

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. B/M/N U/E/S	7.	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
1	H	2												N	S	B, CR, 41.5
2	H	2												B	S	C, CR, 41.5
3	H	2												N	S	A, CR, 41.5
4	H	3												B	S	A, CR, 41.5
5	F	3												N	S	D, CR, 41.10
6	H	2												N	S	D, CR, 41.14
7	F	3												N	S	C, CR, 41.10
8	H	3												B	S	B, CR, 41.5
9	F	2												N	S	A, CR, 41.10
10	F	4												B	S	D, CR, 41.5

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).
- Enter question source: (B)ank, (M)odified, or (N)ew. Check that (M)odified questions meet criteria of ES-401 Section D.2.f.
- 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).

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11	F	3												A, CR, 51.5
12	F	3												C, CR, 41.10
13	H	3										U		C, CR, 41.5 – This is a KA mismatch because it does not involve how saturation conditions affect a plant system. This question is ok after discussing with facility.
14	H	3										U		B, CR, 41.7 – This is a KA mismatch because the question does not test on the ability to operate and/or monitor the RWST and VCT valves given a loss of power. This question is ok after discussing with facility.
15	F	3												C, CR, 41.7
16	H	3										U		D, CR, 43.5 – This question tests on selecting the correct procedure given a set of plant conditions. This makes it an SRO only question. In addition, the question does not test on evaluating a system or plant component. This question was revised.
17	H	3										U		B, CR, 41.10 – This question is a KA mismatch because it does not test on the reason for the response to a loss of emergency recirculation. This question was revised.
18	H	4												C, CR, 41.5
19	F	3												C, CR, 41.1
20	H	3					E							A, CR, 41.6 – An argument could be made the rod would be conservatively declared inoperable making D also correct. CAF After discussing with facility, this question is ok as written.
21	H	3				E								B, CR, 41.7 – Explain how distractors A and C are credible. The distractors were changed.
22	H	3												C, CR, 41.6
23												U		D, CR, 41.7 – This question is a KA mismatch because it does not test on the reason, but rather the system response. This question is ok as written.
24	F	3												B, CR, 41.13
25	H	3												A, CR, 41.5

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26	H	3										B	S	D, CR, 41.10
27	F	3												A, CR, 41.10
28	H	3										B	S	A, CR, 41.3
29	F	3										N	S	D, CR, 41.7
30	F	3										E	E	D, CR, 41.10 – Is the level requirement related to dilution concerns? Also explain why this is an RO question since the answer is based on the tech specs. CAF A new question was written.
31	F	2												C, CR, 41.10
32	H	3										N	S	B, CR, 41.5
33	F	3										B	S	C, CR, 41.7
34	F	3										N	S	A, CR, 41.3
35	F	3										N	S	B, CR, 41.6
36	H	3										M	S	A, CR, 41.7
37	H	3					E					B	E	D, CR, 41.7 – Could distractor B be argued as correct if 'slow' is preselected for the sequencer? CAF This is ok as written since it doesn't matter what is preselected .
38	H	3												C, CR, 41.8
39	H	3										N	S	C, CR, 41.10
40	F	2										B	S	D, CR, 41.10
41	H	3										N	S	D, CR, 41.7
42	H	3										N	S	A, CR, 41.10
43	H	3										N	S	B, CR, 41.5
44	H	3										B	S	A, CR, 41.7
45	F	3										E	E	B, CR, 43.2 – This looks like an SRO Only question in that it is testing "below the line" in the tech specs. Recommend changing the reference. This question was be replaced.
46	H	3										N	S	C, CR, 41.7

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47	H	4												N	S	C, CR, 41.7
48	F	3												N	S	A, CR, 41.7 – Delete the “only” from the second sentence in the stem. This was done.
49	F	3												B	S	D, CR, 41.11
50	F	3												N	S	B, CR, 41.10
51	F	4												N	S	B, CR, 41.10
52	F	3												N	S	C, CR, 41.10
53	H	3												N	E S	C, CR, 41.5 – Recommend the first sentence in the stem read “Callaway is at 100% steady state when a loss of Instrument Air occurs.” The correction was made.
54	F	3			U									B	U S	D, CR, 41.4 – This question is unsat because each of the distractors are True/False statements. This question was revised.
55	F	3												N	S	A, CR, ? – CAF, Is this RO knowledge? This question is ok as written.
56	H	3												N	S	B, CR, 41.10
57	H	3												B	S	A, CR, 41.5
58	F	3												B	S	C, CR, 41.7
59	H	3											E	N	E S	D, CR, 41.10 – Remove the procedure selection part of the question as this SRO knowledge. This question was revised.
60	H	3												N	S	B, CR, 41.4
61	H	3												B	S	C, CR, 41.5
62	H	3												N	S	D, CR, 41.6
63	F	3										U		B	U S	B, CR, 41.4 – This question is a KA mismatch because it does not test on alarm and interlock setpoint checks or adjustments. Also, distractor D could also be argued as correct even though it is not in the At the Control area. This question is ok as written after discussing with facility.

