Facility: Developed By:		
Exam Date:		:
Target Date*	Task Description / Reference	Chief Examiner's Initials
08-May-02	1. Examination administration date confirmed (C.1.a; C.2.a & b)	\$
07-Jul-02	2. NRC examiners and facility contact assigned (C.1.d; C.2.e)	\$ 7/3/02
07-Jul-02	3. Facility contact briefed on security & other requirements (C.2.c)	\$ 7/3/02
07-Jul-02	4. Corporate notification letter sent (C.2.d)	\$ 7/3/02
06-Aug-02	[5. Reference material due (C.1.e; C.3.c)]	N/A
21-Aug-02	6. Integrated examination outline(s) due (C.1.e & f; C.3.d)	\$ 8/17/02
26-Aug-02	7. Examination outline(s) reviewed by NRC and feedback provided to facility licensee (C.2.h; C.3.e)	B 8/23/02
20-Sep-02	8. Proposed examinations, supporting documentation, and reference materials due (C.1.e, f, g & h; C.3.d)	B 9/25/02
05-Oct-02	9. Preliminary license applications due (C.1.I; C.2.g; ES-202)	B 10/1/02
21-Oct-02	10. Final license applications due and assignment sheet prepared (C.1.I; C.2.g; ES-202)	B 10/23/02
21-Oct-02	11. Examination approved by NRC supervisor for facility licensee review (C.2.h; C.3.f)	F later 102
21-Oct-02	12. Examinations reviewed with facility licensee (C.1.j; C.2.f & h; C.3.g)	5 10/21/02
28-Oct-02	13. Written examinations and operating tests approved by NRC supervisor (C.2.i; C.3.h)	\$ 10/31/02
28-Oct-02	14. Final applications reviewed; assignment sheet updated; waiver letters sent (C.2.g, ES-204)	\$ 10/31/02
28-Oct-02	15. Proctoring/written exam administration guidelines reviewed with facility licensee and authorization granted to give written exams (if applicable) (C.3.k)	\$ 10/31/02
28-Oct-02	16. Approved scenarios, job performance measures, and questions distributed to NRC examiners (C.3.i)	\$ 10/31/02
*	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.	
	Tappines only to examinations prepared by the MTO.	

Facility	SALEM Date of Examination:	//-	4-0	J_
ltem	Task Description	a	Initia	s c#
1.	a. Verify that the outline(s) fit(s) the appropriate model per ES-401.	FIL	as,	15
W R I T	 Assess whether the outline was systematically and randomly prepared in accordance with Section D.1 of ES-401 and whether all K/A categories are appropriately sampled. 	RK	a & J	F
T E	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	FIL	and	8
N	d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.	FK	an	B
2.	 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. 	FIL	957	80
S I M	b. Assess whether there are enough scenario sets (and spares) to test the projected number and mix of applicants in accordance with the expected crew composition and rotation schedule without compromising exam integrity; 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.	RK	a=7.	4
	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.	AL	as7	V
W /	 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. 	AK	Œ7	B
	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.	R	Q 17	B
	c. Verify that the required administrative topics are covered, with emphasis on performance-based activities. ${\mathfrak f}$	ŔZ.	az	R
	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.	FIL	ar	8
4.	 Assess whether plant-specific priorities (including PRA and IPE insights) are covered in the appropriate exam section. 	R	U2)	R
G E	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.	RK	26	8
N E R	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.		20/	To the
Â	d. Check for duplication and overlap among exam sections.		(le)	N N
}	e. Check the entire exam for balance of coverage.	MR I	100	1
c. NRC	f. Assess whether the exam fits the appropriate job level (RO or SRO). Printed Name / Signature TK LLOYD FANCES KARINSKI TREE FAUCKJER (March 1) Chief Examiner (#) Supervisor R. J. Con te	rge j	8-14 8-14 8/21	202 -02 -02
Note:	* Not applicable for NRC-developed examinations. # Independent NRC reviewer initial items in Column "c;" chief examiner concurrence required.			

