.																		
2. Reactivity manipulations may be conducted under normal or <i>controlled</i> abnormal conditions (refer to Section D.5.d) but must be significant per Section C.2.a of Appendix D. (*) Reactivity and normal evolutions may be replaced with additional I/C malfunctions on a one-for-one basis.																		
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 requirements specified for the applicant's license level in the right-hand columns.																		
4. For new reactor facility licensees that use the ATC operator primarily for monitoring plant parameters, the chief examiner may place SRO-I applicants in either the ATC or BOP position to best evaluate the SRO-I in manipulating plant controls.																		



Facility: Millstone Unit 3			Date of Exam: 12/04/17			Operating Test No.: 2K17											
A P P L I C A N T	E V E N T  T Y P E	Scenarios (Rev 1)												T O T A L	M I N I M U M (*)		
		1			2			3 (DELETED)			4 (SPARE)						
		CREW POSITION			CREW POSITION			CREW POSITION			CREW POSITION						
		S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P				
RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input checked="" type="checkbox"/> 2,3 TS <input checked="" type="checkbox"/>		RX	3							(1)	(1)		1	1	1	0	
		NOR				2						(1)	1	1	1	1	
		I/C	1,2			1				(2,3)	(3,6)	(2,4,7)	3	4	4	2	
		MAJ	5			3,7				(5)	(5)	(5)	3	2	2	1	
		TS	1,2							(2,3)			2	0	2	2	
		RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input checked="" type="checkbox"/> 1,2 TS <input checked="" type="checkbox"/>	RX		3		2							2	1	1	0
NOR													1	1	1		
I/C		1,2,6,8		1								5	4	4	2		
MAJ		5		3,7								3	2	2	1		
TS				1,2								2	0	2	2		
RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input checked="" type="checkbox"/> 1 TS <input checked="" type="checkbox"/>	RX	3			2								2	1	1	0	
NOR													0	1	1	1	
I/C	1,2			1									3	4	4	2	
MAJ	5			3,7									3	2	2	1	
TS	1,2			1,2									4	0	2	2	

Instructions:

- Check the applicant level and enter the operating test number and Form ES-D-1 event numbers for each event type; TS are not applicable for RO applicants. ROs must serve in both the at-the-controls (ATC) and balance-of-plant (BOP) positions. Instant SROs (SRO-I) must serve in both the SRO and the ATC positions, including at least two instrument or component (I/C) malfunctions and one major transient, in the ATC position. If an SRO-I *additionally* serves in the BOP position, one I/C malfunction can be credited toward the two I/C malfunctions required for the ATC position.
- Reactivity manipulations may be conducted under normal or *controlled* abnormal conditions (refer to Section D.5.d) but must be significant per Section C.2.a of Appendix D. (\*) Reactivity and normal evolutions may be replaced with additional I/C malfunctions on a one-for-one basis.
- 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 requirements specified for the applicant's license level in the right-hand columns.
- For new reactor facility licensees that use the ATC operator primarily for monitoring plant parameters, the chief examiner may place SRO-I applicants in either the ATC or BOP position to best evaluate the SRO-I in manipulating plant controls.

Facility: Millstone 3

Date of Examination: Week of 4 Dec 17

Operating Test No.: 2K17

Competencies	APPLICANTS (Rev 1)															
	RO-1 X <input type="checkbox"/>				RO-2,3 X <input type="checkbox"/>				RO-4 X <input type="checkbox"/>				RO <input type="checkbox"/>			
	SRO-I <input type="checkbox"/>				SRO-I <input type="checkbox"/>				SRO-I <input type="checkbox"/>				SRO-I <input type="checkbox"/>			
	SRO-U <input type="checkbox"/>				SRO-U <input type="checkbox"/>				SRO-U <input type="checkbox"/>				SRO-U <input type="checkbox"/>			
SCENARIO				SCENARIO				SCENARIO				SCENARIO				
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
ATC	BOP			BOP	ATC			BOP	ATC							
Interpret/Diagnose Events and Conditions	1,3,6,8	1,3,7			2,7	2,5,6			2,7	2,5,6						
Comply with and Use Procedures (1)	1,2,3,4,5,6,8	1,3,4,7			2,3,5,7,8	2,3,5,6,7			2,3,5,7,8	2,3,5,6,7						
Operate Control Boards (2)	1,2,3,4,5,6,8	1,3,4,7			2,3,4,5,7,8	2,3,5,6,7			2,3,4,5,7,8	2,3,5,6,7						
Communicate and Interact	1,2,3,4,5,6,8	1,3,4,7			2,3,4,5,7,8	2,4,5,6,7			2,3,4,5,7,8	2,4,5,6,7						
Demonstrate Supervisory Ability (3)																
Comply with and Use TS (3)																

Notes:

- (1) Includes TS compliance for an RO.
- (2) Optional for an SRO-U.
- (3) Only applicable to SROs.

