

Form 2.3-3 Operating Test Review Worksheet (JPMs)

2023 Calvert Cliffs Operating Exam - Administered week of June 5, 2023

Facility: Calvert Cliffs				Exam Date: June 5, 2023								
1 JPM # or title	2 Type (S/P/A)	3 ALT (Y/N)	4 LOD (1-5)	5 JPM Errors						6 U/E/S	7 Explanation	
				LOD	REF	IC	TSK	CUE	CS			TL
RO Admin 1 - Calculate readings from RPS	A	N	2								E	<ul style="list-style-type: none"> • Changed tolerance for step 1 to 5 vice 10
RO Admin 2 - Calculate Main Generator Hydrogen Leak Rate	A	N	2								E	<ul style="list-style-type: none"> • Are acceptable band tolerances for the calculations reasonable? NO • Changed tolerance to 50 • Typo on the initial conditions – shown vs show • Added more detail in task standard
RO Admin 3 - Evaluate AFW Pump performance data during a Surveillance Test	A	N	3								E	<ul style="list-style-type: none"> • Are acceptable band tolerances for the calculations reasonable? YES • Added more detail to the task standard
RO Admin 4 - Determine Response to a Security Event	A	N	2								S	To be filed in Non-Public ADAMS

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				LOD	REF	IC	TSK	CUE	CS	TL		
SRO Admin 1 - Reactivation of SRO License	A	N	3								S	
SRO Admin 2 - Determine reportability requirements	A	N	2								E	Task Standard says form needs to be filled out. To nonspecific and ambiguous. Added more detail to task standard
SRO Admin 3 - Evaluate and then independently verify AFW Pump performance data during a Surveillance Test, then determine Tech Spec actions	A	N	2								E	Changed validation time to 20 minutes
SRO Admin 4 - Review and Authorize KI	A	N	3								S	
SRO Admin 5 - Determine Emergency Action Level	A	N	3								S	
a. SIM-1 Dropped CEA during Startup	S	Y	2								E	Added group 5 to what can be selected on CEAPDS
b. SIM-2 Respond to an RCS Leak on the Charging Header	S	Y	2								E	<ul style="list-style-type: none"> • Added cue earlier for location of the leak • Minor typo on page 7 • Made isolating letdown not critical

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				LOD	REF	IC	TSK	CUE	CS	TL		
c. SIM-3 Prepare for RAS Actuation	S	Y	2								E	• Created overrides for ECCS fans
d. SIM-4 Restore Shutdown Cooling	S	Y	2								E	• Changed the tolerance to 100 gpm.
e. SIM-5 Respond to a condensate or feedwater rupture at power	S	N	2								S	
f. SIM-6 Bleed and Feed to Cool the Quench Tank	S	N	3								E	Task Standard lacks specificity - added more detail. Also corrected typo in cue.
g. SIM-7 Respond to a loss of 11 4KV Bus	S	Y	3								E	Are all actions of AOP 71 critical? No, added more specificity to the task standard. • Added an initial condition for grid stable. • Deleted steps after 6.1.b
h. SIM-8 Shift Control Room Ventilation	S	N	3								E	Are all actions of OI-22F critical? No, added specificity to the Task Standard.

Form 2.3-3 Instructions for Completing the JPM Table

1. Enter the JPM number and/or title.
2. Enter the type of JPM—(S)imulator, (P)lant, or (A)dministrative.
3. Enter (Y)es or (N)o for an Alternate Path JPM.
4. Rate the level of difficulty (LOD) of each JPM using a scale of 1–5 (easy–difficult). A JPM containing less than two critical steps, a JPM that tests solely for recall or memorization, or a JPM that involves directly looking up a single correct answer is likely LOD = 1 (too easy). Conversely, a JPM with over 30 steps or a JPM that takes more than 45 minutes to complete is likely LOD = 5 (too difficult).
5. Check the appropriate block for each JPM error type, using the following criteria:
 - LOD = 1 or 5 is unsatisfactory (U).
 - REF: The JPM lacks required references, tools, or procedures (U).
 - IC: The JPM initial conditions are missing or the JPM lacks an adequate initial cue (U).
 - CUE: The JPM lacks adequate evaluator cues to allow the applicant to complete the task, or the evaluator cues are subjective or leading (U).
 - TSK: The JPM lacks a task standard or lacks completion criteria for a task standard (U).
 - CS: The JPM contains errors in designating critical steps, or the JPM lacks an adequate performance standard for a critical step (U).
 - TL: The JPM validation times are unreasonable, or a time-critical JPM lacks a completion time (U).
6. Mark the JPM as unsatisfactory (U), satisfactory (S), or needs enhancements (E). A JPM is (U) if it has one or more (U) errors as determined in step 5. Examples of enhancements include formatting, spelling, or other minor changes.
7. Briefly describe any JPM determined to be unsatisfactory (U) or needing enhancement (E). Save initial review comments and detail subsequent comment resolution so that each exam-bound JPM is marked by a satisfactory (S) resolution on this form.

