

Administrative Documents
(Yellow Paper)

V. C. Summer
2007-301
June 4-7, 2007 - operating TEST
June 13, 2007 - Written EXAM

- 1. Exam Preparation Checklist ES-201-1 ✓
- 2. Exam Outline Quality Checklist ES-201-2 ✓
- 3. Exam Security Agreement(s) ES-201-3 ✓ MORE SIGS
- 4. Administrative Topics Outline (Final) ES-301-1 ✓
- 5. Control Room Systems & Facility Walk-through Test Outline (Final) ES-301-2 ✓
- 6. Operating Test Quality Check Sheet ES-301-3 ✓
- 7. Simulator Scenario Quality Check Sheet ES-301-4 ✓
- 8. Transient and Event Checklist ES-301-5 ✓
- 9. Competencies Checklist ES-301-6 ✓
- 10. Written Exam Quality Check Sheet ES-401-6 ✓
- 11. Written Exam Review Worksheet ES-401-9 ✓
- 12. Written Exam Grading Quality Checklist ES-403-1 ✓
- 13. Post-Exam Check Sheet ES-501-1
- 14. Facility Submittal Letter (s) [✓]

Facility: Summer Date of Examination: 06/04/2007
 Facility: _____ NRC
 Examinations Developed by: **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)	02/13/2007
-120	2. NRC examiners and facility contact assigned (C.1.d; C.2.e)	02/13/2007
-120	3. Facility contact briefed on security and other requirements (C.2.c)	02/13/2007
-120	4. Corporate notification letter sent (C.2.d)	2/14/2007
[-90]	[5. Reference material due (C.1.e; C.3.c; Attachment 2)]	03/06/2007
{-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)	3/21/2007 (3/27/2007) 8
{-70}	{7. Examination outline(s) reviewed by NRC and feedback provided to facility licensee (C.2.h; C.3.e)}	3/26/2007
{-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)	4/16/2007
-30	9. Preliminary license applications (NRC Form 398's) due (C.1.i; C.2.g; ES-202)	5/07/2007
-14	10. Final license applications due and Form ES-201-4 prepared (C.1.i; C.2.i; ES-202)	5/21/2007
-14	11. Examination approved by NRC supervisor for facility licensee review (C.2.h; C.3.f)	5/21/2007
-14	12. Examinations reviewed with facility licensee (C.1.j; C.2.f and h; C.3.g)	5/21/2007
-7	13. Written examinations and operating tests approved by NRC supervisor (C.2.i; C.3.h)	5/27/2007 (5/31/07) -O (6/11/2007)-W 8
-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)	5/27/2007
-7	15. Proctoring/written exam administration guidelines reviewed with facility licensee (C.3.k)	5/27/2007
-7	16. Approved scenarios, job performance measures, and questions distributed to NRC examiners (C.3.i)	5/27/2007 (6/04/2007) 8

* 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.

Facility:	V.C. Summer	Date of Examination:	6/4/2007		
Item	Task Description	Initials			
		a	b*	c#	
WRITEN	a. Verify that the outline(s) fit(s) the appropriate model per ES-401.	JAS	Pa	JAS	
	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.	Pa	Pa	JAS	
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	JAS	Pa	JAS	
	d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.	Pa	Pa	JAS	
SIMULATOR	a. Using Form ES-301-5, verify that the proposed scenario sets cover the required number of normal evolutions, instrument and component failures, technical specifications, and major transients.	JAS	Pa	JAS	
	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 scenarios will not be repeated on subsequent days.	JAS	Pa	JAS	
	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.	JAS	Pa	JAS	
W/T	a. Verify that 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 alternate path, low-power, emergency and RCA tasks meet the criteria on the form.	JAS	Pa	JAS	
	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	JAS	Pa	JAS	
	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.	JAS	Pa	JAS	
GENERAL	a. Assess whether plant-specific priorities (including PRA and IPE insights) are covered in the appropriate exam section.	JAS	Pa	JAS	
	b. Assess whether the 10CFR 55.41/43 and 55.45 sampling is appropriate.	JAS	Pa	JAS	
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	JAS	Pa	JAS	
	d. Check for duplication and overlap among exam sections.	JAS	Pa	JAS	
	e. Check the entire exam for balance of coverage.	JAS	Pa	JAS	
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	JAS	Pa	JAS	
a. Author	Joseph G. Arsenault	<i>Joseph G. Arsenault</i>		4/12/2007	
b. Facility Reviewer (*)	William R. Quid	<i>William R. Quid</i>		4/14/2007	
c. NRC Chief Examiner (#)	GERARD W. LASKA	<i>Gerard W. Laska</i>		5/31/2007	
d. NRC Supervisor	Robert HAAG	<i>Robert Haag</i>		5/31/07	

NOTE: # Independent NRC reviewer initial items in Column "c", chief examiner concurrence required.

404-562-4854

1. Pre-Examination

V.C. Summer NRC Exam

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 4 June 2007 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 _____. 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. SHAUN Zarandi	GMNSS	<i>Shaun Zarandi</i>	5-4-07	<i>Shaun Zarandi</i>	6/18/07	
2. George Lippard	MGR. operations	<i>George Lippard</i>	5/4/07	<i>George Lippard</i>	6/18/07	by A. P. Kow on 5/4/07
3. John Leone	NRC INST III	<i>John Leone</i>	5/1/07	<i>John Leone</i>	6/14/07	
4. TIM PHILLIPS	CRS	<i>Tim Phillips</i>	5/11/07	<i>Tim Phillips</i>	7/24/07	
5. Robert Tomy	operations supervisor	<i>Robert Tomy</i>	6-5-07	<i>Robert Tomy</i>	6/20/07	
6. H.H. Crider	TRWB instructor	<i>H.H. Crider</i>	6/4/07	<i>H.H. Crider</i>	6/14/07	
7. Aubrey Lindley	BO	<i>Aubrey Lindley</i>	6-4-7	<i>Aubrey Lindley</i>	7-12-7	
8. Glenn M. Payne	training supervisor	<i>Glenn M. Payne</i>	6/4/7	<i>Glenn M. Payne</i>	6/15/07	
9. Thomas A. Stehe	CRS - SRO	<i>Thomas A. Stehe</i>	6/5/7	<i>Thomas A. Stehe</i>	6/26/07	
10. STEVEN K WEBSTER	SS - SRO	<i>Steven K Webster</i>	6-5-7	<i>Steven K Webster</i>	6-18-07	
11. Wanda Robinson	CLERK	<i>Wanda Robinson</i>	6-5-7	<i>Wanda Robinson</i>	6/15/07	
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* Per Telecon with A. Kow on 5/4/07.

i. Pre-Examination

V.C. Summer

6/4/07 +

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 6/11/07 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 _____. 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. Doug Watson	Supervisor Development	<i>Doug Watson</i>	2/24/07	<i>Doug Watson</i>	6/14/07	
2. Tom Driscoll	Supervisor Simulation Ops	<i>Tom Driscoll</i>	2/24/07	<i>Tom Driscoll</i>	6/14/07	
3. STEVE WILLIAMS	CRS	<i>Steve Williams</i>	3-19-07	<i>Steve Williams</i>	6-14-07	
4. Gregory S. Pattee	Developer	<i>Gregory S. Pattee</i>	3-19-07	<i>Gregory S. Pattee</i>	6-14-07	
5. Wanda P. MORRIS	Clerk	<i>Wanda P. Morris</i>	3-20-07	<i>Wanda P. Morris</i>	6-18-07	
6. Donna Railey	Licensing Tech	<i>Donna Railey</i>	3-22-07	<i>Donna Railey</i>	6-14-07	
7. ALBERT R. KOON, JR.	Supv. OPS. TRN	<i>Albert R. Koon, Jr.</i>	3-23-07	<i>Albert R. Koon, Jr.</i>	6-14-07	
8. Rusty Quick	Supervisor Initial Training	<i>Rusty Quick</i>	3-23-07	<i>Rusty Quick</i>	6/16/07	
9. Joe Arsenault	Western Technical Services	<i>Joe Arsenault</i>	3-23-07	<i>Joe Arsenault</i>	6/16/07	
10. Gary Maffatt	Manager, Nuclear Training	<i>Gary Maffatt</i>	3-23-07	<i>Gary Maffatt</i>	6-14-07	
11. Steven Billingsley	RO	<i>Steven Billingsley</i>	3-30-07	<i>Steven Billingsley</i>	6-14-07	
12. JEFF MANROSS	SRO	<i>Jeff Manross</i>	3-30-07	<i>Jeff Manross</i>	6-25-07	
13. Randall Kerrall	RO	<i>Randall Kerrall</i>	3-30-07	<i>Randall Kerrall</i>	6-27-07	
14. Wanda ROBINSON	CLERK	<i>Wanda Robinson</i>	3-30-07	<i>Wanda Robinson</i>	6-15/07	
15. KATY BECKHAM	SRO	<i>Katy Beckham</i>	3-31-07	<i>Katy Beckham</i>	7-12-07	

NOTES:

1. Pre-Examination

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PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE NOTE
1. Jeffrey Porcell	RO	<i>Jeffrey Porcell</i>	3-31-07	<i>Porcell</i>	7-16-07
2. W.H. TACKETT	Simulator Maintenance	<i>W.H. Tackett</i>	4-2-7	<i>W.H. Tackett</i>	6-14-07
3. JIM R. BRUCKS	SIMULATOR ENGINEER	<i>Jim R. Brucks</i>	4-2-07	<i>Jim R. Brucks</i>	6-19-07
4. NIKOS OKIMOSCH	RO	<i>Nikos Okimosch</i>	4-10-7	<i>Nikos Okimosch</i>	6-25-07
5. LEON SMITH	RO	<i>Leon Smith</i>	4-11-07	<i>Leon Smith</i>	8-2-7
6. DAVID LAZAROVY	EXAM DEVELOPER	<i>David Lazarovy</i>	4-14-07	see attached Pa	8/6/07
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1. Pre-Examination

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.

