Examination Preparation Checklist

eveloped by	: Written: Facility 🗹 NRC 🗌 // Operating Facility 🗹 NRC	$\simeq \Box 3/30/$
Target Date*	Task Description (Reference)	Chief Examiner's Initials
-180	1. Examination administration date confirmed (C.1.a; C.2.a and b)	TF
-150	2. NRC examiners and facility contact assigned (C.1.d; C.2.e)	TP
-150	3. Facility contact briefed on security and other requirements (C.2.c)	TP
-150	4. Corporate notification letter sent (C.2.d)	TP
[-120]	5. Reference material due (C.1.e; C.3.c; Attachment 3)	NA
{-90}	 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, ES-401-1/2, ES-401N-1/2, ES-401-3, ES-401N-3, ES-401-4, and ES-401N-4, as applicable (C.1.e and f; C.3.d) 	TP
{-85}	 Examination outline(s) reviewed by NRC and feedback provided to facility licensee (C.2.h; C.3.e) 	TF
{-60} ,	 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, ES-401N-6, and any Form ES-201-2, ES-201-3, ES-301-1, or ES-301-2 updates), and reference materials due (C.1.e, f, g and h; C.3.d) 	TP
-45	9. Written exam and operating test reviews completed. (C.3.f)	TF
-30	10. Preliminary license applications (NRC Form 398's) due (C.1.I; C.2.g; ES-202)	TP
-21	11. Examination approved by NRC supervisor for facility licensee review (C.2.h; C.3.f)	T
-21	12. Examinations reviewed with facility licensee (C.1.j; C.2.f and h; C.3.g)	TP
-14	13. Final license applications due and Form ES-201-4 prepared (C.1.I; C.2.i; ES-202)	TT
-14	14. Written examinations and operating tests approved by NRC supervisor (C.2.i; C.3.h)	T
-7	 Facility licensee management queried regarding the licensee's views on the examination. (C.2 j) 	TF
-7	 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) 	T
-7	17. Proctoring/written exam administration guidelines reviewed with facility licensee (C.3.k)	TF
-7	 Approved scenarios, job performance measures, and questions distributed to NRC examiners (C.3.i) 	TF

