

**NRC COMMENTS TO THE WRITTEN
EXAMINATION, ES-401-9, FOR THE KEWAUNEE
RETAKE EXAMINATION-AUGUST 2006**

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	H	2											x		S	Bank. (1 of 30 - checked K/A)
2	H	2											x		S	New. (1 of 30 - checked K/A)
3	H	2.5											x		U	New. (1 of 30 - checked K/A) Question ≠ K/A. Modified question.
4	H	2.5											x		S	New. (1 of 30 - checked K/A)
5	F	2.0											x		S	Bank (1 of 30 - checked K/A)
6	H	2.0											x		S	New (1 of 30 - checked K/A)
7	F	2.0											x		S	New (1 of 30 - checked K/A)
8	F	2.0											x		S U	New (1 of 30 - checked K/A) Post exam comment - delete.

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.
 - 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).
- 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)nsatisfactory (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	2.0										x		S	New (1 of 30 - checked K/A)
10	H	2.5											x	U	New. (1 of 30 - checked K/A) Answering this question requires an applicant to have memorized the sequence of actions in the subsequent steps of a procedure, which is not required. Modified question.
11	H	2.0											x	S	New (1 of 30 - checked K/A)
12	H	2.0											x	E	New. (1 of 30 - checked K/A) Add a condition to the stem or initial plant conditions that prevents the applicant from assuming the rupture disk has ruptured and a. is correct. Modified question.
13	F	2.0											x	S	Bank (1 of 30 - checked K/A)
14	F	2.0											x	S	Bank (1 of 30 - checked K/A)
15	H	2.5											x	S	Bank (1 of 30 - checked K/A)
16	H	2.5											x	S	Bank (1 of 30 - checked K/A)
17	F	2.0											x	S	Bank (1 of 30 - checked K/A)
18	F	2.0											x	S	Bank (1 of 30 - checked K/A)
19	F	2.0											x	S	New (1 of 30 - checked K/A)
20	F	2.0											x	S	Bank (1 of 30 - checked K/A)
21	H	2.0											x	S	Modified
22	F	2.0											x	S	New
23	H	2.0											x	E	New. Distractor a. has core exit T/C. Distractor c. has CETs. Modify to look the same, or put (CETs) behind core exit T/C in distractor a. Modified question.
24	H	2.0											x	S	Bank
25	H	2.5											x	S	New
26	H	2.5											x	S	Bank

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			
27	F	2.0											x		U	New. Distractor a. may also be correct, giving two correct answers to this question. Modified stem to eliminate distractor a. as a correct answer.
28	H	2.0											x		S	Bank
29	F	2.5											x		U	Bank. This material is not required to be memorized. Sequence of steps that are not immediate actions steps. Modified stem.
30	H	2.5											x		S	Bank.
31	F	2.0											x		S	Bank
32	F	2.0											x		S	New
33	H	2.0											x		S	New
34	F	2.0											x		S	New
35	F	2.0											x		S	Bank
36	H	2.0											x		S	Bank
37	F	2.0											x		S	New
38	F	1.0											x		U	New. This answer would always be correct and would be expected of an applicant with only minimal training. Replaced question.
39	F	2.0											x		S	New
40	F	2.0											x		S	Bank.
41	H	2.0											x		E	New. Capitalize the names of the Rad Monitor alarms. Rad monitor alarms capitalized.
42	H	2.0											x		S	New.
43	H	2.5											x		S	Bank.
44	H	2.0											x		S	New.
45	H	2.0											x		S	New.
46	H	2.5											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			
47	F	2.5											x		U	New. Question is SRO Only, not for ROs. (ROs don't declare equipment INOP.) Question is not fundamental - higher skill - applicants don't have to have precautions and limitations memorized, but when given one, they should be able to explain the precaution/limitation. The procedure declares the diesel generator inoperable, not the reactor operator. Re-wrote the question to clarify and use the procedure step.
48	F	2.0											x		S	New.
49	H	2.0											x		U S	New. Not a higher skill question. Appears to be a memory/fundamental item. Question has a thought path to get to the correct answer. Question is higher skill.
50	H	2.0													U S	New. Not a higher skill. The question is a memory item from an RNO. Question has a thought path to get to the correct answer. Question is higher skill.
51	F	2.0											x		S	New.
52	H	2.5											x		S	New.
53	H	2.0													U S	Modified. Question ≠ K/A. The K/A asks for knowledge of power supplies. The question asks which pump is started first on a given bus. The given loads have other power supplies. Also, the operators are required to memorize the load auto-sequencer. Question was changed to satisfactory.
54	H	2.0											x		S	New.
55	F	2.0											x		S	New.
56	F	2.5											x		S	Bank.
57	F	1.0													U S	Bank. LOD = 1. Question ≠ K/A. The K/A asks for effects, the question asks for equipment considerations. In order to correctly answer the question, an operator must know the effects of the equipment being used. Question changed to satisfactory.

