

Facility: Seabrook Date of Examination: 7/15/13

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

* 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: 7/15/2013 – 7/24/2013		
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.	RAB	WFA	WJ
	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.	RAB	WJ	WJ
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	RAB	WJ	WJ
	d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.	RAB	WJ	WJ
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.	RAB	WJ	WJ
	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.	RAB	WJ	WJ
	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.	RAB	WJ	WJ
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.	RAB	WJ	WJ
	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	RAB	WJ	WJ
	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.	RAB	WJ	WJ
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.	RAB	WJ	WJ
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.	RAB	WJ	WJ
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	RAB	WJ	WJ
	d. Check for duplication and overlap among exam sections.	RAB	WJ	WJ
	e. Check the entire exam for balance of coverage.	RAB	WJ	WJ
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	RAB	WJ	WJ
a. Author	Printed Name/Signature <u>Ralph Bryant / Ralph A. Bryant</u>		Date <u>7/13/13</u>	
b. Facility Reviewer (*)	<u>Matthew Hiseveest / Matthew Hiseveest</u>		<u>7-15-13</u>	
c. NRC Chief Examiner (#)	<u>David Sill / David Sill</u>		<u>7/25/13</u>	
d. NRC Supervisor	<u>Donald Jackson / Donald Jackson</u>		<u>7/26/13</u>	
Note:	# Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required. * Not applicable for NRC-prepared examination outlines			

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

ES-201

Examination Security Agreement Form

ES-201-3

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) July 12-19, 2013 of as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC (e.g., acting as a simulator booth operator or communicator is acceptable if the individual does not select the training content or provide direct or indirect feedback). Furthermore, I am aware of the physical security measures and requirements (as documented in the facility licensee's procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of 7-15-13 and 7-24-13. 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. <u>Ralph Bryant</u>	<u>Lead Author</u>	<u>Ralph Bryant</u>	<u>11/6/12</u>	<u>Ralph Bryant</u>	<u>7/29/13</u>	
2. <u>Edward F Lyons</u>	<u>Author</u>	<u>Ed Lyons</u>	<u>12/4/12</u>	<u>Ed Lyons</u>	<u>7/25/13</u>	
3. <u>Matthew Arsenault</u>	<u>Facility Rep</u>	<u>Matthew Arsenault</u>	<u>12/6/12</u>	<u>Per telecon Ralph Bryant</u>	<u>8/5/13</u>	
4. <u>MARK LEONE</u>	<u>PROJECT MANAGER - SITE</u>	<u>Mark Leone</u>	<u>12/6/12</u>	<u>Mark Leone</u>	<u>7/25/13</u>	
5. <u>Chuck Sizemore</u>	<u>PROJECT MGR ASSISTANT</u>	<u>Chuck Sizemore</u>	<u>12/6/12</u>	<u>Per telecon Ralph Bryant</u>	<u>8/7/13</u>	
6. <u>Bonnie Bryant</u>	<u>Facility Rep</u>	<u>Bonnie Bryant</u>	<u>12/6/12</u>	<u>PER TELCON Ed Lyons</u>	<u>7/25/13</u>	
7. <u>MARK SKOCHLY</u>	<u>CORPORATE OVERSIGHT</u>	<u>Mark Skochly</u>	<u>2/19/13</u>	<u>PER TELCON Ed Lyons</u>	<u>7/29/13</u>	
8. <u>Richard Klotz</u>	<u>Unit Supervisor</u>	<u>Richard Klotz</u>	<u>3/5/13</u>	<u>Per telecon Ralph Bryant</u>	<u>8/12/13</u>	
9. <u>GARY BOGUE</u>	<u>CRO</u>	<u>Gary Bogue</u>	<u>3-5-13</u>	<u>Per telecon Ralph Bryant</u>	<u>8-12-13</u>	
10. <u>Richard Conrad</u>	<u>UNIT SUPERVISION</u>	<u>Richard Conrad</u>	<u>3/5/13</u>	<u>Richard Conrad</u>	<u>8/5/13</u>	
11. <u>Andrew Ferraioli</u>	<u>CRO</u>	<u>Andrew Ferraioli</u>	<u>3/5/13</u>	<u>Andrew Ferraioli</u>	<u>8/5/13</u>	
12. <u>Eric Mallett</u>	<u>Shift Manager</u>	<u>Eric Mallett</u>	<u>3/5/13</u>	<u>Per telecon Ralph Bryant</u>	<u>8/3/13</u>	
13. <u>JAMES KENNISH</u>	<u>LOCT INSTRUCTOR</u>	<u>James Kennish</u>	<u>3/24/13</u>	<u>James Kennish</u>	<u>7/25/13</u>	
14. <u>Michael Gregory</u>	<u>CRO</u>	<u>Michael Gregory</u>	<u>3/26/13</u>	<u>Michael Gregory</u>	<u>8/5/13</u>	
15. <u>Mark McVerty</u>	<u>CRO</u>	<u>Mark McVerty</u>	<u>3/26/13</u>	<u>Mark McVerty</u>	<u>7/25/13</u>	

