ADMINISTRATIVE DOCUMENTS

(Yellow Paper)

1. Exam Preparation Checklist ES-201-1
2. Exam Outline Quality Checklist ES-201-2
3. Exam Security Agreement(s) ES-201-3
4. Administrative Topics Outline (Final) see blue "Final Outlines" ES-301-1
5. Control Room Systems & Facility Walk-through Test Outline (Final) see blue "Final Outlines" 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 None
12. Written Exam Grading Quality Checklist ES-403-1
13. Post-Exam Check Sheet ES-501-1
14. Facility Submittal Letter 08-0217 DTD 4-11-08 [ ]

SURRY 2008-301

Facility: Surry Date of Examination: 3/17/08

Examinations Developed by: Facility: Operating Test NRC: Written

Target Date*	Task Description (Reference)	Chief Examiner's Initials
-180	1. Examination administration date confirmed (C.1.a; C.2.a and b)	/FJE
-120	2. NRC examiners and facility contact assigned (C.1.d; C.2.e)	/FJE
-120	3. Facility contact briefed on security and other requirements (C.2.c)	/FJE
-120	4. Corporate notification letter sent (C.2.d)	/FJE
[-90]	[5. Reference material due (C.1.e; C.3.c; Attachment 2)]	/FJE
{-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)	/FJE
{-70}	{7. Examination outline(s) reviewed by NRC and feedback provided to facility licensee (C.2.h; C.3.e)}	/FJE
{-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)	/FJE
-30	9. Preliminary license applications (NRC Form 398's) due (C.1.l; C.2.g; ES-202)	/FJE
-14	10. Final license applications due and Form ES-201-4 prepared (C.1.l; C.2.i; ES-202)	/FJE
-14	11. Examination approved by NRC supervisor for facility licensee review (C.2.h; C.3.f)	/FJE
-14	12. Examinations reviewed with facility licensee (C.1.j; C.2.f and h; C.3.g)	/FJE
-7	13. Written examinations and operating tests approved by NRC supervisor (C.2.i; C.3.h)	/FJE
-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)	/FJE
-7	15. Proctoring/written exam administration guidelines reviewed with facility licensee (C.3.k)	/FJE
-7	16. Approved scenarios, job performance measures, and questions distributed to NRC examiners (C.3.i)	/FJE

* Target dates are generally based on facility-prepared examinations and are keyed to the examination date identified in the corporate notification letter. They are for planning purposes and may be adjusted on a case-by-case basis in coordination with the facility licensee.
[Applies only] {Does not apply} to examinations prepared by the NRC.

WRITTEN ONLY

Facility: SURRY Date of Examination:

Item	Task Description	Initials a	Initials b*	Initials c#
1. WRITTEN	a. Verify that the outline(s) fit(s) the appropriate model, in accordance with ES-401.		N/A	
	b. Assess whether the outline was systematically and randomly prepared in accordance with Section D.1 of ES-401 and whether all K/A categories are appropriately sampled.			
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.			
	d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.			
2. 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.			
	b. Assess whether there are enough scenario sets (and spares) to test the projected number and mix of applicants in accordance with the expected crew composition and rotation schedule without compromising exam integrity, and ensure that each applicant can be tested using at least one new or significantly modified scenario, that no scenarios are duplicated from the applicants' audit test(s), and that scenarios will not be repeated on subsequent days.			
	c. To the extent possible, assess whether the outline(s) conform(s) with the qualitative and quantitative criteria specified on Form ES-301-4 and described in Appendix D.			
3. W/T	a. Verify that the systems walk-through outline meets the criteria specified on Form ES-301-2: (1) the outline(s) contain(s) the required number of control room and in-plant tasks distributed among the safety functions as specified on the form (2) task repetition from the last two NRC examinations is within the limits specified on the form (3) no tasks are duplicated from the applicants' audit test(s) (4) the number of new or modified tasks meets or exceeds the minimums specified on the form (5) the number of alternate path, low-power, emergency, and RCA tasks meet the criteria on the form.			
	b. Verify that the administrative outline meets the criteria specified on Form ES-301-1: (1) the tasks are distributed among the topics as specified on the form (2) at least one task is new or significantly modified (3) no more than one task is repeated from the last two NRC licensing examinations			
	c. Determine if there are enough different outlines to test the projected number and mix of applicants and ensure that no items are duplicated on subsequent days.			
4. GENERAL	a. Assess whether plant-specific priorities (including PRA and IPE insights) are covered in the appropriate exam sections.			
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.			
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.			
	d. Check for duplication and overlap among exam sections.			
	e. Check the entire exam for balance of coverage.			
	f. Assess whether the exam fits the appropriate job level (RO or SRO).		N/A	

	Printed Name/Signature	Date
a. Author	Craig Bonte	04/2/08
b. Facility Reviewer (*)	N/A - NRC DEVELOPED	
c. NRC Chief Examiner (#)	Frank J. Ehrhardt	4/2/08
d. NRC Supervisor	MARGARET WIDMAYER	04/03/08

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

Facility: SURRY POWER STATION Date of Examination: 3/17/2008

Item	Task Description	Initials a	Initials b*	Initials c#
1. WRITTEN	a. Verify that the outline(s) fit(s) the appropriate model, in accordance with ES-401.	(1)	(1)	(1)
	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.	(1)	(1)	(1)
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	(1)	(1)	(1)
	d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.	(1)	(1)	(1)
2. 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.	M	DW	F/E
	b. Assess whether there are enough scenario sets (and spares) to test the projected number and mix of applicants in accordance with the expected crew composition and rotation schedule without compromising exam integrity, and ensure that each applicant can be tested using at least one new or significantly modified scenario, that no scenarios are duplicated from the applicants' audit test(s), and that scenarios will not be repeated on subsequent days.	M	DW	F/E
	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.	M	DW	F/E
3. W/T	a. Verify that the systems walk-through outline meets the criteria specified on Form ES-301-2: (1) the outline(s) contain(s) the required number of control room and in-plant tasks distributed among the safety functions as specified on the form (2) task repetition from the last two NRC examinations is within the limits specified on the form (3) no tasks are duplicated from the applicants' audit test(s) (4) the number of new or modified tasks meets or exceeds the minimums specified on the form (5) the number of alternate path, low-power, emergency, and RCA tasks meet the criteria on the form.	M	DW	F/E
	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	M	DW	F/E
	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.	M	DW	F/E
4. GENERAL	a. Assess whether plant-specific priorities (including PRA and IPE insights) are covered in the appropriate exam sections.	M(2)	DW(2)	F/E
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.	M(2)	DW (2)	F/E
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	M(2)	DW (2)	F/E
	d. Check for duplication and overlap among exam sections.	M(2)	DW (2)	F/E
	e. Check the entire exam for balance of coverage.	M(2)	DW(2)	F/E
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	M(2)	DW(2)	F/E

	Printed Name/Signature	Date
a. Author	WILLIAM W. MARSHALL / [signature]	3/5/08
b. Facility Reviewer (*)	DAVID H WILSON / [signature]	3/05/08
c. NRC Chief Examiner (#)	Frank J. Ehrhardt / [signature]	3/12/08
d. NRC Supervisor	MALCOLM T. WIDMANN / [signature]	03/12/08

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

(1) WRITTEN Exam generated by NRC.

