

Facility: Seabrook Station

Date of Examination: 06/12/2009

Developed by: Written - Facility NRC // Operating - Facility NRC

Target Date*	Task Description (Reference)	Chief Examiner's Initials
-180	1. Examination administration date confirmed (C.1.a; C.2.a and b)	<i>ASD</i>
-120	2. NRC examiners and facility contact assigned (C.1.d; C.2.e)	<i>ASD</i>
-120	3. Facility contact briefed on security and other requirements (C.2.c)	<i>ASD</i>
-120	4. Corporate notification letter sent (C.2.d)	<i>ASD</i>
[-90]	[5. Reference material due (C.1.e; C.3.c; Attachment 3)]	<i>N/A</i>
{-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)	<i>ASD</i>
{-70}	{7. Examination outline(s) reviewed by NRC and feedback provided to facility licensee (C.2.h; C.3.e)}	<i>ASD</i>
{-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 any Form ES-201-3 updates), and reference materials due (C.1.e, f, g and h; C.3.d)	<i>ASD</i>
-30	9. Preliminary license applications (NRC Form 398's) due (C.1.i; C.2.g; ES-202)	<i>ASD</i>
-14	10. Final license applications due and Form ES-201-4 prepared (C.1.i; C.2.i; ES-202)	<i>ASD</i>
-14	11. Examination approved by NRC supervisor for facility licensee review (C.2.h; C.3.f)	<i>ASD</i>
-14	12. Examinations reviewed with facility licensee (C.1.j; C.2.f and h; C.3.g)	<i>ASD</i>
-7	13. Written examinations and operating tests approved by NRC supervisor (C.2.i; C.3.h)	<i>ASD</i>
-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 5; ES-202, C.2.e; ES-204)	<i>ASD</i>
-7	15. Proctoring/written exam administration guidelines reviewed with facility licensee (C.3.k)	<i>ASD</i>
-7	16. Approved scenarios, job performance measures, and questions distributed to NRC examiners (C.3.i)	<i>ASD</i>

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

[Applies only] {Does not apply} to examinations prepared by the NRC.

Facility: Seabrook		Date of Examination: 6/15/09		
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.	PB	TLL	AS
	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.	PB	TLL	AS
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	PB	TLL	AS
	d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.	PB	TLL	AS
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.	PB	TLL	AS
	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.	PB	TLL	AS
	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.	PB	TLL	AS
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.	PB	TLL	AS
	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	PB	TLL	AS
	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.	PB	TLL	AS
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.	PB	TLL	AS
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.	PB	TLL	AS
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	PB	TLL	AS
	d. Check for duplication and overlap among exam sections.	PB	TLL	AS
	e. Check the entire exam for balance of coverage.	PB	TLL	AS
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	PB	TLL	AS
a. Author	Patrick Liay / <i>[Signature]</i>		Date	3-30-09
b. Facility Reviewer (*)	Timothy C. Cassioy / <i>[Signature]</i>		Date	3/30/09
c. NRC Chief Examiner (#)	Anthony / Peter Presby / <i>[Signature]</i>		Date	4/6/09
d. NRC Supervisor	Samuel L. Hansell Jr. / <i>[Signature]</i>		Date	4/9/09
Note:	# Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required. * Not applicable for NRC-prepared examination outlines			

