

Administrative Documents

OCONEE JUNE 2005 EXAM
50-269, 270, & 287/2005-301

JUNE 20 - 24, 2005
JUNE 30, 2005 (WRITTEN)

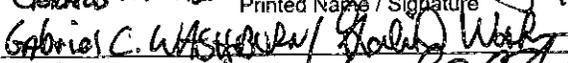
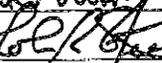
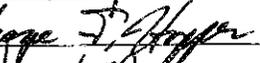
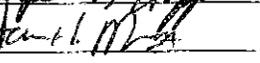
1. Exam Preparation Checklist ES-201-1 ✓
2. Exam Outline Quality Checklist ES-201-2 ✓
3. Exam Security Agreement(s) ES-201-3 ✓
4. Administrative Topics Outline (Final) ES-301-1 ✓
5. Control Room Systems & Facility Walk-through Test Outline
(Final) ES-301-2 ✓
6. Operating Test Quality Check Sheet ES-301-3 ✓
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 [] ✓

Facility: **Oconee**Date of Examination: **June 20, 2005**Examinations Developed by: Facility / NRC (circle one) *see flow only*

Target Date*		Task Description / Reference	Chief Examiner's Initials
-180	12-22-04	1. Examination administration date confirmed (C.1.a; C.2.a and b)	<i>LOZ</i>
-120	02-20-05	2. NRC examiners and facility contact assigned (C.1.d; C.2.e)	<i>ASH</i>
-120	02-20-05	3. Facility contact briefed on security and other requirements (C.2.c)	<i>ASH</i>
-120	02-20-05	4. Corporate notification letter sent (C.2.d)	<i>ASH</i>
[-90]	03-22-05	5. [Reference material due (C.1.e; C.3.c; Attachment 2)]	<i>ASH</i>
-75	04-08-05 //	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)	<i>ASH</i>
-70	04-11-05	7. Examination outline(s) reviewed by NRC and feedback provided to facility licensee (C.2.h; C.3.e)	<i>ASH</i>
-45	05-05-05	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) Receive written exam for utility review and comment.	<i>ASH</i>
-30	05-21-05	9. Preliminary license applications (NRC Form 398's) due (C.1.i; C.2.g; ES-202)	<i>ASH</i>
-14	06-06-05	10. Final license applications due and Form ES-201-4 prepared (C.1.i; C.2.i; ES-202)	<i>ASH</i>
-14	06-06-05	11. Examination approved by NRC supervisor for facility licensee review (C.2.h; C.3.f)	<i>ASH</i>
-14	06-06-05	12. Examinations reviewed with facility licensee (C.1.j; C.2.f & h; C.3.g)	<i>ASH</i>
-7	06-13-05	13. Written examinations and operating tests approved by NRC supervisor (C.2.i; C.3.h)	<i>ASH</i>
-7	06-13-05	14. Final applications reviewed, examination approval and waiver letters sent (C.2.i; Attachment 4; ES-204)	<i>ASH</i>
-7	06-13-05	15. Proctoring/written exam administration guidelines reviewed with facility licensee (C.3.k)	<i>ASH</i>
-7	06-13-05	16. Approved scenarios, job performance measures, and questions distributed to NRC examiners (C.3.i)	<i>ASH</i>

* Target dates are keyed to the examination date identified in the corporate notification letter. They are for planning purposes and may be adjusted on a case-by-case basis in coordination with the facility licensee.

[] Applies only to examinations prepared by the NRC.

Facility: Oconee		Date of Examination: June 20, 2005		
Item	Task Description	Initials		
		a	b*	c#
1. W R I T T E N	a. Verify that the outline(s) fit(s) the appropriate model per ES-401.	JS	JS	AK
	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.	JS	JS	AK
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	JS	JS	AK
	d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.	JS	JS	AK
2. S I M U L A T O R	a. Using Form ES-301-5, verify that the proposed scenario sets cover the required number of normal evolutions, instrument and component failures, technical specifications, and major transients.	JS	JS	AK
	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 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.	JS	JS	AK
	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.	JS	JS	AK
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.	JS	JS	AK
	b. Verify that the administrative outline meets the criteria specified on Form ES-301-1: (1) the tasks are 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	JS	JS	AK
	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.	JS	JS	AK
4. G E N E R A L	a. Assess whether plant-specific priorities (including PRA and IPE insights) are covered in the appropriate exam section.	JS	JS	AK
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.	JS	JS	AK
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	JS	JS	AK
	d. Check for duplication and overlap among exam sections.	JS	JS	AK
	e. Check the entire exam for balance of coverage.	JS	JS	AK
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	JS	JS	AK
a. Author	<u>George W. Lutz</u> Printed Name / Signature 	Date <u>6-9-05</u>		
b. Facility Reviewer (*)	<u>Gabriel C. WASHBURN / John R. Stealy</u>  	Date <u>6-9-05</u>		
c. NRC Chief Examiner (#)	<u>George T. Hopper</u> / <u>George T. Hopper</u> 	Date <u>6-9-05</u>		
d. NRC Supervisor	<u>JAMES H. MOORMAN, III</u> / <u>James H. Moorman, III</u> 	Date <u>6-16-05</u>		
Note: # Independent NRC reviewer initial items in Column "c;" chief examiner concurrence required.				