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64	H	3												S	A, CR, 41.4
65	F	3												S	A, CR, 41.4
66	F	2												S	B, CR, 41.10 – Reword distractor B to read, "Transfer your escort duties to the Shift Clerk, who is not currently escorting anyone."
67	F	3										U		U S	C, CR, 41.10 – This question is a KA mismatch because it is not generic. Rewrote question.
68	F	2												S	B, CR, 41.10 – Place each of the distractors in quotes. Edit made.
69	F	3										U		U S	C, CR, 41.10 - This question is a KA mismatch because it is not generic. This question was rewritten.
70	F	3												S	D, CR, 41.10
71	F	3												S	C, CR, 41.12
72	F	3												S	B, CR, 41.12
73	F	3												S	A, CR, 41.11
74	F	2												S	A, CR, 41.10
75	H	3												S	D, CR, 41.10
76	H	3											U	U S	A, CR, 41.10 – This is an RO question since it tests on a specific operator action. This question was revised.
77	H	3												S	B, CR, 43.5
78	H	3												U S	C, CR, 41.10 – This is an RO question because it is testing on a specific operator action. This question will be revised.
79	H	3												S	D, CR, 43.5
80	H	3												S	C, CR, 43.5
81	H	3												S	A, OR, 43.5
82	H	3												S	C, OR, 43.5
83	H	3												S	B, CR, 43.5

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84	H	3											U	N	U S C, CR, 41.10 – This is an RO question because it is testing on specific operator actions. This question was revised.
85	H	3										U		N	U S C, CR, 43.5 – This is a KA mismatch because it does not involve determining operability and/or availability of safety related equipment. This question is ok as written.
86	H	3											U	N	D, CR, 41.10 – This is an RO question because it is testing on specific operator actions. This question was revised.
87	H	3				E								N	A, CR, 43.5 – Distractors B and C are not credible since there is no electrical power to start the pumps. This question is ok as written.
88	H	3												N	C, CR, 43.5
89	H	3												B	A, CR, 43.2
90	H	3											U	N	D, CR, 41.10 – This is an RO question because it is testing on specific operator actions. This question was revised.
91	H	3											U	N	B, CR, 41.10 – This is an RO question because it is testing on specific operator actions. A new question was written.
92	F	3												N	C, CR, 43.7
93	H	3											U	B	A, CR, 41.10 – This is an RO question because it is testing on specific operator actions. This question was rewritten.
94	H	2												B	C, OR, 43.3
95	F	2												N	D, CR, 43.7
96	F	3												N	C, CR, 41.10
97	F	2												N	A, CR, 43.5
98	F	3												N	B, CR, 43.2

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99	F	3											U	U	A, CR, 41.10 – This is an RO question because it is testing on specific operator actions. With is KA, it will be difficult to craft an SRO question so I recommend selecting a new KA.
100	F	3											U	S	A new KA was selected and a new question was written.
RO TOTALS: B= 26 F= 37 (49%) E= 1 M= 1 H= 38 (51%) U= 10 N= 48 Additional Notes:															
SRO TOTALS: B= 5 F= 7 (28%) E= M= 0 H= 18 (72%) U= 10 N= 20 Additional Notes:															
GENERAL COMMENTS: 1. Bank questions are indicated by B; Modified are indicated by M; New questions are indicated by N. 2. Chief Examiner comments are indicated in <i>blue</i>. 3. Average difficulty is <u>2.85</u> on the RO exam and <u>2.88</u> on the SRO exam. 4. The 10CFR55.41/43 distribution is: RO / SRO 41.1 = 1 43.1 = 0 41.2 = 2 43.2 = 2 41.3 = 2 43.3 = 1 41.4 = 5 43.4 = 0 41.5 = 16 43.5 = 10 41.6 = 4 43.6 = 0 41.7 = 14 43.7 = 2 41.8 = 1 41.9 = 0 41.10 = 24 41.11 = 2 41.12 = 2 41.13 = 1															

41.14 = 1

5. The answer distribution is: RO / SRO

A = 19 (25%)	/	8 (32%)
B = 18 (24%)	/	4 (16%)
C = 21 (28%)	/	9 (36%)
D = 17 (23%)	/	4 (16%)

6. There are 4 questions with references provided.