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PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE NOTE
1. Jeffrey Pucell	RO	<i>Jeffrey Pucell</i>	3-31-07	<i>Pucell</i>	7-16-07
2. W.H. Tuckett	Simulator Maint	<i>W.H. Tuckett</i>	7-2-07	<i>W.H. Tuckett</i>	6-12-07
3. JEFFREY BROWN	Simulator Maint	<i>Jeffrey Brown</i>	4-2-07		
4. Mike O'Connell	RO	<i>Mike O'Connell</i>	4-11-07		
5. Leon Smith	RO	<i>Leon Smith</i>	4-11-07		
6. DAVID LAZAROV	EXAM DEVELOPER	<i>David Lazarov</i>	4-14-07	<i>David</i>	6-18-07
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VC SUMMER

ES 201

Examination Security Agreement

Form ES-201-3

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 6/4/07 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 (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 _____. 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.	JOSEPH ARSENAULT	Developer	<i>Joseph Arsenault</i>	1/29/07			
2.	Jacqueline Schelky	Admin	<i>Jacqueline Schelky</i>	1/29/07			
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ES-201

Examination Security Agreement

Form ES-201-3

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	PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE	NOTE
1.	JOSEPH ARSENAULT	Developer	<i>Joseph Arsenault</i>	1/29/07	<i>Joseph Arsenault</i>	6/15/07	
2.	Jacqueline Scheikly	Admin	<i>Jacqueline Scheikly</i>	1/29/07	<i>Jacqueline Scheikly</i>	6/18/07	
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VC-Summer

ES-201

Examination Security Agreement

Form ES-201-3

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	PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE NOTE
1.	James K. Lloyd	Exam Developer	<i>[Signature]</i>	2/24/07	see attached	8/6/07
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ES-201

Examination Security Agreement

Form ES-201-3

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1.	James K. Lloyd	Exam Developer	<i>[Signature]</i>	2/24/07	<i>[Signature]</i>	6/18/07
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1. Pre-Examination

V.C. Summer NRC Exam

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1. SHAUN Zarandi	GMNSS	<i>Shaun Zarandi</i>	5-4-07	<i>Shaun Zarandi</i>	6/18/07	
2. George Lippard	MGR. operations	George Lippard	5/4/07	George Lippard	6/18/07	by A.P. Kaur on 5/4/07
3. John Leone	NRC Inst III	John Leone	5-9-7	John Leone	6-14-7	
4. TIM PHILLIPS	CRS	<i>Tim Phillips</i>	5/16/07			
5. Robert Remy	operations supervisor	<i>Robert Remy</i>	6-5-7			6/22/07
6. Matt Cridler	TRNG Instructor	<i>Matt Cridler</i>	6/14/07			6/14/07
7. Aubrey Lindley	RO	<i>Aubrey Lindley</i>	6-9-7			
8. Glenn M. Ely	training supervisor	<i>Glenn M. Ely</i>	6/4/7			6/15/07
9. Thomas A. Stokes	CRS - SRO	<i>Thomas A. Stokes</i>	6/5/7			
10. STEVEN K WEBSTER	SS - SRO	<i>Steven K Webster</i>	6-5-7			6-18-07
11. Wanda Robinson	CLERK	<i>Wanda Robinson</i>	6-5-7	<i>Wanda Robinson</i>		6/15/07
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* Par Telecom with A. Kaur on 5/4/07.

1. Pre-Examination

V.C. Summer

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 6/4/07 + 6/11/07 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 _____. 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. Doug Watson	Supervisor Development	<i>Doug Watson</i>	2/24/07	<i>Doug Watson</i>	6/14/07
2. Tom Kincel	Supervisor, Simulator Ops	<i>Tom Kincel</i>	2/10/07	<i>Tom Kincel</i>	6/14/07
3. STEVE WILLIS	CRS	<i>Steve Willis</i>	3-19-07	<i>Steve Willis</i>	6-14-07
4. Gregory S. Pateet	Developer	<i>Greg Pateet</i>	3-19-07	<i>Greg Pateet</i>	6-14-07
5. Wanda P MORRIS	Clerk	<i>Wanda P Morris</i>	3-20-07	<i>Wanda P Morris</i>	6-14-07
6. Donna Railey	Licensing Tech	<i>Donna Railey</i>	3-22-07	<i>Donna Railey</i>	6-14-07
7. ALBERT R. Korman	supv. ops. TRN	<i>Albert R Korman</i>	3-23-07	<i>Albert R Korman</i>	6-14-07
8. Rusty Quick	Supervisor Initial Training	<i>William Quick</i>	3-23-07	<i>William Quick</i>	6/14/07
9. Joe Arsenault	Western Technical Services	<i>William Quick for JGA</i>	3-23-07	<i>William Quick</i>	6/14/07
10. Gary Maffett	Manager, Nuclear Training	<i>Gary Maffett</i>	3-23-07	<i>Gary Maffett</i>	6-14-07
11. Steven Billingsley	RO	<i>Steven Billingsley</i>	3-30-07		
12. JEFF MANROSS	SRO	<i>Jeff Manross</i>	3-30-07		
13. Rannan Kearsoll	RO	<i>Rannan Kearsoll</i>	3-20-07		
14. Wanda Robinson	Clerk	<i>Wanda Robinson</i>	3-30-07	<i>Wanda Robinson</i>	6-15/07
15. ROB BECKHAM	SRO	<i>Rob Beckham</i>	3-31-07		

see attached signature for 1/29/07

NOTES:

1. Pre-Examination

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 _____. 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 Purcell	RO	<i>Jeffrey Purcell</i>	3-31-07			
2. W.H. TACKETT	Simulator Maintenance	<i>W.H. Tackett</i>	4-2-07	<i>W.H. Tackett</i>	6-14-07	
3. JIM R. BROOKS	SIMULATOR ENGINEER	<i>Jim Brooks</i>	4-2-07	<i>Jim Brooks</i>	6-19-07	
4. NIKOS OKIMOSH	RO	<i>Nikos Okimosh</i>	4-10-07			
5. LEON SMITH	RO	<i>Leon Smith</i>	9-11-07			
6. DAVID LAZAROVY	EXAM DEVELOPER	<i>David Lazarovy</i>	4-14-07			see attached page
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6/18/2007 8:38:00 AM PAGE 2/004 Fax Server

ES-201

Examination Security Agreement

Form ES-201-3

1. Pre-Examination

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.

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	PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE NOTE
1.	Jeffrey Purcell	RO	<i>Jeffrey Purcell</i>	3-31-07		
2.	W.H. TACKETT	Simulation Maintenance	<i>W.H. Tackett</i>	4-2-07	<i>W.H. Tackett</i>	6-14-07
3.	PETER BROOKS	Simulation Engineer	<i>Peter Brooks</i>	4-2-07		
4.	Nike Okimochi	RO	<i>Nike Okimochi</i>	4-11-07		
5.	Leon Smith	RO	<i>Leon Smith</i>	4-11-07		
6.	DAVID LAZAROVY	EXAM DEVELOPER	<i>David Lazarovy</i>	4-14-07	<i>David Lazarovy</i>	6/18/07
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VC SUMMER

ES-201

Examination Security Agreement

Form ES-201-3

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 6/4/07 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 (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.

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To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of _____. From the date that I entered into this security agreement until the completion of examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations, except as specifically noted below and authorized by the NRC.

	PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE	NOTE
1.	JOSEPH ARSENAULT	Developer	<i>Joseph Arsenault</i>	1/29/07	see attached page		
2.	Jacqueline Schelky	Admin	<i>Jacqueline Schelky</i>	1/29/07	see attached page		
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VC SUMMER

ES-201

Examination Security Agreement

Form ES-201-3

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	PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE	NOTE
1.	JOSEPH ARSENAULT	Developer	<i>Joseph Arsenault</i>	1/29/07	<i>Joseph Arsenault</i>	6/15/07	
2.	Jacqueline Schelkly	Admin	<i>Jacqueline Schelkly</i>	1/29/07	<i>Jacqueline Schelkly</i>	6/18/07	
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VC-Summer

ES-201

Examination Security Agreement

Form ES-201-3

1. Pre-Examination

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	PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE	NOTE
1.	James K. Lloyd	Exam Developer	<i>[Signature]</i>	2/24/07	see attached page		
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VC Summer

ES-201

Examination Security Agreement

Form ES-201-3

1. Pre-Examination

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2. Post-Examination

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	PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE NOTE
1.	James K. Lloyd	Exam Developer	<i>J. K. Lloyd</i>	2/24/07	<i>James K. Lloyd</i>	6/18/07
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James Lloyd

James Lloyd

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Mar 28 07 12:10p

Facility: VC Summer		Date of Examination: 6/4/2007
Examination Level (circle one): <input checked="" type="radio"/> RO / <input type="radio"/> SRO		Operating Test Number: NRC
Administrative Topic (see Note)	Type Code*	Describe activity to be performed
Conduct of Operations	M,R	2.1.7 Ability to evaluate plant performance and make operational judgments based on operating characteristics, reactor behavior, and instrument interpretation (3.7) Perform a QPTR Calculation for dropped control rod
Conduct of Operations	N,R	2.1.25 Ability to obtain and interpret station references and material such as graphs, nomographs, and references which contain performance data (2.8) Perform actions for natural circulation cooldown including: <ul style="list-style-type: none"> - Determination of required boron concentration - Maximum allowable RCS cooldown rate - Maximum allowable RCS temperature for current plant conditions
Equipment Control	N, R	2.2.13 Knowledge of tagging and clearance procedures (3.6) Prepare a manual tagout of a CCW Pump
Radiation Control	M, R	2.3.2 Knowledge of facility ALARA program (2.5) Determine Worker Exposure
Emergency Plan		
NOTE: All items (5 total are required for SROs. RO applicants require only 4 items unless they are retaking only the administrative topics, when 5 are required.		

*Type Codes & Criteria:

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

Admin Task Description

- A1a The applicants will perform a QPTR calculation that will result in QPTR being outside of requirements. The conditions of this JPM are significantly modified from a bank JPM.
- A1b The applicants will determine Mode 5 required boron concentration during a natural circulation cooldown, and then also determine maximum allowable cooldown rate for current plant conditions, (No CRDM Fans running) and maximum allowable RCS temperature for the given RCS pressure using curves in EOP-1.3. This is a new JPM.
- A2 The applicants will prepare a tagout manually without the aid of computers. They will be required to identify critical isolation boundaries as well as sequence of tag placement for a Component Cooling Water Pump. This JPM is new
- A3 Given a task to perform in the Radiological Controlled Area, determine the worker's exposures. (SRO ONLY) determine any administrative requirements. This is a modified JPM.