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 6-20-2005 as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC. Furthermore, I am aware of the physical security measures and requirements (as documented in the facility licensee's procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of 6-20-2005. 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
<u>Gabriel Washburn</u>	<u>Instructor / Exam Developer</u>	<u>Gabriel Washburn</u>	<u>2-17-05</u>	<u>Gabriel Washburn</u>	<u>6/30/05</u>	
<u>DIANE PERRY</u>	<u>ADMIN. SPEC</u>	<u>Diane Perry</u>	<u>3/16/05</u>	<u>Diane Perry</u>	<u>07/06/05</u>	
<u>Rick Robinson</u>	<u>Senior Reactor Operator / Oils Rel</u>	<u>Rick Robinson</u>	<u>3/22/05</u>	<u>Rick Robinson</u>	<u>6/30/05</u>	
<u>Tom Van Vo</u>	<u>Simulator support / Oils</u>	<u>Tom Van Vo</u>	<u>4-4-05</u>	<u>Tom Van Vo</u>	<u>7-6-05</u>	
<u>John R Steely</u>	<u>Supervisor / Initial Training</u>	<u>John R Steely</u>	<u>4-8-05</u>	<u>John R Steely</u>	<u>6/30/05</u>	
<u>JAMES M. BYKO</u>	<u>Instructor / Simulator Config</u>	<u>James M Byko</u>	<u>4-14-05</u>	<u>James M Byko</u>	<u>6/30/05</u>	
<u>THOMAS LO RICE</u>	<u>SIMULATOR SUPPORT / OILS</u>	<u>Thomas Rice</u>	<u>4-18-05</u>	<u>Thomas Rice</u>	<u>6/30/05</u>	
<u>Jeff G. Potmeyer</u>	<u>Simulator Support</u>	<u>Jeff G. Potmeyer</u>	<u>4-18-05</u>	<u>Jeff G. Potmeyer</u>	<u>7-6-05</u>	
<u>KEITH WELCHEL</u>	<u>Simulator Support</u>	<u>Keith V. Welchel</u>	<u>4-18-05</u>	<u>Keith V. Welchel</u>	<u>6/30/05</u>	
<u>Allen G Collins</u>	<u>Simulator Support</u>	<u>Allen G Collins</u>	<u>4-18-05</u>	<u>Allen G Collins</u>	<u>6/30/05</u>	
<u>Jeffrey P. Hill</u>	<u>Instuctor</u>	<u>Jeffrey P. Hill</u>	<u>4-20-05</u>	<u>Jeffrey P. Hill</u>	<u>6/30/05</u>	
<u>JAMES S. LASKARIS</u>	<u>SRO (Validation)</u>	<u>James S. Laskaris</u>	<u>4-20-05</u>	<u>James S. Laskaris</u>	<u>6/30-05</u>	
<u>Harvey K. Kenton</u>	<u>FO (Validation)</u>	<u>Harvey K. Kenton</u>	<u>4-27-05</u>	<u>Harvey K. Kenton</u>	<u>6-30-05</u>	
<u>MICHAEL HOWARD</u>	<u>RO (Validation)</u>	<u>Michael Howard</u>	<u>4-27-05</u>	<u>Michael Howard</u>	<u>7-1-05</u>	
<u>Neal Constantine</u>	<u>Ops training mng</u>	<u>Neal Constantine</u>	<u>4-28-05</u>	<u>Neal Constantine</u>	<u>7-27-05</u>	

NOTES:

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PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE	NOTE
1. Diane Burrell	Admin Support	<i>Diane Burrell</i>	5/3/05	<i>Diane Burrell</i>	6/30/05	
2. Michael Blackburn	RP Staff	<i>Michael Blackburn</i>	5-2-05	<i>Michael Blackburn</i>	7-11-05	
3. Erik Dady	Reactor Operator	<i>Erik Dady</i>	6-13-05	<i>Erik Dady</i>	6-30-05	
4. Brian Bowers	Senior Reactor Operator	<i>Brian Bowers</i>	6-13-05	<i>Brian Bowers</i>	7-24-05	
5. R.B. POOLE	Senior Reactor Operator	<i>R.B. Poole</i>	6-14-05	<i>R.B. Poole</i>	7-7-05	
6. Carlos L. Minor	Reactor Operator	<i>Carlos L. Minor</i>	6-14-05	<i>Carlos L. Minor</i>	7-8-05	
7. Gregory B. Baumgartner	HLP Instructor/Support	<i>Gregory B. Baumgartner</i>	6/19/05	<i>Gregory B. Baumgartner</i>	7-22-05	
8. Kenneth O. Schaefer	HLP Instructor/Support	<i>Kenneth O. Schaefer</i>	6/20/05	<i>Kenneth O. Schaefer</i>	6-30-05	
9. Olson K. Mercedo	HLP Instructor/Support	<i>Olson K. Mercedo</i>	6/20/05	<i>Olson K. Mercedo</i>	6-30-05	
10. Philip J. North	SOM	<i>Philip J. North</i>	6/21/05	<i>Philip J. North</i>	7/1/05	
11. Roger M. Hubbard	Trng Mg	<i>Roger M. Hubbard</i>	6-21-05	<i>Roger M. Hubbard</i>	6/30/05	
12. Michael Hill	ops sup mg	<i>Michael Hill</i>	6/21-05	<i>Michael Hill</i>	6/30/05	
13. Larry Century	Surrogate	<i>Larry Century</i>	6-21-05	<i>Larry Century</i>	7/5/05	
14.						
15.						

NOTES:

Facility: Oconee		Date of Examination: June, 2005
Examination Level (circle one) (RO) / SRO		Operating Test Number: <u> 1 </u>
Administrative Topic	Describe activity to be performed	
Conduct of Operations GEN 2.1.25 (2.8/3.1) N	Admin-112, Calculate requirements to makeup to the BWST EOP Encl. 5.4, Makeup to the BWST (RO only) (group activity) (12 min)	
Conduct of Operations GEN 2.1.1 (3.7/3.8) N	Admin-111, Perform the required Actions to Enter and Exit the SFP Area (Performed in conjunction with JPM NLO-039.) (5 min)	
Equipment Control GEN 2.2.12 (3.0/3.4) P, S	Admin-202, Perform Surveillance to Verify SSF RCMUP Operability PT/600/001 Encl. 13.1 (Mode 1 & 2) (15 min) (RO only)	
Radiation Control GEN 2.3.4 (2.5/3.1) N	Admin-302, Calculate the Maximum Permissible Stay Time Within Duke Power Basic Administrative Limits (group activity) (13 min)	
Emergency Plan GEN 2.4.39 (3.3/3.1)		
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 (D)irect from bank (≤ 3 for ROs; ≤ 4 for SROs & RO retakes) (N)ew or (M)odified fro bank (≥ 1) (P)revious 2 exams (≤ 1 ; randomly selected) (S)imulator	

Facility: Oconee		Date of Examination: June, 2005
Examination Level (circle one): RO (SRO)		Operating Test Number: <u> 1 </u>
Administrative Topic	Describe activity to be performed	
Conduct of Operations GEN 2.1.19 (3.0/3.0) M, S	CRO-037, Calculate An Estimated Critical Rod Position PT/1/A/1103/15, Reactivity Balance (SRO only) (17 min)	
Conduct of Operations GEN 2.1.1 (3.7/3.8) N	Admin-111, Perform the required Actions to Enter and Exit the SFP Area (Performed in conjunction with JPM NLO-039.) (5 min)	
Equipment Control GEN 2.2.18 (2.3/3.6) N	Admin-203, Complete Plant Configuration Sheet (Calculate Time to Core Boil) S. D. 1.3.5 Attachment 9.3A (SRO only) (group activity) (11 min)	
Radiation Control GEN 2.3.4 (2.5/3.1) N	Admin-302, Calculate the Maximum Permissible Stay Time Within Duke Power Basic Administrative Limits (group activity) (11 min)	
Emergency Plan GEN 2.4.38 (2.2/4.0) N	Admin-405, Determine Emergency Classification and Protective Action Recommendations (SRO only) (group activity) (20 min)	
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 (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) (S)imulator	

