Form 2.3-5 Written Examination Review Worksheet

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	F	2												N	S	
2	H	2												B	E	Added third bullet, "No operator actions are taken".
3	F	3												N	S	
4	H	3												B	S	
5	H	3												N	S	
6*	F	3												N	S	Overlap with Q16 - edits addressed in Q16
7	H	2												N	E	Added question stem to increase operational validity.
8	F	2												B	S	
9	H	3												N	E	Changed "is" to "are" in 'A' and 'B'.
10	H	3												N	S	
11	F	3												N	E	Added 'per OS1000.07, "Approach to Criticality"'
12	H	3												N	S	
13*	F	3												N	E	Rewrite as 2x2. Is the procedure selection (first part) RO level? Distractor A – does Fuel Handling Mode place them in operation? Why is this wrong? Not required by procedure. Distractor C & D: why is entering OS1252.03 wrong? Second part is wrong. Reworded distractors to have AND and edited stem to include procedurally required actions.
14	H	2												B	E	Added "under all conditions" to distractor 'D'.

15	H	3										B	S	
16	F	2										N	E	• Changed part (2) of question to avoid overlap with question 6. • Added "from 100% power" to first bullet.

Q#	1. LOK (F/H)	2. LOD (1–5)	3. Psychometric Flaws				Partial	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.		Job Link	Minutia	#/Units	Logic	Q–K/A	License Level			
17	H	3												N	S	Overlap with Q49 – edits addressed in Q49
18	F	2												B	S	
19	H	3												B	S	
20*	F	2												N	E	Tier 4 – this may be too specific for Tier 4. Question doesn't really doesnt explain what local peaking factor is. Added "Seabrook's" to first sentence in the question.
21*	F	2					X							N	U	Tier 4 – C is correct also. Do the commas in the distractors mark 2 separate parts in the answer where each parts corresponds with each other directly? Rewrote question, needs edits - Added "As seen on RE-1, "Critical Boron Concentration vs Burnup"" to the beginning of the question stem.
22	F	2												B	S	
23	F	2												N	S	
24*	H	3										X		B	U	K/A mismatch – how does this question determine the source of the water in the sump? Redrew K/A
25	F	3												B	S	
26	H	3												B	E	• Added fourth bullet, "No operator actions are taken". • Added note stating: "Simulator run validated that the Main Feed Pumps will not trip on over speed in response to FW-PT-508 failing low before the reactor trips on high SG level".
27	H	3					X							B	U	• 'B' is subset of 'D'. Added 'only' to 'B'. 'B' does not contain "transfer SEPS supply from Bus E6 to E5" which is contained in 'D'. • Correct answer 'C' is also a subset of 'D'. Added 'only' to 'C'. 'C' does not contain "manually start the SEPS diesels" as the SEPS will automatically start. This statement is contained in 'D'. • 'A', 'B' and 'C' use "only" to eliminate subset issues. • Statement to "verify auto start of SEPS" was not added to 'A' and 'C' because this action is not contained in ECA-0.0.

28	H	3												B	E	Changed "Which component(s) were running, if any?" to "Which component(s) were running when the FBL returned, if any?" to better specify what time is in question.
29	H	3												N	S	
30	H	3												B	S	
31*	F	2				X								N	U	D may be correct also. Why is D wrong where the crew will verify that bleed and feed is not required? D is correct also. Question will be reworded to ask what actions are required vice why the procedure requires actions to be done. Rewritten question is SAT
32	H	3												B	S	

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			
33	H	3												B	S	
34	H	3												B	S	
35	H	3												B	S	
36*	H	1					X				X			N	U	Backwards logic for an A2 K/A. Test what actions (secure both charging pumps) instead of providing that information. Isn't D correct? You won't lift a PORV? Question will be rewritten. Question does not meet K/A and all part 2s are correct.
37	F	3												B	S	
38	H	3												B	S	
39	H	3												B	S	
40	H	3												B	E	Added "to 800 MWe" to incorrect distractor 'A' to better distinguish it from incorrect distractor 'D'.
41	H	3												B	E	Added "if any" to make the question stem read, "Which of the following describes the effect if any,…"
42	F	3												N	E	• Changed "Per the VPRO" to "In accordance with the VPRO". • In 'C' and 'D' removed statements "verify that the pump trips automatically" with the following changes: o 'C' changed "trip the reactor and transition to E-0, "Reactor Trip or safety Injection", verify that the pump trips automatically due to high vibrations" to, "trip the reactor and transition to E-0, "Reactor Trip or safety Injection" once the pump trips automatically due to high vibrations". o 'D' changed "verify that the pump trips automatically due to high vibrations, then transition to OS1231.03, "Turbine Runback/Setback"" to, "transition to OS1231.03, "Turbine Runback/Setback" once the pump trips automatically due to high vibrations".
43	H	3												B	S	

44	H	3											B	E	Corrected typo, RSC to RCS.
45	H	3											B	S	
46	H	3											B	E	Added noun name to EDE-PP-1D, "Vital 120 VAC Power Panel 1D".
47	H	3											B	E	Removed statement "the crew has reset the Safety Injection signal on both trains" in the fifth bullet and replaced with "the crew has turned both 'A' and 'B' train SI reset switches to RESET.
48	F	3											N	S	

