

## Clinton August 2011 Exam

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	F	3										✓		B	S	
2	H	2										✓		B	E	<b>NRC:</b> Change first stem sentence to read "The plant is at rated power with systems in their normal alignment." <b>Licensee:</b> Incorporated.
3	H	2										✓		N	S	½ <b>twice</b>
4	H	2										✓		N	S	
5+	F	2				✓						✓		N	U E	½ <b>twice NRC:</b> Two implausible distracters. Less than TAF assures adequate core cooling (B). Greater than TAF does NOT assure adequate core cooling (C). <b>Licensee:</b> Additional clarification provided for plausibility of distractor B, modified C, "is assured ONLY if LPCS restored." <b>NRC:</b> Changed comment to one implausible distractor C.

## 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).

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

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
6	H-F H	2										✓		B	E S	<b>NRC:</b> F vice H. Cannot predict or determine effect of loss of TB IA from information given in stem (memory). <b>Licensee:</b> Provided further explanation under Answer Justification to explain H vice F. <b>NRC:</b> Withdrew comment based on additional explanation.
7	F	2				✓						✓		N	S	½ <b>twice</b>
8+	H	2										✓		B	S	½ <b>twice</b>
9	H	2										✓		B	S	½ <b>twice</b>
10	F	2				✓						✓		B	E	<b>NRC:</b> A not plausible. SRM Period would be considered valid with SRMs inserted, ie... normal condition. <b>Licensee:</b> Enhanced stem. Modified distracters A and C. Provided additional clarification for plausibility of distracters under Answer Justification.
11	H	2										✓		B	S	
12+	H-F H	2				✓						✓		M	U	½ <b>twice</b> <b>NRC:</b> 1) B and C not plausible. Outboard and Inboard valves being supplied by same trip system. 2) F vice H, asking what valves are supplied by Div 1 trip system (memory). <b>Licensee:</b> Replaced question, H cog.
13	F	3										✓		N	S	
14	H	1				✓						✓		N	U	<b>NRC:</b> LOD=1. If injecting 10000 gpm with LPCI (RHR) A and B, then take away (ie, shift to Ctmt Spray), it only makes sense that RWL will lower. B,C and D are implausible. If you take away injection, why would RWL stabilize, maintain current trend, or rise at a faster rate? <b>Licensee:</b> Modified question stem, distracters and answer. Provided additional clarification in the Answer Justification.
15	H	3										✓		B	S	
16	H	2										✓		N	S	
17+	H	3										✓		B	S	<b>ILT 09 NRC Exam</b>

## Clinton August 2011 Exam

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
18	H F H	2										✓		M	E S	<b>NRC:</b> F vice H. Knowledge of power supply to FWLCS (memory) <b>Licensee:</b> Provided additional clarification in Answer Justification to support H cog. <b>NRC:</b> Question Sat, H cog.
19+	H	3										✓		M	S	
20	H	3										✓		N	S	
21	F	2										✓		B	S	
22+	F	2										✓		N	S	
23	F	2										✓		N	S	
24+	H	3										✓		N	S	
25	F	2										✓		N	S	
26	H	2										✓		B	S	
27	H	2										✓		N	S	
28	H	2										✓		B	S	
29+	H	2												B	U S	<b>NRC:</b> K/A not completely addressed. None of choices are focused on, or specifically address, the effect on MT steam flow. <b>Licensee:</b> Provided additional clarification in Answer Justification to support completely addressing K/A in original question. <b>NRC:</b> Question Sat, K/A is fully supported.
30	F	2										✓		B	S	
31+	F	3										✓		B	S	
32	F	2										✓		N	S	½ twice
33	H	3										✓		B	S	
34	H	2										✓		N	S	½ twice

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
35+	F	2				✓						✓		B	E	<b>NRC:</b> B not plausible, ACCUMULATOR TROUBLE indicative of rod overtravel. Suggest some type of position indication distractor.  <b>Licensee:</b> Modified B to include incorrect OVERTRAVEL annunciator. Clarified plausibility in Answer Justification.
36	F	2										✓		N	S	
37	H	2										✓		B	S	
38+	F	2										✓		B	S	½ twice
39	H	3										✓		N	S	
40	F	2										✓		N	S	
41	H	2										✓		B	S	
42+	F	2										✓		N	S	
43	F	2										✓		B	S	½ twice
44	H	2										✓		N	S	½ twice
45+	F	2										✓		B	S	
46	F	2										✓		B	S	
47	F H	2				✓						✓		N	U	½ twice <b>NRC:</b> Part (1) of C and D not plausible. Why would anyone choose 1094 MVA associated with a leading pf? Words under the table column for "LAG MVA Limit" state "[Normal Oper State]" which cues the applicant that "Lag" is the normal state. No one runs with leading pf. Suggest maybe using "1182".  <b>Licensee:</b> Modified distracters C and D such that Leading pf operations is no longer considered. Clarified choices in Answer Justification.  <b>NRC:</b> H cog.
48	F	2				✓						✓		N	U	½ twice <b>NRC:</b> Part (1) of A and C are not plausible, ie....actual RWL is lower than indicated. Would not be conservative operation if this were true.  <b>Licensee:</b> Modified all distracters so that no distractor should be considered "not conservative." Revised Answer Justification.
49+	H	2										✓		N	S	½ twice