1. <u>Pre-Examination</u>

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of $\frac{1/\sqrt{4} + 1/\sqrt{2002}}{\sqrt{2002}}$ 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 **Police*** 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) DATENOTE
1. PRAyers KAMINSKI	SALEM EXAM CO-ORD.	Krancis Kanti	5-13-02	Kranin Land 15-13-02
2. DAVID M. REIN	INSTRUCTOR	Soli R.	5/14/02	MISOR MISOR
3. ARCHIE E FAULKNER	TRAINING Supervisor	- Clark E. fll	5/14/02	Chan E Jaule 11/4/02
4. GERALD GAUDING	INSTRUCTOR	Such Sand	5/14/02	April 2. Rango 11/14/02
5. Steven Hill	Salem Licensed Training Suparusa	Alever Hotel	5117/02	F. L. 5 Hill 11-14-02
6. James K. Cloyd	Developer	James Claland	5/24/02	Mach 5 Hold 11-14-02
7. James Lockman	flomputer Mordnore	your Josh	<u>6/23/02</u>	Wh J. Cooper 11-14-02
8. Ann Lloyd	In Secretary INTC. mgnt.	an olgano	6/24/02	6th A. Could 11-14-02
9. JAMES G. KEID	OPS TRAINING MOR	Naura L- 2	6/24/02	Jane Mille
10. Edward GAllaghere	SRO REVIEW	Lew Bulley	8/8/02	
11. PATRICK L DENNISEL	RO REVIEW		8-8-02	RD- 11-14-62
12 KEVIN SLAVINGS	RO REVIEW	Allaveral	9/14/2	FF H. Slemp 11-14-02
13. Thomas Bykkonen.		Expl	9/14/2	11-14-02
14. Michael Straubuck	er CRS	Milys Still	9/16/02	1 th 1 Duglary 11-14-02
15. Scott Bickhart	RO Review	Millow	9/16/07	FARL S. Biddet 11-14-00
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1. <u>Pre-Examination</u>

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 1/- 4-0-2 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 $\frac{u/\sqrt{4 \cdot u/v}}{v}$. 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) DAT	ENOTE
1. David Myers	Neo	Capel Mun	9.17.02	Ale L. D. Myus	11-14-02
2. S. Sauer	0/5	Aguer	9-17-05	Fifth S. Jane	11-14-02
3. Steven smpper	NCO"	Stellande	917.2	Ryle L S-Vomlor	11-14-02
4. Donald bckson	Ting Mar	DULL	9-19-02	The LO Valleson	11-14-02
5. John F. Garacht	AOM-Shift	10 Jes 17	9-20-02	Ash J. Bravellas	11-14-02
6. John Kowovelchie	11 Salen Os	Door of	9-23-02	BALL A V. Korovaldo	11-14-02
7. STEVE MILLER	SALEM OPS	XXXXIII	10/15/02	& Marian	11/14/02
8. James Ellis	Salem Opt Training	() Elle	10/15/02	J. SOL	11/14/02
9. Rosemarie Pillsburg	Copyl- Technition	Promorie Pellyberro	10-15-02	Rosenosia Pillabura	11/14/02
10. WAYNE MORAN	SIM ENCIUM	- Ard in ho	1./11/03	Fish Willow	11-14-02
11. John Olivel	Sim Instructor	Who Chi	4:11/02	Sto Clan	11/14/02
12. Glenn MARShall	LEAD ILT TUSTEUCTOR	Maistall ,	14/02	Mashall	11/14/02
13. Robert Johnston	ILT Introdor	1700	11/4/12	>4000	11/14/02
14. Ed Yeres	JE 17 30 nistricts		nator	E L	1/14/02
15. Mike Hanchuruck	Maurheruch Instruct	or Mildudderund	11/4/2	FIR L M. Handwar	11-14-02
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1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of // - // - as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC. 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. <u>Post-Examination</u>

