

Clinton July 2005 Exam

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws					5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
1	F	3													S	New.
2	F	3													S	New.
3+	H	3						X							U	New. Question is at the SRO level per 10CFR55.43(b)(2), since this is a Tech Spec Bases question per the referenced Lesson Plan. <u>RESOLUTION:</u> Re-selected K/A new K/A 209002 K3.02 - Knowledge of the effect that a loss or malfunction of the HIGH PRESSURE CORE SPRAY SYSTEM (HPCS) will have on the following: Standby liquid control. New question is High level vs fundamental. Edited Distractor D for clarity.
4	F	3													S	New.

Instructions

[Refer to Section D of ES-401 and Appendix B for additional information regarding each of the following concepts.]

1. Enter the level of knowledge (LOK) of each question as either (F)undamental or (H)igher cognitive level.
2. Enter the level of difficulty (LOD) of each question using a 1 – 5 (easy – difficult) rating scale (questions in the 2 – 4 range are acceptable).
3. Check the appropriate box if a psychometric flaw is identified:
 - The stem lacks sufficient focus to elicit the correct answer (e.g., unclear intent, more information is needed, or too much needless information).
 - The stem or distractors contain cues (i.e., clues, specific determiners, phrasing, length, etc).
 - The answer choices are a collection of unrelated true/false statements.
 - The distractors are not credible; single implausible distractors should be repaired, more than one is unacceptable.
 - One or more distractors is (are) partially correct (e.g., if the applicant can make unstated assumptions that are not contradicted by stem).
4. Check the appropriate box if a job content error is identified:
 - The question is not linked to the job requirements (i.e., the question has a valid K/A but, as written, is not operational in content).
 - The question requires the recall of knowledge that is too specific for the closed reference test mode (i.e., it is not required to be known from memory).
 - The question contains data with an unrealistic level of accuracy or inconsistent units (e.g., panel meter in percent with question in gallons).
 - The question requires reverse logic or application compared to the job requirements.
5. Check questions that are sampled for conformance with the approved K/A and those that are *designated SRO-only* (K/A and license level mismatches are unacceptable).
6. Based on the reviewer's judgment, is the question as written (U)nsatisfactory (requiring repair or replacement), in need of (E)ditorial enhancement, or (S)atisfactory?
7. At a minimum, explain any "U" ratings (e.g., how the Appendix B psychometric attributes are not being met).

A "+" in the "Q#" column indicates that question was reviewed as part of the representative sample of 30 questions.

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5	F	3												S	New.
6+	H	3												S	New.
7	H	3												S	New.
8	H	3												S	New.
9+	H	2												S	New.
10	F	2												S	New.
11	H	3												S	New.
12	H	2				X								U	New. Distractors A and B are not plausible that the UAT would be available following a turbine trip. <u>RESOLUTION:</u> The licensee changed distractors A and B. Sat.
13+	H	3												E	New. In the question stem, change "... should ramp to ..." to "... is expected to ramp to ...". <u>RESOLUTION:</u> Comment incorporated. Sat.
14	F	2												S	Bank.
15	H	3												S	New.
16+	H	2												S	New.
17	H	3												S	New.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
18	H	3	X											E	New. In the question stem, instead of requiring the applicant to know "the NEXT operator action related to the Backwash of RWCU Filter 'A', just state "the NEXT operator action associated with placing the System Functions interlock switch to Normal". <u>RESOLUTION:</u> Incorporated comment. Sat.
19+	H	3												S	New.
20	F	2												S	New.
21	F	2												S	New.
22	H	3												S	New.
23+	H	3												S	New.
24	F	2				X								E	New. 1) Distractor A is not plausible that the SLOW speed for RR Pump 1B would be powered from a different bus than the FAST speed. 2) Distractor D is not plausible that both Bus Duct Cooler Fans would be powered from the same Bus. <u>RESOLUTION:</u> Comments are an enhancement vs being unsat because Distractor A is plausible because different speeds ARE powered from different buses. Licensee edited Distractor D. Sat.
25	H	4												S	New.
26+	F	3												S	New.
27	H	3												U	New. It could be interpreted that the correct answer is "the beginning of DAY shift on July 26", which is not listed as one of the distractors, and thus there is no correct answer. <u>RESOLUTION:</u> Licensee edited distractors to remove more than one reference to 4 days prior to the start of the shift. Sat.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
28	H	3						X							U	New. Question is at the SRO level per 10CFR55.43(b)(6) (since this is a question related to alterations in core configuration), unless there is a Learning Objective for the RO related to this question. <u>RESOLUTION:</u> Licensee identified RO learning objective LP86610.1.19, Sat.
29+	F	3													S	New.
30	H	3	X												U	New. 1) The question stem does not infer that one could be in EOP-2 or EOP-3. It only states that a LOCA and ATWS are present. 2) Only distractor C has specific EOP numbers stated. Another distractor should also have EOP numbers (for question symmetry). <u>NOTE:</u> Question requires a reference. <u>RESOLUTION:</u> The licensee edited the question to remove reference to any specific EOP. Sat.
31	F	3													S	New.
32	H	2													S	New.
33+	H	3													S	New.
34	F	2													S	New.
35	H	3													S	New.
36+	H	3													S	New. <u>NOTE:</u> Question requires a reference.
37	H	2													S	New.
38	H	2													S	New.
39+	F	3													S	New.
40	F	2													S	New.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
41	F	3												S	New.
42	H	3												S	New.
43+	H	3					X							E	New. Distractor C is not plausible that Spent Fuel Pool temperature would rise rapidly with loss of a FC Pump. <u>RESOLUTION:</u> Changed Distractor C to discuss pool level vs pool temperature. Sat.
44	F	2	X											U	New. The Low-Low Set initiation is only associated with 5 of the 16 S/RVs. Thus the term "MOST of the 16 Safety Relief Valves" is not correct, and there is no correct answer. <u>RESOLUTION:</u> This question was changed from unsat to an enhancement because the original wording was confusing for the examiners but the answer was correct. The word "most" was removed. Sat.
45	H	3												S	New. <u>NOTE:</u> Question requires a reference.
46+	H	3				X								U	New. Distractors A and C are not plausible, since they are related to answers that one would get by sending someone inside containment with containment pressure at 1.5 psia or 2.5 psig respectively. It is not conceivable that one would send someone inside containment with a near perfect vacuum of 1.5 psia or with the containment at 2.5 psig. <u>NOTE:</u> Question requires a reference. <u>RESOLUTION:</u> Edited distractors to remove reference to entering the containment. Sat.
47	F	2	X											E	New. Add the words "BY ITSELF" to the question stem (i.e, "Which ONE of the following events BY ITSELF requires ..."). <u>NOTE:</u> Question requires a reference. <u>RESOLUTION:</u> Done. Sat.

