

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	Back- ward	Q= K/A	SRO Only		
1	H	2										Y		S	N
2	F	3										Y		S	B
3	H	2											Y	S	N
4	F	2										Y	Y	S	L NRC
5	H	3	X				X					Y	Y	U	N The stem does not state what the current RPM is on RCIC. This is required to ensure that the speed is not less than 1000 rpm.  Stem was changed to specifically state that turbine speed was 1700.
6	F	2										Y	Y	S	N
7	H	3										Y	Y	S	N
8	H	3										Y	Y	S	N

## Instructions

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

- Enter the level of knowledge (LOK) of each question as either (F)undamental or (H)igher cognitive level.
- 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).
- 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.
  - More than one distractor is not credible.
  - One or more distractors is (are) partially correct (e.g., if the applicant can make unstated assumptions that are not contradicted by stem).
- 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.
- 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).
- Based on the reviewer's judgment, is the question as written (U)nacceptable (requiring repair or replacement), in need of (E)ditorial enhancement, or (S)atisfactory?
- At a minimum, explain any "U" ratings (e.g., how the Appendix B psychometric attributes are not being met).

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	Back- ward	Q= K/A	SRO Only		
9	H	3					X					Y	Y	U	N Could answer (c) could also be correct.  Distractor (c) was modified to be incorrect
10	H	3										N		U	B The K/A is relation between high sup. Pool temp. and sup. Pool cooling, the question does not discuss the high temperature.  The Stem was modified to discuss high suppression pool temperature.
11	F	2										Y	Y	S	N
12	H	3										Y	Y	S	N
13	F	3										Y		S	N
14	F	2										Y		S	N
15	F	2										Y		S	N
16	F	3										Y		S	N
17	H	3										Y		S	N
18	H	3	X									Y		E	B The stem should state that just prior to 0100 the readings were normal.  The stem was changed to state that the plant was operating normally just prior to 0100.
19	H	3										Y		S	N
20	H	3										Y		S	N
21	H	3										Y		S	N
22	H	3										Y		S	N
23	H	2										N		U	N The K/A discuss high temperature. The question does not address high CRDM temperatures.  The question was modified to address CRDM temperatures.
24	F	2										N		S	M
25	H	3										Y		S	M
26	H	3	X									Y		U	B The stem should state using plant procedures because answer b would work but is not in compliance with station procedures.  Using plant procedures was added to the stem.

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	Back- ward	Q= K/A	SRO Only		
27	H	2										Y		S	N
28	F	2										Y		S	N

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	Back- ward	Q= K/A	SRO Only		
29	H	2										Y		S	B
30	H	3										Y		S	N
31	H	3										Y		S	N
32	F	2										N		U	B This has nothing to do with area radiation monitors / system. The question was changed to focus on area radiation.
33	F	2										Y		S	B
34	H	3										Y		S	M
35	F	2										Y		S	N
36	F	2										Y		S	B
37	H	2					X					Y		U	N could ans (a) also be correct? Is this the only procedure that provides guidance? (a) was changed to be incorrect.
38	H	2										Y		S	N
39	H	1.5										Y		S	N
40	F	3										Y		S	B
41	H	3										Y		S	B
42	H	4										Y		S	N
43	H	2										Y		S	M
44	H	2										Y		S	M
45	H	2										Y		S	N
46	H	3	X									Y		E	B Add "and the basis for this," in the stem. The stem was changed.
47	F	3										Y		S	N
48	H	3										Y		S	N

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		
49	H	2										Y		S	N
50	F	2										Y		S	B
51	F	2										Y		E	B Add punctuation to (d). "And" was removed from (d), However, should still add",
52	F	2										Y		S	N
53	F	2										Y		S	N
54	H	3										Y		S	N
55	F	2										N	Y	U	B This K/A is for high drywell pressure. High DW pressure conditions were added into stem.
56	H	3										Y	Y	S	N
57	H	3										Y		S	N
58	H	3										Y		S	N
59	H	3										Y		S	B
60	H	3										Y		S	B
61	H	2										Y		S	L NRC
62	F	2										Y		E	N change stem to say supplied power by ... Stem was changed.
63	H	3										Y		E	N This condition results in a full reactor scram. In addition, the prints state non-coincidence mode.  The prints will not be provided to applicants, wording changed for ease of reading.
64	H	2										Y		S	L NRC
65	H	2										Y		S	N
66	H	3										N		U	N Does not meet the second ½ of the K/A.  The stem was changed to address the second ½ of the K/A.
67	H	4										Y		S	N
68	F	2										Y		S	B

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	Back- ward	Q= K/A	SRO Only		
69	F	2										N		U	<p><b>B</b> The K/A is for detector operation (K5.01). The question is on gamma discrimination, which is the next K/A (K5.02) and has a importance of 2.2*.</p> <p>Question was replaced to address appropriate K/A.</p>
70	F	2										Y		S	<p><b>B</b></p>

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	Back- ward	Q= K/A	SRO Only		
71	F	3										Y		S	B
72	F	2										Y		S	B
73	F	3										Y		S	B
74	H	2										Y		S	N
75	H	3										Y		S	N
76	F	2										Y		S	N
77	H	3										Y		S	N
78	H	3										Y		S	N
79	F	2										N		S	N
80	F	2										N		U	B The question does not address the K/A to monitor and predict changes.  Question changed to meet K/A.
81	F	2										Y		S	N
82	F	2										N		U	N The K/A is to predict the effect a scram has on the turbine / generator and use procedures to correct conditions. The question is a simple knowledge based question.  Question was modified to add operator actions.
83	H	3										Y		S	M
84	H	3										N		U	N Does not meet the second ½ of the K/A.  Question added a second part to determine what operator actions were acceptable.
85	H	4										Y		S	M
86	F	3							X			N		U	N K/A mismatch and would an operator know this information from memory?  Question was change to match K/A.
87	F	3										Y		S	N
88	F	3										Y		S	N
89	H	3										Y		S	N
90	H	3										Y		S	N

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	Back- ward	Q= K/A	SRO Only		
91	F	2										Y		S	N
92	H	2										Y		S	N
93	H	2										Y		S	M
94	F	2										Y		S	N
95	F	3										Y		S	N
96	H	3										Y		S	N
97	H	3										Y		S	N
98	H	3										Y		S	B
99	H	3										Y		S	N
100	H	2										Y		S	N
101	F	2										N		U	B The K/A also states the purpose. This is typically to allow addition flow through the core for cooling.  Question was changed to add purpose for the action.
102	F	2										Y		S	N
103	H	2										Y		S	M
104	H	3										Y		S	B
105	H	4										Y		S	N
106	F	2										Y		S	B
107	F	2										Y		S	B
108	H	3										Y		S	N
109	F	3										Y		S	B
110	F	3										Y		S	N



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	Back- ward	Q= K/A	SRO Only		
111	F	4										Y	Y	S	N
112	F	3										Y	Y	S	N
113	H	3										Y	Y	S	N
114	H	3										Y	Y	S	N
115	F	3										N	Y	U	N This does not test knowledge of shift staffing requirements it test knowledge of fitness for duty.  Question was changed to minimum staffing.
116	F	2										Y	Y	S	N
117	F	2										Y	Y	S	N
118	H	3										Y	Y	S	N
119	H	3										Y	Y	S	N
120	H	3										Y	Y	S	B
121	F	3										Y	Y	S	B
122	H	3										Y		S	M
123	H	4										Y		S	N
124	F	3										Y		S	B
125	H	3										Y		S	N