Form 2.3-3 Operating Test Review Worksheet (Scenarios)

Facility: Calvert Cliffs		Scenario: 1 (contingency EOP)				Exam Date: June 5, 2023		
1 Scenario Event ID/Name:		2 Scenario event errors				3 U/E/S	4 Explanation	
		Realism/ Credibility	Performance Standards	Verifiable Actions	Critical Task			TS
1	N-SRO R- ATC/BOP						S	
2	C-BOP/SRO TS-SRO						S	TS
3	C-BOP/SRO						S	
4	C-ALL MC-ATC TS-SRO						S	TS
5	C-ATC/SRO						S	
6	C-BOP/SRO MC-BOP						S	CT-1
7	C-ALL						S	CT-2
8	M-ALL						S	CT-3
							SAT	<u>Other minor edits:</u> • Added a note for the failure to start 13 SW and 13 SRW Pumps • Removed the if necessary for starting 11 AFW pump on page 16

Form 2.3-3 Operating Test Review Worksheet (Scenarios)

Facility: Calvert Cliffs		Scenario: 2 (SPARE)					Exam Date: June 5, 2023	
1 Scenario Event ID/Name:		2 Scenario event errors					3 U/E/S	4 Explanation
		Realism/ Credibility	Performance Standards	Verifiable Actions	Critical Task	TS		
1	I-ATC/SRO MC-ATC						S	
2	C-BOP/SRO TS-SRO						S	TS
3	C-ATC/SRO TS-SRO						S	TS
4	R-ATC/BOP C-SRO						S	
5	C-ALL						S	
6	M-ALL						S	CT-1
7	C-BOP/SRO MC-BOP						S	CT-1
8	M-ALL						S	CT-3
							SAT	<u>Other minor edits:</u> • Page 11 – rewrote cue for 11 SGTR and TBV failure. • Added in RCP trip per the curves or CIS. • Added in prior to EOP-8 to the cooldown CT. • Added AOP-2A entry for Event 3. • Added in EOP-0 RLEC could be not met due to trends.

Form 2.3-3 Operating Test Review Worksheet (Scenarios)

Facility: Calvert Cliffs		Scenario: 3				Exam Date: June 5, 2023	
1 Scenario Event ID/Name:		2 Scenario event errors				3 U/E/S	4 Explanation
		Realism/ Credibility	Performance Standards	Verifiable Actions	Critical Task		
1	I-BOP/SRO TS-SRO						S TS
2	C-ATC/SRO TS-SRO						S TS
3	R-ATC/BOP C-SRO						S
4	C-ALL						S
5	MC-BOP C- BOP/SRO						S
6	M-ALL						S CT-1, CT-2
7	MC-ATC I-ATC/SRO						S CT-3
							SAT <u>Other minor edits:</u> • Page 14, removed the bold for BD-4012 • Changed the wording of the 3rd Critical Task

Form 2.3-3 Operating Test Review Worksheet (Scenarios)

Facility: Calvert Cliffs		Scenario: 4 (contingency EOP)				Exam Date: June 5, 2023	
1 Scenario Event ID/Name:		2 Scenario event errors				3 U/E/S	4 Explanation
		Realism/ Credibility	Performance Standards	Verifiable Actions	Critical Task		
1	C-BOP/SRO MC-BOP						S TS
2	C-BOP/SRO TS-SRO						S TS
3	R-ATC C-BOP/SRO TS-SRO						S
4	C-ALL						S
5	C-ATC/SRO MC-ATC						S CT-1
6	C-ALL						S CT-2
7	M-ALL						S CT-3
							SAT <u>Other minor edits:</u> • Added in that RLEC could be not met due to loss of power to the main vent RMS pump.

