

PERRY
INITIAL LICENSE EXAM

MARCH 5 THRU 13, 2002

Form ES-401-9, "Written Examination
Review Worksheet"

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	3												S	Q=K/A and reference material reviewed.
2.*	F	3												S	Q=K/A and reference material reviewed.
3.*	F	3					X							U	See attached comments, Q=K/A, and, reference material reviewed.
4.*	F	2												E	See attached comments, Q=K/A, and reference material reviewed.
5.*	H	3												S	Q=K/A and reference material reviewed.
6.*	F	3												E	See attached comments, Q=K/A, and, reference material reviewed.
7.*	F	3												S	Q=K/A and reference material reviewed.
8.*	H	3												S	Q=K/A and reference material reviewed.
9.*	H	3												S	Q=K/A and reference material reviewed.
10.*	F	3												S	Q=K/A and reference material reviewed.

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 the appropriate box if the sampled question does not match the approved K/A or an SRO-only question is not at the SRO level.~~
- 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?
- For any "U" ratings, at a minimum, explain how the Appendix B psychometric attributes are not being met.

* Question used for "30 question" initial review.

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		
11.*	H	4												S	Q=K/A and reference material reviewed.
12.*	H	3												S	Q=K/A and reference material reviewed.
13.*	H	4												S	Q=K/A and reference material reviewed.
14.*	F	2												S	Q=K/A and reference material reviewed.
15.*	F	3				X								U	See attached comments, Q=K/A, and reference material reviewed.
16.*	H	3												S	Q=K/A and reference material reviewed.
17.*	F	3					X							U	See attached comments, Q=K/A, and reference material reviewed.
18.*	H	3												S	Q=K/A and reference material reviewed.
19.*	F	3					X							U	See attached comments, Q=K/A, and reference material reviewed.
20.*	F	3												S	Q=K/A and reference material reviewed.
21.*	H	3					X							U	See attached comments, Q=K/A, and reference material reviewed.
22.*	H	3												S	Q=K/A and reference material reviewed.
23.*	H	3												S	Q=K/A and reference material reviewed.
24.*	F	3												S	Q=K/A and reference material reviewed.
25.*	F	4												S	Q=K/A, and reference material reviewed.
26.*	H	4												E	See attached comments, Q=K/A, and reference material reviewed.
27.*	H	3				X								U	See attached comments, Q=K/A, and reference material reviewed.
28.*	H	3												E	See attached comments, Q=K/A, and reference material reviewed.
29.*	H	3												S	Q=K/A and reference material reviewed.
30.*	H	3												S	Q=K/A and reference material reviewed.

* Question used for "30 question" initial review.

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		
31.	H	2												E	See attached comments, Q=K/A, and reference material reviewed.
32.	F	3												S	Q=K/A, and reference material reviewed.
33.	H	3					X							U	See attached comments, Q=K/A, and reference material reviewed.
34.	H	3												S	Q=K/A and reference material reviewed.
35.	H	3					X							U	See attached comments, Q=K/A, and reference material reviewed.
36.	F	3										X		U	See attached comments, Q=K/A, and reference material reviewed.
37.	F	3					X							U	See attached comments, Q=K/A, and reference material reviewed.
38.	H	4												S	Q=K/A and reference material reviewed.
39.	F	3					X							U	See attached comments, Q=K/A, and reference material reviewed.
40.	H	2												S	Q=K/A and reference material reviewed.
41.	H	3					X							U	See attached comments, Q=K/A, and reference material reviewed.
42.	F	3												S	Q=K/A and reference material reviewed.
43.	F	3					X							U	See attached comments, Q=K/A, and reference material reviewed.
44.	H	4												S	Q=K/A and reference material reviewed.
45.	H	3												S	Q=K/A and reference material reviewed.
46.	F	5						X						U	See attached comments, Q=K/A, and reference material reviewed.
47.	H	3												S	Q=K/A and reference material reviewed.
48.	F	5						X						U	See attached comments, Q=K/A, and reference material reviewed.

