

VARIOUS CHECKLISTS

FOR THE D. C. COOK INITIAL EXAMINATION - MARCH 2004

Facility: <u>DC Cook Units 1 and 2</u>		Date of Examination: <u>March 15-25, 2004</u>
Examinations Developed by: <u>Facility</u> / 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)	MGB
-120	2. NRC examiners and facility contact assigned (C.1.d; C.2.e)	MGB
-120	3. Facility contact briefed on security & other requirements (C.2.c)	MGB
-120	4. Corporate notification letter sent (C.2.d)	MGB
[-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)	MGB
-70	7. Examination outline(s) reviewed by NRC and feedback provided to facility licensee (C.2.h; C.3.e)	MGB
-45	8. Proposed examinations, supporting documentation, and reference materials due (C.1.e, f, g & h; C.3.d)	MGB
-30	9. Preliminary license applications due (C.1.i; C.2.g; ES-202)	MGB
-14	10. Final license applications due and assignment sheet prepared (C.1.i; C.2.g; ES-202)	MGB
-14	11. Examination approved by NRC supervisor for facility licensee review (C.2.h; C.3.f)	MGB
-14	12. Examinations reviewed with facility licensee (C.1.j; C.2.f & h; C.3.g)	MGB
-7	13. Written examinations and operating tests approved by NRC supervisor (C.2.i; C.3.h)	MGB
-7	14. Final applications reviewed; assignment sheet updated; waiver letters sent (C.2.g, ES-204)	MGB
-7	15. Proctoring/written exam administration guidelines reviewed with facility licensee and authorization granted to give written exams (if applicable) (C.3.k)	MGB
-7	16. Approved scenarios, job performance measures, and questions distributed to NRC examiners (C.3.i)	MGB
<p>* Target dates are keyed to the examination date identified in the corporate notification letter. They are for planning purposes and may be adjusted on a case-by-case basis in coordination with the facility licensee.</p> <p>[] Applies only to examinations prepared by the NRC.</p>		

COOK 2004 NRC Exam

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 3/15/04 & 3/22/04 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 3/15/04, 3/22/04, 3/29/04 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. <u>Ronald M. Bailey</u>	<u>SR. Instructor</u>	<u>[Signature]</u>	<u>10/9/03</u>	<u>[Signature]</u>	<u>3/29/04</u>
2. <u>Steven W. Pettinger</u>	<u>NRC Exam Contractor</u>	<u>[Signature]</u>	<u>10/18/03</u>	<u>[Signature]</u>	<u>3/29/04</u>
3. <u>Ken Helm</u>	<u>AEO-Obstainer</u>	<u>[Signature]</u>	<u>10/13/03</u>	<u>[Signature]</u>	<u>not for 3/31/04</u>
4. <u>Tim Vizzanna</u>	<u>Simulator Supervisor</u>	<u>[Signature]</u>	<u>11/18/03</u>	<u>[Signature]</u>	<u>4/13/04</u>
5. <u>Keith Salvati</u>	<u>Simulator Systems Admin</u>	<u>[Signature]</u>	<u>11/18/03</u>	<u>[Signature]</u>	<u>3/29/04</u>
6. <u>Min Ke</u>	<u>Simulator Staff</u>	<u>[Signature]</u>	<u>11/18/03</u>	<u>[Signature]</u>	<u>3/29/04</u>
7. <u>Tim Garrison</u>	<u>Simulator Staff</u>	<u>[Signature]</u>	<u>11/21/03</u>	<u>[Signature]</u>	<u>3/29/04</u>
8. <u>J. Downelly</u>	<u>RO / OPS-D</u>	<u>[Signature]</u>	<u>12-14-03</u>	<u>[Signature]</u>	<u>3-31-04</u>
9. <u>Kevin Phillips</u>	<u>US / OPS-D</u>	<u>[Signature]</u>	<u>12-15-03</u>	<u>[Signature]</u>	<u>3-30-04</u>
10. <u>FRITZ HEIMBIGNER</u>	<u>RO / OPS-WCC</u>	<u>[Signature]</u>	<u>12-11-03</u>	<u>[Signature]</u>	<u>3/30/04</u>
11. <u>GEORGE McULLOUGH</u>	<u>SIMULATOR STAFF</u>	<u>[Signature]</u>	<u>12/15/03</u>	<u>[Signature]</u>	<u>5/15/04</u>
12. <u>Rod Sieber</u>	<u>OPS TRAINING MGR</u>	<u>[Signature]</u>	<u>12/19/03</u>	<u>[Signature]</u>	<u>3/29/04</u>
13. <u>BRIAN MUTZ</u>	<u>OPJ Supt. Program administrator</u>	<u>[Signature]</u>	<u>12/23/03</u>	<u>[Signature]</u>	<u>3/30/04</u>
14. <u>JEFFERY CLARK</u>	<u>RO / OPS C Shift</u>	<u>[Signature]</u>	<u>1/1/04</u>	<u>[Signature]</u>	<u>3/31/04</u>
15. <u>Jim Lynde</u>	<u>US - SRO</u>	<u>[Signature]</u>	<u>1/1/04</u>	<u>[Signature]</u>	<u>3/30/2004</u>