(2) Review of WRITTEN EXAM is on-going

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 3/17 → 4/2 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 3/17-4/2/08. From the date that I entered into this security agreement until the completion of examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations, except as specifically noted below and authorized by the NRC.

	PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE NOTE
1.	WILLIAM W. MARSHALL	SENIOR INST-NUC OPS/LEAD LC INSTRUCTOR	WWMarshall	12/27/07	WWMarshall	4/10/08
2.	Ronald A. Ewald	Nuclear Unit Supervisor / ONSHIFT SRO		2/15/08		4-29-08
3.	Ryan C. Phillips	Reactor Operator / ONSHIFT RO		2/21/08		4-29-08
4.	JOHN HEIDT	RO / ONSHIFT RO		2/22/08		4/26/8
5.	William J. Parker	Nuclear Shift Manager / onshift SRO	W.J.P.	2/22/08	W.J.P.	4/22/08
6.	Walter J. Ford	Senior Inst - Nuc Ops / LC instructor		02/26/08		4/10/08
7.	L.A. Baker	Supv Nuclear Shift Oper.		3/5/8		4/10/8
8.	Tim Green	Unit Supervisor		3/14/8		4/16/8
9.	Brian Dohmeier	Reactor Operator / E shift	Brian J Dohmeier	3/14/08	Brian J Dohmeier	4/16/08
10.	Jessie Soto	Reactor Operator / D shift		3/14/08		4/16/08
11.	F.K. Grover	Ops Manager /		3/14/08		4/10/08
12.	Paul K Greisen	Initial STA - Head Ops/Instructor		3/17/08		4/11/08
13.	Kevin J. Labat	Sr. Instructor - Nuc Ops / ILO Instr		3/17/08		4/16/08
14.	Carl F. Dawn III	Sr. Instructor / ILO instructor		3/17/08		4/23/08
15.	Richard F Bowen	SRO	R Bower	3/18/08	R Bower	4/16/08
NOTES:		Unit Supervisor		3/19/08		4-29-08
	R. PHILPOT	RO	Richard Philpot	3/18/08	Richard Philpot	4/11/08

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 03/17-04/12/08 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 3/17-4/12/8. 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.	A. RUCKEL	HP SHIFT SUPERVISOR		3-25-08		4-16-08
2.	HUNTER SCHILL	SHIFT TECHNICAL ADVISOR		3/25/08		4/16/08
3.	Andy T. Barbee	Mgr-Training / Training Mgr		3/26/08		4-16-08
4.	Don Jernigan	Site VP		3/26/08		4/16/08
5.	SEAN LOCASCIO	R.O.		3/28/8		4/22/8
6.	William Henry Moore	Senior Reactor Operator/Unit Supv		4-1-08		4-26-08
7.	M Johnson	NUS		4/1/8		4/14/8
8.	~~Jon Jordan~~					
9.						
10.						
11.						
12.						
13.						
14.						
15.						

NOTES:

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 3/17-4/4 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 3/17-4/9. 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.	AMY C. EPPS	TRAINING ADMINISTRATOR	Amy C. Epps	10-22-07	Amy C. Epps	4-16-08
2.	David H Wilson	Supervisor - Nuclear Training		12/12/07		4/16/08
3.	Robert W. Sedenka	SR Simulation Support Coordin		12/12/07		4/24/08
4.	Christopher G. Huth	SSG - Software		12/12/07		4/24/08
5.	PHAT TRAN - LAM	STA COOR (HARDWARE)		12/12/07		4/24/08
6.	Aaron D Brown	SR Sim Support Coord Software		12 Dec 07		24 APR 08
7.	Rodney Holaway	Operations Inst.		10/20/08		4/24/08
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						

NOTES:

Facility: **Surry** Date of Examination: **March 2008**

Examination Level: RO ☑ SRO ☐ Operating Test Number: **2008-301**

Administrative Topic (see Note)	Type Code*	Describe activity to be performed
Conduct of Operations		
Conduct of Operations G2.1.7 (3.7/4.4)	N, R	Title: Perform a Quadrant Power Tilt Ratio calculation (QPTR). Description: Given plant conditions determine the QPTR in accordance with QPTR worksheet.
Equipment Control G2.2.12 (3.0/3.4)	N, R	Title: Perform Measurement of Macrofouling Blockage of Component Cooling Heat Exchanger (CCHX) 1CC-E-1A Surveillance (RO only) Description: Determine status of the CCHX given plant data and associated graphs from 1-OSP-SW-002 to include completion of procedure acceptance criteria and follow-on tasks.
Radiation Control G2.3.2 (2.5/2.9)	M, R	Title: Calculate radiation exposure when performing task in containment (varying fields and use of personnel) Description: Job to be performed in CTMT. Select number of personnel to perform the job in accordance with ALARA practices and determine the expected dose.
Emergency Plan G2.4.43 (2.8/3.5)	D, S	Title: Complete Report of Emergency to State and Local Governments (RO only). Description: Complete report per EPIP-2.01, Notification of State and Local Governments (Met data and stability class determination required).

