COVER SHEET

ST. LUCIE EXAM
50-335, 389/2001-301

MAY 14 - 18 & 21 - 25, 2001

-- ADMINISTRATIVE DOCUMENTS --
ALL IN ONE ADAMS DOCUMENT

[✓] ES-201-1 - Exam Preparation Checklist

[✓] ES-201-2 - Exam Outline Quality Checklist

[✓] ES-201-3 - Exam Security Agreements

[✓] ES-301-1 - Admin Topics Outline

[✓] ES-301-2 - Control Room Systems & Facility Walk-through Test Outline

[✓] ES-301-3 - Operating Test Quality Checklist

[✓] ES-301-4 - Simulator Scenario Quality Checklist

[✓] ES-301-5 - Transient & Event Checklist

[✓] ES-301-6 - Competencies Checklist

[✓] ES-401-7 - Written Exam Quality Checklist

[✓] ES-401-9 - Written Exam Review Worksheet

[✓] ES-403-1 - Written Exam Grading Quality Checklist

[✓] ES-501-1 - Post Exam Check Sheet

Facility: St. Lucie Nuclear Plant Date of Exam: May 14 - 18, 2001

Examinations Developed by: Written: Facility
Operating: Facility

Target Date*	Task Description / Reference	Chief Examiner's Initials
-180	1. Examination administration date confirmed (C.1.a; C.2.a & b)	*msm*
-120	2. NRC examiners and facility contact assigned (C.1.d; C.2.e)	*msm*
-120	3. Facility contact briefed on security & other requirements (C.2.c)	*msm*
-120	4. Corporate notification letter sent (C.2.d)	*msm*
[-90]	[5. Reference material due (C.1.e; C.3.c)]	*msm*
-75	6. Integrated examination outline(s) due (C.1.e & f; C.3.d)	*msm*
-70	7. Examination outline(s) reviewed by NRC and feedback provided to facility licensee (C.2.h; C.3.e)	*msm*
-45	8. Proposed examinations, supporting documentation, and reference materials due (C.1.e, f, g & h; C.3.d)	*msm*
-30	9. Preliminary license applications due (C.1.l; C.2.g; ES-202)	*msm*
-14	10. Final license applications due and assignment sheet prepared (C.1.l; C.2.g; ES-202)	*msm*
-14	11. Examination approved by NRC supervisor for facility licensee review (C.2.h; C.3.f)	*msm*
-14	12. Examinations reviewed with facility licensee (C.1.j; C.2.f & h; C.3.g)	*msm*
-7	13. Written examinations and operating tests approved by NRC supervisor (C.2.i; C.3.h)	*msm*
-7	14. Final applications reviewed; assignment sheet updated; waiver letters sent (C.2.g, ES-204)	*msm*
-7	15. Proctoring/written exam administration guidelines reviewed with facility licensee and authorization granted to give written exams (if applicable) (C.3.k)	*msm*
-7	16. Approved scenarios, job performance measures, and questions distributed to NRC examiners (C.3.i)	*msm*

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

[ ] Applies only to examinations prepared by the NRC.

Facility: FPL St. Lucie Nuclear Plant Date of Examination: 5/14/01

Item	Task Description	Initials a	Initials b*	Initials c
1. WRITTEN	a. Verify that the outline(s) fit(s) the appropriate model per ES-401.			
	b. Assess whether the outline was systematically prepared and whether all knowledge and ability categories are appropriately sampled.			
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.			
	d. Assess whether the repetition from previous examination outlines is excessive.			
2. SIM	a. Using Form ES-301-5, verify that the proposed scenario sets cover the required number of normal evolutions, instrument and component failures, 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; ensure 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 over successive days.			
	c. To the extent possible, assess whether the outline(s) conform(s) with the qualitative and quantitative criteria specified on Form ES-301-4 and described in Appendix D.			
3. W/T	a. Verify that: (1) the outline(s) contain(s) the required number of control room and in-plant tasks, (2) no more than 30% of the test material is repeated from the last NRC examination, (3)* no tasks are duplicated from the applicants' audit test(s), and (4) no more than 80% of any operating test is taken directly from the licensee's exam banks.			
	b. Verify that: (1) the tasks are distributed among the safety function groupings as specified in ES-301, (2) one task is conducted in a low-power or shutdown condition, (3) 40% of the tasks require the applicant to implement an alternate path procedure, (4) one in-plant task tests the applicant's response to an emergency or abnormal condition, and (5) the in-plant walk-through requires the applicant to enter the RCA.			
	c. Verify that the required administrative topics are covered, with emphasis on performance-based activities.			
	d. Determine if there are enough different outlines to test the projected number and mix of applicants and ensure that no items are duplicated on successive days.			
4. GENERAL	a. Assess whether plant-specific priorities (including PRA and IPE insights) are covered in the appropriate exam section.			
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.			
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.			
	d. Check for duplication and overlap among exam sections.			
	e. Check the entire exam for balance of coverage.			
	f. Assess whether the exam fits the appropriate job level (RO or SRO).			

	Printed Name / Signature	Date
a. Author	LAWRENCE M RICH	2/21/01
b. Facility Reviewer(*)	Robert W Lindsey	2/23/01
c. Chief Examiner	MARK S. MILLER	3/6/01
d. NRC Supervisor	MIKE ERNSTES	4/27/01

(*) Not applicable for NRC-developed examinations.

St. Lucie Initial Exam Outline Comments

RO OUTLINE

EXAM	TIER	GROUP	CAT	COMMENT
RO	1	1	BW/E09	CLARIFY THAT THIS IS FROM CE/A13, NATURAL CIRC
RO	1	1	000040	CLARIFY THAT THIS K/A APPEARS UNDER CE E05 EA2.2 OR CHANGE DESCRIPTION TO MATCH EA2.1
RO	1	1	CE/A11	SRO IMPORTANCE FOR AK3.3 IS 3.5, NOT 3.3
RO	1	1	000074	HIGHLIGHT THE FACT THAT THIS IS 000074, NOT W/E06&7. ALSO, EK2.2.05 DOESN'T EXIST – SHOULD BE EK2.05
RO	1	2	000003	AA2.02 - THE K/A CATALOG DOES NOT REFERENCE 10 CFR 55.41 FOR THIS K/A – SHOW RO LEARNING OBJECTIVE OR RELATE TO 55.41
RO	1	2	000007	CLARIFY THAT THIS IS FROM CE/E02
RO	1	2	000008	A2.03 - THE K/A CATALOG DOES NOT REFERENCE 10 CFR 55.41 FOR THIS K/A – SHOW RO LEARNING OBJECTIVE OR RELATE TO 55.41
RO	1	2	000011	G2.4.14 – IMPORTANCE VALUES SHOULD BE 3.0/3.9, NOT 3.3/3.9
RO	1	2	000037	AA2.13 - THE K/A CATALOG DOES NOT REFERENCE 10 CFR 55.41 FOR THIS K/A – SHOW RO LEARNING OBJECTIVE OR RELATE TO 55.41
RO	1	2	000054	G.2.4.45 - THE K/A CATALOG DOES NOT REFERENCE 10 CFR 55.41 FOR THIS K/A – SHOW RO LEARNING OBJECTIVE OR RELATE TO 55.41
RO	2	1	001	PLACE "/" IN PLACE OF "." IN IMPORTANCE VALUES FOR K6.11
RO	2	1	071	G2.1.32 – IMPORTANCE VALUES SHOULD BE 3.4/3.8
RO	2	2	063	"K2,01" SHOULD BE "K2.01." IMPORTANCE VALUES SHOULD BE 3.4/3.8.
RO	2	3	028	G2.4.21 - THE K/A CATALOG DOES NOT REFERENCE 10 CFR 55.41 FOR THIS K/A – SHOW RO LEARNING OBJECTIVE OR RELATE TO 55.41
RO	3		G2.1.7	THE K/A CATALOG DOES NOT REFERENCE 10 CFR 55.41 FOR THIS K/A – SHOW RO LEARNING OBJECTIVE OR RELATE TO 55.41
RO	3		G2.1.11	THE K/A CATALOG DOES NOT REFERENCE 10 CFR 55.41 FOR THIS K/A – SHOW RO LEARNING OBJECTIVE OR RELATE TO 55.41
RO	3		G2.2.1	THE K/A CATALOG DOES NOT REFERENCE 10 CFR 55.41 FOR THIS K/A – SHOW RO LEARNING OBJECTIVE OR RELATE TO 55.41
RO	3		G2.2.11	THE K/A CATALOG DOES NOT REFERENCE 10 CFR 55.41 FOR THIS K/A – SHOW RO LEARNING OBJECTIVE OR RELATE TO 55.41
RO	3		G2.2.30	THE K/A CATALOG DOES NOT REFERENCE 10 CFR 55.41 FOR THIS K/A – SHOW RO LEARNING OBJECTIVE OR RELATE TO 55.41
RO	3		G2.4.21	THE K/A CATALOG DOES NOT REFERENCE 10 CFR 55.41 FOR THIS K/A – SHOW RO LEARNING OBJECTIVE OR RELATE TO 55.41

