

Facility: CAUVENT Date of Examination: 2/27-3/1/04

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)	<i>[Signature]</i>
-120	2. NRC examiners and facility contact assigned (C.1.d; C.2.e)	<i>[Signature]</i>
-120	3. Facility contact briefed on security & other requirements (C.2.c)	<i>[Signature]</i>
-120	4. Corporate notification letter sent (C.2.d)	<i>[Signature]</i>
[-90]	[5. Reference material due (C.1.e; C.3.c)]	<i>[Signature]</i>
-75	6. Integrated examination outline(s) due (C.1.e & f; C.3.d)	<i>[Signature]</i>
-70	7. Examination outline(s) reviewed by NRC and feedback provided to facility licensee (C.2.h; C.3.e)	<i>[Signature]</i>
-45	8. Proposed examinations, supporting documentation, and reference materials due (C.1.e, f, g & h; C.3.d)	<i>[Signature]</i>
-30	9. Preliminary license applications due (C.1.i; C.2.g; ES-202)	<i>[Signature]</i>
-14	10. Final license applications due and assignment sheet prepared (C.1.i; C.2.g; ES-202)	<i>[Signature]</i>
-14	11. Examination approved by NRC supervisor for facility licensee review (C.2.h; C.3.f)	<i>[Signature]</i>
-14	12. Examinations reviewed with facility licensee (C.1.j; C.2.f & h; C.3.g)	<i>[Signature]</i>
-7	13. Written examinations and operating tests approved by NRC supervisor (C.2.i; C.3.h)	<i>[Signature]</i>
-7	14. Final applications reviewed; assignment sheet updated; waiver letters sent (C.2.g, ES-204)	<i>[Signature]</i>
-7	15. Proctoring/written exam administration guidelines reviewed with facility licensee and authorization granted to give written exams (if applicable) (C.3.k)	<i>[Signature]</i>
-7	16. Approved scenarios, job performance measures, and questions distributed to NRC examiners (C.3.i)	<i>[Signature]</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:		Date of Examination:		
Item	Task Description	Initials		
		a	b*	c#
1. W R I T T E N	a. Verify that the outline(s) fit(s) the appropriate model per ES-401.	red	DE	2
	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.	red	DE	2
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	red	DE	2
	d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.	red	DE	2
2. S I M	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.	red	DE	
	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 <del>over successive</del> on subsequent days.	red	DE	2
	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.	red	DE	
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.	red	DE	2
	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) <del>40%</del> 4 - 6 (2 - 3 for SRO-U) 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.	red	DE	2
	c. Verify that the required administrative topics are covered; <del>with emphasis on performance-based activities.</del>	red	DE	2
	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 <del>successive</del> subsequent days.	red	DE	2
4. G E N E R A L	a. Assess whether plant-specific priorities (including PRA and IPE insights) are covered in the appropriate exam section.	red	DE	2
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.	red	DE	2
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	red	DE	2
	d. Check for duplication and overlap among exam sections.	red	DE	2
	e. Check the entire exam for balance of coverage.	red	DE	2
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	red	DE	2
a. Author	M.L. Wosch / <del>W. Wosch</del> Printed Name / Signature		Date	
b. Facility Reviewer (*)	D.F. LAVATO / <del>D.F. Lavato</del>		12/9/03	
c. NRC Chief Examiner (#)	J. D'Antonio / <del>J. D'Antonio</del>		12/15/03	
d. NRC Supervisor	R.J. Conter / <del>R.J. Conter</del>		11/7/02	
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 2/23/04, 3/1/04 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 Wasem	Exam developer	Michael Wasem	9/11/03			
2. CHRISTOPHER J. TROPEA	CHEMISTRY	Christopher Tropea	10/14/03			
3. Domenic F. LAVATO	SUPV-RTU / FACILITY REP	Domenic F. Lavato	10/30/03			
4. James C. Kellum	Sr Ops Inst.	James C. Kellum	11/6/03			
5. EDMOND B. CHYZAKOWSKI	SIM SUPPORT WORK LEADER	Edmond B. Chyzakowski	11/12/03			
6. Karen Lofton	Sr Admin Asst	Karen Lofton	12/3/03			
7. DAVID SULA-WIT	C.R.O.	David Sula-Wit	12-3-03			
8. Richard D. GRETZ	POC INSTRUCTOR	Richard D. Gretz	12-5-03			
9. Justin R. Tuck	ST-SRO	Justin R. Tuck	12-10-03			
10. ERWIN LYSON	CONTROL ROOM OPERATOR	Erwin Lyson	12-17-03			
11. Robin M. Day	Training Program Specialist	Robin M. Day	12-18-03			
12. MICHAEL J. FICK	LORT INSTRUCTOR	Michael J. Fick	12/31/03			
13. James T. Huber	LORT INSTRUCTOR	James T. Huber	1/8/04			
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NOTES:

1. Pre-Examination

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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.	ROD HAMMANS	Senior Reactor Operator CRS	<i>Rod Hammans</i>	1-6-07			
2.	BOB HOWARTH	SSWG CRO	<i>R. Howarth</i>	1-7-07			
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NOTES:

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 2/23/04 + 3/1/04 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.