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			
58	H	2.0				x							x		U S U	Bank. Distractors a. and b. are implausible, making the question an easy 1 out of 2. <i>Even though it is an air leak, cooling the containment would reduce containment pressure making distractor a. plausible. Distractor b. works the other way, but could be plausible to a less-than-competent operator. Question changed to satisfactory. Post exam comment - 2 correct answers.</i>
59	F	2.0											x		S	Bank.
60	F	1.0											x		U	Bank. LOD = 1. GET knowledge, not license operator knowledge. <i>Replaced question.</i>
61	F	1.0											x		U	Bank No correct answer. An RO/SRO may be able to clear the tag. <i>Revised stem. RO/SROs do not clear tags in non-emergency time.</i>
62	H	2.0													U	Bank. The K/A states: Ability to manipulate the console controls as required to operate the facility between shutdown and designated power levels. The question has no control manipulations associated with it, but only use of indications. <i>Replaced question.</i>
63	H	2.0											x		S	Bank.
64	F	2.0											x		S	Bank.
65	F	2.0											x		S	Bank.
66	H	2.0											x		U E	Bank. Not an RO question. SROs select the procedures. <i>Replaced distractor a. with another procedure the ROs have to have entry conditions memorized. Changed the classification from Not an RO question to one unacceptable distractor.</i>
67	H	2.5											x		S	Bank.
68	H	2.5											X		S	Modified.
69	H	2.5											x		S	New.
70	H	2.5											x		S	New.
71	H	2.5											x		S	Bank.
72	H	2.5											x		U	Modified. Not an RO question. SROs select the procedures. <i>Replaced question.</i>

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			
73	F	2.0											x		S	New.
74	H	2.0											x		S	Bank.
75	H	2.0													U-S-U	New. The K/A states: Ability to operate and/or monitor the following as they apply to the (High Containment Radiation): Operating behavior characteristics of the facility. The question asks about action to be taken to control radiation, not monitoring or operating equipment. Doesn't match the K/A. Because the K/A was not clear, the station made a best-guess at writing an acceptable question rather than reject the K/A. Since the question was acceptable as written and partially matched the K/A, grading was changed to Satisfactory. Post exam comment - delete question.
76	H	2.0											x	x	U	New. (1 of 30 - checked K/A) Change COLF to COLD in the stem. Not an SRO ONLY question. Question replaced. COLF corrected.
77	H	2.5											x	x	S	New. (1 of 30 - checked K/A)
78	H	2.5											x	x	E U	New. (1 of 30 - checked K/A) Add plant conditions to establish pre-event conditions. I.E., the rod control system was in a normal 100% power line-up. Added initial plant conditions. Post examination comment - delete question.
79	H	2.5											x	x	U S	New. (1 of 30 - checked K/A) Does not appear to be an SRO ONLY question. ROs should be able to diagnose this condition. Although ROs may be able to make the calculations, they are not required to do so. SROs are specifically required to be able to make these calculations by procedure. Changed from U to S.
80	H	2.0											x	x	S	New. (1 of 30 - checked K/A)
81	F	2.0											x	x	U	Bank. (1 of 30 - checked K/A) Question is not SRO ONLY. Answer comes from a caution in N-RVC-18B which is not required to be memorized. Replaced question.
82	H	2.0											x	x	S	Modified. (1 of 30 - checked K/A)
83	H	2.0											x	x	U E	Bank. (1 of 30 - checked K/A) Distractors b. and c. are not plausible. Venting a ruptured S/G to atmosphere is implausible. Distractor b. is plausible. Because the S/G is isolated, the ruptured S/G would not be discharging to atmosphere. Replace distractor c. Changed question status from unsat to enhancement.

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84	H	2.5											x	x	U S	New. (1 of 30 - checked K/A) Explain why the correct answer is the only correct answer. Under the given conditions the other answers cannot be assumed to be correct as stated in the justification section provided with the question. Changed from U to S.
85	F	2.0											x	x	U	New. (1 of 30 - checked K/A) Question is not SRO ONLY. Answer comes from a subsequent action that is available to ROs. Changed question to require an operability determination.
86	H	2.0												x	U S	New. Question is not SRO ONLY. This is system knowledge. SRO makes the determination of procedure and fill rate which comes from the EOPs and is not system knowledge. Changed to Sat.
87	F	2.0												x	U	New. Question is not SRO ONLY. Immediate actions are required to be memorized by ROs. Replaced question.
88	F	2.0												x	S	New.
89	F	2.0												x	U S	New. Question is not SRO ONLY. Auxiliary operators and ROs should know the requirements to enter containment at power. Plant requires SROs to control access to containment. SRO only responsibility.
90	F	1.0												x	U E	Modified. Question is not SRO ONLY. Question is LOD = 1. Plant requires SRO control access to the control room. SRO responsibility. Replaced weak distractor. Changed from U to E.
91	H	2.0												x	U	New. Question is not SRO ONLY. Replaced question. Post examination comment - question has two correct answers.
92	F	2.5												x	S	New.
93	H	2.0												x	U	New. Question is not SRO ONLY. Replaced question.
94	H	2.0												x	U	Bank. Question is not SRO ONLY. SROs are required to know this material, ROs are not required to know material. This is an SRO job responsibility at the station - not taught in GET.
95	H	2.0												x	S U	New. Post examination comment - delete question.
96	H	2.5												x	S	New.
97	H	2.0												x	S	New.

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		
98	F	2.0											x	S	New.
99	H	2.0											x	S	New.
100	H	2.0											x	S	Modified