SRO OUTLINE

EXAM	TIER	GROUP	CAT	COMMENT
SRO	1	1	000055	EA1.06 - THE K/A CATALOG DOES NOT REFERENCE 10 CFR 55.43 FOR THIS K/A – SHOW RO LEARNING OBJECTIVE OR RELATE TO 55.43
SRO	1	1	000068	AK2.07 - THE K/A CATALOG DOES NOT REFERENCE 10 CFR 55.43 FOR THIS K/A – SHOW RO LEARNING OBJECTIVE OR RELATE TO 55.43
SRO	1	1	000069	AK2.03 - THE K/A CATALOG DOES NOT REFERENCE 10 CFR 55.43 FOR THIS K/A – SHOW RO LEARNING OBJECTIVE OR RELATE TO 55.43
SRO	1	2	000022	SRO OUTLINE SHOWS AA1.01 AS "BOTH" RO OUTLINE SHOWS AA1.08 AS "BOTH." NEITHER APPEARS ON BOTH OUTLINES.
SRO	2	1	003	A2.01 SHOULD BE A2.02, OR K/A DESCRIPTION/IMPORTANCE SHOULD BE CHANGED.
SRO	2	1	003	RO OUTLINE SHOWS K3.04 AS "BOTH" BUT DOES NOT APPEAR ON SRO EXAM
SRO	2	1	015	A2.05 – IMPORTANCE VALUES SHOULD BE 3.3/3.8, VICE 3.3/3.5
SRO	2	1	063	"K2,01" SHOULD BE "K2.01"
SRO	2	2	002	A1.04 – CORRECT TYPOS
SRO	2	3	005	G2.4.2 - THE K/A CATALOG DOES NOT REFERENCE 10 CFR 55.43 FOR THIS K/A – SHOW RO LEARNING OBJECTIVE OR RELATE TO 55.43
SRO	3		G2.4.40	THE K/A CATALOG DOES NOT REFERENCE 10 CFR 55.43 FOR THIS K/A – SHOW RO LEARNING OBJECTIVE OR RELATE TO 55.43

St. Lucie Initial Exam Outline Comments

ADMINISTRATIVE TOPICS OUTLINE

EXAM	JPM	COMMENT
BOTH	GENERAL	K/A DESIGNATORS SHOULD BEGIN WITH "G," NOT "K"
RO	A.1.b	G.2.1.7 - THE K/A CATALOG DOES NOT REFERENCE 10 CFR 55.41 FOR THIS K/A – SHOW RO LEARNING OBJECTIVE OR RELATE TO 55.41
RO	A.3	G2.3.10 - THE K/A CATALOG DOES NOT REFERENCE 10 CFR 55.41 FOR THIS K/A – SHOW RO LEARNING OBJECTIVE OR RELATE TO 55.41
RO	A.4	2.4.41 - THE K/A CATALOG DOES NOT REFERENCE 10 CFR 55.41 FOR THIS K/A – SHOW RO LEARNING OBJECTIVE OR RELATE TO 55.41
RO	A.4	2.4.41 – RO IMPORTANCE VALUE < 2.5. EXPLAIN WHY THIS IS ACCEPTABLE.

SIMULATOR SCENARIOS

SCENARIO	EVENT	COMMENT
ALL	GENERAL	CONSIDER SPECIFYING WHERE SRO CREDIT IS ACCRUED (E.G. C-SRO)
1	6	BOP OPERATOR SHOULD BE IDENTIFIED AS HANDLING EDG ISSUES
ALL	GENERAL	WHEN DEVELOPING EVENTS, ENSURE AREAS EVALUATING SRO COMPETENCY WITH TS SHOULD BE IDENTIFIED

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 5-14-01 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.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 _____. 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. W L Parks	NPS		3/19/01		5/22/01	
2. R.A. Sherwood	RCO		3/19/01		5/22/01	
3. Jim MARTIN	SIMULATOR SUPERVISOR		3/20/01		5-22-01	
4. Karen Church	Plant Technician - Admin		5/7/01		5 23 01	
5. Walt DAUGHTRY	SURROGATE & PROCTOR		5/14/01		5-23-01	
6. RON LAUVER	surrogate & Proctor		5/14/01		5-23-01	
7. Michael A Perry	Sequestering & Proctor		5/14/01		5-22-01	
8. BRIAN MCMEEKIN	SEQUESTERING & PROCTOR		5/14/01		5-22-01	
9. Charles A. Rogers	Sequestering & Proctor		5/14/01		5 23-01	
10. ROBERT F. CZACHOR	SEQUESTERING + PROCTOR		5/14/01		5-23-01	
11. A.W. MARVIN	SEQUESTERING / PROCTOR		5-14-01		5-23-01	
12. STEVE WILLETT	SEQUESTERING / PROCTOR		5/14/01		5 23 01	
13. W G GULDEMANN	Ops Mgr		5/15/01		6 4 01	
14.						
15.						