NOTES:

ATTACHMENT 3

Form ES-210-3, Examination Security Agreement

ES-201

Examination Security Agreement Form

ES-201-3

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) July 12-19, 2015 of as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC (e.g., acting as a simulator booth operator or communicator is acceptable if the individual does not select the training content or provide direct or indirect feedback). Furthermore, I am aware of the physical security measures and requirements (as documented in the facility licensee's procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of 7-15-13 and 7-24-13. 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. <u>Amy Cavallaro</u>	<u>SM</u>		<u>3-26-13</u>		<u>7/25/13</u>	
2. <u>Kyle Barry</u>	<u>US</u>		<u>3-27-13</u>		<u>8/5/13</u>	
3. <u>Edward A Spader</u>	<u>Sim Support</u>		<u>4-11-13</u>	<u>N/A</u>	<u>7/25/13</u>	<u>①</u>
4. <u>JYE-YUH LEE</u>	<u>Sim support</u>		<u>4/11/13</u>		<u>7/25/13</u>	
5. <u>ROBERT COUTURE</u>	<u>Sim Support</u>		<u>4/25/13</u>		<u>7/25/13</u>	
6. <u>SHIH-WEI TAN</u>	<u>Sim Support</u>		<u>04/25/13</u>		<u>07/25/13</u>	
7. <u>RICH FURMANICK</u>	<u>SIM SUPPORT</u>		<u>5/3/13</u>		<u>6/6/13</u>	
8. <u>MARK A. THOMPSON</u>	<u>US</u>		<u>5-13-13</u>		<u>8-5-13</u>	
9. <u>ROBERT FANNING</u>	<u>LOCT INSTRUCTOR</u>		<u>5/15/13</u>		<u>7/25/13</u>	
10. <u>Shaan Miller</u>	<u>SM</u>		<u>5/15/13</u>		<u>8/5/13</u>	
11. <u>Kenneth Browne</u>	<u>TG Mgr</u>		<u>5/18/13</u>		<u>7/25/13</u>	
12. <u>Rob Howe</u>	<u>CRO</u>		<u>5-30-13</u>		<u>8-14-13</u>	<u>per selection</u>
13. <u>Joseph A. Vega</u>	<u>WCS</u>		<u>5-30-13</u>		<u>8-14-13</u>	<u>per selection</u>
14. <u>Nicholas H. Theberge</u>	<u>RO</u>		<u>5-30-13</u>		<u>8/5/13</u>	
15. <u>Richard S. Morrow</u>	<u>CRO</u>		<u>6/10/13</u>		<u>7/29/13</u>	

NOTES:

① Retired from company. no longer on site.

