# **Examination Preparation Checklist**

Form ES-201-1

Facility:	Brunswick Date of Examination: December 7, 202	20
Develope	ed by: Written: Facility 🗵 NRC 🔲 // Operating: Facility 🗵 NRC 🔲	
Target Date*	Task Description (Reference)	Chief Examiner's Initials
-240	1. Examination administration date confirmed (C.1.a; C.2.a–b). For NRC-prepared exams, arrangements are made for the facility to submit reference materials (C.1.e; C.3.c; Attachment 3).	DB
-210	2. NRC examiners and facility contact assigned (C.1.d; C.2.f).	DB
-210	3. Facility contact briefed on security and other requirements (C.2.c). As applicable, the facility contact submits to the NRC any prescreened K/As for elimination from the written examination outline, with a description of the facility's prescreening process (ES-401, D.1.b).	DB
-210	4. Reference material due for NRC-prepared exams (C.1.e; C.3.c; Attachment 3).	N/A
-210	Corporate notification letter sent (C.2.e).	DB
-195	<ol> <li>NRC-developed written examination outline (ES-401-1/2 or ES-401N-1/2 and ES-401-3 or ES-401N-3) sent to facility contact (must be on the exam security agreement) (C.1.e-f; C.2.h; C.3.d-e).</li> </ol>	DB
-150	7. Operating test outline(s) and other checklists due, including Forms ES-201-2, ES-201-3, ES-301-1, ES-301-2, ES-301-5, and ES-D-1, as applicable (C.1.e–f; C.3.d–e).	DB
-136	8. Operating test outline(s) reviewed by the NRC and feedback provided to facility licensee (C.2.h; C.3.d–e).	DB
-75	9. Proposed examinations (written, JPMs, and scenarios, as applicable) and outlines (Forms ES-301-1, ES-301-2, ES-D-1, ES-401-1/2 or ES-401N-1/2, and ES-401-3 or ES-401N-3); supporting documentation (including Forms ES-301-3, ES-301-4, ES-301-5, ES-301-6, ES-401N-6, and any Form ES-201-2 and ES-201-3 updates); and reference materials due (C.1.e–h; C.3.d).	DB
-75	10. Examinations prepared by the NRC are approved by the NRC supervisor and forwarded for facility licensee review (C.1.i; C.2.h; C.3.f–g).	N/A
-60	11. Preliminary waiver/excusal requests due (C.1.m; C.2.c; ES-202).	DB
-50	12. Written exam and operating test reviews completed (C.3.f).	DB
-35	13. Examination review results discussed between the NRC and facility licensee (C.1.i; C.1.k–l; C.2.h; C.3.g). The NRC and the facility licensee conduct exam preparatory week.	DB
-30	14. Preliminary license applications and waiver/excusal requests, as applicable (NRC Form 398) due (C.1.m; C.2.i; ES-202).	DB
-14	15. Final license applications and waiver/excusal requests, as applicable (NRC Form 398), due and Form ES-201-4 prepared (C.1.m; C.2.k; ES-202).	DB
-7	16. Written examinations and operating tests approved by the NRC supervisor (C.2.j–k; C.3.h).	DB
-7	17. Request facility licensee management feedback on the examination (C.2.I).	DB
-7	<ol> <li>Final applications reviewed; one or two (if more than 10) applications audited to confirm qualifications/eligibility; and examination approval and waiver/excusal letters sent (C.2.k; Attachment 5; ES-202, C.3.j; ES-204).</li> </ol>	DB
-7	19. Proctoring/written exam administration guidelines reviewed with facility licensee (C.3.k).	DB
-7	20. Approved scenarios and job performance measures distributed to NRC examiners (C.3.i).	DB

<sup>\*</sup> Target dates are based on facility-prepared examinations and the examination date identified in the corporate notification letter. These dates are for planning purposes and may be adjusted on a case-by-case basis in coordination with the facility licensee.

