

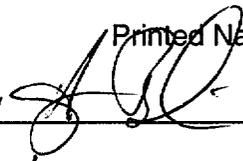
Facility: <u>SSES</u>		Date of Examination: <u>12/17-20/05</u>
Examinations Developed by: <u>operating / written</u> Facility / NRC (circle one)		
Target Date*	Task Description (Reference)	Chief Examiner's Initials
-180	1. Examination administration date confirmed (C.1.a; C.2.a and b)	TF
-120	2. NRC examiners and facility contact assigned (C.1.d; C.2.e)	TF
-120	3. Facility contact briefed on security and other requirements (C.2.c)	TF
-120	4. Corporate notification letter sent (C.2.d)	TF
[-90]	[5. Reference material due (C.1.e; C.3.c; Attachment 2)]	TF
-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)	TF
-70	7. Examination outline(s) reviewed by NRC and feedback provided to facility licensee (C.2.h; C.3.e)	TF
-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)	TF
-30	9. Preliminary license applications (NRC Form 398's) due (C.1.i; C.2.g; ES-202)	TF
-14	10. Final license applications due and Form ES-201-4 prepared (C.1.i; C.2.i; ES-202)	TF
-14	11. Examination approved by NRC supervisor for facility licensee review (C.2.h; C.3.f)	TF
-14	12. Examinations reviewed with facility licensee (C.1.j; C.2.f and h; C.3.g)	TF
-7	13. Written examinations and operating tests approved by NRC supervisor (C.2.i; C.3.h)	TF
-7	14. Final applications reviewed; examination approval and waiver letters sent (C.2.i; Attachment 4; ES-204)	TF
-7	15. Proctoring/written exam administration guidelines reviewed with facility licensee (C.3.k)	TF
-7	16. Approved scenarios, job performance measures, and questions distributed to NRC examiners (C.3.i)	TF
<p>* Target dates are keyed to the examination date identified in the corporate notification letter. They are for planning purposes and may be adjusted on a case-by-case basis in coordination with the facility licensee.</p> <p>[] Applies only to examinations prepared by the NRC.</p>		

Facility: SSES		Date of Examination: 12/12/05		(Rev. 0)	
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.	N/A	N/A	N/A	↑ developed ↓
	b. Assess whether the outline was systematically and randomly prepared in accordance with Section D.1 of ES-401 and whether all K/A categories are appropriately sampled.	N/A	N/A	N/A	
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	N/A	N/A	N/A	
	d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.	N/A	N/A	N/A	
2. S I M	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.	RJB	KML	TF	
	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 applicant's audit test(s), and scenarios will not be repeated on subsequent days.	RJB	KML	TF	
	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.	RJB	KML	TF	
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 applicant's 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.	RJB	KML	TF	
	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.	RJB	KML	TF	
	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.	RJB	KML	TF	
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.	RJB	KML	TF	
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.	RJB	KML	TF	
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	RJB	KML	TF	
	d. Check for duplication and overlap among exam sections.	RJB	KML	TF	
	e. Check the entire exam for balance of coverage.	RJB	KML	TF	
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	RJB	KML	TF	
a. Author <u>Richard J. Brooks / Richard J Brooks</u> b. Facility Reviewer (*) <u>K. M Roush / KML Roush</u> c. NRC Chief Examiner (#) <u>TODD FISHER / Todd Fisher</u> d. NRC Supervisor <u>R.O. Carter / R.O. Carter</u>		Printed Name / Signature		Date 9/20/05 9/20/05 9/22/05 10/13/05	
Note: # Independent NRC reviewer initial items in Column "c", chief examiner concurrence required.					