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		
49.	F	3												S	Q=K/A and reference material reviewed.
50.	H	3										X		U	See attached comments, Q=K/A, and reference material reviewed.
51.	F	3												E	See attached comments, Q=K/A, and reference material reviewed.
52.	H	3												S	Q=K/A and reference material reviewed.
53.	F	5						X						U	See attached comments, Q=K/A, and reference material reviewed.
54.	F	5						X						U	See attached comments, Q=K/A, and reference material reviewed.
55.	H	3												S	Q=K/A and reference material reviewed.
56.	F	3												E	See attached comments, Q=K/A, and reference material reviewed.
57.	H	3												E	See attached comments, Q=K/A, and reference material reviewed.
58.	H	3												S	Q=K/A and reference material reviewed.
59.	F	3												S	Q=K/A and reference material reviewed.
60.	F	3					X							U	Q=K/A and reference material reviewed.
61.	H	3												S	Q=K/A and reference material reviewed.
62.	F	3												S	Q=K/A and reference material reviewed.
63.	H	3												S	Q=K/A and reference material reviewed.
64.	H	3												E	See attached comments, Q=K/A, and reference material reviewed.
65.	H	2												S	Q=K/A and reference material reviewed.
66.	H	3												S	Q=K/A and reference material reviewed.

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		
67.	F	3												S	Q=K/A and reference material reviewed.
68.	H	5						X						U	See attached comments, Q=K/A, and reference material reviewed.
69.	F	2										X		U	See attached comments, Q=K/A, and reference material reviewed.
70.	F	3												S	Q=K/A and reference material reviewed.
71.	F	3												S	Q=K/A and reference material reviewed.
72(ro).	H	3												S	Q=K/A and reference material reviewed.
73(ro).	H	3												S	Q=K/A and reference material reviewed.
74(ro).	F	2					X							U	See attached comments, Q=K/A, and reference material reviewed.
75(ro).	F	2												S	Q=K/A and reference material reviewed.
76(ro).	F	3												S	Q=K/A and reference material reviewed.
77(ro).	F	5						X						U	See attached comments, Q=K/A, and reference material reviewed.
78(ro).	H	3												S	Q=K/A and reference material reviewed.
79(ro).	H	2												E	See attached comments, Q=K/A, and reference material reviewed.
80(ro).	F	3												S	Q=K/A and reference material reviewed.
81(ro).	F	3												S	Q=K/A and reference material reviewed.
82(ro).	H	4												S	Q=K/A and reference material reviewed.
83(ro).	H	4												S	Q=K/A and reference material reviewed.
84(ro).	H	3												S	Q=K/A and reference material reviewed.

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		
85(ro).	H	3												E	See attached comments, Q=K/A, and reference material reviewed.
86(ro).	F	3												S	Q=K/A, and reference material reviewed.
87(ro).	H	3												S	Q=K/A and reference material reviewed.
88(ro).	F	2												S	Q=K/A and reference material reviewed.
89(ro).	F	3												S	Q=K/A and reference material reviewed.
90(ro).	H	4												S	Q=K/A and reference material reviewed.
91(ro).	H	3												E	See attached comments, Q=K/A, and reference material reviewed.
92(ro).	F	2												S	Q=K/A and reference material reviewed.
93(ro).	F	3												S	Q=K/A and reference material reviewed.
94(ro).	F	3												S	Q=K/A and reference material reviewed.
95(ro).	F	3												S	Q=K/A and reference material reviewed.
96(ro).	F	3												S	Q=K/A and reference material reviewed.
97(ro).	H	3												S	Q=K/A and reference material reviewed.
98(ro).	H	3												S	Q=K/A and reference material reviewed.
99(ro).	F	3					X							U	See attached comments, Q=K/A, and reference material reviewed.
100(ro).	F	3												S	Q=K/A and reference material reviewed.
72(sro).	H	3											X	E	See attached comments, Q=K/A, and reference material reviewed.
73(sro).	F	3					X						X	U	See attached comments, Q=K/A, and reference material reviewed.