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

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

Facility: Surry Date of Examination: March 2008

Examination Level: RO ☐ SRO ☑ Operating Test Number: 2008-301

Administrative Topic (see Note)	Type Code*	Describe activity to be performed
Conduct of Operations G2.1.5 (2.3/3.4)	M, R	Title: Evaluate Overtime Eligiblity. (SRO only) Description: Given various Operator hours of work for previous week, determine which operator is eligible to perform overtime.
Conduct of Operations G2.1.7 (3.7/4.4)	N, R	Title: Perform a Quadrant Power Tilt Ratio calculation (QPTR). Description: Given plant conditions determine the QPTR in accordance with QPTR worksheet.
Equipment Control G2.2.12 (3.0/3.4)	N, R	Title: Perform a review of a performance test to verify operability of associated components. (SRO only) Description: Review 1-OPT-CS-006 (RWST Chemical Addition Tank and Containment Spray System MOV Stroke Test) for accuracy.
Radiation Control G2.3.2 (2.5/2.9)	M, R	Title: Calculate radiation exposure when performing task in containment (varying fields and use of personnel) Description: Job to be performed in CTMT. Select number of personnel to perform the job in accordance with ALARA practices and determine the expected dose.
Emergency Plan G2.4.41 (2.3/4.1)	M, S	Title: Classify an event in accordance with EPIP-1.01 (SRO only). Description: Facility JPM 88.05. Modified such that EPIP-1.01 will be performed with requested approval of faulted EPIP-2.01 form.

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

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

Facility: Surry Date of Examination: March, 2008
Exam Level: RO ☑ SRO-I ☐ SRO-U ☐ Operating Test No.: 2008-301

Control Room Systems@ (8 for RO; 7 for SRO-I; 2 or 3 for SRO-U)

	System / JPM Title	Type Code*	Safety Function
a.	CVCS / Perform a blended flow make-up to the Unit 1 RWST in accordance with 1-OP-CS-004. K/A - 004A4.04 (3.2/3.6)	S/N	I
b.	ESFAS / Transfer the SI System to Cold Leg Recirculation Mode (1-ES-1.3). K/A - 013A4.01 (4.5/4.8)	S/L/A/EN/D	II
c.	RHR / Initiate RHR alternate decay heat removal by forced feed cooling with a charging pump. K/A - 005A2.03 (2.9/3.1) and APE25AA1.02 (3.8/3.9)	S/L/D	IV - P
d.	CS / Secure containment depressurization equipment. 026A2.08 (3.2/3.7)	S/L/A/M	V
e.	NI / Remove a failure source range NI from service during a reactor startup. 015A4.03 (3.8/3.9)	S/L/A/D	VII
f.	CW / Respond to a low level transient. 075A2.02 (2.5/2.7)	S/D	VIII
g.	WGDS / Initiate the release of a waste gas decay tank. 071A4.26 (3.1/3.9)	S/A/N	IX
h.	PPC / Depressurize the RCS to minimize SGTR breakflow EPE038 EA1.04 (4.3/4.1)	S/D	III
In-Plant Systems@ (3 for RO); (3 for SRO-I); (3 or 2 for SRO-U)			
i.	RC / Locally establish RCS and SG HI/LO interface integrity. APE068.AA1.21 (3.9/4.1) / APE067.AA2.16 (3.3/4.0)	E/D	VIII
j.	AFW / Establish make-up to the ECST in accordance with 2-ES-3.1 Attachment 4. 061A1.04 (3.9/3.9)	E/L/A/R/N	IV - S
k.	EDG / Manually start an emergency diesel generator at the local panel. 064A4.01 (4.0/4.3)	E/A/M	VI

@ 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	4-6 / 4-6 / 2-3

(D)irect from bank	≤ 9 / ≤ 8 / ≤ 4
(E)mergency or abnormal in-plant	≥ 1 / ≥ 1 / ≥ 1
(EN)gineered safety feature	- / - / ≥ 1
(L)ow-Power / Shutdown	≥ 1 / ≥ 1 / ≥ 1
(N)ew or (M)odified from bank including 1(A)	≥ 2 / ≥ 2 / ≥ 1
(P)revious 2 exams	≤ 3/ ≤ 3 / ≤ 2 (randomly selected)
(R)CA	≥ 1 / ≥ 1 / ≥
(S)imulator	

Facility: Surry Date of Examination: March, 2008
Exam Level: RO ☐ SRO-I ☑ SRO-U ☐ Operating Test No.: 2008-301

Control Room Systems@ (8 for RO; 7 for SRO-I; 2 or 3 for SRO-U)

	System / JPM Title	Type Code*	Safety Function
a.	CVCS / Perform a blended flow make-up to the Unit 1 RWST in accordance with 1-OP-CS-004. K/A - 004A4.04 (3.2/3.6)	S/N	I
b.	ESFAS / Transfer the SI System to Cold Leg Recirculation Mode (1-ES-1.3). K/A - 013A4.01 (4.5/4.8)	S/L/A/EN/D	II
c.	RHR / Initiate RHR alternate decay heat removal by forced feed cooling with a charging pump. K/A - 005A2.03 (2.9/3.1) and APE25AA1.02 (3.8/3.9)	S/L/D	IV - P
d.	CS / Secure containment depressurization equipment. 026A2.08 (3.2/3.7)	S/L/A/M	V
e.	NI / Remove a failure source range NI from service during a reactor startup. 015A4.03 (3.8/3.9)	S/L/A/D	VII
f.	CW / Respond to a low level transient. 075A2.02 (2.5/2.7)	S/D	VIII
g.	WGDS / Initiate the release of a waste gas decay tank. 071A4.26 (3.1/3.9)	S/A/N	IX
h.			

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

i.	RC / Locally establish RCS and SG HI/LO interface integrity. APE068.AA1.21 (3.9/4.1) / APE067.AA2.16 (3.3/4.0)	E/D	VIII
j.	AFW / Establish make-up to the ECST in accordance with 2-ES-3.1 Attachment 4. 061A1.04 (3.9/3.9)	E/L/A/R/N	IV - S
k.	EDG / Manually start an emergency diesel generator at the local panel. 064A4.01 (4.0/4.3)	E/A/M	VI

@ 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	4-6 / 4-6 / 2-3
(C)ontrol room	
(D)irect from bank	≤ 9 / ≤ 8 / ≤ 4
(E)mergency or abnormal in-plant	≥ 1 / ≥ 1 / ≥ 1

(EN)gineered safety feature	- / - / ≥ 1
(L)ow-Power / Shutdown	≥ 1 / ≥ 1 / ≥ 1
(N)ew or (M)odified from bank including 1(A)	≥ 2 / ≥ 2 / ≥ 1
(P)revious 2 exams	≤ 3/ ≤ 3 / ≤ 2 (randomly selected)
(R)CA	≥ 1 / ≥ 1 / ≥
(S)imulator	

Facility: Surry Date of Examination: March, 2008
Exam Level: RO ☐ SRO-I ☐ SRO-U ☑ Operating Test No.: 2008-301

Control Room Systems@ (8 for RO; 7 for SRO-I; 2 or 3 for SRO-U)

	System / JPM Title	Type Code*	Safety Function
a.	ESFAS / Transfer the SI System to Cold Leg Recirculation Mode (1-ES-1.3). K/A - 013A4.01 (4.5/4.8)	S/L/A/EN/D	II
b.	RHR / Initiate RHR alternate decay heat removal by forced feed cooling with a charging pump. K/A - 005A2.03 (2.9/3.1) and APE25AA1.02 (3.8/3.9)	S/L/D	IV - P
c.	CS / Secure containment depressurization equipment. 026A2.08 (3.2/3.7)	S/L/A/M	V
d.			
e.			
f.			
g.			
h.			

