

**APPENDIX I****Operations Branch Assignment Check Sheet:**  
(Includes ES-201-1 & ES-501-1 Rev. 8 information)

as of: 12/19/00

Chief: T STETKA

Facility/Task: PV IN

Task Start Date: 7/23/01

	ITEM DESCRIPTION	DUE DATE	INIT	DATE
0	Exam/Inspection Schedule Agreement	Jan 24, 2001	JLP	12/19/2000
1	NRC Staff & Fac. Contact Assigned	Jan 24, 2001	JLP	12/19/2000
2	Facility contact briefed on security & other issues	Jan 24, 2001	JLP	12/19/2000
3	Corp. Notification Letter Sent	Jan 24, 2001	VS	2/12/01
3a	Inspection Announcement Letter Sent (PIR & LORT if req'd)	Jun 8, 2001	N/A	N/A
4	Task Expectations, Issues, & Standards Discussed w/ BC	Apr 24, 2001	VS	5/23/01
5	[Reference Material Due]	Mar 25, 2001	N/A	N/A
6	Integrated Exam Outlines Due	Mar 25, 2001	VS	3/26/01
7	Outlines reviewed by NRC & Feedback Sent	Apr 8, 2001	VS	3/30/01
8	Preliminary Applications Due	Jun 23, 2001	VS	6/26/01
9	Draft Exams w/ Doc./Ref. Due	May 24, 2001	VS	5/23/01
10*	Independent Reviewer Initials As Reviewed All Parts	Jun 3, 2001	IK	6/11/01
11*	NRC Supervisor. Initials Approving for Fac. Rev.	Jun <sup>11</sup> 3, 2001	OLAP	6/14/01
12	Exams Reviewed w/ Fac.	Jun <sup>18</sup> 3, 2001	VS	6/21/01
13	Final Appl. Due & Assign. Sheet Prepared	Jul 9, 2001	VS	7/9/01
14*	NRC Supervisor Approved Final Exams	Jul 16, 2001	OLAP	7/18/01
15	Final Appl. Rec'd & Waivers Sent	Jul 16, 2001	VS	7/11/01
16	Proctor Rules Reviewed w/ Fac. & Written Authorized	Jul 16, 2001	VS	7/16/01
17	Exam/Insp Material to Team	Jul 16, 2001	VS	7/16/01
18	Fac. graded exam & Comments Rec'd	Aug 4, 2001	VS	7/30/01
19	NRC Written Grading Completed	Aug 7, 2001	VS	7/31/01
20	Examiners Finished Grading Op. Tests	Aug 7, 2001	VS	7/31/01
21	NRC Ch. Ex. Review Completed	Aug 17, 2001	VS	8/1/01
22*	NRC BC Review Completed	Aug 18, 2001	OLP	8/1/01
23	RPS/IP Examinees Updated Before Report Issued	Aug 23, 2001	VS	8/21/01
24	License/Denials Signed & Report Issued	Aug 23, 2001	VS	8/21/01
25	Package Closed Out	Sep 13, 2001	VS	9/6/01
	Final Inspection Report Issued, Exam Package to OLA, Facility. Contact Notified of Results			

\* Note Supervisor or Independent Reviewer initials required in for lines 10, 11, 14, &amp; 22.

[] Required NRC-auth. exams only for line 5.

Facility: PVNGS		Examination Start Date: 7/23/01		
Item	Task Description	Initials		
		a	b	c
1.1 Writ-ten	a. Verify that the outline(s) fit(s) the appropriate model per ES-401.	AK	MAP	JES
	b. Assess whether the outline was systematically and randomly prepared in accordance with Section D.1 of ES-401 and whether all knowledge and ability categories are appropriately sampled.	AK	MAP	JES
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	AK	MAP	JES
	d. Assess whether the repetition from previous examination outlines is excessive.	AK	MAP	JES
2. Sim	a. Using form 301-5, verify that the proposed scenario sets cover the required number of normal evolutions, instrument failures, and major transients.	AK	MAP	JES
	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.	AK	MAP	JES
	c. To the extent possible, assess whether the outline(s) conform(s) with the qualitative and quantitative criteria specified on Form 301-4 and described in Appendix D.	AK	MAP	JES
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 bank	AK	MAP	JES
	b. Verify that: (1) the tasks are distributed among the safety function groupings as specified in ES-301, (2) one task shall require 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.	AK	MAP	JES
	c. Verify the required administrative topics are covered, with emphasis on performance-based activities.	AK	MAP	JES
	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.	AK	MAP	JES
	e. Verify that the required administrative topics are covered, with emphasis on performance-based activities.	AK	MAP	JES
	f. 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.	AK	MAP	JES
4. General	a. Assess whether plant-specific priorities (including PRA and IPE insights) are covered in the appropriate exam section.	AK	MAP	JES
	b. Assess whether the 10 CFR 55/41/43 and 55.45 sampling is appropriate.	AK	MAP	JES
	c. Ensure the K/A importance ratings (except for plant-specific priorities) are at least 2.5.	AK	MAP	JES
	d. Check for duplication and overlap among exam sections.	AK	MAP	JES
	e. Check the entire exam for balance of coverage.	AK	MAP	JES
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	AK	MAP	JES
a. Author		Printed Name / Signature		Date
b. Facility Reviewer		Phillip Capehart / <i>Phillip Capehart</i>		3/21/01
c. Chief Examiner		Warren Potter / <i>Warren Potter</i>		3/22/01
d. NRC Supervisor		Thomas F. Statka / <i>Thomas F. Statka</i>		4/13/01
		<i>Mark A. Coners</i>		04/13/01