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PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE	NOTE
1. Michael Nasem	Exam developer	<i>Michael Nasem</i>	9/11/03			
2. CHRISTOPHER J. STROTH	CHEMISTRY	<i>Christopher Stroth</i>	10/1/03			
3. Domenic F. LAVATO	SUPV-RTU / FACILITY REP	<i>Domenic F. Lavato</i>	10/30/03			
4. James C. Kellum	Sn Ops Inst.	<i>James C. Kellum</i>	11/6/03			
5. EDMOND B. CZKAWOWSKI	SIM SUPPORT WORK LEADER	<i>Edmond B. Czkaowski</i>	11/17/03			
6. Karen Loftin	Sc Admin Asst	<i>Karen Loftin</i>	12/3/03			
7. DAVID SULAWIT	CRO	<i>David Sulawit</i>	12-3-03			
8. Richard D. Gretz	POCT Instructor	<i>Richard D. Gretz</i>	12-5-03			
9. Justin R. Topp	ST-SRO	<i>Justin R. Topp</i>	12-10-03			
10. ERVIN LYSON	CONTROL ROOM OPERATOR	<i>Ervin Lyson</i>	12-17-03			
11. Robin M. Day	Training Program Specialist	<i>Robin M. Day</i>	12-18-03			
12. MICHAEL J. FICK	LORT INSTRUCTOR	<i>Michael J. Fick</i>	12/31/03			
13. James T. Huber	LORT INSTRUCTOR	<i>James T. Huber</i>	1/9/04			
14. Kevin B. Humphrey	Control Room Supervisor	<i>Kevin B. Humphrey</i>	2/4/04			
15. JAY GAINES	Control Room Supervisor	<i>Jay Gaines</i>	2/4/04			

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	PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE	NOTE
1.	ROD HAMMANT	Senior Reactor Operator CR3	<i>Rod Hammant</i>	1-16-03			
2.	BOB HOWARTH	SSWG GRO	<i>R. Howarth</i>	1-7-04			
3.	JULIE SICKLE	Training Manager	<i>J. Sickle</i>	2-9-04			
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1. Michael Wasem	Exam developer	<i>Michael Wasem</i>	9/11/03	<i>Michael Wasem</i>	3/4/04
2. CHRISTOPHER J. TROPEA	CHIEFISTRY	<i>Christopher Tropea</i>	10/14/03	<i>Christopher Tropea</i>	3/15/04
3. DOMENIC F. LAVATO	SUPV-RTU / FACILITY REP	<i>Domenic F. Lavato</i>	10/30/03	<i>Domenic F. Lavato</i>	3/4/04
4. JAMES C. KELLUM	Sr. Ops Inst.	<i>James C. Kellum</i>	11/6/03	<i>James C. Kellum</i>	3/4/04
5. EDMOND A. CZYZAKOWSKI	SRM SUPPORT WORK LEADER	<i>Edmond A. Czysakowski</i>	11/12/03	<i>Edmond A. Czysakowski</i>	3/4/04
6. Karen Lofton	Sr Admin Asst	<i>Karen Lofton</i>	12/3/03	<i>Karen Lofton</i>	3/4/04
7. DAVID SULA-LUT	CRO	<i>David Sula-Lut</i>	12-3-03	<i>David Sula-Lut</i>	3-4-04
8. Richard D. GRETZ	POCT Instructor	<i>Richard D. Gretz</i>	12-5-03	<i>Richard D. Gretz</i>	3-4-04
9. Justin R. Topik	ST-SRO	<i>Justin R. Topik</i>	12-10-03	<i>Justin R. Topik</i>	3-4-04
10. ERWIN LYSON	CONTROL ROOM OPERATOR	<i>Erwin Lyson</i>	12-17-03	<i>Erwin Lyson</i>	3-4-04
11. Robin M. Day	Training Program Specialist	<i>Robin M. Day</i>	12-18-03	<i>Robin M. Day</i>	3/4/04
12. MICHAEL J. FICK	LORT INSTRUCTOR	<i>Michael J. Fick</i>	12/3/03	<i>Michael J. Fick</i>	3/4/04
13. JAMES T. HUBER	LORT INSTRUCTOR	<i>James T. Huber</i>	12/1/04	<i>James T. Huber</i>	3/4/04
14. Kevin B. Umphrey	Control Room Supervisor	<i>Kevin B. Umphrey</i>	2/4/04	<i>Kevin B. Umphrey</i>	3/4/04
15. JAY GAINES	Control Room SUPERVISOR	<i>Jay Gaines</i>	2/4/04	<i>Jay Gaines</i>	3/4/04