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of $\frac{U \cdot Q \cdot \frac{1}{2} \cdot \frac{1}{2} \cdot \frac{1}{2}}{2}$. 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) DA	TENOTE
	MD Guintz	ADM- Staff	MAL	11-4-03	m	11-14-02
3	Acc FRICKING Cen Staving	Ops ManaGer Ops Trus Instructor	Kinster		Red Stay	11-14-00-
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Facility SALEM GENERATING STATION Date of Examination: 11-4-02 Operating	Test I	Numbe	r:
1. GENERAL CRITERIA	а	Initial	s c#
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).	FL	aez	Q
 There is no day-to-day repetition between this and other operating tests to be administered during this examination. 	61	Q67	4
c. The operating test shall not duplicate items from the applicants' audit test(s)(see Section D.1.a).	MA	GEF	4
d. Overlap with the written examination and between operating test categories is within acceptable limits.	FIL	a=7	8
It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.	FAX	asp	*
2. WALK-THROUGH (CATEGORY A & B) CRITERIA		<u></u>	
a. Each JPM includes the following, as applicable:			
 initial conditions initiating cues references and tools, including associated procedures reasonable and validated time limits (average time allowed for completion) and specific designation if deemed to be time critical by the facility licensee 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 	FR	U٤7.	Ø
b. The prescripted questions in Category A are predominantly open reference and meet the criteria in Attachment 1 of ES-301.	AL	ae7	*
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.	FIL	ŒŢ	S.
d. At least 20 percent of the JPMs on each test are new or significantly modified.	RIL	0.27	40
3. SIMULATOR (CATEGORY C) CRITERIA			
The associated simulator operating tests (scenario sets) have been reviewed in accordance with Form ES-301-4 and a copy is attached.	FIL	OFJ	V
a. Author b. Facility Reviewer(*) c. NRC Chief Examiner (#) d. NRC Supervisor Printed Name / Signature Mancis M	9/2 9/2 10	Date - 24/0:	02 2 102
NOTE: * The facility signature is not applicable for NRC-developed tests. # Independent NRC reviewer initial items in Column "c;" chief examiner concurrence required.			

Facility	SALEM GENERATING Date of Exam: /1-4-02 Scenario Num	pers: //2/3 Ope	rating T	est No).:
	QUALITATIVE ATTRIBUTES			Initial	s
			а	b*	c#
1.	The initial conditions are realistic, in that some equipment and/or instrument service, but it does not cue the operators into expected events.	ation may be out of	FR	Û47	A
2.	The scenarios consist mostly of related events.		MR	aEz	X
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)		FR	Ú17	6
4.	No more than one non-mechanistic failure (e.g., pipe break) is incorporated without a credible preceding incident such as a seismic event.	into the scenario	FL	UE)	₩
5.	The events are valid with regard to physics and thermodynamics.		FR	CEZ	82
6.	Sequencing and timing of events is reasonable, and allows the examination complete evaluation results commensurate with the scenario objectives.	team to obtain	FIX	aez	8
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.		FR	047	42
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 modi other scenarios have been altered in accordance with Section D.4 of ES-301	fied scenario. All	FIL	ŒĮ	C
11.	All individual operator competencies can be evaluated, as verified using For the form along with the simulator scenarios).	m ES-301-6 (submit	FR	ar J	₹
12.	Each applicant will be significantly involved in the minimum number of transi specified on Form ES-301-5 (submit the form with the simulator scenarios).	ents and events	FIL	Q 8 /	*
13.					
TARGI	ET QUANTITATIVE ATTRIBUTES (PER SCENARIO; SEE SECTION D.4.D)	Actual Attributes	_	1	
1.	Total malfunctions (5-8)	6,7,7	FSL	act	1
2.	Malfunctions after EOP entry (1-2)	21212	AL	ast	82
3.	Abnormal events (2-4)	3 /3/3	FU	art	8
4.	Major transients (1-2)	21212	FIR	06	1
5.	EOPs entered/requiring substantive actions (1-2)	2/1/1	ML	RET	30
6.	EOP contingencies requiring substantive actions (0-2)	21211	M	(Per)	X
7.	Critical tasks (2-3)	2 1312	All	Ou j	*

Applicant	Evolution	Minimum	S	cenario	Numbe	er
Туре	Туре	Number	1	2	3	4
			PÓ	RO	PO	
	Reactivity	1		4		
	Normal	1	1		1	
RO	Instrument/ Component	4	6B,7	1,2,7	is	
	Major	1	∦ ,6A	5,6	5,7	
	Reactivity	1				
	Normal	0				
As RO	Instrument/ Component	2	,			
	Major	1				
SRO-I						
	Reactivity	0				
	Normal	1				
As SRO	Instrument/ Component	2				
	Major	1				
	Reactivity	0				
	Normal	1				
SRO-U	Instrument/ Component	2				
	Major	1				