PVNGS NRC Written Examination  
Quality Assurance Checklist

PVNGS Form ES-401-7

Facility: PVNGS		Examination Start Date: 7/20/01		Exam Level: RO/SRO		
Item Description				Initials		
				a	b	c
1.	Questions and answers technically accurate and applicable to facility			AK	WAP	ES
2.	a. NRC K/As referenced for all questions b. Facility learning objectives referenced as available			AK	WAP	ES
3.	RO/SRO overlap is no more than 75 percent, and SRO questions are appropriate per Section D.2.d of ES-401			AK	WAP	ES
4.	Question selection and duplication from the last two NRC licensing exams appears consistent with a systematic sampling process					ES
5.	Question duplication from the license screening/audit exam was controlled as indicated below (check the item that applies) and appear appropriate: ___ 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 <input checked="" type="checkbox"/> the licensee certifies that there is no duplication; or ___ other (explain)			AK	WAP	ES
6.	Bank use meets limits (no more than 75 percent from the bank, at least 10 new, and the rest modified); enter the actual question distribution at right	Bank 35	Modified 5	New 92	AK	WAP ES
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 86	AK	WAP ES
8.	References/handouts provided do not give away answers			AK	WAP	ES
9.	Question distribution meets previously approved examination outlines; deviations are justified			AK	WAP	ES
10.	Question psychometric quality and format meet ES, Appendix B, guidelines			AK	WAP	ES
11.	The exam contains 100, one-point, multiple choice items; the total is correct and corresponds to value on cover sheet			AK	WAP	ES
				Printed Name / Signature		Date
a.	Author	Phillip G. Capehart / <u>AK Capehart</u>				7/3/01
b.	Facility Reviewer	Warren Potter / <u>WAP Potter</u>				7/3/2001
c.	Chief Examiner	Thomas F. Stetka / <u>Thomas F. Stetka</u>				7/17/01
d.	NRC Supervisor	DALE A. POWERS / <u>dale a. Powers</u>				7/18/01

Facility: PVNGS Examination Start Date: 7/20/01 Operating Test Number: 2001 RO/ SRO				
1. GENERAL CRITERIA		Initials		
		a	b	c
a.	The operating test conforms with the previously approved outline; changes are consistent with sampling requirements (e.g., 10 CFR 55.45, operational importance, safety function distribution).	PK	MAP	TES
b.	There is no day-to-day repetition between this and other operating tests to be administered during this examination.	PK	MAP	TES
c.	The operating test shall not duplicate items from the applicants' audit test(s) (see Section D.1.a)	PK	MAP	TES
d.	Overlap with the written examination and between operating test categories is within acceptable limits.	PK	MAP	TES
e.	It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.	PK	MAP	TES
2. WALK-THROUGH (CATEGORY A & B) CRITERIA		-	-	-
a.	Each JPM includes the following, as applicable: <ul style="list-style-type: none"> <li>Initial Conditions</li> <li>Initiating cues</li> <li>Reference and tools, including associated procedures</li> <li>Validated time limits (average time allowed for completion) and specific designation if deemed to be time critical by the facility licensee</li> <li>Specific performance criteria that include: <ul style="list-style-type: none"> <li>Detailed expected actions with exact criteria and nomenclature</li> <li>System response and other examiner cues</li> <li>Statements describing important observations to be made by the applicant</li> <li>Criteria for successful completion of the task</li> <li>Identification of critical steps and their associated performance standards</li> <li>Restrictions on the sequence of steps, if applicable</li> </ul> </li> </ul>	PK	MAP	TES
b.	The prescribed questions in Category A are predominantly open reference and meet the criteria in Attachment 1 of ES-301.	PK	MAP	TES
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.	PK	MAP	TES
d.	At least 20 percent of the JPMs and questions on each test are new or significantly modified.	PK	MAP	TES
3. SIMULATOR (CATEGORY C) CRITERIA		-	-	-
a.	The associated simulator operating test (scenario sets) have been reviewed in accordance with Form ES-301-4 and a copy is attached.	PK	MAP	TES
		Printed Name / Signature		Date
a. Author	Phillip G. Capehart / <u>PK Capehart</u>			7/31/01
b. Facility Reviewer	Warren Potter / <u>MAP Potter</u>			7/3/2001
c. Chief Examiner	Tom Stetka / <u>TES Stetka</u>			7/17/01
d. NRC Supervisor	DALE POWERS / <u>DALE A. POWERS</u>			7/18/01