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
48	H	3												S	New. <u>NOTE:</u> Question requires a reference.
49+	H	3												S	New.
50	F	3												S	New.
51	H	3												S	New. <u>NOTE:</u> Question requires a reference.
52	H	2												S	New.
53+	H	3												S	New.
54	F	2				X								U	New. Distractors B and D are not plausible that one would partially re-open a valve to close it. <u>RESOLUTION:</u> Edited Distractors to remove reference to re-opening the valve. Sat.
55	F	2												S	New.
56+	H	3												S	New. <u>NOTE:</u> Question requires a reference.
57	H	3												S	New.
58	F	2												S	New.
59+	F	3												S	New.
60	H	3												S	New.
61	H	3												S	New. <u>NOTE:</u> Question requires a reference.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
62	F	3						X							U	New. Question is at the SRO level per 10CFR55.43(b)(4), since this question is related to radiation hazards that may arise. <u>RESOLUTION:</u> Licencee re-wrote question completely. Sat. New question is fundamental vs higher cognitive. New question was worded incorrectly. Question stated that off-site was .5 miles from site boundary. The site boundary is .5 miles from the plant.
63+	F	3				X									E	New. Distractor D is not plausible that one would initiate Halon in the main control room without a fire known to exist. <u>RESOLUTION:</u> Halon is inside the panels not in the control room. Sat.
64	F	3													E	New. <u>NOTE:</u> Question requires a reference.
65	F	2													S	New.
66+	H	3													U	New. An IRM reading of 40 on range 10 corresponds to 12.64% on the APRM channels (per Figure 14 of LP854111-02 which was provided). The explanation for the reason that distractor D is correct states an IRM Range 10 reading of 40 is within the instrument loop tolerance for the APRM Upscale Neutron Trip setpoint of 15%. Is this statement correct, (since a normal instrument loop tolerance for a channel is about 2%, which would not result in a trip signal, since $15\% - 2\% = 13\%$)? <u>RESOLUTION:</u> Licensee edited Stem for clarity and changed distractors completely to ensure there was only one correct answer. The correct answer had to be raised due to a misprint in the training documentation that showed an incorrect power level associated with the IRM reading given in the distractor. Sat.
67	F	2													S	New.
68	H	2													S	New.
69+	F	3													S	New.

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
70	F	2												S	New.
71	F	3												S	New.
72	F	2				X								U	New. Distractors B and D are not plausible that the RWCU system would not isolate if operators are only able to defeat one division before the Differential Flow Timers time out. <u>RESOLUTION:</u> The licensee changed the stem and the distractors to remove the connection between one division of protection and an RWCU isolation. Sat.
73+	F	2												S	New.
74	H	3												S	New.
75	H	2												S	New.
76+	H	3											X	S	New <u>NOTE:</u> Question requires a reference.
77	H	2											X	S	New. <u>NOTE:</u> Question requires a reference.
78	H	2											X	S	New.
79+	H	3											X	S	New. <u>NOTE:</u> Question requires a reference.
80	H	2					X						X	U	New. 1) Distractor D could be interpreted as being correct, since if inspects the zone, then one is essentially also performing a fire watch. 2) In distractors A and B, add the following words after the word "otherwise,": "within 1 hour". <u>NOTE:</u> Question requires a reference. <u>RESOLUTION:</u> Changed distractor D to inspect every 8 hours. Sat.