NOTES:

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 5/14/00 5/21/00 5/28/00 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.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 5.14.01. 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.	LARRY RICH	EXAM DEVELOPER		9.29.00		5.22.01	
(1) 2.	ROGER WALKER	EXAM DEVELOPER		9-29-00		6/22/01	
3.	Robert Lindsey	Exam Reviewer/Training Mgr		11/2/00		5/11/01	
4.	J. CHARLES COUTURE	OPERATING TEST DEVELOPER		20NOV2000		23 MAY-2001	
✱5.	GEORGE T. LOREE	SIMULATOR ENGR.		1/14/01		5/22/01	
++6.	ROBERT T. DIEHL	ASST. NUC PLT SUPV OPS		1-17-01		6-5-01	
++7.	Hank Holzmacher	Reactor Control Operator	Hank Holzmacher	1-17-01	Hank Holzmacher	6-5-01	
8.	Adam Scales	Operations Supervisor / Reviewer		01/18/01		5/31/01	
9.	Rajiv S. Kundalkar	Site Vice President		2/28/01		5/22/01	
10.	R G W	PGM		3/1/01		5/22/01	
11.	Dave Brown	Nuclear Instructor		3/8/01		5/23/01	
12.	Reid Watson	SEG Engineer		3/8/01		5/23/01	
13.	Carlos de la Guardia	RCO		3-19-01		5/29/01	
14.	Tom Brown	RCO		3-19-01		5-29-01	
15.	Jim Fiori	RCO		3-19-01		5/29/01	

NOTES: ✱ OPERATING TEST ONLY
++ WRITTEN EXAM ONLY
(1) TAUGHT LOR PCM TRAINING CYCLE 01.1, 3 SRO UPGRADES IN ATTENDANCE

Facility: St. Lucie Examination Level (circle one): (RO) / SRO	Date of Examination: 5/14/01 Operating Test Number: 1

Administrative Topic/Subject Description		Describe method of evaluation: 1. ONE Administrative JPM, OR 2. TWO Administrative Questions
A.1	Ability to interpret graphs monographs and tables which contain performance data K2.1.25 2.8/3.1	Question 1: Determine HUT level change from draining RCS while on SDC Unit 2
		Question 2: Determine SDC flow rate during Mid-Loop Operations Unit 2
	Plant parameter Verification K2.1.7 3.7/4.4	JPM: Perform SDM Calculation Unit 2
A.2	Knowledge of Surveillance Procedures K2.2.12 3.0/3.4	JPM: Monitor AFW Header for Water Hammer Conditions
A.3	Ability to perform procedures to reduce levels of radiation and exposure K2.3.10 2.9/3.3	Question 1: Respond to rapidly lowering refueling cavity with refueling operations in progress.
		Question 2: Respond to a dropped new fuel element in the Fuel Handling Building
A.4	Knowledge of emergency action level thresholds and classifications K2.4.41 2.3/4.0	JPM: Determine RCS leak rate and evaluate leak rate to determine if the E-Plan should be implemented.

Facility: St. Lucie
Examination Level (circle one): RO / SRO

Date of Examination: 5/14/01
Operating Test Number: 1

Administrative Topic/Subject Description		Describe method of evaluation: 1. ONE Administrative JPM, OR 2. TWO Administrative Questions
A.1	Ability to interpret graphs monographs and tables which contain performance data K2.1.25 2.8/3.1	Question 1: Determine HUT level change from draining RCS while on SDC Unit 2.
		Question 2: Determine SDC flow rate during Mid-Loop Operations Unit 2
	Plant parameter Verification K2.1.7 3.7/4.4	JPM: Perform SDM Calculation Unit 2
A.2	Knowledge of Surveillance Procedures K2.2.12 3.0/3.4	JPM: Monitor AFW Header for Water Hammer Conditions
A.3	Ability to perform procedures to reduce levels of radiation and exposure K2.3.10 2.9/3.3	Question 1: Respond to rapidly lowering refueling cavity with refueling operations in progress.
		Question 2: Respond to a dropped new fuel element in the Fuel Handling Building
A.4	Knowledge of the SRO responsibility in the Emergency plan K2.4.40 2.3/4.0 (SRO)	Question 1: Determine the assembly area during a General Emergency with a release occurring
		Question 2: Identify the responsibilities that the EC cannot delegate during implementation of the E-Plan

Facility: St. Lucie Exam Level (circle one): RO / SRO(I) / SRO(U)	Date of Examination: 5/14/01 Operating Test No.: 1

B.1 Control Room Systems

System / JPM Title	Type Code*	Safety Function
a. ECCS 006: Align Hot and Cold Leg Injection SRO(U)	M, S, A, L	02
b. ECCS 006: Establish Once Through Cooling	D, S, A, L	02
c. CSS 026: Verify Containment Spray	N, S, A, L	05
d. SWS 076: Loss of ICW header SRO(U)	N, S, A, L	04
e. A.C. Electrical 062: Energize 1B3 4.16 K.V. Bus from Unit 2 During Station Blackout. SRO(U)	D, C, L	06
f. Main Feedwater 059: Transfer 1A S/G Level Control From FCV- 9011 to LCV-9005. Unit 1	N, C	04
g. Pressurizer Pressure 010: Respond to Abnormal Pressurizer Pressure Condition Unit 1	M, C	03

B.2 Facility Walk-Through

a. CRDS 001: CEA ONOP Perform Manipulations outside Control Room Unit 1 SRO(U)	D	01
b. A.C. Electrical 062: Perform Actions of SNPO for Control Room Inaccessibility Unit 1	D, R, L	06
c. Inst. Air 078: Align Emergency Cooling Water to the Instrument air system during a LOOP Unit 1 SRO (U)	D, L	08
d. **(Alternate)** CDRDS 001: Place CEA Subgroup on the hold bus Unit 2	D	01
e. **(Alternate)** A.C. Electrical 062: Disconnect 1B Instrument Inverter for Preventive Maintenance Unit 1	D	06

* Type Codes: (D)irect from bank, (M)odified from bank, (N)ew, (A)lternate path, (C)ontrol room, (S)imulator, (L)ow-Power, (R)CA

Facility: St. Lucie
Examination Level (circle one): RO / **SRO**

Date of Examination: 5/14/01
Operating Test Number: 1

Administrative Topic/Subject Description		Describe method of evaluation: 1. ONE Administrative JPM, OR 2. TWO Administrative Questions
A.1	Ability to interpret graphs monographs and tables which contain performance data G2.1.25 2.8/3.1	Question 1: Determine HUT level change from draining RCS while on SDC Unit 2.
		Question 2: Determine SDC flow rate during Mid-Loop Operations Unit 2
	Plant parameter Verification G2.1.7 3.7/4.4	JPM: Perform SDM Calculation Unit 2
A.2	Knowledge of Surveillance Procedures G2.2.12 3.0/3.4	JPM: Monitor AFW Header for Water Hammer Conditions
A.3	Ability to perform procedures to reduce levels of radiation and exposure G2.3.10 2.9/3.3	Question 1: Respond to rapidly lowering refueling cavity with refueling operations in progress.
		Question 2: Respond to a dropped new fuel element in the Fuel Handling Building
A.4	Knowledge of the SRO responsibility in the Emergency plan G2.4.40 2.3/4.0 (SRO)	Question 1: Determine the assembly area during a General Emergency with a release occurring
		Question 2: Identify the responsibilities that the EC cannot delegate during implementation of the E-Plan

Facility: St. Lucie Examination Level (circle one): **RO** / SRO	Date of Examination: 5/14/01 Operating Test Number: 1

Administrative Topic/Subject Description		Describe method of evaluation: 1. ONE Administrative JPM, OR 2. TWO Administrative Questions
A.1	Ability to interpret graphs monographs and tables which contain performance data G2.1.25 2.8/3.1	Question 1: Determine HUT level change from draining RCS while on SDC Unit 2
		Question 2: Determine SDC flow rate during Mid-Loop Operations Unit 2
	Plant parameter Verification G2.1.7 3.7/4.4	JPM: Perform SDM Calculation Unit 2
A.2	Knowledge of Surveillance Procedures G2.2.12 3.0/3.4	JPM: Monitor AFW Header for Water Hammer Conditions
A.3	Ability to perform procedures to reduce levels of radiation and exposure G2.3.10 2.9/3.3	Question 1: Respond to rapidly lowering refueling cavity with refueling operations in progress.
		Question 2: Respond to a dropped new fuel element in the Fuel Handling Building
A.4	Knowledge of emergency action level thresholds and classifications G2.4.41 2.3/4.0	JPM: Determine RCS leak rate and evaluate leak rate to determine if the E-Plan should be implemented.

