

Facility: <u>Robinson</u>		Date of Examination: <u>July 2013</u>
Examinations Developed by: <u>Facility</u>		NRC
<u>Written</u> / Operating Test		Written / Operating Test

Target Date*	Task Description (Reference)	Chief Examiner's Initials
-180	1. Examination administration date confirmed (C.1.a; C.2.a and b)	RSB
-120	2. NRC examiners and facility contact assigned (C.1.d; C.2.e)	RSB
-120	3. Facility contact briefed on security and other requirements (C.2.c)	RSB
-120	4. Corporate notification letter sent (C.2.d)	RSB
[-90]	[5. Reference material due (C.1.e; C.3.c; Attachment 2)]	RSB
{-75}	6. Integrated examination outline(s) due, including Forms ES-201-2, ES-201-3, ES-301-1, ES-301-2, ES-301-5, ES-D-1's, ES-401-1/2, ES-401-3, and ES-401-4, as applicable (C.1.e and f; C.3.d)	RSB
{-70}	{7. Examination outline(s) reviewed by NRC and feedback provided to facility licensee (C.2.h; C.3.e)}	RSB
{-45}	8. Proposed examinations (including written, walk-through JPMs, and scenarios, as applicable), supporting documentation (including Forms ES-301-3, ES-301-4, ES-301-5, ES-301-6, and ES-401-6), and reference materials due (C.1.e, f, g and h; C.3.d)	RSB
-30	9. Preliminary license applications (NRC Form 398's) due (C.1.i; C.2.g; ES-202)	RSB
-14	10. Final license applications due and Form ES-201-4 prepared (C.1.i; C.2.i; ES-202)	RSB
-14	11. Examination approved by NRC supervisor for facility licensee review (C.2.h; C.3.f)	RSB
-14	12. Examinations reviewed with facility licensee (C.1.j; C.2.f and h; C.3.g)	RSB
-7	13. Written examinations and operating tests approved by NRC supervisor (C.2.i; C.3.h)	RSB
-7	14. Final applications reviewed; 1 or 2 (if >10) applications audited to confirm qualifications / eligibility; and examination approval and waiver letters sent (C.2.i; Attachment 4; ES-202, C.2.e; ES-204)	RSB
-7	15. Proctoring/written exam administration guidelines reviewed with facility licensee (C.3.k)	RSB
-7	16. Approved scenarios, job performance measures, and questions distributed to NRC examiners (C.3.i)	RSB

* Target dates are generally based on facility-prepared examinations and 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] {Does not apply} to examinations prepared by the NRC.

- WRITTEN EXAM SAMPLE PLAN ONLY -

ES-201

Examination Outline Quality Checklist

Form ES-201-2

Facility: H.B. ROBINSON		Date of Examination: JULY 2013		
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, in accordance with ES-401.	<i>m</i>	<i>N/A</i>	<i>lub</i>
	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.	<i>m</i>	<i>N/A</i>	<i>lub</i>
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	<i>m</i>	<i>N/A</i>	<i>lub</i>
	d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.	<i>m</i>	<i>N/A</i>	<i>lub</i>
2. S I M U L A T O R	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.			
	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.			
	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.			
3. W / T	a. Verify that the systems walk-through outline meets the criteria specified on Form ES-301-2: (1) the outline(s) contain(s) 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 applicants' 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 RCA tasks meet the criteria on the form.	<i>N</i>	<i>A</i>	
	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			
	c. Determine if there are enough different outlines to test the projected number and mix of applicants and ensure that no items are duplicated on subsequent days.			
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 sections.	<i>m</i>	<i>N/A</i>	<i>lub</i>
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.	<i>m</i>	<i>N/A</i>	<i>lub</i>
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	<i>m</i>	<i>N/A</i>	<i>lub</i>
	d. Check for duplication and overlap among exam sections.	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
	e. Check the entire exam for balance of coverage.	<i>m</i>	<i>N/A</i>	<i>lub</i>
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	<i>m</i>	<i>N/A</i>	<i>lub</i>
a. Author: <i>MICHAEL MEERS</i> b. Facility Reviewer (*): <i>N/A</i> c. NRC Chief Examiner (#): <i>RICHARD S. BARDWIN</i> d. NRC Supervisor: <i>MARK FRANK</i>		Date: <i>01/30/2013</i> <i>N/A</i> <i>1/31/2013</i> <i>1/31/13</i>		
Note: # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required. * Not applicable for NRC-prepared examination outlines				

- WRITTEN EXAM SAMPLE PLAN ONLY -

Facility: H B Robinson		Date of Exam: 7/29/13		Exam Level: RO X SRO X		
Item Description				Initial		
				a	b*	c*
1. Questions and answers are technically accurate and applicable to the facility.				gmu	RD	hab
2. a. NRC K/As are referenced for all questions. b. Facility learning objectives are referenced as available.				gmu	RD	hab
3. SRO questions are appropriate in accordance with Section D.2.d of ES-401				gmu	RD	hab
4. The sampling process was random and systematic (If more than 4 RO or 2 SRO questions were repeated from the last 2 NRC licensing exams, consult the NRR OL program office).				X		hab
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 checked="" type="checkbox"/> the licensee certifies that there is no duplication; or <input type="checkbox"/> other (explain)				gmu	RD	hab
6. Bank use meets limits (no more than 75 percent from the bank, at least 10 percent new, and the rest new or modified); enter the actual RO / SRO-only question distribution(s) at right.	Bank	Modified	New	gmu	RD	hab
	13 / 28 (10) / (7)	0 / 0 (0) / (0)	87 / 72 (65) / (18)			
7. Between 50 and 60 percent of the questions on the RO exam 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		gmu	RD	hab
	49 / 28 (37) / (7)	51 / 72 (38) / (18)				
8. References/handouts provided do not give away answers or aid in the elimination of distracters.				gmu	RD	hab
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.				gmu	RD	hab
10. Question psychometric quality and format meet the guidelines in ES Appendix B.				gmu	RD	hab
11. The exam contains the required number of one-point, multiple choice items; the total is correct and agrees with the value on the cover sheet.				gmu	RD	hab
Printed Name / Signature a. Author Jeffrey Smith / <u>Jeffrey Smith</u> b. Facility Reviewer (*) Robert Adams / <u>Robert Adams</u> c. NRC Chief Examiner (#) Richard S. Baldwin / <u>Richard S. Baldwin</u> d. NRC Regional Supervisor MARK FRANKS / <u>Mark Franks</u>				Date 7/25/13 7/25/13 7/25/13 8/1/13		
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: H.B. Robinson		Date of Examination: 07/29/13		
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, in accordance with ES-401.	gm	DS	kas
	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.	gm	DS	kas
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	gm	DS	kas
	d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.	gm	DS	kas
2. S I M U L A T O R	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.	N/A	N/A	N/A
	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.	N/A	N/A	N/A
	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.	N/A	N/A	N/A
3. W / T	a. Verify that the systems walk-through outline meets the criteria specified on Form ES-301-2: (1) the outline(s) contain(s) 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 applicants' 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 RCA tasks meet the criteria on the form.	N/A	N/A	N/A
	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	N/A	N/A	N/A
	c. Determine if there are enough different outlines to test the projected number and mix of applicants and ensure that no items are duplicated on subsequent days.	N/A	N/A	N/A
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 sections.	gm	DS	kas
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.	gm	DS	kas
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	gm	DS	kas
	d. Check for duplication and overlap among exam sections.	gm	DS	kas
	e. Check the entire exam for balance of coverage.	gm	DS	kas
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	gm	DS	kas
a. Author		Jeffrey Smith /		Date 7/25/13 7/25/13 7/25/13 7/25/13
b. Facility Reviewer (*)		Robert Adams /		
c. NRC Chief Examiner (#)		Richard S. Baldwin /		
d. NRC Supervisor		Mark Gault /		
Note: # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required. * Not applicable for NRC-prepared examination outlines				

Facility: H. B. Robinson		Date of Examination: 07/29/13		
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, in accordance with ES-401.	N/A	N/A	N/A
	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.	N/A	N/A	N/A
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	N/A	N/A	N/A
	d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.	N/A	N/A	N/A
2. S I M U L A T O R	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.	gla	DD	gla
	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.	gla	DD	gla
	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.	gla	DD	gla
3. W / T	a. Verify that the systems walk-through outline meets the criteria specified on Form ES-301-2: (1) the outline(s) contain(s) 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 applicants' 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 RCA tasks meet the criteria on the form.	gla	DD	gla
	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	gla	DD	gla
	c. Determine if there are enough different outlines to test the projected number and mix of applicants and ensure that no items are duplicated on subsequent days.	gla	DD	gla
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 sections.	gla	DD	gla
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.	gla	DD	gla
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	gla	DD	gla
	d. Check for duplication and overlap among exam sections.	gla	DD	gla
	e. Check the entire exam for balance of coverage.	gla	DD	gla
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	gla	DD	gla
a. Author: Jeffrey Smith b. Facility Reviewer (*): Robert Adams c. NRC Chief Examiner (#): Richard S. Baldwin d. NRC Supervisor: MARK FRANK		Printed Name/Signature: [Signature] Date: 7/23/13 7/23/13 7/23/2013 7/23/13		
Note: # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required. * Not applicable for NRC-prepared examination outlines				



Mr. Richard S. Baldwin
Senior Operations Engineer, Region II
United States Nuclear Regulatory Commission
Marquis One Tower
245 Peachtree Center Ave., NE Suite 1200
Atlanta, GA 30303-1257

Mr. Baldwin,

In accordance with NUREG-1021, ES-501, Initial Post-Examination Activities, the enclosed Form ES-201-3, Examination Security Agreement, for Robinson Nuclear Plant Initial License Class 13-1 is being submitted. All personnel have signed off the agreement and have acknowledged that from the date that they entered into the security agreement until the completion of the examination administration, they did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

If you have any questions concerning this the Examination Security Agreement, please contact me at (843) 857-5197.

Sincerely,

Jeffrey L. Smith
Robinson Nuclear Plant
Senior Nuclear Operations Training Instructor

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 6/23/13, 7/1/13 (Addit) 7/29/13, 8/5/13 (NRC) 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 (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 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 7/29/13 ; 8/6/13. 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. JEFFREY Smith	EXAM DEV. / LEAD	<i>[Signature]</i>	1/15/13	<i>[Signature]</i>	8/6/13
2. Michael Anderson	Exam Dev	<i>[Signature]</i>	1/15/13	<i>[Signature]</i>	8/6/13
3. DIPLO SUNTHANIKAR	SIMULATOR ENGR / SIMULATOR	<i>[Signature]</i>	1/15/13	<i>[Signature]</i>	8/6/13
4. SAIED KHALFAY	SIMULATOR ENGR / SIMULATOR	<i>[Signature]</i>	1/15/13	<i>[Signature]</i>	8/6/13
5. HOWARD NORRELL	SR. NUC. OPS. TRN. INSTRUCTOR	<i>[Signature]</i>	1/15/13	<i>[Signature]</i>	08/10/13
6. RAYMOND L. MASTERS	INSTRUCTOR	<i>[Signature]</i>	1-15-13	<i>[Signature]</i>	8-6-13
7. James Conde	LOCT Supervisor	<i>[Signature]</i>	1/28/13	<i>[Signature]</i>	8/21/13 ①
8. JAMES HOFFMAN	SRO	<i>[Signature]</i>	3/18/13	<i>[Signature]</i>	8/6/13
9. LAURIA ORSTA	SRO	<i>[Signature]</i>	3/18/13	<i>[Signature]</i>	8/13/13 ②
10. John McDONALD	SM	<i>[Signature]</i>	3/18/13	<i>[Signature]</i>	8/14/13
11. JOSHUA P. TORD	SM	<i>[Signature]</i>	3-26-13	<i>[Signature]</i>	8/17/13 ①
12. KENNETH MYTHEN	CRS/STCO	<i>[Signature]</i>	3-26-13	<i>[Signature]</i>	8/12/13 ①
13. Marty Boushail	STA	<i>[Signature]</i>	3/26/13	<i>[Signature]</i>	8/7/13 ①
14. ARTHUR N. VEST, JR.	DEVELOPER	<i>[Signature]</i>	04/01/13	<i>[Signature]</i>	8/14/13
15. LUIS, SHANE A	RO	<i>[Signature]</i>	4/2/13	<i>[Signature]</i>	8/14/13

NOTES:

- ① see attached e-mail.
 ② Signed onto twice. Signed off on PAGE 2 Line 15.

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 6/23/13, 7/1/13 (Aspits)
7/29/13, 8/5/13 (NRC) 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 (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 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 7/29/13, 8/4/13 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.	B. Woodson	SRO	[Signature]	4/2/13	[Signature]	8/6/13 (1)
2.	K. Schaefer	RO	[Signature]	4/16/13	[Signature]	8/9/13 (2)
3.	P. LATHROP	SRO	[Signature]	4-16-13	[Signature]	8/21/13 (2)
4.	McAnold	SM/SRO	[Signature]	5/6/13	[Signature]	8/14/13
5.	V. Leeth	CRS	[Signature]	5/6/13	[Signature]	8/6/13
6.	B. DANBURY	SRO	[Signature]	5/13/13	[Signature]	8/13/13 (2)
7.	Daniel Brocan	Sim Engineer	[Signature]	5/15/13	[Signature]	8/16/13
8.	Robert Bolin	BNP Lead Exam Writer	[Signature]	5/21/13	[Signature]	8/17/13 (2)
9.	Clark Fletcher	MNS Exam Team Lead	[Signature]	5/21/13	[Signature]	8/21/13 (2)
10.	David Hester	SNOTI	[Signature]	5/24/13	[Signature]	8/27/13 (2)
11.	JH Cox	SRO	[Signature]	5/29/13	[Signature]	8/28/13
12.	G. M. MONTGOMERY	RO	[Signature]	6/25/13	[Signature]	8/29/13
13.	M. Nelson	EP	[Signature]	6/27/13	[Signature]	8/27/13 (2)
14.	Mike Smith	RO	[Signature]	6/28/13	[Signature]	8/29/13
15.	L. BASTA	SRO	[Signature]	4/4/13	[Signature]	8/27/13

NOTES:

- ① No longer with Duke Energy.
 ② see attached e-mail.

1. Pre-Examination

6/23/13, 7/1/13 (Audit)
7/29/13, 8/5/13 (NRC)

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of _____ as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC (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 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 7/29/13; 8/6/13. 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. Sandra Brown	Supt - Nuc Ops Support		6/7/13		8/7/13	①
2. Robert W Adams	Supt - Ops Training		6/13/13		8/6/13	
3. Darrell Ayers	SRO		7-8-13		8/2/13	
4. Ashley Valone	Instructor - ops		7/18/13		8/14/13	
5. John Kronz	SRO		7/24/13		8-13-13	
6. Larry Beach	Sr Ops INST		2/13/13		5/1/13	
7. Brian Kanda	SRO		7-19-13		8-2-13	
8. Robert Kilgus	SRO		7-23-13		8-22-13	
9. Matt Basta	Rx Eng.		7/24/13		9/2/13	
10. Rick Stebbins	INSTR - OPS		7/24/13		8/1/13	
11. Keith Hotschall	mbk ops		7-29-13		8/24/13	①
12. Tim Musselwhite	ATM unrel. SRO		7/25/13		8/17/13	①
13. FB Schwier	Instructor ops		7/29/13		8/6/13	
14. Bill Shaw	OIT Supervisor		7/29/13		8/7/13	
15. JOHN LITTLE	MANAGER-SHIFT OPERATIONS		07/31/13		08/22/13	

NOTES:



① see attached e-mail.

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 6/23/13, 7/1/13 (Audit) as of the date 7/29/13, 8/5/13 CURE 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 (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 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 7/29/13, 8/5/13. 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.	WILLIAM STONER	SOP COORDINATOR		7/31/13		8/7/13	①
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							

NOTES:

① See attached e-mail.

Smith, Jeffrey

From: Lathrop, Patrick
Sent: Tuesday, August 20, 2013 7:32 AM
To: Smith, Jeffrey
Subject: RE: ILC-13 Exam Security

I have read and agree with the bolded statement below. Please sign me off the security agreement.
Patrick Lathrop

From: Smith, Jeffrey
Sent: Monday, August 19, 2013 1:13 PM
To: Conder, James; Schauer, Kirk; Lathrop, Patrick; Morrison, Gary; Kilgore, Robert (Bob); Holbrook, Richard (Keith); Little, John
Subject: ILC-13 Exam Security
Importance: High

Reminder to sign off the ILC-13 security agreement or respond to this e-mail with the statement in RED below and I will sign you off. Thanks.

To all,
Examination Security has been lifted for the RNP ILC 13 NRC Exam. The Operating Exam was administered the week of 7/29/13 and the written exam was administered on 8/6/13. The Exam Security book with the signature forms are located on my desk in the training building (beside the printer in the Operations Training Office area). Please come by and sign off the agreement and return your red exam security badge. If unable to come by my desk, I can sign you off if you reply to this e-mail stating that you agree with the following statement:

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 of 7/29/13 and on 8/6/13. 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.

When responding that you would like me to sign you off the agreement please respond with the following statement (or similar).

I have read and agree with the bolded statement below. Please sign me off the security agreement.

The e-mails are going to be attached to the security agreement forms and mailed to the NRC Chief Examiner.

Thanks for your support during the development and implementation of the ILC-13 Audit and NRC Exams.

Jeffrey Smith
X5197

Smith, Jeffrey

From: Schauer, Kirk
Sent: Tuesday, August 20, 2013 6:09 AM
To: Smith, Jeffrey
Subject: RE: ILC-13 Exam Security

Please sign me off the agreement.

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 of 7/29/13 and on 8/6/13. 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.

Kirk Schauer

From: Smith, Jeffrey
Sent: Monday, August 19, 2013 1:13 PM
To: Conder, James; Schauer, Kirk; Lathrop, Patrick; Morrison, Gary; Kilgore, Robert (Bob); Holbrook, Richard (Keith); Little, John
Subject: ILC-13 Exam Security
Importance: High

Reminder to sign off the ILC-13 security agreement or respond to this e-mail with the statement in RED below and I will sign you off. Thanks.

To all,
Examination Security has been lifted for the RNP ILC 13 NRC Exam. The Operating Exam was administered the week of 7/29/13 and the written exam was administered on 8/6/13. The Exam Security book with the signature forms are located on my desk in the training building (beside the printer in the Operations Training Office area). Please come by and sign off the agreement and return your red exam security badge. If unable to come by my desk, I can sign you off if you reply to this e-mail stating that you agree with the following statement:

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Thanks for your support during the development and implementation of the ILC-13 Audit and NRC Exams.

Jeffrey Smith
X5197

Smith, Jeffrey

From: Holbrook, Richard (Keith)
Sent: Monday, August 19, 2013 7:04 PM
To: Smith, Jeffrey
Subject: Re: ILC-13 Exam Security

Please sign me off the security agreement.

From: Smith, Jeffrey
Sent: Monday, August 19, 2013 10:12 AM
To: Conder, James; Schauer, Kirk; Lathrop, Patrick; Morrison, Gary; Kilgore, Robert (Bob); Holbrook, Richard (Keith); Little, John
Subject: ILC-13 Exam Security

Reminder to sign off the ILC-13 security agreement or respond to this e-mail with the statement in RED below and I will sign you off. Thanks.

To all,
Examination Security has been lifted for the RNP ILC 13 NRC Exam. The Operating Exam was administered the week of 7/29/13 and the written exam was administered on 8/6/13. The Exam Security book with the signature forms are located on my desk in the training building (beside the printer in the Operations Training Office area). Please come by and sign off the agreement and return your red exam security badge. If unable to come by my desk, I can sign you off if you reply to this e-mail stating that you agree with the following statement:

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When responding that you would like me to sign you off the agreement please respond with the following statement (or similar).

I have read and agree with the bolded statement below. Please sign me off the security agreement.

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Thanks for your support during the development and implementation of the ILC-13 Audit and NRC Exams.