Form ES-201-2

Peac	h Bottom Date of Examination: 3	20/17		
	Task Description		Initials	
		a	D.,	c#
a.	Verify that the outline(s) fit(s) the appropriate model, in accordance with ES-401.	(III)	~	18
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.	1A	5	TK
C.	Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	1A	\mathcal{V}	11
d.	Assess whether the justifications for deselected or rejected K/A statements are appropriate.	/K	h	19
а.	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.	MA		17
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 scenarios will not be repeated on subsequent days.	[Thes]	6	-14
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.	Ins	1-	1
а.	 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 	IN	6	11
b. с.	 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 Determine if there are enough different outlines to test the projected number and mix 	ms	5	T
a	of applicants and ensure that no items are duplicated on subsequent days. Assess whether plant-specific priorities (including PRA and IPE insights) are covered		1	
.	in the appropriate exam section.		12	Ĩ
b.	Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.		r	1
с. d	a the second sec		<u>ل</u> مب	X
		An A		Ę
		MA A		
hor cility F	Reviewer (*) Christopher P, Weichler	11/14 12/1 12/10	1 116 116 116 120 115	- [6 -
	a. b. c. d. a. b. c. a. b. c. a. b. c. a. b. c. c. a. b. c. c. a. b. c. c. c. c. c. c. c. c. c. c. c. c. c.	Task Description a. Verify that the outline(s) fit(s) the appropriate model, in accordance with ES-401. b. Assess whether the outline was systematically and randomly prepared in accordance with Section D.1 of ES-401 and whether all K/A categories are appropriately sampled. c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics. d. Assess whether the justifications for deselected or rejected K/A statements are appropriate. a. Using Form ES-301-5, verify that the proposed scenario sets cover the required number of normal evolutions, instrument and component failures, technical specifications, and major transients. b. Assess whether there are enough scenario sets (and spares) to test the projected number and mix of applicants in accordance with the expected crew composition and rotation schedule without compromising exam integrity, and ensure that each applicant can be tested using at least one new or significantly modified scenario, that no scenarios are duplicated from the applicants' audit test(s), and 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-301-2: (1) the outline(s) contain(s) the required number of control room and in-plant tasks distributed among the safety functions as specified on Form ES-301-2: (1) the outlise(blacted from the applicants' audit test(s) (3) (4) the number of new or modified tasks meets or exceeds the minimums specified on the form (3) no tasks are duplicated from the applicants' audit test(s) (4) the number of alternate path, low-power, emergency, and RCA tasks meet the criteria on the form (5) the number of alternate path, low-power, emergency, an	Task Description a a. Verify that the outline(s) fit(s) the appropriate model, in accordance with ES-401. M b. Assess whether the outline was systematically and randomly prepared in accordance with Section D.1 of ES-401 and whether all KA categories are appropriately sampled. M c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics. M d. Assess whether the justifications for deselected or rejected K/A statements are appropriate. 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. M 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). M c. To the extent possible, assess whether the outline(s) conform(s) with the qualitative and quantitative criteria specified on form ES-301-4. M d. Verify that the systems walk-through outline meets the criteria specified on the form (2) tack repetition from the asky ton NRC examinations is within the limits specified on the form (3) no tasks are duplicated from the applicant's audit test(s). M e. To the extent possible, assess whether the criteria specified on Form ES-301-1: (1) the tasks ared is or exceeds	Task Description Initials a b* a. Verify that the outline(s) fit(s) the appropriate model, in accordance with ES-401. b 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. b c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics. b d. Assess whether the justifications for deselected or rejected K/A statements are appropriate. c a. Using Form ES-301-5, erify that the proposed scenario sets cover the required number of normal evolutions, instrument and component failures, technical specifications, and major transients. b 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 for the applicant's audit test(s), and 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 the form d. Verify that the systems walk-through outline meets the criteria specified on form ES-301-2: d. 1. the outline(s) contain(s) the required number of control

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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) of 3/23/17 # 3/27/17 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

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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 $\frac{3}{20}/(7 \pm 3)/(2)$ From the date that I entered into this security agreement until the completion of examination administration, I did not -201, 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.

, Page PRINTED NAME JOB TITLE / RESPONSIBILITY SIGNATURE (1) DATE SIGNATURE (2) DATE NOTE 3/20/17 and Exam Author Robert Artos 3/30/17 nin Support chele Ambernan 28 3. Virginia Billings SUDDONT 3-30-17 * 4. Themas R. Hosser m contina (9 ALPLIC -3-17 Kechner 8. Lara TECHNICAL REDIEN 4-3-1 J.L. FISHER LORT ERAM ANTHOR -6-16 3/3/17 AREN HILDEBOAND LOLT EXAN Author -6-16 1/5//^ STATION REY. 11. CHRIS WEICHLAR 12 DAVID MUNAHAN O > C4-3-1 13. Aller J. Murrow OPS RO SRO 14. Sarah G. Marian OPS 4-3-17 15. Charles & m' Days'el RO 03

NOTES:

(1) Signed off via Email

1. **Pre-Examination**

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 3/co/17 # 3/c7/17 as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC (e.g., acting as a simulator booth operator or communicator is acceptable if the individual does not select the training content or provide direct or indirect feedback). Furthermore, I am aware of the physical security measures and requirements (as documented in the facility licensee's procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of 3/2017 + 3/27/17 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. BRAD KIRIGUA 2. STEVEN MELKA 3. Chr. strahr Ferrara 4. Doub Hurs 5. David Turkk	ILT ELSTRUCTOR ILT INSTRUCTOR ILT INSTRUCTOR ILT INSTRUCTOR SOS 0350000 ODS DIVERATV/OBEN	Honge Hall	3/20/17 3/20/17 3/20/17 3/20/17 3/20/17 3/20/17	Dough Hild	3 3317 3 31 117 <i>3 130/17</i> 3 130/17	
6 7						
8 9						
10 11 12.						
13						
15						