	Tools Description		Initial	s
em	Task Description	а	b*	C,
1.	a. Verify that the outline(s) fit(s) the appropriate model in accordance with ES-401 or ES-401N.	2	2	DE
W R	Assess whether the outline was systematically and randomly prepared in accordance with Section D.1 of ES-401 or ES-401N and whether all K/A categories are appropriately sampled.	13	R	DE
T T	c. Assess whether the outline overemphasizes any systems, evolutions, or generic topics.	RB	R	D
E	d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.	RB	R	D
2. S	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.	es	R	D
I M U L A T	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.	B	R	D
O R	c. To the extent possible, assess whether the outline(s) conforms with the qualitative and quantitative criteria specified on Form ES-301-4 and described in Appendix D and in Section D.5, "Specific Instructions for the 'Simulator Operating Test," of ES-301 (including overlap).	pb	R	D
3. W A L K T	<ul> <li>a. Verify that the systems walkthrough outline meets the criteria specified on Form ES-301-2:</li> <li>(1) The outline(s) contains the required number of control room and in-plant tasks distributed among the safety functions as specified on the form.</li> <li>(2) Task repetition from the last two NRC examinations is within the limits specified on the form.</li> <li>(3) No tasks are duplicated from the applicant's audit test(s).</li> <li>(4) The number of new or modified tasks meets or exceeds the minimums specified on the form.</li> <li>(5) The number of alternate-path, low-power, emergency, and radiologically controlled area tasks meets the criteria on the form.</li> </ul>	es	R	D
R O U G H	<ul> <li>b. Verify that the administrative outline meets the criteria specified on Form ES-301-1:</li> <li>(1) The tasks are distributed among the topics as specified on the form.</li> <li>(2) At least one task is new or significantly modified.</li> <li>(3) No more than one task is repeated from the last two NRC licensing examinations.</li> </ul>	B	2	D
	<ul> <li>Determine whether there are enough different outlines to test the projected number and mix of applicants and ensure that no items are duplicated on subsequent days.</li> </ul>	B	R	D
4.	Assess whether plant-specific priorities (including probabilistic risk assessment and individual plant examination insights) are covered in the appropriate exam sections.	B	R	DI
G E	b. Assess whether the 10 CFR 55.41, 55.43, and 55.45 sampling is appropriate.	PB	2	D
N	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	13	2	D
E R	d. Check for duplication and overlap among exam sections and the last two NRC exams.	B	R	D
A " L	e. Check the entire exam for balance of coverage.	14	R	D
-	f. Assess whether the exam fits the appropriate job level (RO or SRO).	13	R	D
b. с.	Printed Name/Signature  Author  Facility Reviewer (*)  NRC Chief Examiner (#)  NRC Supervisor  Printed Name/Signature  Printed Name/Signature  Printed Name/Signature  Printed Name/Signature  Printed Name/Signature  Printed Name/Signature  Digitally signed by Janiel M. Bacon Date: 2020.11.16 1333:17-0500'  Digitally signed by Gerald J. McCoy			

### 1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the U.S. Nuclear Regulatory Commission (NRC) licensing examinations scheduled for 12/7/20 thru 12/22/20 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's 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's 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 12/7/20 thru 12/22/20. 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
1. Robert Bolin	Exam Author	Zoluthor	10/14/19	Roleffel	1-4-21
2. STEVE COSTUN	EXAM WRITER	12/1/h	10-14-19	1x2/Ato	12.14.20
3. TIM CRARTIEE	SIM SUPPORT C	1	10/21/19	pe email	T-4-21
4. Eddic RAM	EXAM SUPV	Sep SI	-10/21/19	Enfel -	12-15-20
5. Kendall Creus	Sim Sugarort	Kalle	11/12/19	hell h	12/15/20
6. Ken Hill	Nac Ope Tech - EP	Landon	2/4/20	per enal	12/23/20
7. Robert MEHS	Nuc Facility Rep	M	2/27/2020	lu	12-12-3020,
8. MATT CORMAN	1 SIM SUFFORT LEAD	MA	4/29/202	0/1/2	12/15/20
9. MICHARL NEMEC	EXAM WRITER	Maraza	5/11/20	nothing an	12/M/20
10. Acc 410 (52) Horac	FIET ACTION	100	012110	pan enal	12/15/20
11. BRETT LAYON	CRS	Butager	6/16/2020	por amil	1-11-21
12. TODO BIZZELL	Ro	Thorn	6/16/2020	Too	12-16-5030