Jeffrey Smith
X5197

Smith, Jeffrey

From: Conder, James
Sent: Tuesday, August 20, 2013 12:18 AM
To: Smith, Jeffrey
Subject: RE: ILC-13 Exam Security

I have read and agree with the bolded statement below. Please sign me off the security agreement.

From: Smith, Jeffrey
Sent: Monday, August 19, 2013 1:13 PM
To: Conder, James; Schauer, Kirk; Lathrop, Patrick; Morrison, Gary; Kilgore, Robert (Bob); Holbrook, Richard (Keith); Little, John
Subject: ILC-13 Exam Security
Importance: High

Reminder to sign off the ILC-13 security agreement or respond to this e-mail with the statement in RED below and I will sign you off. Thanks.

To all,

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I have read and agree with the bolded statement below. Please sign me off the security agreement.

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Thanks for your support during the development and implementation of the ILC-13 Audit and NRC Exams.

Jeffrey Smith
X5197

Smith, Jeffrey

From: Danbury, Gregg
Sent: Monday, August 12, 2013 6:12 PM
To: Smith, Jeffrey
Subject: RE: ILC-13 Exam Security

I have read and agree with the bolded statement below. Please sign me off the security agreement.

From: Smith, Jeffrey
Sent: Tuesday, August 06, 2013 3:48 PM
To: Sunthankar, Dilip; Khalfay, Saeed; Worrell, Howard; Masters, Raymond; Conder, James; Hoffman, Jamie; Basta, Laura; Basta, Matthew; McDonald, John; Todd, Joseph; Myhren, Kenneth; Bowskill, Martin; Vest, Jr., Arthur; Lewis, Shane; Schauer, Kirk; Lathrop, Patrick; Arnold, Marty; Leeth, Vincent; Danbury, Gregg; Bolin, Bob; Fletcher, Clark; Horton, Richard (JR); Cox, Jim; Morrison, Gary; Nelson, Matthew; Smith, Michael (RNP); Brown, Sandra (Sandi); Adams, Robert; Ayers, Darryl; Valone, Ashley; Kronz, John; Beach, Larry; Kawa, Brian; Kilgore, Robert (Bob); Stebbins, Rick; Holbrook, Richard (Keith); Musselwhite, Art; Schwier, Brian; Shane, Robert; Little, John; Stover, Bill
Subject: ILC-13 Exam Security

To all,
Examination Security has been lifted for the RNP ILC 13 NRC Exam. The Operating Exam was administered the week of 7/29/13 and the written exam was administered on 8/6/13. The Exam Security book with the signature forms are located on my desk in the training building (beside the printer in the Operations Training Office area). Please come by and sign off the agreement and return your red exam security badge. If unable to come by my desk, I can sign you off if you reply to this e-mail stating that you agree with the following statement:

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When responding that you would like me to sign you off the agreement please respond with the following statement (or similar).

I have read and agree with the bolded statement below. Please sign me off the security agreement.

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Thanks for your support during the development and implementation of the ILC-13 Audit and NRC Exams.

Jeffrey Smith
X5197

Smith, Jeffrey

From: Fletcher, Clark
Sent: Monday, August 12, 2013 7:19 AM
To: Smith, Jeffrey
Subject: RE: ILC-13 Exam Security

Hi Jeff,

Sorry to take so long to get back to you. Just got back from Sturgis and into the office this morning.

I have read the bolded statement below and agree. Please sign me off the security agreement.

Regards,

Clark Fletcher

MNS NRC Exam Team Lead
(980) 875-5302 (Desk)
(828) 302-6967 (Mobile)

From: Smith, Jeffrey
Sent: Tuesday, August 06, 2013 3:48 PM
To: Sunthankar, Dilip; Khalfay, Saeed; Worrell, Howard; Masters, Raymond; Conder, James; Hoffman, Jamie; Basta, Laura; Basta, Matthew; McDonald, John; Todd, Joseph; Myhren, Kenneth; Bowskill, Martin; Vest, Jr., Arthur; Lewis, Shane; Schauer, Kirk; Lathrop, Patrick; Arnold, Marty; Leeth, Vincent; Danbury, Gregg; Bolin, Bob; Fletcher, Clark; Horton, Richard (JR); Cox, Jim; Morrison, Gary; Nelson, Matthew; Smith, Michael (RNP); Brown, Sandra (Sandi); Adams, Robert; Ayers, Darryl; Valone, Ashley; Kronz, John; Beach, Larry; Kawa, Brian; Kilgore, Robert (Bob); Stebbins, Rick; Holbrook, Richard (Keith); Musselwhite, Art; Schwier, Brian; Shane, Robert; Little, John; Stover, Bill
Subject: ILC-13 Exam Security

To all,

Examination Security has been lifted for the RNP ILC 13 NRC Exam. The Operating Exam was administered the week of 7/29/13 and the written exam was administered on 8/6/13. The Exam Security book with the signature forms are located on my desk in the training building (beside the printer in the Operations Training Office area). Please come by and sign off the agreement and return your red exam security badge. If unable to come by my desk, I can sign you off if you reply to this e-mail stating that you agree with the following statement:

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When responding that you would like me to sign you off the agreement please respond with the following statement (or similar).

have read and agree with the bolded statement below. Please sign me off the security agreement.

The e-mails are going to be attached to the security agreement forms and mailed to the NRC Chief Examiner.

Smith, Jeffrey

From: Myhren, Kenneth
Sent: Thursday, August 08, 2013 2:23 PM
To: Smith, Jeffrey
Subject: RE: ILC-13 Exam Security

Jeff,

I have read and agree with the bolded statement below. Please sign me off the security agreement.

Ken Myhren

From: Smith, Jeffrey
Sent: Tuesday, August 06, 2013 3:48 PM
To: Sunthankar, Dilip; Khalfay, Saeed; Worrell, Howard; Masters, Raymond; Conder, James; Hoffman, Jamie; Basta, Laura; Basta, Matthew; McDonald, John; Todd, Joseph; Myhren, Kenneth; Bowskill, Martin; Vest, Jr., Arthur; Lewis, Shane; Schauer, Kirk; Lathrop, Patrick; Arnold, Marty; Leeth, Vincent; Danbury, Gregg; Bolin, Bob; Fletcher, Clark; Horton, Richard (JR); Cox, Jim; Morrison, Gary; Nelson, Matthew; Smith, Michael (RNP); Brown, Sandra (Sandi); Adams, Robert; Ayers, Darryl; Valone, Ashley; Kronz, John; Beach, Larry; Kawa, Brian; Kilgore, Robert (Bob); Stebbins, Rick; Holbrook, Richard (Keith); Musselwhite, Art; Schwier, Brian; Shane, Robert; Little, John; Stover, Bill
Subject: ILC-13 Exam Security

To all,

Examination Security has been lifted for the RNP ILC 13 NRC Exam. The Operating Exam was administered the week of 7/29/13 and the written exam was administered on 8/6/13. The Exam Security book with the signature forms are located on my desk in the training building (beside the printer in the Operations Training Office area). Please come by and sign off the agreement and return your red exam security badge. If unable to come by my desk, I can sign you off if you reply to this e-mail stating that you agree with the following statement:

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 of 7/29/13 and on 8/6/13. 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.

When responding that you would like me to sign you off the agreement please respond with the following statement (or similar).

I have read and agree with the bolded statement below. Please sign me off the security agreement.

The e-mails are going to be attached to the security agreement forms and mailed to the NRC Chief Examiner.

Thanks for your support during the development and implementation of the ILC-13 Audit and NRC Exams.

Jeffrey Smith
X5197

Smith, Jeffrey

From: Stover, Bill
Sent: Wednesday, August 07, 2013 8:27 AM
To: Smith, Jeffrey
Subject: ILC-13 Exam Security

I have read the following statement and agree that I have complied with the requirements contained therein.

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 of 7/29/13 and on 8/6/13. 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.

Please sign me off the security agreement.

Bill Stover

Bill.Stover@duke-energy.com

Work: 843-857-1508

Cell: 843-307-4275

Robinson Nuclear Plant



Smith, Jeffrey

From: Bolin, Bob
Sent: Tuesday, August 06, 2013 3:50 PM
To: Smith, Jeffrey
Subject: RE: ILC-13 Exam Security

Jeff,

I have read the bolded statement and confirm that I have not divulged any exam information.

Bob Bolin

From: Smith, Jeffrey
Sent: Tuesday, August 06, 2013 3:48 PM
To: Sunthakar, Dilip; Khalfay, Saeed; Worrell, Howard; Masters, Raymond; Conder, James; Hoffman, Jamie; Basta, Laura; Basta, Matthew; McDonald, John; Todd, Joseph; Myhren, Kenneth; Bowskill, Martin; Vest, Jr., Arthur; Lewis, Shane; Schauer, Kirk; Lathrop, Patrick; Arnold, Marty; Leeth, Vincent; Danbury, Gregg; Bolin, Bob; Fletcher, Clark; Horton, Richard (JR); Cox, Jim; Morrison, Gary; Nelson, Matthew; Smith, Michael (RNP); Brown, Sandra (Sandi); Adams, Robert; Ayers, Darryl; Valone, Ashley; Kronz, John; Beach, Larry; Kawa, Brian; Kilgore, Robert (Bob); Stebbins, Rick; Holbrook, Richard (Keith); Musselwhite, Art; Schwier, Brian; Shane, Robert; Little, John; Stover, Bill
Subject: ILC-13 Exam Security

To all,
Examination Security has been lifted for the RNP ILC 13 NRC Exam. The Operating Exam was administered the week of 7/29/13 and the written exam was administered on 8/6/13. The Exam Security book with the signature forms are located on my desk in the training building (beside the printer in the Operations Training Office area). Please come by and sign off the agreement and return your red exam security badge. If unable to come by my desk, I can sign you off if you reply to this e-mail stating that you agree with the following statement:

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When responding that you would like me to sign you off the agreement please respond with the following statement (or similar).

I have read and agree with the bolded statement below. Please sign me off the security agreement.

The e-mails are going to be attached to the security agreement forms and mailed to the NRC Chief Examiner.

Thanks for your support during the development and implementation of the ILC-13 Audit and NRC Exams.

Jeffrey Smith
X5197

Smith, Jeffrey

From: Nelson, Matthew
Sent: Tuesday, August 06, 2013 3:53 PM
To: Smith, Jeffrey
Subject: RE: ILC-13 Exam Security

I have read and agree with the bolded statement below. Please sign me off the security agreement.

Matthew Nelson

From: Smith, Jeffrey
Sent: Tuesday, August 06, 2013 3:48 PM
To: Sunthankar, Dilip; Khalfay, Saeed; Worrell, Howard; Masters, Raymond; Conder, James; Hoffman, Jamie; Basta, Laura; Basta, Matthew; McDonald, John; Todd, Joseph; Myhren, Kenneth; Bowskill, Martin; Vest, Jr., Arthur; Lewis, Shane; Schauer, Kirk; Lathrop, Patrick; Arnold, Marty; Leeth, Vincent; Danbury, Gregg; Bolin, Bob; Fletcher, Clark; Horton, Richard (JR); Cox, Jim; Morrison, Gary; Nelson, Matthew; Smith, Michael (RNP); Brown, Sandra (Sandi); Adams, Robert; Ayers, Darryl; Valone, Ashley; Kronz, John; Beach, Larry; Kawa, Brian; Kilgore, Robert (Bob); Stebbins, Rick; Holbrook, Richard (Keith); Musselwhite, Art; Schwier, Brian; Shane, Robert; Little, John; Stover, Bill
Subject: ILC-13 Exam Security

To all,
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I have read and agree with the bolded statement below. Please sign me off the security agreement.

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Thanks for your support during the development and implementation of the ILC-13 Audit and NRC Exams.

Jeffrey Smith
X5197

Smith, Jeffrey

From: Brown, Sandra (Sandi)
Sent: Tuesday, August 06, 2013 3:58 PM
To: Smith, Jeffrey
Subject: RE: ILC-13 Exam Security

I have read the below bolded statement and I agree with it. Please sign me off of the agreement.

By the way, I will be onsite Monday, Aug 12, if you prefer that I sign in ink and that will be in time for getting this to the NRC:

Sandi

-----Original Message-----

From: Smith, Jeffrey
Sent: Tuesday, August 06, 2013 03:48 PM Eastern Standard Time
To: Sunthankar, Dilip; Khalfay, Saeed; Worrell, Howard; Masters, Raymond; Conder, James; Hoffman, Jamie; Basta, Laura; Basta, Matthew; McDonald, John; Todd, Joseph; Myhren, Kenneth; Bowskill, Martin; Vest, Jr., Arthur; Lewis, Shane; Schauer, Kirk; Lathrop, Patrick; Arnold, Marty; Leeth, Vincent; Danbury, Gregg; Bolin, Bob; Fletcher, Clark; Horton, Richard (JR); Cox, Jim; Morrison, Gary; Nelson, Matthew; Smith, Michael (RNP); Brown, Sandra (Sandi); Adams, Robert; Ayers, Darryl; Valone, Ashley; Kronz, John; Beach, Larry; Kawa, Brian; Kilgore, Robert (Bob); Stebbins, Rick; Holbrook, Richard (Keith); Musselwhite, Art; Schwier, Brian; Shane, Robert; Little, John; Stover, Bill
Subject: ILC-13 Exam Security

To all,

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Thanks for your support during the development and implementation of the ILC-13 Audit and NRC Exams.

Jeffrey Smith
X5197

Smith, Jeffrey

From: Bowskill, Martin
Sent: Tuesday, August 06, 2013 3:59 PM
To: Smith, Jeffrey
Subject: RE: ILC-13 Exam Security

I have read and agree with the bolded statement below. Please sign me off the security agreement.

From: Smith, Jeffrey
Sent: Tuesday, August 06, 2013 3:47 PM

To: Sunthankar, Dilip; Khalfay, Saeed; Worrell, Howard; Masters, Raymond; Conder, James; Hoffman, Jamie; Basta, Laura; Basta, Matthew; McDonald, John; Todd, Joseph; Myhren, Kenneth; Bowskill, Martin; Vest, Jr., Arthur; Lewis, Shane; Schauer, Kirk; Lathrop, Patrick; Arnold, Marty; Leeth, Vincent; Danbury, Gregg; Bolin, Bob; Fletcher, Clark; Horton, Richard (JR); Cox, Jim; Morrison, Gary; Nelson, Matthew; Smith, Michael (RNP); Brown, Sandra (Sandi); Adams, Robert; Ayers, Darryl; Valone, Ashley; Kronz, John; Beach, Larry; Kawa, Brian; Kilgore, Robert (Bob); Stebbins, Rick; Holbrook, Richard (Keith); Musselwhite, Art; Schwier, Brian; Shane, Robert; Little, John; Stover, Bill
Subject: ILC-13 Exam Security

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Thanks for your support during the development and implementation of the ILC-13 Audit and NRC Exams.

Jeffrey Smith
X5197

Smith, Jeffrey

From: Todd, Joseph
Sent: Tuesday, August 06, 2013 4:16 PM
To: Smith, Jeffrey
Subject: RE: ILC-13 Exam Security

I have read and agree with the bolded statement below. Please sign me off the security agreement.

From: Smith, Jeffrey
Sent: Tuesday, August 06, 2013 15:48
To: Sunthankar, Dilip; Khalfay, Saeed; Worrell, Howard; Masters, Raymond; Conder, James; Hoffman, Jamie; Basta, Laura; Basta, Matthew; McDonald, John; Todd, Joseph; Myhren, Kenneth; Bowskill, Martin; Vest, Jr., Arthur; Lewis, Shane; Schauer, Kirk; Lathrop, Patrick; Arnold, Marty; Leeth, Vincent; Danbury, Gregg; Bolin, Bob; Fletcher, Clark; Horton, Richard (JR); Cox, Jim; Morrison, Gary; Nelson, Matthew; Smith, Michael (RNP); Brown, Sandra (Sandi); Adams, Robert; Ayers, Darryl; Valone, Ashley; Kronz, John; Beach, Larry; Kawa, Brian; Kilgore, Robert (Bob); Stebbins, Rick; Holbrook, Richard (Keith); Musselwhite, Art; Schwier, Brian; Shane, Robert; Little, John; Stover, Bill
Subject: ILC-13 Exam Security

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The e-mails are going to be attached to the security agreement forms and mailed to the NRC Chief Examiner.

Thanks for your support during the development and implementation of the ILC-13 Audit and NRC Exams.

Jeffrey Smith
X5197

Smith, Jeffrey

From: Horton, Richard (JR)
Sent: Tuesday, August 06, 2013 5:04 PM
To: Smith, Jeffrey
Subject: RE: ILC-13 Exam Security

I have read and agree with the bolded statement below. Please sign me off the security agreement.

From: Smith, Jeffrey
Sent: Tuesday, August 06, 2013 3:48 PM
To: Sunthankar, Dilip; Khalfay, Saeed; Worrell, Howard; Masters, Raymond; Conder, James; Hoffman, Jamie; Basta, Laura; Basta, Matthew; McDonald, John; Todd, Joseph; Myhren, Kenneth; Bowskill, Martin; Vest, Jr., Arthur; Lewis, Shane; Schauer, Kirk; Lathrop, Patrick; Arnold, Marty; Leeth, Vincent; Danbury, Gregg; Bolin, Bob; Fletcher, Clark; Horton, Richard (JR); Cox, Jim; Morrison, Gary; Nelson, Matthew; Smith, Michael (RNP); Brown, Sandra (Sandi); Adams, Robert; Ayers, Darryl; Valone, Ashley; Kronz, John; Beach, Larry; Kawa, Brian; Kilgore, Robert (Bob); Stebbins, Rick; Holbrook, Richard (Keith); Musselwhite, Art; Schwier, Brian; Shane, Robert; Little, John; Stover, Bill
Subject: ILC-13 Exam Security

To all,

Examination Security has been lifted for the RNP ILC 13 NRC Exam. The Operating Exam was administered the week of 7/29/13 and the written exam was administered on 8/6/13. The Exam Security book with the signature forms are located on my desk in the training building (beside the printer in the Operations Training Office area). Please come by and sign off the agreement and return your red exam security badge. If unable to come by my desk, I can sign you off if you reply to this e-mail stating that you agree with the following statement:

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 of 7/29/13 and on 8/6/13. 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.

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Jeffrey Smith
X5197

Smith, Jeffrey

From: Musselwhite, Art
Sent: Wednesday, August 07, 2013 7:31 AM
To: Smith, Jeffrey
Subject: RE: ILC-13 Exam Security

I have read and agree with the bolded statement below. Please sign me off the security agreement.

~art

From: Smith, Jeffrey
Sent: Tuesday, August 06, 2013 3:48 PM
To: Sunthankar, Dilip; Khalfay, Saeed; Worrell, Howard; Masters, Raymond; Conder, James; Hoffman, Jamie; Basta, Laura; Basta, Matthew; McDonald, John; Todd, Joseph; Myhren, Kenneth; Bowskill, Martin; Vest, Jr., Arthur; Lewis, Shane; Schauer, Kirk; Lathrop, Patrick; Arnold, Marty; Leeth, Vincent; Danbury, Gregg; Bolin, Bob; Fletcher, Clark; Horton, Richard (JR); Cox, Jim; Morrison, Gary; Nelson, Matthew; Smith, Michael (RNP); Brown, Sandra (Sandi); Adams, Robert; Ayers, Darryl; Valone, Ashley; Kronz, John; Beach, Larry; Kawa, Brian; Kilgore, Robert (Bob); Stebbins, Rick; Holbrook, Richard (Keith); Musselwhite, Art; Schwier, Brian; Shane, Robert; Little, John; Stover, Bill
Subject: ILC-13 Exam Security

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Jeffrey Smith
X5197

Facility: H B RobinsonDate of Examination: 7/29/13Examination Level: RO ☒ SROOperating Test Number: ILC-13

Administrative Topic (see Note)	Type Code*	Describe activity to be performed
Conduct of Operations	M, R	Determine Power Distribution Flux Limits
Conduct of Operations	N, S	Power Range Calorimetric During Power Operation
Equipment Control	N, R	Determine Proper Equipment Boundaries
Radiation Control	M, R	Calculate Low Dose Path
Emergency Procedures/Plan		N/A

NOTE: All items (5 total) are required for SROs. RO applicants require only 4 items unless they are retaking only the administrative topics, when all 5 are required.