Facility: Oconee		Date of Examination: June, 2005	
Exam Level (circle one): (RO) SRO(I) / SRO(U)		Operating Test No.: <u> 1 </u>	
Control Room Systems[®] (8 for RO; 7 for SRO-I; 2 or 3 for SRO-U)			
System / JPM Title	Type Code*	Safety Function	
a. CRO-107, With the Reactor Critical, Increase Power From 1.5% to 15% [KA: 001 A3.01 (4.1/4.0)] (20 min)	D, S, L	1	
b. CRO-200, Re-establish RCP Seal Injection and Normal RCS Makeup following loss of operating HPI Pump, AP/14, Loss of Normal HPI Makeup and/or RCP Seal Injection [KA: APE 022 AA1.01 (3.4/3.3)] (15 min)	D, S	2	
c. CRO-075, Initiate Automatic Pressurizer Spray (spray valve fails open with closed indication) OP/1103/05, Pressurizer Operation, Encl. 4.1 [KA: 010 A2.02 (3.9/3.9)] (12 min)	D, A, S	3	
d. CRO-96, Align ECCS Suction From Emergency Sump (1LP-21 Fails to Close) EOP, Enclosure 5.12 [KA:BW/E08 EA1.1 (4.0/3.7)] (PRA) (15 min)	M, A, S	4P	
e. CRO-017, Re-establish Main FDW Flow From Condensate Booster Pump Flow EOP, LOHT Tab [APE-054 AK3.04 (4.4/4.6)] (15 min)	M, A, S	4S	
f. CRO-601, Synchronization with the grid following a load rejection AP/1, Load Rejection [062 A4.07 (3.1*/3.1*)] (10 min)	D, S	6	
g. CRO-700, Place ICS In Auto following Loss Of Auto Power AP/23, Loss of ICS Power [KA: BW/A02 AA1.1 (4.0/3.8)] (20 min)	D, S, P	7	
h. CRO-800, Perform Required Actions for an Intake Canal Dam Failure AP/13, Dam Failure [KA: 075 A2.01 (3.0*/3.2)] (20 min)	N, S	8	

In-Plant Systems (3 for RO; 3 for SRO-I; 3 or 2 for SRO-U)		
i. NLO-039, Prime The Spent Fuel Pool Fill Line EOP Encl. 5.7, HPI Pump Operations from ASW Pump Switchgear [KA: APE022 AK3.02 (3.5/3.8)] (16 min)	D, R, P	2
j. NLO-700, Restoration of ICS AUTO Power AP/23 (Loss of ICS Power) Encl. 5.2, Restoration of ICS AUTO Power [KA: APE BW/A02 AK3.2 (3.7/4.0)] (16 min)	N, A, E	7
k. NLO-037, Place A Control Battery Charger In Service OP/1107/010, Removal From Service and Restoration To Service of Control Charger [KA: 063 K1.03 (2.9/3.5)] (12 min))	D	6
@ All control (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	
(L)ow-Power	≥ 1 / ≥ 1 / ≥ 1	
(N)ew or (M)odified from bank	≥ 2 / ≥ 2 / ≥ 1	
(P)revious 2 exams	≤ 3 / ≤ 3 / ≤ 2 (randomly selected)	
(R)CA	≥ 1 / ≥ 1 / ≥ 1	
(S)imulator		

Facility: Oconee		Date of Examination: June, 2005
Exam Level (circle one): RO / SRO(I) / SRO(U)		Operating Test No.: <u> t </u>
Control Room Systems® (8 for RO; 7 for SRO-I; 2 or 3 for SRO-U)		
System / JPM Title	Type Code*	Safety Function
a. CRO-107, With the Reactor Critical, Increase Power From 1.5% to 15% [KA: 001 A3.01 (4.1/4.0)] (30 min)	D, S, L	1
b. CRO-200, Re-establish RCP Seal Injection and Normal RCS Makeup following loss of operating HPI Pump, AP/14, Loss of Normal HPI Makeup and/or RCP Seal Injection [KA: APE 022 AA1.01 (3.4/3.3)] (15 min)	D, S	2
c. CRO- 075, Initiate Automatic Pressurizer Spray (spray valve fails open with closed indication) OP/1103/05, Pressurizer Operation, Encl. 4.1 [KA: 010 A2.02 (3.9/3.9)] (12 min)	D, A, S	3
d. CRO-96, Align ECCS Suction From Emergency Sump (1LP-21 Fails to Close) EOP, Enclosure 5.12 [KA:BW/E08 EA1.1 (4.0/3.7)] (PRA) (15 min)	M, A, S	4P
e. CRO-017, Re-establish Main FDW Flow From Condensate Booster Pump Flow EOP, LOHT Tab [APE-054 AK3.04 (4.4/4.6)] (15 min)	M, A, S	4S
f. CRO-601, Synchronization with the grid following a load rejection AP/1, Load Rejection [062 A4.07 (3.1*/3.1*)] (10 min)	D, S	6
g. CRO-700, Place ICS In Auto following Loss Of Auto Power AP/23, Loss of ICS Power [KA: BW/A02 AA1.1 (4.0/3.8)] (20 min)	D, S, P	7
h. N/A		