Facility: St. Lucie Exam Level (circle one): RO / SRO(I) / SRO(U)	Date of Examination: 5/14/01 Operating Test No.: 1

B.1 Control Room Systems

System / JPM Title	Type Code*	Safety Function
a. ECCS 006: Align Hot and Cold Leg Injection SRO(U)	M, S, A, L	02
b. ECCS 006: Establish Once Through Cooling	D, S, A, L	02
c. CSS 026: Verify Containment Spray	N, S, A, L	05
d. SWS 076: Loss of ICW header SRO(U)	N, S, A, L	04
e. A.C. Electrical 062: Energize 1B3 4.16 K.V. Bus from Unit 2 During Station Blackout. SRO(U)	D, C, L	06
f. Main Feedwater 059: Transfer 1A S/G Level Control From FCV- 9011 to LCV-9005. Unit 1	N, C	04
g. Pressurizer Pressure 010: Respond to Abnormal Pressurizer Pressure Condition Unit 1	M, C	03

B.2 Facility Walk-Through

a. CRDS 001: CEA ONOP Perform Manipulations outside Control Room Unit 1 SRO(U)	D	01
b. A.C. Electrical 062: Perform Actions of SNPO for Control Room Inaccessibility Unit 1 SRO (U)	D, R, L	06
c. Inst. Air 078: Align Emergency Cooling Water to the Instrument air system during a LOOP Unit 1	D, L	08
d. **(Alternate)** CDRDS 001: Place CEA Subgroup on the hold bus Unit 2	D	01
e. **(Alternate)** A.C. Electrical 062: Disconnect 1B Instrument Inverter for Preventive Maintenance Unit 1	D	06

* Type Codes: (D)irect from bank, (M)odified from bank, (N)ew, (A)lternate path, (C)ontrol room, (S)imulator, (L)ow-Power, (R)CA

FPL

March 28, 2001

Mr. Mark Miller
USNRC Region II
Atlanta Federal Center
61 Forsyth Street S.W.
Atlanta, Ga. 30303-3415

Mark,

Enclosed, please find the RO/SRO operating test and RO/SRO written exams with the following checklists:

- Operating Test Quality Checklist ES-301-3
- Simulator Scenario Quality Checklist ES-301-4
- RO/SRO Written Exam Quality Checklist ES-401-7
- Transient and Event Checklist ES-301-5
- Competencies Checklist ES-301-6

Please withhold the written and operating test from public disclosure until after the examinations are complete.

Sincerely,

Robt. W. "Bill" Lindsey
Training Manager
St. Lucie Plant

PSL-TRN-01-007

Facility: ST. LUCIE | Date of Exam: 5·14·01 | Exam Level: (RO) SRO

	Item Description				Initial a	Initial b*	Initial c#
1.	Questions and answers technically accurate and applicable to facility						
2.	a. NRC K/As referenced for all questions b. Facility learning objectives referenced as available						
3.	RO/SRO overlap is no more than 75 percent, and SRO questions are appropriate per Section D.2.d of ES-401						
4.	No more than 25 questions are duplicated from [practice exams, quizzes, and] the last two NRC licensing exams; enter the actual number of duplicated questions at right	NRC: 1	Other: 4				
5.	[No (Less than 5 percent) question duplication from the license screening/audit exam (if independently written)]						
6.	Bank use meets limits (no more than 50 percent from the bank, at least 10 percent new, and the rest modified); enter the actual question distribution at right	Bank: 5	Modified: 7	New: 88			
7.	Between 50 and 60 percent of the questions on the exam (including 10 new questions) are written at the comprehension/analysis level; enter the actual question distribution at right	Memory: 46	C/A: 54				
8.	References/handouts provided do not give away answers						
9.	Question distribution meets previously approved examination outline; deviations are justified						
10.	Question psychometric quality and format meet ES, Appendix B, guidelines						
11.	The exam contains 100, one-point, multiple choice items; the total is correct and agrees with value on cover sheet						

	Printed Name / Signature	Date
a. Author	LARRY RICH	3·27·01
b. Facility Reviewer(*)	Robert W. Lindsey	3/27/01
c. NRC Chief Examiner(*)	MARK S. MILLER	4/31/01
d. NRC Regional Supervisor(*)	MIKE ERNSTES	5/10/01

Note: * The facility reviewer's signature is not applicable for NRC-developed examinations; two independent NRC reviews are required.
See special instructions (Section E.2.c) for Items 1, 4, 5, and 6.
[ ] The items in brackets do not apply to NRC-prepared examinations.

Facility: ST. LUCIE | Date of Exam: 5·14·01 | Exam Level: RO/SRO

	Item Description				Initial a	Initial b*	Initial c#
1.	Questions and answers technically accurate and applicable to facility						
2.	a. NRC K/As referenced for all questions b. Facility learning objectives referenced as available						
3.	RO/SRO overlap is no more than 75 percent, and SRO questions are appropriate per Section D.2.d of ES-401						
4.	No more than 25 questions are duplicated from [practice exams, quizzes, and] the last two NRC licensing exams; enter the actual number of duplicated questions at right	NRC: 1	Other: 4				
5.	[No (Less than 5 percent) question duplication from the license screening/audit exam (if independently written)]						
6.	Bank use meets limits (no more than 50 percent from the bank, at least 10 percent new, and the rest modified); enter the actual question distribution at right	Bank: 5	Modified: 7	New: 88			
7.	Between 50 and 60 percent of the questions on the exam (including 10 new questions) are written at the comprehension/analysis level; enter the actual question distribution at right	Memory: 46	C/A: 54				*
8.	References/handouts provided do not give away answers						
9.	Question distribution meets previously approved examination outline; deviations are justified						
10.	Question psychometric quality and format meet ES, Appendix B, guidelines						
11.	The exam contains 100, one-point, multiple choice items; the total is correct and agrees with value on cover sheet						

	Printed Name / Signature	Date
a. Author	LARRY RICH	3·27·01
b. Facility Reviewer(*)	Robert W. Lindsey	3/27/01
c. NRC Chief Examiner(*)	MARK S. MILLER	4/31/01
d. NRC Regional Supervisor(*)	MIKE ERNSTES	5/10/01

Note: * The facility reviewer's signature is not applicable for NRC-developed examinations; two independent NRC reviews are required.
See special instructions (Section E.2.c) for Items 1, 4, 5, and 6.
[ ] The items in brackets do not apply to NRC-prepared examinations.

* UPON REVIEW & RESOLUTION OF COMMENTS, ACTUAL COUNT 44 MEMORY & 56 C/A.