NOTES:

Cook 2004 NRC Exam

1. Pre-Examination

3/15/04

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 3/22/04 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

3/15/2004, 3/22/2004, & 3/29/2004

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 3/15/2004, 3/22/2004, & 3/29/2004. 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 HOENN	RO	<i>Robert Hoenn</i>	1/11/04	<i>Robert Hoenn</i>	3/30/04
2. SUSAN FREEMAN	Dept ASST	<i>Susan Freeman</i>	1/13/04	<i>Susan Freeman</i>	3/29/04
3. JAMES P. SHAW	SRO Instructor	<i>James P. Shaw</i>	1/15/04	<i>James P. Shaw</i>	3-29-04
4. Douglas A. Mason	US	<i>Douglas A. Mason</i>	1/17/04	<i>Douglas A. Mason</i>	3/30/04
5. Daniel S. Kurth	RO	<i>Daniel S. Kurth</i>	1/17/04	<i>Daniel S. Kurth</i>	3/30/04
6. Thomas A. Baker	RO	<i>Thomas A. Baker</i>	1/17/04	<i>Thomas A. Baker</i>	3/30/04
7. David Dolby	U.S.	<i>David Dolby</i>	1-18-04	<i>David Dolby</i>	3-30-04
8. Kyle Baker	R.O	<i>Kyle Baker</i>	1-18-04	<i>Kyle Baker</i>	3-30-04
9. Douglas Bowman	US	<i>Douglas Bowman</i>	1/26/04	<i>Douglas Bowman</i>	3/30/04
10. TOM SWINHART	RU	<i>Tom Swinhart</i>	1-28-04	<i>Tom Swinhart</i>	3-30-04
11. Tonya Ott	Admin	<i>Tonya Ott</i>	1-28-04	<i>Tonya Ott</i>	3/30/04
12. FRANK BAKER	SRO	<i>Frank Baker</i>	2/20/04	<i>Frank Baker</i>	3/30/04
13. Chris Guiton	RO	<i>Chris Guiton</i>	3/01/04	<i>Chris Guiton</i>	3/30/04
14. JEFF MANROE	RO	<i>Jeff Manroe</i>	2-23-04	<i>Jeff Manroe</i>	3-31-04
15. Gary J. Zielle	RU	<i>Gary J. Zielle</i>	2-23-04	<i>Gary J. Zielle</i>	4-15-04

NOTES:

COOK 2004 NRC Exam

1. Pre-Examination

3/15/04

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of *3/22/04* 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

