

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	Backward	Q=K/A	SRO Only			
1	H	2								A	7			N	S	
2	H	3				X				B	10			N	E/S	Distractors A&C are not credible. 25 is a subset of 50, meaning if 25 was the correct answer than 50 would also be correct, meaning that there would be two correct answers. Rewrite (use MINIMUM) to eliminate problem./REVISED.
3	H	3	X			X				A	10			B	E/S	Need to reword distractors B(1) and D(1) to be actions (like A(1) and C(1)); i.e. "control depressurization to prevent voiding in the reactor vessel head." Also, the note for the credible distractor B reads as follows: "The upper head region may void during RCS depressurization if RCPs are NOT running. This will result in a rapidly rising PZR level." Would the RCPs be tripped given these conditions? If you added "RCPs are running" in the stem it would make the distractors more credible. The applicant wouldn't have to assume any information. ON 2013 NRC EXAM/REVISED
4	F	3				X				C	10			N	E/S	Distractor B not plausible. What does feedwater isolation have to do with RCS leakage? /REVISED B

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 B 5 (easy B difficult) rating scale (questions in the 2 B 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 AU@ 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	Backward	Q=K/A	SRO Only			
5	H	3				X				B	10			B	E/S	The atmospheric steam dump valves (distractor B) are called "steam generator dump to atmosphere valves" in distractor D. Revise to make consistent – "Start forced circulation in the RCS, establish auxiliary feedwater flow, and dump steam using the atmospheric steam dump valves." /Revised ON 2009 NRC EXAM
6	H	3								C	3			N	S	
7	H	3				X				C	5			B	E/S	The A distractor does not seem credible based on the stem. If you tell the applicant that one channel is failing high while the other channels are lowering then is it reasonable to conclude all heaters are energized? Some heaters would have to be deenergized because the actual plant response is pressure is lowering. Would spray valves be full open based on the failing channel? You could take out "begins to fail HIGH" from the stem, or set up all distractors in 2X2 format similar to distractors C and D. ON 2005 NRC EXAM/REVISED
8	F	2				X				C	10			N	U/S	*This question is LOD=1. B and D can be discounted pretty quickly as the obvious issue is decay heat after opening the breakers and dropping rods in the core. The sole purpose of the RTBs are to immediately stop heat generation through fission by dropping the rods into the core. This question should be strengthened or replaced. (On 2009 Audit Exam)/REPLACED
9	F	3				X	X			A	10			B	E/S	As written, B is a true statement (i.e. there are two correct answers as written). Need to say "per procedure XXX, what is the PRIMARY reason..." Distractor D could also be argued as a true statement. Also, distractor C is not plausible, as there is no "thermal" problem discussed in the stem (distractor doesn't answer question). (On 2009 Audit Exam)/REVISED
10	F	3				X				D	10			N	E/S	Distractors A & C do not appear plausible, as I can't think of any circumstance where an operator would use pressure to verify a cooldown rate./REVISED
11	H	2				X				A	4			B	E/S	Distractor B does not appear credible. Why would anyone think that MFP's would be running at normal speed after a reactor trip (due to safety injection)? ON 2005 NRC EXAM/REVISED
12	F	2	X							D	7			N	E/S	Change "will" to "should." Change "starting" to "starting AT" (in stem)/REVISED
13	F	3	X			X	X			B	7			N	E/S	The explanation states an SI is not indicated, but what is seen while running this event during a scenario? At a certain time during the scenario would an SI signal be present? If so, on appeal an applicant may be able to argue there are 2 correct answers (distractor D). Also, if you make it clear that there is no other problem other than SBO, then distractor's B and D become implausible (why would anyone pick LOCA sequencer when there is no need for SI?)/REVISED