Facility: VC Summer		Date of Examination: 6/4/2007
Examination Level (circle one): RO / SRO		Operating Test Number: NRC
Administrative Topic (see Note)	Type Code*	Describe activity to be performed
Conduct of Operations	M,R	2.1.7 Ability to evaluate plant performance and make operational judgments based on operating characteristics, reactor behavior, and instrument interpretation (3.7) Perform a QPTR Calculation for dropped control rod
Conduct of Operations	N,R	2.1.25 Ability to obtain and interpret station reference materials such as graphs, nomographs, and tables which contain performance data (3.1) Review a Shutdown Margin calculation
Equipment Control	N, R	2.2.13 Knowledge of tagging and clearance procedures (3.8) Review a manual tagout of safety related equipment
Equipment Control	M, R	2.2.12 Knowledge of Surveillance Procedures (3.4) Operational Leak Rate Test (*)
Radiation Control	M, R	2.3.2 Knowledge of facility ALARA program (2.9) Determine Worker Exposure
Emergency Plan	N, R	2.4.44 Knowledge of Emergency Plan Protective Action Recommendations (4.0) For plant conditions indicating a General Emergency, perform a PAR
NOTE: All items (5 total are required for SROs. RO applicants require only 4 items unless they are retaking only the administrative topics, when 5 are required.)		
(*) This JPM given to One (1) candidate		

*Type Codes & Criteria:

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

Admin Task Description

- A1a The applicants will perform a QPTR calculation that will result in QPTR being outside of requirements. The applicants will also determine Technical Specification action requirements. The conditions of this JPM are significantly modified from a bank JPM.
- A1b The applicants will review a Shutdown Margin calculation that will contain critical errors, resulting in Shutdown Margin Being outside of requirements. They will then determine appropriate action required in accordance with Technical Specifications. This is a new JPM.
- A2 The applicants will review a tagout prepared manually without the aid of computers. There will be 4 critical errors on the prepared tagout, including a sequencing error, component misidentification, and tag assignment missing for a critical component. This JPM is new.
- A2 (*) The applicant will conduct and Operational Leak Rate Test (STP-114.02) W/O IPCS Lear Rate Program available and determine leakage is outside the TS limit.
- A3 Given a task to perform in the Radiological Controlled Area, determine the worker's exposures. (SRO ONLY) determine any administrative requirements. This is a modified JPM.
- A4 The applicants will be given plant conditions indicating that a general emergency exists. They must classify the event and make initial Protective Action Recommendations must be made. This JPM is new.

Facility:	VC Summer	Date of Examination:	6/4/2007
Exam Level (circle one):	RO / SRO(I) / SRO (U)	Operating Test No.:	NRC
Control Room Systems [®] (8 for RO; 7 for SRO-I; 2 or 3 for SRO-U)			
System / JPM Title		Type Code*	Safety Function
a.	System 004 Initiate Emergency Boration in accordance with EOP-1.1/AOP-106.1, EMERGENCY BORATION.	M, A, E, S	1
b.	EPE E03 De-pressurize the RCS to refill the Pressurizer in accordance with EOP-2.1, POST-LOCA COOLDOWN AND DEPRESSURIZATION.	N, A, E, S	3
c.	System 005 Shift operating RHR loops with RHR cooling in service in accordance with SOP-115, RESIDUAL HEAT REMOVAL SYSTEM.	N, L, S	4P
d.	System 006 Transfer to cold leg recirculation in accordance with EOP-2.2, TRANSFER TO COLD LEG RECIRCULATION.	D, A, E, S	2
e.	System 041 Take corrective action for a steam dump valve failure in accordance with EOP-1.1, Reactor Trip Response	N, A, E, S	4S
f.	System 103 Lower Reactor Building pressure in accordance with SOP-114, REACTOR BUILDING VENTILATION SYSTEM.	N, S	5
g.	System 062 Take corrective action for a high temperature on the Unit Auxiliary Transformer in accordance with the alarm response procedure and SOP-304, 115KV/7.2KV OPERATIONS.	D, A, S	6
h.	System 015 Respond to a failure of PRNIS Channel N-44 in accordance with AOP-401.10, POWER RANGE CHANNEL FAILURE.	P, D, E, S	7
In-Plant Systems [®] (3 for RO; 3 for SRO-I; 3 or 2 for SRO-U)			

i.	System 064 Locally start an Emergency Diesel Generator in accordance with EOP-6.0, LOSS OF ALL ESF AC POWER.	D, E, A	6
j.	System 071 Recover from an automatic termination of a waste gas release in accordance with SOP-119, WASTE GAS PROCESSING.	D, R	9
k.	System 061 Start the Turbine-driven EFW Pump and control flow in accordance with FEP-4.0, CONTROL ROOM EVACUATION DUE TO FIRE, Enclosure F.	P, D, E, R	4S
© All control room (and in-plant) systems must be different and 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 (C)ontrol room (D)irect from bank (E)mergency or abnormal in-plant (L)ow-Power (N)ew or (M)odified from bank including 1(A) (P)revious 2 exams (R)CA (S)imulator		4-6 / 4-6 / 2-3 _ 9 / _ 8 / _ 4 _ 1 / _ 1 / _ 1 _ 1 / _ 1 / _ 1 _ 2 / _ 2 / _ 1 _ 3 / _ 3 / _ 2 (randomly selected) _ 1 / _ 1 / _ 1	

VC Summer 2007 NRC Exam JPM Summary

- a. Initiate Emergency Boration in accordance with EOP-1.1, REACTOR TRIP RECOVERY, and AOP-106.1, EMERGENCY BORATION. Modify Bank JPM JPS-003 to start in EOP-1.1, requiring the applicant to make the decision that emergency boration is required. Initial attempt will fail, requiring use of AOP-106.1 to initiate an alternate path. RO and SROU
- b. De-pressurize the RCS to refill the Pressurizer using a PORV in accordance with EOP-2.1, POST-LOCA COOLDOWN AND DEPRESSURIZATION, Step 8. The alternate path is that the applicant must use a PZR PORV to depressurize because no RCP's are running and the PZR PORV will fail to close requiring the respective isolation valve to be closed. New JPM. RO and SROU.
- c. Shift operating RHR loops with RHR cooling in service in accordance with SOP-115, RESIDUAL HEAT REMOVAL SYSTEM. New JPM. RO and SROU.
- d. Transfer to cold leg recirculation in accordance with EOP-2.2, TRANSFER TO COLD LEG RECIRCULATION. The applicant will assume the watch with the criteria met for transfer to cold leg recirculation. The alternate path is that the applicant must make a specific discharge cross-connect alignment because only one Charging Pump is running. Bank JPM JPSF-005. RO only.
- e. Take corrective action for a steam dump valve failure in accordance with EOP-1.1, REACTOR TRIP RESPONSE. The alternate path is that the applicant will be required to evaluate Steam Dump response and take compensatory action for a valve failure. Ultimate action will be to either reduce EFW flow or close the MSIVs. New JPM. RO only.
- f. Lower Reactor Building pressure in accordance with SOP-114, REACTOR BUILDING VENTILATION SYSTEM, Section O - LOWERING REACTOR BUILDING PRESSURE USING NORMAL PRESSURE CONTROL. The applicant will assume the watch with Reactor Building pressure approaching the Technical Specification limit and be directed to implement the referenced procedure. New JPM. RO only.
- g. Take corrective action for a high temperature on the Unit Auxiliary Transformer in accordance with the alarm response procedure and SOP-304, 115KV/7.2KV OPERATIONS. The applicant will assume the watch and respond to alarm ARP-001-XCP-633-6-3, UNIT AUX XFMR XTF-2 TRBL. The alternate path is that the report from the field will require the applicant to transfer the BOP buses to the alternate feed so that the transformer can be de-energized. Bank JPM JPSF-139. RO only.
- h. Respond to a failure of PRNIS Channel N-44 in accordance with AOP-401.10, POWER RANGE CHANNEL FAILURE. The applicant will assume the watch with the unit at full power and respond to failure of N-44. Randomly selected task from the 2004 NRC Exam/Bank JPM JPS-008. RO only.

- i. Locally start an Emergency Diesel Generator in accordance with EOP-6.0, LOSS OF ALL ESF AC POWER. The applicant will simulate performance of EOP-6.0, ATTACHMENT 1 – LOCAL STARTING AND LOADING DIESEL GENERATOR. The applicant must implement an alternate path when the diesel does not start after the ENGINE SHUTDOWN RESET pushbutton is depressed. Bank JPM JPPF-012B. RO and SROU.
- j. Recover from an automatic termination of a waste gas release in accordance with SOP-119, WASTE GAS PROCESSING. The applicant will reinstate a waste gas release that was terminated when a radiation monitor failed. Bank JPM JPP-039. RO and SROU.
- k. Start the TDEFW Pump and control flow in accordance with FEP-4.0, CONTROL ROOM EVACUATION DUE TO FIRE, Enclosure F. The applicant will simulate starting the TDEFW Pump and align/control flow. Randomly selected task from the 2005 NRC Exam/Bank JPM JPP-055. RO only.