Facility: ST. LUCIE Date of Examination: 5.14.01 Operating Test Number: 1

	1. GENERAL CRITERIA	Initials a	Initials b	Initials 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).			
b.	There is no day-to-day repetition between this and other operating tests to be administered during this examination.			
c.	The operating test shall not duplicate items from the applicants' audit test(s)(see Section D.1.a).			
d.	Overlap with the written examination and between operating test categories is within acceptable limits.			
e.	It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.			
	2. WALK-THROUGH (CATEGORY A & B) CRITERIA	--	--	--
a.	Each JPM includes the following, as applicable: · initial conditions · initiating cues · references and tools, including associated procedures · validated time limits (average time allowed for completion) and specific designation if deemed to be time critical by the facility licensee · 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			
b.	The prescripted questions in Category A are predominantly open reference and meet the criteria in Attachment 1 of ES-301.			
c.	Repetition from operating tests used during the previous licensing examination is within acceptable limits (30% for the walk-through) and do not compromise test integrity.			
d.	At least 20 percent of the JPMs on each test are new or significantly modified.			
	3. SIMULATOR (CATEGORY C) CRITERIA	--	--	--
a.	The associated simulator operating tests (scenario sets) have been reviewed in accordance with Form ES-301-4 and a copy is attached.			

	Printed Name / Signature	Date
a. Author	LARRY RICH	3-27-01
b. Facility Reviewer(*)	Robert W. Lindsey	3/27/01
c. NRC Chief Examiner (*)	MARK S. MILLER /	4/30/01
d. NRC Supervisor (*)	MIKE ERNSTES /	5/10/01

(*) The facility signature is not applicable for NRC-developed tests; two independent NRC reviews are required.

Facility: ST. LUCIE Date of Exam: 5·14·01 Scenario Numbers: 1 / 2 / 3 Operating Test No.: 1

QUALITATIVE ATTRIBUTES	Initials a	Initials b	Initials 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.			
2. The scenarios consist mostly of related events.			
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)			
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.			
5. The events are valid with regard to physics and thermodynamics.			
6. Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.			
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.			
8. The simulator modeling is not altered.			
9. The scenarios have been validated. Any open simulator performance deficiencies have been evaluated to ensure that functional fidelity is maintained while running the planned scenarios.			
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.4 of ES-301.			
11. All individual operator competencie ES-301-6 (submit the form along with the simulator s			
12. Each applicant will be significantly nts and events specified on Form ES-301-5 (subm			
13. The level of difficulty is appropriate w position.			

3 FOR SCENARIO 1?

TARGET QUANTITATIVE ATTRIBUTES (PI	Actual Attributes	–	–	–
1. Total malfunctions (5-8)	7 / 7 / 8			
2. Malfunctions after EOP entry (1-2)	2 / 2* / 2†			
3. Abnormal events (2-4)	4 / 4 / 5			
4. Major transients (1-2)	1 / 1 / 1			
5. EOPs entered/requiring substantive actions (1-2)	1** / 1† / 1α			
6. EOP contingencies requiring substantive actions (0-2)	0 / 0 / 0			
7. Critical tasks (2-3)	3 / 3†† / 2			

* 3 IF STEAM BOUND BC AFW PUMP IS COUNTED - NSM
** 2 EOPS EOP-1 & 4 NSM
† - 2 EOPS - EOP-1 & 6 NSM
†† - 4 CRIT TASKS NSM
† - MALFS AFTER EOP ENTRY - 3 NSM
α - 2 EOPS - EOP-1 & 3

OPERATING TEST NO.: 1-R01

Applicant Type	Evolution Type	Minimum Number	Scenario Number 1	2	3	4
RO ✓	Reactivity	1 1	1			
	Normal	1 1	1			
	Instrument	2 2	2.7			
	Component	2 2	3.4			
	Major	1 2	5.6			
As RO	Reactivity	1				
	Normal	0				
	Instrument	1				
	Component	1				
	Major	1				
SRO-I						
As SRO	Reactivity	0				
	Normal	1				
	Instrument	1				
	Component	1				
	Major	1				
SRO-U	Reactivity	0				
	Normal	1				
	Instrument	1				
	Component	1				
	Major	1				

Instructions: (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution type.

(2) Reactivity manipulations may be conducted under normal or *controlled* abnormal conditions (refer to Section D.4.d) but must be significant per Section C.2.a of Appendix D.

Author: _____

Chief Examiner: _____

NOTE: NORMAL FOR EVENT 1 IS CHPP START; PZR RECIRC - REACTIVITY IS ACTUAL DOWNPOWER ASSY

OPERATING TEST NO.: 1 - R02

Applicant Type	Evolution Type	Minimum Number	Scenario Number 1	2	3	4
RO ✓	Reactivity	1 1	1			
	Normal	1 1	1			
	Instrument	2 2	2.7			
	Component	2 2	3.4			
	Major	1 2	5.6			
As RO	Reactivity	1				
	Normal	0				
	Instrument	1				
	Component	1				
	Major	1				
SRO-I						
As SRO	Reactivity	0				
	Normal	1				
	Instrument	1				
	Component	1				
	Major	1				
SRO-U	Reactivity	0				
	Normal	1				
	Instrument	1				
	Component	1				
	Major	1				

Instructions: (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution type.
(2) Reactivity manipulations may be conducted under normal or *controlled* abnormal conditions (refer to Section D.4.d) but must be significant per Section C.2.a of Appendix D.

Author: _____

Chief Examiner: _____

NOTE: NORMAL FOR SCENARIO 1 IS CAPP START; PER REQUIRE - REACTIVITY IS ACTUAL DOWNPOWER MOM

OPERATING TEST NO.: 1- R03

Applicant Type	Evolution Type	Minimum Number	Scenario Number 1	2	3	4
RO ✓	Reactivity	1 1	1			
	Normal	1 1	1			
	Instrument	2 2	2.7			
	Component	2 2	3.4			
	Major	1 2	5.6			
As RO	Reactivity	1				
	Normal	0				
	Instrument	1				
	Component	1				
	Major	1				
SRO-I						
As SRO	Reactivity	0				
	Normal	1				
	Instrument	1				
	Component	1				
	Major	1				
SRO-U	Reactivity	0				
	Normal	1				
	Instrument	1				
	Component	1				
	Major	1				

Instructions: (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution type.
(2) Reactivity manipulations may be conducted under normal or *controlled* abnormal conditions (refer to Section D.4.d) but must be significant per Section C.2.a of Appendix D.

Author: _____

Chief Examiner: _____

NOTE: NORMAL FOR SCENARIO 1 IS CHAP START & PER RECIRC - REACTIVITY IS ACTUAL DOWNPOWER MSM

OPERATING TEST NO.: 1 - USR01

Applicant Type	Evolution Type	Minimum Number	Scenario Number 1	2	3	4
RO	Reactivity	1				
	Normal	1				
	Instrument	2				
	Component	2				
	Major	1				
As RO	Reactivity	1				
	Normal	0				
	Instrument	1				
	Component	1				
	Major	1				
SRO-I						
As SRO	Reactivity	0				
	Normal	1				
	Instrument	1				
	Component	1				
	Major	1				
SRO-U ✓	Reactivity	0 1	1*			
	Normal	1 1	1*			
	Instrument	1 2	2.7			
	Component	1 3	3.4.8			
	Major	1 2	5.6			

Instructions: (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution type.

(2) Reactivity manipulations may be conducted under normal or *controlled* abnormal conditions (refer to Section D.4.d) but must be significant per Section C.2.a of Appendix D.

Author: _____

Chief Examiner: _____

* NORMAL - CHARGING PUMP START / PZR REGIRL
P - DOWNPOWER

OPERATING TEST NO.: 1 - USRO 2

Applicant Type	Evolution Type	Minimum Number	Scenario Number 1	2	3	4
RO	Reactivity	1				
	Normal	1				
	Instrument	2				
	Component	2				
	Major	1				
As RO	Reactivity	1				
	Normal	0				
	Instrument	1				
	Component	1				
	Major	1				
SRO-I						
As SRO	Reactivity	0				
	Normal	1				
	Instrument	1				
	Component	1				
	Major	1				
SRO-U ✓	Reactivity	0 1*	1			
	Normal	1 1*	1			
	Instrument	1 2	2.7			
	Component	1 3	3.4.8			
	Major	1 2	5.6			

Instructions: (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution type.

