

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws				5. Other		7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A		
1	F	2										N	S	C, CR, 41.10
2	H	4										N	S	A, CR, 41.2
3	F	3										N	S	C, CR, 41.7
4	H	2										N	S	B, CR, 41.4
5	F	3										N	S	C, CR, 41.7
6	F	2										N	S	B, CR, 41.7
7	F	2										N	S	D, CR, 41.4
8	H	3										N	S	D, CR, 41.4
9	F	2										N	S	D, CR, 41.10
10	H	3										N	S	B, CR, 41.11

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).

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws				5. Other		6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only		
11	H	3												N	E S D, OR, 41.10 – Change the stem to read “Based on the conditions, why is drywell sprays not allowed?” Also, eliminate the yes/no from the distractors. After discussing the with the exam author, this question will be left as originally drafted.
12	F	2												N	S B, CR, 41.7
13	F	3												N	S A, CR, 41.5
14	F	3												M	S B, OR, 41.10
15	F	3												N	E S A, CR, 41.5 – Change the stem to read, “The reason EOP-4 (Primary Containment Control) directs HPCI to be tripped if torus level cannot be maintained greater than 10.75 feet is to prevent.” Change was be made as suggested.
16	H	4												N	S B, CR, 41.7
17	H	3												N	S C, CR, 41.10
18	F	2												N	S D, CR, 41.11
19	F	3												N	S A, CR, 41.8
20	F	4												N	S B, CR, 41.10
21	H	3												N	E A, CR, 41.10 – Change distractor A to read, “...due to the imminent loss of the main condenser.” Revised the question as suggested.
22	F	3												N	S D, CR, 41.5
23	H	3												N	S C, CR, 41.6
24	H	3												N	E S A, CR, 41.9 – The way the stem reads, it sounds like a Div II isolation occurred. This would make one half of the MSIVs to close. Will discuss with author. Will clarify the stem. Stem was clarified
25	F	2												N	S A, CR, 41.3
26	H	2												N	S B, CR, 41.7
27	F	4												N	S D, CR, 41.7
28	H	4												N	S C, CR, 41.7

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws			4. Job Content Flaws				5. Other		6.	7.	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only	
29	F	3												C, CR, 41.8
30	H	2												B, CR, 41.5
31	F	2												A, CR, 41.7
32	F	3												C, CR, 41.7
33	F	2												D, CR, 41.6
34	H	3												B, CR, 41.7
35	H	3												B, CR, 41.6
36	H	3												C, CR, 41.7
37	F	2												B, CR, 41.6
38	H	3												B, CR, 41.2
39	F	3												A, CR, 41.6
40	F	2												D, CR, 41.6
41	H	4												D, CR, 41.7
42	F	3												A, CR, 41.10
43	F	3												D, CR, 41.9
44	H	3				U								D, CR, 41.3 – Distractors A and B are not credible. Will revise the distractors. The distractors were revised.
45	F	3												C, CR, 41.4
46	F	3												C, CR, 41.7
47	H	2				U								B, CR, 41.7 – Distractors A and C are not credible. This question will be revised. The question was revised.
48	H	3												C, OR, 41.10
49	F	4												B, CR, 41.4
50	H	2												D, CR, 41.4

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws			4. Job Content Flaws				5. Other	6.	7.	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only
51	H	2										S	C, CR, 41.7
52	F	2	E									E S	D, CR, 41.4 – Delete the conditions in the stem with the exception of the fill in the blank sentence at the end as the initial conditions are irrelevant to the question. This question will be revised as recommended. The question was revised.
53	H	3										U S	B, CR, 41.4 – This question is a KA mismatch because it does not address the effect the malfunction will have on CCW. This question will be revised to focus on RBCW (called CCWS in the KA catalogue). The question was rewritten.
54	H	3										S	A, CR, 41.4
55	F	2										S	A, CR, 41.6
56	H	2										S	C, CR, 41.6
57	F	3										S	D, CR, 41.9
58	F	3										S	C, CR, 41.6
59	H	3										S	C, CR, 41.7
60	H	3										S	D, CR, 41.7
61	H	3										S	C, CR, 41.5
62	F	3										S	A, CR, 41.4
63	H	3										S	A, CR, 41.11
64	F	4										S	D, CR, 41.11
65	F	3										S	B, CR, 41.5
66	F	3										S	D, CR, 41.10
67	F	2										S	D, CR, 41.10
68	H	3										S	C, CR, 41.10
69	F	2										S	B, CR, 41.10
70	H	2										S	B, CR, 41.10
71	F	2										S	A, CR, 41.10

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws				5. Other	6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only	
72	F	3											S	B, CR, 41.12
73	F	3											S	D, CR, 41.11
74	F	3										U	U S	B, CR, 43.10 – This is a KA mismatch because it is not generic on how to verify an alarm setpoint. Will revise the question to match the KA. The question was revised.
75	F	2											S	B, CR, 41.10
76														There is no SRO exam.
77														
78														
79														
80														
81														
82														
83														
84														
85														
86														
87														
88														
89														
90														
91														
92														
93														
94														

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only		Explanation
95															
96															
97															
98															
99															
100															
<div>RO TOTALS:</div> <div> <div>B= 2 (3%)</div> <div>F= 43 (57%)</div> <div>E= 4</div> </div> <div> <div>M= 0</div> <div>H= 32 (43%)</div> <div>U= 4</div> </div> <div> <div>N= 73 (97%)</div> </div> <div>Additional Notes:</div>															
<div>SRO TOTALS:</div> <div> <div>B=</div> <div>F=</div> <div>E=</div> </div> <div> <div>M=</div> <div>H=</div> <div>U=</div> </div> <div> <div>N=</div> </div> <div>Additional Notes:</div>															
<div>GENERAL COMMENTS:</div> <div> <div>1. Bank questions are indicated by <b>B</b>; Modified are indicated by <b>M</b>; New questions are indicated by <b>N</b></div> <div>2. Chief Examiner follow-up comments are indicated in <i>blue</i>.</div> <div>3. Average difficulty is <u>2.7</u> on the RO exam and <u>na</u> on the SRO exam. These values fall within the expected range for this reviewer</div> <div>4. The 10CFR55.41/43 distribution is: RO / SRO</div> <div> <div>41.1 = 0</div> <div>41.2 = 3</div> <div>41.3 = 2</div> <div>41.4 = 10</div> <div>41.5 = 6</div> <div>41.6 = 9</div> <div>41.7 = 18</div> <div>41.8 = 2</div> <div>41.9 = 3</div> <div>41.10 = 17</div> <div>41.11 = 5</div> <div>43.1 =</div> <div>43.2 =</div> <div>43.3 =</div> <div>43.4 =</div> <div>43.5 =</div> <div>43.6 =</div> <div>43.7 =</div> </div> </div>															

ES-401	JAF-2012-09	7	Form ES-401-9
	<p>41.12 = 2 41.13 = 0 41.14 = 0</p> <p>5. The answer distribution is: A = 15 (20%) / B = 29 (39%) / C = 18 (24%) / D = 13 (17%) /</p> <p>6. There are <u>3</u> questions with attachments provided.</p> <p>7. The distribution of correct answers for distractor B is high. Will have the author revise the distribution.</p> <p>7. This exam was reviewed by S. Garchow on July 23-24, 2012.</p>		