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
81	H	2		X									X	E	<p>New. 1) In all the distractors, delete the phrase "within 1 hour" or "within 8 hours" as applicable, since the applicants may understand that they are not responsible for knowing Tech Spec actions from memory that are greater than one hour (and thus eliminate distractors C and D from consideration). 2) In the question stem, change "1.2 psid" to "1.1 psid", since a value of 1.1 psid may be more likely thought of as being acceptable (if the applicant confuses this number with the lower Tech Sec limit of -0.2 psid).</p> <p><u>RESOLUTION:</u></p> <p>Licensee made edits. Sat.</p>
82	F	2				X							X	E	<p>New. To make distractor D more plausible, change "rises to 10 times normal" to "rises to 100 times normal". This distractor would still be incorrect since the Max Normal radiation level for an RHR Pump Room is 100 mR/hour per Table R4 on page CL-3-6 of EP-AA-1003 (thus 100 X 100 mR/hour = 10 R/hour, which is still below the Max Safe value of 25 R/hour listed in Table R4).</p> <p><u>NOTE:</u> Question requires a reference.</p> <p><u>RESOLUTION:</u></p> <p>Licensee made changes. Sat.</p>
83+	H	3											X	U	<p>New. To ensure distractor C is correct, add the following at the end of distractor C: "but will be returned to service in 24 hours". Otherwise, one could postulate that HPCS could be returned to service in a short period of time after the 14 days and thus not start a plant shutdown required by Tech Specs.</p> <p><u>RESOLUTION:</u></p> <p>Licensee made changes. Sat.</p>

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
84	H	2											X	E	New. In distractors B and D, change the wording of "(1)" to "A blockage exists somewhere in the SLC Pump 'A' piping", since the explanations for distractors B and D state that the pump high delta P could be due to a blockage in either the suction or discharge of the pump. <u>NOTE:</u> Question requires a reference. <u>RESOLUTION:</u> Changed B and D to read as recommended above. Sat.
85	F	2											X	S	New.
86+	H	2				X							X	E	New. 1) Distractor B is not plausible that a temperature of only 106 deg F could damage demineralizer resin. 2) Change the wording for the first part of distractor C to : "Seal cavity temperatures for the RWCU Pumps will be exceeded". <u>RESOLUTION:</u> Changed Distractors B to discuss a high CCW temp trip which doesn't exist and changed C as recommended above. Sat.
87	H	3											X	S	New.
88	H	3											X	S	New. <u>NOTE:</u> Question requires a reference.
89+	F	3											X	S	New.
90	H	3											X	S	New.
91	F	2				X							X	E	New. Distractor A is not plausible to direct hanging an Adverse Condition Monitoring Tag (i.e., a tag that does not exist). Suggest changing distractor A to: "Initiate a Degraded Equipment Log (DEL) entry for the instrument". <u>RESOLUTION:</u> Changed Distractor A as recommended above. Sat.
92	F	2											X	S	New.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
93+	H	2											X	S	New. <u>NOTE:</u> Question requires a reference.
94	F	3											X	S	New.
95	H	2											X	E	New. Re-word distractor C to : Suspend control rod withdrawal and be in Mode 3 within 12 hours" to more closely reflect ORM 3.3.1.2 requirements. <u>NOTE:</u> Question requires a reference. <u>RESOLUTION:</u> Licensee incorporated the above comment. Sat.
96+	H	3											X	S	New. <u>NOTE:</u> Question requires a reference.
97	H	3											X	S	New. <u>NOTE:</u> Question requires a reference.
98	H	2											X	S	New. <u>NOTE:</u> Question requires a reference.
99+	H	3	X										X	U	New. Since the question stem does not state what the RPV pressure is at the present time, then it is not clear that RPV pressure is above the 138 psig value as stated in Table J of EOP-1A. If pressure is below 138 psig, then distractor D could also be correct. Wanted justification why Distractor C was not also correct. <u>NOTE:</u> Question requires a reference. <u>RESOLUTION:</u> Licensee edited stem to include reactor pressure and edited stem to include prior to ERO activation and distractor C was edited for clarity. Sat.

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
100	H	2											X	E	<p>New. It is not clear that the 375 degF value for the temperature downstream of a lifting SRV would be applicable if the RPV pressure is only 750 psig. Suggest changing question stem so that the plant is at 10% power instead of during plant pressurization at 750 psig to ensure that the 375 degF value is a valid number. This change would also make distractors B and D (related to feedwater heating) more plausible.</p> <p><u>RESOLUTION:</u></p> <p>Stem was changed as recommended above. Sat.</p>