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PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE
1. Brian West	CRS	Must	6/16/2020	pus	1/2/2021
2. Trey Burel	RS	FILOS	6/30/20	F-1/25	12/14/20
3. Patrick Mchadely-	Ro	fatal M Zalli	6/30/20	Phillipple.	12/18/20
4. Kevin Kingston	CRS	2/1/2/	6.30.20	11/14	12.18.20
5. CHARLES BROOKSHINE	CAS	CBL,	6.30.20	Che carowy	12-16.20
6. Michael D. Long	CRS	Me Juy	8-18-20	Me frag	12-16-20
7. STEPHENSON MILAKALIN	r Po	they	8.13.20	It for	12.16.20
8. MICHAEL MAREUE	RO	Whall Work	8.18.20	Works for for	8+ 12.16.20
9. ANDREN PREED	INSTRUCTOR	Michen Lot	8-19-2020	Spoken fol	12/28/2020
10. FRANK CLARK	20	23/2 J	8-25-2020	LEW!	1505/11/1
11. RICK GARNER	CFAM-BTM	Milyon	8-31-2024	that Amen	12/15/20
12. MARK DEWARE	ADM-SHAFT	Mont Ill	9/14/2000	per engil	1-11-21

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PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE
1. Jerry Pierce	TM	prox Veres	9/14/2020	ery fune	12/15/2020
2. SHOWN ZAWOUR	RO	A Second	11/2/2026	Pen email	1-5-21
3. MARK DIXON	SRO	Marding	11-2-2020	Man Diff	12-15-20-0
4 David Cribb	RO	David Cont	11-4-2020	Our Cuth	12/28/2020
5. Cary Oliver	ILT Supt.	Al	11-30-2020	45	12/15/2020
6. MONOW, Jumes	CRS	John	12/5/2020	Him.	12/16/20
7. Jordan, Megan	CRS	mp	12/3/2020	mp	12/17/20
8. Brian Stetson	ILT Instructor	Popstelan	12/09/2020	Bottel	12/15/2020
9. HEARASTANT, STECHENSON	Ro	et-ce	B.13.20	Itsue	12/16/20
10					
11		5 1			
12					

		1. General Criteria			Initials	S
		i. General Cinteria		а	b*	c#
а.	The operating test conformation sampling requirements (e	ns to the previously approved g., 10 CFR 55.45, operations	I outline; changes are consistent with at importance, safety function distribution).	N	R	DE
b.	There is no day-to-day reput during this examination.	petition between this and other	er operating tests to be administered	B	R	DE
C.	The operating test shall no	ot duplicate items from the ap	plicants' audit test(s) (see Section D.1.a.).	13	R	DI
d.	Overlap with the written e acceptable limits.	camination and between diffe	erent parts of the operating test is within	Ps	2	DE
е.	It appears that the operati applicants at the designat		een competent and less-than-competent	B	R	DE
	- 3 28 A. 18 20 - 18 2	2. Walkthrough Criteri	a	-		
a.	reasonable and valid designation if deeme operationally imports  detailed expect system respons statements des criteria for succ identification of restrictions on t  Ensure that any changes outlines (Forms ES-301-1 acceptance criteria (e.g., identification (e.g., identification).	including associated proced ated time limits (average time do to be time critical by the fact that specific performance criterials and other examiner cues cribing important observation essful completion of the task critical steps and their associate sequence of steps, if applifrom the previously approved and ES-301-2) have not cau	e allowed for completion) and specific cility licensee ria that include— and nomenclature sto be made by the applicant stated performance standards cable  systems and administrative walkthrough sed the test to deviate from any of the spetition from the last two NRC	B	R	DE
	examinations) specified of	3. Simulator Criteria	501-2,	1.		-
	ssociated simulator operating to ES-301-4, and a copy is attach	ests (scenario sets) have bee	en reviewed in accordance with	13	2	DE
a. b. c. d.	Author Facility Reviewer (*) NRC Chief Examiner (#) NRC Supervisor		Digitally signed by Daniel M. Bacon Date: 2020.11.16 14:57:05 05:00  Digitally signed by Gerald J. McCoy	•	11-5	ate -20

