

The final changes to the LGS 2005 ILT NRC Operating Exam have been completed, and are summarized below.

An integrated schedule is also provided, and reflects the final number and type of candidates that will be taking the exam.

The following changes have been incorporated for the Operating Exam:

Scenarios

Scenarios 1, 3, and 4 are provided for use. Since the number of candidates has been reduced to 11 (4 RO, 4 SROI, and 3 SROU), only two scenarios must be used to complete the simulator scenario portion of the operating exam. Scenario 1 is the low power scenario and is scheduled to be conducted on 1/10/05, and Scenario 4 is scheduled to be conducted on 1/11/05. Scenario 4 was selected over Scenario 3 due to having more opportunities for evaluation of the candidates. Scenario 3 is provided as the spare. Revised ES-301-5 and ES-301-6 forms have been provided.

Assessment items in all three scenarios have been broken down into discrete action steps where applicable.

In Scenario 4, Event 4 was subdivided into Events 4 and 5, and Event 5 then became Event 6.

Admin JPMs

The Admin JPM "Activate the Fire Brigade" was removed and replaced with "Determination of Equipment Availability for Fire Safe Shutdown". This change is reflected in the revised page of ES-301-1 that is provided.

The Admin JPM "ERP Classification and Reporting", which was based on a loss of DC power (SRO), has been replaced with an ERP Classification and Reporting JPM that is based on an ATWS condition.

The Admin JPM "Interpretation and Application of Overtime Limits" JPM has been revised to specifically require the candidates to determine who can stand the entire shift, and why/why not.

The Admin JPM "Review Control Rod Exercise ST" has been changed so that the as-found control rod position log does not match the as-found position recorded for that rod in the copy of the ST provided. All as-found positions recorded in the data sheets are the same as the corresponding as-left positions.

The Admin JPM "Calculate Stay Time" has been revised to provide a survey map for the candidate to determine dose rates instead of a dose rate being provided in the initiating cues.

System JPMs

The System JPM "Scram Channel A1 and A2 Functional Test" was removed and replaced with "ST-6-107-880-1, APRM and LPRM Noise Level Determination". This change is reflected in the revised page of ES-301-2 that is provided.

The System JPM "Inadvertent Opening of a Relief Valve" was revised to have "E" SRV open instead of "K". Also, pictures of the inside of the panel where the fuses are located have been provided.

Note: Bolded question numbers have had a technical review. Documents reviewed are included as italics in Explanation where applicable.

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	L	2											Y	N	E	delete "expected" <i>LP LLOT 0560, Pg 14</i>
2	L	2				X							Y	N	U	Distractors b, c, d not credible with a Loss of offsite power
3	H												Y	N	E	Delete "permissible"
4	H	3											Y	N	E	delete "expected"
5	L	3											Y	N	S	
6	H	2				X							Y	N	U	dist. "A" not plausible; would not expect reactor pressure to be at 490 psig if ADS initiated 3 minutes ago.
7	L	2											Y	N	E	Change "Equipment Operator..." to T-200 locker location..."
8	L	2											Y	N	S	<i>T-102, Step SP/L-4</i>

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

Instructions

[Refer to Section D of ES-401 and Appendix B for additional information regarding each of the following concepts.]

1. Enter the level of knowledge (LOK) of each question as either (F)undamental or (H)igher cognitive level.
2. 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).
3. 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).
4. 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.
5. 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).
6. 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?
7. 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. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
9	L	2										Y	N	S	
10	H	2										Y	N	E	Replace "Low-Low-Low " with a value that meets "Low-Low-Low" criteria <i>LP LLOT 0660 Page 13</i>
11	H	2										Y	N	E	use 2 column format like Q#14 <i>S92.10, Sect 4.5, Pg 14 Caution</i>
12	L	3										Y	N	E	use 2 column format like Q#14
13	L	2										Y	N	S	<i>LP LLOT 0250 Pg 20</i>
14	L	2										Y	N	S	
15	H	3										Y	N	E	Change "expected" to "normal"
16	L	2										Y	N	S	
17	H	3				X						Y	N	U	phrase "void collapse" gives away a and b as implausible; change core void collapse to core void change
18	L	2										Y	N	E	change 110 degrees to 109 <i>T-101 Bases Pg 19</i>
19	H	2										Y	N	S	
20	L	2										Y	N	S	
21	H	2										Y	N	S	
22	L	4										Y	N	S	<i>LP LLOT Pg 19; SE-1 Caution pg 27</i>
23	L	2										Y	N	S	<i>P&ID 10-13 Sh 2</i>