Facility: PVNGS    Date of Exam: 07/20/01    Scenario Numbers: 1/2/3    Operating Test No: 2001							
QUALITATIVE ATTRIBUTES				Initials			
				a	b	c	
1.	The initial conditions are realistic, in that some equipment and/or instrumentation may be out of service, but it does not cue the operators into expected events.	JK	MAP	JFS			
2.	The scenarios consist mostly of related events.	JK	MAP	JFS			
3.	Each event description consists of <ul style="list-style-type: none"> <li>• the point in the scenario when it is to be initiated</li> <li>• the malfunction(s) that are entered to initiate the event</li> <li>• the symptoms/cues that will be visible to the crew</li> <li>• the expected operator actions (by shift position)</li> <li>• the event termination point (if applicable)</li> </ul>	JK	MAP	JFS			
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.	JK	MAP	JFS			
5.	The events are valid with regard to physics and thermodynamics.	JK	MAP	JFS			
6.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.	JK	MAP	JFS			
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.	JK	MAP	JFS			
8.	The simulator modeling is not altered.	JK	MAP	JFS			
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.	JK	MAP	JFS			
10.	Every operator will be evaluated using at least one new scenario. All other scenarios have been modified in accordance with Section D.4 of ES-301.	JK	MAP	JFS			
11.	All individual operator competencies can be evaluated, as verified using ES-301-6 (submit the form along with the simulator scenarios).	JK	MAP	JFS			
12.	Each applicant will be significantly involved in the minimum number of transients and events specified on Form ES-301-5 (submit the form along with the simulator scenarios).	JK	MAP	JFS			
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.	JK	MAP	JFS			
TARGET QUANTITATIVE ATTRIBUTES (PER SCENARIO)		Actual Attributes			-	-	-
1.	Total Malfunctions (5-8)	6	6	5	JK	MAP	JFS
2.	Malfunctions after EOP entry (1-2)	2	1	1	JK	MAP	JFS
3.	Abnormal Events (2-4)	3	4	3	JK	MAP	JFS
4.	Major Transients (1-2)	1	1	1	JK	MAP	JFS
5.	EOPs entered/requiring substantive actions (1-2)	2	2	1	JK	MAP	JFS
6.	EOP contingencies requiring substantive actions (0-2)	1	1	0	JK	MAP	JFS
7.	Critical Tasks (2-3)	3	3	3	JK	MAP	JFS

OPERATING TEST NUMBER: R1

Applicant Type	Evolution Type	Minimum Number	Scenario Number			
			1 (PO)	2 (SO)	3	4
RO	Reactivity	1	1	1		
	Normal	1	1	0		
	Instrument/Component	4	2	2		
	Major	1	1	1		

As RO	Reactivity	1				
	Normal	0				
	Instrument/Component	2				
	Major	1				
SRO-I	Reactivity	0				
	Normal	1				
	Instrument/Component	2				
	Major	1				

SRO-U	Reactivity	0				
	Normal	1				
	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.

Author:

*[Signature]*

Chief Examiner:

*[Signature]*

OPERATING TEST NUMBER: R2

Applicant Type	Evolution Type	Minimum Number	Scenario Number			
			1 (SO)	2 (PO)	3	4
RO	Reactivity	1	1	1		
	Normal	1	0	1		
	Instrument/Component	4	2	2		
	Major	1	1	1		

As RO	Reactivity	1				
	Normal	0				
	Instrument/Component	2				
	Major	1				
SRO-I	Reactivity	0				
	Normal	1				
	Instrument/Component	2				
	Major	1				
As SRO	Reactivity	0				
	Normal	1				
	Instrument/Component	2				
	Major	1				

SRO-U	Reactivity	0				
	Normal	1				
	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.