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
50	H-F H	2										✓		B	E S	<b>NRC:</b> F vice H. Question requires recall of pump start/trips as appropriate (memory). <b>Licensee:</b> Provided clarification in Answer Justification to support H cog.
51+	H	3										✓		M	S	
52	H	2										✓		B	S	
53	F	2										✓		B	S	
54+	H	2										✓		B	E S	<b>½ twice NRC:</b> Change second choice for B and C to reflect the MSIVs "fail closed" vice "be shut during". As written, an applicant may incorrectly think they are shut by operator vice knowing they fail closed on loss of IA...ie, he could select right answer for wrong reason. <b>Licensee:</b> The responses would be more plausible if they are left "as is." The MSIVs will not fail shut immediately based on the conditions presented in the stem. The loss of CCW will cause the running SA compressor to trip on high air or oil temperature. The standby SA compressor will automatically start and run until it too trips on high air or oil temperature. At that time, IA header pressure will lower unchecked. The MISVs will fail shut at < 70 psig air supply pressure to their accumulators.  Based on this sequence of events and the inability of the applicant to predict accurately when the MSIVs would shut, it is better and more technically accurate that the applicant understands the condition of the MSIVs during the plant cooldown as opposed to predicting if they will fail close before or during the plant cooldown.
55	F	2										✓		B	S	
56	F	2										✓		N	S	
57	F	2										✓		N	S	
58	F	2										✓		N	S	
59+	F	2										✓		N	S	

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
60	H-F H	2										✓		B	E	<b>NRC:</b> F vice H. Question requires recall of bases for being above the SRV Tail Pipe Limit curve (memory). <b>Licensee:</b> Changed one distractor, slightly modified stem and remaining distractors which require knowledge from plotting the point. Clarified Answer Justification. <b>NRC:</b> H cog.
61	F	2										✓		B	S	
62+	H-F H	2										✓		N	E	<b>NRC:</b> F vice H. Question requires recall of L2 isolations (memory). <b>Licensee:</b> Modified stem to remove the RPV Level (L2) statement. Added an additional statement to ensure applicant realizes the RPV Level is greater than L1. Provided clarification in Answer Justification to support H cog.
63	F	2										✓		M	S	
64	F	2										✓		N	S	
65	H	2										✓		N	S	
66+	F	2										✓		N	S	½ twice
67	H	3										✓		N	S	
68	F	2										✓		B	S	
69	F	2										✓		M	S	
70+	F	2										✓		B	S	
71	H	3										✓		B	S	
72+	F H	2										✓		N	U	<b>NRC:</b> Replace question. These actions are taken by the RO in Scenario 1. <b>Licensee:</b> Replaced question. H cog. <b>NRC:</b> Replaced question is H cog.
73	H	2										✓		N	S	
74	F	2										✓		N	S	
75+	H	2										✓		B	S	ILT 08 NRC Exam

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only				
For RO portion of Exam: N = 36, M = 5, B = 34 (45%): LOK: F=35, H= 40 (53%)																	
76	H	2										✓	✓	N	S		
77	H	2										✓	✓	B	S	Ref	
78+	H	2										✓	✓	B	S	Ref ;½ twice	
79	H	2				✓						✓	✓	B	S	Ref	
80+	H	2					✓					✓	✓	B	E	NRC: A is partially correct answer. Licensee: Modified stem to ensure A is never correct.	
81	H	2										✓	✓	B	S	Ref; ILT 08 NRC Exam;	
82	F	2										✓	✓	B	S		
83+	H	2										✓	✓	B	S	Ref	
84	F	2										✓	✓	B	S	Ref ;½ twice	
85	H	2										✓	✓	N	S	Ref	
86+	H	2										✓	✓	N	S		
87	F	2										✓	✓	B	S	½ twice	
88+	H	2										✓	✓	N	S	½ twice	
89	H	2										✓	✓	M	S		
90	H	2										✓	✓	N	S	Ref	
91+	H	2										✓	✓	N	S	½ twice	
92	H	3										✓	✓	N	S	Ref ;½ twice	
93	F	2										✓	✓	N	S		
94	H	2										✓	✓	B	S	Ref ;½ twice	
95+	F	2					✓					✓		B	U	Ref ; NRC: 1) Not SRO only knowledge. 2) B is also a correct answer.  Licensee: 1) Provided clarification to support SRO Only. 2) Modified distracters A and B to eliminate B as correct answer.	

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
96+	F	2										✓	✓	B	S	Ref
97	F	2										✓	✓	N	S	
98	F	2										✓	✓	N	S	
99+	H	2										✓	✓	N	S	
100	F	2										✓	✓	M	S	

For SRO portion of Exam: N = 11, M = 2, B = 12 (48%); LOK: F=9, H= 16 (64%)

Q. Will applicants be given EOPs as a whole, ie, not just one specific section? A. Will be given specific sections.

Q. Are EOP1A entry conditions blacked out? A. Entry conditions are blacked out. Are other major numbers (ie, EOP entry condition numbers) in the EOPs blacked out?

Q. Are all graphs included on the EOPs? A. Graphs are included with the EOPs.

Q. Are questions requiring references identified to the applicant? A. No.