Form 2.3-3 Instructions for Completing the Scenario Table

1. For each scenario, enter the scenario event names and descriptions.
2. Review the individual events contained in each scenario, and identify and mark event errors:
 - The scenario guide event description is not realistic/credible—unsatisfactory (U).
 - The scenario guide event description lacks adequate crew/operator performance standards—needs enhancement (E).
 - The scenario guide event description lacks verifiable actions for a credited normal event, reactivity event instrument/component malfunction, or technical specification (TS) event (or a combination of these) (U).
 - The scenario guide event description incorrectly designates an event as a critical task (i.e., a noncritical task labeled as critical or a critical task labeled as noncritical). This includes critical tasks that do not meet the critical task criteria (i.e., the critical task does not have a measurable performance standard) (U).
 - The scenario guide event description incorrectly designates entry into TS actions when not required or does not designate entry into TS actions when required (U).
3. Based on the outcome in step 2, mark the scenario event as unsatisfactory (U), satisfactory (S), or needs enhancements (E). An event is (U) if it has one or more (U) errors as determined in step 2. Examples of enhancements include formatting, spelling, or other minor changes.
4. Briefly describe any scenario event determined to be unsatisfactory (U) or needing enhancement (E). Save initial review comments and detail subsequent comment resolution so that each exam-bound scenario event is marked by a satisfactory (S) resolution on this form.

Form 2.3-5 Written Examination Review Worksheet

2023 Calvert Cliffs Written Exam - Administered June 14, 2023

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. K/A Use Flaws		6. Source (B/M/N)	7. Status (U/E/S)	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job Link	Minutia	#/Units	Logic	Q-K/A	License Level			
1	H	3												B	S	
2	F	2												B	E	Don's comment on 2 nd round was that this did not match the K/A. Calvert Cliffs defines SDC and RHR (ECCS) as the same system, so K/A is matched well enough
3	H	2					X						X	B	U	Is part 1 SRO level (procedure selection)? IS there any direction in AOP-2B for loss of 1 charging pump, where then B1 and C1 would be correct? Plausibility discusses one CHG pump in operation showing signs of gas binding. In this case wouldn't you enter this AOP for 1 CHG pump in service? Stem doesn't say if other pumps are in operation.
														U	E	Rewrote question, new question does not address loss of reactor coolant makeup per the K/A. Changed AOP-2B to OI-2A-1 and made 2 nd bullet to describe trip of a charging pump. Reframed stem to describe a loss of reactor coolant makeup to better match the K/A
4	H	2												B	S	Is IX ion exchanger? YES
5	F	1												B	U	Question too easy for Tier 3, is GFE. Redraw K/A and rewrite. Redrew K/A and rewrote. New question SAT.
6	H	2												B	E	Part 2 seems trivial LOD1, only tests adding times accurately. Rewrote question to add a SFP event at 0800
7	F	3			X							X		B	U	K/A mismatch and True/False statements – only need to know valve lift setpoints and nothing about vapor space accidents. Need more detail on an accident instead of basic RCS overpressure event. Rewrote question, SAT
8	H	3												B	S	

Form 2.3-5 Written Examination Review Worksheet

25	F	3				X							N	U	C and D are implausible. These systems do not provide flow into the core. Changed those systems to SIAS and RAS.
26	H	3											B	S	
27	F	2											B	E	Tier 4, edited to be more plant specific
28	H	3											B	E	Edited B and C to eliminate the term available.
29	F	2											B	S	Previous exam question (2021 NRC RO exam)
30	F	3											N	E	K1 generic D reads like a none of the above. Need a distractor for D. Rewrote distractor D. Added image of containment dome and rx cavity temps.
31	H	2											N	S	
32	F	3											B	E	Should D say 11 SFP cooler? Changed D to HX

Form 2.3-5 Written Examination Review Worksheet

85	H	3												B	E	What are the bold strikethroughs on the reference TS for? Removed "if any" from stem.
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Form 2.3-5 Written Examination Review Worksheet

97	H	3												N	S	
'98	H	3												B	S	
99	F	2												B	S	
100	F	3												B	E	Minor edit in stem