201 ATTACHMENT 3
Form ES-210-3, Examination Security Agreement

Form ES-201-3

Examination Security Agreement

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 6/15-6/22/09 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 6/22-09. 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>Patrick Leary</u>	<u>Exam Author</u>	<u>[Signature]</u>	<u>1-8-09</u>	<u>[Signature]</u>	<u>6-23-09</u>
<u>SHIH-WEI TAN</u>	<u>Sim Support</u>	<u>[Signature]</u>	<u>6/18/09</u>	<u>[Signature]</u>	<u>6-23-09</u>
<u>Timothy Chaffin</u>	<u>Facility Rep</u>	<u>[Signature]</u>	<u>11/09</u>	<u>[Signature]</u>	<u>6/23/09</u>
<u>LEA BURBANK</u>	<u>Sim Support</u>	<u>[Signature]</u>	<u>1-8-09</u>	<u>[Signature]</u>	<u>6/23/09</u>
<u>KERRY WRIGHT</u>	<u>TRK MNC</u>	<u>[Signature]</u>	<u>1-15-09</u>	<u>[Signature]</u>	<u>6/23-09</u>
<u>Matthew Aricaud</u>	<u>Admin Support</u>	<u>[Signature]</u>	<u>1-15-09</u>	<u>[Signature]</u>	<u>6/23/09</u>
<u>JAMES LEAHY</u>	<u>Western exam validation</u>	<u>[Signature]</u>	<u>3/15/09</u>	<u>[Signature]</u>	<u>6/23/09</u>
<u>James Kincaid</u>	<u>Network Provision</u>	<u>[Signature]</u>	<u>3/15/09</u>	<u>[Signature]</u>	<u>6/23/09</u>
<u>Barry Redbury</u>	<u>Slitt McLayer (F)</u>	<u>[Signature]</u>	<u>4/13/09</u>	<u>[Signature]</u>	<u>6/23/09</u>
<u>Richard (WNNM)</u>	<u>Unit Operator</u>	<u>[Signature]</u>	<u>4/13/09</u>	<u>[Signature]</u>	<u>6/23/09</u>
<u>MARGARET WYMAN</u>	<u>Cell Ops PM (Control)</u>	<u>[Signature]</u>	<u>4/14/09</u>	<u>[Signature]</u>	<u>6/23/09</u>
<u>JOSEPH FURDGE</u>	<u>Control Support</u>	<u>[Signature]</u>	<u>4-14-09</u>	<u>[Signature]</u>	<u>6/23/09</u>
<u>EVAN GREENE</u>	<u>CRG</u>	<u>[Signature]</u>	<u>4-14-09</u>	<u>[Signature]</u>	<u>6/23/09</u>
<u>Chick Swanson</u>	<u>PLANT TECHNICIAN</u>	<u>[Signature]</u>	<u>4-22-09</u>	<u>[Signature]</u>	<u>6/23/09</u>
	<u>Mid Fleet CRG Training</u>	<u>[Signature]</u>	<u>4-22-09</u>	<u>[Signature]</u>	<u>6/23/09</u>

NOTES:

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 6/15-16/09 ²⁰⁰⁹ 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 6/15-16/09. 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 DATE
IVE-YUHT LEE	ENGINEER	<i>[Signature]</i>	5/13/09	<i>[Signature]</i>	6/25/09
ED NUNN	Ops Training Supervisor	<i>[Signature]</i>	6/11/09	<i>[Signature]</i>	6/23/09
Les BROWN	ASST OPERATIONS MGR	<i>[Signature]</i>	6/15/09	<i>[Signature]</i>	6/23/09
Sean M. Butler	Simulator Booth Operator	<i>[Signature]</i>	6/15/09	<i>[Signature]</i>	6/23/09
GUY FURANK	SPZ TECH	<i>[Signature]</i>	6/15/09	<i>[Signature]</i>	6/23/09
Charlotte Tapp	SPZ TECH	<i>[Signature]</i>	6/15/09	<i>[Signature]</i>	6/23/09
Scott Dimler	OPS TRAINER	<i>[Signature]</i>	6/15/09	<i>[Signature]</i>	6/23/09
Michael Breda	OPS TRAINER	<i>[Signature]</i>	6/15/09	<i>[Signature]</i>	6/23/09
ROBERT FANNING	OPS TRAINER	<i>[Signature]</i>	6/15/09	<i>[Signature]</i>	6/23/09
JAMES BORSO	OPS ASST	<i>[Signature]</i>	6/15/09	<i>[Signature]</i>	6/23/09

NOTES:

Facility:		Date of Examination:		Operating Test Number:		
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).			JA	TCL	RA
b.	There is no day-to-day repetition between this and other operating tests to be administered during this examination.			JA	TCL	RA
c.	The operating test shall not duplicate items from the applicants' audit test(s). (see Section D.1.a.)			JA	TCL	RA
d.	Overlap with the written examination and between different parts of the operating test is within acceptable limits.			JA	TCL	RA
e.	It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.			JA	TCL	RA
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 			JA	TCL	RA
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.			JA	TCL	RA
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.				JA	TCL	RA
		Printed Name / Signature		Date		
a.	Author	LEONARD HUBBARD / <i>[Signature]</i>		5/1/09		
b.	Facility Reviewer(*)	TIMOTHY CASSIDY / <i>[Signature]</i>		5/1/09		
c.	NRC Chief Examiner (#)	Peter Presby / <i>[Signature]</i>		6/5/09		
d.	NRC Supervisor	Sam Hansell / <i>[Signature]</i>		6/5/09		
NOTE: * The facility signature is not applicable for NRC-developed tests. # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required.						

Facility: <i>Seabrook</i>		Date of Exam: <i>6/18/88</i>		Scenario Numbers: <i>D1B1C</i>		Operating Test No.:	
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.	<i>RB</i>	<i>TLL</i>	<i>RO</i>			
2.	The scenarios consist mostly of related events.	<i>RB</i>	<i>TLL</i>	<i>RO</i>			
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) 	<i>PCO</i>	<i>TLL</i>	<i>RO</i>			
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.	<i>RB</i>	<i>TLL</i>	<i>RO</i>			
5.	The events are valid with regard to physics and thermodynamics.	<i>RB</i>	<i>TLL</i>	<i>RO</i>			
6.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.	<i>RB</i>	<i>TLL</i>	<i>RO</i>			
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.	<i>RB</i>	<i>TLL</i>	<i>RO</i>			
8.	The simulator modeling is not altered.	<i>RB</i>	<i>TLL</i>	<i>RO</i>			
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.	<i>RB</i>	<i>TLL</i>	<i>RO</i>			
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.	<i>RB</i>	<i>TLL</i>	<i>RO</i>			
11.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).	<i>RB</i>	<i>TLL</i>	<i>RO</i>			
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).	<i>RB</i>	<i>TLL</i>	<i>RO</i>			
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.	<i>RB</i>	<i>TLL</i>	<i>RO</i>			
Target Quantitative Attributes (Per Scenario; See Section D.5.d)		Actual Attributes		-	-	-	
1.	Total malfunctions (5-8)	<i>5</i>	<i>5, 5</i>	<i>RB</i>	<i>TLL</i>	<i>RO</i>	
2.	Malfunctions after EOP entry (1-2)	<i>2</i>	<i>1, 1, 2</i>	<i>RB</i>	<i>TLL</i>	<i>RO</i>	
3.	Abnormal events (2-4)	<i>3</i>	<i>4, 4</i>	<i>RB</i>	<i>TLL</i>	<i>RO</i>	
4.	Major transients (1-2)	<i>1</i>	<i>1, 1, 1</i>	<i>RB</i>	<i>TLL</i>	<i>RO</i>	
5.	EOPs entered/requiring substantive actions (1-2)	<i>3</i>	<i>1, 3, 2</i>	<i>RB</i>	<i>TLL</i>	<i>RO</i>	
6.	EOP contingencies requiring substantive actions (0-2)	<i>1</i>	<i>1, 0, 1</i>	<i>RB</i>	<i>TLL</i>	<i>RO</i>	
7.	Critical tasks (2-3)	<i>2</i>	<i>2, 3</i>	<i>RB</i>	<i>TLL</i>	<i>RO</i>	

(RO4, SROI-4, SROI-8 1430-1700 crews)

