

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			
1+	H	3										Y		N B	U	This appears to duplicate JPM a. Suggest changing indications in Q such that different path on Nominal Feedwater Heating hard card is used that is different from JPM a. RE: Changed the written question to use a different end-point on the flow chart than what is used on JPM a.
2	L	2										Y		N	S	
3	H	2										Y		B	S	1/2X2; NRC 2013
4+	H	3										Y		B	S	
5	L	3										Y		B	E S	Valve designator is incorrect! Is this the 1 valve? (Should not be 2 valve). RE: Designator is a switch not a valve. STET. NRC 2014
6+	F	2										Y		B	S	NRC 2014
7	F	2										Y		N	S	1/2X2

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 a 1 (easy) to 5 (difficult); questions with a difficulty between 2 and 4 are acceptable.
- Check the appropriate box if a psychometric flaw is identified:
  - “Stem Focus”: The stem lacks sufficient focus to elicit the correct answer (e.g., unclear intent, more information is needed, or too much needless information).
  - “Cues”: The stem or distractors contain cues (e.g., clues, specific determiners, phrasing, length).
  - “T/F”: The answer choices are a collection of unrelated true/false statements.
  - “Cred. Dist.”: The distractors are not credible; single implausible distractors should be repaired, and more than one is unacceptable.
  - “Partial”: One or more distractors are partially correct (e.g., if the applicant can make unstated assumptions that are not contradicted by the stem).
- Check the appropriate box if a job content flaw is identified:
  - “Job Link”: 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).
  - “Minutia”: 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).
  - “#/Units”: The question contains data with an unrealistic level of accuracy or inconsistent units (e.g., panel meter in percent with question in gallons).
  - “Backward”: 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 K/As that are designated “SRO-only.” (K/A and license-level mismatches are unacceptable.)
- Enter question's source: (B)ank, (M)odified, or (N)ew. Verify that (M)odified questions meet the criteria of Form 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” status ratings (e.g., how the Appendix B psychometric attributes are not being met).

A “+” in the “Q#” column indicates that question was reviewed as part of the representative sample of 30 questions.

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8	H	2										Y		N	S	
9+	H	2										Y		N	S	
10	H	3										Y		N	S	
11	L	2										Y		B	S	NRC 2015
12+	H	3						X	X			Y		N	? S	Are applicants expected to know control rods locations within the RPV relative to nuclear instrument locations without a reference? RE: Yes, it is a learning objective to know this information.
13	H	3										Y		B	S	1/2X2
14	H	2										Y		N	E	MO 2-3704 valve is the RBCCW cooling return valve from the SDC heat exchangers. Is valve noun name correct? RE: Noun name is correct. 1/2X2
15	H	3										Y		N	S	
16+	H	3										Y		B	S	NRC 2008
17	H	2										Y		N	S	
18	H	2										Y		B	S	NRC 2009
19+	H	2										Y		N	S	
20	H	2										Y		N	S	1/2x2
21+	F	2										Y		N	S	
22	H	2										Y		N	S	1/2x2
23	H	2										Y		B	S	
24+	F	2										Y		N	U S	"B" and "D" distractors not plausible. Replace? RE: May use diagrams from panels for operators to read and decide which is correct in lieu of giving pressure indications. RE: STET, testing knowledge of system pressures.
25	H	2										Y		B	S	1/2x2; NRC 2005
26	F	3										Y		N	S	
27	F	2										Y		N	S	
28+	H	3										Y		B	S	
29	H	2										Y		B	S	Assume question is from Bank
30	H	2										Y		B	S	1/2x2

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31	H	2										Y		N	S	
32+	H	3		X								Y		N	U	Remove U2 IC distractors. A. Have no effect; B. Will disallow refilling the IC shell side from CST or put radiation monitor in an alarmed state or ONLY vent valves 17 & 20 would close. RE: Added U2 to plant conditions in stem. 1/2x2
33	F	2				X						Y		N	U	No correct answer! Not plausible that C and D distractors would rise in value during a cooldown. Also, not plausible that distractor A & B Pt 3 would lower in value. Pt 3 would not rise above 200°F would rise above 220°F; Pts 9 & 10 would initially rise in value then slowly lower? RE: Changed distractors and added time limit to stem.
34	F	2										Y		N	S	1/2X2
35	F	2										Y		B	S	Assume Bank question; NRC Exam 2008
36	H	3										Y		B	S	1/2X2: NRC Exam 2007
37+	F	2										Y		N	S	
38	H	2										Y		N	S	
39	H	2										Y		N	S	Why is this a higher cog question. Appears to be from memory. RE: STET
40	H	2										Y		N	S	1/2X2
41	F	2										Y		N	S	
42	H	3										Y		N	S	
43+	F	2										Y		N	S	
44	H	3										Y		N	S	
45	H	2										Y		B	S	
46+	H	3										Y		N	S	
47	H	2										Y		N	S	
48	H	3		X								Y		N	U	Replace A distractor with BOTH U2 and U3 battery voltage lowers, and add ONLY to distractors B & C. RE: Either replace distractors or add other unit conditions to stem. 1/2X2
49+	F	3										Y		B	S	2012 NRC exam
50	H	3										Y		B	S	
51	H	3										Y		N	S	
52	F	2										Y		N	S	1/2x2