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		
74(sro).	F	3												S	Q=K/A and reference material reviewed.
75(sro).	H	3												S	Q=K/A and reference material reviewed.
76(sro).	H	3												S	Q=K/A and reference material reviewed.
77(sro).	H	3												S	Q=K/A and reference material reviewed.
78(sro).	H	3												S	Q=K/A and reference material reviewed.
79(sro).	H	4												S	Q=K/A and reference material reviewed.
80(sro).	H	3												U	See attached comments, Q=K/A, and reference material reviewed.
81(sro).	F	3												S	Q=K/A and reference material reviewed.
82(sro).	F	3												S	Q=K/A and reference material reviewed.
83(sro).	F	3				X							X	U	See attached comments, Q=K/A, and reference material reviewed.
84(sro).	H	3												S	Q=K/A and reference material reviewed.
85(sro).	H	3												S	Q=K/A and reference material reviewed.
86(sro).	H	3											X	E	See attached comments, Q=K/A, and reference material reviewed.
87(sro).	H	3											X	E	See attached comments, Q=K/A, and reference material reviewed.
88(sro).	F	3												E	See attached comments, Q=K/A, and reference material reviewed.
89(sro).	F	3												S	Q=K/A and reference material reviewed.
90(sro).	F	2											X	U	See attached comments, Q=K/A, and reference material reviewed.
91(sro).	F	2												E	See attached comments, Q=K/A, and reference material reviewed.

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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		
92(sro).	H	3											X	U	See attached comments, Q=K/A, and reference material reviewed.
93(sro).	H	4												E	See attached comments, Q=K/A, and reference material reviewed.
94(sro).	F	3										X		U	See attached comments, Q=K/A, and reference material reviewed.
95(sro).	H	4												S	Q=K/A and reference material reviewed.
96(sro).	H	3												S	Q=K/A and reference material reviewed.
97(sro).	H	4												S	Q=K/A and reference material reviewed.
98(sro).	H	3												E	See attached comments, Q=K/A, and reference material reviewed.
99(sro).	H	3												S	Q=K/A and reference material reviewed.
100(sro).	F	3												S	Q=K/A and reference material reviewed.

Comments on PERRY Written Exam Material

Question Number	Comment(s)
<p>3.</p> <p>UNSAT₁</p>	<p><u>NRC:</u> Psychometric Flaw; one or more distractors are partially correct. Distractor "D" is also correct. A low SFP level could cause the SFP surge tank level to decrease resulting in a FPCC pump trip.</p> <p><u>LICENSEE RESPONSE:</u> The licensee modified distractor "D" to be <u>clearly</u> wrong.</p>
<p>4.</p>	<p><u>NRC:</u> Get rid of "Note." You didn't give a partial list as a possible answer.</p> <p><u>LICENSEE RESPONSE:</u> The licensee agreed and deleted this from the question.</p>
<p>6.</p>	<p><u>NRC:</u> This is a MEMORY LEVEL question. The applicant is expected to know the automatic and immediate actions for annunciators, including MSL high rads.</p> <p><u>LICENSEE RESPONSE:</u> The licensee agreed and changed the designation to MEMORY level.</p>
<p>15.</p> <p>UNSAT₂</p>	<p><u>NRC:</u> Psychometric Flaw; distractors "B" and "C" are implausible.</p> <p><u>LICENSEE RESPONSE:</u> The licensee agreed and improved the distractors for plausability.</p>
<p>17.</p> <p>UNSAT₃</p>	<p><u>NRC:</u> Psychometric Flaw; one or more distractors are partially correct. Distractor "B" is also correct. "Minimizing the amount of water injected into the reactor vessel" REGARDLESS of the source is synonymous with "preventing flooding of the main steam lines."</p> <p><u>LICENSEE RESPONSE:</u> The licensee modified distractors "B" and "D" to be <u>clearly</u> wrong.</p>