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

ES-201
3

Examination Security Agreement Form

ES-201-

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) 7/12/13 - 7/19/13 of as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC (e.g., acting as a simulator booth operator or communicator is acceptable if the individual does not select the training content or provide direct or indirect feedback). Furthermore, I am aware of the physical security measures and requirements (as documented in the facility licensee's procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of 7-15 and 7-24-13. 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. Robert Royce	Millstone 3 Ops Instructor	<i>[Signature]</i>	5/13/13	<i>[Signature]</i>	8-7-13	per telecon
2. JACK CONNOLLY	UNIT SUPERVISOR	<i>[Signature]</i>	6/10/13	<i>[Signature]</i>	7/29/13	
3. MAURICE LIPMAN	PLANT TECH	<i>[Signature]</i>	6.10.13	<i>[Signature]</i>	7/25/13	
4. ROBERT JENKINS	ELECTRICIAN	<i>[Signature]</i>	6-11-13	<i>[Signature]</i>	8/5/13	per telecon
5. JOHN THOMPSON	HVAC TECH	<i>[Signature]</i>	6-11-13	<i>[Signature]</i>	8/5/13	per telecon
6. Len Purinton	Unit Supervisor	<i>[Signature]</i>	6-11-13	<i>[Signature]</i>	7-29-13	
7. NICK WALTS	unit supervisor	<i>[Signature]</i>	6/21/13	<i>[Signature]</i>	7/25/13	
8. Scott Santal	unit supervisor	<i>[Signature]</i>	6/21/13	<i>[Signature]</i>	8-12-13	per telecon
9. Steven Kessinger	WCS	<i>[Signature]</i>	6/21/13	<i>[Signature]</i>	7/25/13	
10. DOUGLAS ECCLESTON	INSTRUCTOR	<i>[Signature]</i>	07/14/13	<i>[Signature]</i>	7/25/13	
11. Mark Bartell	Instructor	<i>[Signature]</i>	7/15/13	<i>[Signature]</i>	7/29/13	
12. James Webber	NSO	<i>[Signature]</i>	7/15/13	<i>[Signature]</i>	7/29/13	
13. CIVILS AOR	UNIT INSTRUCTOR	<i>[Signature]</i>	7/16/13	<i>[Signature]</i>	7/25/13	
14. Barry Brady	AOMT	<i>[Signature]</i>	7/16/13	<i>[Signature]</i>	7/25/13	
15. <i>[Signature]</i>						

Facility: Seabrook		Date of Examination: July 2013		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).	RAB	MAY	WJ		
b.	There is no day-to-day repetition between this and other operating tests to be administered during this examination.	RAB	MAY	WJ		
c.	The operating test shall not duplicate items from the applicants' audit test(s). (see Section D.1.a.)	RAB	MAY	WJ		
d.	Overlap with the written examination and between different parts of the operating test is within acceptable limits.	RAB	MAY	WJ		
e.	It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.	RAB	MAY	WJ		
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 	RAB	MAY	WJ		
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.	RAB	MAY	WJ		
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.		RAB	MAY	WJ		
		Printed Name / Signature		Date		
a.	Author	Ralph Bryant / <i>Ralph A Bryant</i>		5/20/13		
b.	Facility Reviewer(*)	Matthew Arsenault / <i>Matthew Arsenault</i>		5-21-13		
c.	NRC Chief Examiner (#)	David Silk / <i>David Silk</i>		6/14/13		
d.	NRC Supervisor	Donald Jackson / <i>Donald Jackson</i>		7/1/13		
NOTE: * The facility signature is not applicable for NRC-developed tests. # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required.						

Facility: Seabrook		Date of Exam: July 2013		Scenario Numbers: 1213		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.			RAB	NOT	WJ			
2.	The scenarios consist mostly of related events.			RAB	NOT	WJ			
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) 			RAB	NOT	WJ			
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.			RAB	NOT	WJ			
5.	The events are valid with regard to physics and thermodynamics.			RAB	NOT	WJ			
6.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.			RAB	NOT	WJ			
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.			RAB	NOT	WJ			
8.	The simulator modeling is not altered.			RAB	NOT	WJ			
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.			RAB	NOT	WJ			
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.			RAB	NOT	WJ			
11.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).			RAB	NOT	WJ			
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).			RAB	NOT	WJ			
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.			RAB	NOT	WJ			
Target Quantitative Attributes (Per Scenario; See Section D.5.d)				Actual Attributes		--	--	--	
1.	Total malfunctions (5-8)			7	6	6	RAB	NOT	WJ
2.	Malfunctions after EOP entry (1-2)			2	2	2	RAB	NOT	WJ
3.	Abnormal events (2-4)			3	3	3	RAB	NOT	WJ
4.	Major transients (1-2)			1	1	1	RAB	NOT	WJ
5.	EOPs entered/requiring substantive actions (1-2)			3	2	2	RAB	NOT	WJ
6.	EOP contingencies requiring substantive actions (0-2)			1	1	0	RAB	NOT	WJ
7.	Critical tasks (2-3)			3	2	3	RAB	NOT	WJ