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

i.	RC / Locally establish RCS and SG HI/LO interface integrity. APE068.AA1.21 (3.9/4.1) / APE067.AA2.16 (3.3/4.0)	E/D	VIII
j.	AFW / Establish make-up to the ECST in accordance with 2-ES-3.1 Attachment 4. 061A1.04 (3.9/3.9)	E/L/A/R/N	IV - S
k.			

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

Facility: SURRY POWER STATION Date of Examination: 3/17/08 Operating Test Number: 301

	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).	M	DW	F/E
b.	There is no day-to-day repetition between this and other operating tests to be administered during this examination.	M	DW	F/E
c.	The operating test shall not duplicate items from the applicants' audit test(s). (see Section D.1.a.)	M	DW	F/E
d.	Overlap with the written examination and between different parts of the operating test is within acceptable limits.	M	DW	F/E
e.	It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.	M	DW	F/E
	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	M	DW	F/E
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.	M	DW	F/E
	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.		M	DW	F/E

		Printed Name / Signature	Date
a.	Author	WILLIAM W. MARSHALL / [signature]	3/5/08
b.	Facility Reviewer(*)	DAVID H WILSON / [signature]	3/5/2008
c.	NRC Chief Examiner (#)	Frank J. Ehlenfeldt / [signature]	3/12/08
d.	NRC Supervisor	MALCOLM T. WIDMANN / [signature]	03/12/08

NOTE: * The facility signature is not applicable for NRC-developed tests.
Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required.

Facility: Surry Power Station Date of Exam: 3/11/18 Scenario Numbers: 1 / 2 / 3 Operating Test No.: 301

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.	M	DW	F/E
2.	The scenarios consist mostly of related events.	M	DW	F/E
3.	Each event description consists of • the point in the scenario when it is to be initiated • the malfunction(s) that are entered to initiate the event • the symptoms/cues that will be visible to the crew • the expected operator actions (by shift position) • the event termination point (if applicable)	M	DW	F/E
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.	M	DW	F/E
5.	The events are valid with regard to physics and thermodynamics.	M	DW	F/E
6.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.	M	DW	F/E
7.	If time compression techniques are used, the scenario summary clearly so indicates. Operators have sufficient time to carry out expected activities without undue time constraints. Cues are given.	M	DW	F/E
8.	The simulator modeling is not altered.	M	DW	F/E
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.	M	DW	F/E
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.	M	DW	F/E
11.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).	M	DW	F/E
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).	M	DW	F/E
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.	M	DW	F/E

Target Quantitative Attributes (Per Scenario; See Section D.5.d)		Actual Attributes	--	--	--
1.	Total malfunctions (5–8)	8 / 8 / 8	M	DW	F/E
2.	Malfunctions after EOP entry (1–2)	2 / 3 / 3	M	DW	F/E
3.	Abnormal events (2–4)	4 / 4 / 4	M	DW	F/E
4.	Major transients (1–2)	3 / 2 / 3	M	DW	F/E
5.	EOPs entered/requiring substantive actions (1–2)	2 / 2 / 2	M	DW	F/E
6.	EOP contingencies requiring substantive actions (0–2)	1 / 1 / 1	M	DW	F/E
7.	Critical tasks (2–3)	3 / 2 / 2	M	DW	F/E

Facility: Surry Power Station Date of Exam: 3/17/08 Scenario Numbers: 4 / 5 / Operating Test No.: 301

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.	M	DW	
2.	The scenarios consist mostly of related events.	M	DW	
3.	Each event description consists of • the point in the scenario when it is to be initiated • the malfunction(s) that are entered to initiate the event • the symptoms/cues that will be visible to the crew • the expected operator actions (by shift position) • the event termination point (if applicable)	M	DW	
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.	M	DW	
5.	The events are valid with regard to physics and thermodynamics.	M	DW	
6.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.	M	DW	
7.	If time compression techniques are used, the scenario summary clearly so indicates. Operators have sufficient time to carry out expected activities without undue time constraints. Cues are given.	M	DW	
8.	The simulator modeling is not altered.	M	DW	
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.	M	DW	
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.	M	DW	
11.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).	M	DW	
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).	M	DW	
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.	M	DW	

	Target Quantitative Attributes (Per Scenario; See Section D.5.d)	Actual Attributes	--	--	--
1.	Total malfunctions (5–8)	7 / 8 /	M	DW	
2.	Malfunctions after EOP entry (1–2)	2 / 2 /	M	DW	
3.	Abnormal events (2–4)	4 / 4 /	M	DW	
4.	Major transients (1–2)	2 / 3 /	M	DW	
5.	EOPs entered/requiring substantive actions (1–2)	3 / 2 /	M	DW	
6.	EOP contingencies requiring substantive actions (0–2)	1 / 1 /	M	DW	
7.	Critical tasks (2–3)	2 / 2 /	M	DW	

Facility: Surry Power Station Date of Exam: 3/17/2008 Operating Test No.:

APPLICANT	EVENT TYPE	Scenarios												TOTAL	MINIMUM (*)		
		1			2			3			4						
		CREW POSITION			CREW POSITION			CREW POSITION			CREW POSITION						
		SRO	ATC	BOP	SRO	ATC	BOP	SRO	ATC	BOP	SRO	ATC	BOP		R	I	U
RO ☒ SRO-I ☐ SRO-U ☐	RX								5					1	1	1	0
	NOR								1				1	2	1	1	1
	I/C								3,4,7,9				3,7,8	7	4	4	2
	MAJ								6,8,9				6,8	5	2	2	1
	TS													0	0	2	2
RO ☒ SRO-I ☐ SRO-U ☐	RX											5		1	1	1	0
	NOR									1				1	1	1	1
	I/C									2,8		2,4,6		5	4	4	2
	MAJ									6,8,9		6,8		5	2	2	1
	TS													0	0	2	2
RO ☐ SRO-I ☐ SRO-U ☒	RX							5			5			2	1	1	0
	NOR							1			1			2	1	1	1
	I/C							2,3,4,7,8,9			2,3,4,6,7,8			12	4	4	2
	MAJ							6,8,9			6,8			5	2	2	1
	TS							2,4			3,4,5			5	0	2	2
RO ☐ SRO-I ☐ SRO-U ☐	RX													2	1	1	0
	NOR													2	1	1	1
	I/C													8	4	4	2
	MAJ													5	2	2	1
	TS													3	0	2	2

Instructions:

1) Check the applicant level and enter the operating test number and Form ES-D-1 event numbers for each event type; TS are not applicable for RO applicants. ROs must serve in both the "at-the-controls (ATC)" and "balance-of-plant (BOP)" positions; Instant SROs must do one scenario, including at least two instrument or component (I/C) malfunctions and one major transient, in the ATC position.