(2) Reactivity manipulations may be conducted under normal or *controlled* abnormal conditions (refer to Section D.4.d) but must be significant per Section C.2.a of Appendix D.

Author: _____

Chief Examiner: _____

* NORMAL - CHARGING PUMP START
P - DOWNPOWER

OPERATING TEST NO.: 1 – USRO 3

Applicant Type	Evolution Type	Minimum Number	Scenario Number 1	2	3	4
RO	Reactivity	1				
	Normal	1				
	Instrument	2				
	Component	2				
	Major	1				
As RO	Reactivity	1				
	Normal	0				
	Instrument	1				
	Component	1				
	Major	1				
SRO-I						
As SRO	Reactivity	0				
	Normal	1				
	Instrument	1				
	Component	1				
	Major	1				
SRO-U ✓	Reactivity	0 1		6*		
	Normal	1 2		1.6*		
	Instrument	1 1		3		
	Component	1 3		2.5.8		
	Major	1 1		7		

Instructions: (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution type.
(2) Reactivity manipulations may be conducted under normal or *controlled* abnormal conditions (refer to Section D.4.d) but must be significant per Section C.2.a of Appendix D.

Author: _____

Chief Examiner: _____

~~* SHOULD BE EVENT 5~~

* APPLICANT WILL NOT BE CREDITED WITH EVENT 6 AS A NORMAL EVOLUTION, AS IT IS DOUBLE-COUNTING THE DOWNPOWER

OPERATING TEST NO.: 1 - I SRO I

Applicant Type	Evolution Type	Minimum Number	Scenario Number 1	2	3	4
RO	Reactivity	1				
	Normal	1				
	Instrument	2				
	Component	2				
	Major	1				
As RO ✓	Reactivity	1 1		6		
	Normal	0 1		1		
	Instrument	1 1		3		
	Component	1 1		2		
	Major	1 1		7		
SRO-I						
As SRO ✓	Reactivity	0 1	1*			
	Normal	1 1	1			
	Instrument	1 2	2.7			
	Component	1 3	3.4.8			
	Major	1 2	5.6			
SRO-U	Reactivity	0				
	Normal	1				
	Instrument	1				
	Component	1				
	Major	1				

Instructions: (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution type.
(2) Reactivity manipulations may be conducted under normal or *controlled* abnormal conditions (refer to Section D.4.d) but must be significant per Section C.2.a of Appendix D.

Author: _____

Chief Examiner: _____

* NORMAL - CHFP START / PER REQUIRE
P - DEMINERALIZER

OPERATING TEST NO.: 1 - ISRO2

Applicant Type	Evolution Type	Minimum Number	Scenario Number 1	2	3	4
RO	Reactivity	1				
	Normal	1				
	Instrument	2				
	Component	2				
	Major	1				
As RO ✓	Reactivity	1 1	1*			
	Normal	0 1	1			
	Instrument	1 2	2.7			
	Component	1 2	3.4			
	Major	1 2	5.6			
SRO-I						
As SRO ✓	Reactivity	0 1		6		
	Normal	1 2**		1.6**		
	Instrument	1 1		3		
	Component	1 3		2.5.8		
	Major	1 1		7		
SRO-U	Reactivity	0				
	Normal	1				
	Instrument	1				
	Component	1				
	Major	1				

Instructions: (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution type.

(2) Reactivity manipulations may be conducted under normal or *controlled* abnormal conditions (refer to Section D.4.d) but must be significant per Section C.2.a of Appendix D.

Author: _____

Chief Examiner: _____

* NORMAL - CHPP
P - DOWNPOWER

** SHOULD BE 1 NORMAL @ EVENT #1

OPERATING TEST NO.: 1 - ISRO3

Applicant Type	Evolution Type	Minimum Number	Scenario Number 1	2	3	4
RO	Reactivity	1				
	Normal	1				
	Instrument	2				
	Component	2				
	Major	1				
As RO ✓	Reactivity	1 1		6		
	Normal	0 1		1		
	Instrument	1 1		3		
	Component	1 1		2		
	Major	1 1		7		
SRO-I						
As SRO ✓	Reactivity	0 1	1*			
	Normal	1 1	1			
	Instrument	1 2	2.7			
	Component	1 3	3,4,8			
	Major	1 2	5.6			
SRO-U	Reactivity	0				
	Normal	1				
	Instrument	1				
	Component	1				
	Major	1				

Instructions: (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution type.

(2) Reactivity manipulations may be conducted under normal or *controlled* abnormal conditions (refer to Section D.4.d) but must be significant per Section C.2.a of Appendix D.

Author: _____

Chief Examiner: _____

* NORMAL - CAPP
P - DOWNPOWER

OPERATING TEST NO.: 1 - ISRO4 †

Applicant Type	Evolution Type	Minimum Number	Scenario Number 1	2	3	4
RO	Reactivity	1				
	Normal	1				
	Instrument	2				
	Component	2				
	Major	1				
As RO ✓	Reactivity	1 1	1			
	Normal	0 1	1			
	Instrument	1 2	2.7			
	Component	1 2	3.4			
	Major	1 2	5.6			
SRO-I						
As SRO ✓	Reactivity	0 1		6		
	Normal	1 2		1.6*		
	Instrument	1 1		3		
	Component	1 3		2.5.8		
	Major	1 1		7		
SRO-U	Reactivity	0				
	Normal	1				
	Instrument	1				
	Component	1				
	Major	1				

Instructions: (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution type.

(2) Reactivity manipulations may be conducted under normal or *controlled* abnormal conditions (refer to Section D.4.d) but must be significant per Section C.2.a of Appendix D.

Author: _____

Chief Examiner: _____

* * SHOULD BE 1 NORMAL & 1 INSTR

† DUE TO SCHEDULING ISSUES, THIS CHECKLIST ACTUALLY APPLIES TO 1-ISRO5 MSM

OPERATING TEST NO.: 1 - ISR05 †

Applicant Type	Evolution Type	Minimum Number	Scenario Number 1	2	3	4
RO	Reactivity	1				
	Normal	1				
	Instrument	2				
	Component	2				
	Major	1				
SRO-I As RO ✓	Reactivity	1 1		6		
	Normal	0 1		1		
	Instrument	1 1		3		
	Component	1 1		2		
	Major	1 1		7		
SRO-I As SRO ✓	Reactivity	0 1	1*			
	Normal	1 1	1*			
	Instrument	1 2	2.7			
	Component	1 3	3,4,8			
	Major	1 2	5.6			
SRO-U	Reactivity	0				
	Normal	1				
	Instrument	1				
	Component	1				
	Major	1				

Instructions: (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution type.
(2) Reactivity manipulations may be conducted under normal or *controlled* abnormal conditions (refer to Section D.4.d) but must be significant per Section C.2.a of Appendix D.