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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.	Row Hamman	Senior Reactor Operator CRS	[Signature]	1-6-04	[Signature]	3-5-04	
2.	Bob Howarth	SSWG CRO	[Signature]	1-7-04	[Signature]	3-5-04	
3.	Julie Sickle	Training Manager	[Signature]	2-9-04	[Signature]	3-4-04	
4.	Brian Hayden	SUPV-LOI	[Signature]	3-1-04	[Signature]	3-4-04	
5.	Kurt Mills	GSAPP	[Signature]	3-1-04	[Signature]	3-4-04	
6.	RODNEY RUFJ	COMPUTER TECH	[Signature]	3-1-04	[Signature]	3-4-04	
7.	DAVID A. GIBENS	COMPUTER MAINT.	[Signature]	3-1-04	[Signature]	3-4-04	
8.	EVERETT R. SMITH	CM SUPERVISOR	[Signature]	3-1-04	[Signature]	3-4-04	
9.	MACK A THOMPSON	IT Analyst	[Signature]	3-1-04	[Signature]	3-4-04	
10.	GLENN S JOY	INST Training	[Signature]	3-2-04	[Signature]	3-4-04	
11.	Denise Nelson	Regual	[Signature]	3-4-04	[Signature]	3-4-04	
12.	M. Sickle						
13.	Julie Sickle	Training Manager	[Signature]	3-4-04	[Signature]	3-4-04	
14.							
15.							

NOTES:



NUREG-1021, Draft Revision 9

ES-301

Operating Test Quality Checklist Form

ES-301-3

Facility:	Date of Examination:	Operating Test Number:		
<b>1. GENERAL CRITERIA</b>		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).		new	AE	✓
b) There is no day-to-day repetition between this and other operating tests to be administered during this examination.		new	AE	✓
c) The operating test shall not duplicate items from the applicants' audit test(s)(see Section D.1.a).		new	AE	✓
d) Overlap with the written examination and between different parts of the operating test is within acceptable limits.		new	AE	✓
e) It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.		new	AE	✓
<b>2. WALK-THROUGH CRITERIA</b>		-	-	-
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>• 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>		new	AE	✓
b) 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.		new	AE	✓
c) At least 20 percent of the JPMs on each test are new or significantly modified.		new	AE	✓
<b>3. SIMULATOR (CATEGORY C ) CRITERIA</b>		-	-	-
a) The associated simulator operating tests (scenario sets) have been reviewed in accordance with Form ES-301-4 and a copy is attached.		new	AE	✓
Printed Name / Signature		Date		
a. Author	<u>Michael L. Wasem / <i>[Signature]</i></u>	<u>1/16/04</u>		
b. Facility Reviewer(*)	<u>Domenic F. Lavato / <i>[Signature]</i></u>	<u>1/16/04</u>		
c. NRC Chief Examiner (#)	<u><i>[Signature]</i> / J. Varnover</u>	<u>1/29/04</u>		
d. NRC Supervisor	<u>RO Carter / <i>[Signature]</i></u>	<u>1/23/04</u>		
NOTE: * The facility signature is not applicable for NRC-developed tests. # Independent NRC reviewer initial items in Column "c;" chief examiner concurrence required.				