Facility: VC Summer	Date of Examination: 6/4/2007	Operating Test Number: NRC
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).	JPM	Z J
b. There is no day-to-day repetition between this and other operating tests to be administered during this examination.	JPM	Z J
c. The operating test shall not duplicate items from the applicants' audit test(s) (see Section D.1.a).	JPM	Z J
d. Overlap with the written examination and between different parts of the operating test is within acceptable limits.	JPM	Z J
e. It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.	JPM	Z J
2. WALK-THROUGH CRITERIA		- - -
a. Each JPM includes the following, as applicable: * initial conditions * initiating cues * references and tools, including associated procedures * reasonable and validated time limits (average time allowed for completion) and specific designation if deemed to be time-critical by the facility licensee * operationally important specific performance criteria that include: - detailed expected actions with exact criteria and nomenclature - system response and other examiner cues - statements describing important observations to be made by the applicant - criteria for successful completion of the task - identification of critical steps and their associated performance standards - restrictions on the sequence of steps, if applicable	JPM Z J	
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.	JPM	Z J
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.		JPM Z J
	Printed Name / Signature	Date
a. Author	Joseph G. Arsenault <i>Joseph G. Arsenault</i>	4/12/2007
b. Facility Reviewer (*)	William R. Quick <i>William R. Quick</i>	4/14/2007
c. NRC Chief Examiner (#)	GERARD W. LASCA <i>Gerard W. Lasca</i>	5/31/2007
d. NRC Supervisor	Robert HAAG <i>Robert Haag</i>	5/31/07
NOTE: * The facility signature is not applicable for NRC-developed tests. # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required.		

Facility:	Summer	Date of Exam:	6/4/07	Scenario Numbers:	1/2/3	Operating Test No.:	NRC		
QUALITATIVE ATTRIBUTES						Initials			
						a	b*	c#	
1.	The initial conditions are realistic, in that some equipment and/or instrumentation may be out of service, but it does not cue the operators into expected events.				JAA	Pa	JAA		
2.	The scenarios consist mostly of related events.				JAA	Pa	JAA		
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) 				JAA	Pa	JAA		
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.				JAA	Pa	JAA		
5.	The events are valid with regard to physics and thermodynamics.				JAA	Pa	JAA		
6.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.				JAA	Pa	JAA		
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.				JAA	Pa	JAA		
8.	The simulator modeling is not altered.				JAA	Pa	JAA		
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.				JAA	Pa	JAA		
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.				JAA	Pa	JAA		
11.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).				JAA	Pa	JAA		
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).				JAA	Pa	JAA		
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.				JAA	Pa	JAA		
Target Quantitative Attributes (Per Scenario; See Section D.5.d)				Actual Attributes (Scenario)			-	-	-
				1	2	3			
1.	Total malfunctions (5-8)			9	9	8	JAA	Pa	JAA
2.	Malfunctions after EOP entry (1-2)			4	3	3	JAA	Pa	JAA
3.	Abnormal events (2-4)			2	5	3	JAA	Pa	JAA
4.	Major transients (1-2)			2	2	2	JAA	Pa	JAA
5.	EOPs entered/requiring substantive actions (1-2)			1	1	2	JAA	Pa	JAA
6.	EOP contingencies requiring substantive actions (0-2)			1	0	0	JAA	Pa	JAA
7.	Critical tasks (2-3)			2	2	2	JAA	Pa	JAA

ES-301

Transient and Event Checklist

Form ES-301-5

Facility:		VC Summer		Date of Exam:		6/4/2007		Operating Test No.:		NRC										
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			5						
		Crew Position			Crew Position			Crew Position			Crew Position			Crew Position						
		S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P		R	I	U
RO-1	RX		5														1	1	1	0
	NOR						1										1	1	1	1
	I/C		24				34	6									5	4	4	2
	MAJOR		7				7	9									4	2	2	1
	TS																0	0	2	2
RO-2	RX					3											1	1	1	0
	NOR			5													1	1	1	1
	I/C			36		24	5										5	4	4	2
	MAJOR			7		7	9										4	2	2	1
	TS																0	0	2	2
RO-3	RX		5														1	1	1	0
	NOR						1										1	1	1	1
	I/C		24				34	6									5	4	4	2
	MAJOR		7				7	9									4	2	2	1
	TS																0	0	2	2

Instructions:

- Circle 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 service in both the "at-the-controls (ATC)" and "balance-of-plant (BOP)" positions; Instant SROs must do one scenario, including at least two instrument or component (I/C) malfunctions and one major transient, in the ATC position.
- Reactivity manipulations may be conducted under normal or *controlled* abnormal conditions (refer to Section D.5.d) but must be significant per Section C.2.a of Appendix D. (*) Reactivity and normal evolutions may be replaced with additional instrument or component malfunctions on a 1-for-1 basis.
- Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirements specified for the applicant's license level in the right-hand columns.

This form assumes Scenarios 1 and 2 are to be performed, with scenario 3 as the spare. Only required positions are listed for attributes.

Facility: VC Summer Date of Examination: 6/4/07 Operating Test No. NRC 1-3												
Competencies	SRO				RO (ATC)				BOP			
	SCENARIO				SCENARIO				SCENARIO			
	1	2	3	4	1	2	3	4	1	2	3	4
Interpret/Diagnose Events and Conditions	1-4, 6-11	2-11	3-10		2,4, 7-11	2,3,4, 7,8, 10	3,5,7, 8,10		3,6,7, 8,11	3,4,5, 8,9, 11	4,6-9	
Comply With and Use Procedures (1)	ALL	ALL	ALL		2-5, 7-11	2-4, 7-11	2,3,5, 7,8, 10		3,5,6, 8,11	1,3,4, 5, 8-11	1,4, 6-9	
Operate Control Boards (2)	N/A	N/A	N/A		2,4,5, 7,8,9 11	2-4, 7,10	2,3,5, 7,10		3,5,6, 8,11	1,3,4, 5,8,9, 11	1,4,6, 8,9	
Communicate and Interact	ALL	ALL	ALL		2,4,5, 7-11	2-4, 7,8, 10,11	2,3,5, 7,8, 10		3,5,6, 8,11	1,3,4, 5,8,9, 11	1,4, 6-9	
Demonstrate Supervisory Ability (3)	ALL	ALL	ALL		N/A	N/A	N/A		N/A	N/A	N/A	
Comply With and Use Tech. Specs. (3)	1,4	4,5,6, 7	3,4		N/A	N/A	N/A		N/A	N/A	N/A	

Notes:

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

Instructions:

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

FINAL

Facility:	VC Summer	Date of Exam:	6/4/2007	Exam Level:	RO/SRO		
Item Description				Initial			
				a	b*	c#	
1.	Questions and answers technically accurate and applicable to facility.			sl	Pa	##	
2.	a. NRC K/As referenced for all questions. b. Facility learning objectives referenced as available.			sl	Pa	##	
3.	SRO questions are appropriate in accordance with Section D.2.d of ES-401			sl	Pa	##	
4.	The sampling process was random and systematic. (If more than 4 RO and 2 SRO questions were repeated from the last 2 NRC licensing exams, consult the NRR OL Program Office)			sl	Pa	##	
5.	Question duplication from the license screening/audit exam was controlled as indicated below (check the item that applies) and appears appropriate: _____ the audit exam was systematically and randomly developed, or _____ the audit exam was completed before the license exam was started, or _____ the examinations were developed independently, or <u>XX</u> the licensee certifies that there is no duplication, or _____ other (explain)			sl	Pa	##	
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. (IN %)	Bank	Modified	New	sl	Pa	##
		45 / 28	11 / 24	44/48			
	(# of Questions)	34 / 7	8 / 6	33/ 12	sl	Pa	##
7.	Between 50 and 60 percent of the question 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 (IN %)	Memory	C/A		sl	Pa	##
		43 / 12	57 / 88				
	(# of Questions)	32 / 3	43 / 22		sl	Pa	##
8.	References/handouts provided do not give away answers or aid in the elimination of distractors.			sl	Pa	##	
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.			sl	Pa	##	
10.	Question psychometric quality and format meet the guidelines in ES Appendix B.			sl	Pa	##	
11.	The exam contains the required number of one-point, multiple choice items; the total is correct and agrees with value on cover sheet.			sl	Pa	##	
		Printed Name / Signature			Date		
a.	Author	Scott Poteet			6/8/2007		
b.	Facility Reviewer (*)	Rusty Quick			6/8/2007		
c.	NRC Chief Examiner (#)	GERARD W. LASCA			6/8/2007		
d.	NRC Regional Supervisor	Robert HAAG			6/11/07		
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

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		

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. 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?
7. At a minimum, explain any "U" ratings (e.g., how the Appendix B psychometric attributes are not being met).

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
1	F	2				X									U 003A4.08 Question appears to meet the K/A. Distractors C and D are subsets of A and B. So why would any one pick C or D? Need to change question so that distractors are not subsets, and are credible. One source has the standby booster pump starting at 50 psig, and two sources state 70 psig. Which is correct? Is the training material incorrect? BANK 4/23/2007 Place question in two column format, ask setpoints, with out subsets. B pump does not start. Changed the stem and format SAT 5/29/2007 .
2	H	2				X									E 004A3.05 Question appears to meet the K/A. With both 605A & B in auto, it appears that both trains are in service. This makes distractor D confusing. Need to reword this distractor. The way the question is constructed an operator that reviewed the 2006 exam could read this question and answer it just like the previous exam question and get it correct. Move the distractors around so that they do not look Identical to the old question. Modified. 4/23/2007. S Changed the stem to have RHR in manual, changed order of answers. SAT 5/09/2007

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
3	F	2				X								E	005K3.07 Question appears to meet the K/A. What is the normal level of the refueling cavity when refueling. Is 25 feet greater than the normal level. If so then distractor A is not credible. (Fundamental Level) NEW 4/23/2007 Changed level in stem and distractor A. Question appears to be SAT. Still disagree that the question is C/A. SAT 5/9/2007
4	F	1				X								U	006K2.01 Question appears to meet the K/A. Distractors C and D not credible. This is a major piece of equipment, and is powered from safety related power supplies (as listed) but all power supplies should be of the same voltage. This question could be enhanced by asking it at a higher level, and stating either an A or B train power was lost. BANK 4/23/2007. Changed the question to a two column format and added another pump RHR. SAT 5/9/2007