Facility: Seabrook		Date of Exam: July 2013		Scenario Numbers: 4 / /		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.			RAB	WJZ	RS	
2.	The scenarios consist mostly of related events.			RAB	WJZ	RS	
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) 			RAB	WJZ	RS	
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.			RAB	WJZ	RS	
5.	The events are valid with regard to physics and thermodynamics.			RAB	WJZ	RS	
6.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.			RAB	WJZ	RS	
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.			RAB	WJZ	RS	
8.	The simulator modeling is not altered.			RAB	WJZ	RS	
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.			RAB	WJZ	RS	
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.			RAB	WJZ	RS	
11.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).			RAB	WJZ	RS	
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).			RAB	WJZ	RS	
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.			RAB	WJZ	RS	
Target Quantitative Attributes (Per Scenario; See Section D.5.d)				Actual Attributes			
1.	Total malfunctions (5-8)			7 / /	RAB	WJZ	RS
2.	Malfunctions after EOP entry (1-2)			3 / /	RAB	WJZ	RS
3.	Abnormal events (2-4)			4 / /	RAB	WJZ	RS
4.	Major transients (1-2)			1 / /	RAB	WJZ	RS
5.	EOPs entered/requiring substantive actions (1-2)			2 / /	RAB	WJZ	RS
6.	EOP contingencies requiring substantive actions (0-2)			1 / /	RAB	WJZ	RS
7.	Critical tasks (2-3)			2 / /	RAB	WJZ	RS

3
 As per 6/28/13 telecom
 with R. Bryant (licensee)
 DS.

Facility: Seabrook		Date of Exam: July 2013										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			2			4			3 Back-up							
		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														
M A S T E R	RX		1			1			1			3				1	1	0
	NOR	1		1	1		1	1		1	3		3			1	1	1
	I/C	2,3,4	3,4,7	2,4,8	2,3,4	2,4,7	2,3,6	2,3,5	2,3,7,9	3,5,8	1,2	1,2	5,6			2	2	2
	MAJ	6	6	6	5	5	5	6	6	6	4	4	4			1	1	1
	TS	2,4,5			2,3			3,4			1,2					0	2	2
SRO I-1 <input checked="" type="checkbox"/>	RX					1									1	1	1	0
	NOR	1								1					2	1	1	1
	I/C	2,3,4				2,4,7				3,5,8					9	4	4	2
	MAJ	6				5				6					3	2	2	1
	TS	2,4,5													3	0	2	2
SRO I-2 <input checked="" type="checkbox"/>	RX		1												1	1	1	0
	NOR						1	1							2	1	1	1
	I/C		3,4,7				2,3,6	2,3,5							9	4	4	2
	MAJ		6				5	6							3	2	2	1
	TS							3,4							2	0	2	2
SRO I-3 <input checked="" type="checkbox"/>	RX								1						1	1	1	0
	NOR			1	1										2	1	1	1
	I/C			2,4,8	2,3,4				2,3,7,9						10	4	4	2
	MAJ			6	5				6						3	2	2	1
	TS				2,3										2	0	2	2

Instructions:

- 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.
- 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: Seabrook			Date of Exam: July 2013										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			2			4			3 Back-up								
		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						
SRO U-1 <input checked="" type="checkbox"/>	RX															0	1	1	0
	NOR							1								1	1	1	1
	I/C							2,3,5								3	4	4	2
	MAJ							6								1	2	2	1
	TS							3,4								2	0	2	2
SRO U-2 <input checked="" type="checkbox"/>	RX															0	1	1	0
	NOR							1								1	1	1	1
	I/C							2,3,5								3	4	4	2
	MAJ							6								1	2	2	1
	TS							3,4								2	0	2	2
SRO I-4 <input checked="" type="checkbox"/>	RX								1							1	1	1	0
	NOR	1			1											2	1	1	1
	I/C	2,3,4			2,3,4				2,3,7,9							10	4	4	2
	MAJ	6			5				6							3	2	2	1
	TS	2,4,5			2,3											5	0	2	2
SRO I-5 <input checked="" type="checkbox"/>	RX								1							1	1	1	0
	NOR	1			1											2	1	1	1
	I/C	2,3,4			2,3,4				2,3,7,9							10	4	4	2
	MAJ	6			5				6							3	2	2	1
	TS	2,4,5			2,3											5	0	2	2

Instructions:

- 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.
- 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: Seabrook			Date of Exam: July 2013						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			2			4			3 Back-up						
		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				
RO-1 <input checked="" type="checkbox"/>	RX	1												1	1	1	0
	NOR					1				1				2	1	1	1
	I/C	3,4,7				2,3,6				3,5,8				9	4	4	2
	MAJ	6				5				6				3	2	2	1
	TS													0	0	2	2
RO-2 <input checked="" type="checkbox"/>	RX				1									1	1	1	0
	NOR		1											1	1	1	1
	I/C		2,4,8		2,4,7									6	4	4	2
	MAJ		6		5									2	2	2	1
	TS													0	0	2	2
RO-3 <input checked="" type="checkbox"/>	RX	1												1	1	1	0
	NOR					1				1				2	1	1	1
	I/C	3,4,7				2,3,6				3,5,8				9	4	4	2
	MAJ	6				5				6				3	2	2	1
	TS													0	0	2	2
RO-4 <input checked="" type="checkbox"/>	RX				1									1	1	1	0
	NOR		1											1	1	1	1
	I/C		2,4,8		2,4,7									6	4	4	2
	MAJ		6		5									2	2	2	1
	TS													0	0	2	2
Instructions:																	
<p>5. 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 <i>additionally</i> serves in the BOP position, one I/C malfunction can be credited toward the two I/C malfunctions required for the ATC position.</p> <p>6. Reactivity manipulations may be conducted under normal or <i>controlled</i> 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.</p> <p>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.</p>																	

Facility: Seabrook		Date of Examination: July 2013				Operating Test No.:										
Competencies	APPLICANTS															
	SRO-I-1 X				SRO-I-2 X				SRO-I-3 X				SRO-U-1 X			
	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	23	23		35	34	24		23	24	23		23				234
	45	45		68	7	8		45	8	45		47				569
	6	6						69		67		9				
Comply With and Use Procedures (1)	12	13		13	13	12		12	12	12		12				123
	34	46		58	46	46		34	68	34		35				456
	56	7				8		56		57		79				9
Operate Control Boards (2)		13		13	13	12			12			12				
		47		58	46	48			48			36				
Communicate and Interact	12	13		13	13	12		12	12	12		12				123
	34	46		56	45	46		34	46	34		34				456
	56	7		8	67	8		56	8	56		67				789
	78							78		7		9				
Demonstrate Supervisory Ability (3)	12							12		12						123
	34							34		34						456
	56							56		56						9
Comply With and Use Tech. Specs. (3)	24							34		24						34
	5															

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: July 2013	Operating Test No.:	APPLICANTS															
Competencies	SRO-U-2 X				SRO-I-4 X				SRO-I-5 X				RO-1 X					
	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				23	23	23		23	23	23		23	23	24		35		
				45	45	45		47	45	45		47	45	8		68		
				69	6	67		9	6	67		9	6					
Comply With and Use Procedures (1)				12	12	12		12	12	12		12	13	12		13		
				34	34	34		35	34	34		35	46	46		58		
				56	56	57		79	56	57		79	7	8				
			9															
Operate Control Boards (2)								12				12	13	12		13		
								36				36	47	48		58		
								79				79						
Communicate and Interact				12	12	12		12	12	12		12	13	12		13		
				34	34	34		34	34	34		34	46	46		56		
				56	56	56		67	56	56		67	7	8		8		
			78	78	7		9	78	7		9							
			9															
Demonstrate Supervisory Ability (3)				12	12	12			12	12								
				34	34	34			34	34								
				56	56	56			56	56								
			9		7				7									
Comply With and Use Tech. Specs. (3)				34	24	24			24	24								
					5				5									

Notes:

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

Instructions:

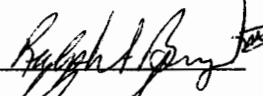
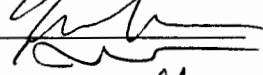
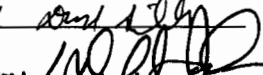
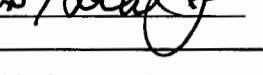
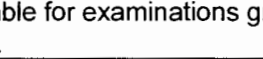
Check the applicants' license type and enter one or more event numbers that will allow the examiners to evaluate every applicable competency for every applicant.