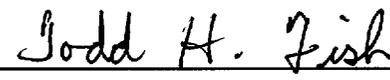
Facility: Susquehanna SES		Date of Examination: 12 to 22 December 2005		
Item	Task Description	Initials		
		a	b *	c #
1. W R I T T E N	a. Verify that the outline(s) fit(s) the appropriate model, in accordance with ES-401.	HB	NA	TF
	b. Assess whether the outline was systematically and randomly prepared in accordance with Section D.1 of ES-401 and whether all K/A categories are appropriately sampled.	HB	NA	TF
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	HB	NA	TF
	d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.	HB	NA	TF
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	Not Applicable - Facility Developed		
	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.	Not Applicable - Facility Developed		
	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			
	c. Determine if there are enough different outlines to test the projected			

4. G E N E R A L	a. Assess whether plant-specific priorities (including PRA and IPE insights) are covered in the appropriate exam sections.	HB	NA	TF
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.	HB	NA	TF
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	HB	NA	TF
	d. Check for duplication and overlap among exam sections.	HB	NA	TF
	e. Check the entire exam for balance of coverage.	HB	NA	TF
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	HB	NA	TF

Printed Name/Signature Date

a. Author: Harry Balian (HB) /  1 July 2005

b. Facility Reviewer (*) N/A

c. NRC Chief Examiner (#): Todd H. Fish /  7/7/05

d. NRC Supervisor: Richard J. Conte /  7/14/05

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

1. Pre-Examination

Susquehanna 12/19/05

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 12/12/05 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 § 12/19/05

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 12/12/05. 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. Susquehanna

PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE	NOTE
1. Richard J. Brooks	Exam coordinator	[Signature]	4/18/05	[Signature]	12/21/05	
2. Richard E. CHIN	Exam Developer	[Signature]	4-18-05	[Signature]	12/28/05	
3. CAROL A. BURKHART	DATABASE ADMINISTRATOR	[Signature]	4-18-05	[Signature]	1/03/06	
4. Gregory J. Fowler	Computer Analyst - Nuclear	[Signature]	5-5-05	[Signature]	12/27/05	
5. CL Seale Dodge	Simulation Group	[Signature]	5/14/05	[Signature]	12/27/05	
6. Scott Dietschenbacher	Scott Dietschenbacher	[Signature]	7/10/05	[Signature]	01/03/06	
7. Guy N Wynn	Exam Developer	[Signature]	7/18/05	[Signature]	12/21/05	
8. Jon Krupp	Senior Engineer	[Signature]	7/25/05	[Signature]	12/28/05	
9. Jon Seek	NTG reviewer	[Signature]	9/6/05	[Signature]	12/21/05	
10. Thomas Ray	Unit Supervisor	[Signature]	9/16/05	[Signature]	12/21/05	
11. Scott Cawley	Plant Control Operator	[Signature]	9/16/05	[Signature]	12/28/05	
12. MARK DWORZINSKI	Plant Control Operator	[Signature]	9/16/05	[Signature]	12/28/05	
13. Keith W. Davis	Unit Supervisor	[Signature]	9/16/05	[Signature]	12/28/05	
14. K M Roush	Manager - Nuclear training	[Signature]	9/20/05	[Signature]	12/28/05	
15. Vicky H. Horvath	Choreil (Apr)	[Signature]	09/26/05	[Signature]	01/03/06	

NOTES: ① VIA Telecon

Susquehanna

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 12/12/05 & 12/19/05 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 12/12/05 & 12/19/05 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. Janice L. Frey	Clerical Support	Janice L. Frey	10/20/05	[Signature]	12/28/05	
2. CHARLES HESS	SIMULATOR INSTRUCTOR	[Signature]	11/19/05	[Signature]	12/21/05	
3. Hilary Clatch Jr	SYSTEM ANALYST	[Signature]	11-14-05	[Signature]	12/28/05	
4. CHRISTOPHER DAVIS	SENIOR ENGINEER	Christopher Davis	11/14/05	[Signature]	1/3/06	
5. TAMMY S. ACKER	Computer Associate	Tammy S. Acker	11/14/05	[Signature]	1/3/06	
6. CARL RUMION	EXITECH CONTRACTOR	Carl Rumion	11/14/05	[Signature]	1/3/06	
7. JAMES A. BONARD	EXITECH CONTRACTOR	James Bonard	11/14/05	[Signature]	1/3/06	
8. J. FLETCHER GIBBS	TVA	J. Fletcher Gibbs	1/15/05	[Signature]	1/3/06	
9. JOE POPIETSCHI JR	COMPUTER ANALYST	Joe Popietschi Jr	11/15/05	[Signature]	1/3/06	
10. ERIC R. SCHMACK	PCO	E.R. Schmack	11/21/05	[Signature]	12/28/05	
11. Robert Boesch	NTG - Ops Supervisor	Robert Boesch	12/17/05	[Signature]	12/21/05	
12. Sidney Morgan	ILO - Program Lead	Sidney Morgan	12/12/05	[Signature]	12/29/05	
13. Russ HALL	ILO - LEAD INSTRUCTOR	Russ Hall	12/12/05	[Signature]	12/24/05	
14. DAVE KOHL	ILO - INSTRUCTOR	[Signature]	12-12-05	[Signature]	1-3-06	
15. CLIFFORD NICKENSMAN	ILO INSTRUCTOR	Clifford Nickensman	12/12/05	[Signature]	12/21/05	