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
5	H	2	X											E	006A3.07 Question appears to match K/A. RCS pressure should be listed at about 350 psig. This is still above the value (250 psig) that the RHR pumps would start injecting into the RCS and the answer would be the same. Operationally speaking how did RCS pressure get to 500 psig? This high pressure makes B and D not credible. Modified 4/23/2007. Changed question as asked SAT 5/9/2007
6	H	1												U	007A4.04 Question appears to match K/A. It is very simple as written. Very Little discriminatory value. The stem has a temperature of 158°F. The distractors mention a temperature of 148°F, which one is supposed to be there? Still believe that distractors A and C are not credible. BANK 4/23/2007. Table the question and ask later. Changed distractors A and C. SAT 5/29/2007.
7	H	1				X								U	008K1.03 Question appears to match K/A. Very simple, very Little discriminatory value. Distractors C and D are not credible. Not really modified. The stem was not changed and the answer is essentially the same. BANK 4/23/2007. Change to letdown HX. SAT 5/29/2007.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
8	H	2	X											E	010A3.01 Question appears to match K/A. Same comment as 2006 ST. Lucie, the pressure in the PRT will be the based on the temperature in the PRT. Will PORV tailpipe and PRT temperature be the same? BANK 4/23/2007. Will work on question. 5/9/2007 SAT 5/29/2007.
9	H	2				X								U S	012K1.07 Appears to match K/A. Distractor A is not credible. Use the steam dumps will open and control Tave at (approx no load value, 557°F) And change distractor d to read the steam dumps will open and control tave at (No load value + 2°F, 559°F). Disctractor C is not credible. The failure of a controller does not normally render the steam dumps inoperable. This is a BANK question used in several other banks. 4/23/2007. Will change as requested wait to see change. SAT 5/9/2007

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
10	F	2				X						X		U	<p>012K2.01 Not really sure question meets K/A. The K/A is asking for the knowledge of bus power supplies to the following RPS channels, components, and interconnections. (I think this may be an interconnection and will check with another examiner. Does AC supply provide control power for any breakers in the plant? If it does not then C and D are not credible. It also appears from the drawing that you sent, the A Reactor trip breaker, and the A bypass breaker get control power from the same bus, 1HA. This would mean that the B reactor trip breaker would get power from the 1HB bus. It appears the trip signal is sent from the opposite train, and the breaker cannot be closed unless the same train reactor trip breaker is open. Need further explanation.</p> <p>BANK 4/23/2007</p> <p>Changed A to be the correct answer, per the drawing. Answered other questions.</p>
														S	<p>SAT 5/9/2007</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
11	H	2				X							X		U S 013K1.06 Does not appear to match the K/A. There was not a clear connection between the Actuation signal and the ECCS except that it actuated. (All equipment has responded to this event as designed) then a vital bus becomes de-energized. This is more of an impact of what will happen if a vital bus fails to operate. Distractors C and D are not credible, why would equipment trip after it is started? NEW 4/23/2007 Changed stem and distractors and replaced 5902 with 5904. SAT 5/9/2007
12	F	1				X									U S 013K3.03 Question appears to match K/A. No discriminating value. Distractors A and B not credible. BANK 4/23/2007 Changed stem to make A and B credible. SAT 5/9/2007
13	H	2				X	X								U 022G2.4.46 Borderline K/A Match. Both distractors A and B could be considered correct. If the B SWBP tripped both of these alarms could come in with all the valves in the correct position. This could be argued in appeal space. Distractors C and D are not credible. There are no annunciators in for this train so why would anyone pick it. NEW 4/23/2007 Continue to Work Replace 5/18/2007 SAT 5/29/2007.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		
14	F	2				X								U	026K2.02 Question appears to match K/A. Distractors A and D may not credible. What voltages are these buses rated for. If the buses are not of the same voltage as the MOVs then they are not credible. I cannot tell from the material that you sent if these buses are at the same voltage. BANK 4/23/2007 Changed power supplies and placed in two column format. SAT 5/9/2007
15	F	2										X		U	026K4.07 Not sure if question matches K/A, will get a second opinion. The question as written actually tests the interlock based on RWST level, not on sump level. Furthermore, everyone knows that this is an automatic swapover. This could be re-written for all of them to swap automatically..... NEW 4/23/2007 allow question close to K/A added A RTB failed to open to add crediblilty. Will look at column format. SAT 5/9/2007

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
16	H	2				X									U 039K4.06 Question sort of Matches K/A. Distractors A and C not credible. Need to make A and C more like B and D. i.e. coincidence included. 2 of 3 containment pressure indications reach 3.6 psig (this should also be higher actual setpoint is 6.35 psig. NEW 4/23/2007 S Changed A and C distractors, to make them more plausible. SAT 5/9/2007
17	H	1					X								U 059G2.4.50 Kind of matches K/A. May not have a correct answer as written just placing the A FRV in manual will not correct the problem. The operator has to restore level back to normal. Not much discriminatory value as written. NEW 4/23/2007 Changed all distractors SAT 5/9/2007
18	F	2													S 061K5.02 Question appears to match K/A. Very simple. SAT NEW 4/23/2007 SAT 5/9/2007

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
19	F	2												E	<p>062A1.03 Question appears to match K/A. Move the A D/G is tagged out to the second bullet. Is there any other instrumentation that could be affected. We have tested on the ESFLS on this examination and the previous. Not sure that this will be discriminatory.</p> <p>Fundamental Level question BANK 4/23/2007</p> <p>Made changes to stem LOOK at Later after exam is complete. Check Again 5/9/2007</p>
20	F	2				X								E	<p>062A3.04 Question appears to match K/A. Distractors C and D do not appear to be credible. Since Vital safeguards power is always available during a loss of one train of AC power scenario these distractors would be discounted immediately. At least one other distractor should have a battery source in it.</p> <p>This Is a Fundamental Level Question. BANK 4/24/2007</p> <p>Made changes to all distractors except A. Seems to make C and D more plausible. Check when Complete. SAT 5/9/2007</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
21	F	2				X								U	0632.4.4 This question kind of matches K/A. Not sure if all these items are credible Main feed booster pumps and pressurizer sprays do not appear to be credible. This is a fundamental level question. NEW 4/23/2007 Agree to disagree Look at later More Feed back to Licensee. 5/18/2007 Per BC allow question as is but it is memory level. SAT 05/30/2007
22	F	2				X								E	064A1.05 Question appears to match K/A. Distractor C is not credible, the fan would be running all the time in South Carolina. Use a number like 72 or 75 degrees. NEW 4/23/2007 Changed to 72 Sat. SAT 5/9/2007
23	H	2												S	064K1.01 Question appears to match K/A. BANK 4/24/2007 2005 Harris Believe that this Higher level

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		
24	F	2				X								E	073A4.01 Question appears to match K/A. Change Distractor D to read RM-L5 or RM-L9. BANK 4/24/2007 Made changes as requested. SAT 5/9/2007
25	F	2	X											E	073K1.01 Question appears to match K/A. Statement Given the following plant conditions: and listing four fans does not make sense. Do you mean to say these fans are in operation? Change stem to read Which one of the following describes the operation of XFN-30 A (B) and XFN-32 A(B) upon receipt of an alarm on RMA-1. 4/24/2007 Made changes as requested. SAT 5/9/2007

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
26	H	2	X			X									U	076K3.05 Question kind of matches K/A. The stem states that RHR train A is in service, but the responses all state that all RHR system temperatures are going up. Are two trains of RHR always in service? Would it still be prudent to perform actions of AOP-117.1 in conjunction with loss of RHR? As written very little discriminatory value. In appeal space Distractor A could be argued correct. NEW 4/24/2007 Work on later 5/9/2007 SAT 5/29/2007.
27	F	2													S	078K2.02 Question appears to match K/A. Is the supplemental air compressor the emergency air compressor? BANK 4/24/2007 SAT 5/9/2007
28	H	2	X	X			X								U	103A2.03 Question appears to match K/A. Teaching in stem (stating that these are containment Isolation valves). Although the stem also asks for the minimum action, distractor B could also be argued as correct. Suggest something like, Both phase A actuation switches must be placed in the actuate position. NEW 4/24/2007. SAT 5/9/2007

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
29	F	1												U	002K3.03 Question appears to match K/A. Very little discriminatory value. NEW 4/24/2007 S Discussed made changes SAT 5/9/2007
30	H	2												S	011K6.03 Question appears to match K/A. Lets make sure that a 30% load rejection will not lift the PORVs. NEW 4/24/2007 SAT 5/9/2007 Much discussion on PORVs all/2 or 1.
31	H	2		X	X									U	017A1.01 Question appears to match K/A. Teaching in stem list the name of PT-402 and PT-403. The applicant can determine the train. Is PT-455A located in the control room? The way the distractors are now the applicant need only figure out one of the core exit temperatures and can answer the question. Two distractors should have 557 and 560 in them. Modified 4/24/2007 SAT 5/9/2007
32	F	2												E	027K5.01 Question appears to match K/A. The figure that you provided shows the discharge of the RB Charcoal clean-up systems discharging to the RB atmosphere but the filters appear to be on the suction of the fans. NEW 4/24/2007 SAT 5/9/2007