* Type Codes & Criteria:

(C)ontrol room, (S)imulator, or Class(R)oom
 (D)irect from bank (≤ 3 for ROs; ≤ 4 for SROs & RO retakes)
 (N)ew or (M)odified from bank (≥ 1)
 (P)revious 2 exams (≤ 1 ; randomly selected)

ILC-13 NRC RO Admin JPM Summary

ILC-13 NRC JPM Admin RO A1-1 – Determine Power Distribution Flux Limits

G2.1.7 Ability to evaluate plant performance and make operational judgments based on operating characteristics, reactor behavior, and instrument interpretation.
(CFR: 41.5 / 43.5 / 45.12 / 45.13)

The plant is at 70% RTP with a Xenon transient in progress. The program that calculates penalty points is inoperable. The candidate will be provided the 100% Target Value and the Target Band range along with seven sets of Power Data and individual Power Range NI AFD readings over a 3 hour period. The candidate will be directed to manually calculate the Penalty Points in accordance with FMP-009, Power Distribution Control. Candidate will determine that a total of 105 penalty points have been accumulated over the course of the 3 hour power ascension. (Modified Admin JPM)

ILC-13 NRC JPM Admin RO A1-2 – Power Range Calorimetric During Power Operation

G2.1.19 Ability to use plant computers to evaluate system or component status. (CFR 41.10 / 45.12)

The plant is at 100% RTP and the candidate is directed to perform OST-010, Power Range Calorimetric During Power Operation Daily, and to adjust all Power Range NI's that indicate greater than +/- 0.5% of 100%. During the calorimetric the candidate will determine that NI-44 is outside of the prescribed band and adjust NI-44 from 101% to 100%. (New Admin JPM)

ILC-13 NRC JPM Admin RO A2 – Determine Proper Equipment Boundaries

G2.2.13 Knowledge of tagging and clearance procedures

G2.2.41 Ability to obtain and interpret station electrical and mechanical drawings

The plant is at 100% RTP and SI-888P, SI Pump C Drain, is identified as experiencing excessive seat leakage. The candidate is directed to identify the pump boundary valves and motor breaker to expedite the component isolation and termination of the leakage. The Shift Manager has authorized single valve isolation.

ILC-13 NRC JPM Admin RO A3 – Calculate Low Dose Path

G2.3.4 Knowledge of radiation exposure limits under normal or emergency conditions.
(CFR: 41.12 / 43.4 / 45.10)

The candidate will be given a set of conditions and directed to determine the most efficient method of performing a job to receive the lowest dose for work in an RCA. The applicant will be given 2 possible paths to get to a work site and the option of using 1 or 2 workers. The candidates are also given the current annual dose of the two workers assigned to perform the work and have to determine if any dose limits will be exceeded. This JPM will be performed by both RO and SRO candidates. (Modified Admin JPM)

Facility: H B RobinsonDate of Examination: 7/29/13

Examination Level: RO

SRO X

Operating Test Number: ILC-13

Administrative Topic (see Note)	Type Code*	Describe activity to be performed
Conduct of Operations	M, R	Determine Power Distribution Flux Limits
Conduct of Operations	M, R	Review a set of Hot Ops Log
Equipment Control	N, R	Determine Proper Equipment Boundaries and Post Maintenance Test Requirements
Radiation Control	M, R	Calculate Low Dose Path
Emergency Procedures/Plan	N, R	Perform an Emergency Action Level Classification and Recommended Protective Actions

NOTE: All items (5 total) are required for SROs. RO applicants require only 4 items unless they are retaking only the administrative topics, when all 5 are required.

* Type Codes & Criteria:

(C)ontrol room, (S)imulator, or Class(R)oom

(D)irect from bank (≤ 3 for ROs; ≤ 4 for SROs & RO retakes)

(N)ew or (M)odified from bank (≥ 1)

(P)revious 2 exams (≤ 1 ; randomly selected)

ILC-13 NRC SRO Admin JPM Summary

ILC-13 NRC JPM Admin SRO A1-1 – Determine Power Distribution Flux Limits

G2.1.7 Ability to evaluate plant performance and make operational judgments based on operating characteristics, reactor behavior, and instrument interpretation.
(CFR: 41.5 / 43.5 / 45.12 / 45.13)

The plant is at 70% RTP with a Xenon transient in progress. The program that calculates penalty points is inoperable. The candidate will be provided the 100% Target Value and the Target Band range along with seven sets of Power Data and individual Power Range NI AFD readings over a 3 hour period. The candidate will be directed to manually calculate the Penalty Points in accordance with FMP-009, Power Distribution Control. Candidate will also determine if any ITS Surveillance requirements and LCOs are applicable. Candidate will determine that the ITS 3.2.3, Condition C limit of 60 penalty points was exceeded at time 1430 and that ITS 3.2.3 Condition D was met at 1500 due to power not being reduced below 50% RTP within 30 minutes. Candidate also determines that SR 3.2.3.2 is required due to the AFD monitor being out of service.
(Modified Admin JPM)

ILC-13 NRC JPM Admin SRO A1-2 – Review a set of Hot Ops Logs

G2.1.25 Ability to interpret reference materials, such as graphs, curves, tables, etc.

G2.1.18 Ability to make accurate, clear, and concise logs, records, status boards, and reports. (CFR: 41.10 / 45.12 / 45.13)

The candidate will be given a set of Hot Ops Logs to review following the 1600 readings. The candidate will be directed to review the logs in accordance with OMM-01-011, Logkeeping, and OPS-NGGC-1000, Fleet Conduct of Operations. Candidate will identify that "B" SI Accumulator's recorded level is high out of specification and request additional information. A cue will be given that will prompt the candidate that ITS SR 3.5.1.4 be performed to sample the accumulator for proper boron concentration. Candidate will also identify that "A" Boric Acid Storage Tank is low out of specification and determine that adequate volume exists between "A" and "B" BASTs to meet the requirements of TRM 3.6. Lastly the candidate will identify that the Primary Water Storage Tank is low out of specification per the logs. The candidate will review the station curve book and determine that adequate volume is available to meet the requirements of TRM 3.6. (Modified Admin JPM)

ILC-13 NRC JPM Admin SRO A2 – Determine Proper Equipment Boundaries and Post Maintenance Test Requirements

G2.2.13 Knowledge of tagging and clearance procedures

G2.2.41 Ability to obtain and interpret station electrical and mechanical drawings

G2.2.21 Knowledge of pre- and post-maintenance operability requirements

The plant is at 100% RTP and SI-888P, SI Pump C Drain, is identified as experiencing excessive seat leakage. The candidate is directed to identify the pump boundary valves and motor breaker to expedite the component isolation and termination of the leakage. The Shift Manager has authorized single valve isolation. The candidate is also directed to determine the required Post Maintenance Testing requirements for the replacement valve including the specific procedure number(s), if applicable, that will be used to document the test results. (New Admin JPM)

ILC-13 NRC JPM Admin SRO A3 – Calculate Low Dose Path

G2.3.4 Knowledge of radiation exposure limits under normal or emergency conditions. (CFR: 41.12 / 43.4 / 45.10)

The candidate will be given a set of conditions and directed to determine the most efficient method of performing a job to receive the lowest dose for work in an RCA. The applicant will be given 2 possible paths to get to a work site and the option of using 1 or 2 workers. The candidates are also given the current annual dose of the two workers assigned to perform the work and have to determine if any dose limits will be exceeded. This JPM will be performed by both RO and SRO candidates. (Modified Admin JPM)

ILC-13 NRC JPM Admin SRO A4 – Perform an Emergency Action Level Classification and Recommended Protective Actions.

G2.4.41 Knowledge of the emergency action level thresholds and classifications. (CFR: 41.10 / 43.5 / 45.11)

G2.4.44 Knowledge of emergency plan protective action recommendations. (CFR: 41.10 / 43.5 / 45.3 / 45.12)

The candidate will be given the necessary plant conditions to classify that an emergency event has occurred. This classification is time critical and is required to be determined within 15 minutes of the onset of the event. Once the classification is communicated to the examiner, the candidate will directed to determine the Protective Action Recommendations based on the event and meteorological data. (New Admin JPM)

Facility: H B RobinsonDate of Examination: 7/29/13Exam Level: RO ☒ SRO-I ☒ SRO-UOperating Test No.: ILC-13Control Room Systems[@] (8 for RO); (7 for SRO-I); (2 or 3 for SRO-U, including 1 ESF)

System / JPM Title	Type Code*	Safety Function
a. 004 CVCS / Establishing RCS Cold Shutdown Boron Concentration	L, N, S	1
b. 010 PZR PCS / Place LTOP in Service	L, N, S	3
c. 002 RCS / Establish RCS Bleed and Feed	A, EN, L, M, S	4P
d. 039 MRSS / Reactor Trip Response – Excessive RCS Cooldown	A, D, L, S	4S
e. 103 Containment / Verify Phase B Containment Isolation and CV Spray Alignment	A, EN, L, M, P, S	5
f. 062 AC Elect. / Operation with High Switchyard Voltage	A, N, S	6
g. 008 CCW / Respond to a Loss of CCW	D, S	8
h. 006 ECCS / Fill a Safety Injection Accumulator IAW OP-202 (RO Only)	D, EN, S	2

In-Plant Systems[@] (3 for RO); (3 for SRO-I); (3 or 2 for SRO-U)

i. 004 CVCS / Auxiliary Building Operator Actions IAW DSP-002, Att. 3	A, E, L, M, R	2
j. 061 AFW / Aligning SW Backup to SDAFW Pump Suction IAW DSP-007, Attachment 7	A, D, E, L, R	4S
k. 064 EDG / Align Backup Fuel Oil to the "B" EDG IAW EPP-28, Att. 5	D, E, L, R	6

[@] All RO and SRO-I control room (and in-plant) systems must be different and serve different safety functions; all 5 SRO-U systems must serve different safety functions; in-plant systems and functions may overlap those tested in the control room.

* Type Codes	Criteria for RO / SRO-I / SRO-U
--------------	---------------------------------

(A)lternate path	4-6 / 4-6 / 2-3
(C)ontrol room	
(D)irect from bank	$\leq 9 / \leq 8 / \leq 4$
(E)mergency or abnormal in-plant	$\geq 1 / \geq 1 / \geq 1$
(EN)gineered safety feature	- / - / ≥ 1 (control room system)
(L)ow-Power / Shutdown	$\geq 1 / \geq 1 / \geq 1$
(N)ew or (M)odified from bank including 1(A)	$\geq 2 / \geq 2 / \geq 1$
(P)revious 2 exams	$\leq 3 / \leq 3 / \leq 2$ (randomly selected)
(R)CA	$\geq 1 / \geq 1 / \geq 1$
(S)imulator	

JPM A: Establishing RCS Cold Shutdown Boron Concentration.

K/A 004 A4.18 Ability to manually operate and/or monitor in the control room:
Emergency borate valve (CFR 41.7, 45.5 to 45.8)

(004 CVCS) Candidate will assume the watch with the plant in Mode 3 following a Rapid Plant Shutdown due to a 20 gpm leak on "A" S/G. The candidate will be directed to add 700 gallons of boric acid to the RCS in accordance with AOP-035, Att. 3, Establishing RCS Cold Shutdown Boron Concentration. This procedure will have the candidate use MOV-350, BA TO CHARGING PMP SUCT, as the boration flowpath. Candidate will have to utilize Boric Acid Flowrate information and calculate how long the addition must be in service to add the desired amount of boric acid. MOV-350 will be closed after the desired amount of boric acid has been added based on calculated time. (New CR JPM)

JPM B: Place LTOP in Service

K/A 010 A4.03 Ability to manually operate and/or monitor in the control room: PORV and Block Valves (CFR: 41.7 / 45.5 to 45.8)

(010 PZR PCS) Candidate will assume the watch as Operator at Controls with a cooldown to Cold Shutdown in progress. With RCS temperature between 350°F and 360°F the candidate will adjust PC-444J, PZR PRESS MASTER CONTROLLER, OR PZR Spray Valves in manual to lower RCS pressure to between 350 and 375 psig. Candidate will the proceed through a series of plant condition verification steps and then ultimately place both PZR PORV's Overpressure Selector Switches to the LOW PRESSURE position. This evolution will be performed in accordance with GP-007, Plant Cooldown from Hot Shutdown to Cold Shutdown, Step 8.3.10. (New CR JPM)

JPM C: Establish RCS Bleed and Feed

K/A 002 A2.04 Ability to (a) predict the impacts of the following malfunctions or operations on the RCS; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those malfunctions or operations: Loss of heat sinks. (CFR: 41.5 / 43.5 / 45.3 / 45.5)

(002 RCS) The plant has experienced a loss of all feedwater along with failure of the reactor to be tripped from the control room. Upon exiting FRP-S.1, the crew has identified a RED terminus on the Heat Sink CSF and transitioned to FRP-H.1, Response to Loss of Secondary Heat Sink. The candidate will be directed to respond to the loss of secondary heat sink in accordance with FRP-H.1. The candidate will determine that RCS Bleed and Feed criteria have been met and take the necessary actions. During the implementation of RCS Bleed and Feed the candidate will determine that PZR PORV PCV-455C has failed at mid-position. The candidate will take alternative actions to open all RCS and PZR Vent Valves in an attempt to provide an adequate bleed path. (CR-075 Bank JPM Modified for Alternate Path)

JPM D: Reactor Trip Response – Excessive RCS Cooldown

039A1.05.

K/A 007 EA1.03 / EA1.10 Ability to operate and monitor the following as they apply to a reactor trip: RCS pressure and temperature / S/G Pressure (CFR: 41.7 / 45.5 / 45.6)

(039 MRSS) The plant was manually tripped due to a loss of both Main Feed Pumps. The CRS has directed the candidate to stabilize the plant IAW EOP-ES-0.1. Candidate will identify that RCS Temperature is continuing to lower with all S/G PORVs and Steam Dumps closed and takes action to close the MSIVs. (Alternate Path) Based on a continuous action step the candidate will identify that RCS temperature is now rising and takes action to control RCS temperature by manually controlling the S/G PORVs and stabilizes RCS temperature at approximately 547°F. (CR-084 Bank JPM)

JPM E: Verify Phase B Containment Isolation and CV Spray Alignment

K/A 026 A4.01 Ability to manually operate and/or monitor in the control room: CSS Controls (CFR: 41.7 / 45.5 to 45.8)

K/A 103 A3.01 Ability to monitor automatic operation of the containment system, including: Containment Isolation (CFR: 41.7 / 45.5)

(103 Containment) The plant has tripped due to a Large Break LOCA. EOP-E-0 has been implemented up to Step 9. a. "CV pressure – HAS REMAINED LESS THAN 10 PISG." The candidate has been directed to perform the RNO actions for this step due to CV being greater than 10 psig. Candidate will determine that none of the CV Spray Pump Discharge Valves (SI-880s) are open and take manual actions to open them from the RTGB controls. The candidate will then determine that none of the Phase B valves are in the proper position and take manual action to close all the valves and then secure the RCPs. (CR-098 Bank JPM Modified for Alternate Paths)

JPM F: Operation with High Switchyard Voltage

K/A 062 A2.08 Ability to (a) predict the impacts of the following malfunctions or operations on the AC distribution system; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those malfunctions or operations: Consequences of exceeding voltage limitations (CFR: 41.5 / 43.5 / 45.3 / 45.13)

(062 AC Dist.) The plant is in Mode 1 and Grid voltage has risen to the point that E-2 voltage is greater than 505 Volts. AOP-031, Operation with High Switchyard Voltage, has been performed up to step 21. The candidate will continue in AOP-031 and start loads on E-2 in an attempt to lower voltage and ultimately transfer 4Kv Bus 4 to the Start-Up Transformer. During the transfer, breaker 52/20 will fail to Auto-Open and require the candidate to perform an alternate path by manually opening breaker 52/20. (New CR JPM)

JPM G: Respond to a Loss of CCW IAW AOP-014

K/A 008 A3.01 Knowledge of the effect that a loss or malfunction of the CCWS will have on the following: RCP (CFR: 41.5 / 45.5)

(007 PRT) Candidate will assume the watch with the plant at 100% RTP and told to respond to plant alarms. The candidate will receive a CCW Surge Tank HI/LO Level alarm and determine that the CCW Surge Tank is lowering rapidly. Candidate will take actions IAW AOP-014, CCW System Malfunction, and trip the reactor and trip all RCPs. Candidate will then lockout all CCW Pumps to prevent Auto-Start on Low System Pressure and ultimately determine that the leak is in the CV and Isolate CCW to the RCPs. (CR-066 Bank JPM)

JPM H: Fill a Safety Injection Accumulator IAW OP-202 (RO Only)

K/A 006 A1.13 Ability to predict and / or monitor changes in parameters (to prevent exceeding design limits) associated with operating the ECCS controls including:
Accumulator pressure (level, boron concentration) (CFR 41.5 / 45.5)

(006 ECCS): Fill a Safety Injection Accumulator IAW OP-202. The candidate assumes the watch with a SI Accumulator Low level alarm with direction to fill the Accumulator IAW OP-202, SAFETY INJECTION AND CONTAINMENT VESSEL SPRAY SYSTEM, Section 8.2.1, to reset the low level alarm. The applicant will align ECCS valves and start a Safety Injection Pump to raise level above 69%, while maintaining pressure within band. (CR-019 Bank JPM) **(RO ONLY)**

JPM I: Auxiliary Building Operator Actions IAW DSP-002, Att. 3

K/A 004 G2.1.30 Ability to locate and operate components, including local controls with respect to CVCS. (CFR: 41.7 / 45.7)

(004 CVCS) The plant has been tripped and control room evacuated due to a fire on the RTGB. DSP-002, Hot Shutdown Using the Dedicated / Alternate Shutdown System, is being implemented. The candidate has been assigned to perform DSP-002, Attachment 3, Auxiliary Building Operator Actions, and directed to inform the SM when a Charging Pump is running at minimum speed and adequate seal injection flow is being supplied to the RCPs. The candidate will enter the Charging Pump Room and take local control of "A" Charging Pump, properly align a discharge and suction path, and then manually start "A" Charging Pump and adjust Charging Pump Speed. The candidate then manually throttles open the RCP Seal Water Flow Control Valves to raise seal injection flow to within the expected band. This JPM requires RCA entry. (IP-145 Bank JPM Modified)

JPM J: Aligning SW Backup to SDAFW Pump Suction IAW DSP-007, Att. 7

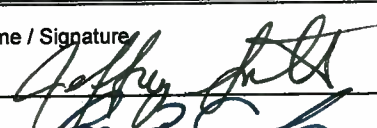
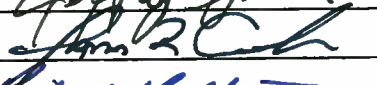


K/A 061 K4.01 Knowledge of AFW design feature(s) and/or interlock(s) which provide for the following: Water sources and priority of use. (CFR: 41.7)

(061 AFW) The plant has been shutdown and is preparing to cool down IAW DSP-007, Cold Shutdown Using the Dedicated / Alternate Shutdown System. The CRS has directed the candidate perform DSP-007, Att. 7 to align Service Water to the suction of the SDAFW pump. When Service Water is aligned the candidate is to start the SDAFW pump by manually opening the steam supply from "C" S/G (V1-8C). The candidate will determine that V1-8C is stuck in the closed position and have to open an alternate steam supply valve. This JPM has actions both inside and outside of the RCA. (IP-165 Bank JPM)

JPM K: Align Backup Fuel Oil to the "B" EDG IAW EDG IAW EPP-28, Att. 5

K/A 064 K1.03 Knowledge of the physical connections and / or cause-effect relationships between the ED/G system and the following systems: Diesel fuel oil supply system (CFR: 41.2 to 41.9 / 45.7 to 45.8)

(064 EDG) The plant has been shut down due to hostile action that has resulted in a loss of off-site power and a loss of Ultimate Heat Sink. EPP-028, Loss of Ultimate Heat Sink, has been implemented and "B" EDG is the only EDG operating. The candidate is directed to perform EPP-28, Attachment 5, Backup Fuel Oil Alignment. The candidate will enter the "B" EDG Room and perform manual valve operations to add fuel oil from the Alternate Fuel Oil Storage Tank and raise the EDG Fuel Oil Day Tank from ¼ full to ¾ full. This JPM requires RCA entry. (IP-151 Bank JPM)

Facility: H B Robinson		Date of Examination: 7/29/13		Operating Test Number: ILC-13		
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).			gm	h	msb
b.	There is no day-to-day repetition between this and other operating tests to be administered during this examination.			gm	h	msb
c.	The operating test shall not duplicate items from the applicants' audit test(s). (see Section D.1.a.)			gm	h	msb
d.	Overlap with the written examination and between different parts of the operating test is within acceptable limits.			gm	h	msb
e.	It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.			gm	h	msb
2. Walk-Through 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 operationally important 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 			gm	h	msb
b.	Ensure that any changes from the previously approved systems and administrative walk-through outlines (Forms ES-301-1 and 2) have not caused the test to deviate from any of the acceptance criteria (e.g., item distribution, bank use, repetition from the last 2 NRC examinations) specified on those forms and Form ES-201-2.			gm	h	msb
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.				gm	h	msb
		Printed Name / Signature		Date		
a.	Author	Jeffrey Smith / 		7/18/13		
b.	Facility Reviewer(**)	James Conder / 		7/18/13		
c.	NRC Chief Examiner (#)	Rick Baldwin / 		7/23/2013		
d.	NRC Supervisor	Mark Frankel / 		7/24/13		
NOTE: * The facility signature is not applicable for NRC-developed tests. # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required.						