NOTES: ① Via telecon

1. Pre-Examination

Susquehanna

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 12/12/05 & 12/14/05 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 12/12/05 & 12/14/05. 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. Christopher Michaels	Instructor / Escort Candidates	<i>Chris Michaels</i>	12/12/05	<i>Chris Michaels</i>	12/21/05	
2. Art Fitch	Assistant Op. Mgr.	<i>Art Fitch</i>	12/13/05	<i>Art Fitch</i>	12/27/05	
3. Russell B DeVore	Instructor / Escort	<i>Russell B DeVore</i>	12/14/05	<i>Russell B DeVore</i>	12/21/05	
4. SEBASTIAN ROSE	ESCORT	<i>Sebastian Rose</i>	12/14/05	<i>Sebastian Rose</i>	12/21/05	
5. RANDY R. NEWTON	ESCORT	<i>Randy R Newton</i>	12/15/05	<i>Randy R Newton</i>	12/20/05	
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						

NOTES:

Facility: **SSES**

Date of Examination: **12/12/05 (Rev. 2)** 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).	RJB	KML	TF
b. There is no day-to-day repetition between this and other operating tests to be administered during this examination.	RJB	KML	TF
c. The operating test shall not duplicate items from the applicants audit test(s)(see Section D.1.a).	RJB	KML	TF
d. Overlap with the written examination and between different parts of the operating test is within acceptable limits.	RJB	KML	TF
e. It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.	RJB	KML	TF

2. WALK-THROUGH CRITERIA			
a. Each JPM includes the following, as applicable: <ul style="list-style-type: none"> initial conditions initiating cues references and tools, including associated procedures reasonable and validated time limits (average time allowed for completion) and specific designation if deemed to be time critical by the facility licensee operationally important specific performance criteria that include: <ul style="list-style-type: none"> detailed expected actions with exact criteria and nomenclature system response and other examiner cues statements describing important observations to be made by the applicant criteria for successful completion of the task identification of critical steps and their associated performance standards restrictions on the sequence of steps, if applicable 	RJB	KML	TF
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.	RJB	KML	TF

3. SIMULATOR CRITERIA			
a. The associated simulator operating tests (scenario sets) have been reviewed in accordance with Form ES-301-4 and a copy is attached.	RJB	KML	TF

	Printed Name / Signature	Date
a. Author	Richard J. Brooks / <i>[Signature]</i>	12/1/05
b. Facility Reviewer (*)	K-M. Roush / <i>[Signature]</i>	12/1/05
c. NRC Chief Examiner (#)	TODD FISH / <i>[Signature]</i>	12/2/05
d. NRC Supervisor	P.J. Conte / <i>[Signature]</i>	12/8/05