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
33	F	2				X								U	028K6.01 Question appears to match K/A. Distractor D is not credible. Distractor B the second H2 concentration should be 6% (explosive begins at 8%, and the lesson material designates that above 6% recombiner operation could trigger a hydrogen burn. BANK 4/24/2007 2007 SEQ/Robinson/IP Made changes as requested check after the review is complete.
34	F	2												E	033K4.04 Question appears to match K/A. Will the running SFP cooling pump trip if actual level gets to 460'6"? If it will them A could be argued correct. NEW 4/24/2007 Fix distractor D. Otherwise SAT 5/9/2007
35	F	2				X								U	035K5.03 Question appears to match K/A. The question asks how to avoid operational implications not the knowledge of BANK 4/24/2007 Work on later 5/9/2007 SAT 5/29/2007.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
36	H	2				X									U 015A2.02 (Changed from 041A2.02) 401-4 needs to be fixed. Question appears to match K/A. Distractors A and C are not credible. Why would I repair channel N-35 if N-36 is the channel with the problem. Question needs repair. BANK 4/24/2007 S Made changes as requested SAT 5/9/2007
37	F	2										X			U 072K4.03 Question does not match the K/A. This question matches K4.01, containment ventilation, not plant ventilation. Need another question that deals with plant ventilation. This is the only system that uses an ARM and has an interlock, will allow the use of the question. S NEW 4/24/2007 SAT 5/9/2007
38	H	2													E 086A2.01 Question appears to match the K/A. Need to add "is" before running on distractors A and B. BANK 4/24/2007 S Made changes as requested. SAT 5/9/2007
39	F	2													E 007EK3.01 Question appears to match the K/A. All of these statements are true, only one is listed as basis. Need to ensure that these others can be not appealed as correct. BANK 4/24/2007 Replace Question 5/09/2007 Replaced question SAT 5/29/2007.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
40	H	1													U 008AK2.01 Question appears to match the K/A. Distractor B is not credible. This question was used on the Harris, Robinson, and also on the Last Summer Retake. No discriminating value BANK 4/24/2007 Will look in changing question. 5/09/2007 SAT 5/29/2007.
41	H	2	X	X		X					X				U 009EK1.02 Question appears to match K/A. This is a backwards logic question. Need to ask it in a more forward way. Normally one just verifies that subcooling is sat prior to securing the charging pumps. Why was a value of 1300 psia chosen, it is not in the stem of the question at all. If the applicant chose 1335 and subtracted 15 psi they still would not arrive at these numbers. Also having the minimum subcooling in the stem is teaching. The values on this question also are the same as the values on question RO 31. NEW 4/24/2007 Replace Question 5/09/2007 Reworked question SAT 5/29/2007.
42	H	1				X									U 011EK2.02 Question appears to match K/A. No discriminatory value. This question is also on another exam. BANK 4/24/2007 Replace Question 5/09/2007 Replcaced SAT 5/29/2007.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
43	H	1												U	015AK2.08 Question appears to match the K/A. It was modified from the 2006 retake, the item that was changed was the part of the pump that is overheating. Not sure that the question will have discriminatory value. MOD 4/24/2007. Changed to 8 % Modified SAT 5/10/2007
44	H	1	X			X								U	022AK1.02 Question appears to match the K/A. Distractors C and D are not credible. What is normal charging flow. With 122 fully open and charging flow only 80 gpm why would anyone choose C and D, you already stated in the stem that flow is going down. NEW 2/24/2007 Work on two distractors. Removed stuff out of stem. SAT 5/10/2007 Licensee still did not like question. Replaced Question SAT 5/29/2007.
45	L	2												E	027AK3.01 Question appears to match the K/A. Distractors A, C and D have some wording issues. In C you mention loss of pressure in the pressurizer... in D you just mention the pressure reduction, and in A you mention RCS pressure. While it is true that all pressures are being affected, this should be mentioned the same way each time. BANK 4/24/2007 Changed the question Replaced Question SAT 5/10/2007

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
46	H	1												U	029EK2.06 Question appears to match K/A. This question was also on the 2006 Retake, although it was asked in a slightly different format. (K/A 007EK2.02) It has little discriminatory value. BANK 4/24/2007 Refer to Boss SAT 5/10/2007 Per the Boss this is a repeat question and should be replaced. 05/30/2007 New K/A. EK3.09 Replaced Question. SAT 6/7/2007
47	H	2				X								E S	038G2.2.22 Question appears to match K/A. Is there a limit for total S/G leakage, if there is D could use that number and D would be a better distractor. Some of the documentation included with this question involved natural circulation conditions, I don't know why it was included? BANK 4/24/2007 Discussed limits Question SAT SAT 5/10/2007
48	H	2												S	054AK1.01 Question appears to match K/A. BANK 4/24/2007 Songs 2006 otherwise sat SAT 5/10/2007
49	F	2				X								U S	055EA1.07 Question appears to match K/A. Distractors C and D are not credible. If the plant did not have an SI, why would the SI signal need to be reset. NEW 4/24/2007 S Changed distractors C and D SAT Question SAT 5/10/2007

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
50	F	1				X								U	056AA2.50 Question appears to match the K/A. No discriminatory value. Distractor C is asking if the voltage is low, and voltage is above the 6.9KV rating of the machine. NEW 4/24/2007 Worked on this Question SAT 5/10/2007
51	H	2												E	057AA2.19 Question appears to match K/A. Why do you have to tell the applicant that a loss of APN-5902 has occurred? Just tell them Inverter XIT 5902 output breaker trips open. BANK 4/24/2007. SAT Question SAT 5/10/2007
52	H	1+												E	058AA2.02 Question appears to match K/A. How different would the indications be if this were B train? This is another bank question and with the high number of questions with discriminatory value issues it would be nice to see a different train than those listed in the bank. BANK 4/24/2007. Made changes to B train and changed several distractors Question SAT SAT 5/10/2007
53	F	2				X								U S	065AK3.04 Question appears to match K/A. Distractors C and D are not credible. This valve does not close. If you used a valve that did isolate, and used these numeric values then they would be acceptable. Modified 4/25/2007 On Summer 2005 Changed distractors C and D. SAT Question SAT 5/10/2007

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
54	F	1				X								U	WE04 EK1.2 Question appears to match K/A. Distractors B and D are not credible. BANK 4/25/2007. Replace or fix Question SAT 5/10/2007 Reworked question SAT 5/29/2007.
55	F	1				X								U	WE11EK1.1 Question appears to match K/A. The only distractor that has "taking a suction from the RWST" is the correct answer, it is also the only distractor that states verbatim what the procedure step states, so why would anyone pick one of the other distractors. Distractors A, B, C are not credible. This is a fundamental level question. BANK 4/25/2007. Continue to work SAT 5/10/2007 Licensee made Format changes SAT 5/29/2007.
56	F					X	X							U	WE12G2.2.25 Question sort of matches K/A. Distractors C and D not credible. If B is correct then A is also correct. This is simply the basis of the RCS cooldown T/S, and applies for any cooldown event. This question is written at the Fundamental level. NEW 4/25/2007. Continue to work SAT 5/10/2007

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only			
57	F	1					X						X		U	001AA2.04 Kind of matches K/A. This is a backwards way of meeting it. The K/A ask for the ability to determine and interpret the following as they apply to the Continuous rod withdrawal: Reactor power and its trend. You are asking what will happen to other parameters that change as a result of the temperature rise, but nothing is mentioned about reactor power. If Imp. Loops are in then B would also remain the same. At what point in core life is this happening? You are assuming in the stem that the unit is online but it is not mentioned. An applicant could assume that this occurred during a startup. This question is also written at the Fundamental level. NEW 4/25/2007. Made changes SAT 5/10/2007
58	H	2		X			X								U	028AK3.03 Question appears to match K/A. C and D could be argued as correct answers. This question is also very similar to Question 40. Parts of this question will help answer it and parts of it will help answer this one. BANK 4/25/2007. Will replace this Question Continue to work 5/10/2007 Check after word chopping. 5/29/2007. SAT 6/7/2007

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
59	F	2					X								U	036AA1.04 Question kind of matches K/A. AOP123.3 does not direct the placing of the fuel assembly. How would any of the others be considered wrong in this case? BANK 4/25/2007. Replace Question Look at new K/A.Continue to work 5/10/2007 Replaced K/A 036AK3.02 Question SAT 5/29/2007.
60	F	2					X								U	051AK3.01 Question appears to match K/A. Distractors A and B are not plausible. Why would C-9 or C-16 arm the atmospheric dumps and <u>Relief Valves</u> ? BANK 4/25/2007. Made changes as requested SAT 5/10/2007
61	H	2					X								E	WE03G2.1.33 Question appears to match K/A. Why does the stem state "First Exceeded" this would imply that distractor D is not credible. I think that 0900-1000 is the only time that the T/S limit was exceeded. There should also be a time after 1000 for psychometric reasons. BANK 4/25/2007. SEQ Discuss Enhancements 5/18/2007 SAT 5/29/2007.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
62	F	2				X	X							E	WE06EK2.2 Kind of matches K/A. Do not agree with the reason that C is incorrect, if the RCS becomes pressurized enough for LPSI , and the temperature of the RCS cold legs is less than195°F you would still go to P.1 after completion of this procedure. BANK 4/25/2007. North Anna SAT 5/29/2007.
63	H	2		X		X								U	WE08EA2.1 Question appears to match K/A. Distractors C and D are not credible, RB Flooding is a yellow path, there is not a red path on containment for flooding. The critical safety functions are listed in order of priority this is a cue to the applicants. BANK 4/25/2007. Changed question to orange and red paths SAT 5/10/2007
64	H	2										X		U	WE10G2.1.23 Question really does not match the K/A. The procedure entered is for a natural Circulation cooldown. The stem states that RVLIS is not available. It appears that V C Summer does not have a natural circulation cooldown with out RVLIS procedure. There should be something in this procedure that deals with a loss of RVLIS and this is what the question should directed towards. BANK 4/25/2007. Changed several conditions in stem and distractors. SAT 5/10/2007 Changed question again SAT 5/29/2007.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only			
65	F	2				X									U	WE16EA1.3 Question appears to match K/A. Distractors C and D are not credible. There is no way that RB purge would be placed in service with high radiation in the RB. BANK 4/25/2007. Changed stem and distractor C and D. SAT 5/10/2007
66	H	2													E	G2.1.7 Question appears to match the K/A. Distractors C and D are too wordy. C should read: An RPS setpoint has not been exceeded; Trip the Reactor, perform the immediate actions of EOP1.0, then initiate a safety Injection. D should read: An RPS setpoint has not been exceeded; Trip the Reactor, perform the immediate actions of EOP1.0, continue to implement AOP concurrently, initiate SI when Pressurizer level is less than 12%. BANK 4/25/2007. Check on final exam 5/18/2007
67	F	2													S	G2.1.17 Question appears to match K/A. Why do you have examples for A,B, and C? We will discuss these. NEW 4/25/2007.
68	F	2													S	G2.1.27 Question appears to match K/A. BANK 4/25/2007.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
69	F	2												S	G2.2.24 Question appears to match K/A. BANK 4/25/2007.
70	F	2				X	X							U	G2.2.28 RO 70 must have changed. The question submitted appears to match the K/A. I have material included that covers NIs, and some material that discusses limit switches and interlocks. The question included is on source range nuclear instruments. The correct answer states that 2 must be operable in the control room (visual) but the procedure reference REP-107.002 states that: Two source range channels are operable and in service with visual indication in the control room and with audible indication in the control room and reactor building. By this procedure D would be the correct answer. BANK 4/25/2007. Licensee stated that this should be the same as technical specifications. SAT 5/10/2007
71	F	2					X							U	G2.3.4 Question appears to match the K/A. The correct answer does not agree with the material provided. It states that >25 rem can be received to save a life. Therefore there is not a correct answer. BANK 4/25/2007. Replace Question 5/10/2007 Reworked to modify question. SAT 5/29/2007.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
72	F	2				X								U	G2.3.1 Question appears to match the K/A. Distractors C and D are not credible. Some of the distractors should be less than the correct answers. One answer should be similar to the HPP-153 section 4.7. BANK 4/25/2007. Changed distractor D.SAT 5/10/2007
73	F	2				X								E	G2.4.9 Question appears to match the K/A. I understand that D is the second action IAW the procedure, but it is assuming that the flow reduction has already occurred. Therefore, D is not really credible. BANK 4/25/2007. Check on final exam 5/18/2007
74	F	2				X								E S	G2.4.29 Question appears to match the K/A. Can the emergency director and the SS be the same person? BANK 4/25/2007. Leave as is SAT 5/10/2007
75	F	2												S	G2.4.13 Question kind of matches the K/A. BANK 4/25/2007.