Comments on PERRY Written Exam Material

Question Number	Comment(s)
<p align="center">19.</p> <p align="center">UNSAT₄</p>	<p><u>NRC:</u> Psychometric Flaw; one or more distractors are partially correct. Distractor "C" is also correct. "continue executing PEI-B13" is synonymous with "re-enter PEI-B13."</p> <p><u>LICENSEE RESPONSE:</u> The licensee modified distractor "C" to be <u>clearly</u> wrong.</p>
<p align="center">21.</p> <p align="center">UNSAT₅</p>	<p><u>NRC:</u> Psychometric Flaw; one or more distractors are partially correct. Distractor "D" is also correct. The system isolates at a tank pressure of 9- psig. The stem states that the IA system is at 89 psig. This is too close to the set point. The valves may have not closed yet.</p> <p><u>LICENSEE RESPONSE:</u> The licensee modified the stem and distractor "D" to ensure the distractor was <u>clearly</u> wrong.</p>
<p align="center">26.</p>	<p><u>NRC:</u> State "half-scam" in distractors "C" and "D."</p> <p><u>LICENSEE RESPONSE:</u> The licensee agreed and modified the distractors to include the term "half-scam."</p>
<p align="center">27.</p> <p align="center">UNSAT₆</p>	<p><u>NRC:</u> Psychometric Flaw; distractors "A" and "D" are implausible. When would power decrease and period remain stable and positive? When would power rise yet period be negative?</p> <p><u>LICENSEE RESPONSE:</u> The licensee modified distractors "A" and "D" to be "more plausible."</p>

Comments on PERRY Written Exam Material

Question Number	Comment(s)
28.	<p><u>NRC:</u> Will reactor pressure go from 1090 to <1083 in 25 seconds or less (particularly under ATWS conditions)? If not, one or more distractors would be correct.</p> <p><u>LICENSEE RESPONSE:</u> The licensee will enhance the stem to make the 20 second time frame, discussed in the stem, clear.</p>
31.	<p><u>NRC:</u> By giving a value of suppression pool level and temperature right on the line, the LOD is < 2.0. However, if you gave values between such that the applicant would have to "higher" or "lower" IAW the graph, that would increase LOD.</p> <p><u>LICENSEE RESPONSE:</u> The licensee will enhance the question by providing values that require application of the notes on the graph to interpret.</p>
33. UNSAT₇	<p><u>NRC:</u> Psychometric Flaw; one or more distractors are partially correct. Distractor "C" is also correct. The question asks for the "most effective" method. Distractors "A" and "B" would not result in rod motion thus would not be effective. The methods described in distractors "C" and "D" would cause rod motion but how would the applicant determine if "C" or "D" were the most effective?</p> <p><u>LICENSEE RESPONSE:</u> The licensee modified distractor "C" to be <u>clearly</u> wrong.</p>