Facility: SEABROOK		Date of Exam: 6/15/09									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 (*)		
		1 (D – Mon 1430-1700)			2 (B – Tues 1430-1700)			3 (C – Wed 0930-1200)			4				R	I	U
		C R E W P O S I T I O N			C R E W P O S I T I O N			C R E W P O S I T I O N			C R E W P O S I T I O N						
		S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P				
RO-#4 <input checked="" type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/>	RX		Ev1						Ev2				2	1	1	0	
	NOR						Ev1						1	1	1	1	
	I/C		Ev3 Ev4 Ev6				Ev3 Ev5			Ev3 Ev4 Ev8			8	4	4	2	
	MAJ		Ev5			Ev6			Ev6				3	2	2	1	
	TS													0	2	2	
	RX					Ev1							1	1	1	0	
RO <input type="checkbox"/> SRO-I #4 <input checked="" type="checkbox"/> SRO-U <input type="checkbox"/>	NOR													1	1	1	
	I/C	Ev1 Ev2 Ev3 Ev4 Ev6 Ev7				Ev2 Ev4 Ev7							9	4	4	2	
	MAJ	Ev5			Ev6								2	2	2	1	
	TS	Ev3 Ev4											2	0	2	2	
	RX													1	1	0	
	NOR													1	1	1	
RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/>	I/C													4	4	2	
	MAJ													2	2	1	
	TS													0	2	2	
	RX		Ev1						Ev2				2	1	1	0	
	NOR		Ev1										1	1	1	1	
RO <input type="checkbox"/> SRO-I #8 <input checked="" type="checkbox"/> SRO-U <input type="checkbox"/>	I/C		Ev2 Ev7	Ev2 Ev3 Ev4 Ev5 Ev7					Ev1 Ev5				9	4	4	2	
	MAJ		Ev5	Ev6				Ev6					3	2	2	1	
	TS			Ev2 Ev3 Ev4									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 serve in both the SRO and the ATC positions, including at least two instrument or component (I/C) malfunctions and one major transient, in the ATC position. If an Instant SRO *additionally* serves in the BOP position, one I/C malfunction can be credited toward the two I/C malfunctions required for the ATC position.
2. Reactivity manipulations may be conducted under normal or *controlled* abnormal conditions (refer to Section D.5.d) but must be significant per Section C.2.a of Appendix D. (*) Reactivity and normal evolutions may be replaced with additional instrument or component malfunctions on a 1-for-1 basis.
3. Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirements specified for the applicant's license level in the right-hand columns.

ES-301

Transient and Event Checklist

Form ES-301-5

(RO1, SRO1-1, SRU-1, SRU-2 - 0700 to 0900 crews)

Facility: SEABROOK		Date of Exam: 6/15/09		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 M(*)		
		1 (D - Mon 0700 - 0930)			2 (B - Tues 0700 - 0930)			3 (C - Wed 0700 - 0930)			4 (C - Wed 1200 - 1430)				R	I	U
		C R E W P O S I T I O N			C R E W P O S I T I O N			C R E W P O S I T I O N			C R E W P O S I T I O N						
		S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P				
RO-1 <input checked="" type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U	RX		Ev1										1	1	1	0	
	NOR					Ev1							1	1	1	1	
	I/C		Ev3 Ev4 Ev6			Ev3 Ev5							5	4	4	2	
	MAJ		Ev5			Ev6							2	2	2	1	
	TS													0	2	2	
RO <input type="checkbox"/> SRO-I #1 <input checked="" type="checkbox"/> SRO-U	RX				Ev1								1	1	1	0	
	NOR													1	1	1	
	I/C	Ev1 Ev2 Ev3 Ev4 Ev6 Ev7			Ev2 Ev4 Ev7		Ev1 Ev3 Ev4 Ev5 Ev8							14	4	4	2
	MAJ	Ev5			Ev6		Ev6						3	2	2	1	
	TS	Ev3 Ev4					Ev1 Ev3						3	0	2	2	
RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SR-U#1 <input checked="" type="checkbox"/>	RX													1	1	0	
	NOR													1	1	1	
	I/C				Ev2 Ev3 Ev4 Ev5 Ev7								5	4	4	2	
	MAJ				Ev6								1	2	2	1	
	TS				Ev2 Ev3 Ev4								3	0	2	2	
RO <input type="checkbox"/>	RX													1	1	0	
	NOR			Ev1									1	1	1	1	

SRO-I <input type="checkbox"/> SR-U#2 <input checked="" type="checkbox"/>	I/C			Ev2 Ev7										7	4	4	2
	MAJ			Ev5										2	2	2	1
	TS													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 serve in both the SRO and the ATC positions, including at least two instrument or component (I/C) malfunctions and one major transient, in the ATC position. ~~If an Instant SRO additionally serves in the BOP position, one I/C malfunction can be credited toward the two I/C malfunctions required for the ATC position.~~
2. Reactivity manipulations may be conducted under normal or *controlled* abnormal conditions (refer to Section D.5.d) but must be significant per Section C.2.a of Appendix D. (*) Reactivity and normal evolutions may be replaced with additional instrument or component malfunctions on a 1-for-1 basis.
3. Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirements specified for the applicant's license level in the right-hand columns.