Instructions:

- (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution
- (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.
 (3) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

Author:

FJ Kaminski

Applicant	Evolution	Minimum	S	cenario	Numbe	er
Туре	Туре	Number	1	2	3	4
			PO	RO		
	Reactivity	1		4		
	Normal	1	1			
RO	Instrument/ Component	4	6B,7	1,2,7		
	Major	1	4,6A	5,6		
	Reactivity	1				
	Normal	0				
As RO	Instrument/ Component	2				
	Major	1				1
SRO-I						
	Reactivity	0				
	Normal	1				
As SRO	Instrument/ Component	2				
	Major	1				
	Reactivity	0		:		
	Normal	1				-
SRO-U	Instrument/ Component	2				
	Major	1			<u> </u>	

Instructions:

- (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution
- (1) Effect the operating test humber and Form ES-D-1 event humbers 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.
 (3) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

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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.
- Appendix D.

 (3) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

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NRC Reviewer:

FJ Kaminski

Evolution	Minimum	S	cenario	rio Number		
Туре	Number	1	2	3	4	
		РО	RO			
Reactivity	1		4			
Normal	1	1				
Instrument/ Component	4	6B,7	1,2,7			
Major	1	4,6A	5,6			
Reactivity	1					
Normal	0					
Instrument/ Component	2					
Major	1					
Reactivity	0					
Normal	1					
Instrument/ Component	2					
Major	1					
Reactivity	0					
Normal	1					
Instrument/ Component	2	:				
Major	1					
	Reactivity Normal Instrument/ Component Major Reactivity Normal Instrument/ Component Major Reactivity Normal Instrument/ Component Major Reactivity Normal Instrument/ Component Major	Type Number Reactivity 1 Normal 1 Instrument/ Component Major 1 Reactivity 1 Normal 0 Instrument/ Component Major 1 Reactivity 0 Normal 1 Instrument/ Component Major 1 Reactivity 0 Normal 1 Instrument/ Component Major 1 Reactivity 0 Normal 1 Instrument/ Component 1 Reactivity 0 Normal 1 Instrument/ Component 1	Type Number 1 PO Reactivity 1 Normal 1 1 Instrument/ Component 4,6A Reactivity 1 Normal 0 Instrument/ Component 2 Component 1 Reactivity 0 Normal 1 Instrument/ Component 1	Type Number 1 2 PO RO	Number 1	

Instructions:

- (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution
- (1) Enter the operating test number and Form ES-D-1 event numbers for each evolutional 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.
 (3) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

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NRC Reviewer:

FJ Kaminski

Applicant	Evolution	Minimum	S	cenario	Numbe	er
Туре	Туре	Number		1	3	4
· .				РО	RO	
	Reactivity	1			1	
	Normal	1		1	1	
RO	Instrument/ Component	4		6B,7	3,4	
	Major	1		4,6A	5,7	
	Reactivity	1				
	Normal	0				
As RO	Instrument/ Component	2				
	Major	1				
SRO-I						
	Reactivity	0	:		**	
	Normal	1				
As SRO	Instrument/ Component	2	1.13			
	Major	1				
	Reactivity	0				
	Normal	1				
SRO-U	Instrument/ Component	2				
	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.

 (3) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

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Applicant	Evolution	Minimum	S	cenario	Numbe	er
Туре	Туре	Number	1	2	3	4
,	Reactivity	1				
	Normal	1				
RO	Instrument/ Component	4		And the second s	A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	Major	1		A Company		
	Reactivity	1				
	Normal	0				
As RO	Instrument/ Component	2				
	Major	1				
SRO-I						
	Reactivity	0				History
	Normal	1	A A A A A A A A A A A A A A A A A A A			
As SRO	Instrument/ Component	2				
	Major	1				
	Reactivity	0				
	Normal	1	1		1	
SRO-U	Instrument/ Component	2	22, 6B,7		2.3, 4,6	
	Major	1	#,6A		5,7	