2) Reactivity manipulations may be conducted under normal or *controlled* abnormal conditions (refer to Section D.5.d) but must be significant per Section C.2.a of Appendix D. (*) Reactivity and normal evolutions may be replaced with additional instrument or component malfunctions on a 1-for-1 basis.

3) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirements specified for the applicant's license level in the right-hand columns.

Facility: Surry Power Station Date of Exam: 3/17/2008 Operating Test No.:

APPLICANT	EVENT TYPE	Scenarios												TOTAL	MINIMUM (*)		
		1			2			5			4						
		CREW POSITION			CREW POSITION			CREW POSITION			CREW POSITION						
		SRO	ATC	BOP	SRO	ATC	BOP	SRO	ATC	BOP	SRO	ATC	BOP		R	I	U
RO ☒ SRO-I ☐ SRO-U ☐	RX					4								1	1	1	0
	NOR									3				1	1	1	1
	I/C					1,3,6				2,4,7				6	4	4	2
	MAJ					6,8				6,8,9				5	2	2	1
	TS													0	0	2	2
RO ☒ SRO-I ☐ SRO-U ☐	RX								1					1	1	1	0
	NOR						2							1	1	1	1
	I/C						5,7,9		3,5,6					6	4	4	2
	MAJ						6,8		6,8,9					5	2	2	1
	TS													0	0	2	2
RO ☐ SRO-I ☒ SRO-U ☐	RX				4				1					2	1	1	0
	NOR				2									1	1	1	1
	I/C				1,3,5,6,7,9				3,5,6					9	4	4	2
	MAJ				6,8				6,8,9					5	2	2	1
	TS				1,3									2	0	2	2
RO ☐ SRO-I ☒ SRO-U ☐	RX					4		1						2	1	1	0
	NOR					2		3						1	1	1	1
	I/C					1,3,6		2,3,4,5,6,7						9	4	4	2
	MAJ					6,8		6,8,9						5	2	2	1
	TS							2,3						2	0	2	2

Instructions:

1) Check the applicant level and enter the operating test number and Form ES-D-1 event numbers for each event type; TS are not applicable for RO applicants. ROs must serve in both the "at-the-controls (ATC)" and "balance-of-plant (BOP)" positions; Instant SROs must do one scenario, including at least two instrument or component (I/C) malfunctions and one major transient, in the ATC position.

2) Reactivity manipulations may be conducted under normal or *controlled* abnormal conditions (refer to Section D.5.d) but must be significant per Section C.2.a of Appendix D. (*) Reactivity and normal evolutions may be replaced with additional instrument or component malfunctions on a 1-for-1 basis.

3) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirements specified for the applicant's license level in the right-hand columns.

Facility: Surry Power Station	Date of Examination: 3/17/2008	Operating Test No.: 301

Competencies	APPLICANTS															
	RO ☒ SRO-I ☐ SRO-U ☐				BOP ☒ SRO-I ☐ SRO-U ☐				RO ☐ SRO-I ☒ SRO-U ☐				RO ☐ SRO-I ☐ SRO-U ☒			
	SCENARIO				SCENARIO				SCENARIO				SCENARIO			
	1	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**
Interpret/Diagnose Events and Conditions	5	1	3	2	4	5	1	3	5	1	3	2	5	1	3	2
Comply With and Use Procedures (1)	1	2	1	1	8	4	1	7	1	2	1	1	1	2	1	1
Operate Control Boards (2)	4	4	5	5	2	8	2	5	4	4	5	5				
Communicate and Interact	All	All	All	All	All	All	All	All	All	All	All	All	All	All	All	All
Demonstrate Supervisory Ability (3)									4	4	5	5	4	4	5	5
Comply With and Use Tech. Specs. (3)									2	3	4	3	2	3	4	3

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

Instructions:

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

Facility: Surry Power Station	Date of Examination: 3/17/2008	Operating Test No.: 301

Competencies	APPLICANTS															
	RO ☒ SRO-I ☐ SRO-U ☐				BOP ☒ SRO-I ☐ SRO-U ☐				RO ☐ SRO-I ☒ SRO-U ☐				RO ☐ SRO-I ☐ SRO-U ☒			
	SCENARIO				SCENARIO				SCENARIO				SCENARIO			
	5				**5**				**5**				**5**			
Interpret/Diagnose Events and Conditions	3				2				3				3			
Comply With and Use Procedures (1)	1				3				1				1			
Operate Control Boards (2)	4				6				4							
Communicate and Interact	All	All	All	All	All	All	All	All	All	All	All	All	All	All	All	All
Demonstrate Supervisory Ability (3)									1				1			
Comply With and Use Tech. Specs. (3)									2				2			

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

Instructions:

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

ES-401 **Written Examination Quality Checklist** **FORM ES-401-6**

Facility: SURRY 2008-301 Date of exam: 4/9/08 Exam Level RO ~~SRO~~ SRO ~~I~~

	Item Description	Initial a	b*	c#
1.	Questions and answers are technically accurate and applicable to the facility.	CK	N/A	CK
2.	a. NRC K/As are referenced for all questions. b. Facility learning objectives are referenced as available.	CK	↓	CK
3.	SRO questions are appropriate in accordance with Section D.2.d of ES-401	CK		CK
4.	The sampling process was random and systematic (If more than 4 RO or 2 SRO questions were repeated from the last 2 NRC licensing exams, consult the NRR OL program office).	CK		CK
5.	Question duplication from the license screening/audit exam was controlled as indicated below (check the item that applies) and appears appropriate: __ the audit exam was systematically and randomly developed, or __ the audit exam was completed before the license exam was started, or ✓ the examinations were developed independently, or __ the licensee certifies that there is no duplication, or __ other (explain)	CK		CK
6.	Bank use meets limits (no more than 75 percent from the bank, at least 10 percent new, and the rest new or modified); enter the actual RO / SRO-only question distribution(s) at right.	Bank: 22 / 3 — Modified: 21 / 3 — New: 32 / 19		CK
7.	Between 50 and 60 percent of the questions on the RO exam are written at the comprehension/ analysis level; the SRO exam may exceed 60 percent if the randomly selected K/As support the higher cognitive levels; enter the actual RO / SRO question distributibution.	Memory: 37 / 11 — C/A: 38 / 14		CK
8.	References/handouts provided do not give away answers or aid in the elimination of distractors.	CK		CK
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.	CK	↓	CK
10.	Question psychometric quality and format meet the guidelines in ES Appendix B.	CK	↓	CK
11.	The exam contains the required number of one-point, multiple choice items; the total is correct and agrees with the value on the cover sheet.	CK	N/A	CK

	Printed Name / Signature	Date
a. Author	Craig Kontz	4/3/08
b. Facility Reviewer (*)	N/A - NRC DEVELOPED	
c. NRC Chief Examiner (#)	Frank J. Ehrhardt	4/3/08
d. NRC Regional Supervisor	MALCOLM T. WIDMANN	04/03/08

Note *The facility reviewer=s initials/signature are not applicable for NRC-developed examinations.

Independent NRC reviewer initial items in Column Ac@; chief examiner concurrence required.

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

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).

ES-401, Rev. 9 **Written Examination Review Worksheet** **Form ES-401-9**

Q#	1 LOK (F/H)	2 LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	U/E/S
1	H	3	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	E
008.AK2.01			Frank reviewed -											
			Restructured stem and distractors											
			Done											
2	H	4	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
011.EK3.12			Wrote new question.											
			2/21											
			Frank reviewed -											
			Done											
3	H	4	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
007.EK2.02			Frank reviewed -											
			Meets KA, no other comments											
4	H	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
022.AA2.03			2/21											
			Frank reviewed - Suggested adding actual component nomenclature which has failed.											
			Changed distracter B to include the actual component which failed.											
5	F	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
026.AA1.07			Frank has reviewed sat											
6	F	2	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
027.AA1.01			Frank reviewed											
			Focused stem and distractors											
			Final											

Q#	1 LOK (F/H)	2 LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	U/E/S
7	H	4	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
029.EK3.10			Frank reviewed Focused question and added DA Final											
8	H	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
038.EK1.01			Frank has reviewed SAT											
9	H	4	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
040.AA1.24			Frank Reviewed Minor editorial remarks completed.											
10	H	4	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
054.AK1.02			Frank reviewed. Editorial remarks completed. 2/21 Frank thought this might be an overlap question. Searched through the 100 questions here and could not find a repeat question.											
11	F	2	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	E
055.EA2.05			Frank reviewed. 2/21 Changed question wording "Station Batteries are NOT fully depleted" to "Station Batteries have NOT reached the end of their design discharge rating".											

Q#	1 LOK (F/H)	2 LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	U/E/S
12	F	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	E
056.AA1.04			Frank reviewed Reorganized stem Focused distractors Final											
13	H	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
057.AA2.19			Frank reviewed. 2/21 Made minor editorial corrections based on Frank's input. Changed 2nd part of each distracter to "CC Flow to the HX remains the same" or "is lost".											
14	F	2	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	E
062.AG2.1.32			Frank reviewed. OK 2/21 Minor editorial changes, i.e. Clarified wording in stem of question.											
15	F	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	E
065.AK3.03			Frank reviewed Changed structure of question and distractors											
16	F	3	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	E
WE04.EG2.4.31			Frank reviewed. Modified to change last two distractors from Rad Monitor alarms to sump alarms that are not entry criteria for ECA-1.2 OK 2/21 Changed distractors A & B to match the annunciator display and not the rad monitor numbers. Now matches the question.											

Q#	1 LOK (F/H)	2 LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	U/E/S
17	H	3	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	E
WE12.EK2.2			Frank reviewed Changed distractors Final											
18	H	4	☐	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐	E
WE05.EK3.2			Frank reviewed. Changed wording such that FRV bypass valve is given to be closed and ask what it takes to open valve. 2/21 Minor editorial corrections.											
19	H	3	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	E
001.AK2.06			Frank reviewed Add plausibility to speed of distractors - 72 and 8 too big of gap Changed distractors and stem Final											
20	F	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	E
003.AG2.4.1			Frank reviewed. Made changes so that question is now modified from INPO bank question. Original question response was to place rod control in manual. With 2 rods now being affected, a Rx trip is required. 2/21 Added Delta Flux alarm to stem to make distracter C more plausible.											
21	H	3	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
005.AA2.01			Frank reviewed Clarified stem Final											

Q#	1 LOK (F/H)	2 LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6 U/E/S
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	
22	F	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
061.AA2.05			Frank reviewed. OK 2/21 Made minor changes to qualify that there are currently no fuel handling activities in progress.											
23	F	2	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	E
068.AK3.09			Frank reviewed changed distractors corrected DA											
24	F	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
076.AK3.05			2/22 Frank reviewed OK											
25	H	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
WE13.EK1.2			Frank reviewed Clarified distractors Final											
26	F	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	E
WE16.EA2.2			2/22 Frank reviewed - modifications made OK											
27	H	4	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
WE02.EG2.4.31			Frank revewed SAT											

Q#	1 LOK (F/H)	2 LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6 U/E/S
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	
28	F	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
003.K6.14			Frank reviewed											
			Done											
29	F	3	☑	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	S
004.A2.13			Frank reviewed											
			Changed question and distractors											
			Final											
30	H	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
005.K2.03			Frank reviewed											
			Removed pumps from question											
			Final											
31	F	2	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	E
006.A3.05			Frank reviewed											
			Heatup of RWST not plausible											
			Changed to motor overheating											
			Done - need procedure reference for information found in lesson plan											
32	F	2	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
004.K6.13			Frank reviewed											
			Added DA											
			Changed question due to overlap											
			Focused stem											
			Final											