3/15/2004
3/22/2004
3/29/2004

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 *3/15/04*. 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. RONALD W. PETRO	SRO Unit Supervisor	<i>Ronald W. Petro</i>	<i>2-23-04</i>	<i>Ronald W. Petro</i>	<i>3-31-04</i>
2. SHANE RUSSO	Software Developer	<i>Shane Russo</i>	<i>2-23-04</i>	<i>Shane Russo</i>	<i>3-29-04</i>
3. SHANE LIES	SRO Unit Supervisor	<i>Shane Lies</i>	<i>2/23/04</i>	<i>Shane Lies</i>	<i>3/29/04</i>
4. JOHN T. CONRAD	ILT SR Instructor	<i>John T. Conrad</i>	<i>3/15/04</i>	<i>John T. Conrad</i>	<i>3/29/04</i>
5. THEODORE C. WERK	OPS UNIT SUPERVISOR	<i>Theodore C. Werk</i>	<i>3/15/04</i>	<i>Theodore C. Werk</i>	<i>3/29/04</i>
6. ROBERT NIEDZIEMSKI	INSTRUCTOR	<i>Robert Niedziemski</i>	<i>3/15/04</i>	<i>Robert Niedziemski</i>	<i>4/1/04</i>
7. JEFFREY P. SHIPS	INSTRUCTOR	<i>Jeffrey P. Ships</i>	<i>3/15/04</i>	<i>Jeffrey P. Ships</i>	<i>3-29-2004</i>
8. IRAN D. FLEERWOOD	ILT SUPERVISOR	<i>Iran D. Fleerwood</i>	<i>3/15/04</i>	<i>Iran D. Fleerwood</i>	<i>3-29-04</i>
9. MARK RUSSELL	UNIT SUPERVISOR	<i>Mark Russell</i>	<i>3/15/04</i>	<i>Mark Russell</i>	<i>4/13/04</i>
10. ROBERT K. GILLESPIE	OPS MANAGER	<i>Robert K. Gillespie</i>	<i>3/19/04</i>	<i>Robert K. Gillespie</i>	<i>3-30-04</i>
11. THOMAS A. CRAIG	Unit Supervisor	<i>Thomas A. Craig</i>	<i>3/22/04</i>	<i>Thomas A. Craig</i>	<i>3/29/04</i>
12. TERRY STAFFELD	REACTOR OPERATOR	<i>Terry Staffeld</i>	<i>3/24/04</i>	<i>Terry Staffeld</i>	<i>3-30-04</i>
13.					
14.					
15.					

NOTES:

Facility: <u>DC Cook Nuclear Station</u>		Date of Examination: <u>03/15/2004</u>		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).	S	VA	nav	RW	
b.	There is no day-to-day repetition between this and other operating tests to be administered during this examination.	S	VA	nav	RW	
c.	The operating test shall not duplicate items from the applicants' audit test(s)(see Section D.1.a).	S	VA	nav	RW	
d.	Overlap with the written examination and between operating test categories is within acceptable limits.	S	VA	nav	RW	
e.	It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.	S	VA	nav	RW	
2. WALK-THROUGH (CATEGORY A & B) CRITERIA				--	--	--
a.	Each JPM includes the following, as applicable: <ul style="list-style-type: none"> - 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: <ul style="list-style-type: none"> - 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 	S	VA	nav	RW	
b.	The prescribed questions in Category A are predominantly open reference and meet the criteria in Attachment 1 of ES-301.	S	VA	NA	RW	
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.	S	VA	nav	RW	
d.	At least 20 percent of the JPMs on each test are new or significantly modified.	S	VA	nav	RW	
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.	S	VA	nav	RW	
a. Author	<u>Ronald M Bailey /</u>	Printed Name / Signature		Date		
b. Facility Reviewer (*)	<u>Ronald J Sieber /</u>	<i>[Signature]</i>		<u>01/23/04</u>		
c. NRC Chief Examiner (#)	<u>Michael E. Bieby /</u>	<i>[Signature]</i>		<u>1/23/04</u>		
d. NRC Supervisor	<u>RJ Lanksbury /</u>	<i>[Signature]</i>		<u>2/12/04</u>		
				<u>3/4/04</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>DC Cook Nuclear Station</u> Date of Exam: <u>3/15/04</u> Scenario Numbers: <u>01/02/05</u> Operating Test No.: <u>Set 1</u>		Initials			
QUALITATIVE ATTRIBUTES		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.	B	MA	NAV	
2.	The scenarios consist mostly of related events.	B	MA	NAV	
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)	B	MA	NAV	
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.	B	MA	NAV	
5.	The events are valid with regard to physics and thermodynamics.	B	MA	NAV	
6.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.	B	MA	NAV	
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.	B	MA	NAV	
8.	The simulator modeling is not altered.	B	MA	NAV	
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.	B	MA	NAV	
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.	B	MA	NAV	
11.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).	B	MA	NAV	
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).	B	MA	NAV	
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.	B	MA	NAV	
TARGET QUANTITATIVE ATTRIBUTES (PER SCENARIO; SEE SECTION D.4.D)		Actual Attributes			
1.	Total malfunctions (5-8)	6 / 6 / 6	B	MA	NAV
2.	Malfunctions after EOP entry (1-2)	2 / 2 / 2	B	MA	NAV
3.	Abnormal events (2-4)	4 / 4 / 4	B	MA	NAV
4.	Major transients (1-2)	1 / 1 / 1	B	MA	NAV
5.	EOPs entered/requiring substantive actions (1-2)	2 / 2 / 1	B	MA	NAV
6.	EOP contingencies requiring substantive actions (0-2)	0 / 1 / 1	B	MA	NAV
7.	Critical tasks (2-3)	2 / 2 / 2	B	MA	NAV