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			
24	H	2											Y	N	E	delete "expected"
25	H	2											Y	N	S	
26	H	3											Y	N	E	delete "expected"
27	H	3											Y	N	S	
28	H	3											Y	N	S	<i>P&ID MO6, Sh 2,4,6</i>

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			
29	L	2											Y	N	S	T-102 Bases Step SP/L-22
30	H	2											Y	N	E	Add "RPV Level -75 inches" to be consistent with conditions in T-102; change O2 to 6%. T-102 Table PC/G-1, T-228 Sect 4.5 and 4.6
31	H	2											Y	N	S	
32	L	3											Y	N	E	Change 2 nd paragraph to "if the administrative dose control level will be exceeded...who approves..."
33	H	2											Y	N	S	T-102
34	H	3											Y	N	S	
35	L	2	X										Y	N	U	can't answer Q w/o additional info related to plant Mode(s) and/or plant parameters
36	H	4											Y	N	E	delete reference to ON-XXX
37	H	3											Y	N	S	
38	L	2											Y	N	S	
39	L	2											Y	N	S	
40	H	2											Y	N	E	use "only" in distractors.
41	H	4											Y	N	E	delete "expected"
42	H	3											Y	N	S	LP LLOT 0550 Pg 19&20; OT-110

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			
43	H	2											Y	N	S	ON-102; P&ID M70 Sh 2
44	H	3											Y	N	S	
45	H	2											Y	N	S	
46	H	2											Y	N	S	
47	H	2											Y	N	S	
48	H	2											Y	N	E	add "with core alterations in progress" to stem; change bus numbering TS 3.8.3.6

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		
49	L	2										Y	N	E	add "HWC in service" to stem to ensure correct background radiation is used. <i>ARC RAD F-1</i>
50	H	2										Y	N	E	provide some time interval to Q stem to ensure Flooding Dampers have closed (making "D" clearly wrong.) <i>LLOT 0190 Pg 5 (.5 psid)</i>
51	H	2										Y	N	E	add "subsequently" to stem; just after conditions
52	L	2										Y	N	S	
53	L	3										Y	N	S	
54	H	2										Y	N	E	add info to ensure containment leak parameters are normal <i>OT-101</i>
55	H	2										Y	N	E	change Chilled Water to RECW to avoid similarity with Q71
56	H	2										Y	N	S	
57	H	3										N	N	U	K/A mismatch
58	L	3										Y	N	E	grammar: add "in" to stem
59	L	2										Y	N	E	delete first paragraph <i>E-92 Sh 1</i>
60	H	3										Y	N	S	
61	H	3										Y	N	S	<i>SE-10 TAC 1, Pg 1; LLOT 0730 Pg 3&4</i>

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		
62	L	1										N	N	U	K/A mismatch.
63	L	3										Y	N	S	
64	H	2										Y	N	S	
65	L	2										Y	N	E	change "D" to " ... 2/3 coverage is still maintained"
66	H	2										Y	N	E	use 2 column format like Q#14
67	L	2										Y	N	E	deleted "expected"
68	L	2										Y	N	E	add "Automatic Response" to Q <i>T-270 Sect 4.7.1</i>

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		
69	H	2										Y	N	E	add "directly" before "controlled" in Q
70	L	2										Y	N	S	
71	H	2										Y	N	S	
72	L	2										Y	N	S	
73	H	2				X						Y	N	U	A and C are implausible with a SCOOP TUBE LOCK since speed cannot change.
74	H	2										Y	N	S	S32.1A Precaution 3.4 (Use "Lag" only)
75	H	2										Y	N	E	add procedure reference
76	H	1										Y	Y	S	
77	H	4										Y	Y	S	
78	H	3										Y	Y	S	
79	H	3										Y	Y	S	
80	H	2										Y	Y	S	T-103, T-104
81	H	3										Y	Y	S	
82	H	2										Y	Y	S	ON-121; RHR P&ID
83	H	2										Y	Y	S	T-102
84	H	3										Y	Y	S	
85	H	2										Y	Y	E	format: indent last 3 statements in first stem conditions

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
86	H	2											Y	Y	S	
87	H	2											Y	Y	S	
88	H	2											Y	Y	E	add "without requiring LCO entry".