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

Facility: **SSES** Date of Exam: **12/12/05 (Rev. 2)** Scenario Numbers **ILO-304 / 305 / 504 / 505 / 602** 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.	RJZ	KMR	TF	
2.	The scenarios consist mostly of related events.	RJZ	KMR	TF	
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) 	RJZ	KMR	TF	
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.	RJZ	KMR	TF	
5.	The events are valid with regard to physics and thermodynamics.	RJZ	KMR	TF	
6.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.	RJZ	KMR	TF	
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.	RJZ	KMR	TF	
8.	The simulator modeling is not altered.	RJZ	KMR	TF	
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.	RJZ	KMR	TF	
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.	RJZ	KMR	TF	
11.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).	RJZ	KMR	TF	
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).	RJZ	KMR	TF	
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.	RJZ	KMR	TF	
TARGET QUANTITATIVE ATTRIBUTES (PER SCENARIO; SEE SECTION D.5.d)		Actual Attributes			
1.	Total malfunctions (5-8)	9/7/9/5/8	RJZ	KMR	TF
2.	Malfunctions after EOP entry (1-2)	4/2/4/2/3	RJZ	KMR	TF
3.	Abnormal events (2-4)	3/4/4/2/4	RJZ	KMR	TF
4.	Major transients (1-2)	2/2/3/3/2	RJZ	KMR	TF
5.	EOPs entered/requiring substantive actions (1-2)	3/2/3/2/2	RJZ	KMR	TF
6.	EOP contingencies requiring substantive actions (0-2)	0/2/1/2/2	RJZ	KMR	TF
7.	Critical tasks (2-3)	5/2/4/4/5	RJZ	KMR	TF

Facility		SSES		Date of Exam 12/12/05 (Rev. 2)				Operating Test No: {									
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 (-)		
		ILO-304			ILO-305			ILO-504 B/U			ILO-505						
		CREW POSITION			CREW POSITION			CREW POSITION			CREW POSITION						
		S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P				
		R	I	U													
RO <input type="checkbox"/>	RX	2,4	2,4		1,	1,		1	1		3,	3,			1	1	0
SRO-I <input type="checkbox"/>	NOR			2			1,				1	1	1,3		1	1	1
SRO-U <input type="checkbox"/>	I/C	1,3, 5,6, 7,9,	3,5, 6,7	1,4, 6,7, 9,	2,3, 4,5, 6,7, 8,	2,5, 6,7, 8,	3,4, 5,8,	2,3, 4,7, 8,9,	4,9,	2,3, 7,8,	2, 5,6,	2,	2,5, 6,		4	4	2
	MAJ	8,10	8,10	8,10	9	9	9	5,6, 10	5,6, 10	5,6, 10	4,7, 8,	4,7, 8,	4,7, 8,		2	2	1
	TS	1,4			3,4			1,2			2,3				0	2	2
RO <input type="checkbox"/>	RX														1	1	0
SRO-I <input type="checkbox"/>	NOR														1	1	1
SRO-U <input type="checkbox"/>	I/C														4	4	2
	MAJ														2	2	1
	TS														0	2	2
RO <input type="checkbox"/>	RX														1	1	0
SRO-I <input type="checkbox"/>	NOR														1	1	1
SRO-U <input type="checkbox"/>	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 the applicant's competence count toward the minimum requirements specified for the applicant's license level in the right hand columns.

Facility		SSES	Date of Exam 12/12/05 (Rev. 2)			Operating Test No. {												
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 (-)		
		ILO-602			2			3			4							
		CREW POSITION			CREW POSITION			CREW POSITION			CREW POSITION							
		S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P					
														R	I	U		
RO <input type="checkbox"/>	RX	2,	2,												1	1	0	
SRO-I <input type="checkbox"/>	NOR	1,		1,2,											1	1	1	
SRO-U <input type="checkbox"/>	I/C	4,5, 7,8,	4,5, 8,	5,7, 8,											4	4	2	
	MAJ	6,10	6,10	6,10											2	2	1	
	TS	2,5													0	2	2	
RO <input type="checkbox"/>	RX														1	1	0	
SRO-I <input type="checkbox"/>	NOR														1	1	1	
SRO-U <input type="checkbox"/>	I/C														4	4	2	
	MAJ														2	2	1	
	TS														0	2	2	
RO <input type="checkbox"/>	RX														1	1	0	
SRO-I <input type="checkbox"/>	NOR														1	1	1	
SRO-U <input type="checkbox"/>	I/C														4	4	2	
	MAJ														2	2	1	
	TS														0	2	2	

Instructions:

- Circle the applicant level and enter the operating test number and Form ES-D-1 event numbers for each event type; TS are not applicable for RO applicants. ROs must 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.
- Reactivity manipulations may be conducted under normal or *controlled* abnormal conditions (refer to Section D.5.d) but must be significant per section C.2.a of Appendix D. (-) Reactivity and normal evolutions may be replaced with additional instrument or component malfunctions on a 1-for-1 basis.
- Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirements specified for the applicant's license level in the right hand columns.