In-Plant Systems (3 for RO; 3 for SRO-I; 3 or 2 for SRO-U)		
i. NLO-039, Prime The Spent Fuel Pool Fill Line EOP Encl. 5.7, HPI Pump Operations from ASW Pump Switchgear [KA: APE022 AK3.02 (3.5/3.8)] (16 min)	D, R, P	2
j. NLO-700, Restoration of ICS AUTO Power AP/23 (Loss of ICS Power) Encl. 5.2, Restoration of ICS AUTO Power [KA: APE BW/A02 AK3.2 (3.7/4.0)] (16 min)	N, A, E	7
k. NLO-037, Place A Control Battery Charger In Service OP/1107/010, Removal From Service and Restoration To Service of Control Charger [KA: 063 K1.03 (2.9/3.5)] (12 min)	D	6
<p>@ All control (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.</p>		
* 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	
(L)ow-Power	≥ 1 / ≥ 1 / ≥ 1	
(N)ew or (M)odified from bank	≥ 2 / ≥ 2 / ≥ 1	
(P)revious 2 exams	≤ 3 / ≤ 3 / ≤ 2 (randomly selected)	
(R)CA	≥ 1 / ≥ 1 / ≥ 1	
(S)imulator		

Facility: **Oconee**

Date of Examination: **June, 2005**

Exam Level (circle one): RO / SRO(I) / **SRO(U)** Operating Test No.: 1

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

System / JPM Title	Type Code*	Safety Function
a. CRO-107, With the Reactor Critical, Increase Power and Place The ICS in Auto [KA: 001 A3.01 (4.1/4.0)] (30 min)	D, S, L	1
d. CRO-96, Align ECCS Suction From Emergency Sump (1LP-21 Fails to Close) EOP, Enclosure 5.12 [KA:BW/E08 EA1.1 (4.0/3.7)] (PRA) (15 min)	M, A, S	4P
f. CRO-601, Synchronization with the grid following a load rejection AP/1, Load Rejection [062 A4.07 (3.1*/3.1*)] (10 min)	D, S	6

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

i. NLO-039, Prime The Spent Fuel Pool Fill Line EOP Encl. 5.7, HPI Pump Operations from ASW Pump Switchgear [KA: APE022 AK3.02 (3.5/3.8)] (16 min)	D, R, P	2
j. NLO-700, Restoration of ICS AUTO Power AP/23 (Loss of ICS Power) Encl. 5.2, Restoration of ICS AUTO Power [KA: APE BW/A02 AK3.2 (3.7/4.0)] (16 min)	N, A, E	7

@ All control (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
(L)ow-Power	≥ 1 / ≥ 1 / ≥ 1
(N)ew or (M)odified from bank	≥ 2 / ≥ 2 / ≥ 1
(P)revious 2 exams	≤ 3 / ≤ 3 / ≤ 2 (randomly selected)
(R)CA	≥ 1 / ≥ 1 / ≥ 1
(S)imulator	

Final Submittal

Facility: Oconee		Date of Examination: June 20, 2005	Operating Test Number: 1	
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).	Gen	JW	AW
b.	There is no day-to-day repetition between this and other operating tests to be administered during this examination.	Gen	JW	AW
c.	The operating test shall not duplicate items from the applicants' audit test(s)(see Section D.1.a).	Gen	JW	AW
d.	Overlap with the written examination and between different parts of the operating test is within acceptable limits.	Gen	JW	AW
e.	It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.	Gen	JW	AW
2. WALK-THROUGH CRITERIA		a	b*	c#
a.	Each JPM includes the following, as applicable: <ul style="list-style-type: none"> - initial conditions - initiating cues - references and tools, including associated procedures - reasonable and validated time limits (average time allowed for completion) and specific designation if deemed to be time critical by the facility licensee - operationally important specific performance criteria that include: <ul style="list-style-type: none"> - detailed expected actions with exact criteria and nomenclature - system response and other examiner cues - statements describing important observations to be made by the applicant - criteria for successful completion of the task - identification of critical steps and their associated performance standards - restrictions on the sequence of steps, if applicable 	Gen	JW	AW
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 acceptance criteria (e.g., item distribution, bank use, repetition from the last 2 NRC examinations) specified on those forms and Form ES-201-2.	Gen	JW	AW
3. SIMULATOR CRITERIA		a	b*	c#
a.	The associated simulator operating tests (scenario sets) have been reviewed in accordance with Form ES-301-4 and a copy is attached.	Gen	JW	AW
Printed Name / Signature		Date		
a. Author	<u>Gabriel WASHURAN / John P. Wash</u>	<u>5-5-05</u>		
b. Facility Reviewer(*)	<u>John R Stealy / John R Stealy</u>	<u>5-5-05</u>		
c. NRC Chief Examiner (#)	<u>George T. Hopper / George T. Hopper</u>	<u>6-9-05</u>		
d. NRC Supervisor	<u>James H. Moorhead, III / James H. Moorhead</u>	<u>6/6/05</u>		
NOTE: * The facility signature is not applicable for NRC-developed tests. # Independent NRC reviewer initial items in Column "c;" chief examiner concurrence required.				