Instructions:

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

(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.
(3) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

Author:

Applicant	Evolution	Minimum	s	cenario	Numb	er
Туре	Туре	Number	1	2	3	4
	Reactivity	1				
	Normal	1				
RO	Instrument/ Component	4				
	Major	1				
	Reactivity	1				
	Normal	0				
As RO	Instrument/ Component	2		- Abrahava		11.11
	Major	1				
SRO-I			•			
	Reactivity	0				
	Normal	1				
As SRO	Instrument/ Component	2				
	Major	1				
	Reactivity	0				
	Normal	1	1	-	4	
SRO-U	Instrument/ Component	2	2,3, 6B,7		3,7 8	
	Major	1	4,6A		5,6	

* RO only-does no count toward SRC

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.
(3) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

applicant's competence count toward the minimum requirement.

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NRC Reviewer:

FJ Kaminski

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Applicant	Evolution	Minimum	S	cenario	Numb	er
RO Inst Con Re Re RO Inst	Туре	Number	1	2	3	4
	Reactivity	1				
	Normal	1				
RO	Instrument/ Component	4		March 1997		
	Major	1	Who his A			The state of the s
	Reactivity	1				
	Normal	0				
As RO	Instrument/ Component	2				
	Major	1				
SRO-I						1:
	Reactivity	0			1	
	Normal	1				
As SRO	Instrument/ Component	2				
	Major	1				
	Reactivity	0				
	Normal	1	1		4	
SRO-U	Instrument/ Component	2	2,3, 6B,7		3.7,8	
			1			<u> </u>

Instructions:

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

4,6A

(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.

(3) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

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Author:

NRC Reviewer:

FJ Kaminski

Major

5.6

Applicant	Evolution	Minimum	S	cenario	Numbe	er
Туре	Туре	Number	1	2	3	4
	Reactivity	1	e sa in			
	Normal	1		0.00		
RO	Instrument/ Component	4				
	Major	1				
	Reactivity	1				
	Normal	0				
As RO	Instrument/ Component	2				
	Major	1				
SRO-I					· · · · · · · · · · · · · · · · · · ·	•
	Reactivity	0			The state of the s	
	Normal	1				
As SRO	Instrument/ Component	2				
	Major	1				
	Reactivity	0				
	Normal	1	1		4	
SRO-U	Instrument/ Component	2	2,3, 6B,7	!	3.7,8	
	Major	1	4,6A		5.6	

docs not and SRO

Instructions:

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

(1) Enter the operating test number and form 20-2-1 event hambers.
(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.
(3) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

Author:

NRC Reviewer:

FJ Kaminski

Applicant	Evolution	Minimum	S	cenario	Numbe	er
Туре	Туре	Number	1	2	3	4
	Reactivity	1				
	Normal	1				
RO	Instrument/ Component	4				
	Major	1				
	Reactivity	1	1			
	Normal	0				
As RO	Instrument/ Component	2	13 , 5,6B, 7			
	Major	1	∦ ,6A			
SRO-I						
	Reactivity	0				
	Normal	1		4		
As SRO	Instrument/ Component	2		1,2, 3,7,8		
	Major	1		5,6		
	Reactivity	0				
	Normal	1		redinedi Bilida d		
SRO-U	Instrument/ Component	2		And the second s		
	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.
- Appendix D.

 (3) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

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NRC Reviewer:

F.I. Kaminski

Applicant	Evolution	Minimum	S	cenario	Numb	er
Туре	Туре	Number	1	2	3	4
	Reactivity	1				
	Normal	1				
RO	Instrument/ Component	4				
	Major	1		W. Colombia		
	Reactivity	1	1			
	Normal	0			***	
As RO	Instrument/ Component	2	2,3, 5,6B, 7			
	Major	1	4,6A			
SRO-I						
	Reactivity	0				
	Normal	1		4		
As SRO	Instrument/ Component	2		1,2, 3,7,8		
	Major	1		5,6		
	Reactivity	0				
	Normal	1				
SRO-U	Instrument/ Component	2				
	Major	1				

Instructions:

- (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution
- (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.
 (3) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