Q#	1 LOK (F/H)	2 LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6 U/E/S
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	
33	H	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
008.K1.02			Frank reviewed Final											
34	H	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
010.K6.03			Frank reviewed Final											
35	F	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
012.G2.1.27			Frank reviewed Rewrite Wrote new question											
36	H	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
013.K2.01			Frank reviewed - Focused Stem Final											
37	H	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
003.K3.01			Frank reviewed - Added below ECP to the stem. Check with plant on review. May not need this additional info if you can not be critical if still pulling CB C this low in the group.											
38	F	2	☑	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	E
076.K1.12			Frank reviewed changed distractors changed stem Final											

Q#	1 LOK (F/H)	2 LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	U/E/S
39	H	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
078.K2.01			Frank reviewed -											
			Minor editorial changes to stem and distractors											
			Final											
40	H	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
103.G2.1.12			Rewrote question											
			Frank reviewed SAT											
41	F	2	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	S
073.K1.01			Frank reviewed											
			Changed distractors											
			Final											
42	H	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
007.K4.01			Frank reviewed											
			Minor editorial changes to stem and distractors Final											
43	H	3	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	S
064A.4.06			Reviewed by frank											
			Modified distractors											
			Final											

Q#	1 LOK (F/H)	2 LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	U/E/S
44	H	3	☐	☐	☐	☐	☐	☐	☑	☐	☐	☐	☐	E
008.A1.04			Frank reviewed											
			Rewrote question											
			Frank reviewed - editorial changes											
			Final											
45	H	4	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	E
059.A4.03			Frank reviewed											
			Changed stem											
			Final											
46	H	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
022.K1.01			Frank reviewed											
			Final											
47	F	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	E
026.A4.01			Frank reviewed											
			Changed stem format											
			Final											
48	F	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
039.K5.01			Frank reviewed - question replaced											
			Frank reviewed											
			Final											

Q#	1 LOK (F/H)	2 LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	U/E/S
49	F	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
059.A4.08			Frank reviewed Corrected distractor Frank reviewed added symmetry to distractors Final											
50	F	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	E
061K4.01			Frank reviewed - rewrote question Changed to 2x2 format											
51	H	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	E
062.A3.05			Frank reviewed Changed distractors to 2x2 Rearranged the distractors Final											
52	H	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
063.A2.01														
53	F	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
064.K3.03			Frank reviewed Final											
54	H	4	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
004.K5.15			Frank reviewed - looks OK											

Q#	1 LOK (F/H)	2 LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	U/E/S
55	F	3	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	E
103.K3.02			Frank reviewed Rewrote question Changed distractors Final											
56	H	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
079.K4.01														
57	F	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	E
086.A4.05			Frank reviewed Changed distractors format Added type of operation											
58	H	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	E
002.K6.02			Frank reviewed Changed Distractor format Final											
59	F	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
029.A3.01			Frank reviewed Changed question Final											

Q#	1 LOK (F/H)	2 LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	U/E/S
60	F	4	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
035.K1.01			Frank reviewed Added DA Added reason to TDAFP Final											
61	H	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	E
045.A1.05			Frank reviewed Changed distractors and stem Final											
62	F	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
071.K4.04			Frank reviewed Resampled KA due to no auto actions in LW System Changed format of stem Final											
63	F	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
015.K5.10			Verify with the licensee that choices C & D could not be considered correct. Also, are the adjustments made always in the increase or decrease direction?											
64	H	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
001.G2.1.27			Changed question due to overlap\ Final											

Q#	1 LOK (F/H)	2 LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	U/E/S
65	H	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
011.A2.10			Frank reviewed Added DA Changed stem Final											
66	H	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
G2.1.1			Replaced question due to overlap Changed Question and distractors Final											
67	F	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	E
G2.1.14			Frank reviewed Changed distractors due to reference change Added reference Changed distractors and question Changed Distractor Final											
68	H	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
G2.1.7			Frank reviewed Added Annunciator designations Final											
69	F	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	E
G2.2.22			Frank reviewed - This question was modified to change correct answer per his input.											

Q#	1 LOK (F/H)	2 LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	U/E/S
70	F	3	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	E
G2.2.13			Frank reviewed Changed question Focused Stem Final											
71	H	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
G2.2.28			Frank reviewed - OK											
72	F	4	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
G2.3.4														
73	H	4	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
G2.3.2			Frank reviewed Modified stem Changed distractors - new answer Final											
74	F	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
G2.4.49			Frank reviewed Changed distractors Final											
75	F	3	☐	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐	S
G2.4.11			Frank reviewed Changed distractor construction Replaced question due to overlap											

Q#	1 LOK (F/H)	2 LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	U/E/S
76	H	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	E
007 EG2.4.4			Frank reviewed and updated editorial comments. FINAL											
77	H	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
008AA2.26			Frank reviewed - stems changed and reviewed by Frank Can Add procedure selection if necessary to make SRO only. FINAL											
78	H	3	☑	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	E
038EG2.4.6			W/ RCS SC <50F and decreasing - transition to ECA-3-1 would be required per E-3 step 18. WOG Guidance quoted in basis for answer A supports this. Changed stem to reverse trend of Subcooling and clarify procedure position and added to distractors FINAL											
79	H	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
054AA2.04			Frank reviewed - Answer A has A & C SG having 30% wide range level and supplied from unit 2 AFW system. If the RNO is followed in step 2, 12% NR would be required before being allowed to exit the procedure. Rewrote question Frank Reviewed FINAL											
80	H	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑	☐	S
055EG2.4.30			Frank - Q How does it meet the KA?? Rewrote question Frank reviewed - changed distractors and scope of stem FINAL											

Q#	1 LOK (F/H)	2 LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	U/E/S
81	H	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
WE05EG2.4.6			Already have a question on FR-H.1 Rewrote question Frank reviewed FINAL											
82	F	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
WE03EA2.1			Frank Reviewed - editorial changes FINAL											
83	H	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑	☐	E
WE08EG2.4.20			Frank reviewed KA Match?? Question about procedure flow -through ES-1.3 and required transition. Rewrote question Frank reviewed - changed construction of distractors Final											
84	H	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	E
061AG2.2.25			Frank Reviewed - added Monitor designation in in distractors. Rearranged distractors to be consistent in construction. Frank reviewed - reorganized the stem - added time to distractors FINAL											
85	F	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
069AA2.02			Frank Reviewed - editorial changes.											
86	F	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
013G2.1.23			FINAL											