Fac	ility: Brunswick Date of Exam: 12/07/2020 Scenario Numbers: 1 / 2 / 3	Operating Tes	No.: Fir	nal
	QUALITATIVE ATTRIBUTES		Initials	
		а	b*	c*
1.	The initial conditions are realistic in that some equipment and/or instrumentation may be out of s but it does not cue the operators into expected events.	ervice,	R	DB
2.	The scenarios consist mostly of related events.	U	R	DB
3.	Each event description consists of the following:  the point in the scenario when it is to be initiated  the malfunction(s) or conditions 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)	B	R	DB
4.	The events are valid with regard to physics and thermodynamics.	PS	R	DB
5.	Sequencing and liming of events is reasonable and allows the examination team to obtain compevaluation results commensurate with the scenario objectives.	lete pb	R	DB
6.	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.	B	2	DB
7.	The simulator modeling is not altered.	13	R	DB
8.	The scenarios have been validated. Pursuant to 10 CFR 55.46(d), any open simulator performs deficiencies or deviations from the referenced plant have been evaluated to ensure that function fidelity is maintained while running the planned scenarios.		R	DE
9.	Scenarios are new or significantly modified in accordance with Section D.5 of ES-301.	13	R	DB
10.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submi form along with the simulator scenarios).	the //	7	DE
11.	The scenario set provides the opportunity for each applicant to be evaluated in each of the applicating factors. (Competency rating factors as described on Forms ES-303-1 and ES-303-3.)	cable //	R	DE
12.	Each applicant will be significantly involved in the minimum number of transients and events spon Form ES-301-5 (submit the form with the simulator scenarios).	ecified	R	DB
13.	Applicants are evaluated on a similar number of preidentified critical tasks across scenarios, who possible.	en B	R	DB
14.	The level of difficulty is appropriate to support licensing decisions for each crew position.	(P)	R	DB
	Target Quantitative Attributes per Scenario (See Section D.5.d)  Actual Attri	butes -	-	_
1.	Malfunctions after EOP entry (1–2) 3 / 2 /	2	R	DE
2.	Abnormal events (2–4) 3 / 2 /	3	R	DE
3.	Major transients (1–2) 2 / 1 /	2	R	DI
4.	EOPs entered/requiring substantive actions (1–2)  1 / 2 /	2	R	DE
5.	Entry into a contingency EOP with substantive actions (≥1 per scenario set) 2 / 3 /	1 /	R	DE
6.	Preidentified critical tasks (>2) 2 / 3 /	3	R	DE

<sup>\*</sup> The facility licensee signature is not applicable for NRC-developed tests.
# An independent NRC reviewer initials items in column "c"; chief examiner concurrence is required.

Facility: B	runswick N	Nuclear	Plant			Date	of Exam	: 12/07/	2020			Ор	erating <sup>-</sup>	Test No	.: Fi	nal	
A P	E V						Scen	arios									
Р	E		1			2			3			4		Т	М		
L I	N T	CRE\	N POSI	TION	CREV	V POSI	TION	CRE	W POSI	TION	CREV	V POSI	ΓΙΟΝ	0		l N	
C			_	_			_						_	T A		I	
A N	T Y	S R	A T	B O	S R	A T	В О	S R	A T	B O	S R	A T	B O	L		M J	
Т	P E	0	С	Р	0	С	Р	0	С	Р	0	С	Р			M(*)	
															R	I	U
	RX		3		3									2	1	1	0
000 14	NOR I/C		2- 47		1									1 8	1	1	1
SRO-I1	MAJ	1	3a,4,7 6,7		4,5,6,7,8									3	2	2	2
	TS		0,7		2,6									2	0	2	2
ı	1.0				_,:									_		_	_
	RX	3			3									2	1	1	0
	NOR	1			1									2	1	1	1
SRO-U1	I/C	2,3a,4, 5,6,7			4,5,6,7,8									11	4	4	2
	MAJ	6,7			8									3	2	2	1
	TS	4,5			2,6									4	0	2	2
	RX	3												1	1	1	0
	NOR	1					1							2	1	1	1
SRO-U2	I/C	2,3a,4, 5,6,7					5,7,8							9	4	4	2
	MAJ	6,7					8							3	2	2	1
	TS	4,5												2	0	2	2

Facility: Bi	runswick N	luclear	Plant			Date of	Exam:	12/07/20	)20			Ope	rating Te	est No	o.: Fii	nal	
A P	E V						Scen	arios									
P	E		1			2			3			4		Т	ı	M	
L I	N T	CRE	W POS	ITION	CRE	W POSI	ΓΙΟΝ	CRE	W POSI	TION	CRE	W POSI	TION	O T	١,	I N	
C A N T	T Y P	S R O	A T C	B O P	A L	I M U M(*)											
	E														R	1	U
	RX					3								1	1	1	0
	NOR			1										1	1	1	1
RO-1	I/C			2,5,6		4,6,8				i.				6	4	4	2
	MAJ			6,7		8								3	2	2	1
	TS														0	2	2
	RX					3								1	1	1	0
	NOR			1										1	1	1	1
RO-2	I/C			2,5,6		4,6,8				ı.				6	4	4	2
	MAJ			6,7		8				i.				3	2	2	1
	TS														0	2	2
	RX		3											1	1	1	0
	NOR						1							1	1	1	1
RO-3	I/C		3a,4,7				5,7,8							6	4	4	2
	MAJ		6,7				8							3	2	2	1
	TS														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 (SRO-I) 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 SRO-I 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 I/C malfunctions on a one-for-one 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.
- 4. For new reactor facility licensees that use the ATC operator primarily for monitoring plant parameters, the chief examiner may place SRO-I applicants in either the ATC or BOP position to best evaluate the SRO-I in manipulating plant controls.