Facility: H B Robinson Date of Exam: 7/29/13 Scenario Numbers: 1 / 2 / 3 Operating Test No.: ILC-13		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.	gm	h	lab
2.	The scenarios consist mostly of related events.	gm	h	lab
3.	Each event description consists of <ul style="list-style-type: none"> 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) 	gm	h	lab
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.	gm	h	lab
5.	The events are valid with regard to physics and thermodynamics.	gm	h	lab
6.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.	gm	h	lab
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.	gm	h	lab
8.	The simulator modeling is not altered.	gm	h	lab
9.	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.	gm	h	lab
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.5 of ES-301.	gm	h	lab
11.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).	gm	h	lab
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).	gm	h	lab
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.	gm	h	lab
Target Quantitative Attributes (Per Scenario; See Section D.5.d)		Actual Attributes		
1.	Total malfunctions (5-8)	12 / 12 / 11	gm	lab
2.	Malfunctions after EOP entry (1-2)	5 / 6 / 5	gm	lab
3.	Abnormal events (2-4)	6 / 5 / 5	gm	lab
4.	Major transients (1-2)	1 / 2 / 3	gm	lab
5.	EOPs entered/requiring substantive actions (1-2)	2 / 3 / 2	gm	lab
6.	EOP contingencies requiring substantive actions (0-2)	1 / 1 / 1	gm	lab
7.	Critical tasks (2-3)	3 / 4 / 4	gm	lab

Facility: H B Robinson Date of Exam: 7/29/13 Scenario Numbers: 4 Operating Test No.: ILC-13		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.	gm	h	lab
2.	The scenarios consist mostly of related events.	gm	h	lab
3.	Each event description consists of <ul style="list-style-type: none"> 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) 	gm	h	lab
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.	gm	h	lab
5.	The events are valid with regard to physics and thermodynamics.	gm	h	lab
6.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.	gm	h	lab
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.	gm	h	lab
8.	The simulator modeling is not altered.	gm	h	lab
9.	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.	gm	h	lab
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.5 of ES-301.	gm	h	lab
11.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).	gm	h	lab
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).	gm	h	lab
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.	gm	h	lab
Target Quantitative Attributes (Per Scenario; See Section D.5.d)		Actual Attributes		
1.	Total malfunctions (5-8)	10	gm	h
2.	Malfunctions after EOP entry (1-2)	5	gm	h
3.	Abnormal events (2-4)	4	gm	h
4.	Major transients (1-2)	2	gm	h
5.	EOPs entered/requiring substantive actions (1-2)	2	gm	h
6.	EOP contingencies requiring substantive actions (0-2)	0	gm	h
7.	Critical tasks (2-3)	7	gm	h

ES-301

Transient and Event Checklist

Form ES-301-5

Facility: H B Robinson

Date of Exam: 7/29/13 Operating Test No.: ILC-13

A P P L I C A N T	E V E N T T Y P E	Scenarios												T O T A L	M I N I M U M (*)		
		1			2			3			4						
		C R E W P O S I T I O N			C R E W P O S I T I O N			C R E W P O S I T I O N			C R E W P O S I T I O N						
		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				
		R	I	U													
SRO-I 1	RX							4						1	1	1	0
	NOR	4			2									2	1	1	1
	I/C	2,3 5,6			3,4 5			2,3						9	4	4	2
	MAJ	7			6			6						3	2	2	1
	TS	2,3 4,5			3,5									6	0	2	2
SRO-I 2	RX				2									1	1	1	0
	NOR	4						4						2	1	1	1
	I/C	2,3 5,6			3,4			1,2 5						9	4	4	2
	MAJ	7			6			6						3	2	2	1
	TS	2,3 4,5						1,3 5						7	0	2	2
	RX														1	1	0
	NOR														1	1	1
	I/C														4	4	2
	MAJ														2	2	1
	TS														0	2	2
	RX														1	1	0
	NOR														1	1	1
	I/C														4	4	2
	MAJ														2	2	1
	TS														0	2	2

ES-301		Transient and Event Checklist												Form ES-301-5					
Facility:		H B Robinson						Date of Exam: 7/29/13						Operating Test No.: ILC-13					
A P P L I C A N T	E V E N T T Y P E	Scenarios														T O T A L	M I N I M U M(*)		
		1			2			3			4								
		C R E W P O S I T I O N			C R E W P O S I T I O N			C R E W P O S I T I O N			C R E W P O S I T I O N								
		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						
																	R	I	U
RO-1	RX		4													1	1	1	0
	NOR						2									1	1	1	1
	I/C		2,5 6				1,5									5	4	4	2
	MAJ		7				6									2	2	2	1
	TS															0	0	2	2
RO-2	RX					2										1	1	1	0
	NOR			4						4						2	1	1	1
	I/C			1,3		3,4				1,5						6	4	4	2
	MAJ			7		6				6						3	2	2	1
	TS															0	0	2	2
RO-3	RX		4													1	1	1	0
	NOR						2									1	1	1	1
	I/C		2,5 6				1,5									5	4	4	2
	MAJ		7				6									2	2	2	1
	TS															0	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 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 Instant SRO *additionally* 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 *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 instrument or component malfunctions on a 1-for-1 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.

Robinson ILC-13 License Class

Instant SROs

I1 – Justin Gainey
I2 – Jesse Seymour

ROs

R1 – Mike Griffin
R2 – Daniel Hendrick
R3 – Glenn Hill

Facility: H B Robinson		Date of Examination: 7/29/13		Operating Test No.: ILC-13												
Competencies	APPLICANTS															
	SRO-I1				SRO-I2											
	SCENARIO				SCENARIO				SCENARIO				SCENARIO			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Interpret/Diagnose Events and Conditions	2,4 5,6 7	2,3 4,5 7	2,3 8		2,4 5,6 7	3,4 6,7	1,2 4,5 6,7 8									
Comply With and Use Procedures (1)	1,2 4,5 6,7 12	2,3 4,5 6,7	1,2 3,4 6,8		1,2 4,5 6,7 12	2,3 4,6	1,2 3,4 5,6 8									
Operate Control Boards (2)			1,2 4,6 8 11			2,4 6,7 9										
Communicate and Interact	1,2 3,4 5,6 7	2,3 4,6 7 10	1,2 3,4 6,8		1,2 3,4 5,6 7	2,3 4,6	1,2 3,4 5,6 7,8									
Demonstrate Supervisory Ability (3)	4,5 6,7	2,3 4,6 7 10			4,5 6,7		2,3 4,6 7,8									
Comply With and Use Tech. Specs. (3)	2,3 4,5	3,5			2,3 4,5		1,3 5									
Notes: (1) Includes Technical Specification 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.

Facility: H B Robinson		Date of Examination: 7/29/13		Operating Test No.: ILC-13												
Competencies	APPLICANTS															
	RO-1				RO-2				RO-3							
	SCENARIO				SCENARIO				SCENARIO				SCENARIO			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Interpret/Diagnose Events and Conditions	2,4 5,6	2,5, 8,10 11 12			1,3 8	3,4 6,7	1,4 5,6 9		2,4 5,6	2,5 8,10 11 12						
Comply With and Use Procedures (1)	2,4 6	1,2 4,5 6,7			1,3 4,6	2,3 4,6	1,4 5,6 7,8		2,4 6	1,2 4,5 6,7						
Operate Control Boards (2)	2,4 5,6 9, 10	1,2 4,5 8,10 11 12			1,3 4,8	2,4 6,7 9	1,4 5,6 8,9 10		2,4 5,6 9 10	1,2 4,5 8,10 11 12						
Communicate and Interact	2,4 5,6	1,2 5,6 8,10			1,3 4,6	2,3 4,6	1,4 5,6 7,9 10		2,4 5,6	1,2 5,6 8,10						
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:

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.

Facility: H.B. ROBINSON		Date of Exam: JULY 2013															
Tier	Group	RO K/A Category Points											SRO-Only Points				
		K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G *	Total	A2	G*	Total	
1. Emergency & Abnormal Plant Evolutions	1	3	3	3				3	3				3	18	3	3	6
	2	2	1	1	N/A			2	1	N/A			2	9	2	2	4
	Tier Totals	5	4	4				5	4				5	27	5	5	10
2. Plant Systems	1	2	3	2	3	2	2	3	3	2	3	3	28	3	2	5	
	2	1	1	0	1	1	1	1	1	1	1	1	10	0	2	3	
	Tier Totals	3	4	2	4	3	3	4	4	3	4	4	38	5	3	8	
3. Generic Knowledge and Abilities Categories				1		2		3		4		10	1	2	3	4	7
				2		2		3		3			1	2	2	2	

Note:

- Ensure that at least two topics from every applicable K/A category are sampled within each tier of the RO and SRO-only outlines (i.e., except for one category in Tier 3 of the SRO-only outline, the "Tier Totals" in each K/A category shall not be less than two).
- The point total for each group and tier in the proposed outline must match that specified in the table. The final point total for each group and tier may deviate by ± 1 from that specified in the table based on NRC revisions. The final RO exam must total 75 points and the SRO-only exam must total 25 points.
- Systems/evolutions within each group are identified on the associated outline; systems or evolutions that do not apply at the facility should be deleted and justified; operationally important, site-specific systems/evolutions that are not included on the outline should be added. Refer to Section D.1.b of ES-401 for guidance regarding the elimination of inappropriate K/A statements.
- Select topics from as many systems and evolutions as possible; sample every system or evolution in the group before selecting a second topic for any system or evolution.
- Absent a plant-specific priority, only those K/As having an importance rating (IR) of 2.5 or higher shall be selected. Use the RO and SRO ratings for the RO and SRO-only portions, respectively.
- Select SRO topics for Tiers 1 and 2 from the shaded systems and K/A categories.
- * The generic (G) K/As in Tiers 1 and 2 shall be selected from Section 2 of the K/A Catalog, but the topics must be relevant to the applicable evolution or system. Refer to Section D.1.b of ES-401 for the applicable K/As.
- On the following pages, enter the K/A numbers, a brief description of each topic, the topics' importance ratings (IRs) for the applicable license level, and the point totals (#) for each system and category. Enter the group and tier totals for each category in the table above; if fuel handling equipment is sampled in other than Category A2 or G* on the SRO-only exam, enter it on the left side of Column A2 for Tier 2, Group 2 (Note #1 does not apply). Use duplicate pages for RO and SRO-only exams.
- For Tier 3, select topics from Section 2 of the K/A catalog, and enter the K/A numbers, descriptions, IRs, and point totals (#) on Form ES-401-3. Limit SRO selections to K/As that are linked to 10 CFR 55.43.

KA	NAME / SAFETY FUNCTION:	IR	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	TOPIC:
		RO	SRO											
008AK2.03	Pressurizer Vapor Space Accident / 3	2.5	2.4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Controllers and positioners
009EK1.02	Small Break LOCA / 3	3.5	4.2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Use of steam tables
011EG2.4.21	Large Break LOCA / 3	4.0	4.6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Knowledge of the parameters and logic used to assess the status of safety functions
022AK3.07	Loss of Rx Coolant Makeup / 2	3	3.2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Isolating charging
025AK2.02	Loss of RHR System / 4	3.2	3.2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	LPI or Decay Heat Removal/RHR pumps
027AA1.02	Pressurizer Pressure Control System Malfunction / 3	3.1	3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SCR-controlled heaters in manual mode
<input checked="" type="checkbox"/> 029EA1.04 1.02	ATWS / 1	3.9	3.8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	BIT inlet valve switches
038EK3.08	Steam Gen. Tube Rupture / 3	4.1	4.2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Criteria for securing RCP
040AA2.02	Steam Line Rupture - Excessive Heat Transfer / 4	4.6	4.7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Conditions requiring a reactor trip
054AK1.01	Loss of Main Feedwater / 4	4.1	4.3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MFV line break depressurizes the S/G (similar to a steam line break)
055EG2.4.21	Station Blackout / 6	4.0	4.6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Knowledge of the parameters and logic used to assess the status of safety functions

KA	NAME / SAFETY FUNCTION:	IR	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	TOPIC:
		RO	SRO											
056AA1.15	Loss of Off-site Power / 6	2.7	2.9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Service water booster pump <i>OR SVCS H₂O pump.</i>
057AA2.19	Loss of Vital AC Inst. Bus / 6	4	4.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The plant automatic actions that will occur on the loss of a vital ac electrical instrument bus
058AK1.01	Loss of DC Power / 6	2.8	3.1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Battery charger equipment and instrumentation
077AK3.02	Generator Voltage and Electric Grid Disturbances / 6	3.6	3.9	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Actions contained in abnormal operating procedures for voltage and grid disturbances
WE04EK2.1	LOCA Outside Containment / 3	3.5	3.9	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Components and functions of control and safety systems, including instrumentation, signals, interlocks, failure modes and automatic and manual features.
we05EG2.4.6	Inadequate Heat Transfer - Loss of Secondary Heat Sink / 4	3.7	4.7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge symptom based EOP mitigation strategies.
WE11EA2.2	Loss of Emergency Coolant Recirc. / 4	3.4	4.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Adherence to appropriate procedures and operation within the limitations in the facility's license and amendments.

KA	NAME / SAFETY FUNCTION:	IR	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	TOPIC:
		RO	SRO											
028AA2.03	Pressurizer Level Malfunction / 2	2.8	3.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Charging subsystem flow indicator and controller
032AA1.01	Loss of Source Range NI / 7	3.1	3.4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Manual restoration of power
033AG2.2.22	Loss of Intermediate Range NI / 7	4.0	4.7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Knowledge of limiting conditions for operations and safety limits.
060AK3.02	Accidental Gaseous Radwaste Rel. / 9	3.3	3.5	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Isolation of the auxiliary building ventilation
067AK1.02	Plant Fire On-site / 8	3.1	3.9	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fire fighting
068AG2.2.36	Control Room Evac. / 8	3.1	4.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ability to analyze the effect of maintenance activities, such as degraded power sources, on the status of limiting conditions of operations
076AA1.04	High Reactor Coolant Activity / 9	3.2	3.4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Failed fuel-monitoring equipment
WE08EK1.2	RCS Overcooling - PTS / 4	3.4	4.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Normal, abnormal and emergency operating procedures associated with (Natural Circulation Operations).
WE10EK2.2	Natural Circ. With Seam Void/ 4	3.6	3.9	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Facility's heat removal systems, including primary coolant, emergency coolant, the decay heat removal systems and relations between the proper operation of these systems to the operation of the facility.

KA	NAME / SAFETY FUNCTION:	IR	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	TOPIC:
		RO	SRO											
003A1.04	Reactor Coolant Pump	2.6	2.5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	RCP oil reservoir levels
003K4.02	Reactor Coolant Pump	2.5	2.7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Prevention of cold water accidents or transients
004K3.08	Chemical and Volume Control	3.6	3.8	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	RCP seal injection
004K6.26	Chemical and Volume Control	3.8	4.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Methods of pressure control of solid plant (PZR relief and water inventory)
005A2.04	Residual Heat Removal	2.9	2.9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	RHR valve malfunction
006A4.02	Emergency Core Cooling	4.0	3.8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Valves
006K5.10	Emergency Core Cooling	2.5	2.9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Theory of thermal stress
007K5.02	Pressurizer Relief/Quench Tank	3.1	3.4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Method of forming a steam bubble in the PZR
008A2.07	Component Cooling Water	2.5	2.8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Consequences of high or low CCW flow rate and temperature; the flow rate at which the CCW standby pump will start
010K1.08	Pressurizer Pressure Control	3.2	3.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PZR LCS
012A3.04	Reactor Protection	2.8	2.9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circuit breaker

KA	NAME / SAFETY FUNCTION:	IR	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	TOPIC:
		RO	SRO											
013K2.01	Engineered Safety Features Actuation	3.6	3.8	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ESFAS/safeguards equipment control
022A3.01	Containment Cooling	4.1	4.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Initia tion of safeguards mode of operation
026G2.2.42	Containment Spray	3.9	4.6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ability to recognize system parameters that are entry-level conditions for Technical Specifications
039A4.04	Main and Reheat Steam	3.8	3.9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Emergency feedwater pump turbines
059A2.12	Main Feedwater	3.1	3.4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Failure of feedwater regulating valves
061K6.02	Auxiliary/Emergency Feedwater	2.6	2.7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pumps
062K3.03	AC Electrical Distribution	3.7	3.9	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DC system
063A1.01	DC Electrical Distribution	2.5	3.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Battery capacity as it is affected by discharge rate
064G2.1.27	Emergency Diesel Generator	3.9	4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge of system purpose and or function.
064K2.01	Emergency Diesel Generator	2.7	3.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Air compressor
073A4.01	Process Radiation Monitoring	3.9	3.9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Effluent release

KA	NAME / SAFETY FUNCTION:	IR	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	TOPIC:
		RO	SRO											
073K4.02	Process Radiation Monitoring	3.3	3.9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Letdown isolation on high-RCS activity
076A1.02	Service Water	2.6	2.6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Reactor and turbine building closed cooling water temperatures.
076K2.08	Service Water	3.1	3.3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ESF-actuated MOVs
078G2.4.50	Instrument Air	4.2	4.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ability to verify system alarm setpoints and operate controls identified in the alarm response manual.
078K1.04	Instrument Air	2.6	2.9	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cooling water to compressor
103K4.04	Containment	2.5	3.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Personnel access hatch and emergency access hatch

KA	NAME / SAFETY FUNCTION:	IR	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	TOPIC:
		RO	SRO											
002A2.04	Reactor Coolant	4.3	4.6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Loss of heat sinks
011K6.03	Pressurizer Level Control	2.9	3.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Relationship between PZR level and PZR heater control circuit
014G2.1.30	Rod Position Indication	4.4	4.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Ability to locate and operate components, including local controls.
017A1.01	In-core Temperature Monitor	3.7	3.9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Core exit temperature
027K2.01	Containment Iodine Removal	3.1	3.4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fans
029A4.01	Containment Purge	2.5	2.5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Containment purge flow rate
033K4.01	Spent Fuel Pool Cooling	2.9	3.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Maintenance of spent fuel level
035K5.01	Steam Generator	3.4	3.9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Effect of secondary parameters, pressure and temperature on reactivity
055A3.03	Condenser Air Removal	2.5	2.7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Automatic diversion of CARS exhaust
068K1.07	Liquid Radwaste	2.7	2.9	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sources of liquid wastes for LRS

KA	NAME / SAFETY FUNCTION:	IR	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	TOPIC:
		RO	SRO											
G2.1.14	Conduct of operations	3.1	3.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge of criteria or conditions that require plant-wide announcements, such as pump starts, reactor trip, mode changes, etc.
G2.1.40	Conduct of operations	2.8	3.9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge of refueling administrative requirements
G2.2.12	Equipment Control	3.7	4.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge of surveillance procedures.
G2.2.7	Equipment Control	2.9	3.6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge of the process for conducting special or infrequent tests
G2.3.14	Radiation Control	3.4	3.8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge of radiation or contamination hazards that may arise during normal, abnormal, or emergency conditions or activities
G2.3.15	Radiation Control	2.9	3.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge of radiation monitoring systems
G2.3.4	Radiation Control	3.2	3.7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge of radiation exposure limits under normal and emergency conditions
G2.4.12	Emergency Procedures/Plans	4.0	4.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge of general operating crew responsibilities during emergency operations.
G2.4.26	Emergency Procedures/Plans	3.1	3.6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge of facility protection requirements including fire brigade and portable fire fighting equipment usage.
G2.4.39	Emergency Procedures/Plans	3.9	3.8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge of the RO's responsibilities in emergency plan implementation.