OPERATING TEST NO.:DC Cook 2004 Set 1

Applicant Type	Evolution Type	Minimum Number	Scenario Number			
			Cook 04-01	Cook 04-02	Cook 04-05	-
RO	Reactivity	1	1	1	1	
	Normal	1	1	1	1	
	Instrument / Component	4	3	4	2	
	Major	1	1	1	1	

As RO	Reactivity	1	1	1	1	
	Normal	0				
	Instrument / Component	2	3	4	2	
	Major	1	1	1	1	
SRO-I	Reactivity	0	1	1	1	
	Normal	1	1	1	1	
	Instrument / Component	2	6	6	6	
	Major	1	1	1	1	

SRO-U	Reactivity	0				
	Normal	1				
	Instrument / Component	2				
	Major	1				

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

Author:

NRC Reviewer:

Mark Batty
Nicholas A. Valen

DC Cook 2004 Simulator Exams Set 1(a)

Crews 5,6 Competencies Position Scenario Cook04-	Applicant #1 SRO-I				Applicant #2 SRO-I				Applicant #3 RO			
	SCENARIO				SCENARIO				SCENARIO			
	SRO 01	RO 02	SRO 05		BOP 01	SRO 02	RO 05		RO 01	BOP 02	BOP 05	
Understand and Interpret Annunciators and Alarms	3,4,5 ,6,7	3,6, 7,8	2,3, 4,5, 7,8, 9		4,6,7 ,8	2,3,5 ,6,7, 8	2,3, 7		3,5 ,7	2,5,6 ,7,8	4,5,8 ,9	
Diagnose Events and Conditions	3,4,5 ,6,7	3,6, 7,8	2,3, 4,7, 8,9		4,6,7 ,8	2,3,5 ,6,7	2,3, 7,8		3,5 ,7, 9	2,5,6 ,8	4,5,7 ,8,9	
Understand Plant and System Response	3,4,5 ,6,7, 8,9	3,4, 6,7, 8	2,3, 4,5, 7,8, 9		4,6,7 ,8	2,3,4 ,6,7, 8	2,3, 6,7, 8		3,5 ,7, 9	2,5,6 ,7,8	4,5,7 ,8,9	
Comply With and Use Procedures (1)	3,4,5 ,7,8, 9	3,4, 6,7, 8	2,3, 4,5, 7,8, 9		4,6,7 ,8	1,2,3 ,4,5, 6,7	2,3, 7,8		3,5 ,7, 9	1,5,6 ,7,8	1,4,5 ,7,8, 9	
Operate Control Boards (2)		3,4, 6,7, 8			1,4,7 ,8		2,3, 8		2,3 ,7, 9	1,2,5 ,7,8	1,4,5 ,8,9	
Communicate and Interact With the Crew	2,3,4 ,5,7, 8,9	3,6, 7,8	2,3, 4,5, 7,8, 9		4,6,7 ,8	2,3,4 ,6,7, 8	2,3, 6,8		3,5 ,7, 9	2,5,7 ,8	4,5,6 ,8,9	
Demonstrate Supervisory Ability (3)	2,3,4 ,5,7		2,3, 4,5, 7,8, 9			2,3,4 ,6,7, 8						
Comply With and Use Tech. Specs. (3)	3,4,5		2			2,3						

Notes:

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

Instructions:

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

Author:

Mark J. Kelly

NRC Reviewer:

Nicholas A. Valeri

DC Cook 2004 Simulator Exams Set 1(b)