Instructions:

Check the applicants' license type and enter one or more event numbers that will allow the examiners to evaluate every applicable competency for every applicant. (This includes all rating factors for each competency.) (Forms ES 303 1 and ES 303 3 describe the competency rating factors.)

Facility: Millstone 3

Date of Examination: Week of 4 Dec 17

Operating Test No.: 2K17

Competencies	APPLICANTS (Rev 1)															
	RO <input type="checkbox"/> SRO-I 1,2 <input checked="" type="checkbox"/> SRO-U <input type="checkbox"/>				RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U1 <input checked="" type="checkbox"/>				RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U 2,3 <input checked="" type="checkbox"/>				RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/>			
	SCENARIO				SCENARIO				SCENARIO				SCENARIO			
	1 ATC	2 SRO	3	4	1 SRO	2 SRO	3	4	1 SRO	2 BOP	3	4	1	2	3	4
Interpret/Diagnose Events and Conditions	1,3,6,8	1,2,3,7			1,2,4,5,8	1,2,3,7			1,2,4,5,8	1,3,7						
Comply with and Use Procedures (1)	1,2,3,4,5,6,8	1,2,3,7			1,2,3,4,5,8	1,2,3,7			1,2,3,4,5,8	1,2,3,4,7						
Operate Control Boards (2)	1,2,3,4,5,6,8								1,2,3,4,7							
Communicate and Interact	1,2,3,4,5,6,8	1,2,3,7			1,2,3,4,5,8	1,2,3,7			1,2,3,4,5,8	1,2,3,4,7						
Demonstrate Supervisory Ability (3)		1,2,3,7			1,2,3,4,5,8	1,2,3,7			1,2,3,4,5,8							
Comply with and Use TS (3)		1,2			1,2	1,2			1,2							

Notes:

- (1) Includes TS compliance for an RO.
- (2) Optional for an SRO-U.
- (3) Only applicable to SROs.

Instructions:

Check the applicants' license type and enter one or more event numbers that will allow the examiners to evaluate every applicable competency for every applicant. (This includes all rating factors for each competency.) (Forms ES 303 1 and ES 303 3 describe the competency rating factors.)

Facility: <u>Millstone 3</u>		Date of Exam: <u>12/11/17</u>		Exam Level: RO <input type="checkbox"/> SRO <input checked="" type="checkbox"/>	
Item Description	Initials				
	a	b	c		
1. Clean answer sheets copied before grading	R	myc	Pro		
2. Proposed answer key changes and question deletions justified and documented (facility reviewer initials not required (N/R) if NO post-examination comments are submitted)	N/R	N/R	N/R Pro		
3. Applicants' scores checked for addition errors (reviewers spot check > 25% of examinations)	R	myc	Pro		
4. Grading for all borderline cases (80% ±2% overall and 70% or 80%, as applicable, ±4% on the SRO-only exam) reviewed in detail	N/R	N/R	N/R Pro		
5. All other failing examinations checked to ensure that grades are justified	N/R	N/R	N/R Pro		
6. Performance on missed questions checked for training deficiencies and wording problems; evaluate validity of questions missed by one-half or more of the applicants	R	myc	Pro		
Printed Name/Signature		Date			
a. Grader	<u>Robert Royce / [Signature]</u>		<u>12/12/17</u>		
b. Facility Reviewer(*)	<u>MJCOTE [Signature]</u> <del>THOMAS SETZEL [Signature]</del>		<u>12/13/17</u> <u>12/18/17</u>		
c. NRC Chief Examiner (*)	<u>Peter Presby / [Signature]</u>		<u>12/15/17</u>		
d. NRC Supervisor (*)	<u>Donald Jackson / [Signature]</u>		<u>12/15/17</u>		
(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.					