(RO2, SROI-2, SROI-6 0930 to 1200 crews)

Facility: SEABROOK		Date of Exam: 6/15/09										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 (*)		
		1 (D – Mon 0930-1200)			2 (B – Tues 0930-1200)			3 (C – Wed 0930-1200)			4 (C – Wed 1200-1430)						
		C R E W P O S I T I O N			C R E W P O S I T I O N			C R E W P O S I T I O N			C R E W P O S I T I O N						
		S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P		R	I	U
RO-#2 <input checked="" type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U	RX		Ev1										Ev2	2	1	1	0
	NOR					Ev1								1	1	1	1
	I/C		Ev3 Ev4 Ev6			Ev3 Ev5							Ev3 Ev4 Ev8	8	4	4	2
	MAJ		Ev5			Ev6							Ev6	3	2	2	1
	TS														0	2	2
RO <input type="checkbox"/> SRO-I #2 <input checked="" type="checkbox"/> SRO-U	RX					Ev1								1	1	1	0
	NOR														1	1	1
	I/C	Ev1 Ev2 Ev3 Ev4 Ev6 Ev7				Ev2 Ev4 Ev7			Ev1 Ev3 Ev4 Ev5 Ev8					14	4	4	2
	MAJ	Ev5				Ev6			Ev6					3	2	2	1
	TS	Ev3							Ev1 Ev3					3	0	2	2
RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U	RX														1	1	0
	NOR														1	1	1
	I/C														4	4	2
	MAJ														2	2	1
	TS														0	2	2
RO <input type="checkbox"/> SRO-I #6 <input checked="" type="checkbox"/> SRO-U	RX		Ev1										Ev2	2	1	1	0
	NOR		Ev1											1	1	1	1
	I/C		Ev2 Ev7	Ev2 Ev3 Ev4 Ev5 Ev7									Ev1 Ev5	9	4	4	2
	MAJ		Ev5	Ev6									Ev6	3	2	2	1
	TS			Ev2 Ev3 Ev4										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 serve in both the SRO and the ATC positions, including at least two instrument or component (I/C) malfunctions and one major transient, in the ATC position. If an Instant SRO *additionally* serves in the BOP position, one I/C malfunction can be credited toward the two I/C malfunctions required for the ATC position.
2. Reactivity manipulations may be conducted under normal or *controlled* abnormal conditions (refer to Section D.5.d) but must be significant per Section C.2.a of Appendix D. (*) Reactivity and normal evolutions may be replaced with additional instrument or component malfunctions on a 1-for-1 basis.
3. Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirements specified for the applicant's license level in the right-hand columns.

Facility: SEABROOK	Date of Examination: 6/15/09	Operating Test No.:														
Competencies	APPLICANTS															
	RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U#1 <input checked="" type="checkbox"/>				RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/>				RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/>				RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/>			
	SCENARIO				SCENARIO				SCENARIO				SCENARIO			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Interpret/Diagnose Events and Conditions			2, 3, 4, 5, 6, 7													
Comply With and Use Procedures (1)			1, 2, 3, 4, 5, 6, 7													
Operate Control Boards (2)																
Communicate and Interact			1, 2, 3, 4, 5, 6, 7													
Demonstrate Supervisory Ability (3)			1, 2, 3, 4, 5, 6, 7													
Comply With and Use Tech. Specs. (3)			2, 3, 4													