Crew 4 Competencies Position Scenario Cook04-	Applicant #1 RO				Applicant #2 RO				Applicant #3			
	SCENARIO				SCENARIO				SCENARIO			
	BOP 02	RO 05			RO 02	BOP 05						
Understand and Interpret Annunciators and Alarms	2,5,6 ,7,8	2,3,7			3,6,7 ,8	4,5,8 ,9						
Diagnose Events and Conditions	2,5,6 ,8	2,3,7 ,8			3,6,7 ,8	4,5,7 ,8,9						
Understand Plant and System Response	2,5,6 ,7,8	2,3,6 ,7,8			3,4,6 ,7,8	4,5,7 ,8,9						
Comply With and Use Procedures (1)	1,5,6 ,7,8	2,3,7 ,8			3,4,6 ,7,8	1,4,5 ,7,8, 9						
Operate Control Boards (2)	1,2,5 ,7,8	2,3,8			3,4,6 ,7,8	1,4,5 ,8,9						
Communicate and Interact With the Crew	2,5,7 ,8	2,3,6 ,8			3,6,7 ,8	4,5,6 ,8,9						
Demonstrate Supervisory Ability (3)												
Comply With and Use Tech. Specs. (3)												
Notes: (1) Includes Technical Specification compliance for an RO. (2) Optional for an SRO-U. (3) Only applicable to SROs.												

Instructions:

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

Author: 

NRC Reviewer: 

Facility: <u>DC Cook Nuclear Station</u> Date of Exam: <u>3/15/04</u> Scenario Numbers: <u>03 / 06</u> Operating Test No.: <u>Set 2</u>		Initials		
QUALITATIVE ATTRIBUTES		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.	15	15	nav
2.	The scenarios consist mostly of related events.	15	15	nav
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)	15	15	nav
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.	15	15	nav
5.	The events are valid with regard to physics and thermodynamics.	15	15	nav
6.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.	15	15	nav
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.	15	15	nav
8.	The simulator modeling is not altered.	15	15	nav
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.	15	15	nav
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.	15	15	nav
11.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).	15	15	nav
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).	15	15	nav
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.	15	15	nav
TARGET QUANTITATIVE ATTRIBUTES (PER SCENARIO; SEE SECTION D.4.D)		Actual Attributes	--	--
1.	Total malfunctions (5-8)	6 / 6 /	15	15
2.	Malfunctions after EOP entry (1-2)	2 / 2 /	15	15
3.	Abnormal events (2-4)	4 / 4 /	15	15
4.	Major transients (1-2)	1 / 1 /	15	15
5.	EOPs entered/requiring substantive actions (1-2)	1 / 1 /	15	15
6.	EOP contingencies requiring substantive actions (0-2)	0 / 1 /	15	15
7.	Critical tasks (2-3)	2 / 2 /	15	15

OPERATING TEST NO.:DC Cook 2004 Set 2

Applicant Type	Evolution Type	Minimum Number	Scenario Number			
			Cook 04-03	Cook 04-06		-
RO	Reactivity	1	1	1		
	Normal	1	1	1		
	Instrument / Component	4	4	3		
	Major	1	1	1		

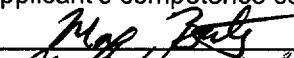

As RO	Reactivity	1				
	Normal	0				
	Instrument / Component	2				
	Major	1				
SRO-I	Reactivity	0				
	Normal	1				
	Instrument / Component	2				
	Major	1				

SRO-U	Reactivity	0	1	1		
	Normal	1	1	1		
	Instrument / Component	2	6	6		
	Major	1	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:

DC Cook 2004 Simulator Exams Set 2

Crews 1,2,3 Competencies Position Scenario Cook04-	Applicant #1 SRO-U				Applicant #2 RO				Applicant #3 RO			
	SCENARIO				SCENARIO				SCENARIO			
	SRO 03	SRO 06			RO 03	BOP 06			BOP 03	RO 06		
Understand and Interpret Annunciators and Alarms	2,3,5 ,6,7	2,4,5 ,6,7, 8,9			3,5,6 ,7	4,6,8 ,9			2,6,9	2,5, 6,7		
Diagnose Events and Conditions	2,3,5 ,6,7	2,4,5 ,6,7, 8,9			3,5,7 ,8	4,6,8 ,9			2,6,7, 9	2,5, 6,7		
Understand Plant and System Response	2,3,5 ,6,7, 8	2,4,5 ,7,8, 9			3,5,6 ,7	4,6,8 ,9			2,6,7, 9	2,5, 6,7		
Comply With and Use Procedures (1)	2,3,5 ,6,7	2,4,5 ,7,8, 9			1,3,5 ,6,7, 8	4,6,8 ,9			2,6,9	1,2, 3,5, 7		
Operate Control Boards (2)					1,3,5 ,6,7, 8	4,6,8 ,9			2,6,9	1,2, 3,5, 7		
Communicate and Interact With the Crew	2,3,5 ,6,7, 8,9	2,4,5 ,6,7, 8,9			3,5,6 ,7,8	4,6,8 ,9			2,6,7, 9	2,3, 5,7		
Demonstrate Supervisory Ability (3)	2,3,5 ,6,7, 9	2,4,5 ,6,7, 8,9										
Comply With and Use Tech. Specs. (3)	2,3,5	2,4,5										