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FJ Kaminski

Applicant	Evolution	Minimum	S	cenario	Numbe	er
Туре	Туре	Number	1	2	3	4
	Reactivity	1				
	Normal	1				
RO	Instrument/ Component	4				
	Major	1				
	Reactivity	1	1			
	Normal	0				
As RO	Instrument/ Component	2	2,3, 5,6B, 7			
	Major	1	4,6A			
SRO-I						
	Reactivity	0				
	Normal	1		4		
As SRO	Instrument/ Component	2		1,2, 3,7,8		
	Major	1		5,6		
	Reactivity	0				
	Normal	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
SRO-U	Instrument/ Component	2			:	
	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.
- Appendix D.

 (3) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

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FJ Kaminski

Applicant	Evolution	∂Minimum	S	cenario	Numbe	er
Туре	Туре	Number	1	2	3	4
	Reactivity	1				
	Normal	1				
RO	Instrument/ Component	4				
	Major	1		a		
	Reactivity	1	1			
	Normal	0				
As RO	Instrument/ Component	2	2,3, 5,6B, 7			
	Major	1	4,6A			
SRO-I						
	Reactivity	0				
	Normal	1		4		
As SRO	Instrument/ Component	2		1,2, 3,7,8		
	Major	1		5,6		
	Reactivity	0				
	Normal	1				
SRO-U	Instrument/ Component	2				
	Major	1				

Instructions:

- (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution
- (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.
- Appendix (i)

 (3) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

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<u>FJ Kaminski</u>

GOLF CREW A		SRO	DU-1			SR	OI-1			RO	D-1	
Competencies		SCE	NARIO		SCENARIO				SCENARIO			
	1 SR	2	3 5R	4	1 RO	2 SR	3	4	1 PO	2 RO	3	4
Understand and Interpret Annunciators and Alarms	234 6A,7		2,3,4 5.6 7		2,3, 6A, 6B,7	1,2,6			4,7	1,2,5 ,6		
Diagnose Events and Conditions	5,6A ,7		2,3.4 5,6,7		2,3,5 ,6A, 6B	3,5,6			4,7	1,2,5 ,6,7		
Understand Plant and System Response	1, 2/3 4 ,6A ,6B		5,6,7		1,2,3 6A, 6B	1,2,3 5,6			1,4, 6A, 6B,7	1,2,4 ,5,6		
Comply With and Use Procedures (1)	ALL		ALL		ALL	ALL			ALL	ALL		
Operate Control Boards (2)	N/A		7		1, 2 % 5,6A 6B,7	N/A			1,4, 6A, 6B	1,2,4 ,5,6, 7		
Communicate and Interact With the Crew	ALL		ALL		ALL	ALL			ALL	ALL		
Demonstrate Supervisory Ability (3)	ALL		ALL		N/A	ALL			N/A	N/A		
Comply With and Use Tech. Specs. (3)	7.7		2,3		N/A	1			N/A	N/A		

11/21/02 Changes were result of lose
Power fise in Scenario 1. SRDI-1
was evaluated on 5.0 act appropriately
to instrument readings on 5, 68,7.

- (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:

F.I.Kaminski

Chief Examiner:

GOLF CREW B		SRC)U-2			SRO	Ol-2			RC	D-2		
Competencies	SCENARIO				SCENARIO					SCENARIO			
·	1 SR	2	3 Po	4	1 RO	2 SR	3	4	1 PO	2 RO	3	4	
Understand and Interpret Annunciators and Alarms	2,3,4 6A,7		3.5 6.7 8		2,3, 6A, 6B,7	1,2,6			4,7	1,2,5 ,6			
Diagnose Events and Conditions	5,6A ,7		3.6, 7.8		2,3,5 ,6A, 6B	3,5,6			4,7	1,2,5 ,6			
Understand Plant and System Response	1,2,3 4,6A ,6B		3,4 5,6, 7,8		1,2,3 6A, 6B	1,2,3 5,6			1,4, 6A, 6B,7	1,2,4 ,5,6			
Comply With and Use Procedures (1)	ALL		ALL		ALL	ALL			ALL	ALL			
Operate Control Boards (2)	N/A		3.4. 5.6. 7.8		1,2,3 5,6A 6B,7	N/A			1,4, 6A, 6B	1,2,4 ,5,6, 7			
Communicate and Interact With the Crew	ALL		ALL		ALL	ALL			ALL	ALL			
Demonstrate Supervisory Ability (3)	ALL		414		N/A	ALL			N/A	N/A			
Comply With and Use Tech. Specs. (3)	2,3		١		N/A	1			N/A	N/A			