Facility: Brunswick	D;	ate of	Exa	mine	ation:	12/07	7/202	0		Оре	ratinę	g Te	st N	o.: Fir	nal	
							API	PLIC	ANT	S						
		) RO-I # RO-U	- [ :1 [			) .O-I # .O-U	2 [ [			O RO-I RO-I			RO SRO-I SRO-U			
Competencies	S	CEN	ARIC	)	5	3CEN	IARIC	)	S	CEN	NARIO	0		SCEN	\ARI	0
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Interpret/Diagnose Events and Conditions	3, 3a, 4,6, 7	All														
Comply with and Use Procedures (1)	3, 3a, 4,6, 7	All														
Operate Control Boards (2)	3, 3a, 4,6, 7															
Communicate and Interact	All	All														
Demonstrate Supervisory Ability (3)		All														
Comply with and Use TS (3)		2,6														
Notes: (1) Includes TS complian (2) Optional for an SRO- (3) Only applicable to SR	U.	r an F	₹О.													

## 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. (This includes all rating factors for each competency.) (Forms ES 303 1 and ES 303 3 describe the competency rating factors.)

Da	ate of	Exa	Examination: 12/07/2020 Operating Test No.:												
						API	PLIC	ANTS	}						
SR	O-I	[ [ #1		SF	RO-I	#2		SR	O-I	#3		RO SRO-I SRO-U			
5	SCEN	IARIO	)	S	CEN	ARI	0	SC	CENA	RI	0	,	SCE	NARI	0
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
All	All			All	1, 5, 7,8										
All	All			All	1, 5, 7,8										
					1, 5, 7,8										
All	All			All	All										
All	All			All											
4,5	2,6			4,5											
	SR S	SCEN 1 2 AII AII AII AII AII AII AII AII	SRO-I SRO-U#1 SRO-U#1 SCENARIO  1 2 3 AII AII  AII AII  AII AII  AII AII	SRO-I SRO-U#1  SCENARIO  1 2 3 4  AII AII  AII AII  AII AII	SRO-I SRO-U #1       SRO-U #1         SCENARIO       SRO-U #1         1 2 3 4 1       AII         AII AII       AII         AII AII       AII         AII AII       AII         AII AII       AII	SRO-I SRO-U #1       □ SRO-I SRO-U         SCENARIO       SCEN         1 2 3 4 1 2       All 1, 5, 7,8         All All All All 1, 5, 7,8       All 1, 5, 7,8         All	RO SRO-I SRO-U #2    SCENARIO   SCENARIO     1   2   3   4   1   2   3     AII   AII   AII   AII   AII     AII   AII   AII   AII     AII   AII   AII   AII     AII   AII   AII   AII     AII   AII   AII   AII     AII   AII   AII   AII   AII     AII   AII   AII   AII   AII     AII   AII   AII   AII   AII   AII     AII   AII   AII   AII   AII   AII     AII   AII   AII   AII   A	RO	RO	SRO-I SRO-U #1         SRO-I SRO-U #2         SRO-I SRO-U SRO	RO SRO-I SRO-U #2 SRO-I SRO-U #3  SCENARIO SCENARIO SCENARIO  1 2 3 4 1 2 3 4 1 2 3  AII AII AII AII AII AII AII AII AII AI	RO SRO-I SRO-U #2 SRO-I SRO-U #3 SRO-U	RO SRO-I SRO-U #1 SRO-U #2 SRO-U #3 SI SI SRO-U #3 SI SI SRO-U #3 SI SI SRO-U #4 SRO-U #3 SI SI SI SRO-U #4 SI SI SRO-U #4 SI	RO SRO-I SRO-U #1         RO SRO-I SRO-U #2         RO SRO-I SRO-U #3         RO SRO-U #3	RO SRO-I SRO-U #1 SRO-U #2 RO SRO-I SRO-U #3 SRO-U SRO-U #3 SRO-U #3 SRO-U #3 SRO-U SCENARIO SCENARIO SCENARIO AII AII AII AII AII AII AII AII AII A