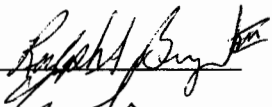
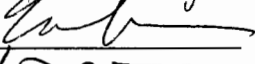
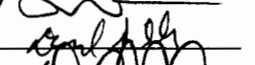
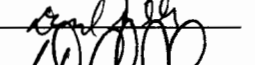
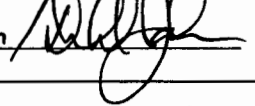
Facility:	Date of Examination:	Operating Test No.:														
Competencies	APPLICANTS															
	RO-2 X				RO-3 X				RO-4 X							
	SCENARIO				SCENARIO				SCENARIO				SCENARIO			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Interpret/Diagnose Events and Conditions	24 8	23 45 6			23 45 6	24 8		356 8	24 8	23 45 6						
Comply With and Use Procedures (1)	12 68	13 46 7			13 46 7	12 46 8		135 8	12 68	13 46 7						
Operate Control Boards (2)	12 48	13 47			13 47	12 48		135 8	12 48	13 47						
Communicate and Interact	12 46 8	13 46 7			13 46 7	12 46 8		135 68	12 46 8	13 46 7						
Demonstrate Supervisory Ability (3)																
Comply With and Use Tech. Specs. (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 Exam: July 2013		Exam Level: RO X	SRO X
Item Description	Initial				
	a	b*	c*		
1. Questions and answers are technically accurate and applicable to the facility.	RAB	WJ	WJ		
2. a. NRC K/As are referenced for all questions. b. Facility learning objectives are referenced as available.	RAB	WJ	WJ		
3. SRO questions are appropriate in accordance with Section D.2.d of ES-401	RAB	WJ	WJ		
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).			WJ		
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; or <input type="checkbox"/> the audit exam was completed before the license exam was started; or <input type="checkbox"/> the examinations were developed independently; or <input checked="" type="checkbox"/> the licensee certifies that there is no duplication; or <input type="checkbox"/> other (explain)	RAB	WJ	WJ		
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		
	41 / 11 54.7% / 44%	7 / 1 9.3% / 4%	27 / 13 36% / 52%		
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			
	33 / 6 44% / 24%	42 / 19 56% / 76%			
8. References/handouts provided do not give away answers or aid in the elimination of distractors.	RAB	WJ	WJ		
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.	RAB	WJ	WJ		
10. Question psychometric quality and format meet the guidelines in ES Appendix B.	RAB	WJ	WJ		
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.	RAB	WJ	WJ		
Printed Name / Signature		Date			
a. Author	Ralph Bryant / <i>Ralph A. Bryant</i>	7/8/13			
b. Facility Reviewer (*)	Matt Absenault / <i>Matt Absenault</i>	7/9/13			
c. NRC Chief Examiner (#)	David Silk / <i>David Silk</i>	7/9/13			
d. NRC Regional Supervisor	Donald Jackson / <i>Donald Jackson</i>	7/1/13			
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>7/24/13</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	RAB	ku	WJ		
2. Answer key changes and question deletions justified and documented <u>N/A</u>	RAB	ku	WJ		
3. Applicants' scores checked for addition errors (reviewers spot check > 25% of examinations)	RAB	ku	WJ		
4. Grading for all borderline cases (80 ±2% overall and 70 or 80, as applicable, ±4% on the SRO-only) reviewed in detail <u>N/A</u>	RAB	ku	WJ		
5. All other failing examinations checked to ensure that grades are justified <u>N/A</u>	RAB	ku	WJ		
6. Performance on missed questions checked for training deficiencies and wording problems; evaluate validity of questions missed by half or more of the applicants	RAB	ku	WJ		
Printed Name/Signature		Date			
a. Grader	<u>Ralph Bryant</u> 	<u>7/25/13</u>			
b. Facility Reviewer(*)	<u>MARK LEONE</u>  <u>Joyce Tomlinson</u> 	<u>7/25/13</u> <u>7/29/13</u>			
c. NRC Chief Examiner (*)	<u>David Silk</u> 	<u>7/29/13</u>			
d. NRC Supervisor (*)	<u>Donald Jackson</u> 	<u>7/31/13</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>7/24/13</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	RAB	U	WJ		
2. Answer key changes and question deletions justified and documented NA	RAB	U	WJ		
3. Applicants' scores checked for addition errors (reviewers spot check > 25% of examinations)	RAB	U	WJ		
4. Grading for all borderline cases (80 ±2% overall and 70 or 80, as applicable, ±4% on the SRO-only) reviewed in detail NA	RAB	U	WJ		
5. All other failing examinations checked to ensure that grades are justified NA	RAB	U	WJ		
6. Performance on missed questions checked for training deficiencies and wording problems; evaluate validity of questions missed by half or more of the applicants	RAB	U	WJ		
Printed Name/Signature		Date			
a. Grader	<u>Ralph Bryant</u> 	<u>7/25/13</u>			
b. Facility Reviewer(*)	<u>MARK LEONE</u>  <u>Joyce Tomlinson</u> 	<u>7/25/13</u> <u>7/29/13</u>			
c. NRC Chief Examiner (*)	<u>David Sillc</u> 	<u>7/27/13</u>			
d. NRC Supervisor (*)	<u>Donald Jackson</u> 	<u>7/31/13</u>			
(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.					