Comments on PERRY Written Exam Material

Question Number	Comment(s)
<p align="center">35. UNSAT₈</p>	<p><u>NRC:</u> Psychometric Flaw; no correct answer is provided. The basis provided in the answer only applies under DBA conditions. Since DBA conditions do not exist, the basis for LLS is simply to minimize valve cycling and prolong the life of the SRVs.</p> <p><u>LICENSEE RESPONSE:</u> The licensee modified the correct answer, "A," to be based on the basis provided in the student text for LLS.</p>
<p align="center">36. UNSAT₉</p>	<p><u>NRC:</u> The question does not match the referenced K/A. The K/A concerns reactor low water level and the reasons for spray cooling. The question simply asks which system responds to the conditions in the stem. The applicant need only know that HPCS initiated. No knowledge of the reasons for the concept of spray cooling is required to answer the question.</p> <p><u>LICENSEE RESPONSE:</u> The licensee re-wrote the question and provided it to the NRC for review. The re-written question was also unsat, in that, it was considered a memory level question concerning ECCS acceptance criteria from 10 CFR 50. The licensee again re-wrote the question and was able to develop a question that met the K/A.</p>
<p align="center">37. UNSAT₁₀</p>	<p><u>NRC:</u> Psychometric Flaw; one or more distractors are partially correct. Distractors "C" is also be correct. The basis states that the temperature limits are based on "equipment qualifications." Why doesn't this include the qualifications of the cooling units?</p> <p><u>LICENSEE RESPONSE:</u> The licensee modified distractor "C" to be <u>clearly</u> wrong.</p>

Comments on PERRY Written Exam Material

Question Number	Comment(s)
<p>39.</p> <p>UNSAT₁₁</p>	<p><u>NRC:</u> Psychometric Flaw; one or more distractors are partially correct. Distractor "A" is also correct. "Maintenance representatives" assigned to a crew are typically also "operating representatives."</p> <p><u>LICENSEE RESPONSE:</u> The licensee modified distractor "A" to be <u>clearly</u> wrong.</p>
<p>41.</p> <p>UNSAT₁₂</p>	<p><u>NRC:</u> Psychometric Flaw; one or more distractors are partially correct. Distractor "C" may also be correct. Won't run out eventually lead to cavitation thus distractor "C" would also be correct.</p> <p><u>LICENSEE RESPONSE:</u> The licensee included pump flow information in the stem that precludes the concept of run-out from being a possible answer.</p>
<p>43.</p> <p>UNSAT₁₃</p>	<p><u>NRC:</u> Psychometric Flaw; one or more distractors are partially correct. Distractor "A" is also correct. Reactor pressure less than 250 psig would prevent an operator from manually opening the SRV.</p> <p><u>LICENSEE RESPONSE:</u> The licensee replaced this question. The new question meets NUREG-1021 requirements.</p>
<p>46.</p> <p>UNSAT₁₄</p>	<p><u>NRC:</u> Tech Spec basis questions are not appropriate for an RO exam. It would; however, be considered an "SRO only" question.</p> <p><u>LICENSEE RESPONSE:</u> The licensee decided to use this as-is on the SRO exam. The proposed replacement question for the RO exam did not meet the intent of the K/A. The replacement question meets NUREG-1021 requirements.</p>

Comments on PERRY Written Exam Material

Question Number	Comment(s)
<p style="text-align: center;">48.</p> <p style="text-align: center;">UNSAT₁₅</p>	<p><u>NRC:</u> This EOP basis question is not appropriate for an RO exam. It would; however, be considered an "SRO only" question.</p> <p><u>LICENSEE RESPONSE:</u> The licensee decided to use this as-is on the SRO exam. Modified the RO version to test at the appropriate level.</p>
<p style="text-align: center;">50.</p> <p style="text-align: center;">UNSAT₁₆</p>	<p><u>NRC:</u> The question does not match the referenced K/A. The K/A concerns manipulation of controls. The questions tests the applicant's knowledge of a procedural limitation on rod withdrawal.</p> <p><u>LICENSEE RESPONSE:</u> The licensee replaced this question. The proposed replacement had two correct answers. The licensee replaced it with a question from their bank. The new question meets NUREG-1021 requirements.</p> <p><u>NRC:</u> Not modified in accordance with NUREG-1021. In order for a question to be considered modified, IAW NUREG-1021, you must:</p> <ul style="list-style-type: none"> • Change at least 1 pertinent condition in the stem; and • Change at least 1 distractor. <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> • Change the conditions in the stem such that one of the three distractors in the original question becomes the correct answer. <p style="text-align: center;">In this case, no pertinent condition in the stem was changed.</p> <p><u>LICENSEE RESPONSE:</u> The licensee agreed and changed the designation to BANK.</p>