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

Facility: Brunswick	Da	ate of	Exa	mina	ation:	12/07	7/20	20	ı	Oper	ating	Te	est No.: Final					
							ΑF	PPLIC	CANT	S								
	SR	) #1 .O-I .O-U	[		SR	RO #2 SRO-I SRO-U			SR	#3 O-I O-U			RO #4 SRO-I SRO-U					
Competencies	S	SCENARIO			S	CEN	ARI	0	S	CEN	ARIO		SCENARIO					
	1				1	2	3	4	1	2	3	4	1	2	3	4		
Interpret/Diagnose Events and Conditions	1, 2, 5, 6,7	2, 3, 4, 6,8			1, 2, 5, 6,7	2, 3, 4, 6,8			3, 3a, 4,6, 7	1, 5, 7,8								
Comply with and Use Procedures (1)	1, 2, 5, 6,7	2, 3, 4, 6,8			1, 2, 5, 6,7	2, 3, 4, 6,8			3, 3a, 4,6, 7	1, 5, 7,8								
Operate Control Boards (2)	1, 2, 5, 6,7	2, 3, 4, 6,8			1, 2, 5, 6,7	2, 3, 4, 6,8			3, 3a, 4,6, 7	1, 5, 7,8								
Communicate and Interact	All	All			All	All			All	All								
Demonstrate Supervisory Ability (3)																		
Comply with and Use TS (3)																		

# Notes:

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

Facility: <b>Brunswick</b> Date of Exam: <b>December 14, 2020</b> Exam Level: RO <b>X</b> SRO <b>X</b>					
Item Description		Initials			
		а	b	С	
Clean answer sheets copied before grading		DL	N/A	DB	
2. Proposed answer key changes and question deletions justified and documented (facility reviewer initials not required (N/R) if NO post-examination comments are submitted)		N/A	N/A	N/A	
<ol> <li>Applicants' scores checked for addition errors (reviewers spot check &gt; 25% of examinations)</li> </ol>		DL	N/A	DB	
Grading for all borderline cases (80% ±2% overall and 70% or 80%, as applicable, ±4% on the SRO-only exam) reviewed in detail		DL	N/A	DB	
5. All other failing exami are justified			N/A	N/A	
Performance on missed questions checked for training deficiencies and wording problems; evaluate validity of questions missed by one-half or more of the applicants		DL	N/A	DB	
Printed Name/Signature			Date		
a. Grader  David R. Lanyi  Digitally signed by David R. Lanyi  Date: 2021.01.19 09:58:58 -05'00'					
b. Facility Reviewer(*)	N/A	_	N/A	_	
c. NRC Chief Examiner (*)					
d. NRC Supervisor (*)	Digitally signed by Gerald J. McCoy Date: 2021.01.19 11:47:11 -05'00'				
(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.					



July 9, 2020

Serial: RA-20-0190

U. S. Nuclear Regulatory Commission, Region II ATTN: Ms. Laura Dudes, Regional Administrator 245 Peachtree Center Ave, NE, Suite 1200 Atlanta, GA 30303-1257

Subject: Brunswick Steam Electric Plant, Unit Nos. 1 and 2

Renewed Facility Operating License Nos. DPR-71 and DPR-62

Docket Nos. 50-325 and 50-324

Operating Test Outline, Written Examination Outline, and Reference Materials for Licensed Operator Initial Examination 50-325/2020-301 and 50-324/2020-301

Reference: Letter from Gerald J. McCoy (NRC) to John A. Krakuszeski (Duke Energy),

"Brunswick Steam Electric Plant - Notification of Licensed Operator Initial

Examination 05000325/2020 and 05000324/2020301," dated February 12, 2020,

ADAMS Accession Number ML20043F346

Dear Ms. Dudes,

In accordance with the guidelines in Revision 11, of NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Duke Energy Progress, LLC, is providing the operating test outline, written examination outline, and reference materials supporting the operating test, which is scheduled to be administered during the weeks of December 7 and December 14, 2020; and the written examination scheduled to be administered after the operating exam is completed.

In accordance with the schedule contained in the NRC's letter dated February 12, 2020 (i.e., Reference), the examination materials listed in the enclosure of this letter are being provided electronically via a secure File Transfer Protocol (FTP) website to Mr. Daniel Bacon, the assigned NRC chief examiner, only. The material is not included herein.

In accordance with 10 CFR 55.40(b)(3), Mr. Robert Mehs, as the designated authorized representative of the Brunswick Steam Electric Plant, has approved the outline for the examinations of the applicants.