KA	NAME / SAFETY FUNCTION:	IR	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	TOPIC:
		RO	SRO											
008AG2.1.7	Pressurizer Vapor Space Accident / 3	4.4	4.7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ability to evaluate plant performance and make operational judgments based on operating characteristics, reactor behavior and instrument interpretation.
054AG2.4.35	Loss of Main Feedwater / 4	3.8	4.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge of local auxiliary operator tasks during emergency and the resultant operational effects
055EA2.06	Station Blackout / 6	3.7	4.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Faults and lockouts that must be cleared prior to re-energizing buses
058AG2.1.19	Loss of DC Power / 6	3.9	3.8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ability to use plant computer to evaluate system or component status.
077AA2.02	Generator Voltage and Electric Grid Disturbances / 6	3.5	3.6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Voltage outside the generator capability curve
WE05EA2.2	Inadequate Heat Transfer - Loss of Secondary Heat Sink / 4	3.7	4.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Adherence to appropriate procedures and operation within the limitations in the facility's license and amendments.

KA	NAME / SAFETY FUNCTION:	IR	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	TOPIC:
		RO	SRO											
001AA2.05	Continuous Rod Withdrawal / 1	4.4	4.6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Uncontrolled rod withdrawal from available indications
060AG2.2.37	Accidental Gaseous Radwaste Rel. / 9	3.6	4.6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ability to determine operability and/or availability of safety related equipment
061AA2.02	ARM System Alarms / 7	2.9	3.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Normal radiation intensity for each ARM system channel
we14EG2.2.38	Loss of CTMT Integrity / 5	3.6	4.5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge of conditions and limitations in the facility license.

KA	NAME / SAFETY FUNCTION:	IR	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	TOPIC:
		RO	SRO											
012G2.1.20	Reactor Protection	4.6	4.6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ability to execute procedure steps.
089G2.4.20	Main and Reheat Steam	3.8	4.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge of operational implications of EOP warnings, cautions and notes.
061	Auxiliary / Emergency Feed													
063A2.02	DC Electrical Distribution	2.3	3.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Loss of ventilation during battery charging
076A2.01	Service Water	3.5	3.7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Loss of SWS
103A2.01	Containment	2.0	2.6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Integrated leak rate test

KA	NAME / SAFETY FUNCTION:	IR	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	TOPIC:
		RO	SRO											
028A2.01	Hydrogen Recombiner and Purge Control	3.4	3.6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hydrogen recombinder power setting, determined by using plant data book
068A2.04	Liquid Radwaste	3.3	3.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Failure of automatic isolation
071G2.4.46	Waste Gas Disposal	4.2	4.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ability to verify that the alarms are consistent with the plant conditions.

KA	NAME / SAFETY FUNCTION:	IR	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	TOPIC:
		RO	SRO											
G2.1.38	Conduct of operations	3.7	3.8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge of the stations requirements for verbal communication when implementing procedures
G2.2.13	Equipment Control	4.1	4.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge of tagging and clearance procedures.
G2.2.18	Equipment Control	2.6	3.8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge of the process for managing maintenance activities during shutdown operations.
G2.3.13	Radiation Control	3.4	3.8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge of radiological safety procedures pertaining to licensed operator duties
G2.3.5	Radiation Control	2.9	2.9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ability to use radiation monitoring systems
G2.4.23	Emergency Procedures/Plans	3.4	4.4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge of the bases for prioritizing emergency procedure implementation during emergency operations.
G2.4.30	Emergency Procedures/Plans	2.7	4.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge of events related to system operations/status that must be reported to internal organizations or outside agencies.

ES-401			Record of Rejected K/As	Form ES-401-4
Tier / Group	Randomly Selected K/A	Reason for Rejection		
1/1	008AK2.03	SRO importance rating is 2.4. Will this be acceptable since the SRO will also be taking the RO portion of this exam? NRC responded that this was ok since this is on the RO portion of the exam and the RO importance rating is >2.5.		
1/2	068G2.2.2	IAW ES-401 pg 4 of 33, G2.2.2 is not on the list of K/A's that are to be selected from for Tiers 1 and 2. Should this K/A be swapped out for one on that list? NRC swapped the K/A for 068 G2.3.7 and said to try creating a question to this K/A and get back to them if there is problems.		
1/2	032AA1.01	We do not have a specific abnormal operating procedure that addresses a loss of Source Range NI's. We can ask it from the perspective of what Instrument Bus has to be manually restored in order to power the Source Range NI's. Would this work for meeting the K/A? NRC said this was an acceptable way to meet the K/A.		
1/2	WE08EK1.2	K/A from NUREG 1122 says "Normal, abnormal and emergency operating procedures associated with (Pressurized Thermal Shock)". The sample plan says "Normal, abnormal and emergency operating procedures associated with (Natural Circulation Operations)". Is there a misprint on the sample plan? NRC said the sample plan is misprinted, this should say (Pressurized Thermal Shock).		
2/1	003A1.04	There are no controls dealing with RCP oil reservoir levels at the RTGB. Cannot write a question to this K/A. NRC replaced with K/A 003 A1.09.		
2/1	003K4.02	H.B. Robinson does not have any design features or interlocks on the RCP's associated with cold-water accidents or transients. Cannot write a question to this K/A. NRC replaced with K/A 003 K4.04.		
2/1	008A2.07	H.B. Robinson's CCW pumps do not auto start on low/hi flow. They auto start on low pressure. Cannot write a question to this K/A. NRC replaced with K/A 008 A2.03.		
2/1	062K3.03	There is a high potential of this K/A and the following K/A, 063A1.01, having overlap. Recommend swapping 062K3.03 out for a new K/A. NRC replaced with K/A 062 K3.01.		
2/1	073K4.02	H.B. Robinson's Letdown does not isolate on high RCS activity. Cannot write a question to this K/A. NRC replaced with K/A 073 K4.01.		

2/1	076K2.08	H.B. Robinson's Service Water system does not have any ESF actuated valves. Cannot write a question to this K/A. NRC replaced with K/A 076 K2.01.
2/1	078G2.4.50	There are not actions taken in the Control Room. All actions are local. Cannot write a question to this K/A. NRC did not change this K/A. K/A has nothing to do with actions taken in the Control Room.
2/2	029A4.01	The Control Room does not have the ability to monitor the Containment Purge flow rate. Cannot write a question to this K/A. NRC replaced with K/A 029 A4.04.
2/2	055A3.03	H.B. Robinson does not have "automatic diversion of CARS exhaust". Cannot write a question to this K/A. NRC replaced with K/A 015 A3.02.
SRO 1/1	077AA2.02	This topic will be very difficult to write to the SRO level. There are no Tech Spec implications nor are there any EAL classifications. NRC replaced with K/A 077 AA2.07.
SRO 1/2	060AG2.2.37	There is nothing that is associated with the Waste Gas System that is Safety Related. Cannot write a question to this K/A. NRC replaced with K/A 060 G2.2.40.
SRO 2/1	103A2.01	This K/A is not operationally valid. Integrated Leak Rate Tests are performed every 10 years by engineering. Cannot write a question to this K/A. NRC replaced with K/A 103 A2.03.
SRO 2/2	028A2.01	This K/A is not applicable to H.B. Robinson. We do not have a Hydrogen Recombiner. Cannot Write a question to this K/A. NRC replaced with K/A 001 A2.13.

Facility: H B Robinson		Date of Exam: 7/29/13		Exam Level: RO X SRO X			
Item Description				Initial			
				a	b*	c*	
1. Questions and answers are technically accurate and applicable to the facility.				gjm	RA	RA	
2. a. NRC K/As are referenced for all questions. b. Facility learning objectives are referenced as available.				gjm	RA	RA	
3. SRO questions are appropriate in accordance with Section D.2.d of ES-401				gjm	RA	RA	
4. The sampling process was random and systematic (If more than 4 RO or 2 SRO questions were repeated from the last 2 NRC licensing exams, consult the NRR OL program office).						RA	
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 checked="" type="checkbox"/> the licensee certifies that there is no duplication; or <input type="checkbox"/> other (explain)				gjm	RA	RA	
6. Bank use meets limits (no more than 75 percent from the bank, at least 10 percent new, and the rest new or modified); enter the actual RO / SRO-only question distribution(s) at right.		Bank	Modified	New	gjm	RA	RA
		13 / 24 (10) / (6)	0 / 4 (0) / (1)	87 / 72 (65) / (18)			
7. Between 50 and 60 percent of the questions on the RO exam 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	gjm	RA	RA
		45 / 32 (34) / (8)		55 / 68 (41) / (17)			
8. References/handouts provided do not give away answers or aid in the elimination of distracters.				gjm	RA	RA	
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.				gjm	RA	RA	
10. Question psychometric quality and format meet the guidelines in ES Appendix B.				gjm	RA	RA	
11. The exam contains the required number of one-point, multiple choice items; the total is correct and agrees with the value on the cover sheet.				gjm	RA	RA	
Printed Name / Signature a. Author Jeffrey Smith / <u>Jeffrey Smith</u> b. Facility Reviewer (*) Robert Adams / <u>Robert Adams</u> c. NRC Chief Examiner (#) Rick Baldwin / <u>Rick Baldwin</u> d. NRC Regional Supervisor <u>MARKE FRANK</u>				Date 6/12/13 6/14/13 12/4/2012 12/4/2013			
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.							

FINAL

ES-401

Written Examination Review Worksheet

Form ES-401-9

HB ROBINSON INITIAL REVIEW

Instructions

[Refer to Section D of ES-401 and Appendix B for additional information regarding each of the following concepts.]

1. Enter the level of knowledge (LOK) of each question as either (F)undamental or (H)igher cognitive level.
2. Enter the level of difficulty (LOD) of each question using a 1 – 5 (easy – difficult) rating scale (questions in the 2 – 4 range are acceptable).
3. Check the appropriate box if a psychometric flaw is identified:
 - The stem lacks sufficient focus to elicit the correct answer (e.g., unclear intent, more information is needed, or too much needless information).
 - The stem or distractors contain cues (i.e., clues, specific determiners, phrasing, length, etc).
 - The answer choices are a collection of unrelated true/false statements.
 - The distractors are not credible; single implausible distractors should be repaired, more than one is unacceptable.
 - One or more distractors is (are) partially correct (e.g., if the applicant can make unstated assumptions that are not contradicted by stem).
4. Check the appropriate box if a job content error is identified:
 - The question is not linked to the job requirements (i.e., the question has a valid K/A but, as written, is not operational in content).
 - The question requires the recall of knowledge that is too specific for the closed reference test mode (i.e., it is not required to be known from memory).
 - The question contains data with an unrealistic level of accuracy or inconsistent units (e.g., panel meter in percent with question in gallons).
 - The question requires reverse logic or application compared to the job requirements.
5. Check questions that are sampled for conformance with the approved K/A and those that are *designated SRO-only* (K/A and license level mismatches are unacceptable).
6. Enter question source: (B)ank, (M)odified, or (N)ew. Check that (M)odified questions meet criteria of ES-401 Section D.2.f.
7. Based on the reviewer's judgment, is the question as written (U)nsatisfactory (requiring repair or replacement), in need of (E)ditorial enhancement, or (S)atisfactory?
8. At a minimum, explain any "U" ratings (e.g., how the Appendix B psychometric attributes are not being met).

2

Form ES-401-9

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stern Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Backward	Q= K/A	SRO Only			
1	H	3												N	S	008AK2.03, NEW, D 1. Appears to meet KA 2.Appears to be ok. Wednesday, July 24, 2013 1. Further changed to additional.
2	H	2-3												N	E	009EK1.02, NEW, D 1. Appears to meet KA 2. CETCs are steady at 547? 3. References? Only the Steam Tables is OK. NO fold out. Discuss with licensee to ensure this is ok. 4. When does adverse numbers come in? 5. Is it necessary to say a Small Break LOCA occurred? Or can you just put the indications as is and remove the statement. Ask licensee if this can be done. 6. If so then the question should be ok. Tuesday, July 23, 2013 1. Removal of SBLOCA. OK. 2. Steady 547 deg F. ok 3. Change the MAX. CV to MAXIMUM all caps. Need to ensure they see it. S Wednesday, July 24, 2013 1. Removed SMBLOCA occurred for # 5 above. 2. Agree to # 3 above. All caps for maximum with bold.

FINAL

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
3	H	3												N	U	<p>011EG2.4.21, NEW, D</p> <ol style="list-style-type: none"> KA appears to match Normally use Based on, vice Based off. I guess either way could be ok. I do not care for the 4 different answers in part 2. Can this be pared down to two of them. The correct answer and one from the J.1 section. Use the one in distractor A, Verify containment isolation and Heat removal Why is C not a correct answer? This is identified in the material presented. Have licensee explain why it is not. <p>Potentially 2 correct answers and too many second answers. Pare these down to two only.</p> <p>Wednesday, July 24, 2013</p> <ol style="list-style-type: none"> Made two answers as suggested. It to it and Isolate to isolate and Possible to possible. Change to one line.
4	H	2-3												N	E	<p>022AK3.07, NEW</p> <ol style="list-style-type: none"> KA appears to match Is it necessary to provide the entire procedure and section as done in stem? Can you just say that "IAW AOP-018, Coolant Pump Abnormal Conditions, the reason HIC-121 is closed is to _____?" I think this can be shortened so there is not as much to read. Otherwise appears to be ok. <p>Discuss 2 with licensee.</p> <p>Wednesday, July 24, 2013</p> <ol style="list-style-type: none"> Ok as changed.

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
5	F	2												N	S	025AK2.02, New 1. KA appears match 2. In the stem for the level 68 there is a dash in front of 68, is this a minus sign? IF it is then use parentheses around the minus sign like this (-) 68. If it is not then don't use the -. 3. Is it necessary to identify which flow instrument is being used? In this case FI-605? 4. Question is simple memory Appears to be ok. Wednesday, July 24, 2013 1. Added parenthesis around the negative sign.
6	H	3												N	E	027AA1.02. New 1. KA appears to match 2. IS it necessary to add to the stem what procedure this is being accomplished with? IT appears to me it does. Ask licensee to add IAW, AOP-025, "RTGB Instrument Failures." Is this appropriate? 3. Ask licensee to explain the + or – 15 psig signal. Otherwise appears to be ok. Wednesday, July 24, 2013
															S	1. + or – Sign. On RTGB has a gauge with 5 psig . If on + 9 psig heaters on lesser time. As the number gets more negative the heaters are on longer. OK as is.
7	H	2-3												N	E	029 EA1.02, NEW 1. KA appears to match 2. Add the procedure name to the stem to make it valid for that procedure only. FRP-S.1
															S	Otherwise appears to be ok . Wednesday, July 24, 2013 1. Added procedure and name. Ok as changed.

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
8	F	2												N	S	038EK3.08, NEW 1. KA appears match 2. In this question each distractor has a period. What it the convention for the distractors with or without a period. Either way is fine just be consistent. 3. ASK operations manager or representative if this is something the RO is expected to know. We need to have a decision from Robinson upper management to ensure we are testing expected requirements of the RO applicants. 4. Otherwise appears to be ok. Wednesday, July 24, 2013 1. They have a lesson plan and objective that the ROs are expected to know. 2. The OPS Mgr. Sandy Brown indicated that this is required.
9	F	2-3												N	S	040AA2.02, NEW 1. KA appears to match. 2. Does the level instrument for the answers have to be known? appears to be ok,
10	H	2-3												N	S	054AK1.01, New, 1. KA appears to match. Appears to be ok.
11	H	2-3												N	E	055EG2.4.21, NEW 1. KA appears to match. 2. In the first part, capitalize or bold or use a convention to indicate INFORMATION ONLY, so it can be read easier and not missed. Ask licensee if they believe this is necessary. 3. Is it better to have the first fill in the blank use "SHOULD BE" or "SHOULD NOT BE?" if this change is used, I don't

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
																<p>mean to have it all caps plus the rest of the sentence wording would have to be changed. Discuss.</p> <p>4. Make the second sentence on the next line. Do not split it as it is. This makes it harder to read for the reader. Discuss</p> <p>Wednesday, July 24, 2013</p> <p>1. Didn't use should because it is currently written as the procedure is written. And didn't want to change it to should be. OK with this.</p> <p>2. Added to # 2 above the INFORMATION ONLY.</p>
12	H	2-3												BANK	E	<p>056AA1.15, RNP BANK</p> <p>1. KA appears to match</p> <p>2. Question appears to be ok</p> <p>3. Can the second fill in be on one line and not slip as it is now?</p> <p>4. Have licensee explain how the SI and Blackout sequencers work and which one takes over and when.</p>
															S	<p>Appears to be ok with minor change.</p> <p>Wednesday, July 24, 2013</p> <p>1. Black out starts, first piece of equipment 20 sec after bus energized. The BO sequencer actually never started in this case and in fact the SI sequencer ALWAYS takes precedence over the BO sequencer.</p>
13	N	2-3												NEW	S	<p>057AA2.19, NEW</p> <p>1. KA appears to match</p> <p>2. No comment</p> <p>Appears to be satisfactory.</p>
14	H	3												NEW	E	<p>058AK1.01, NEW,</p> <p>1. KA appears to match</p> <p>2. In distractors A and D, capitalize ONLY in each of them. Just to make sure the applicants do not read this.</p>

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
																3. Split the second question to a separate line. I think it is easier to read. Otherwise it appears to be ok. Wednesday, July 24, 2013 1.
15	F	2-3												NEW	U	077AK3.02, NEW 1. KA appears to match 2. In the stem, add AOP-026 as the actions are to be done in accordance with for the first part as is in the second part. 3. The first part of B and D does not make sense because it just states 5 minutes. I see in the procedure where is comes from but there a comparison is made so that makes sense here there is no comparison. If that comparison could be added then it would be more attractive for selection. 4. During validation did anyone select B or D? Explain. NO one picked B or D however they picked A who got it wrong. 5. Additionally, the wording in the basis document states PREEMPT NOT PREVENT as in the question. The question is NOT totally correct with PREVENT. Because it does not prevent the trip, it tries to do it before it happens automatically. This is evaluated as a U until the NRC discusses with licensee. Wednesday, July 24, 2013 1. Corrected #2 above. 2. Corrected B and D first part to something that made sense. See exam for this information. 3. Changed # 5 a requested. In correct to begin with. Ok as changed.
16	F	2-3												NEW	E	WE/04EK2.1, NEW 1. KA appears to match 2. The section in the procedure determination of the leak not the isolation of the leak. This may not matter but am not sure if the statement should be changed to mimic that.