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			
49*	H	3												N	E	Add gpm to stem 3 "is" choices and 1 "is not" choice is awkward. Rewrite to a better 2x2 where they determine if there is a leak and how big. Changed "PSO has reduced charging to seals only" to "CS-HCV-182, "RCP Seal Flow Control Valve" has been closed" to avoid overlap with question 17.
50	H	3												B	E	• Added 100% power as first bullet. • Added "Due to a small break LOCA" in the fourth bullet.
51	F	3												N	S	
52	H	3												B	S	
53	H	3												B	S	
54	F	3												N		
55*	F	3									X			B	U	Rewrite, backwards logic – 3rd bullet in stem is what we should be testing. Use current distractors as a part 2. New question SAT
														N	S	
56	F	3												B	S	
57	F	3												B	E	Added reference to OX1460.01 "Weekly Air Lock Door Seal Air Flow Rate" to question stem. Reworded question for better readability.
58	H	3												B	S	
59	H	3												N	S	
60	F	3												N	E	Added note to question pedigree documenting site specific OE where IA was lost to CS-HCV-182. *OE driven question.
61	H	3												N	S	
62	F	3												B	E	Added "In accordance with the background document for ES-3.1" to beginning of question stem.
63	F	3												N	S	

| 64 | H | 3 | | | | | | | | | | | N | E | Added element in plant conditions for loss of offsite power to eliminate direct look up concern and changed distractors accordingly. |

Form 2.3-5 Written Examination Review Worksheet

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			
65	F	2												N	S	
66	H	3												B	S	
67*	F	3										X		B	U	K/A mismatch – doesn't test electrical power supplies. Reselected K/A. Revised question SAT
68	H	3												B	S	
69	F	2												N	S	
70	H	3												B	S	
71	F	2												B	S	
72	H	2												B	E	Added K/A justification.
73	H	3												B	S	
74	F	3												N	S	
75	H	3												B	S	

*These questions were submitted as part of the presubmittal sample for preliminary review and comment. As such, they do not count towards the total of unsatisfactory questions since changes have been incorporated.

Form 2.3-5 Written Examination Review Worksheet

Form 2.3-5 Instructions for Written Examination Review Worksheet

Refer to ES-4.2 for the definitions of terms used in this worksheet for the written examination. Review each question (Q) as submitted and as subsequently revised and document the following in the associated worksheet columns:

1. Enter the level of knowledge (LOK) as either (F)undamental or (H)igher cognitive level.
2. Enter the level of difficulty (LOD) from 1 (easy) to 5 (difficult); mark direct lookup questions (applicant can directly determine the answer from the provided reference) as LOD 1. A question is (U)nsatisfactory if it is LOD 1 or LOD 5.
3. Check the appropriate box if a psychometric flaw is identified:
    *   "Stem Focus": The stem lacks enough focus to elicit the correct answer (e.g., unclear intent, more information is needed, or too much needless information). This is an (U)nsatisfactory question.
    *   "Cues": The stem or one or more answer choices contains cues (e.g., clues, specific determiners, phrasing, length). This is an (U)nsatisfactory question.
    *   "T/F": All of the answer choices are a collection of unrelated true/false statements. This is an (U)nsatisfactory question.
    *   "Cred. Dist.": The distractors are not credible; single implausible distractors require (E)nhancement, and more than one noncredible distractor in the same question results in an (U)satisfactory question.
    *   "Partial": One or more distractors are partially correct (e.g., if the applicant can make unstated assumptions that are not contradicted by the stem). This is an (U)nsatisfactory question.

4. Check the appropriate box if a job content flaw is identified:
    *   "Job Link": The question is not linked to the job requirements (i.e., the question has a valid knowledge or ability (K/A) but, as written, is not operational in content). This is an (U)nsatisfactory question.
    *   "Minutia": The question requires the recall of knowledge that is too specific for the closed-reference test mode (i.e., it is not required to be known from memory). This is an (U)nsatisfactory question.
    *   "#/Units": The question contains data with an unrealistic level of accuracy or inconsistent units (e.g., panel meter in percent with question in gallons). This is an (U)nsatisfactory question.
    *   "Logic": The question requires backward or reverse logic or application compared to the job requirements. This is an (U)nsatisfactory question.
5. Check the first box if a K/A mismatch flaw exists. Check the second box if the question is flawed because it is written at the wrong license level. Either condition results in an (U)nsatisfactory question.
6. Enter the question's source: (B)ank, (M)odified, or (N)ew. Verify that (M)odified questions meet the criteria of ES-4.2.
7. Based on the review performed in steps 2–5, mark the question as (U)nsatisfactory, in need of (E)nhancement, or (S)atisfactory.
8. Fully explain the reason for any (U) in column 7 (e.g., how the psychometric attributes are not being met).
9. Save the initial review comments and detail subsequent comment resolution so that each exam-bound question is marked by an (S) on this form.
    marked by an (S) on this form.