Final Submittal

Facility: Oconee		Date of Exam: June 20, 2005		Scenario Numbers: 1 / 2 / 3		Operating Test No.: 1		
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.	Ben	JW	AK				
2.	The scenarios consist mostly of related events.	Ben	JW	AK				
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) 	Ben	JW	AK				
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.	Ben	JW	AK				
5.	The events are valid with regard to physics and thermodynamics.	Ben	JW	AK				
6.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.	Ben	JW	AK				
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.	Ben	JW	AK				
8.	The simulator modeling is not altered.	Ben	JW	AK				
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.	Ben	JW	AK				
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.	Ben	JW	AK				
11.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).	Ben	JW	AK				
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).	Ben	JW	AK				
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.	Ben	JW	AK				
TARGET QUANTITATIVE ATTRIBUTES (PER SCENARIO; SEE SECTION D.5.d)		Actual Attributes		--	--	--		
1.	Total malfunctions (5-8)	7	8	7	Ben	JW	AK	
2.	Malfunctions after EOP entry (1-2)	2	3	1	Ben	JW	AK	
3.	Abnormal events (2-4)	3	2	2	Ben	JW	AK	
4.	Major transients (1-2)	1	1	1	Ben	JW	AK	
5.	EOPs entered/requiring substantive actions (1-2)	3	2	2	Ben	JW	AK	
6.	EOP contingencies requiring substantive actions (0-2)	2	2	2	Ben	JW	AK	
7.	Critical tasks (2-3)	5	5	3	Ben	JW	AK	

Final Submittal

Facility: **Oconee**

Date of Exam: **June 20, 2005**

Operating Test No.: **1**

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 (*) R I U		
		1			2			3			4						
		CREW POSITION			CREW POSITION			CREW POSITION			CREW POSITION						
		S R O	A T C	B O P													
RO SRO-I SRO-U	RX					5								1	1	1	0
	NOR			1										1	1	1	1
	I/C			2,3 5		3,6 7								6	4	4	2
	MAJ			8		8								2	2	2	1
	TS													0	0	2	2
RO SRO-I SRO-U	RX		6											1	1	1	0
	NOR				1									1	1	1	1
	I/C		4,7 5		2,3,6 7									7	4	4	2
	MAJ		8		8									2	2	2	1
	TS				4,5									2	0	2	2
RO SRO-I SRO-U	RX													0	1	1	0
	NOR	1												1	1	1	1
	I/C	2,3 4,7,5												5	4	4	2
	MAJ	8												1	2	2	1
	TS	2,5												2	0	2	2
RO SRO-I SRO-U	RX														1	1	0
	NOR														1	1	1
	I/C														4	4	2
	MAJ														2	2	1
	TS														0	2	2

Instructions:

1. 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 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 their applicant's competence count toward the minimum requirement.

Author: 

NRC Reviewer: 