In accordance with Revision 11, of NUREG-1021, Section ES-201, "Initial Operator Licensing Examination Process," please ensure that the examination materials are withheld from public disclosure until after the examinations are complete.

This document contains no regulatory commitments.

# U. S. Nuclear Regulatory Commission, Region II Page 2 of 3

Please refer any questions regarding this submittal to Mr. Bob Bolin, Nuclear Operations Instructor, at (910) 832-3078, or Mr. Robert Mehs, Nuclear Control Room Supervisor, at (910) 832-2746.

Sincerely,

Sabrina Salazar

Manager – Nuclear Support Services Brunswick Steam Electric Plant

SBY/sby

Enclosure: List of Examination Materials

# U. S. Nuclear Regulatory Commission, Region II Page 3 of 3

# cc (with enclosure):

Document Control Desk, NRC

Mr. Daniel Bacon, NRC Senior Operations Engineer, Region II

Mr. Gerald J. McCoy, Chief, NRC Operations Branch 1, Region II

Mr. Andrew Hon, NRC Project Manager

Mr. Gale Smith, NRC Senior Resident Inspector

Chair - North Carolina Utilities Commission

# **List of Examination Materials**

The following documents, developed in accordance with NUREG-1021, Revision 11, "Operator Licensing Examination Standards for Power Reactors," are being provided, along with Reference Material, via a secure FTP website.

Form ES-201-2	Examination Outline Quality Checklist
Form ES-201-3	Examination Security Agreement (Photocopy)
Form ES-301-1	Administrative Topics Outline (for RO and SRO positions)
Form ES-301-2	Control Room/In-Plant Systems Outline (for RO, SRO-U, and
	SRO-I positions)
Form ES-301-5	Transient and Event Checklist
Form ES-401-1	BWR Examination Outline
Form ES-401-3	Generic Knowledge and Abilities Outline
Form ES-401-4	Record of Rejected K/As
Form ES-D-1	Scenario Outline (one for each scenario)



September 23, 2020

Serial: RA-20-0276

U. S. Nuclear Regulatory Commission, Region II ATTN: Ms. Laura Dudes, Regional Administrator 245 Peachtree Center Ave, NE, Suite 1200 Atlanta, GA 30303-1257

Subject: Brunswick Steam Electric Plant, Unit Nos. 1 and 2

Renewed Facility Operating License Nos. DPR-71 and DPR-62

Docket Nos. 50-325 and 50-324

Written Exam for Licensed Operator Initial Examination 50-325/2020-301 and

50-324/2020-301

Reference: Letter from Gerald J. McCoy (NRC) to John A. Krakuszeski (Duke Energy),

"Brunswick Steam Electric Plant - Notification of Licensed Operator Initial

Examination 05000325/2020 and 05000324/2020301," dated February 12, 2020,

ADAMS Accession Number ML20043F346

Dear Ms. Dudes,

In accordance with the guidelines in Revision 11, of NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Duke Energy Progress, LLC, is providing the operating test, which will begin the week of December 7, 2020, and the written exam, which is scheduled to be administered on December 16, 2020.

In accordance with the schedule contained in the NRC's letter dated February 12, 2020 (i.e., Reference), the examination materials listed in the enclosure of this letter are being provided electronically via secure File Transfer Protocol (FTP), in accordance with the memorandum of understanding, to Mr. Daniel Bacon, the assigned NRC chief examiner, only. The material is not included herein.

In accordance with 10 CFR 55.40(b)(3), Mr. Robert Mehs, as the designated authorized representative of the Brunswick Steam Electric Plant, has approved the written tests for the examination of the applicants.

In accordance with Revision 11, of NUREG-1021, Section ES-201, "Initial Operator Licensing Examination Process," please ensure that the examination materials are withheld from public disclosure until after the examination is complete.

This document contains no regulatory commitments.

# U. S. Nuclear Regulatory Commission, Region II Page 2 of 3

Please refer any questions regarding this submittal to Mr. Bob Bolin, Nuclear Operations Instructor, at (910) 832-3078, or Mr. Eddie Rau, Training Superintendent, at (910) 880-0612.