Facility: <u>CCNAP</u>		Date of Exam: <u>2/27/04</u>		Scenario Numbers: <u>11213*</u>		Operating Test No.: <u>1</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.	/	JK	JK	JK		
2.	The scenarios consist mostly of related events.	/	JK	JK	JK		
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)	/	JK	JK	JK		
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.	/	JK	JK	JK		
5.	The events are valid with regard to physics and thermodynamics.	/	JK	JK	JK		
6.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.	/	JK	JK	JK		
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	N/A		
8.	The simulator modeling is not altered.	/	JK	JK	JK		
9.	The scenarios have been validated. Pursuant to 10 CFR 55.46(d), any open simulator performance deficiencies have been evaluated to ensure that functional fidelity is maintained while running the planned scenarios.	/	JK	JK	JK		
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.45 of ES-301.	/	JK	JK	JK		
11.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).	/	JK	JK	JK		
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).	/	JK	JK	JK		
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.	/	JK	JK	JK		
<b>TARGET QUANTITATIVE ATTRIBUTES (PER SCENARIO; SEE SECTION D.4.B5.d)</b>		Actual Attributes		--	--	--	
1.	Total malfunctions (5-8)	7 18 18					
2.	Malfunctions after EOP entry (1-2)	2 13 13					
3.	Abnormal events (2-4)	2 12 12					
4.	Major transients (1-2)	2 12 11					
5.	EOPs entered/requiring substantive actions (1-2)	1 11 11					
6.	EOP contingencies requiring substantive actions (0-2)	0 11 10					
7.	Critical tasks (2-3)	2 12 12					

\* Scenario #3 is a spare.


Facility: <i>CCNPP</i>		Date of Exam: <i>2/27/04</i>		Scenario Numbers: <i>41* 1</i>		Operating Test No.: <i>1</i>	
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.	<i>/</i>	<i>DE</i>	<i>/</i>			
2.	The scenarios consist mostly of related events.	<i>/</i>	<i>DE</i>	<i>/</i>			
3.	Each event description consists of <ul style="list-style-type: none"> <li>· the point in the scenario when it is to be initiated</li> <li>· the malfunction(s) 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>	<i>/</i>	<i>DE</i>	<i>/</i>			
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.	<i>/</i>	<i>DE</i>	<i>/</i>			
5.	The events are valid with regard to physics and thermodynamics.	<i>/</i>	<i>DE</i>	<i>/</i>			
6.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.	<i>/</i>	<i>DE</i>	<i>/</i>			
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.	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>			
8.	The simulator modeling is not altered.	<i>/</i>	<i>DE</i>	<i>/</i>			
9.	The scenarios have been validated. Pursuant to 10 CFR 55.46(d), any open simulator performance deficiencies have been evaluated to ensure that functional fidelity is maintained while running the planned scenarios.	<i>/</i>	<i>DE</i>	<i>/</i>			
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.45 of ES-301.	<i>/</i>	<i>DE</i>	<i>/</i>			
11.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).	<i>/</i>	<i>DE</i>	<i>/</i>			
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).	<i>/</i>	<i>DE</i>	<i>/</i>			
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.	<i>/</i>	<i>DE</i>	<i>/</i>			
<b>TARGET QUANTITATIVE ATTRIBUTES (PER SCENARIO; SEE SECTION D.4-B5.d)</b>		Actual Attributes	--	--	--		
1.	Total malfunctions (5-8)	<i>7</i>	<i>1</i>	<i>1</i>			
2.	Malfunctions after EOP entry (1-2)	<i>2</i>	<i>1</i>	<i>1</i>			
3.	Abnormal events (2-4)	<i>3</i>	<i>1</i>	<i>1</i>			
4.	Major transients (1-2)	<i>2</i>	<i>1</i>	<i>1</i>			
5.	EOPs entered/requiring substantive actions (1-2)	<i>1</i>	<i>1</i>	<i>1</i>			
6.	EOP contingencies requiring substantive actions (0-2)	<i>0</i>	<i>1</i>	<i>1</i>			
7.	Critical tasks (2-3)	<i>2</i>	<i>1</i>	<i>1</i>			

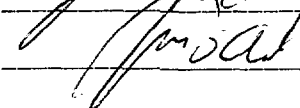
\* Scenario 4 is a Low power spare

OPERATING TEST NO.: 1

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

- 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.45.d) but must be significant per Section C.2.a of Appendix D. \* Reactivity and normal evolutions may be replaced with additional instrument or component 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 requirement.

Author: 

NRC Reviewer: 

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

*F. C. Hill*

NRC Reviewer:

*[Signature]*

Facility: <u>CCNPP</u>		Date of Exam: <u>2/27/04</u>		Exam Level: <u>RO/SRO</u>		
Item Description	Initial					
	a	b*	c*			
1. Questions and answers technically accurate and applicable to facility	MLW	JE	#			
2. a. NRC K/As referenced for all questions b. Facility learning objectives referenced as available	MLW	JE	#			
3. RO/SRO overlap is no more than 75 percent, and SRO questions are appropriate per Section D.2.d of ES-401	MLW	JE	#			
4. Question selection and duplication from the last two NRC licensing exams appears consistent with a systematic sampling process	MLW	JE	#			
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 X other (explain) <u>see attached</u>	MLW	JE	#			
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 RO / SRO-only question distribution(s) at right	Bank	Modified	New	MLW	JE	#
	24/10	9/1	42/14			
7. Between 50 and 60 percent of the questions on the RO exam (including 10 new questions) are written at the comprehension/analysis level; the SRO exam may exceed 60 percent if the randomly selected K/As support the higher cognitive levels; enter the actual RO / SRO question distribution(s) at right	Memory	CIA		MLW	JE	#
	31/10	44/15				
8. References/handouts provided do not give away answers	MLW	JE	#			
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	MLW	JE	#			
10. Question psychometric quality and format meet ES, Appendix B, guidelines	MLW	JE	#			
11. The exam contains 100; the required number of one-point, multiple choice items; the total is correct and agrees with value on cover sheet	MLW	JE	#			
		Printed Name / Signature		Date		
a. Author	<u>Michael L. Wasem / M. Wasem</u>		<u>1/16/04</u>			
b. Facility Reviewer (*)	<u>Domenic F. Lavato / K. Lavato</u>		<u>1/16/04</u>			
c. NRC Chief Examiner (#)	<u>M. J. Davis / M. J. Davis</u>		<u>1/27/04</u>			
d. NRC Regional Supervisor	<u>R. J. Conter / R. J. Conter</u>		<u>1/27/04</u>			
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.						

The Calvert Cliffs 2004 Audit Exam was based on the July 2002 Initial License Exam. The license exam was reviewed, modified and edited by an independent exam team consisting of LOIT instructors. There was no collaboration between the audit exam team and the 2004 Initial Exam team. The Initial Exam author selected no questions used on the 2002 exam for the 2004 exam.

msw 1/16/04

AFTER  
VALUATION  
WEEK - JMD

ES-401

Written Examination  
Quality Checklist

Form ES-401-76

Facility:		Date of Exam:			Exam Level: RO/SRO		
Item Description					Initial		
					a	b*	c#
1.	Questions and answers technically accurate and applicable to facility						
2.	a. NRC K/As referenced for all questions b. Facility learning objectives referenced as available						
3.	RO/SRO overlap is no more than 75 percent, and SRO questions are appropriate per Section D.2.d of ES-401						
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: <input type="checkbox"/> the audit exam was systematically and randomly developed; or <input type="checkbox"/> the audit exam was completed before the license exam was started; or <input type="checkbox"/> the examinations were developed independently; or <input type="checkbox"/> the licensee certifies that there is no duplication; or <input type="checkbox"/> other (explain)						
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 RO / SRO-only question distribution(s) at right	Bank	Modified	New			
		22110	811	45114			
7.	Between 50 and 60 percent of the questions on the RO exam (including 10 new questions) are written at the comprehension/analysis level; the SRO exam may exceed 60 percent if the randomly selected K/As support the higher cognitive levels; enter the actual RO / SRO question distribution(s) at right	Memory	C/A				
		34111	41114				
8.	References/handouts provided do not give away answers						
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						
10.	Question psychometric quality and format meet ES, Appendix B, guidelines						
11.	The exam contains 100; the required number of one-point, multiple choice items; the total is correct and agrees with value on cover sheet						
Printed Name / Signature					Date		
a.	Author	_____			_____		
b.	Facility Reviewer (*)	_____			_____		
c.	NRC Chief Examiner (#)	_____			_____		
d.	NRC Regional Supervisor	_____			_____		
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:		Date of Exam:		Exam Level: RO/SRO		
Item Description				Initials		
				a	b	c
1.	Clean answer sheets copied before grading			meW	H	J
2.	Answer key changes and question deletions justified and documented			meW	H	J
3.	Applicants' scores checked for addition errors (reviewers spot check > 25% of examinations)			meW	H	J
4.	Grading for all borderline cases (80 +/- 2% overall and 70 +/- 4% on the SRO-only) reviewed in detail			meW	H	J
5.	All other failing examinations checked to ensure that grades are justified			N/A	N/A	N/A
6.	Performance on missed questions checked for training deficiencies and wording problems; evaluate validity of questions missed by half or more of the applicants			meW	H	J
		Printed Name / Signature			Date	
a.	Grader	Michael L. Wasem / <u>meW</u>			3/5/04	
b.	Facility Reviewer(*)	Brian Hayden / <u>BH</u>			3-5-04	
c.	NRC Chief Examiner (*)	J. DANFORD / <u>J.D.</u>			3/17/04	
d.	NRC Supervisor (*)	R. J. Carter / <u>RJC</u>			3/23/04	
(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.						