Facility: SEABROOK		Date of Examination: 6/15/09								Operating Test No.:							
Competencies	APPLICANTS																
	RO <input type="checkbox"/> SRO-I #1 <input checked="" type="checkbox"/> SRO-U <input type="checkbox"/>				RO #1 <input checked="" type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/>				RO <input type="checkbox"/> SRO-I #2 <input checked="" type="checkbox"/> SRO-U <input type="checkbox"/>				RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U#2 <input checked="" type="checkbox"/>				
	SCENARIO				SCENARIO				SCENARIO				SCENARIO				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Interpret/Diagnose Events and Conditions		2, 4, 6, 7	1, 3, 4, 5, 6, 7	2			3, 5	3, 4, 5		2, 4, 6, 7	1, 3, 4, 5, 6, 7	2			1, 3, 4, 5, 6, 7	2, 4, 5	
Comply With and Use Procedures (1)		1, 2, 4, 6, 7	1, 2, 3, 5, 6, 7, 8	2, 3, 4, 5		1, 3, 5, 6, 7		1, 3, 4, 5, 6		1, 2, 4, 6, 7	1, 2, 3, 5, 6, 7, 8	2, 3, 4, 5			1, 2, 3, 5, 6, 7, 8	1, 3, 4, 5, 6	
Operate Control Boards (2)		1, 2, 4, 6, 7				1, 3, 5, 6, 7		1, 3, 4, 5, 6		1, 2, 4, 6, 7						1, 2, 4, 5	
Communicate and Interact		1, 2, 4, 6, 7	1, 2, 3, 4, 5, 6, 7, 8	2, 3, 4, 5, 6, 7		1, 3, 5, 6, 7		1, 3, 4, 5, 6		1, 2, 4, 6, 7	1, 2, 3, 4, 5, 6, 7, 8	2, 3, 4, 5, 6, 7			1, 2, 3, 4, 5, 6, 7, 8	1, 3, 4, 5, 6	

Demonstrate Supervisory Ability (3)			1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5, 6, 7						1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5, 6, 7			1, 2, 3, 4, 5, 6, 7, 8	
Comply With and Use Tech. Specs. (3)			1, 2, 3	3, 4						1, 2, 3	3, 4			1, 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 applicants' license type and enter one or more event numbers that will allow the examiners to evaluate every applicable competency for every applicant.

Facility: SEABROOK		Date of Examination: 6/15/09								Operating Test No.:							
Competencies	APPLICANTS																
	RO #4 <input checked="" type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/>				RO #3 <input checked="" type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/>				RO <input type="checkbox"/> SRO-I #8 <input checked="" type="checkbox"/> SRO-U <input type="checkbox"/>				RO <input type="checkbox"/> SRO-I #7 <input checked="" type="checkbox"/> SRO-U <input type="checkbox"/>				
	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		3, 5	3, 4, 5, 6, 7, 8	3, 4, 5		3, 5	3, 4, 5, 6, 7, 8	3, 4, 5		2, 3, 4, 5, 6, 7	1, 5	2, 4, 5		2, 3, 4, 5, 6, 7	1, 5	2, 4, 5	
Comply With and Use Procedures (1)		1, 3, 5, 6, 7	2, 3, 6, 7, 8	1, 3, 4, 5, 6		1, 3, 5, 6, 7	2, 3, 6, 7, 8	1, 3, 4, 5, 6		1, 2, 3, 4, 5, 6, 7	1, 2, 5, 6	1, 3, 4, 5, 6		1, 2, 3, 4, 5, 6, 7	1, 2, 5, 6	1, 3, 4, 5, 6	
Operate Control Boards (2)		1, 3, 5, 6, 7	2, 3, 4, 5, 6, 7, 8	1, 3, 4, 5, 6		1, 3, 5, 6, 7	2, 3, 4, 5, 6, 7, 8	1, 3, 4, 5, 6			1, 2, 5, 6	1, 2, 4, 5			1, 2, 5, 6	1, 2, 4, 5	
Communicate and Interact		1, 3, 5, 6, 7	2, 3, 4, 5, 6, 7, 8	1, 3, 4, 5, 6		1, 3, 5, 6, 7	2, 3, 4, 5, 6, 7, 8	1, 3, 4, 5, 6		1, 2, 3, 4, 5, 6, 7	1, 2, 5, 6	1, 3, 4, 5, 6		1, 2, 3, 4, 5, 6, 7	1, 2, 5, 6	1, 3, 4, 5, 6	

Facility: SEABROOK Date of Examination: 6/15/09 Operating Test No.:

Competencies	APPLICANTS															
	RO <input type="checkbox"/> SRO-I #3 <input checked="" type="checkbox"/> SRO-U <input type="checkbox"/>				RO #2 <input checked="" type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/>				RO <input type="checkbox"/> SRO-I #4 <input checked="" type="checkbox"/> SRO-U <input type="checkbox"/>				RO <input type="checkbox"/> SRO-I #6 <input checked="" type="checkbox"/> SRO-U <input type="checkbox"/>			
	SCENARIO				SCENARIO				SCENARIO				SCENARIO			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Interpret/Diagnose Events and Conditions		2, 4, 6, 7		2		3, 5	3, 4, 5, 6, 7, 8	3, 4, 5		2, 4, 6, 7		2		2, 3, 4, 5, 6, 7	1, 5	2, 4, 5
Comply With and Use Procedures (1)		1, 2, 4, 6, 7		2, 3, 4, 5		1, 3, 5, 6, 7	2, 3, 4, 5, 6, 7, 8	1, 3, 4, 5, 6		1, 2, 4, 6, 7		2, 3, 4, 5		1, 2, 3, 4, 5, 6, 7	1, 2, 5, 6	1, 3, 4, 5, 6
Operate Control Boards (2)		1, 2, 4, 6, 7				1, 3, 5, 6, 7	2, 3, 4, 5, 6, 7, 8	1, 3, 4, 5, 6		1, 2, 4, 6, 7					1, 2, 5, 6	1, 2, 4, 5
Communicate and Interact		1, 2, 4, 6, 7		2, 3, 4, 5, 6, 7		1, 3, 5, 6, 7	2, 3, 4, 5, 6, 7, 8	1, 3, 4, 5, 6		1, 2, 4, 6, 7		2, 3, 4, 5, 6, 7		1, 2, 3, 4, 5, 6, 7	1, 2, 5, 6	1, 3, 4, 5, 6

Demonstrate Supervisory Ability (3)				1, 2, 3, 4, 5, 6, 7								1, 2, 3, 4, 5, 6, 7		1, 2, 3, 4, 5, 6, 7		
Comply With and Use Tech. Specs. (3)				3, 4								3, 4		2, 3, 4		