Facility: Oconee RO 2005-301		Date of Exam: 6/30/2005		Exam Level: RO/SRO	
Item Description	Initial				
	a	b*	c*		
1. Questions and answers are technically accurate and applicable to the facility.	<i>[Handwritten]</i>	<i>N/A</i>	<i>ATL</i>		
2. a. NRC K/As are referenced for all questions. b. Facility learning objectives are referenced as available.	<i>[Handwritten]</i>	<i>[Handwritten]</i>	<i>ATL</i>		
3. SRO questions are appropriate in accordance with Section D.2.d of ES-401	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>		
4. The NRC's sampling process was random and systematic (i.e., no more than 4 RO and/or 2 SRO questions were repeated from the last 2 NRC licensing exams).	<i>[Handwritten]</i>	<i>[Handwritten]</i>	<i>ATL</i>		
5. Question duplication from the license screening/audit exam was controlled as indicated below (check the item that applies) and appears appropriate: <input type="checkbox"/> the audit exam was systematically and randomly developed <input type="checkbox"/> the audit exam was completed before the license exam was started <input checked="" type="checkbox"/> the examinations were developed independently <input type="checkbox"/> the licensee certifies that there is no duplication <input type="checkbox"/> other (explain)	<i>[Handwritten]</i>	<i>N/A</i>	<i>ATL</i>		
6. Bank use meets limits (no more than 75 percent from the bank, at least 10 percent new, and the rest new or modified); enter the actual RO / SRO-only question distribution(s) at right.	Bank	Modified	New	<i>[Handwritten]</i>	<i>ATL</i>
	31	15	29		
7. Between 50 and 60 percent of the questions on the RO exam are written at the comprehension/ analysis level; the SRO exam may exceed 60 percent if the randomly selected K/As support the higher cognitive levels; enter the actual RO / SRO question distribution(s) at right.	Memory	C/A		<i>[Handwritten]</i>	<i>ATL</i>
	46.67%	53.33%			
8. References/handouts provided do not give away answers or aid in the elimination of distractors.	<i>[Handwritten]</i>			<i>[Handwritten]</i>	<i>ATL</i>
9. Question content conforms with specific K/A statements in the previously approved examination outline and is appropriate for the tier to which they are assigned; deviations are justified.	<i>[Handwritten]</i>			<i>[Handwritten]</i>	<i>ATL</i>
10. Question psychometric quality and format meet the guidelines in ES Appendix B.	<i>[Handwritten]</i>			<i>[Handwritten]</i>	<i>ATL</i>
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.	<i>[Handwritten]</i>			<i>[Handwritten]</i>	<i>ATL</i>
a. Author	Printed Name/ Signature <i>George W. Lusk</i>			Date <i>6/13/2005</i>	
b. Facility Reviewer (*)	<i>N/A</i>			<i>N/A</i>	
c. NRC Chief Examiner (#)	<i>George T. Hopper / George J. Johnson</i>			<i>6/15/05</i>	
d. NRC Regional Supervisor	<i>James H. McCormack, III / Janet M. [unclear]</i>			<i>6/16/05</i>	
Note: * The facility reviewer's initials/signature are not applicable for NRC-developed examinations. # independent NRC reviewer initial items in Column "c"; chief examiner concurrence required.					

Facility: Oconee SRO		Date of Exam: 6/30/2005		Exam Level: RO SRO	
Item Description	Initial				
	a	b*	c*		
1. Questions and answers are technically accurate and applicable to the facility.	[Signature]	N/A	[Signature]		
2. a. NRC K/As are referenced for all questions. b. Facility learning objectives are referenced as available.	[Signature]	↓	[Signature]		
3. SRO questions are appropriate in accordance with Section D.2.d of ES-401	[Signature]	↓	[Signature]		
4. The facility licensee's ^{NRC} sampling process was random and systematic (i.e., no more than 4 RO and/or 2 SRO questions were repeated from the last 2 NRC licensing exams).	[Signature]	[Signature]	[Signature]		
5. Question duplication from the license screening/audit exam was controlled as indicated below (check the item that applies) and appears appropriate: <input type="checkbox"/> the audit exam was systematically and randomly developed <input type="checkbox"/> the audit exam was completed before the license exam was started <input checked="" type="checkbox"/> the examinations were developed independently <input type="checkbox"/> the licensee certifies that there is no duplication <input type="checkbox"/> other (explain)	[Signature]	N/A	[Signature]		
6. Bank use meets limits (no more than 75 percent from the bank, at least 10 percent new, and the rest new or modified); enter the actual RO / SRO-only question distribution(s) at right.	Bank	Modified	New	[Signature]	[Signature]
	10	3	12		
7. Between 50 and 60 percent of the questions on the RO exam are written at the comprehension/ analysis level; the SRO exam may exceed 60 percent if the randomly selected K/As support the higher cognitive levels; enter the actual RO / SRO question distribution(s) at right.	Memory	C/A		[Signature]	[Signature]
	24%	76%			
8. References/handouts provided do not give away answers or aid in the elimination of distractors.	[Signature]			[Signature]	[Signature]
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.	[Signature]			[Signature]	[Signature]
10. Question psychometric quality and format meet the guidelines in ES Appendix B.	[Signature]			[Signature]	[Signature]
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.	[Signature]	↓		[Signature]	[Signature]
a. Author b. Facility Reviewer (*) c. NRC Chief Examiner (#) d. NRC Regional Supervisor		Printed Name / Signature Gerard W. Lasuk [Signature] N/A George T. Hopper / George J. Hopper James H. Moorhead, III / [Signature]		Date 6/13/2005 N/A 6/14/05 6-16-05	
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.					