Author: _____

Chief Examiner: _____

* NORMAL - CHPP START
P - DOWNPOWER

† DUE TO SCHEDULING REALITIES, THIS CHECKLIST ACTUALLY APPLIES TO 1-BRO 4

Competencies	Applicant #1 RO SRO-I/SRO-U SCENARIO				Applicant #2 RO SRO-I/SRO-U SCENARIO				Applicant #3 RO SRO-I/SRO-U SCENARIO			
	1	2	3	4	1	2	3	4	1	2	3	4
Understand and Interpret Annunciators and Alarms	45				45				45			
Diagnose Events and Conditions	23 45				23 45				23 45			
Understand Plant and System Response	2 7				2 7				2 7			
Comply With and Use Procedures (1)	4				4				4			
Operate Control Boards (2)	12 48				12 48				12 48			
Communicate and Interact With the Crew	12 58				12 58				12 58			
Demonstrate Supervisory Ability (3)	N/A				N/A				N/A			
Comply With and Use Tech. Specs. (3)	4				4				4			

Notes:

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

Instructions:

Circle 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.

Author: _____
Chief Examiner: _____

Competencies	Applicant #1 RO/SRO-I/SRO-U				Applicant #2 RO/SRO-I/SRO-U				Applicant #3 RO/SRO-I/SRO-U			
	SCENARIO				SCENARIO				SCENARIO			
	1	2	3	4	1	2	3	4	1	2	3	4
Understand and Interpret Annunciators and Alarms	4 5				4 5					3 5		
Diagnose Events and Conditions	23 46				23 46					35 8		
Understand Plant and System Response	27 8				27 8					35 7		
Comply With and Use Procedures (1)	12 46				12 46					13 8		
Operate Control Boards (2)	N/A				N/A					N/A		
Communicate and Interact With the Crew	12 46				12 46					23 48		
Demonstrate Supervisory Ability (3)	24 56				24 56					36 8		
Comply With and Use Tech. Specs. (3)	4				4					2		

Notes:

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

Instructions:

Circle 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.

Author: _____
Chief Examiner: _____

Competencies	Applicant #1 RO/SRO-I/SRO-U				Applicant #2 RO/SRO-I/SRO-U				Applicant #3 RO/SRO-I/SRO-U			
	SCENARIO				SCENARIO				SCENARIO			
	1	2	3	4	1	2	3	4	1	2	3	4
Understand and Interpret Annunciators and Alarms	4 5	2 3			4 5	3 5			4 5	2 3		
Diagnose Events and Conditions	23 46	3 8			23 45	35 8			23 46	3 8		
Understand Plant and System Response	27 8	3 5			2 7	35 7			27 8	3 5		
Comply With and Use Procedures (1)	12 46	13 7			4	13 8			12 46	13 7		
Operate Control Boards (2)	N/A	13 6			12 48	N/A			N/A	13 6		
Communicate and Interact With the Crew	12 46	13 8			12 58	23 48			12 46	13 8		
Demonstrate Supervisory Ability (3)	24 56	N/A			N/A	36 8			24 56	N/A		
Comply With and Use Tech. Specs. (3)	4	2			4	2			4	2		

Notes:

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

Instructions:

Circle 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.

Author: _____
Chief Examiner: _____

Competencies	Applicant #~~1~~ 4 RO/SRO-I/SRO-U				Applicant #~~2~~ 5 RO/SRO-I/SRO-U				Applicant #3 RO/SRO-I/SRO-U			
	SCENARIO				SCENARIO				SCENARIO			
	1	2	3	4	1	2	3	4	1	2	3	4
Understand and Interpret Annunciators and Alarms	4 5	3 5			4 5	2 3						
Diagnose Events and Conditions	23 45	35 8			23 46	3 8						
Understand Plant and System Response	2 7	35 7			27 8	3 5						
Comply With and Use Procedures (1)	4	13 8			12 46	13 7						
Operate Control Boards (2)	12 48	N/A			N/A	13 6						
Communicate and Interact With the Crew	12 58	23 48			12 46	13 8						
Demonstrate Supervisory Ability (3)	N/A	36 8			24 56	N/A						
Comply With and Use Tech. Specs. (3)	4	2			4	2						

Notes:

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

Instructions:

Circle 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.

Author: _____
Chief Examiner: _____

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward		
1	H											S	
2	H											S	Clarify that no operator action is taken
3	F											E	Justify this Q under 55.41. Language in Q not the same as ONP.
4	F											S	
5	H											S	
6	H											S	
7	H											S	Is applicant to determine that Hot Leg is covered based on subcooling? No data given for RVLS to satisfy EOP-03 step 25D.
8	H											E	Show tie to 55.41
9	F											U	Loss of Nuc Svc Water (K/A) refers to ICW, NOT CCW (Q). Loss of CCW is covered under 000026, NOT 000062. Change Q.

Instructions

[Refer to Appendix B for additional information regarding each of the following concepts.]

1. Enter the level of knowledge (LOK) of each question as either (F)undamental or (H)igher cognitive level.

2. Enter the level of difficulty (LOD) of each question using a 1 - 5 (easy - difficult) rating scale (questions in the 2 - 4 range are acceptable).

3. Check the appropriate box if a psychometric flaw is identified:
   - The stem lacks sufficient focus to elicit the correct answer (e.g., unclear intent, more information is needed, or too much needless information).
   - The stem or distractors contain cues (i.e., clues, specific determiners, phrasing, length, etc).
   - The answer choices are a collection of unrelated true/false statements.
   - More than one distractor is not credible.
   - One or more distractors is (are) partially correct (e.g., if the applicant can make unstated assumptions that are not contradicted by stem).

4. Check the appropriate box if a job content error is identified:
   - The question is not linked to the job requirements (i.e., the question has a valid K/A but, as written, is not operational in content).
   - The question requires the recall of knowledge that is too specific for the closed reference test mode (i.e., it is not required to be known from memory).
   - The question contains data with an unrealistic level of accuracy or inconsistent units (e.g., panel meter in percent with question in gallons).
   - The question requires reverse logic or application compared to the job requirements.

5. Based on the reviewer's judgment, is the question as written (U)nacceptable (requiring repair or replacement), in need of (E)ditorial enhancement, or (S)atisfactory?

6. For any "U" ratings, at a minimum, explain how the Appendix B psychometric attributes are not being met.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward		
10	H											E	Show connection to 55.43 or demonstrate tie to SRO L.O.
11	F											U	Does not address KA (Operational implications of some aspect of Rad Theory).
12	H											S	
13	F											E	Q Sat. Distractor D implausible - thermal overloads don't relate to thermal conditions
14	F											U	Change "Failed" to Fails." Q doesn't satisfy K/A. K/A calls for predicting impact on pzr level control system. Question tests impact on pzr pressure control system.
15	H											S	
16	H											U	Q doesn't agree with K/A, which calls for effect of malf on RCS, not RPS.
17	H											E	Explain why this isn't trivially simple - what might lead someone to pick OTHER than C?
18	F											S	
19	H											S	Make statement making it clear that CCW is in a normal full power lineup - both trains operable and cross-connected through N hdr.
20	H											S	Verify solenoid valve closure is not off a trip relay no associated with CS pump brkr. LP says it closes if pump stops, it doesn't say valve won't open if pump doesn't start.
21	H											S	
22	H											S	
23	H											S	
24	F											S	
25	F											E	Too Simplistic and C&D are implausible.
26	H					x						U	Distractors not effective. Q really asks "can you read figure 9?"
27	H											E	Supporting info doesn't make it clear that answer is correct. Need something that shows one "A" side ADV powered from "B" side modutronic. Ref mat'l talks about valves being able to be closed - not controlled.
28	H											E	"D" doesn't have supporting info that talks to going to "reset" then to "auto." Also, specify which 4160 breaker.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward		
29	H											S	
30	H											E	These are not ALL the actions necessary that must be taken to cooldown to SDC entry conditions. Better to ask "which one of the following describes the actions necessary to commence a cooldown..."
31	H											S	
32	F											S	
33	F											S	
34	F											U	Show tie to 55.41. C is not correct - EOP-03 req's "all available operating..." Stem says no equip OOS. So, C should specify 2 in service.
35	H											S	
36	H											S	
37	H											E	How does CBO T>200 compare with Table 1 max of 180? Change "normal" in D to "acceptable" or "sat"
38	H											S	
39	H											S	
40	F											S	
41	H											S	
42	F											E	Show link to 55.41
43	H											E	Show link to 55.41
44	H											S	
45	H											S	
46	H											S	
47	F											S	
48	F											S	
49	F											E	make it clear in the stem that 1A is being lost.
50	F											E	Make link to 55.41.
51	H											E	Make link to 55.41.
52	H											S	