- (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:	FJ Kaminski	
Chief Examiner:	lea 12	

GOLF CREW C	:	SRC	DU-3			SRO	OI-3			RC)-3		
Competencies	SCENARIO				SCENARIO					SCENARIO			
·	1 SR	2	3 Po	4	1 RO	2 SR	3	4	1 PO	2 RO	3	4	
Understand and Interpret Annunciators and Alarms	2,3,4 6A,7		3,5 6,7 8		2,3, 6A, 6B,7	1,2,6			4,7	1,2,5 ,6			
Diagnose Events and Conditions	5,6A ,7		3,6 7,8		2,3,5 ,6A, 6B	3,5,6			4,7	1,2,5 ,6			
Understand Plant and System Response	1,2,3 4,6A ,6B		3,4 5,6 7.8		1,2,3 6A, 6B	1,2,3 5,6			1,4, 6A, 6B,7	1,2,4 ,5,6			
Comply With and Use Procedures (1)	ALL		ALL		ALL	ALL			ALL	ALL			
Operate Control Boards (2)	N/A		3,4 5,6 7,8		1,2,3 5,6A 6B,7	N/A			1,4, 6A, 6B	1,2,4 ,5,6, 7			
Communicate and Interact With the Crew	ALL		ALL		ALL	ALL			ALL	ALL			
Demonstrate Supervisory Ability (3)	ALL		NA		N/A	ALL			N/A	N/A			
Comply With and Use Tech. Specs. (3)	2,3		1		N/A	1			N/A	N/A			

- (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.

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Chief	Exam	inei

GOLF CREW D		SRC	DU-4	·		SRO	OI-4			RC)-4	
Competencies		SCEN	NARIO			SCEN	IARIO			SCEN	IARIO	
•	1 SR	2	3 PO	4	1 RO	2 SR	3	4	1 PO	2 RO	3	4
Understand and Interpret Annunciators and Alarms	2,3,4 6A,7		3,5 6,7 8		2,3, 6A, 6B,7	1,2,6			4,7	1,2,5 ,6		
Diagnose Events and Conditions	5,6A ,7		3,6 7,8		2,3,5 ,6A, 6B	3,5,6			4,7	1,2,5 ,6,7		
Understand Plant and System Response	1,2,3 4,6A ,6B		3,4 5,6 7,8		1,2,3 6A, 6B	1,2,3 5,6			1,4, 6A, 6B,7	1,2,4 ,5,6		
Comply With and Use Procedures (1)	ALL		ALL		ALL	ALL			ALL	ALL		
Operate Control Boards (2)	N/A		3,4 5,6 7,8 2		1,2,3 5,6A 6B,7	N/A			1,4, 6A, 6B	1,2,4 ,5,6, 7		
Communicate and Interact With the Crew	ALL		ALL		ALL	ALL			ALL	ALL		
Demonstrate Supervisory Ability (3)	ALL		Ија		N/A	ALL			N/A	N/A		
Comply With and Use Tech. Specs. (3)	2,3		i		N/A	1			N/A	N/A		

- (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:	F∧Kaminski	
Chief Examiner:	Tank?	