Author:

AP Caplan

Chief Examiner:

Thomas J. Stetko



OPERATING TEST NUMBER: R4

Applicant Type	Evolution Type	Minimum Number	Scenario Number			
			1 (SO)	2 (PO)	3	4
RO	Reactivity	1	1	1		
	Normal	1	0	1		
	Instrument/Component	4	2	2		
	Major	1	1	1		

As RO	Reactivity	1				
	Normal	0				
	Instrument/Component	2				
	Major	1				
SRO-I	Reactivity	0				
	Normal	1				
	Instrument/Component	2				
	Major	1				
As SRO	Reactivity	0				
	Normal	1				
	Instrument/Component	2				
	Major	1				

SRO-U	Reactivity	0				
	Normal	1				
	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.

Author:

ACaplan

Chief Examiner:

Thomas J. Stetko

OPERATING TEST NUMBER: R5

Applicant Type	Evolution Type	Minimum Number	Scenario Number			
			1 (SO)	2 (PO)	3	4
RO	Reactivity	1	1	1		
	Normal	1	0	1		
	Instrument/Component	4	2	2		
	Major	1	1	1		

As RO	Reactivity	1				
	Normal	0				
	Instrument/Component	2				
	Major	1				
SRO-I	Reactivity	0				
	Normal	1				
	Instrument/Component	2				
	Major	1				

SRO-U	Reactivity	0				
	Normal	1				
	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.

Author: *DJ Copeland*

Chief Examiner: *Thomas A. Stetko*

OPERATING TEST NUMBER: U1

Applicant Type	Evolution Type	Minimum Number	Scenario Number			
			1	2	3	4
RO	Reactivity	1				
	Normal	1				
	Instrument/Component	4				
	Major	1				

As RO	Reactivity	1				
	Normal	0				
	Instrument/Component	2				
	Major	1				
SRO-I	Reactivity	0				
	Normal	1				
	Instrument/Component	2				
	Major	1				
As SRO	Reactivity	0				
	Normal	1				
	Instrument/Component	2				
	Major	1				

SRO-U	Reactivity	0		1		
	Normal	1		1		
	Instrument/Component	2		4		
	Major	1		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.

Author: AS. Capelant

Chief Examiner: Thomas J. Sturko

OPERATING TEST NUMBER: U2

Applicant Type	Evolution Type	Minimum Number	Scenario Number			
			1	2	3	4
RO	Reactivity	1				
	Normal	1				
	Instrument/Component	4				
	Major	1				

As RO	Reactivity	1				
	Normal	0				
	Instrument/Component	2				
	Major	1				
SRO-I	Reactivity	0				
	Normal	1				
	Instrument/Component	2				
	Major	1				
As SRO	Reactivity	0				
	Normal	1				
	Instrument/Component	2				
	Major	1				

SRO-U	Reactivity	0	1			
	Normal	1	1			
	Instrument/Component	2	4			
	Major	1	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.

Author:

AS Caplan

Chief Examiner:

Thomas A. Helms

OPERATING TEST NUMBER: U3

Applicant Type	Evolution Type	Minimum Number	Scenario Number			
			1	2	3	4
RO	Reactivity	1				
	Normal	1				
	Instrument/Component	4				
	Major	1				

As RO	Reactivity	1				
	Normal	0				
	Instrument/Component	2				
	Major	1				
SRO-I	Reactivity	0				
	Normal	1				
	Instrument/Component	2				
	Major	1				
As SRO	Reactivity	0				
	Normal	1				
	Instrument/Component	2				
	Major	1				

SRO-U	Reactivity	0		1		
	Normal	1		1		
	Instrument/Component	2		4		
	Major	1		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.

Author:

AS Capelant

Chief Examiner:

Thomas J. Stetko

OPERATING TEST NUMBER: U4

Applicant Type	Evolution Type	Minimum Number	Scenario Number			
			1	2	3	4
RO	Reactivity	1				
	Normal	1				
	Instrument/Component	4				
	Major	1				

As RO	Reactivity	1				
	Normal	0				
	Instrument/Component	2				
	Major	1				
SRO-I	Reactivity	0				
	Normal	1				
	Instrument/Component	2				
	Major	1				
As SRO	Reactivity	0				
	Normal	1				
	Instrument/Component	2				
	Major	1				

SRO-U	Reactivity	0	1			
	Normal	1	1			
	Instrument/Component	2	4			
	Major	1	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.