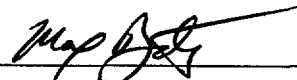
Notes:

(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: <u>DC Cook Nuclear Stations</u>		Date of Exam: <u>03/15/2004</u>		Exam Level: <u>RO</u>		
Item Description	Initial					
	a	b*	c#			
1. Questions and answers technically accurate and applicable to facility	<i>JA</i>	<i>JA</i>	<i>NAV</i>			
2. a. NRC K/As referenced for all questions b. Facility learning objectives referenced as available	<i>JA</i>	<i>JA</i>	<i>NAV</i>			
3. RO/SRO overlap is no more than 75 percent, and SRO questions are appropriate per Section D.2.d of ES-401	<i>JA</i>	<i>JA</i>	<i>NAV</i>			
4. Question selection and duplication from the last two NRC licensing exams appears consistent with a systematic sampling process			<i>NAV</i>			
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 checked="" type="checkbox"/> the examinations were developed independently; or <input checked="" type="checkbox"/> the licensee certifies that there is no duplication; or <input type="checkbox"/> other (explain)	<i>JA</i>	<i>JA</i>	<i>MCS RAW</i>			
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	Modified	New	<i>JA</i>	<i>JA</i>	<i>MCS RAW</i>
	55 <i>MCS</i> <i>56</i>	19	20 <i>MCS</i> <i>25</i>			
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	C/A		<i>JA</i>	<i>JA</i>	<i>MCS RAW</i>
	46 <i>MCS</i> <i>47</i>	54 <i>MCS</i> <i>53</i>				
8. References/handouts provided do not give away answers	<i>JA</i>	<i>JA</i>	<i>NAV</i>			
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	<i>JA</i>	<i>JA</i>	<i>NAV</i>			
10. Question psychometric quality and format meet ES, Appendix B, guidelines	<i>JA</i>	<i>JA</i>	<i>NAV</i>			
11. The exam contains 100, one-point, multiple choice items; the total is correct and agrees with value on cover sheet	<i>JA</i>	<i>JA</i>	<i>NAV</i>			
a. Author <u>Ronald M Bailey / <i>Ronald M Bailey</i></u>				Printed Name / Signature		Date <u>1/26/04</u>
b. Facility Reviewer(*) <u>Ronald J Sieber / <i>Ronald J Sieber</i></u>				Date <u>1/26/04</u>		
c. NRC Chief Examiner(#) <u>Michael E. Bielby Sr. / <i>Michael E. Bielby Sr.</i></u>				Date <u>2/12/04</u>		
d. NRC Regional Supervisor <u>RD Lankburg / <i>RD Lankburg</i></u>				Date <u>3/1</u>		
Note: * The facility reviewer's initials/signature is not applicable for NRC-developed examinations. # Independent NRC reviewer initial items in Column "c," chief examiner concurrence required.						

Facility: <u>DC Cook Nuclear Stations</u>		Date of Exam: <u>03/15/2004</u>		Exam Level: <u>SRO</u>		
Item Description	Initial					
	a	b*	c#			
1. Questions and answers technically accurate and applicable to facility	15	NA	NA			
2. a. NRC K/As referenced for all questions b. Facility learning objectives referenced as available	18	NA	NA			
3. RO/SRO overlap is no more than 75 percent, and SRO questions are appropriate per Section D.2.d of ES-401	15	NA	NA			
4. Question selection and duplication from the last two NRC licensing exams appears consistent with a systematic sampling process			NA			
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 checked="" 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)	17	NA	MES RW			
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	Modified	New			
	47 MES 45	22 MES 25	34 MES 30			
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	C/A				
	43 MES 42	57 MES 58				
8. References/handouts provided do not give away answers	18	NA	NA			
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	18	NA	NA			
10. Question psychometric quality and format meet ES, Appendix B, guidelines	18	NA	NA			
11. The exam contains 100, one-point, multiple choice items; the total is correct and agrees with value on cover sheet	18	NA	NA			
a. Author <u>Ronald M Bailey / Ronald M Bailey</u> b. Facility Reviewer(*) <u>Ronald J Sieber / Ronald J Sieber</u> c. NRC Chief Examiner(#) <u>Michael E. Bielby Sr. / Michael E. Bielby Sr.</u> d. NRC Regional Supervisor <u>RD Lanksbury / RD Lanksbury</u>			Date <u>1/26/04</u> <u>1/26/04</u> <u>2/12/04</u> <u>3/4/04</u>			
Note: * The facility reviewer's initials/signature is not applicable for NRC-developed examinations. # Independent NRC reviewer initial items in Column "c;" chief examiner concurrence required.						