Comments on PERRY Written Exam Material

Question Number	Comment(s)
<p>51.</p>	<p><u>NRC:</u> Not modified in accordance with NUREG-1021. In order for a question to be considered modified, IAW NUREG-1021, you must:</p> <ul style="list-style-type: none"> • Change at least 1 pertinent condition in the stem; and • Change at least 1 distractor. <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> • Change the conditions in the stem such that one of the three distractors in the original question becomes the correct answer. <p>In this case, no pertinent condition in the stem was changed.</p> <p><u>LICENSEE RESPONSE:</u> The licensee agreed and will change the designation to BANK.</p>
<p>53.</p> <p>UNSAT₁₇</p>	<p><u>NRC:</u> This EOP question is not appropriate for an RO exam. It would; however, be considered an "SRO only" question.</p> <p><u>LICENSEE RESPONSE:</u> The licensee decided to use this as-is on the SRO exam. The replacement RO exam question meets NUREG-1021 requirements.</p>
<p>54.</p> <p>UNSAT₁₈</p>	<p><u>NRC:</u> This Tech Spec basis question is not appropriate for an RO exam. It would; however, be considered an "SRO only" question.</p> <p><u>LICENSEE RESPONSE:</u> The licensee replaced this with a question that meets NUREG-1021 requirements.</p>
<p>56.</p>	<p><u>NRC:</u> This is a MEMORY LEVEL question. The applicant is expected to know the automatic response of the ATWS inverter to an undercurrent condition.</p> <p><u>LICENSEE RESPONSE:</u> The licensee agreed and changed the designation to MEMORY level.</p>

Comments on PERRY Written Exam Material

Question Number	Comment(s)
<p>57.</p>	<p><u>NRC:</u> Where does the basis for condenser over pressurization come from?</p> <p><u>LICENSEE RESPONSE:</u> The licensee produced a GE "design document" that discusses this. They will incorporate this basis into the system lesson plan.</p>
<p>60.</p> <p>UNSAT₁₉</p>	<p><u>NRC:</u> Psychometric Flaw; one or more distractors are partially correct. Distractor "D" is also correct. If the Superintendent of Plant Operations can be a licensed senior reactor operator, distractor "D" is also correct.</p> <p><u>LICENSEE RESPONSE:</u> The licensee modified distractor "D" to indicate that the Plant Manger is not licensed.</p>
<p>64.</p>	<p><u>NRC:</u> Poor distractor balance. Should modify distractors "B" and "C" to remove the term "automatic."</p> <p><u>LICENSEE RESPONSE:</u> The licensee agreed and removed the term "automatic."</p>
<p>68.</p> <p>UNSAT₂₀</p>	<p><u>NRC:</u> This EOP question is not appropriate for an RO exam. It would; however, be considered an "SRO only" question.</p> <p><u>LICENSEE RESPONSE:</u> The licensee decided to use this as-is on the SRO exam. The licensee re-wrote the RO exam question. The licensee reworded the distractors and the question now meets NUREG-1021 requirements.</p>