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53	H	2										Y		B	S	
54+	H	2										Y		B	S	NRC 2006 exam.
55	H	2										Y		N	S	1/2X2
56	F	2										Y		B	S	1/2X2
57	F	2										Y		N	S	Reference for Q57 is DAN 902(3)-6, F-5. RE: Corrected
58+	H	2										Y		N	S	1/2X2
59	F	2										Y		B	S	
60	H	2										Y		B	S	
61	F	3										Y		N	S	1/2X2
62	F	2										Y		N	S	
63+	H	2										Y		N	E	Why is this a higher cog question? RE: STET
64	F	2	X									Y		N	E	All distractor end with "to prevent MSL radiation monitors from spiking." This needs to be moved into the stem of the question and delete 2 <sup>nd</sup> half of distractors. RE: Will move a portion of each distractor to the stem.
65	F	2										Y		B	S	2008 NRC exam
66+	F	2										Y		B	S	2012 NRC exam
67	F	2										Y		B	S	2009 NRC exam
68+	F	2										Y		B	S	
69	F	2										Y		N	S	
70	F	2										Y		B	S	2015 NRC exam
71	F	2										Y		B	S	2007 NRC exam
72+	H	3										Y		B	S	
73	F	2										Y		B	S	1/2X2
74	F	2										Y		B	S	
75	F	2										Y		B	S	
76	F	3										Y	Y	B	S	2010 NRC exam
77+	H	3										Y	Y	B	S	2008 NRC exam

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78	H	3										Y	Y	B	S	1/2X2
79+	H	3										Y	Y	B	S	2008 NRC exam
80	F	2										Y	Y	B	S	
81	H	2										Y	Y	B	S	2005, 2007 NRC exam 1/2X2
82	F	2										Y	Y	N	S	
83+	H	3										Y	Y	N	S	
84	F	3										Y	Y	B	S	2009 NRC exam
85+	H	3										Y	Y	B	S	2009 NRC exam
86	H	3										Y	Y	B	S	
87+	F	3										Y	Y	B	S	
88	H	3										Y	Y	N	S	1/2X2
89	H	2										Y	Y	B	E	Typo in 'A' distractor. 'B' & 'C' distractor explanations switched in Info block. RE Conditions corrected.
90+	F	3										Y	Y	N	S	1/2X2
91	F	2										Y	Y	N	E	Since this ST is mode sensitive, do you need to include "in Mode 1."? RE: No, not needed to add Mode 1.
92	H	2				X						Y	?	N	U E	LOCA condition exists in stem, but actions of distractors are Tech Spec related. If actual LOCA condition existed, SRO directions would not use TS time clock. Need to reference procedures to take action. Direct PCIS Group 5 isolation, check that Group 5 isolation occurred or remove accident condition from stem and change 8 hr distractors to 1 hr distractors. RE: Since question is technically correct, changed from U to E. Need to lessen urgency, add MAXIMUM to stem, and add time to trouble shoot. Question remains unchanged.
93	H	2										Y	Y	N	S	
94+	H	2										Y	Y	N	E	Need to include duplicating elements of the distractors added to stem. Stem will now look like fill in the blank with two blanks. RE: Will add portion of each distractor to stem. 1/2X2
95	H	3										Y	Y	N	S	
96	H	3										Y	Y	B	S	2010 NRC exam; 1/2X2
97+	H	3										Y	Y	N	S	Would students know that this is a RPV level transmitter without noun name? RE: Students expected to know this LT from memory, no noun name needed? RE: Added noun name to question stem.

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98	H	3										Y	Y	N	S	'C' distractor explanation in Info box should read incorrect. RE: Corrected.
99+	H	3										Y	Y	B	S	
100	H	2										Y	Y	B	S	

RO 1/2X2 questions: 19/75 = 25.3%

SRO 1/2X2 questions: 5/25 = 20%