NOTES:

(D Signed off Via Email

ES-201

Form ES-201-3

ES-201

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of $\frac{3/20}{17} \frac{6}{5} \frac{3}{21}\frac{1}{11}$ 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 $\frac{12}{20/1743/27/17}$. 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.

ige	PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE	NOTE
27 of 28	1. TIMOTHY CMCDOWER 2. Veremy M. Peter 3. Mark A Partil 4. Aoron Baldwin 5. Ryan Townsley 6. JOHN J DOWNEDIT 7. Nichols P ALEXANON	OPS RO OPS RO OPS SRO OPS SRO OPS SRO OPS SRO OPS SRO OPS SRO	Tity C. Mull Junio aven Barr BC-CZ	12-12-16 <u>12-12-16</u> <u>12-11-16</u> <u>1-3-17</u> <u>1-3-17</u> <u>1-3-17</u>	Ann " Pans www. sour	<u>4/3/17</u> 4/3/17 <u>7/3/17</u>	
	8. Motthew E Gerre	075 720	Matter Ach	2/2/17	Mattasel	<u>4/3/17</u>	7
	9. GARY V GAESSER 10. Doyle A. Burkley 11. Kurr M. KUNKLE	OPS RO OPS/KC	When	2 <u>-21-17</u> 1/ <u>22/17</u>	Bytham	Z 4[3 []	$\frac{(l)}{\sqrt{l}}$
	12. Charles D. M. Mark	OTM		3/20/17	alun/	3/30/1	
e	13.(1).(1).aus C. DALTON 14. <u>MICHAEL J. KELT</u> 15. Jack J. Jurd	TRAINING INSTRUCTOR TRAINING INSTRUCTOR INT Lend	Minter Silly	3/20/14 3/20/17 5-20-17	Melin Charles	4/3-17 - 4/3-17 - 5-675	

NOTES: (1) Signed off via Email

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Operating Test Quality Checklist

Form ES-301-3

Facili	ty: PBATS Date of Examination: March 2017 Operating Test Nu	umber:	1	
	1. General Criteria		Initial	s
		а	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).	<i>Î</i> N	6	ĨF-
b.	There is no day-to-day repetition between this and other operating tests to be administered during this examination.	[A	6	Tr
с.	The operating test shall not duplicate items from the applicants' audit test(s). (see Section D.1.a.)	MA	と	TF
d.	Overlap with the written examination and between different parts of the operating test is within acceptable limits.	IA	\sim	TF
e.	It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.	/mA	ん	717
	2. Walk-Through Criteria			
a.	Each JPM includes the following, as applicable:			
	 initial conditions initiating cues references and tools, including associated procedures reasonable and validated time limits (average time allowed for completion) and specific designation if deemed to be time-critical by the facility licensee operationally important specific performance criteria that include: 			
	 detailed expected actions with exact criteria and nomenclature system response and other examiner cues statements describing important observations to be made by the applicant criteria for successful completion of the task identification of critical steps and their associated performance standards restrictions on the sequence of steps, if applicable 	IA	5	TE
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.	<i>I</i> M	6	TF
	3. Simulator Criteria			
	associated simulator operating tests (scenario sets) have been reviewed in accordance with Form 01-4 and a copy is attached.	IN	v	TP
b. c.	Author Robert J. Artus Printed Name / Signature Facility Reviewer(*) Robert J. Artus	2/7 3/8 3/9 3/9/1) ₁ 4	
NOT	 E: * The facility signature is not applicable for NRC-developed tests. # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required. 			