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutias	#/units	Backward	Q=K/A	SRO Only			
1/76	H	2				X									U	<p>022AA2.02 Question appears to match K/A. Steps in distractors do not match the steps in the procedure. If the applicant went to 101.1, the procedure directs the applicant to quantify the leak and then attempt to isolate. Distractor B has the operator restore charging flow, but in the procedure it is only after performing a valve lineup. As written these distractors are not credible.</p> <p>Answer options consist of three parts diagnosis, procedure, and action. The diagnosis and procedure elements are paired together in each case, so the diagnosis is not unique. Consider the following:</p> <p>A. Go to AOP 1.01 Stop the operating charging pump and Isolate letdown.</p> <p>B. Go to AOP 1.01 Open FCV 122 as necessary and reduce letdown to 45 gpm.</p> <p>C. Go to AOP 102.02 Stop the operating charging pump and Isolate letdown.</p> <p>D. Go to AOP 102.02 Reduce letdown to 45 gpm and verify the charging system valve lineup.</p> <p>BANK 4/25/2007 Made Changes as requested. SAT 5/10/2007</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
2/77	H	1	X			X							X	U	029EA2.07 Question kind of matches K/A. Not SRO knowledge, this is almost the same question that was appealed on the Retake exam. What was reactor power to begin with, how did it get to 8%? From the indications that you give unless a loss of electrical power has occurred rods are still up. Are these indications operationally valid? Question is very simple. BANK 4/25/2007 Discuss with Boss 5/10/2007 Not SRO Only, will attempt to write a new question on breakers after entry into S.1. Also pick a backup K/A. EA2.09 selected as backup
3/78	H	2				X								E	038 G2.4.31 Question appears to match K/A. Answer options consist of three parts, two actions and a procedure selection. The two elements in each action statement are not unique. For example if an applicant knows CPs are removed from service, then no knowledge of SG B/D is required. Consider using only one action. NEW 4/25/2007 Check on final exam 5/18/2007 SAT 5/29/2007

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A		
4/79	H	2	X										U	<p>040G2.4.50 Kind of matches the K/A. The only alarm setpoint to verify is the rod stop. Why is there such a large disparity between N-44 and the rest of the power indications? Was a calculation performed that to confirm that 3% reactor power was equivalent to a 9°F decrease in Tave? Distractors A and B are not credible. Tave is lower than Tref. Inadvertent dilution would raise Tave. XCP-620-5-1 (Urgent Failure) can only be caused by a rod control failure. C could also be correct if someone thought the leak was large enough. Same Question on another exam.</p> <p>BANK 4/26/2007 On Sequoyah Exam Continue to work on 5/10/2007 fixed 5/30/2007</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A			SRO Only
5/80	H	1	X			X							X	U	<p>055EA2.02 Question appears to match K/A. Does not appear to be SRO only. Verifying Natural circulation is an RO task, and knowing the indications of a loss of all AC is also an RO task. Other items: If a loss of all AC is in progress, RCS pressure usually goes down due to seal leakage. (I know that natural circ is not in progress, but the leakage is based on pressure and will continue. I think that 20 minutes into a loss of all AC RCS pressure will not be near this high. Distractors B and D state that heat removal is being maintained...verify that Natural Circulation exists IAW... These do not appear to be credible. With system knowledge an RO could answer this question with out any procedure knowledge.</p> <p>BANK 4/26/2007 Work on this Continue to work on 5/10/2007 Made changes to question Modified. SAT 5/30/2007</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
6/81	H	2	X			X							X	U	<p>056G2.4.6 Question appears to match K/A. It is not SRO only knowledge. Distractors C and D are not credible. With the statement ESF equipment responds as designed means that everything that was supposed to start and run did start and is running. So how can this be considered to be a loss of all AC. With CST at 14 feet, can the plant cooldown IAW EOP 1.3. There is a 29 hours soak in EOP-1.3, can this be maintained? Place the assumption of power being unavailable for > 4 hours as a bullet in the stem.</p> <p>NEW 4/26/2007 Agreed to let it be a SRO question Will work on distractors C and D. C complete still working on D Continue to work on 5/10/2007 SAT 5/30/2007</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
7/82	H	2												X	U	<p>001AA2.05 Question Kind of matches K/A. This is not SRO knowledge. This is RO Knowledge, typically this is IOA of a uncontrolled rod withdrawal and appears to be one in AOP-403.3.</p> <p>PT-447 decreasing indicates a First stage pressure transmitter failure (although it is going the wrong way for the above indications) I believe that this is an attempt to make distractors C and D credible.</p> <p>C and D are not credible with two actions in the distractor when the stem asks for the next (one) action.</p> <p>NEW 4/26/2007 Continue to work on 5/10/2007</p> <p>Select new K/A. Look at B and D negative delta I Okay SAT 5/30/2007</p>
8/83	H	2				X									U	<p>E07EA2.2 Question appears to match K/A. Distractor A and C are not credible. Distractor D is much too wordy, why would some one not choose this answer it is so broad that it can't be wrong. Distractor C is not credible, you never have to transition to a yellow path. What does it mean to address a procedure? Not in OAP-103.4 provided.</p> <p>Question is also on another exam. And is listed as new on this test? NEW 4/26/2007 S Reworked SAT 5/10/2007</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutias	#/units	Backward	Q=K/A	SRO Only		
9/84	H	1											X	U	<p>EO8G2.2.22 Question appears to match K/A. Does not appear to be SRO only knowledge. TS limit on pressure, may be exceeded, which limit? The only TS limit that applies with these conditions is 2735 psig. There are limits in the CSFs but these on not TS limits. What actions does EOP-16.0 have to limit pressure that other procedures don't. These distractors are not credible. No discriminating value.</p> <p>NEW 4/26/2007 Rewrite question using figure in EOP-16.0 Continue to work on 5/10/2007 Table to work on later 5/30/2007 Marked out numbers on curve. Reference allowed. 6/7/2007</p>
10/85	H	2	X											U	<p>E15G2.1.14 Question kind of matches K/A. How much RB spray flow will be established if all ESF equipment operated as designed? If it is greater than 2500 gpm, then raise the RB pressure to 12.5 psig and stable. The question asks for three items and only four choices are available. Insufficient counterbalance as in each case, the procedure, whether incorrect or correct, is paired with it's associated strategy. The applicant need only know the procedure or the strategy, not both. If the strategy, including notification is not necessary knowledge, then the question does not meet the K/A.</p> <p>BANK 4/26/2007 Changed question SAT 5/10/2007</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
11/86	H	1												X	U	004A2.15 Question appears to match the K/A. Not SRO only the action on the correct answer is an immediate operator action from AOP401.6 this is RO knowledge. Not very discriminating. Also each action contained in a distractor is unique, this would allow the applicant to pick the correct answer based on the action that needed to be performed and not know the procedure. BANK 4/26/2007 Look at adding a T/S call with this. Continue to work on 5/10/2007 Worked on distractors with T/S slant continue to work. Reworked. SAT 5/30/2007
12/87	H	2				X									U	010A2.02 Question appears to match the K/A. Distractors A and B are not credible. AOP-401.5 has no actions that deal with a stuck open spray valve. So why would anyone choose them? NEW 4/26/2007 Rewrote Question Check on final exam 5/18/2007
13/88	H	1													U	022G2.4.30 Question appears to match K/A. This is a direct look up with the reference. Suggest using 1 hour, 4 hour, 8 hour, and 24 hour reporting times and not using the reference. This has a LOD of 1 with the reference, and the applicant not having to make a TS call. NEW 4/26/2007 Leave as is no reference SAT 5/10/2007

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
14/89	H	1				X							X	X	U	<p>013A2.05 Does not appear to match the K/A. What part of the ESFAS failed to work. It does not appear that the plant entered a condition that called for an ESF actuation signal, unless you are saying that the load shed is an ESFAS. I don't see this in the supporting information that you have given. The Question can also be answered using systems knowledge, with out DC power there is no way to open the breakers from the MCB (may not have indication either) without tripping power breakers would remain shut. Therefore B is the only answer that is correct, and I have not even mentioned a TS time.</p> <p>BANK 4/26/2007 Changed question removed one of the items that we were asking for. SAT 5/10/2007</p>
15/90	H	1				X							X		U	<p>076G2.4.6 Question kind of matches K/A. The K/A asks for EOP actions, but with some systems this leaves very limited options, so AOP actions are allowed. This question goes all the way down to the SOP level. If C SW pump does not have auto start capabilities then distractor A is not credible. Distractor B states to trip all RCPs, This is not credible without tripping the reactor first, so B is not credible. Not discriminating as written.</p> <p>BANK 4/26/2007 Continue to work on 5/10/2007 Auto start feature.</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
16/91	H	2				X	X								U	001G2.1.23 Question kind of matches K/A. Distractor A does not make sense, the distractor states only the AOP applies, and then gives TS actions. Distractor C is also correct, while the TS does apply, these actions of AOP-403.5 would bring the rod back withing TS, and operation could continue. This could be argued as correct. With all the information in D the applicant would probably pick it. Should not have distractors that state IF. NEW 4/26/2007 Work on question with a T/S slant. SAT 5/30/2007
17/92	F	2	X			X									E	029G2.1.32 Question appears to match K/A. Stem is difficult to understand. Try: Unit Shutdown Equipment Hatch open Which One (1) of the following describes the proper alignment for RB purge fans and the radiation monitor requirements IAW SOP 114? If core alts were in progress then 2 supply and 2 exhaust fans would be running this should be a distractor. NEW 4/26/2007 Check on final exam 5/18/2007 SAT 5/30/2007
18/93	H	2			X										S	086A2.03 Question appears to match K/A. Not much discriminatory value. NEW 4/26/2007