Facility		SSES		Date of Exam 12/12/05 (Rev. 2)			Operating Test No : (
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 (-)		
		ILO-305			ILO-505			ILO-602			4						
		CREW POSITION			CREW POSITION			CREW POSITION			CREW POSITION						
		S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P				
														R	I	U	
RO#1, #2, #3 <input checked="" type="checkbox"/>	RX							2,						1	1	1	0
	NOR			1,			1,3							3	1	1	1
	I/C			3,4, 5,8,			2,5, 6,		4,5, 8,					10	4	4	2
	MAJ			9			4,7, 8,		6,10					6	2	2	1
	TS													0	0	2	2
SRO-I #1, #3, #5 <input checked="" type="checkbox"/>	RX	1,				3,		2,						3	1	1	0
	NOR					1		1,						2	1	1	1
	I/C	2,3, 4,5, 6,7, 8,				2,		4,5, 7,8,						12	4	4	2
	MAJ	9				4,7, 8,		6,10						6	2	2	1
	TS	3,4						2,5						4	0	2	2
SRO-I #2, #4, #6 <input checked="" type="checkbox"/>	RX		1,			3,								2	1	1	0
	NOR					1				1,2,				3	1	1	1
	I/C		2,5, 6,7, 8,			2, 5,6,				5,7, 8,				11	4	4	2
	MAJ		9			4,7, 8,				6,10				6	2	2	1
	TS					2,3								2	0	2	2

Instructions:

- Circle the applicant level and enter the operating test number and Form ES-D-1 event numbers for each event type; TS are not applicable for RO applicants. ROs must 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.
- Reactivity manipulations may be conducted under normal or *controlled* abnormal conditions (refer to Section D.5.d) but must be significant per section C.2.a of Appendix D. (-) Reactivity and normal evolutions may be replaced with additional instrument or component malfunctions on a 1-for-1 basis.
- Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirements specified for the applicant's license level in the right hand columns.

Facility: SSES	Date of Exam 12/12/05 (Rev. 2)						Operating Test No.: 1					
Competencies	APPLICANTS											
	RO #1, 2, 3 <input checked="" type="checkbox"/>			SRO-I #1, 3, 5 <input checked="" type="checkbox"/>			SRO-I #2, 4, 6 <input checked="" type="checkbox"/>					
	SCENARIO 305/505/602			SCENARIO 305/505/602			SCENARIO 305/505/602			SCENARIO		
	1	2	3	1	2	3	1	2	3			
Interpret/Diagnosis Events and Conditions	1,3,4 5,8,9	1,2,3 4,5,6 7,8	2,4, 5,6, 8,10	1,2,3 4,5,6 7,8,9	1,2,3 4,5,6 7,8	1,2, 4,5 6,7 8,10	1,2,5 6,7,8 9	1,2,3 4,5,6 7,8	2,3,4, 5,6,7 8,9 10			
Comply With and Use Procedures (1)	1,3,4 5,8,9	1,2,3 4,5,6 7,8	2,4, 5,6, 8,10	1,2,3 4,5,6 7,8,9	1,2,3 4,5,6 7,8	1,2, 4,5 6,7 8,10	1,2,5 6,7,8 9	1,2,3 4,5,6 7,8	1,2,3 4,5,6 7,8,9 10			
Operate Control Boards (2)	1,3,4 5,8,9	1,2,3 4,5,6 7,8	2,4, 5,6, 8,10		1,2,3 4,5,6 7,8		1,2,5 6,7,8 9		1,2,3 4,5,6 7,8,9 10			
Communicate and Interact	1,2,3 4,5,6 7,8,9	1,2,3 4,5,6 7,8	2,4, 5,6, 8,10	1,2,3 4,5,6 7,8,9 10	1,2,3 4,5,6 7,8	1,2, 4,5 6,7 8,10	1,2,3 4,5,6 7,8,9	1,2,3 4,5,6 7,8	1,2,3 4,5,6 7,8,9 10			
Demonstrate Supervisory Ability (3)				1,2,3 4,5,6 7,8,9 10		1,2, 4,5 6,7 8,10		1,2,3 4,5,6 7,8				
Comply With and Use Tech. Specs. (3)				3,4		2,5		2,3				