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: <u>Seabrook</u>		Date of Exam: <u>6-12-09</u>		Exam Level: RO <input checked="" type="checkbox"/> SRO <input type="checkbox"/>		
Item Description	Initial					
	a	b*	c*			
1. Questions and answers are technically accurate and applicable to the facility.	PB	TU	AS			
2. a. NRC K/As are referenced for all questions. b. Facility learning objectives are referenced as available.	PB	TU	AS			
3. SRO questions are appropriate in accordance with Section D.2.d of ES-401	PB	TU	AS			
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).			AS			
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 <input checked="" type="checkbox"/> the licensee certifies that there is no duplication; or ___ other (explain)	PB	TU	AS			
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	PB	TU	AS
	<u>34% 27</u>	<u>16% 12</u>	<u>32% 36</u>			
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	CIA		PB	TU	AS
	<u>37 149%</u>	<u>38 151%</u>				
8. References/handouts provided do not give away answers or aid in the elimination of distractors.	PB	N/A	AS			
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.	PB	TU	AS			
10. Question psychometric quality and format meet the guidelines in ES Appendix B.	PB	TU	AS			
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.	PB	TU	AS			
a. Author		Printed Name / Signature		Date		
b. Facility Reviewer (*)		<u>Patrick C. Leary / [Signature]</u>		<u>5-1-09</u>		
c. NRC Chief Examiner (#)		<u>Timothy Cassin / [Signature]</u>		<u>5/1/09</u>		
d. NRC Regional Supervisor		<u>Peter Presley / [Signature]</u>		<u>6/5/09</u>		
		<u>Sam Hansell / [Signature]</u>		<u>6/5/09</u>		
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: <u>Seabrook</u>		Date of Exam: <u>6-12-09</u>		Exam Level: RO <input type="checkbox"/> SRO <input checked="" type="checkbox"/>		
Item Description	Initial					
	a	b*	c#			
1. Questions and answers are technically accurate and applicable to the facility.	PB	TU	PB			
2. a. NRC KIAs are referenced for all questions. b. Facility learning objectives are referenced as available.	PB	TU	PB			
3. SRO questions are appropriate in accordance with Section D.2.d of ES-401	PB	TU	PB			
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).						
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 <input checked="" type="checkbox"/> the licensee certifies that there is no duplication; or ___ other (explain)	PB	TU	PB			
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	PB	TU	PB
	218%	100% 4	1810% 19 76%			
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 KIAs support the higher cognitive levels; enter the actual RO / SRO question distribution(s) at right.	Memory	CIA		PB	TU	PB
	5 120%	20 80%				
8. References/handouts provided do not give away answers or aid in the elimination of distractors.	PB	TU	PB			
9. Question content conforms with specific KIA statements in the previously approved examination outline and is appropriate for the tier to which they are assigned; deviations are justified.	PB	TU	PB			
10. Question psychometric quality and format meet the guidelines in ES Appendix B.	PB	TU	PB			
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.	PB	TU	PB			
a. Author		Printed Name / Signature		Date		
b. Facility Reviewer (**)		<u>Patrick C. Liary / [Signature]</u>		<u>5/1/09</u>		
c. NRC Chief Examiner (#)		<u>Timothy Cassano / [Signature]</u>		<u>5/1/09</u>		
d. NRC Regional Supervisor		<u>Peter Besby / [Signature]</u>		<u>6/5/09</u>		
		<u>Sam Hansell / [Signature]</u>		<u>6/5/09</u>		
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: <u>Seabrook</u>		Date of Exam: <u>6/12/09</u>		Exam Level: RO <input checked="" type="checkbox"/> SRO <input type="checkbox"/>	
Item Description	Initials				
	a	b	c		
1. Clean answer sheets copied before grading	PB	TLL	PB		
2. Answer key changes and question deletions justified and documented	PB	N/A	PB		
3. Applicants' scores checked for addition errors (reviewers spot check > 25% of examinations)	PB	TLL	B		
4. Grading for all borderline cases (80 ±2% overall and 70 or 80, as applicable, ±4% on the SRO-only) reviewed in detail	PB	TLL	/		
5. All other failing examinations checked to ensure that grades are justified	PB	TLL	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	PB	TLL	B		
	Printed Name/Signature	Date			
a. Grader	<u>Patrick Leary / [Signature]</u>	<u>7/14/09</u>			
b. Facility Reviewer(*)	<u>Timothy Cassara / [Signature]</u>	<u>7/14/09</u>			
c. NRC Chief Examiner (*)	<u>Peter Presby / [Signature]</u>	<u>7/28/09</u>			
d. NRC Supervisor (*)	<u>Sam Hansell / [Signature]</u>	<u>7/30/09</u>			
(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.					

Facility: <u>Seabrook</u>		Date of Exam: <u>6.12.09</u>		Exam Level: RO <input type="checkbox"/> SRO <input checked="" type="checkbox"/>	
Item Description	Initials				
	a	b	c		
1. Clean answer sheets copied before grading	PB	TLL	AD		
2. Answer key changes and question deletions justified and documented	PB	N/A	AD		
3. Applicants' scores checked for addition errors (reviewers spot check > 25% of examinations)	PB	TLL	AD		
4. Grading for all borderline cases (80 ±2% overall and 70 or 80, as applicable, ±4% on the SRO-only) reviewed in detail	PB	TLL	AD		
5. All other failing examinations checked to ensure that grades are justified	PB	TLL	AD		
6. Performance on missed questions checked for training deficiencies and wording problems; evaluate validity of questions missed by half or more of the applicants	PB	TLL	AD		
	Printed Name/Signature		Date		
a. Grader	<u>Patrick Leary / [Signature]</u>		<u>7.14.09</u>		
b. Facility Reviewer(*)	<u>TIMOTHY CASSIDY / [Signature]</u>		<u>7/14/09</u>		
c. NRC Chief Examiner (*)	<u>Peter Resby / [Signature]</u>		<u>7/22/09</u>		
d. NRC Supervisor (*)	<u>Sam Hansell / [Signature]</u>		<u>7/30/09</u>		
(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.					