ES-301

Simulator Scenario Quality Checklist

Facility	r: Peach Bottom Date of Exam: 3/20/17 Scenario Numbers: 1 / 2	3 Operating Test N	Number		
	QUALITATIVE ATTRIBUTES		a	Initials	c#
1.	The initial conditions are realistic, in that some equipment and/or instrumenta service, but it does not cue the operators into expected events.	tion may be out of	a Mal	10 V-	TF
2.	The scenarios consist mostly of related events.		fte A	V	TP
3.	 Each event description consists of the point in the scenario when it is to be initiated the malfunction(s) that are entered to initiate the event the symptoms/cues that will be visible to the crew the expected operator actions (by shift position) the event termination point (if applicable) 		Ins	6	TF
4.	No more than one non-mechanistic failure (e.g., pipe break) is incorporated in without a credible preceding incident such as a seismic event.	nto the scenario	ANS	7	TF
5.	The events are valid with regard to physics and thermodynamics.		MAS	n	TF
6.	Sequencing and timing of events is reasonable, and allows the examination t complete evaluation results commensurate with the scenario objectives.	eam to obtain	Ins	6	ŢF
7.	If time compression techniques are used, the scenario summary clearly so in Operators have sufficient time to carry out expected activities without undue to Cues are given.		THES	v	ĨF
8.	The simulator modeling is not altered.		Ins	5	TF
9.	The scenarios have been validated. Pursuant to 10CFR55.46(d), any open s performance deficiencies or deviations from the referenced plant have been to ensure that functional fidelity is maintained while running the planned scen	evaluated	Jus	n	TP
10.	Every operator will be evaluated using at least one new or significantly modifi All other scenarios have been altered in accordance with Section D.5 of ES-3		JA1	N	TF
11.	All individual operator competencies can be evaluated, as verified using Form (submit the form along with the simulator scenarios).	n ES-301-6	(int	n	TF
12.	Each applicant will be significantly involved in the minimum number of transie specified on Form ES-301-5 (submit the form with the simulator scenarios).	ents and events	Mars	r	TP
13.	The level of difficulty is appropriate to support licensing decisions for each cre	ew position.	Thes	IN	TF
	Target Quantitative Attributes (Per Scenario; See Section D.5.d)	Actual Attributes			
1.	Total malfunctions (5-8)	8/8/6	In	6	TF
2.	Malfunctions after EOP entry (1-2)	2/2/3	MA	N	TF
3.	Abnormal events (2-4)	4 / 4 / 3	MA	5	TF
4.	Major transients (1-2)	2 / 1 / 2	ANS	n	TF
5.	EOPs entered/requiring substantive actions (1-2)	2/2/2	This	5	TF
6.	EOP contingencies requiring substantive actions (0-2)	1 / 1 / 1	Aus	ろ	TF
7.	Critical tasks (2-3)	3/2/2	hus	V	TF

Transient and Event Checklist

Form ES-301-5

Facility: F	each Bo	ttom		Da	ate of E	Exam	: 3/20	D/17		Opera	ting Te	est No.	: 2017	NRC			
A	E							Sc	enari	os							
P P	V E		1			2			3			4		Т	1	N	
L	N E		REW		CREW				CREV			REW		O T		I N	
	Т	PO	SITIC	ON	PC	SIT	ION	PC	SITI	ON	PC	SITIC	ON	A		l M	
C A	Т	S R	A T	B O P	S R	A T	B O P	S R	A T	B O P	S R	A T	B O	L	i i	ر ار*)	
N T	Y P E	0	С	P	0	С		0	С		0	С	Ρ		R	I	υ
RO	RX	4				5								2	1	1	0
SRO-I 1	NOR	1								1				2	1	1	1
SRO-U	I/C	2,3,5				3,6, 8				4,10				8	4	4	2
	MAJ	6, 9				7				7,9				5	2	2	1
	тs	2, 3												2	0	2	2
RO	RX		4					2						2	1	1	0
SRO-I 2	NOR						1	1						2	1	1	1
SRO-U	I/C		2, 8				2,4,9	3,4,6 ,8,10						10	4	4	2
	MAJ		6, 9				7	7,9						5	2	2	1
	тs							4,5						2	0	2	2
RO	RX				5				2					2	1	1	0
	NOR			1	1									2.	1	1	1
SRO-I-3 ⊠	I/C			3, 5, 7	2,3,4 6,9				3,6,8					11	4	4	2
SRO-U	MAJ			6,9	7				7,9					5	2	2	1
	тs				2,3									2	0	2	2

- 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.