Author:

*J. Caplan*

Chief Examiner:

*Thomas J. Stetson*

OPERATING TEST NUMBER: U5

Applicant Type	Evolution Type	Minimum Number	Scenario Number			
			1	2	3	4
RO	Reactivity	1				
	Normal	1				
	Instrument/Component	4				
	Major	1				

As RO	Reactivity	1				
	Normal	0				
	Instrument/Component	2				
	Major	1				
SRO-I	Reactivity	0				
	Normal	1				
	Instrument/Component	2				
	Major	1				
As SRO	Reactivity	0				
	Normal	1				
	Instrument/Component	2				
	Major	1				

SRO-U	Reactivity	0	1			
	Normal	1	1			
	Instrument/Component	2	4			
	Major	1	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.

Author: AD Capshaw

Chief Examiner: Thomas F. Stettin

OPERATING TEST NUMBER: I1

Applicant Type	Evolution Type	Minimum Number	Scenario Number			
			1	2	3	4
RO	Reactivity	1				
	Normal	1				
	Instrument/Component	4				
	Major	1				

As RO (PO)	Reactivity	1	1			
	Normal	0	1			
	Instrument/Component	2	2			
	Major	1	1			
SRO-I	Reactivity	0		1		
	Normal	1		1		
	Instrument/Component	2		4		
	Major	1		1		

SRO-U	Reactivity	0				
	Normal	1				
	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.

Author:

*A. Caputo*

Chief Examiner:

*Thomas F. Stetho*

Competencies	Applicant #1 SRO-U/I as CRS (4)			Applicant #2 SRO-I or RO as PO (4)			Applicant #3 RO as SO (4)		
	Scenario			Scenario			Scenario		
	1	2	3	1	2	3	1	2	3
Understand and Interpret Annunciators and Alarms	1,2,3,4,5	1,2,3,4	1,2,3	3,4,5	2	2	1,2,4	1,3,4	1,3
Diagnose Events and Conditions	2,3,4,5	3,4,5,6	2,4,5	3,4,5	2,5,6	2,4	1,2,4	1,3,4,5	1,3,4,5
Understand Plant and System Response	2,3,4,5	1,3,4,5,6	1,2,4,5	2,3,4,5	2,3,4,5,6	1,4,5	1,2,4	1,3,4,5	1,2,3,4,5
Comply With and Use Procedures (1)	1,2,3,4,5	1,2,3,4,5,6	1,2,4,5	3,4,5	2,3,5,6	1,4,5	1,2,4	1,3,4,5,6	1,4,5
Operate Control Boards (2)	N/A	N/A	N/A	2,3,4,5	2,3,4,5,6	2,3,4,5	1,2,4	1,3,4,5,6	1,3,4,5
Communicate and Interact With the Crew	1,2,3,4,5	1,2,3,4,5,6	1,2,3,4,5	2,3,4,5	1,2,3,4,5,6	1,2,4,5	1,2,4,5	1,2,3,4,5,6	1,2,3,4,5
Demonstrate Supervisory Ability (3)	1,2,3,4,5	1,2,3,4,5,6	1,2,3,4,5	N/A	N/A	N/A	N/A	N/A	N/A
Comply With and Use Tech. Specs. (3)	1	2,3	1,2	N/A	N/A	N/A	N/A	N/A	N/A

Notes

- (1) Includes Technical Specification compliance for an RO.
- (2) Optional for a SRO-U.
- (3) Only applicable to SROs.
- (4) CRS – Control Room Supervisor, PO – Primary Operator, SO – Secondary Operator

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:

*AL Capodanno*

Chief Examiner:

*Thomas J. Stutts*

Facility:		Date of Exam:		Exam Level: RO/SRO		
Item Description				Initials		
				a	b	c
1.	Clean answer sheets copied before grading			JK	MAP	VJS
2.	Answer key changes and question deletions justified and documented			JK	MAP	VJS
3.	Applicants' scores checked for addition errors (reviewers spot check > 25% of examinations)			JK	MAP	VJS
4.	Grading for all borderline cases (80% +/- 2%) reviewed in detail			JK	MAP	VJS
5.	All other failing examinations checked to ensure that grades are justified			JK	MAP	N/A
6.	Performance on missed questions checked for training deficiencies and wording problems; evaluate validity of questions missed by half or more of the applicants			JK	MAP	VJS
				Printed Name / Signature		Date
a.	Grader			<u>Phil Capehart / P. Capehart</u>		<u>7/27/01</u>
b.	Facility Reviewer(*)			<u>Warren Potter / W. Potter</u>		<u>7/21/01</u>
c.	NRC Chief Examiner (*)			<u>Thomas F. Stetka / Thomas F. Stetka</u>		<u>7/31/01</u>
d.	NRC Supervisor (*)			<u>DALE A. POWERS / Dale A. Powers</u>		<u>8/1/01</u>
(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.						