GOLF CREW A		RO	D-5									
Competencies	SCENARIO			SCENARIO				SCENARIO				
	1	2 PO	3 RO	4	1	2	3	4	1	2	3	4
Understand and Interpret Annunciators and Alarms		3,6	2,3,4 ,5									
Diagnose Events and Conditions		3,6,7 ,8	2,3,4 ,5,7									
Understand Plant and System Response		3,4,6 ,7,8	1,2,3 ,4,5, 7		;							
Comply With and Use Procedures (1)		ALL	ALL.									
Operate Control Boards (2)		3,4,5 ,6,7, 8	1,2,3 ,4,5, 7									
Communicate and Interact With the Crew		ALL	ALL									
Demonstrate Supervisory Ability (3)		N/A	N/A			:						
Comply With and Use Tech. Specs. (3)		N/A	N/A									

- (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:	FJ/Ka mins ki	
Chief Examiner:	WIZE	

Written Examination Quality Checklist

Facility	SALEM GENERATING GRATION DA	te of Exam	: //	-4-	02	Exam Lo	evel: RC	(SRO)
Item Description								c*
Questions and answers technically accurate and applicable to facility							087	Q.
2.	a. NRC K/As referenced for all questions b. Facility learning objectives referenced as available							R
3.	 RO/SRO overlap is no more than 75 percent, and SRO questions are appropriate per Section D.2.d of ES-401 							2
4.								4
5.	Question duplication from the license screening/audit exam was controlled as indicated below (check the item that applies) and appears appropriate: X the audit exam was systematically and randomly developed; or the audit exam was completed before the license exam was started; or the examinations were developed independently; or the licensee certifies that there is no duplication; or other (explain)						ae7	Z.
6.	Bank use meets limits (no more than 75	Bank	Modi	ified	New			
	percent from the bank at least 10 percent new, and the rest modified); enter the actual question distribution at right			2 69		FIL	asI	10
7.	Between 50 and 60 percent of the questions on	Memo	ory		C/A			
	the exam (including 10 new questions) are written at the comprehension/analysis level; enter the actual question distribution at right	46	46 54			FIL	aet	*
8.	References/handouts provided do not give away a	answers				FK	asJ	4
Question content conforms with specific K/A statements in the previously approved examination outline and is appropriate for the Tier to which they are assigned; deviations are justified							aeJ	8
10. Question psychometric quality and format meet ES, Appendix B, guidelines						FIL	ast	4
11. The exam contains 100, one-point, multiple choice items; the total is correct and agrees with value on cover sheet							asJ	4
b. Fac c. NR0 d. NR0	a. Author b. Facility Reviewer (*) c. NRC Chief Examiner (#) d. NRC Regional Supervisor Note: The facility reviewer's initials/signature are not applicable for NRC-developed examinations.							

Facility: SALEM GENERATION Date of Exam: 11-4-02 Exam Level: (RO)SRO								
	Initial							
	а	b*	c*					
1.	Questions and answers technically accurate and a		FRE	ast	7			
2.								\$
3.								8
4.								V
5.							QE7	₩
6.	Bank use meets limits (no more than 75	Bank	Mod	ified	New			
	percent from the bank at least 10 percent new, and the rest modified); enter the actual question distribution at right	36	,	3 61		FIL	asj	4
7.	Between 50 and 60 percent of the questions on	Memo	ory		C/A			
	the exam (including 10 new questions) are written at the comprehension/analysis level; enter the actual question distribution at right			49 51		FM	ast	4
8.	References/handouts provided do not give away a	answers				FR	ait	Se .
9.							arz	W
10.							ast	4
11.								Q
b. Faci	a. Author b. Facility Reviewer (*) c. NRC Chief Examiner (#) d. NRC Regional Supervisor Printed Name / Signature Printed Name / Signature Page Page							4-02

Facility:	Date of Exam:	Exam Le	evel: R	O/SRO				
		Initials						
	Item Description	а	b	С				
1. Clea								
	 Answer key changes and question deletions justified and documented 							
1	 Applicants' scores checked for addition errors (reviewers spot check > 25% of examinations) 							
4. Grad	ling for all borderline cases (80% +/- 2%) reviewed in	FK	QEJ	M				
15	 All other failing examinations checked to ensure that grades are justified 							
6. Perfo defic ques	FK	QEJ	A					
	Printed Name / Signature		D	ate				
a. Grader	Ganes V. Kaminser		11-1	4-02				
b. Facility R	Reviewer(*) Culi ETM	•		5-02				
c. NRC Chi	ef Examiner (*)		11/2	1/02				
d. NRC Sup	pervisor (*) Richard I. Konte 1909 (as	<u>R/1.</u>	1/02				
(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.								