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
19/94	H	1													U	G2.1.11 Question appears to match K/A. This topic was used on the last Summer Retake Exam. There are many 1 hour T/S to choose from. How did this question get randomly selected? I know that it somewhat modified but with it being on the last exam I don't think that is has any discriminatory value. Modified 4/26/2007 2006 Retake Rewrote Question SAT Changed distractors B and D to make more wrong. 6/7/2007.
20/95	F	1				X									U	G2.1.6 Question appears to match K/A. The only distractor that allows immediate action to be taken is the A, the correct answer. All others require either notification or concurrence. This makes all other distractor non-plausible. With no credible distractors this question has no discriminatory value. BANK 4/26/2007 Rewrote Question SAT 5/14/2007.
21/96	H	2				X									U	G2.2.21 Question appears to match K/A. Distractors B and D do not appear to be credible. BANK 4/26/2007 Still Needs Work. 5/14/2007. Changed distractors SAT 5/30/2007

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
22/97	F	1												X	U	G2.2.25 Question appears to match K/A. Not SRO only, this is RO knowledge. BANK 4/26/2007 Not SRO only question Rewrite Question. New Guidance. 5/14/2007. Talk to boss 5/18/2007 RO Knowledge. Replace. SAT 5/30/2007 Changed C and D to 60 minutes. SAT 6/7/07
23/98	F	1												X	U	G2.3.2 Question appears to match K/A. Not SRO only, this is Radiation worker knowledge. All workers are taught what requires a PJB, Alara Review and RWP/SWP review prior to entering the rad side. NEW 4/26/2007 Made changes as required still look at B distractor otherwise SAT 5/14/2007.
24/99	H	1													U	G2.4.22 Question appears to match K/A. This question was used on the last Summer NRC exam and will have little discriminatory value. There are many other bank questions that would apply to this K/A. BANK 4/26/2007 Talk to boss, let him decide the fate of the question.5/14/2007. Boss decided for question to remain on test. SAT 5/30/2007

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
25/100	H	1											X	U	<p>2.4.11 Question appears to match K/A. It is not SRO only, Reactor Operators are required to know the symptoms and entry conditions for procedures.</p> <p>BANK 4/20/2007</p> <p>Ask the boss and HQ. 5/14/2007.</p> <p>RO knowledge. Replace with mitigating strategies. 5/30/2007</p>

Facility: <u>Summer</u>		Date of Exam: <u>6-13-2007</u>		Exam Level: RO <input checked="" type="checkbox"/> SRO <input checked="" type="checkbox"/>	
Item Description	Initials				
	a	b	c		
1. Clean answer sheets copied before grading	sl	Z	sl		
2. Answer key changes and question deletions justified and documented	sl	Z	N/A		
3. Applicants' scores checked for addition errors (reviewers spot check > 25% of examinations)	sl	Z	sl		
4. Grading for all borderline cases (80 ±2% overall and 70 or 80, as applicable, ±4% on the SRO-only) reviewed in detail	sl	Z	sl		
5. All other failing examinations checked to ensure that grades are justified	N/A	N/A	N/A		
6. Performance on missed questions checked for training deficiencies and wording problems; evaluate validity of questions missed by half or more of the applicants	sl	Z	sl		
Printed Name/Signature		Date			
a. Grader	<u>Gregory S. Poteet</u> <i>Gregory S Poteet</i>	<u>6-13-07</u>			
b. Facility Reviewer(*)	<u>William R. Quick</u> <i>William R Quick</i>	<u>6-14-07</u>			
c. NRC Chief Examiner (*)	<u>GERARD V. LASCA</u> <i>Gerard V. Lasca</i>	<u>7/16/07</u>			
d. NRC Supervisor (*)	<u>Robert HAAG</u> <i>Robert Haag</i>	<u>7/24/07</u>			
(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.					

SEATING CHART FOR
VCSNS 2007 NRC EXAM (06/13/07)

BACK OF ROOM

	Ervin		Steed
--	-------	--	-------

Duhaimé		Crawford	
---------	--	----------	--

	Mathias		Todd
--	---------	--	------

Bruner

PROCTOR	PROCTOR
---------	---------

FRONT OF ROOM

Student Questions and Answers

12

20

22

37

52

8

132

12

20

63

16

23

Question #	Candidate	Question	Response	Initials
		Exam started		
81	Ervin	A DG repaired Does not include IHA.	You have enough info to answer the Q	SP
41	Bruner	CAN I assume all appropriate actions taken on 1st bullet	YES	SP
3	Ervin	Value #1's for A	XVD 8329-CS and XVD 8331-CS (posted answer on board) response	
14	Duhaine	FORU → PRT But PRT Press, Temp	CANDIDATE Decided had enough info.	SP
63	Bruner	CAN you tell me how far they got in EOP-2.2	You have enough information to answer the question	SP
27	Steed	Don't we have a value missing in 'B'	Withdraw Q after reading	SP
28	Ervin	Does unwarranted mem not valid or not desired	"D" Not desired (posted response on board)	SP
24	steed	Do we have AN SI or NOT	You have enough information to answer the question	SP
36	Ervin	Initial response or after msiv's close	You have enough information to answer the question	SP
62	Duhaine	Based on Subsequently restored, DED Power Come Back	You have enough information to answer the question	

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Gary D. Moffatt
Manager, Nuclear Training
803.345.4031



April 14, 2007

Mr. Robert C. Haag, Chief
Operator Licensing Branch
Division of Reactor Safety
U. S. Nuclear Regulatory Commission, Region II
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW, Suite 23T85
Atlanta, GA 30303-8931

Dear Mr. Haag

Subject: VIRGIL C. SUMMER NUCLEAR STATION
DOCKET NO. 50-395
OPERATING LICENSE NO. NPF-12
REACTOR AND SENIOR REACTOR OPERATOR INITIAL EXAMINATIONS

Reference Robert C. Haag, NRC, letter to Jeffery B. Archie, February 14, 2007
"Reactor and Senior Reactor Operator Initial Examinations – Virgil C. Summer Nuclear Station"

Pursuant to your letter to Mr. Jeffery B. Archie dated February 14, 2007, and the guidelines of NUREG-1021, SCE&G hereby submits the reactor operator and senior operator operational and written examinations which are scheduled to begin on June 4, 2007. In addition to the exams, please find enclosed completed Forms ES-201-2, ES-201-3, ES-301-1, ES-301-2, ES-301-3, ES-301-4, ES-301-5, ES-301-6, ES-401-2, ES401-3, ES-401-4, and ES-401-6, ES-D-1, ES-D-2; as well as supporting reference materials for the exams.

In accordance with NUREG-1021, this material must be withheld from public disclosure until after the examinations are complete.

Should you have any questions, please call Mr. William R. Quick at (803) 931-5091. We are available at your convenience to discuss questions and/or comments that you may have on this submittal.

Very Truly yours,

A handwritten signature in black ink that reads "Gary D. Moffatt". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Gary D. Moffatt

ARK/GDM/dr
Enclosures

c: (Without Enclosures)
Mr. K. B. Marsh
Mr. S. A. Byrne
Mr. J. B. Archie
Mr. N. S. Carnes
Mr. J. H. Hamilton
Mr. R. J. White
Dr. W. D. Travers

Mr. R. E. Martin
Mr. G. D. Moffatt
Document Control Clerk
NRC Resident Inspector
NRSC
RTS (CR-07-00700)
File (815.01)
DMS (RC-07-0058)

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Gary D. Moffatt
Manager, Nuclear Training
803.345.4031

March 23, 2007

Mr. Robert C. Haag, Chief
Operations Branch, Division of Reactor Safety
U. S. Nuclear Regulatory Commission
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW, Suite 23T85
Atlanta, GA 30303-8931

Dear Mr. Haag:

Subject: VIRGIL C. SUMMER NUCLEAR STATION
DOCKET NO. 50/395
OPERATING LICENSE NO. NPF-12
REACTOR AND SENIOR REACTOR OPERATOR
INITIAL EXAMINATION OUTLINES

Reference: Mr. Robert C. Haag, NRC, Letter to Mr. Jeffrey B. Archie, SCE&G,
dated February 14, 2007, "Reactor and Senior Reactor Operator
Initial Examinations"

Based on the guidelines in NUREG-1021, "Operator Licensing Examination Standards for Power Reactors", Revision 9, in particular ES-201, "Initial Operator Licensing Examination Process", South Carolina Electric & Gas Company (SCE&G) has enclosed the following information for your consideration.

- Enclosure 1 - examination outline for the written exam
- Enclosure 2 - examination outline for the operational exam
- Enclosure 3 - NRC Examination Schedule, ES-201-2, and Random Sampling Methodology

The outlines have been independently reviewed by Mr. William R. Quick, Supervisor, Nuclear Training, and approved by me.

In accordance with NUREG-1021, this material must be withheld from public disclosure until after the examinations are complete.

Should there be any questions, please contact Mr. Quick at (803) 931-5091.

Very truly yours,

Gary D. Moffatt

DWR/GDM/dr
Enclosures

c: (Without Enclosure unless noted)
G. W. Laska (NRC e-mail notification) CER (C-07-0700)
A. R. Koon (w/Enclosures) File (814.04)
NRC Resident Inspector PRS (RC-07-0044)

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MAR 27 2007