St. Lucie Written Exam Comments

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward		
53	F											S	
54	H											S	
55	H											S	
56	F											S	
57	H											S	
58	H											E	Can't find a reference to "Group Motion Inhibit alarm." Can this Q be written without stating that Rx power decreases? That statement tends to make distractors C & D implausible.
59	F											S	
60	H											E	Change K/A ref on Q to 2.2 from 2.1. Show tie to 55.41.
61	F											E	Does not explicitly satisfy the K/A (Knowledge of reason for manipulation of controls to obtain desired operating results). Reference to instrument air in stem diminishes value of distractor A.
62	F											U	Q doesn't satisfy KA (Knowledge of the effect of a loss or malfunction of SG level detectors will have on SGS)
63	F											E	Show tie to 55.41
64	F											E	Show tie to 55.41. Also, distractor A does not appear to have any discriminatory value. Why would an applicant choose this?
65	H											E	Show tie to 55.41. Also, add statement that SG blowdown is in alarm to make it clear that the only steam plant activity success path is to isolate SGs.
66	F											S	
67	H											E	Suggestion - use 25 gpm as the makeup flow rate for distractors A and C - allows for error in reading the units of the x axis for this curve.
68	F											U	Q doesn't satisfy K/A - K/A calls for knowledge of the basis for the power limit for rod misalignment. Q calls for basis of time limit.
69	H											S	
70	F											S	
71	H											S	
72	F											S	

St. Lucie Written Exam Comments

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward		
73	H											U	Q doesn't satisfy K/A - reason for T/S limits on operability
74	H											U	"correct answer" is incorrect. Should be 55 minutes. Make distractor C 50 minutes and D 55 minutes.
75	F											S	
76	F											S	
77	F											S	
78	H											E	Q states that this is a "both" question, but it only appears on the RO exam outline
79	F											S	
80	H											S	
81	F											E	Unclear what the distractor analysis for "C" has to do with "C" itself
82	F											E	Add "Unit 1" in distractor D - otherwise, C looks like a specific determiner
83	H											E	Show link to 55.41.
84	H											S	
85	H											S	
86	H											S	
87	F											S	
88	H											S	
89	H											E	Specify whether leakage is identified or unidentified.
90	H											S	
91	F											U	Show tie to 55.41 If audible count rate selected to "A," won't loss of A CIS monitor result in a loss of audible counts to containment? If so, "A" may seem like right answer - at least until another channel is selected. Distractor analysis for A - shouldn't it be 2 req'd, vice 3? Distractor analysis for B - what's the difference between a wide range detector and a wide range flux monitor? Does "refueling operations" = "Core alterations?"
92	F											S	

St. Lucie Written Exam Comments

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward		
93	F											S	
94	H											E	Show tie to 55.41
95	H											S	
96	F											S	
97	F											S	
98	F											S	
99	H											S	
100	H											U	This does not appear to test the K/A ("knowledge of bases for prioritizing safety functions during abnormal/emergency operations"). Recommend either changing this to a "what is the basis of..." question, or modifying conditions so that one additional (minimum) distractor's safety function is not met, forcing the applicant to demonstrate a knowledge of the basis by truly prioritizing.
101	H											E	Verify that 0702830-11 is an SRO-level LO
102	F											S	
103	H											E	Verify that 0702812-06 is an SRO-level LO
104	H											S	
105	F											S	
106	F											S	
107	F											S	
108	F											S	
109	F											S	
110	F											S	
111	H											E	Change "the required" to "required" in the question in stem - the choices do not list ALL of the required action, just some.
112	H											S	
113	H											E	Distractor C seems implausible. Try "Heat added by RCP operation" Change Cog Level to 2
114	H											S	

St. Lucie Written Exam Comments

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward		
115	F												
116	F												
117	H												
118	F											E	Is "header throttle valve" synonymous with "flow control valve?"
119	F												
120	F												
121	F												
122	H												
123	F												
124	H												
125	H											E	Appears to be level 2. Clarify the electrical source of the gravity feed valves.

ES-403 | Written Examination Grading Quality Checklist | Form ES-403-1

Facility: ST. LUCIE Date of Exam: 5-21-01 Exam Level: RO/SRO

Item Description	Initials a	Initials b	Initials c
1. Answer key changes and question deletions justified and documented			MSM
2. Applicants' scores checked for addition errors (reviewers spot check > 25% of examinations)			MSM
3. Grading for all borderline cases (80% +/- 2%) reviewed in detail			MSM
4. All other failing examinations checked to ensure that grades are justified			MSM
5. Performance on missed questions checked for training deficiencies and wording problems; evaluate validity of questions missed by half or more of the applicants			MSM

	Printed Name / Signature	Date
a. Grader	Robert A. Warren	5/27/01
b. Facility Reviewer(*)	Larry Rich	5-23-01
c. NRC Chief Examiner (*)		6/18/01
d. NRC Supervisor (*)		6/18/01

(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.

ES-403 Written Examination Grading Quality Checklist Form ES-403-1

Facility: ST LUCIE Date of Exam: 5-21-01 Exam Level: RO/SRO

	Item Description	Initials a	Initials b	Initials c
1.	Answer key changes and question deletions justified and documented			MSM
2.	Applicants' scores checked for addition errors (reviewers spot check > 25% of examinations)			MSM
3.	Grading for all borderline cases (80% +/- 2%) reviewed in detail			MSM
4.	All other failing examinations checked to ensure that grades are justified			MSM
5.	Performance on missed questions checked for training deficiencies and wording problems; evaluate validity of questions missed by half or more of the applicants			MSM

	Printed Name / Signature	Date
a. Grader	ROBERT A. WALKER	5/23/01
b. Facility Reviewer(*)	LARRY RICH	5-23-01
c. NRC Chief Examiner (*)		6/18/01
d. NRC Supervisor (*)		6/19/01

(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.

St. Lucie Nuclear Plant		
	Task Description	Date Complete
1.	Facility written exam comments or graded exams received and verified complete	06/15/01
2.	Facility written exam comments reviewed and incorporated and NRC grading completed, if necessary	06/15/01
3.	Operating tests graded by NRC examiners	06/15/01
4.	NRC Chief examiner review of written exam and operating test grading completed	06/15/01
5.	Responsible supervisor review completed	06/15/01
6.	Management (licensing official) review completed	06/15/01
7.	License and denial letters mailed	06/22/01
8.	Facility notified of results	06/22/01
9.	Examination report issued (refer to NRC MC 0610)	06/26/01
10.	Reference material returned after final resolution of any appeals	N/A