Sincerely,

Sabrina Salazar

Manager – Nuclear Support Services Brunswick Steam Electric Plant

SBY/sby

Enclosure: List of Examination Materials

# U. S. Nuclear Regulatory Commission, Region II Page 3 of 3

# cc (with enclosure):

Document Control Desk, NRC

Mr. Daniel Bacon, NRC Senior Operations Engineer, Region II

Mr. Gerald J. McCoy, Chief, NRC Operations Branch 1, Region II

Mr. Andrew Hon, NRC Project Manager

Mr. Gale Smith, NRC Senior Resident Inspector

Chair - North Carolina Utilities Commission

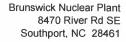
# List of Examination Materials

The following documents, developed in accordance with NUREG-1021, Revision 11, "Operator Licensing Examination Standards for Power Reactors," are being provided, along with Reference Material, via a secure FTP website.

Form ES-201-2	Examination Outline Quality Checklist		
Form ES-201-3	Examination Security Agreement (Photocopy)		
Form ES-301-1	Administrative Topics Outline (for RO and SRO positions)		
Form ES-301-2	Control Room/In-Plant Systems Outline (for RO, SRO-U, and		
	SRO-I positions)		
Form ES-301-3	Operating Test Quality Checklist		
Form ES-301-4	Simulator Scenario Quality Checklist		
Form ES-301-5	Transient and Event Checklist		
Form ES-301-6	Competencies Checklist		
Form ES-401-4	Record of Rejected K/As		
Form ES-401-6	Written Examination Quality Checklist		
Form ES-D-1	Scenario Outline (one for each scenario)		
Form ES-D-2	Required Operator Actions (one for each scenario)		
Administrative and System Job Performance Measures			
RO Written Exam with reference package			
SRO Written Exam with reference package			
DO/CDO Even Anguer Kov			

RO/SRO Exam Answer Key

All exam questions with corresponding distractor analysis





December 15, 2020 Serial: RA-20-0370

U. S. Nuclear Regulatory Commission, Region II ATTN: Ms. Laura Dudes, Regional Administrator 245 Peachtree Center Ave, NE, Suite 1200

Atlanta, GA 30303-1257

Subject:

Brunswick Steam Electric Plant, Unit Nos. 1 and 2

Renewed Facility Operating License Nos. DPR-71 and DPR-62

Docket Nos. 50-325 and 50-324

Reactor Operator and Senior Reactor Operator License Post-Examination

Documentation

Reference:

Letter from Gerald J. McCoy (NRC) to John A. Krakuszeski (Duke Energy), "Brunswick Steam Electric Plant – Notification of Licensed Operator Initial Examination 05000325/2020 and 05000324/2020301," dated February 12, 2020, ADAMS Accession Number ML20043F346

Dear Ms. Dudes.

In accordance with the guidelines in Revision 11, of NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Duke Energy Progress, LLC, is providing the specified post examination documentation for the reactor operator and senior reactor operator examinations. The written exam was administered at the Brunswick Steam Electric Plant on December 14, 2020.

The documentation listed in the enclosure of this letter is being provided electronically via secure File Transfer Protocol (FTP), in accordance with the memorandum of understanding, to Mr. Daniel Bacon, the assigned NRC chief examiner, only. The material is not included herein. As confirmed acceptable with the NRC chief examiner, the ES-201-3 form, "Examination Security Agreement," with all the pre- and post-examination signatures will be provided via email upon completion.

This document contains no regulatory commitments.

Please refer any questions regarding this submittal to Mr. Bob Bolin, Nuclear Operations Instructor, at (910) 832-3078, or Mr. Eddie Rau, Training Superintendent, at (910) 880-0612.

Sincerely,

Sabrina Salazar

Manager – Nuclear Support Services Brunswick Steam Electric Plant

SBY/sby

Enclosure:

List of Post-Examination Documentation

# U. S. Nuclear Regulatory Commission, Region II Page 2 of 2

# cc (with enclosure):

Document Control Desk, NRC

Mr. Daniel Bacon, NRC Senior Operations Engineer, Region II

Mr. Gerald J. McCoy, Chief, NRC Operations Branch 1, Region II

Mr. Andrew Hon, NRC Project Manager

Mr. Gale Smith, NRC Senior Resident Inspector

Chair - North Carolina Utilities Commission

# **List of Post-Examination Documentation**

The following documents are being provided via a secure FTP website.

- 1. Graded Written Examinations and Applicants' Answer Sheets
- 2. Master Examination and Answer Key
- 3. Applicants' Questions Asked and Answers Given During the Written Examination
- 4. Post Exam Comments, if any
- 5. Written Examination Seating Chart
- 6. ES-403-1, "Written Examination Grading Quality Checklist"
- 7. Written Examination Performance Analysis Results (with recommended substantive changes)