Transient and Event Checklist

Facility: F	each Bo	ttom		Da	ate of E	Exam:	3/20)/17		Opera	ating Te	est No.	: 2017	NRC			
A	Ē							Sc	enari	os							
P			1			2			3			4		Т	١	Л	
P	E N	C	REV	v	(N	(REV	v	(REW	/	0	•	 	
	T			TION POSITION					SITIC			SITIC		T		I	
С		S	А	В	S	Α	В	S	А	В	S	А	В	L		۸ J	
A		R O	T C	O P	R O	T C	O P	R O	T C	O P	R O	T C	O P		1	M(*)	
N T	Y P		Ŭ		Ũ		•	Ũ	Ŭ		Ũ	Ŭ	•		R	Т	υ
	Ē																
RO	RX	4				5								2	1	1	0
SRO-I 4	NOR	1								1				2	1	1	1
SRO-U	I/C	2,3,5				3,6, 8				4,10				8	4	4	2
	MAJ	6,9				7				7,9				5	2	2	1
	тѕ	2,3												2	0	2	2
RO	RX		4		5			2						3	1	1	0
SRO-I 5	NOR				1			1						2	1	1	1
SRO-U	I/C		2,8		2,3,4 ,6,9			3,4,6 8,10						12	4	4	2
	MAJ		6,9		7			7,9						5	2	2	1
	TS				2,3			4, 5						4	0	2	2
RO-1	RX								2					1	1	1	0
\boxtimes	NOR			1			1							2	1	1	1
	I/C			3,5, 7			2,4,9		3,6,8					9	4	4	2
SRO-U	MAJ			6,9			7		7,9					5	2	2	1
	TS													0	0	2	2

- 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.

Transient and Event Checklist

Facility: P	each Bo	ttom		Da	ate of E	Exam:	3/20)/17		Opera	ting Te	est No.	: 2017	NRC			
A	E							Sc	enari	os							
P P	V E		1			2			3			4		Т		N	
	N T		REV		CREW POSITION			CREW POSITION			CREW POSITION			O T A	1	 	
C A N	T Y	S R O	A T C	B O P	S R O	A T C	B O P	S R O	R T O			A T C	B O P	L	l 	л Л(*)	U
Т	P E														R		
RO	RX	4				5	-							2	1	1	0
SRO-I 6	NOR	1								1				1	1	1	1
⊠ SRO-U	I/C	2,3,5				3,6, 8				4,10				8	4	4	2
	MAJ	6,9				7				7,9				5	2	2	1
	TS	2,3												2	0	2	2
RO	RX				5			2						2	1	1	0
	NOR				1			1						2	1	1	1
SRO-I	I/C				2,3,4 ,6,9			3,4,6 ,8,10						10	4	4	2
	MAJ				7			7,9						3	2	2	1
	TS				2,3			4, 5						4	0	2	2
RO-2	RX		4											1	1	1	0
SRO-I	NOR						1							1	1	1	1
	I/C		2,8				2,4,9							5	4	4	2
SRO-U	MAJ		6,9				7							3	2	2	1
	TS													0	0	2	2
RO-3	RX								2					1	1	1	0
\square	NOR			1										1	1	1	1
SRO-I	I/C			3,5, 7					3,6,8					6	4	4	2
SRO-U	MAJ			6,9					7,9					4	2	2	1
	TS													0	0	2	2

- 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.