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
															S	Determination vice isolation. Ask licensee. Otherwise appears to be ok. Wednesday, July 24, 2013 1. Corrected # 1 above to use both identification and isolation. OK ask changed.
17	F	2-3												New	S	WE/05, G2.4.6, NEW, 1. KA appears to match. 2. No issues 3. May be could change answer to remove attempt to restore and just say restore feed water. 4. OK as is. Wednesday, July 24, 2013 1. Removed the word Attempt as requested. Ok as changed.
18	H	3												NEW	S	WE/11 EA2.2, NEW, 1. KA appears to match 2. Licensee to explain the 100 deg cooldown. Step 19 states less than 100 in the last 60 minutes. The last 60 min looks like an 82 degree cooldown rate. Plus the 0800 to 1000 is more than an hour. Explain. . Otherwise appears to be ok. Wednesday, July 24, 2013 1. Ok as is.

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
19	H	3												NEW	S	028AA2.03, NEW, 1. KA appears to match. 2. The information concerning the A and B CCPs being out of service has nothing to do with the restoration of the seal flow does it? Make sure this is true, ask licensee to explain. 3. Based off or based on? Otherwise appears to be ok. Wednesday, July 24, 2013 1. Capitalize ALL on the Seal injection flow. Ok as is.
20	F													NEW	S	032AA1.01, NEW 1. KA appears to match 2. Ok AS is.
21	F					X									U	033 AG2.2.22, New, Low. 1. KA appears to 2. Could state in the initial conditions that Power is above P6 but below P10. This may look better. Ask licensee what they think. 3. The question basically asks if both the Intermediate Nis fail as is do you either increase power to > P10 or stop positive reactivity additions. Well this should be a no brainer for any RO or SRO. YOU DON'T add reactivity. This is the complete opposite of the answer. NO ONE WILL GET THIS WRONG. If they do, I would question them being an operator. This is NOT plausible for Distractors C and D. This needs to be fixed. 4. The choice for the second part is either immediately (the answer) or in 1 hour. I do not believe that stopping reactivity additions within one hour would make much sense. There are 15 min time limits is there a 5 minute time limit on the TS. That may could be used but would have to talk about it. And not sure that would work either. This makes this not plausible also. 5. In the question, there is the word "IS" which separates the two fill-in blanks. I believe this should be "in" and not "is." We have 4 distractors that have one part either the first or the

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
																<p>second part not plausible. This is evaluated as Unsatisfactory.</p> <p>Friday, July 05, 2013</p> <ol style="list-style-type: none"> KA appears to Was this Question changed? I don't have the original submittal with me at home. Need to ask licensee. Not sure how the 15 minutes are plausible. Discuss with licensee to see what else they have to say. <p>Wednesday, July 24, 2013</p> <ol style="list-style-type: none"> "IS" is the word we want. Someone picked C. TO increase thermal power above P 10. Ok as changed from the original question. <p>OK as is now.</p>
22	F	2-3				X									U	<p>060 AK3.02, New, Low</p> <ol style="list-style-type: none"> KA appears to match R-20 and R-30 do they have noun names that could be added? Distractor for minimizing dose limits does not make sense. Those are distractors A and D. Maybe minimize dose limits at the site boundary? This is still iffy. Not making this an Unsat because can fix both distractors with one fix. Or maybe could use to prevent exceeding the Rad work permit. Ask licensee if this can be used. <p>Needs to fix A and B first part.</p> <ol style="list-style-type: none"> Second part of C and D do not make sense to me that you can this tank of the cover gas. If the applicant believes that there needs to put on a cover gas, make them decide which tank to use. I suggest that change WGD T A to 40 psig and state the same as the answer. Would this be incorrect? IF it is incorrect this could be used to fix the issue about not being plausible. <p>Since basically all 4 distractors have plausibility issues,</p>

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
						S									S	<p>evaluated as Unsatisfactory.</p> <p>THIS IS NOT TO BE USED AS A U because it was initial submitted with the first 10 questions.</p> <p>Friday, July 05, 2013</p> <p>060 AK3.02</p> <ol style="list-style-type: none"> KA appears to match. Changes to question makes this sat. <p>OK as changed from original 10 questions.</p>
23	F	2-3												N	S	<p>067 AK1.02, NEW</p> <ol style="list-style-type: none"> KA appears to match Question appears to be ok. Not sure that spurious operations of the CVC-200 valves makes sense. And because of this I would not choose these valves. Discuss with licensee to see what they say. <p>Otherwise appears to be ok. Did anyone get this wrong?</p> <p>Wednesday, July 24, 2013</p> <ol style="list-style-type: none"> Two got it wrong selected A. Ok as is. <p>No changes necessary.</p>
24	F	2-3												NEW	S	<p>068AG2.2.37, NEW</p> <ol style="list-style-type: none"> KA appears to match. Appears to be ok.
25	F	2												N	S	<p>076 AA1.04, NEW,</p> <ol style="list-style-type: none"> KA appears to match Appears to be ok. <p>Wednesday, July 24, 2013</p> <ol style="list-style-type: none"> Will separate stem questions with a hard return.

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
26	F	2-3												N	E/U	<p>WE/08 EK 1.2, NEW</p> <ol style="list-style-type: none"> KA appears to Distractors B and D with the 29 hour soak time does not make sense to me. In that, there is no additional information associated with the PTS or Natural Circ Cooldown that would be confused with this soak time. The answer of 1 hour also does not have sufficient information in the question concerning the "Stable RCS Temperature." The question does not state anything concerning the current RCS temperature and its stability of that temperature. Also the 300 gpm afw flow is only if SG level is below 8%. So it appears to be me that there is very important information to get either number and use it in an intelligent way. Discuss with licensee.
															S	<p>Wednesday, July 24, 2013</p> <ol style="list-style-type: none"> This question is really just memory and which procedure has the 29 hour soak or the 1 hour soak. From memory. ALL SG levels indicate 0% NR. Added this information to make the 300 gpm more plausible. Validators picked b c and d as incorrect answers. Could not remember the soak time from what procedure.
27	F	2												NEW	S	<p>WE/16 EK 2.2, NEW</p> <ol style="list-style-type: none"> KA appears to match Appears to be ok. Not very hard. <p>Wednesday, July 24, 2013</p> <ol style="list-style-type: none"> Space between both questions. Add caps to MAXIMUM in both questions and bold. <p>Ok as changed.</p>

FINAL

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
28	F	2												NEW	S	<p>0031.09, NEW</p> <ol style="list-style-type: none"> 1. APPEARS TO MATCH 2. APPEARS TO BE SAT. 3. CAN THE REFERENCE HANDOUTS BE MADE LARGER THEY ARE CURRENTLY HARD TO READ? ASK LICENSEE TO SEE IF THIS CAN BE DONE. <p style="color: red;">Wednesday, July 24, 2013</p> <ol style="list-style-type: none"> 1. WILL PROVIDE THIS IN COLOR. OK WITH THAT. 2. PROVIDE A HARD RETURN BETWEEN BOTH QUESTIONS. OK IT IS CHANGED. 3. EVERY PLACE RCP A APPEARS WILL ADD "A" FOR A. <p>OK AS IS.</p>
29	F	2-3													E S	<p>003 K4.04, NEW, Fundamental</p> <ol style="list-style-type: none"> 1. KA appears to match, however, question appears only to address the seals and not the motor. This is considered ok. 2. The first question could be reworded so the fill in the blank comes after the question is asked. For example it could be When Seal Injection in unavailable (or not available) CCW flow to the _____ ensures adequate cooling of the Reactor Coolant Pump seals. Or something like this. 3. Would like to see the "A" or "B" be in parenthesis. 4. Question will be ok with the suggested changes. <p style="color: red;">Friday, July 05, 2013</p> <ol style="list-style-type: none"> 1. Is this the same question from the initial submittal? Ask licensee if and what has changed. Question still only addresses the seals and not motor. Should be ok as is. <p>Question appears to be ok.</p> <p style="color: red;">Wednesday, July 24, 2013</p> <ol style="list-style-type: none"> 1. Added hard return on second item. 2. Part of the original 10 freebee's . <p>Ok as changed.</p>

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
30	F	2-3												Bank NRC 11-1	S	004 K3.04, RNP Bank, NRC 11-1, 1. KA appears to match 2. Add to the stem where it states Seal injection flows, I would suggest to "each pump" or something like that. Otherwise appears to be ok. Wednesday, July 24, 2013 Ok as is.
31	H	3												New	S	004 K6.26, NEW, Higher, 1. KA appears to match 2. Suggest to capitalize SOLID or underline it or something, use same convention throughout the exam for consistency. We want to ensure that the applicants do not read over this by mistake. 3. Good question. Appears to be satisfactory. Wednesday, July 24, 2013 1. Ok as changed.
32	H	2-3	XX											New	U	005A2.04, New 1. KA appears to match 2. In the stem, there is teaching in the first sentence. Can it just be said that the line breaks and not say there was a complete loss of IA? Is this something that the applicants should know? Discuss with licensee. 3. Is it totally incorrect that the 605 valve is not reasonable to be used or is not used by the procedure? Need to make sure that the licensee agrees there is ONLY one answer. There seems a good chance that distractor C could also be correct? Discuss with licensee to ensure that there is only on answer.
															S	Thursday, July 25, 2013 1. Removed teaching. 2. Added to Cool RCS temperature. 3. One person picked A and that was wrong but based on my comments above. There were two answers. Ok as changed.

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
33	F	2												new	S	006A4.02, NEW 1. KA appears to match. 2. The question is very tricky because while the accumulator valves are valved in the open position they do receive an open signal but they do not reposition. I think it is necessary to have the work REPOSITION emphasized in some way to insure that the applicants don't get coughed up in a trick. Discuss with licensee to see what they think. Otherwise appears to be ok. Thursday, July 25, 2013 1. Changed as requested. Ok as changed.
34	H	2-3												NEW	S	006K5.10, New 1. KA appears to match 2. Appears to be sat. Thursday, July 25, 2013 1. Split the two parts of the question. Ok
35	H	2-3										XX		NEW	U	007K5.02, NEW 1. KA appears to NOT match, the KA talks about steam bubble, the question talks about the PORV leaking and where does it leak to? Discuss with licensee. 2. The Steam Tables are being used to identify the PORV is leaking. Since the values that are provided identify a leaky PORV why would anyone decide to pick NOT leaking? 3. What are other things that the applicants have to memorize that leak or drain into the RCDT? Identify what these are. 4. Just because the stem of the question identifies that a

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
																<p>bubble is being drawn the actual problem is a leaking PORV or NOT leaking PORV that is the question.</p> <p>5. OP-104 indicates that TI-463 on diagram but then in procedure TI-465 is highlighted, what are you trying to identify?</p> <p>Thursday, July 25, 2013</p> <p>1. Changed question but still needs work. See new question. Changed RISE in PRT level or increase in Letdown flow.</p> <p>2. The new change from today now covers the KA better than the question that was presented.</p> <p>3. Will change this now and then meets requirements. See test for what was changed.</p> <p>4. Will need to get another review to ensure that we don't have two answers.</p> <p>Otherwise appears to be ok.</p>
36	H	1-2				XX								BANK	U	<p>008K2.03, RNP Bank, 2004 NRC exam</p> <p>1. KA appears to NOT match</p> <p>2. The question asks to look at data and determine if the CCW system is out of spec and take actions to correct. The other part of the question asks the RCP parameters and asks how to correct this if it is out. The stem identifies CCW temp or RCP motor bearing temp. A person familiar with the system should know that the High temp bearing is above 200 degrees. The temperature provided is 190. Any operator should be familiar with this and know that this answer is not plausible.</p>

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
															S	<p>3. The first part of question asks which is out. The procedure specifically speaks to CCW greater than 105.</p> <p>4. The Second part is what should the crew do? The distractors for CCW have the crew lower heat load on the system. The RCP is to just monitor, you don't do anything with this. Because these is NOTHING to do. There is no action for a pump that has exceeded its set points does not make sense. We need to rethink this question.</p> <p>Need to discuss with other examiners to ask if analysis is correct.</p> <p>Thursday, July 25, 2013</p> <p>1. Removed info</p> <p>2. KA now appears to match.</p> <p>3. Normal Service water pump pressure ranges from greater than 40 and 50 psig.</p> <p>4. In A and B use Pump(s).</p> <p>Appears ok as changed.</p>
37	H	2-3												NEW	S	<p>010K1.08, NEW</p> <p>1. This question was missing a divider.</p> <p>2. KA appears to match.</p> <p>3. No issues.</p> <p>Thursday, July 25, 2013</p> <p>1. Used hard return. In questions.</p> <p>2. ALL in caps.</p>
38	H	2												NEW	S	<p>012A3.04, New</p> <p>1. KA appears to match.</p> <p>2. Disagree with comprehension as level of difficulty. More of a memory. Very low at that.</p> <p>3. Accept however could be more challenging.</p> <p>Thursday, July 25, 2013</p> <p>1. Used hard return.</p>

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
39	H	3												Bank	S	013K2.01, RNP Bank 1. KA appears to match. 2. In distractors, with using ONLY would recommend to either use bold or caps to insure that this is correctly read. 3. Question is acceptable. Thursday, July 25, 2013 1. ok
40	H	2-3												NEW	?	022A3.01, New 1. KA appears to match 2. With this question is it OPERATIONS expectation that the applicants know from memory the set point for the number of seconds it takes for the CV recirculation fans to start. ASK the plant OPS MGR if this is expected operator knowledge? I would be surprised if this is and that an operator is required to know if they start in 30 or 35 seconds. Sandy Brown Ops MGR expects this to be known. 3. Also in the question it asks what the FINAL time is. Kind of splitting hairs. 4. Listed as comprehension but first part is memory and second part is also memory. There is NOTHING to comprehend. All recall.
															S	If Ops agrees this is required knowledge will allow IF not need to change. Is there a learning objective for this? Thursday, July 25, 2013 1. Ok as is.
41	H	3												NEW	E	026G2.2.42, New 1. KA appears to match. 2. OPERATIONS Manager question, are RO applicants expected to have knowledge from memory entry conditions below the line of an LCO? THIS is beyond the RO required knowledge based on the requirements of RO questions. Is there a learning objective for this knowledge

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only			
																<p>requirement? ASK OPS MGT.</p> <p>3. Comprehension, do not agree. More of memory. If you don't know you cannot figure it out from the info provided. Discuss with licensee.</p> <p>Determine if Robinson Mgt agrees this is RO knowledge. If not then change.</p> <p>Thursday, July 25, 2013</p> <p>1. Will change to use "A" and NOT A. Containment Spray Pump A</p> <p>2. Hard return on question split.</p> <p>3. Replacement questions is much better and makes the entire concept more plausible.</p>
42	H	2-3				XX								NEW	U Should have been a S. S	<p>039A4.04, NEW</p> <p>1. KA appears to match.</p> <p>2. Why would anyone think that the Steam shutoff valves would be OPEN on a turbine trip? I would think that if the turbine has tripped these valves would be closed, the steam shutoff valves I would think isolates steam. NOT plausible.</p> <p>3. Validation anyone get this wrong?</p> <p>Discuss with training to see outcome of the validation. Not sure that A and B are plausible.</p> <p>Thursday, July 25, 2013</p> <p>1. NEW question. Replaced old one.</p> <p>2. Hard return put in between questions.</p> <p>3. Because of the low pressure alarm this causes the V1-8 valves get closed signal to shut.</p> <p>4. Incorrectly identified this as unsat. Change to SAT from the start. NOTE: Not to be counted in the TOTAL UNSATs.</p>

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
43	H	2-3				X								NEW	U	<p>059A2.12, NEW</p> <ol style="list-style-type: none"> KA appears to match. Teaching in the stem, by telling them air leak and where and what it is doing you teach the applicants what is expected of the system response. Can this be asked another way? Based on the power level of the question it should be obvious that at 50% power the FRBVs would NEVER be able to replace the MFRV and maintain SG level. Because of this Distractors A and B second part are NOT plausible. Makes the question UNSAT. If the power level were closer to the 15 – 20 % power that the FRBV can supply sufficient feed then maybe this would or could be plausible. Discuss with licensee. <p>Need to fix or replace.</p> <p>Thursday, July 25, 2013</p> <ol style="list-style-type: none"> Removed teaching Changed the power level to 18 from 50% Max of 20% for BPV s open. <p>Appears OK as changed. See test for changes.</p>
44	H	2-3	X											Bank	E	<p>061K6.02, RNP Bank</p> <ol style="list-style-type: none"> KA appears to Teaching again in the stem. Under, Subsequently, Pump B trips on overcurrent, due to runout through line break. The last part after due to is not necessary. Tripping on overcurrent is. Remove the teaching part. Change the wording of which one of the following (WOOTF) identifies the S/Gs that can be fed? Do not add by the remaining AFW pump. <p>These changes should make the question SAT.</p> <p>Thursday, July 25, 2013</p> <ol style="list-style-type: none"> Removed stem teaching Changed as requested. <p>Appears ok.</p>

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
45	H	2-3												NEW	S	062K3.01, New 1. KA appears to match. 2. Appears to be ok Thursday, July 25, 2013 1. Hard return.
46	F	2												NEW	S	0A1.01, NEW 1. KA appears to match 2. First part ok. 3. Second part would reword to have the statement, assuming battery load remains constant, as terminal battery voltage lowers, battery current will ____? To me you are getting the entire question out before you fill in the blank. It is fine the way it is just a different way to write it. 4. Is it necessary to provide the reference in the first question so that the applicants know this is design numbers? IN accordance with HBBR2 FSAR? Otherwise appears to be ok. Thursday, July 25, 2013 1. Hard return. 2 sentences. Ok as changed slightly.