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Question Number	Comment(s)
<p>69.</p> <p>UNSAT₂₁</p>	<p><u>NRC:</u> The question does not match the referenced K/A. The K/A concerns EOPs, high suppression pool temperature, and temperature monitoring. The question test the applicant's knowledge of how CAMS works.</p> <p><u>LICENSEE RESPONSE:</u> The licensee replaced this with a question from a previous NRC exam.</p>
<p>74(ro).</p> <p>UNSAT₂₂</p>	<p><u>NRC:</u> Psychometric Flaw; one or more distractors are partially correct. Distractor "D" is also correct. Halon will coat the fuel source and, via chemical reaction, prevents oxygen from reaching the fuel.</p> <p><u>LICENSEE RESPONSE:</u> The licensee modified distractor "D" to be <u>clearly</u> wrong.</p>
<p>77(ro).</p> <p>UNSAT₂₃</p>	<p><u>NRC:</u> This EOP question is not appropriate for an RO exam. It would; however, be considered an "SRO only" question. If the question is really a systems fundamental question (i.e., knowledge of system arrangements or component elevations, etc.), we will allow it. In this case, the RO would have to know the basis of the SRV tail pipe limit and HCTL to answer the question.</p> <p><u>LICENSEE RESPONSE:</u> The licensee modified the question to test a "concept" rather than requiring the memorization of EOP basis by an RO.</p>
<p>79(ro).</p>	<p><u>NRC:</u> The reference material does not state whether the EDG will start with only one air bank available or not.</p> <p><u>LICENSEE RESPONSE:</u> The discussion of this concept, from TS basis, will be incorporated into the system lesson plan.</p>

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Question Number	Comment(s)
85(ro).	<p><u>NRC:</u> Not modified in accordance with NUREG-1021. In order for a question to be considered modified, IAW NUREG-1021, you must:</p> <ul style="list-style-type: none"> • Change at least 1 pertinent condition in the stem; and • Change at least 1 distractor. <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> • Change the conditions in the stem such that one of the three distractors in the original question becomes the correct answer. <p>In this case, no pertinent condition in the stem was changed.</p> <p><u>LICENSEE RESPONSE:</u> The licensee agreed and changed the designation to BANK.</p>
91(ro).	<p><u>NRC:</u> The stem asks "which of the following describes the <u>adverse consequences</u> of this event?" Distractors "B", "C" and "D" describe conditions that may not be <u>adverse</u>.</p> <p><u>LICENSEE RESPONSE:</u> The licensee modified the stem so as not to cue the applicant.</p>
99(ro). UNSAT₂₄	<p><u>NRC:</u> Psychometric Flaw; no correct answer provided. According to the reference provided and given the conditions in the stem, M25-F010A remains closed and M25-F020B remains open since train "A" was shutdown. This response is not included in the answers provided.</p> <p><u>LICENSEE RESPONSE:</u> The licensee corrected the stem of the question such that there is a correct answer.</p>
72(sro).	<p><u>NRC:</u> This question is not considered "SRO only." You asked the same question to ROs in question 82(ro).</p> <p><u>LICENSEE RESPONSE:</u> The licensee changed the designation to a "Both" question.</p>

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Question Number	Comment(s)
<p>73(sro).</p> <p>UNSAT₂₅</p>	<p><u>NRC:</u> I'll have to see some strip chart data that clearly indicates that a high pressure scram would not also occur based on the given plant conditions.</p> <p><u>LICENSEE RESPONSE:</u> The licensee ran this on the simulator and found that their original correct answer was not correct. the question was modified and is now correct but is no longer "SRO only."</p>
<p>80(sro).</p> <p>UNSAT₂₆</p>	<p><u>NRC:</u> Psychometric Flaw; all answers partially correct. Can the Plant Manager also be assigned as the Duty Management Representative? If he/she can, "A" is also correct. Also, FTI-B0002, Note 3 states that contacting the reactor engineer to obtain verbal direction for rod recovery is considered "expeditious." Therefore, distractors "C" and "D" are correct.</p> <p><u>LICENSEE RESPONSE:</u> The licensee modified the stem to indicate no "Duty Management Representative" had been assigned. Also, the licensee modified distractors "C" and "D" to be <u>clearly</u> wrong.</p>
<p>83(sro).</p> <p>UNSAT₂₇</p>	<p><u>NRC:</u> Psychometric Flaw; ineffective distractors. Distractors "A" and "B" are ineffective. A reasonable supervisor would not stop an operator from taking mitigating actions unless their life were in danger.</p> <p><u>LICENSEE RESPONSE:</u> The licensee rewrote the question. The new question meets NUREG-1021 requirements.</p> <p><u>NRC:</u> This question is not be considered "SRO only." ROs are also required to know RO responsibilities for emergency plan implementation. Need to see RO responsibilities form EPI-B5 and compare them to shift supervisor responsibilities to see if there is a "significant delta."</p> <p><u>LICENSEE RESPONSE:</u> The licensee changed the designation of this to a "Both" question.</p>