Q#	1 LOK (F/H)	2 LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	U/E/S
87	F	4	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
039A2.03			FINAL											
88	H	3	☑	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	E
062A2.03			Frank reviewed - Corrected time for symmetry. Removed one variable from distractor. Frank reviewed second time - focused stem cleaned up distractors. FINAL											
89	F	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
073GG2.1.10			FINAL											
90	F	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	E
078GG2.1.20			Frank reviewed - look to add reason. Rewrote question to include status of flow and strategy for C/D or maintenance in HSD FINAL											
91	F	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
034A2.01														
92	F	2	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
002G2.4.20			Reviewed by Frank - focused stem changed wording in distractors FINAL											
93	H	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑	☐	U
086A2.04			Frank reviewed - KA mismatch - Rewriting question. Frank reviewed - clarified stem and distracters FINAL											

Q#	1 LOK (F/H)	2 LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6 U/E/S
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	
94	H	4	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑	U
G2.1.11			Frank reviewed - RO Only Rewrote question Frank reviewed FINAL											
95	H	4	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
G2.1.20			Frank reviewed - changed language and structure of distractors Frank reviewed second time - focused the stem FINAL Replace question - overlap with Q 99 Frank Reviewed Final											
96	F	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
G2.2.6														
97	H	3	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	E
G2.2.22			Frank reviewed - Change time requirement in distractors to not include 1 hr requirement. Corrected stem to remove window dressing. Frank reviewed a second time - focused stem and formatted distractors. FINAL											
98	F	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
G2.3.8			FINAL											
99	H	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	S
G2.4.1														

Q#	1 LOK (F/H)	2 LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6 U/E/S
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	
E+0	F	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	E

G2.4.28

Frank reviewed. Changed wording in stem to be more specific.

Frank reviewed again - highlighted FIRST - may need to change from caps to bold/underline when outputted.

FINAL

ES-403, Rev. 9 **Written Examination Grading Quality Checklist** **Form ES-403-1**

Facility: Surry	Date of Exam: 4/9/08	Exam Level: RO and SRO

Item Description	Initials a	Initials b	Initials c
1. Clean answer sheets copied before grading		N/A	
2. Answer key changes and question deletions justified and documented		N/A	
3. Applicants' scores checked for addition errors (reviewers spot check > 25% of examinations)		N/A	
4. Grading for all borderline cases (80 ±2% overall and 70 or 80, as applicable, ±4% on the SRO-only) reviewed in detail		N/A	
5. All other failing examinations checked to ensure that grades are justified		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		N/A	

	Printed Name/Signature	Date
a. Grader	P.Capehart / C.Kontz	4/16/08
b. Facility Reviewer(*)	N/A	
c. NRC Chief Examiner (*)	Frank Ehrhardt	4/28/08
d. NRC Supervisor (*)	Malcolm Widmann	04/30/08

(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.

Post-Examination Check Sheet 4/9/08.	
Facility: Sanny	Date of Examination:

	Task Description	Date Complete
1.	Facility written exam comments or graded exams received and verified complete	4/14/08
2.	Facility written exam comments reviewed and incorporated and NRC grading completed, if necessary	4/17/08
3.	Operating tests graded by NRC examiners	4/14/08
4.	NRC chief examiner review of operating test and written exam grading completed	4/28/08
5.	Responsible supervisor review completed	4/30/08
6.	Management (licensing official) review completed	4-30-0c
7.	License and denial letters mailed	5-2-08
8.	Facility notified of results	5-2-08
9.	Examination report issued (refer to NRC MC 0612)	5-2-08
10.	Reference material returned after final resolution of any appeals	N/A

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

April 11, 2008

Mr. Victor McCree
Acting Regional Administrator
United States Nuclear Regulatory Commission
Region II
Sam Nunn Atlanta Federal Center
61 Forsyth St., SW, Suite 23T85
Atlanta, Georgia 30303-8931

Serial No. 08-0217
SS&L/TJN R0
Docket Nos. 50-280
50-281
License Nos. DPR-32
DPR-37

VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION UNITS 1 AND 2
SUBMITTAL OF OPERATING EXAMINATION AND SUPPORTING REFERENCE MATERIALS

NRC letter dated September 12, 2007, Reactor and Senior Reactor Operator Initial Examinations for Surry Power Station, requested transmittal of the Operating Exam and supporting references for the reactor and senior reactor operator initial examinations that were scheduled to be conducted during the weeks of March 17 and March 24, 2008.

The NRC Operating Exam was submitted to Frank Ehrhardt, the NRC Chief Examiner, electronically (via the NRC resident) on March 12, 2008 as previously agreed upon in earlier conversations. In accordance with that agreement, the associated quality assurance documents from NUREG 1021 Revision 9 and the material listed below was sent:

Scenarios:

Scenario #1 – ECA-3.3 (Designated Back-up Scenario)
Scenario #2 – FR-H.1
Scenario #3 – FR-Z.1
Scenario #4 – ECA-3.1
Scenario #5 – ECA-1.1

Administrative JPMS:

G2.3.2 – Calculate Radiation Exposure (All)
G2.1.7 – QPTR Calculation (All)
G2.1.5 – Evaluate Overtime (SRO only)
G2.2.12 – Review 1-OPT-CS-006 (SRO only)
G2.4.41 – Classify an Event (SRO only)
G2.4.43 – Transmit Report of Emergency to State and Local Governments (RO only)
G2.2.12 – Performance of 1-OSP-SW-002 (RO only)

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Simulator JPMs:

005A2.03 – Alternate Decay Heat Removal (All)
013A4.01 – Transfer to Cold Leg Recirculation (All)
026A2.08 – Secure Containment Depressurization Equipment (All)
004A4.04 – Perform a Blended Flow Makeup to Unit1 RWST (RO and DSRO)
015A4.03 – SRNI Failure (RO and DSRO)
071A4.26 – Release a WGDT (RO and DSRO)
075A2.02 – Respond to a Low Level Transient (RO and DSRO)
EPE038.EA1.04 – Depressurize RCS to Minimize SGTR Break Flow (RO only)

In-Plant JPMs:

061A1.04 – Establish Makeup to the ECST (All)
APE068.AA1.21 – Locally Establish RCS and SG HI-LO Interface Integrity (All)
064A4.01 – Manually Start an EDG at the Local Panel (RO and DSRO)

If there are any questions concerning this material, please contact Mr. Barry A. Garber at (757) 365-2725.

Very truly yours,

Mr. Donald Jernigan
Site Vice President

Commitments made by this letter: None

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cc: Mr. M. T. Widmann, Chief
Operations Branch
United States Nuclear Regulatory Commission Region II
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW, Suite 23 T85
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Mr. F. J. Ehrhardt
Chief Examiner
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Senior Resident Inspector
Surry Power Station