Transient and Event Checklist

Facility: P	each Bo	ttom		D	ate of E	Exam	3/20	0/17		Opera	ating Te	est No.	: 2017	NRC			
A	Е							Sc	enari	os							
P P	V		1			2			3			4		Т		N	
L	E N T		REV			CRE\ SIT			CREV		CREW POSITION			O T A	1	 	
C A N T	ΤΥΡΕ	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	L	ι ι	v J VI(*)	U
RO	RX	4				5								2	1	1	0
SRO-I 7	NOR	1								1				2	1	1	1
SRO-U	I/C	2,3,5				3,6, 8				4,10				8	4	4	2
	MAJ	6,9				7				7,9				5	2	2	1
	TS	2,3												2	0	2	2
RO	RX				5			2						2	1	1	0
SRO-I	NOR				1			1						2	1	1	1
SRO-U-2	I/C				2,34, 6,9			3,4,6 ,8,10						10	4	4	2
\boxtimes	MAJ				7			7,9						3	2	2	1
	тs				2,3			4, 5						4	0	2	2
RO-4	RX		4											1	1	1	0
SRO-I	NOR						1							1	1	1	1
	I/C		2,8				2,4,9							5	4	4	2
SRO-U	MAJ		6,9				7							3	2	2	1
	TS													0	0	2	2
RO-5	RX								2					1	1	1	0
\boxtimes	NOR			1										1	1	1	1
SRO-I	I/C			3,5, 7					3,6,8					6	4	4	2
SRO-U	MAJ			6,9					7,9					4	2	2	1
	TS													0	0	2	2

- 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.
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- 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.

Competencies Checklist

Form ES-301-6

Facility: Peach Bottom		Da	te of E	Exam	inatio	n: 3/2	0/17			0	perati	ing Te	est No	o.: 20	17NR								
							A	PLI	CAN	гs			an ako -										
Competencies	s	RO SRO- SRO-			s	RO-I RO-I			s	o Ro-I Ro-I			s	RO 🗌 SRO-I 🗍 SRO-U 🗍									
	SCENARIO					SCEN		D			IARIO	<u>с</u>	5	SCEN		C							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4							
Interpret/ Diagnose Events and Conditions	1-9	1-9	1-10		1-9	1-9	1-10		1-9	1-9	1-10												
Comply With and Use Procedures (1)	1-9	1- 9	1-10		1-9	1-9	1-10		1-9	1-9	1-10												
Operate Control Boards (2)	1-9	1-9	1-4 6-10		1-9	1-4 6-10	1-10																
Communicate and Interact	1-9	1-9	1 -10		1-9	1-9	1-10		1-9	1-9	1-10												
Demonstrate Supervisory Ability (3)					1-9	1-9	1-10		1-10	1-10	1-11												
Comply With and Use Tech Specs. (3)					2, 3	2, 3	4, 5		2, 3	2, 3	4, 5												
Notes: (1) Includes Technica (2) Optional for an SF			tion co	ompli	ance	for an	RO.																

(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.

Written Examination Grading Quality Checklist

Fac	cility: Peach Bottom Date of Exam: 3/30/17 Exam Leve	el: RO 🕻	SRO	X	
Item Description			Initials		
		а	b	с	
1.	Clean answer sheets copied before grading	/MA	M	TF	
2.	Answer key changes and question deletions justified and documented	MA	~4	NA	
3.	Applicants' scores checked for addition errors		01		
	(reviewers spot check > 25% of examinations)	/hl	M	MP	
4.	Grading for all borderline cases (80 \pm 2% overall and 70 or 80 as applicable, \pm 4% on the SRO-only) reviewed in detail), /hA	M	TEMP	
5.	All other failing examinations checked to ensure that grades are justified	NA	N/4	Z	
6.	Performance on missed questions checked for training deficiencies and wording problems; evaluate validity of questions missed by half or more of the applicants	/ms	RH	TF	
Printed Name/Signature			Date		
a.	Grader All		3/3//17		
b.	Facility Reviewer(*) Joseph Karr///hh	2	4-3-17		
C.	NRC Chief Examiner (*) TODB FISH (forda Jul	1	10/20		
d.	NRC Supervisor (*) Donald Jackson / Donald	<u> </u>	4/10/17		
(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.					