Notes:

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

Instructions:

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

Facility: Susquehanna Steam Electric Station				Date of Exam: 12 December 2005			Exam Level: RO X SRO X		
Item Description				Initial					
				a	b*	c#			
1. Questions and answers are technically accurate and applicable to the facility.				HB	N/A	THF			
2. a. NRC K/As are referenced for all questions. b. Facility learning objectives are referenced as available.				HB	N/A	THF			
3. SRO questions are appropriate in accordance with Section D.2.d of ES-401				N/A	N/A	THF			
4. The sampling process was random and systematic (if more than 4 RO and 2 SRO questions are repeated from the last 2 NRC licensing exams, consult with NRR OL program office.)				2 RO repeats 1 SRO repeat		THF			
5. Question duplication from the license screening/audit exam was controlled as indicated below (check the item that applies) and appears appropriate: <input checked="" type="checkbox"/> the audit exam was systematically and randomly developed; or <input type="checkbox"/> the audit exam was completed before the license exam was started; or <input checked="" type="checkbox"/> the examinations were developed independently; or <input type="checkbox"/> the licensee certifies that there is no duplication; or <input type="checkbox"/> other (explain)				HB	N/A	THF			
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	HB	N/A	THF			
	20 / 9	21 / 7	34 / 9						
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	HB	N/A	THF			
	29 / 6		46 / 19						
8. References/handouts provided do not give away answers or aid in the elimination of distractors.				HB	N/A	THF			
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.				HB	N/A	THF			
10. Question psychometric quality and format meet the guidelines in ES Appendix B.				HB	N/A	THF			
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.				HB	N/A	THF			
Printed Name / Signature				Date					
a. Author	Harry Balian / <i>[Signature]</i>			18 Nov 05					
b. Facility Reviewer (*)	* not applicable			n/a					
c. NRC Chief Examiner (#)	Todd H. Fish / <i>[Signature]</i>			18 Nov 05					
d. NRC Regional Supervisor	Todd H. Fish for Richard J. Conte / <i>[Signature]</i>			18 Nov 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.									

This is our fourth submission for the December 2005 ILO exam. These are 100 questions of a 75 question RO exam and a 100 question SRO exam. These questions were validated earlier this week between the NRC Author, the NRC Chief Examiner and SSES Training Department staff.

Questions 9 and 26 were significantly revised. Questions 96 and 97 were replaced. Questions 2, 6, 12, 13, 14, 18, 21, 24, 33, 53, 56, 62, 63, 65, 68, 70, 74, 75, 76, 78, 79, 81, 84 through 89, 92, and 99 contain editorial changes.

Previous Susquehanna Exam questions

August 2002: 1 Modified (34) & 1 Bank (97)
August 2003: None

December 2003: None
August 2004: 1 Modified (14) & 1 Bank (21)

Facility: SSES		Date of Exam: ^{TF 1/6/06} 12/12 thru 12/20 2005		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	RJB	RRB	B/TF		
2. Answer key changes and question deletions justified and documented	N/A RJB	N/A RRB	B/TF		
3. Applicants' scores checked for addition errors (reviewers spot check > 25% of examinations)	RJB	RRB	B/TF		
4. Grading for all borderline cases (80 +/- 2% overall and 70 or 80, as applicable, ± 4% on the SRO-only) reviewed in detail	RJB	RRB	B/TF		
5. All other failing examinations checked to ensure that grades are justified	N/A RJB	N/A RRB	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	RJB	RRB	B/TF		
Printed Name / Signature		Date			
a. Grader	Richard J. Brooks / <i>[Signature]</i>	12/27/05			
b. Facility Reviewer(*)	Robert R Boesch / <i>[Signature]</i>	12/28/05			
c. NRC Chief Examiner (*)	Harry Balian / <i>[Signature]</i>	1/4/06			
	TODD FISH / <i>[Signature]</i>	1/6/06			
d. NRC Supervisor (*)	<i>[Signature]</i> / R.J. Conite	1/6/06			
(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.					