## Operator Licensing Exam Schedule

From 10/01/2000 To 09/30/2001

Region: 4

Phase Code: 5 Operational

Exam Week	Site/Docket No./Insp Rpt #	# Candidates	Type	Exam Author	Chief Examiner	Examiners Assigned
07/08/2001	Palo Verde / 05000529 / 2001005 Procedure #: 7111111Q				MOORMAN, JAMES H.	MOORMAN, JAMES H. SALGADO, NANCY L. WARNICK, GREGORY
07/08/2001	Palo Verde / 05000530 / 2001005 Procedure #: 7111111Q				MOORMAN, JAMES H.	MOORMAN, JAMES H. SALGADO, NANCY L. WARNICK, GREGORY
07/23/2001	Palo Verde / 05000528 / 2001301	RO - 5 SROU - 5	SROI - 1	Admin	FFF	STETKA, THOMAS F. MURPHY, MICHAEL E.

Sites: PALO

Orgs: ALL

Exam Author: ALL

# Operator Licensing Exam Schedule

From 10/01/2000 To 09/30/2001

Region: 4

Phase Code: 5 Operational

**Summary By Date**

07/2000 PALO - Palo Verde

07/2000

10/2000 PALO - Palo Verde

10/2000

01/2001 PALO - Palo Verde

01/2001

04/2001 PALO - Palo Verde

04/2001

06/2001 PALO - Palo Verde

RO - 0

SROI - 0

SROU - 0

LSRO - 0

Total for Palo Verde: 0

06/2001

RO - 0

SROI - 0

SROU - 0

LSRO - 0

Total for 06/2001: 0

07/2001 PALO - Palo Verde

RO - 5

SROI - 1

SROU - 5

LSRO - 0

Total for Palo Verde: 11

Sites: PALO

Orgs: ALL

Exam Author: ALL

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 7/25/01 & 7/26/01 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 participate in any instruction, evaluation, or other training-related activities involving those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration. I further understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of 7/25/01 & 7/26. From the date that I entered into this security agreement until the completion of examination administration, I did not participate in any training-related activities involving those applicants who were administered these licensing examinations.

PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE
1. <u>Warren Potter</u>	<u>Sim SL / Exam Sect. Leader</u>	<u>Warren Potter</u>	<u>7/27/01</u>	<u>Warren Potter</u>	<u>7/27/01</u>
2. <u>Joe Hoover</u>	<u>Instructor / Exam Development</u>	<u>Joe Hoover</u>	<u>7/27/01</u>		
3. <u>Phil Capehart</u>	<u>Instructor / Exam Development</u>	<u>Phil Capehart</u>	<u>7/27/01</u>		
4. <u>Dennis Martin</u>	<u>Instructor</u>	<u>Dennis Martin</u>	<u>7/27/01</u>		
5. <u>Charles Olivere</u>	<u>COMPUTER TECH. / COMPUTER</u>	<u>Charles Olivere</u>	<u>7/27/01</u>		
6. <u>William Hendric</u>	<u>Instructor / Sim &amp; Test operator</u>	<u>William Hendric</u>	<u>7/27/01</u>		
7. <u>Douglas Coxon</u>	<u>Shift Manager / Review</u>	<u>Douglas Coxon</u>	<u>7/27/01</u>		
8. <u>MARCO VENCH</u>	<u>REACTOR OPERATOR / REVIEWER</u>	<u>Marco Vench</u>	<u>7/27/01</u>		
9. <u>DANIEL HAUTALA</u>	<u>ENGINEER / NUCLEAR REG. AFFAIR</u>	<u>Daniel Hautala</u>	<u>7/27/01</u>		
10. <u>FRED RIVERA</u>	<u>Training Dept. / Dept. of Regulatory Affairs</u>	<u>Fred Rivera</u>	<u>7/27/01</u>		
11. <u>Scott Bauer</u>	<u>Dept. of Regulatory Affairs</u>	<u>Scott Bauer</u>	<u>7/27/01</u>		
12. <u>Daniel Marks</u>	<u>Compliance Sect. Ldr. / Cover letter</u>	<u>Daniel Marks</u>	<u>7/27/01</u>		
13. <u>Joe Allison</u>	<u>Program Advisor / Exam Develop</u>	<u>Joe Allison</u>	<u>7/27/01</u>		
14. <u>Carla Charbon</u>	<u>System Admin</u>	<u>Carla Charbon</u>	<u>7/27/01</u>		
15. <u>Jim SHANNON</u>	<u>INSTRUCTOR</u>	<u>Jim Shannon</u>	<u>7/27/01</u>		

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 7/25/01 & 7/26/01 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 participate in any instruction, evaluation, or other training-related activities involving those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration. I further understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of 7/25/01 & 7/26 From the date that I entered into this security agreement until the completion of examination administration, I did not participate in any training-related activities involving those applicants who were administered these licensing examinations.

PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE
1. <u>RICHARD LAETER</u>	<u>INSTRUCTOR/DEVELOPER</u>	<u>[Signature]</u>	<u>4/12/01</u>	<u>[Signature]</u>	<u>7/27/01</u>
2. <u>DAROL JURN</u>	<u>OPS SUPPORT SECTION LEADER</u>	<u>[Signature]</u>	<u>09/26/01</u>	<u>[Signature]</u>	<u>8/10/01</u>
3. <u>LARRY SPEIGHT</u>	<u>SM</u>	<u>[Signature]</u>	<u>4/27/01</u>	<u>[Signature]</u>	<u>08/08/01</u>
4. <u>Scott Ferkel</u>	<u>SM / Work Control</u>	<u>[Signature]</u>	<u>4/27/01</u>	<u>[Signature]</u>	<u>8/15/01</u>
5. <u>Mark Johnson</u>	<u>CRS</u>	<u>[Signature]</u>	<u>4-27-01</u>	<u>[Signature]</u>	<u>8-14-01</u>
6. <u>Doug Coxon</u>	<u>SM / SCRP</u>	<u>[Signature]</u>	<u>4/27/01</u>	<u>[Signature]</u>	<u>8/17/01</u>
7. <u>Reade TAYLOR</u>	<u>SM Training coordinator</u>	<u>[Signature]</u>	<u>4/27/01</u>	<u>[Signature]</u>	<u>7-27</u>
8. <u>GEORGE ANDREWS</u>	<u>STA SOTLDR</u>	<u>[Signature]</u>	<u>9/1/01</u>	<u>[Signature]</u>	<u>8/14/01</u>
9. <u>Ray Roberts</u>	<u>STA</u>	<u>[Signature]</u>	<u>5-2-01</u>	<u>[Signature]</u>	<u>5/16/01</u>
10. <u>JOE ARSEVAULT</u>	<u>CONSULTANT</u>	<u>[Signature]</u>	<u>5-3-01</u>	<u>[Signature]</u>	<u>8/17/01</u>
11. <u>MO Alavi</u>	<u>ENGINEER</u>	<u>[Signature]</u>	<u>5-7-01</u>	<u>[Signature]</u>	<u>8-7-01</u>
12. <u>LARRY ESAU</u>	<u>ENGINEER</u>	<u>[Signature]</u>	<u>5-7-01</u>	<u>[Signature]</u>	<u>7/27/01</u>
13. <u>Lionel Martinez</u>	<u>RO</u>	<u>[Signature]</u>	<u>5-15-01</u>	<u>[Signature]</u>	<u>8-14-01</u>
14. <u>David L Charles</u>	<u>SRO</u>	<u>[Signature]</u>	<u>5-16-01</u>	<u>[Signature]</u>	<u>8/10/01</u>
15. <u>Scott C. Whitton</u>	<u>RO</u>	<u>[Signature]</u>	<u>5-16-01</u>	<u>[Signature]</u>	<u>8/22/01</u>

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 7/25/01 - 7/26/01 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 participate in any instruction, evaluation, or other training-related activities involving those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration. I further understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of 7/20 - 7/26/01. From the date that I entered into this security agreement until the completion of examination administration, I did not participate in any training-related activities involving those applicants who were administered these licensing examinations.

PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE
1. <u>Greg Reynolds</u>	<u>CRS / Validation</u>	<u>Greg Reynolds</u>	<u>5/16/01</u>	<u>Greg Reynolds</u>	<u>8/14</u>
2. <u>KEITH ATKINSON</u>	<u>CRS</u>	<u>Keith Atkinson</u>	<u>5/16/01</u>	<u>Keith Atkinson</u>	<u>8/19/01</u>
3. <u>JEFFREY R GARDEN</u>	<u>CRS</u>	<u>Jeffrey R Garden</u>	<u>5/16/01</u>	<u>Jeffrey R Garden</u>	<u>8/19/01</u>
4. <u>Jimmy P. Callahan</u>	<u>RO / Training Instructor</u>	<u>Jimmy P Callahan</u>	<u>5/16/01</u>	<u>Jimmy P Callahan</u>	<u>7/27/01</u>
5. <u>Monica Ramos</u>	<u>ADMIN. Tech.</u>	<u>Monica Ramos</u>	<u>5/16/01</u>	<u>Monica Ramos</u>	<u>8/2/01</u>
6. <u>Elizabeth Godinez</u>	<u>Forms System Analyst</u>	<u>Elizabeth Godinez</u>	<u>5/16/01</u>	<u>Elizabeth Godinez</u>	<u>8/8/01</u>
7. <u>Petar Carpenter</u>	<u>SM</u>	<u>Petar Carpenter</u>	<u>5/17/01</u>	<u>Petar Carpenter</u>	<u>8-15-01</u>
8. <u>Owen B Truio</u>	<u>SRO</u>	<u>Owen B Truio</u>	<u>5/22/01</u>	<u>Owen B Truio</u>	<u>9/14/01</u>
9. <u>STAWN COLE</u>	<u>RO/OPERATIONS STANDARDS</u>	<u>Stawn Cole</u>	<u>062001</u>	<u>Stawn Cole</u>	<u>080801</u>
10. <u>Joe Costanzo</u>	<u>NLO</u>	<u>Joe Costanzo</u>	<u>6/21/01</u>	<u>Joe Costanzo</u>	<u>8/10/01</u>
11. <u>LARRY WILHELM</u>	<u>TRAINING INSTRUCTOR</u>	<u>Larry Wilhelm</u>	<u>7/5/01</u>	<u>Larry Wilhelm</u>	<u>7-27-01</u>
12. <u>John Wood</u>	<u>TRAINING SECT LDR</u>	<u>John Wood</u>	<u>7/19/01</u>	<u>John Wood</u>	<u>8-7-01</u>
13. <u>Jim Ledford</u>	<u>Nuclear Instructor / Proctor</u>	<u>Jim Ledford</u>	<u>7/20/01</u>	<u>Jim Ledford</u>	<u>8/2/01</u>
14. <u>DOUG ROSENBAUM</u>	<u>NUCLEAR INSTRUCTOR / Proctor</u>	<u>Doug Rosenbaum</u>	<u>7/24/01</u>	<u>Doug Rosenbaum</u>	<u>8/2/01</u>
15. <u>MARY RAYMOND</u>	<u>NUC TRNG INST / Sim Driver</u>	<u>Mary Raymond</u>	<u>7/25/01</u>	<u>Mary Raymond</u>	<u>8/7/01</u>

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 7/25/01 - 7/26/01 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 participate in any instruction, evaluation, or other training-related activities involving those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration. I further understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of 7/20 - 7/26/01. From the date that I entered into this security agreement until the completion of examination administration, I did not participate in any training-related activities involving those applicants who were administered these licensing examinations.

	PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE
1.	<u>Alan Malley</u>	<u>INSTRUCTOR</u>	<u>[Signature]</u>	<u>7/23/01</u>	<u>[Signature]</u>	<u>8/17/01</u>
2.	<u>Roy Rendler</u>	<u>Instructor</u>	<u>[Signature]</u>	<u>7/24/01</u>	<u>[Signature]</u>	<u>8/14/01</u>
3.	<u>PAT WILSON</u>	<u>UDL OPS</u>	<u>[Signature]</u>	<u>7/24/01</u>	<u>[Signature]</u>	<u>7/27/01</u>
4.	<u>Jim Taylor</u>	<u>UDL ops Supt.</u>	<u>[Signature]</u>	<u>7/24/01</u>	<u>[Signature]</u>	<u>7/27/01</u>
5.	<u>Dana H-buckley</u>	<u>Instructor</u>	<u>[Signature]</u>	<u>7/24/01</u>	<u>[Signature]</u>	<u>7/27/01</u>
6.	<u>MICHAEL GREGORY</u>	<u>OWTOL</u>	<u>[Signature]</u>	<u>7/27/01</u>	<u>[Signature]</u>	<u>7/27/01</u>
7.	<u>GEORGE ANDREWS</u>	<u>STA</u>	<u>[Signature]</u>	<u>8/13/01</u>	<u>[Signature]</u>	<u>8/13/01</u>
8.						
9.						
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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. 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 8/23/01. 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)	DATENOTE
1.	JOSEPH R. HOWER	OPERATOR INSPECTOR			<i>Joseph R. Hower</i>	8/16/01 (1)
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NOTES: (1) NO COPIES EMPLOYED AT PUNGS. ORIGINAL DOCUMENT WAS NOT AVAILABLE TO SIGN *9/16/01*

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 12/7 -12/14 2001 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, <sup>8/23/01</sup> I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of 12/7 -12/14 2001. 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 WILHELM	Nuclear Instructor			<i>[Signature]</i>	8/17/01	1
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NOTES:

1. No longer employed at PVNGS, original document was not available to sign