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
47	F	1												NEW	S	<p>064G2.1.27, NEW</p> <ol style="list-style-type: none"> KA appears to match. Is loss of all AC considered a station Black out? The 10 seconds is so well known I doubt anyone would select 15 seconds. Not sure the 15 seconds is plausible. But not sure what else you could use. 5 seconds for the DG and 5 seconds for the bus. Could that be used somehow? Second part change the margin to allow seconds come up on the previous line or make the second line on a separate line. <p>Not sure you can do anything with this to make it better or change. It is very low level because of the second part. And really makes it a 2 out of 2 question. Level of difficulty is a 1.</p> <p style="color: red;">Thursday, July 25, 2013</p> <ol style="list-style-type: none"> YES in # 2 above. Ok as changed. <p>Ok</p>
48	F	2												NEW	S	<p>064K2.01, NEW</p> <ol style="list-style-type: none"> KA appears to match Appears to be ok.
49	H	2												NEW	E	<p>073A4.01,NEW</p> <ol style="list-style-type: none"> KA appears to be ok. In the stem should have the procedure being used to perform the Containment Vacuum relief. Add this to the stem In distractors A and B, use same convention in other questions concerning ONLY. Either all CAPS or not. Separate the last plant condition of R-12 alarming with a

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
																<p>line with something like TERMINOLOGY between.</p> <p>5. DOES CV intake damper have a number associated with it? If it does put up in top and use that terminology.</p> <p>6. Annunciator flashing does it mean fast or slow or in or out? Ensure it means what we want it to.</p> <p>7. They would or they should?? See or can we use what automatic actions?</p> <p>Review comments, should be ok with minor changes.</p> <p>Thursday, July 25, 2013</p> <p>1. Addressed all above.</p> <p>2. Ok as is.</p>
50	H	1-2												??	S	<p>073K4.01, NRC Exam, Which one? BANK?</p> <p>1. KA APPEARS TO MATCH.</p> <p>2. WOULD CHANGE STEM TO READ BASED ON INDICATIONS WHAT HAPPENS TO THE VALVES. RATHER THAN THE OTHER WAY AROUND AS IN THE STEM. CORRECTED.</p> <p>3. Are there no auto actions from the 24A or R-15 NONE</p> <p>4. Not sure why C is not so obvious because it is familiar. Did any other distractor get selected on validation? I would bet not. No one got this incorrect.</p> <p>I guess ok, pretty easy to remember. You don't have to remember what does not come in with these just what does.</p> <p>Thursday, July 25, 2013</p> <p>1. Ok as changed. No changes necessary.</p>
51	F	3												NEW	S	<p>076A1.02, NEW</p> <p>1. KA appears to match</p> <p>2. Does OPS expect applicants to know this temp from memory? Ask Ops Mgr if this is correct. Is there a learning objective that requires this? Sandy Brown OPS MGR expects this to be known.</p> <p>3. OK with question if OPS is ok.</p> <p>Otherwise appears to be ok.</p> <p>Thursday, July 25, 2013</p> <p>1. Ok on above question.</p> <p>Ok as is.</p>

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
52	H	3												BANK	S	076K2.0109 RNP Bank 1. KA appears to 2. Appears to be ok
53	H	2-3												NEW	E	078G2.4.50, NEW 1. KA appears to 2. Add to the second part of the question stem, in accordance with AOP -017 the crew is required to..... 3. I do not believe that the air pressure of 60 psig is a good distractor, discuss with licensee. I like 95 or something like that. I realize that 60 is in the procedure but I think that they will know that 85 is the set point and maybe we can find a better number. ASK If this cannot be found then use as is. But look first. Thursday, July 25, 2013 1. Swapped 60 to 90. 2. Hard return between questions. Ok as changed.
															S	
54	F	2-3												NEW	S	078K1.04, NEW 1. KA appears to 2. Appears to be ok Thursday, July 25, 2013 3. Did a hard return. Ok as changed.
55	F													NEW	E/S	103K4.04, NEW 1. KA appears to 2. Capitalize ONLY in distractors A and B. It is clear that the 1-4 is one through 4. And not just 1 and 4 only. I believe it is clear just making sure. 3. Not so sure that administratively closed is a good distractor. In Mode 6 one door is required to be shut.
															S	

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
																<p>Would this be better? Realize that this is an administrative control but would having Distractors A and B second part be better to say one door is required to remain closed. And is that different than what is there now? Discuss with licensee.</p> <p>4. Is this RO expected knowledge? Ask licensee to ensure this is!</p> <p>Appears this can be an E or an S.</p> <p>Thursday, July 25, 2013</p> <p>1. Capitalize ONLY before the words "one door."</p> <p>2. Ok as changed</p>
56	H	1												NEW	E	<p>002A2.04, NEW</p> <p>1. KA appears to</p> <p>2. To the second part of the stem, add the procedure FR-H.1 So this is done IAW this procedure. First part is based on the conditions in the above add that.</p> <p>3. Appears to be ok, it is not very hard, but ok.</p> <p>4. Would suggest to use all Caps for ALL in distractors A and B, and then all CAPS for BOTH in C and D.</p> <p>Level of difficulty is a 1.</p> <p>Thursday, July 25, 2013</p> <p>1. Revised as asked.</p> <p>2. Hard return added.</p> <p>Ok as changed.</p>
57	H	2-3												NEW	S	<p>011K6.03,NEW,</p> <p>1. KA appears to match</p> <p>2. In other questions the "A" or "C" are using parentheses! It does not matter but needs to be consistent. See other questions for constant f</p> <p>Appears to be ok. \</p> <p>Thursday, July 25, 2013</p> <p>1. Hard return.</p> <p>Ok as is.</p>

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
58	H	2-3												NEW	S	<p>014G2.1.30, NEW</p> <ol style="list-style-type: none"> KA appears to Distractor A and C, for the first part, where to go to select rod for moving rod out, the Rod Control Room. I cannot imagine that anyone got this wrong. It seems that every will know this. That the Lift switches are in the back of the RTGB. Did anyone get this incorrect? I would imagine NOT. Statistics. IS second part of c and d really true? Can someone win on appeal? Appears to be ok. <p>Thursday, July 25, 2013</p> <ol style="list-style-type: none"> Few got wrong because of reason. Hard return. <p>OK as is.</p>
59	H	2-3												NEW	E	<p>017 A 1.01, NEW</p> <ol style="list-style-type: none"> KA appears to match DID anyone get this wrong? Imagine not. I would suggest that RTD be substituted with Loop RTD. Write out CETC. Like it is in the procedures. Core Exit TCs <p>Otherwise appears to be ok.</p>
															S	<p>Thursday, July 25, 2013</p> <ol style="list-style-type: none"> Hard return added. One person selected D. <p>OK as modified slightly.</p>
60	F	2												Bank	S	<p>027K2.01, RPN Bank</p> <ol style="list-style-type: none"> KA appears to match <p>Appears to be ok.</p> <p>Thursday, July 25, 2013</p> <p>Ok as is.</p>

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
61	F	2												New	E	027A 4.04, NEW, 1. KA appears to 2. What does VLC mean? Volume Level Control 3. Are there any other times where 5 seconds is used? Used for fires all clear. 4. Would it be better to or stated in the stem that the time is to hold for AT LEAST _____ seconds. Ask licensee to see if this would be clearer. Appears to be ok. Thursday, July 25, 2013 1. The times recently changed and both validators missed this question. OK as changed.
															S	
62	F	2												NEW	S	033K4.01, NEW, LOW 1. KA appears to match. 2. What other sources are available for Fuel Pool level? 3. Are the RO applicants expected to KNOW from memory this exact number? Have OPS mgt ensure this is expected. NEXT exam we need to have OPS mgt approval for this kind of question during the 45 day submittal. Otherwise appears to be ok. Thursday, July 25, 2013 1. Only two options to fill the Fuel pool, extreme emergency will use lake water. 2. The ROs are expected to know this. 3. Discussed RO expectations. She expected this to be known.

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
63	H	2												NEW	S	<p>035K5.01, NEW, Higher</p> <ol style="list-style-type: none"> KA appears to Is risen used in the terminology of Robinson? They use rise here. Separate the list of items from the sentence ending in Control Room: Just to give it a little more room to read. It appears that FWUFM is KEY to this determination and this information seems from the reference to the answer that it is normally in service. Do we need to state that? Maybe not! Ask licensee. FWUFM is normally in service so if it was NOT in service then that would be told to the applicants. <p>Otherwise appears to be ok.</p> <p>Thursday, July 25, 2013</p> <ol style="list-style-type: none"> Ok will all above. <p>OK as changed.</p>
64	H	2-3				X								NEW	U	<p>015A3.02, New, Higher</p> <ol style="list-style-type: none"> KA appears to match. Should the stem talk about NI channels to make it clearer? Ask licensee. Not necessary for this. It does not appear that Distractors C and D are plausible. In that there is not even a P number associated with High pressure. Would rather see IR High Flux with that being ½ channels. Changed to Turbine trip vice suggestion. Ok with that. <p>Take a look at this and see if this will work as suggested. How did the people taking the test do? Any wrong?</p> <p>Thursday, July 25, 2013</p> <ol style="list-style-type: none"> Hard return. One person answered incorrect. <p>Ok as changed.</p>

FINAL

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
65	F	2												NEW	S	<p>068K1.07, New, Lower</p> <ol style="list-style-type: none"> KA appears to match Anyone get this wrong? <p>Ok as is.</p> <p>Thursday, July 25, 2013</p> <ol style="list-style-type: none"> One person missed, Add to the stem DIRECTLY, just after discharge.....
66	F	1-2												New	E	<p>G2.1.14, NEW, LOW</p> <ol style="list-style-type: none"> KA appears to match In distractors A and B and B and D where the word ONLY appears, capitalize it. All should also be capitalized everywhere it appears. ALL
															S	<p>Otherwise appears to be ok.</p> <p>Thursday, July 25, 2013</p> <ol style="list-style-type: none"> Did 2 and 3 above. Hard return. <p>OK with changes.</p>
67	F	2				X									U	<p>G2.1.40, New, Low KA appears to</p> <ol style="list-style-type: none"> Refueling is misspelled on the first line of initial conditions, only one L. Question asks operability, for the RO?? If this is good here then, well the question associated with the PORV then that should be fair game also. It is impossible to listen to both channels in the control room at the same time, therefore this is not plausible. That would lead the applicants to understand that there are 2 that need to be operable. Can you physically listen to both channels? Maybe we could provide count rates and they be different one higher and have to select the one you would use in the control room. The higher one I would imagine would be the one that is used. Maybe we can use this? Ask licensee to determine if this would work. <p>Not plausible A and B. Because of the and.</p>

FINAL

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
																<p>Monday, July 15, 2013</p> <p>1. Changed as requested in 4 above. OK with change. 2. Changed second question. OK with change.</p> <p>OK with changes.</p> <p>Thursday, July 25, 2013</p> <p>1. Hard return.</p>
68	F	1-2												NEW	S	<p>G2.2.12, NEW, LOW</p> <p>1. KA appears to match in that it deals with surveillances. 2. Rather than asking what the set point is, why don't you provide some surveillance logs and make it a 2 by 2. That would make it a better question and more operational. 3. This suggestion is not necessary unless we are lacking on the number of higher level questions.</p> <p>Ok as is but could be made better and more operational. As it stands this is about a 2 at maximum for level of difficulty. Could be made more relevant if necessary.</p> <p>Thursday, July 25, 2013</p> <p>1. Ok , no changes.</p>
69	F	2												NEW	E	<p>G2.2.7, NEW, LOW</p> <p>1. KA appears to match 2. Would rather see the question start with the procedure then ask the question. IAW " , " which one of the following individuals can be The way it is can also be used. However I believe the request is clearer. No change is necessary</p>
															S	<p>3. Change people to individuals. Changed as requested. 4. Should the lowest level of plant personnel be added. Lowest level!</p> <p>Look at changes suggested.</p> <p>Thursday, July 25, 2013</p> <p>1. . ok as is. No changes with exception of # 3.</p>

FINAL

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
70	F	2-3												NEW	E	<p>G2.3.14, NEW, LOW</p> <ol style="list-style-type: none"> KA appears to match. In distractors A and B, capitalize ONLY. Added as requested also AND. Why would anyone believe there are no postings necessary? Was this selected by anyone during validation? In the stem emphasize the word MINIMUM, whatever convention used to all caps or underline or bold. This could be higher than fundamental or low, there is some element of analysis. <p>Otherwise appears to be ok.</p> <p>Thursday, July 25, 2013</p> <ol style="list-style-type: none"> More of question of knowing the limits. One person selected D which is in correct. Ok with NO posting necessary. <p>Ok as is.</p>
71	F	2-3	X											BANK	U	<p>G2.3.15, RNP Bank</p> <ol style="list-style-type: none"> KA does NOT appear to match. The KA does not necessarily identify location as meeting the KA. The KA, knowledge of radiation monitors and alarms, portable survey instruments, personnel monitoring equipment, etc. Does this include the location or knowledge of what is the location of a monitor in a space? It does not preclude this but as a sole knowledge of the instrument not sure it covers knowledge of radiation monitoring systems. Does it? This means to me more of the knowledge of the instrument itself. <p>Look at this and discuss with licensee.</p> <p>Thursday, July 25, 2013</p> <ol style="list-style-type: none"> Replaced question. Ok with change. Recirculation mode is a manual mode to put in charcoal filters in. <p>OK as changed.</p>

FINAL

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
72	H	2-3												NEW	E	<p>G2.3.4, NEW, High</p> <ol style="list-style-type: none"> KA appears to match. Change distractor D to 6 so you have 3 rem total that the individual could get. The question asks about the administrative amount not the federal limit. If you use 6 hours with the one extra from Summer would equal to 3 plus the 1 for a total of 4 rem total dose. This is just as convincing as the 8 hours. <p>Change D to be 6 hours.</p> <p>Thursday, July 25, 2013</p> <ol style="list-style-type: none"> Changed as request above. Changed AN to A. <p>OK as changed.</p>
															S	
73	F	2	XX											NEW	U	<p>G2.4.12, New, LOW</p> <ol style="list-style-type: none"> KA appears to match. The question as it sits does not prove to me that the plant is in jeopardy as required by the procedure. Is there something that can be added to the stem that would give this information to the RO who is making the decision? The procedure identifies "if time permits" has to take into account. Maybe if we put in conditions and make this URGENT. Discuss with licensee. I believe that A could also be and answer for the first part based on the way the stem is currently written. <p>Two correct answers. A and C.</p> <p>Thursday, July 25, 2013</p> <ol style="list-style-type: none"> Changed see exam. Also just added rapidly lowering pressure. After CRS bold and caps NOT. Change the wording of the ROs announcement to the SRO that he the RO intends to Trip the RX <p>OK as changed.</p>
															S	

FINAL

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
74	F													NEW	S	<p>G2.4.26, NEW, LOW</p> <ol style="list-style-type: none"> KA appears Distractors C and D, capitalize or bold ONLY I do not see where for a SMALL fire that a hose stream should be used based on the material provided. Discuss what I am missing. I do not see why the primary air compressor should be protected OVER the Steam Driven AFW pump based on what we have to select from. <p>Is there some other equipment that can be substituted for the Primary Air Compressor?</p> <p>Leave as is unless licensee has a better or more convincing piece of equipment.</p> <p>Thursday, July 25, 2013</p> <ol style="list-style-type: none"> Did # 2 above. Change C and D to Fire extinguisher. VERYIFY THIS IS NOT CORRECT. <p>Ok as changed.</p>
75	H													RNP Bank	S	<p>G2.4.39, RNP Bank, Higher</p> <ol style="list-style-type: none"> KA appears to match. Appears to be ok.

SRO ONLY

FINAL

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
76	H					X									U	008 AG2.1.7, New, Higher, 1. KA appears to match. 2. In the stem, please add the noun name for PORV PCV-455C and the full name for the block valve RC-536 3. The question in the first part is entry into the appropriate AOP. There is no information in the stem that would give rise to selecting the instrument failure. Nothing is provided so why would anyone select this? This makes AOP-025 in distractors B and D not plausible. This needs to be fixed, provide information that the SRO has to evaluate to determine if it is an instrument or not. The way it is currently written, it does not. 4. Operability of a valve is normally identified by the SRO however, in this case, I would be amazed that ALL the ROs have experienced this event during simulator training at some point. It is a memory item, either you know it or don't. While it is in TS basis it is required SRO ONLY knowledge. Will allow this for the SRO question.
																S Tuesday, July 16, 2013 1. KA appears to match. 2. Ok as changed.
77	F	1-2				X							X		U	054 AG2.4.35, NEW, Low, 1. KA appears to 2. First time I have seen three fill in the blank areas in one question. Not sure if this is allowed. Will ask management. 3. Agree with level of difficulty. 4. Is it true that all AOPs direct Normal operations to be done in the

FINAL

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
																<p>OP? So removal from service of a train is expected to be done in the AOP, correct? If this is the case this makes distractors B and D not plausible.</p> <p>5. The only part of the question that appears to be SRO ONLY is the determination of the procedure to go to in order to remove the train of feed water heaters from service.</p> <p>6. The only skill it takes to know what needs to be removed is to know the procedure itself and what group or groups are removed at the same time.</p> <p>Do not believe this question is are distractors B and D plausible.</p> <p>Discuss with licensee.</p> <p>Tuesday, July 16, 2013</p> <p>1. KA appears to match 2. OK as changed.</p> <p>Thursday, July 25, 2013</p> <p>1. Hard return on final.</p> <p>OK</p>
78	F	2-3				X									U	<p>055 EA2.06, RNP Bank, 2009 NRC Exam with changes</p> <p>1. KA appears to match.</p> <p>2. Need to add to the question, what each of the 86 relays are add the noun names.</p> <p>3. What in the stem would lead the SRO applicants or for that matter anyone to select 603-3? 603-3 deals with high impedance fault trips, is there something in the stem that would direct the applicant to use that procedure? Because of this, two distractors, are not plausible makes this a U.</p> <p>4. Use of OP procedures is required knowledge of the RO not just the SRO.</p> <p>5. I believe that the word "the" needs to be added to the second question prior to the blank. You could also bring the 86 to stem and just have either the "P" or the "BU" be put in each distractor. I can see how it can be done. Whichever way it is easier for the applicants to read.</p> <p>Discuss with licensee.</p>

FINAL

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
																<p>??</p> <p>Tuesday, July 16, 2013</p> <p>1. KA appears to match</p> <p>2. From 3 Above, what in the stem would lead the crew to go to High Impedance fault, OP-603-3? Have licensee explain. NOT sure this is plausible because of this. Discuss.</p> <p>U</p> <p>Thursday, July 18, 2013</p> <p>1. SUT lost and no power to E busses. No EDG started.</p> <p>2. EPP-1 specifically speaks to OP-603.</p> <p>S</p> <p>After discussion this is ok as it is.</p> <p>Thursday, July 25, 2013</p> <p>1. Hard return.</p> <p>OK as changed.</p>
79	H	2-3				X							X		U	<p>058AG2.1.19, NEW, Higher, SRO</p> <p>1. KA appears to match.</p> <p>2. References provided. Are both the color pictures in the submittal going to be given? Agree with the screen but do not believe the C Pump hand switch is necessary.</p> <p>3. As far as the distractors need to add the noun names to each of the procedures.</p> <p>4. Is there a case that going to EPP-7 and then back to EPP-27 is reasonable. IT does not seem plausible to me. Need to ask licensee this question.</p> <p>5. In the initial conditions, is it true to say that B CCP is stopped standby and C CCP is running in Auto? Why don't you just say that? Discuss with licensee.</p> <p>6. Why would the applicants believe that a loss of DC would cause an SI signal? Why would this be reasonable to believe that loss of one channel causes this to occur? Does not seem plausible. Discuss A DC gives SI but B DC does not.</p> <p>7. Entry conditions into procedures is RO knowledge, why would this be SRO ONLY?</p> <p>Need to discuss the comments above concerning the question. Currently it remains evaluated as an unsatisfactory question.</p>

FINAL

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
																<p>?? Tuesday, July 16, 2013</p> <ol style="list-style-type: none"> KA appears to match. Diagram, C CCP, what is the applicant supposed to be understand from reference picture? Not sure I can tell if anything. Discuss with licensee. Ask what if anything was changed. I see added C Charging pump running. That is in the question. Does this matter? Realize it was asked to add but does this make sense. Discuss to understand. <p>U</p> <p>S Thursday, July 18, 2013</p> <ol style="list-style-type: none"> Understand what is going on with this now. <p>OK</p> <p>Thursday, July 25, 2013</p> <ol style="list-style-type: none">
80	F	1-2	X			X							X		U	<p>077AA2.07, NEW, Low, SRO</p> <ol style="list-style-type: none"> KA appears to match. Statement the stem concerning the electrical plant is confusing. Can you just state there were no changes to the electric plant? With regard to the first part of the question TS LCO 3.3.5 for Start Instrumentation appears to require a 1 hour entry into this LCO due to reduced voltage. This is required RO knowledge. This makes this unacceptable for the SRO examination.

FINAL

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
																<p>4. Firstly when using the word ONLY in distractors it should be capitalized.</p> <p>5. Further more for distractors A and B the second part of these distractors are NOT plausible. In that, why would this make sense in any case? This does not make sense, in that, when the plant enters the TS the TS identifies all the MODES this is required in. The TS applies in Modes 1 thru 4 which would encompass all activities that COULD occur. SO the ESF System needs to function all the time not just during the loss of power.</p> <p>Question has to be modified with second part of A and B. It also needs to better assess the SRO ONLY requirements. Currently it remains evaluated as an unsatisfactory question.</p> <p>Agree with LOW level of knowledge.</p> <p>Tuesday, July 16, 2013</p> <p>S</p> <ol style="list-style-type: none"> KA appears to match ALL distractors have 18:00:20 in them. Bring this up to the STEM. Only have the date on line (2). OK as changed.
81	H	2-3												NEW	S	<p>W/E 05 EA2.2, NEW, High</p> <ol style="list-style-type: none"> KA appears to match First part of the question is RO. For second part of distractors where Attachment 2 is being used I believe you also have to identify this is from FR-H.1. This may be clear but it is not to me. <p>Otherwise appears to be ok.</p> <p>Thursday, July 25, 2013</p> <ol style="list-style-type: none"> Hard return. Followed #1 above.