Facility: <u>DC COOK</u>		Date of Exam: <u>3/29/04</u>		Exam Level: <u>RO/SRO</u>	
Item Description	Initials				
	a	b	c		
1. Clean answer sheets copied before grading	<u>RB</u>	<u>VA</u>	<u>BP</u>		
2. Answer key changes and question deletions justified and documented	<u>N/A</u> <u>RB</u>	<u>N/A</u> <u>VA</u>	<u>BP</u>		
3. Applicants' scores checked for addition errors (reviewers spot check > 25% of examinations)	<u>RB</u>	<u>VA</u>	<u>BP</u>		
4. Grading for all borderline cases (80% +/- 2%) reviewed in detail (Note: Graded 80% +/- 3%) <u>RB</u>	<u>RB</u>	<u>VA</u>	<u>BP</u>		
5. All other failing examinations checked to ensure that grades are justified	<u>N/A</u> <u>RB</u>	<u>N/A</u> <u>VA</u>	<u>BP</u>		
6. Performance on missed questions checked for training deficiencies and wording problems; evaluate validity of questions missed by half or more of the applicants	<u>RB</u>	<u>VA</u>	<u>BP</u>		
Printed Name / Signature		Date			
a. Grader	<u>Ronald M. Bailey / RB</u>	<u>3/30/04</u>			
b. Facility Reviewer(*)	<u>RONALD J. SIEGEL / Ronald J. Siegel</u>	<u>3/30/04</u>			
c. NRC Chief Examiner (*)	<u>Michael E. Bielby / Michael E. Bielby Sr.</u>	<u>4/9/04</u>			
d. NRC Supervisor (*)	<u>RD Linksbury / RD Linksbury</u>	<u>4/22/04</u>			
(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.					

Facility: <u>DCCOOK</u>		Date of Exam: <u>3/29/04</u>		Exam Level: <u>RO/SRO</u>	
Item Description	Initials				
	a	b	c		
1. Clean answer sheets copied before grading	<u>RS</u>	<u>MS</u>	<u>OR</u>		
2. Answer key changes and question deletions justified and documented	<u>N/A</u> <u>RS</u>	<u>N/A</u> <u>MS</u>	<u>OR</u>		
3. Applicants' scores checked for addition errors (reviewers spot check > 25% of examinations)	<u>RS</u>	<u>MS</u>	<u>OR</u>		
4. Grading for all borderline cases (80% +/- 2%) reviewed in detail	<u>N/A</u> <u>RS</u>	<u>N/A</u> <u>MS</u>	<u>OR</u>		
5. All other failing examinations checked to ensure that grades are justified	<u>N/A</u> <u>RS</u>	<u>N/A</u> <u>MS</u>	<u>OR</u>		
6. Performance on missed questions checked for training deficiencies and wording problems; evaluate validity of questions missed by half or more of the applicants	<u>RS</u>	<u>MS</u>	<u>OR</u>		
Printed Name / Signature		Date			
a. Grader	<u>Ronald M Bailey / <i>[Signature]</i></u>	<u>3/30/04</u>			
b. Facility Reviewer(*)	<u>Ronald J. Sieser / <i>[Signature]</i></u>	<u>3/30/04</u>			
c. NRC Chief Examiner (*)	<u>Michael E. Bielby / <i>[Signature]</i></u>	<u>4/9/04</u>			
d. NRC Supervisor (*)	<u><i>[Signature]</i> / <i>[Signature]</i></u>	<u>4/22/04</u>			
(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.					