Q#	1. LOK (C/M)	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			

Instructions

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

- Enter the level of knowledge (LOK) of each question as either (F)undamental or (H)igher cognitive level.
- 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).
- 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.
 - One or more distractors is not credible.
 - One or more distractors is (are) partially correct (e.g., if the applicant can make unstated assumptions that are not contradicted by stem).
- 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.
- 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).
- Based on the reviewer's judgment, is the question as written (U)nacceptable (requiring repair or replacement), in need of (E)ditorial enhancement, or (S)atisfactory?
- At a minimum, explain any "U" ratings (e.g., how the Appendix B psychometric attributes are not being met).

Q#	1. LOK (C/M)	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
1															001K6.13 Added valve noun names.
2															003K5.02 Modified "B" to be correct. Changed flows in "C" and "D" in insure incorrect.
3															004K3.07 Modified stem to clarify failure. KA match (pressure)?
4															005K1.13 Utility reviewed no changes.
5															006K2.02 Wrote new question
6															006K2.04 Utility reviewed no changes.
7															007A2.04
8															007EK2.02 Utility reviewed no changes.
9															007K3.01 Modified question to be more plausible.
10															007K4.01 Wrote new question.
11															008A1.02 Editorial changes.
12															008AA2.04 Rewrote question
13															009EK3.07 Modified question to make only one answer correct.
14															010A4.01 Utility reviewed no changes.

RO QUESTIONS

Facility: <u>OCONEE</u>		Date of Exam: <u>6/30/05</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	<u>J</u>	<u>N/A</u>	<u>ATK</u>		
2. Answer key changes and question deletions justified and documented	<u>J</u>	<u>N/A</u>	<u>ATK</u>		
3. Applicants' scores checked for addition errors (reviewers spot check > 25% of examinations)	<u>J</u>	<u>N/A</u>	<u>ATK</u>		
4. Grading for all borderline cases (80 ±2% overall and 70 or 80, as applicable, ±4% on the SRO-only) reviewed in detail	<u>J</u>	<u>N/A</u>	<u>ATK</u>		
5. All other failing examinations checked to ensure that grades are justified	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>		
6. Performance on missed questions checked for training deficiencies and wording problems; evaluate validity of questions missed by half or more of the applicants	<u>J</u>	<u>N/A</u>	<u>ATK</u>		
Printed Name/Signature		Date			
a. Grader	<u>G.W. Liska</u>	<u>7/11/2005</u>			
b. Facility Reviewer(*)	<u>N/A</u>	<u>N/A</u>			
c. NRC Chief Examiner (*)	<u>George T. Hopper / George J. Hopper</u>	<u>7/20/05</u>			
d. NRC Supervisor (*)	<u>James H. Mearns / James H. Mearns</u>	<u>7-27-05</u>			
(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.					

Post-Examination Check Sheet	
Task Description	Date Complete
1. Facility written exam comments or graded exams received and verified complete	7/6/05
2. Facility written exam comments reviewed and incorporated and NRC grading completed, if necessary	7/11/05
3. Operating tests graded by NRC examiners	7/24/05
4. NRC chief examiner review of operating test and written exam grading completed	7/24/05
5. Responsible supervisor review completed	7/25/05
6. Management (licensing official) review completed	7/26/05
7. License and denial letters mailed	7/27/05
8. Facility notified of results	7/26/05
9. Examination report issued (refer to NRC MC 0612)	7/27/05
10. Reference material returned after final resolution of any appeals	N/A

May 5, 2005

NRC REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET, S.W.
SUITE 23T85
ATLANTA, GA. 30303-8931

Re: OCONEE NUCLEAR STATION
Completed Operating Exam

Dear Mr. Moorman:

We are enclosing the Operating Exam Outlines and quality checklists, as required, for the Initial License exam scheduled for the weeks of June 20 and June 27, 2005, at the Operator Training Center, Oconee Nuclear Site. Enclosed for your review are:

- Three Scenarios
- One RO Administrative Exam
- One SRO Administrative Exam
- One RO Control Room/In-Plant Test
- One SRO (I) Control Room/In-Plant Test
- One SRO (U) Control Room/In-Plant Test
- Form ES-301-3, Operating Test Quality Checklist
- Form ES-301-4, Simulator Scenario Quality Checklist
- Form ES-301-5, Transient And Event Checklist
- Form ES-401-6, Written Examination Quality Checklist

If you require any additional information, or have further questions, please feel free to contact Gabriel Washburn at (864) 885-4490, or J.R. Steely at (864) 885-3446.

Sincerely,


Neil E. Constance Jr.,
Manager of Operator Training