FINAL

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
82	H	2-3										X		NEW		<p>001AA.2.05, NEW, High</p> <ol style="list-style-type: none"> KA appears to First part is RO knowledge to understand plant actions. I do not see that the second part is SRO ONLY. While this is in Bases for TS I would think that the RO would know this from a ROD control lecture. Have licensee explain why RO applicants do not have to know this information. <p>NOT SRO ONLY.</p> <p>KDS 7/17</p> <p>When did the Delta Flux alarm come in?.....Why did the Delta Flux alarm come in? ROD withdrawal, rods keep coming out you get this alarm. If the rods step out far enough this could occur.</p> <p>I agree, both halves are RO knowledge. $\Delta\phi$ is from axial distribution which is GFES.</p> <p>Thursday, July 18, 2013</p> <p>Proposed Change : Asking basis for the LCO actions</p> <p>ADD QPTR value that is lower than TS (1.02) give 1.01. If higher the answer would be C. But will keep it lower to keep the same answer.</p> <p>WILL EVALUATE AS an E till the final question is ok.</p> <p>Thursday, July 25, 2013</p> <ol style="list-style-type: none"> Added QPTR to make sure radial was plausible. Added hard return.

FINAL

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
83	H	2	X										X	NEW	U??	<p>Tuesday, July 16, 2013</p> <p>060AG2.2.40, NEW, HIGH</p> <ol style="list-style-type: none"> KA appears to match. First part is RO knowledge Second part is a look up and is basically pretty simple. This has to be changed to at least put in something that the ODCM would require like, two samples have to be done. NOT sure that the References are necessary. This would make it a direct look up to me. Would allow question if references were not provided. Otherwise not an SRO level question. Maybe if the R-14C was not so blatantly OOS. Remove a power supply and don't address the R-14C. The way it is now, it is not acceptable. <p>Discuss with another examiner.</p> <p>KDS 7/17</p>
															??	<p>I agree that with a reference, its not an SRO level question.</p> <p>It appears that when the TS requires you to suspend releases. Is this not a < 1 Hr Action....RO knowledge?</p>
															U RE	<p>Thursday, July 18, 2013</p> <ol style="list-style-type: none"> Agree this is a direct look up. LOOK at again to see what is going on with R12 and R-14.
															S	<p>This needs to be re-evaluated.</p> <p>Thursday, July 25, 2013</p> <ol style="list-style-type: none"> Ok as changed.

FINAL

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
84	H	2-3												NEW	??	<p>Tuesday, July 16, 2013</p> <p>061AA2.02, NEW, High</p> <ol style="list-style-type: none"> KA appears to match. EAL portion section was not with question. This may be a direct look up. First part is Why would anyone select the OP if the title of the OMM indicates it is SETPOINTS? This happens to be correct. Did anyone from validation select the OP? Licensee to explain rational for this. Are the applicants not taught that setpoints come from the OMM? Plausibility?? NO one got it wrong. Because they do it so frequency f the procedures. Need to review the EAL chart to see if this is a direct look up. If this is a direct look up then this is not acceptable and would be evaluated as a U. Why only HOT conditions EAL and not COLD EAL provided? Providing just the HOT kind of narrows it down. There is a cold one also, correct?
															S	<p>Thursday, July 18, 2013</p> <ol style="list-style-type: none"> Will provide ALL 3 HOT COLD and other one. Going to CUT off the CSFST part of the board. This could be used to answer other parts of the test. NONE of the validators picked the OP. On shift license do this regularly. R-9 is the letdown line, fuel failure line. OMM HAS SET POINTS and OP adjustments. Setting potentiometers on CVCS – in an OP. OP 920 very large procedure and does a lot of stuff. Very detailed.
																<p>Thursday, July 25, 2013</p> <ol style="list-style-type: none"> Hard return for the two questions.
85	H													NEW	?? U	<p>W/E14 EG2.2.38, NEW, HIGH</p> <ol style="list-style-type: none"> KA appears to match. Selection of FRP-P.1, Pressurized Thermal Shock does not make any sense with a LARGE break LOCA. There is no re-pressurization of the primary plant with the temperature of the primary being cold. This does not make

FINAL

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
																<p>any sense to me. Was there ANYONE who selected either A or C? and if they did why and if they DIDN'T why NOT?</p> <p>3. There are no RCS temperatures provided so therefore the applicants cannot identify if they are to the right of the pressure-temperature limit A.</p> <p>4. Need to explain.</p> <p>A and C not plausible. There is nothing to evaluate concerning integrity. Then containment design pressure is asked if exceeded leading more to J.1 answer.</p> <p>I do not believe this is satisfactory.</p> <p style="color: red;">KDS 7/17</p> <p>Agree, PTS is not plausible, design pressure is RO knowledge.</p> <p>The question is U.</p>
															RE	<p style="color: red;">Thursday, July 18, 2013</p> <p>1. What if they give indications. Run on simulator to see what happens. Do a print out of RCS. OF a large break LOCA.</p> <p>2. Provide more information.</p> <p>3. Will generate new data and provide curve A. Will get graph</p> <p>4. REDO THIS AND RE EVALUATE.</p>
															S	<p style="color: red;">Thursday, July 25, 2013</p> <p>1. OK as changed. See test for changes.</p>

FINAL

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
86	H													Bank	??	<p>012G2.1.20, BANK, High</p> <ol style="list-style-type: none"> KA appears to match First part answers the KA and is RO knowledge. Second part answers SRO but are ROs also expected to know the FOLDOUT page requirements of EPPs? Discuss with licensee. I would believe that this is RO knowledge also. Licensee states that these are not expected to be memory items for the RO applicant. IF this the case then this is considered unsatisfactory. <p>Discuss with licensee.</p> <p>KDS 7/17</p> <p>The reference material for HI STM FLO LO TAVG/LO SLP SFGRD/TRIP suggests based on setpoints that the MSL isolation occurred during the initial conditions (The Hi Stm flow in conjunction with 614 psig steam pressure). That being said: By the time that the crew was done with the initial actions for the trip:</p> <p>Would you be in EPP-16 or would SG A already be recovering by the time you got to that point in the trip procedure?</p> <p>Are the SG levels and pressures accurate?</p> <p>Thursday, July 18, 2013</p> <ol style="list-style-type: none"> Change the "The Crew" to "The CRS would direct the crew to" <p>Thursday, July 25, 2013</p> <ol style="list-style-type: none"> Hard return added. Removed the ON in distractor B. <p>OK as changed.</p>

FINAL

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
87	H													NEW	??	061G2.4.20, NEW, Higher
															U not characterized as a U to begin with	<ol style="list-style-type: none"> 1. KA appears to match 2. This question is very similar to that of # 77 in that it asks how to line up the system and this question uses the OP as does that one. HOW many times does the EPP or AOP line up the systems. Why would this be a reasonable place to go to for system line up. To the AOP EOP, EPP etc? ASK licensee to explain one example of other than the OP for system line up. States that there are line ups other places. EPP-9 five page attachment 3. EPP volume is 195 gpm and for one pump OP is 140 gpm. 4. Change first answer to ask IAW the OP and then what procedure to line up then the answer would be D. 5. NOT sure this is SRO only knowledge. Based on the knowledge that there are NO line ups done in EPP, AOPs or EPPs. This is incorrect Discuss this and see if this statement is true if it is not then have license provide an example when the EPP or AOP does it and the OP does not.
															S	<p>Do NOT believe this is SRO ONLY. Ask another examiner.</p> <p>Thursday, July 18, 2013</p> <ol style="list-style-type: none"> 1. Nothing has to be done with this question. 2. THIS is SRO only use of procedure. 3. Deep well is aligned to Service water and not directly to the AFW pumps. AOP-402 still lines up the AFW pump directly to the AFW pump suction. <p>Thursday, July 25, 2013</p> <ol style="list-style-type: none"> 1. ONLY caps in last line of STEM.

FINAL

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
88	H	3												NEW	U	<p>063A2.02, NEW, Higher</p> <ol style="list-style-type: none"> KA appears to match. QUESTION is NOT SRO only. The RO applicants are expected to know 1 hour or less LCO action items. With the temperature of the battery cell lower than 67 deg F. this is an IMMEDIATE action item for correction. This is considered less than one hour. Licensee did not provide TS 3.8.5. IF this question was ok ONLY should be caps or something like that. Would need a character space in second part in each distractor except A. <p>NOT SRO ONLY. RO knowledge of less than 1 hour TSs.</p> <p>KDS 7/17</p> <p>At 65 degrees, why would I pick verify the air conditioning over verifying the heater. 1st part of B&D not plausible.</p> <p>Can you be in 3.8.4 or 3.8.5 due to a battery without also being in 3.8.6? If not, A& B are not plausible.</p> <p>Thursday, July 18, 2013</p> <ol style="list-style-type: none"> Think you can be in 3.8.4 or 3.8.5, without being in 3.8.6. Need to look at TS. Will review. Need to come up with something other than AC. Needs work to this. <p>Thursday, July 25, 2013</p> <ol style="list-style-type: none"> Re wrote the question. Have to use Chart in TS Do not need surveillance being done. Hard return added. <p>NEEDS MORE WORK.</p> <p>The SROs response</p>

FINAL

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
89	F	2-3												NEW	S	076A2.01, NEW, LOW 1. KA appears to match. 2. First part RO knowledge. 3. Second part can be partially be answered using question 87. Discuss with licensee. NO it cannot, ok as it. Appears this question meets the SRO requirements and is considered as satisfactory. Thursday, July 25, 2013 1. Added hard return.
90	H	2	X											NEW	U initially but actually an E.	103A2.03, NEW, HIGH 1. KA appears to match. 2. The question as written provides teaching in the stem. This needs to be provided based on plant indications. Provide annunciator actuation system alignment, NOT based on SI or CV operations. Provide Containment pressures. 3. Part 1 is RO system knowledge. 4. Part 2 is Trivial and to identify the Phase A or B connection is a poor way to meet the second part of the KA. 5. What was the result of the validation? Did anyone miss this? I would expect not. 6. Level of difficulty is very low. Discuss with licensee reasons for this being evaluated as Unsat. KDS 7/17 Remove "results in a Safety Injection and CV Spray actuation" from the first bullet. Can you change "may" to "will" in the 2 nd question. How is the actual procedure worded? Thursday, July 18, 2013 E 1. Main steam line in CV occurs.

FINAL

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
															S	<p>2. Removed the second line that E-0 was implemented.</p> <p>3. CC-735 is in the Scenario and this needs to be changed. NEEDS to be Done. Phase B CCW valves.</p> <p>4. One validator selected B.</p> <p>5. THE CRS SHOULD direct</p> <p>Thursday, July 25, 2013</p> <p>1. Hard return.</p> <p>2. Removed teaching.</p> <p>3. People picked B, 2 of the same answer.</p> <p>OK as changed.</p>
91	H	2-3												NEW	U	<p>001A2.13, NEW, High</p> <p>1. KA appears to match.</p> <p>2. This question as written is very confusing. I would recommend that we state it the following way. "While performing FR-S.1, the crew was NOT successful in tripping the reactor by opening the ____1____. To handle this situation the CRS would be required to transition to ____2____? Will use this, this way.</p> <p>3. Distractors C and D first part makes NO sense in that the procedure does NOT tell you to trip feeder breaker to 480V busses 2B and 3, but tell you to go to those busses and open other breakers. Who would pick this? Did anyone select this during validation? I would expect that no one did. NOT plausible. Initially jumped to it, read it and then</p>

FINAL

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only			
															S	<p>realized that this is wrong. Want to change the busses to 2A and 3. Or something like that.</p> <p>Discuss with another examiner.</p> <p>KDS 7/17</p> <p>From the time of the trip signal (assuming from high CV pressure), you are inserting control rods and presumably borating by the time you get to step 21. So would reactor power still be at 100%? Is there a LOCA? I am questioning the validity of the initial conditions.</p> <p>Thursday, July 18, 2013</p> <p>1. NEED to look at part 1. UNSUCCESSFUL is NOT correct.</p> <p>2. Still a U.</p> <p>Thursday, July 25, 2013</p> <p>1. OK as changed.</p> <p>2. Hard return added.</p>
92	H	1-2												Bank	U	<p>068A2.04, Bank, Higher</p> <p>1. KA appears to match.</p> <p>2. Part 1 is RO knowledge.</p> <p>3. Part 2 is a direct look up in the ODCM provided. This is not allowed.</p> <p>4. Want another examiner opinion.</p> <p>If you don't have a reference then I would allow it. As it is now it is unacceptable.</p> <p>KDS 7/17</p> <p>Agreed, with the reference, it's a direct lookup and not an SRO question.</p> <p>Friday, July 19, 2013</p> <p>1. Will remove the reference and this should be ok.</p> <p>Thursday, July 25, 2013</p> <p>1. Removed reference.</p> <p>OK as changed.</p>
															S	

FINAL

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
93	H	1-2											XX	NEW	U	<p>071G2.4.46, NEW, HIGH</p> <ol style="list-style-type: none"> KA appears to match. KA may need to be re-selected in order to provide a better topic for the SRO exam. In stem of the question add an "s" to read on R-14C In distractors C and D spell out SM. Shift Manager. For second part of question, would like to see it as follows. "Based on the provided Attachment 10.3..." I am assuming that the Modified Attachment 10.3 is the example going to be provided to the applicant during the exam. Is this correct? If not this part of the question is just a direct look up and is not allowed on the test. Additionally I do not believe that the second part is SRO ONLY knowledge. <p>NOT SRO knowledge level.</p> <p>Friday, July 19, 2013</p> <ol style="list-style-type: none"> OP 706. - NOT sure how this is done. Will review method and then discuss. <p>Thursday, July 25, 2013</p> <ol style="list-style-type: none"> Changed second part and now a basis. Change the STEM to remove the exact duplication of the TRM. Changed to remove the curie content. <p>OK with change see test to see changes made.</p>
94	F	1-2												NEW	U	<p>G2.1.38, NEW, LOW,</p> <ol style="list-style-type: none"> KA appears to match. May need to re-select a new KA for more relevant topic. Question topic is NOT SRO ONLY. This information is not exclusive to SRO ONLY knowledge. <p>Need to replace or redo. This</p>

FINAL

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
																<div>Friday, July 19, 2013</div> <div><div>1. Provided 2.1.35, SRO responsibilities with refueling or</div><div>2. 2.1.36, Core alterations knowledge of procedures and limitations. Will make a new question.</div></div> <div>Thursday, July 25, 2013</div> <div><div>1. NEW question.</div><div>2. ADD refueling procedure. OMM001-018, IAW to the first statement.</div><div>3. SRO ONLY on new question.</div><div>4. 2 validators, both got it right.</div></div>
95	F	2-3												Bank	<div>E</div> <div>G2.2.13, RNP BANK</div> <div><div>1. KA appears to match</div><div>2. In distractors with ONLY make it caps</div><div>3. Can it be stated that an SRO who is not current in requal can do this? Or does the SRO have to be current? I would imagine would have to be current. Does the answer have to be beefed up?</div></div> <div>S</div> <div>Friday, July 19, 2013</div> <div><div>1. Do not need to state this is a requirement for qualifications being up to date. It is assumed in the question.</div><div>2. Question as is will be sufficient.</div></div> <div>Thursday, July 25, 2013</div> <div><div>1. Hard return added.</div><div>2. Added only in caps.</div><div>3. Both validators missed this question.</div></div> <div>OK</div>	
96	H	2-3												BANK	<div>E</div> <div>G2.2.18, NRC 09 Bank</div> <div><div>1. Exam appears to match</div><div>2. Appears to be more of a memory question but will accept from bank as comprehension.</div><div>3. Changed question and removed the part in A and B about being outside of the CV. Recommend that that be put back in because there may be no answer technically.</div></div>	

FINAL


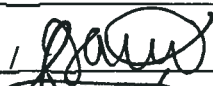
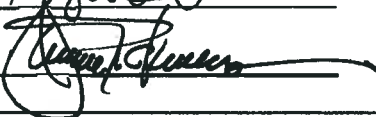
Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only			
															S	OK with recommendations for A and B Friday, July 19, 2013 1. Will double check how this works and will discuss after review. Thursday, July 25, 2013 1. Ok as changed 2. Added hard return. 3. Add a parenthesis around (-) 30.
97	F	2											X	Bank	U	G2.3.13, RNP Bank 1. KA appears to 2. Emergency Worker Dose limits. RO knowledge 3. Is delegation of Exposure a SRO ONLY skill? Ask licensee if this is or is not true? Do not believe it is. Not SRO ONLY.
															S	Friday, July 19, 2013 1. Licensee states that this first part is ONLY SRO knowledge and the RO should not be involved in the decision of who makes the decision of increasing the allowed dose. 2. Should not have been a U to begin with. Thursday, July 25, 2013 1. Add hard return. 2. Added s to statement Ok as changed.

FINAL

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
98	H	3													S	<p>BANK ILC 11-1 NRC exam. NO KA provided.</p> <ol style="list-style-type: none"> What is the reference? Hot conditions EAL Matrix. Provide both Hot and Cold. OK as SRO. Have licensee show what this is based on, actual alpha numeric designator. Need to review with EALs. <p>Assume to be ok as is. Friday, July 19, 2013 OK as is. Thursday, July 25, 2013</p> <ol style="list-style-type: none"> Going to get color picture. <p>OK</p>
99	F													NEW	??	<p>G2.4.23, New, LOW</p> <ol style="list-style-type: none"> KA appears to be match. Part 1 RO knowledge Part 2, trivial basis Changing "will not" too "should not." Is this advisable? While it states that EPP-28 does not have priority can you say that is true because the procedure directs other actions. Could that be viewed as correct? Did anyone pick this during validation? While A and B second part is more clean can anyone argue that C and D second part means something similar? Discuss with licensee. <p>Potentially unsat need more discussion. Friday, July 19, 2013</p> <ol style="list-style-type: none"> Both validators picked C. Didn't know EPP-28 deals with the loss of all AC power.

FINAL

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only			
																2. Will use "WILL NOT," be specific and not leave any grey areas to bring in. 3. EPP-1 DOES not have priority over all over procedures. 4. NOT a U, should have been an S to begin with. OK as originally written. Thursday, July 25, 2013 1. Ok as changed.
100	H	3													S	G2.4.30, NEW, Higher 1. KA appears to match. 2. Question is ok.

Facility: H.B. Robinson		Date of Exam: 08/06/2013		Exam Level: <u>RO/SRO</u>	
Item Description	Initials				
	a	b	c		
1. Clean answer sheets copied before grading	RSB	NA	gar		
2. Answer key changes and question deletions justified and documented	RSB	NA	gar		
3. Applicants' scores checked for addition errors (reviewers spot check > 25% of examinations)	RSB	NA	gar		
4. Grading for all borderline cases (80 \pm 2% overall and 70 or 80, as applicable, \pm 4% on the SRO-only) reviewed in detail	RSB	NA	gar		
5. All other failing examinations checked to ensure that grades are justified	NA	NA	NA		
6. Performance on missed questions checked for training deficiencies and wording problems; evaluate validity of questions missed by half or more of the applicants	RSB	NA	gar		
Printed Name/Signature			Date		
a. Grader	Richard S. Baldwin 			08/13/2013	
b. Facility Reviewer(*)	NA			NA	
c. NRC Chief Examiner (*)	J. Amanda Toth / 			08/13/2013	
d. NRC Supervisor (*)	Mark E. Franke 			08/14/13	
(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.					