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Question Number	Comment(s)
86(sro).	<p><u>NRC:</u> This question is not considered "SRO only." ROs are also required to know SJAE system automatic responses to alarming conditions. An RO would be expected to also know that vacuum pump operation is limited to 5% reactor.</p> <p><u>LICENSEE RESPONSE:</u> Although the question remains on the SRO exam, the licensee changed the designation to a "Both" question.</p>
87(sro).	<p><u>NRC:</u> This question is not considered "SRO only." ROs are also required to know the impact on shutdown cooling when E12-F008 closes. An RO would also be expected to know alternate means of shutdown cooling.</p> <p><u>LICENSEE RESPONSE:</u> Although the question remains on the SRO exam, the licensee changed the designation to a "Both" question.</p>
88(sro).	<p><u>NRC:</u> The K/A concerns EOPs, high drywell pressure, and drywell pressure. The question tests the applicant's knowledge of the basis of the Tech Spec limit for containment differential pressure but the tie to EOPs is weak.</p> <p><u>LICENSEE RESPONSE:</u> The licensee replaced the question with a question from their bank. No longer considered "SRO only." Also, not considered UNSAT due to having been used on a previous NRC exam.</p>
90(sro). UNSAT₂₈	<p><u>NRC:</u> This question is not be considered "SRO only." ROs are also required to know which instruments are considered post-accident monitoring instruments.</p> <p><u>LICENSEE RESPONSE:</u> The licensee modified to be a "SRO only" question.</p>

Comments on PERRY Written Exam Material

Question Number	Comment(s)
<p>91(sro).</p>	<p><u>NRC:</u> Not modified in accordance with NUREG-1021. In order for a question to be considered modified, IAW NUREG-1021, you must:</p> <ul style="list-style-type: none"> • Change at least 1 pertinent condition in the stem; and • Change at least 1 distractor. <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> • Change the conditions in the stem such that one of the three distractors in the original question becomes the correct answer. <p>In this case, no pertinent condition in the stem was changed.</p> <p><u>LICENSEE RESPONSE:</u> The licensee agreed and changed the designation to BANK.</p>
<p>92(sro).</p> <p>UNSAT₂₉</p>	<p><u>NRC:</u> This question is not be considered "SRO only." ROs are also required to know the immediate actions in ARPs. ROs are also expected to know entry conditions into off-normal procedures.</p> <p><u>LICENSEE RESPONSE:</u> Although the question remains on the SRO exam, the licensee changed the designation to a "Both" question.</p>
<p>93(sro).</p>	<p><u>NRC:</u> No basis was provided that discusses carbon buildup in the exhaust system.</p> <p><u>LICENSEE RESPONSE:</u> The licensee provided a letter stating the "official station stance" on this issue and it supports the question.</p>

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<p>94(sro). UNSAT₃₀</p>	<p><u>NRC:</u> The question does not match the referenced K/A. The K/A concerns AOPs, high drywell pressure, and leak rates. The question tests the applicant's knowledge of Tech Spec entry conditions.</p> <p><u>LICENSEE RESPONSE:</u> The licensee re-wrote the question. The new question meets NUREG-1021 requirements. Although the question remains on the SRO exam, the licensee changed the designation to a "Both" question.</p>
<p>98(sro)</p>	<p><u>NRC:</u> Distractor "B" appears implausible. Why would an operator determine that an inoperable piece of equipment was required to be operable yet think that no action was required?</p> <p><u>LICENSEE RESPONSE:</u> The licensee modified distractor "D" to be "more plausible."</p>