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			
14	F	3				X	X			C	7			B	E/S	It appears that as written all four answers could be interpreted as correct. If the pressure control valve receives a close signal at 110 psig then it will still receive a close signal at 105 psig. If closing the pressure control valve isolated a service header leak, then doesn't that also assist in maintaining instrument air header pressure? ON 2007 NRC EXAM/REVISED
15	F	3	X			X	X			B	7			N	U/S	In stem change "will" to "should." The first distractor for answers C and D only seem plausible if the question dealt with starting a pump. It's not plausible that someone would need to establish a flowpath prior to closing a valve to isolate a LOCA. Is there any instance where this is so? Also, what if the pressurizer had not yet emptied? Wouldn't that make distractor A correct? There is no information in the stem regarding pressurizer level or RCS pressure./REVISED
16	F	3		X		X				D	10			B	U/S	Question can be answered by only knowing the first part of the question about stopping ALL pumps. Nothing after that would be necessary knowledge. Recommend making this a 2x2 having two distractors with ALL pumps stopped and two with stopping ONE CS pump. That way knowing the second part of the statement will be required. Also, as written the answer is cued in the stem. The stem gives a low RWST alarm and the only answer that has RWST in it is the correct answer. (on 2011 audit exam)/REVISED
17	H	3				X				C	10			B	E/S	Remove "and establish core cooling", "and verify containment isolations", and "and verify if heat sink is required" from the A, B, and C respectively. These aren't necessary for the question. Consider another functional recovery procedure that could be plausible. Distractor D could be thought of as a "do nothing" answer which isn't usually allowed on an initial exam. More justification is needed to determine appropriate license level. According to the NUREG procedure transition questions can be RO knowledge if integrated plant response knowledge can be used to answer the question. Is integrated plant knowledge used to answer the question? If not SRO only./REVISED
18	H	3								C	5			N	S	
19	H	3	X							C	5			N	E/S	If SDM is done within 30 minutes one would still meet the Tech Spec and could argue that it is not "incorrect." In stem change "within" to "within a MAXIMUM of..." REFERENCE PROVIDED/REVISED
20	H	2								C	10			B	S	ON 2009 NRC EXAM
21	F	3								D	7			B	S	
22	F	2				X				A	11			B	E/S	Borderline LOD=1 as all question is really asking is which of the following monitors is the one that does not confirm RCS leakage. Distractor B not plausible as no information on tube leakage is provided in the stem, which means the applicant must

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	Backward	Q=K/A	SRO Only				
																	assume that it is normal (i.e. no leakage). How can monitoring main steam have anything to do with the RCS with no tube leakage? ON 2007 NRC EXAM/REVISED
23	H	3				X				A	10			B	E/S	Distractor C can be eliminated without reading the question, as it appears to be an impossible statement (If you re-initiate SI, don't you have to go to back to E-0?). Distractor D appears to be a do nothing distractor. These types of distractors are not allowed on initial exams. Why not SRO only if asking about EOP transitions?/REVISED	
24	H	3		X		X				D	7			B	E/S	Why would anyone pick A, B, or C when the only two annunciators in the stem have to do with CCW? The stem cues the answer and there does not appear to be any reason to make the other three distractors plausible. ON 2009 NRC EXAM/REVISED	
25	F	3				X				C	10			B	E/S	Distractors A and D refer to actions that don't appear to have anything to do with initiating a cooldown – how plausible? Also, what is the difference between A and D? Is distractor B referring to steam flow rate? ON 2005 NRC EXAM/REVISED	
26	H	4				X				A	10			N	E/S	Distractors B and D are too similar (if you perform D you are also performing B). Need a different distractor B./REVISED	
27	H	4	X	X		X				D	5			B	U/S	Modified bank – need original bank question. Distractor B not plausible with so much AFW flow available. Distractor C not plausible as the stem cues that the reactor is tripped. Need to verify that information in stem is physically possible (800 degrees core exit thermocouple with a 200 degree Tcold?). Also – where does the 20 degrees subcooling come from (doesn't seem to jive with the stem temperatures)? Plus – how is this RO level knowledge?/REVISED	
28	H	3				X				B	7			N	E/S	Discuss the plausibility of the RCDT as a RCP seal flowpath. The explanation says it can be directed to the RCDT but under what circumstances? This will help determine plausibility of distracters C and D./REVISED	
29	H	2	X							A	7			M	E/S	Modified bank – need original bank question. Should specify in stem (2) that you are asking for just RCP #1 (not cumulative RCP) flows./REVISED	
30	H	3								D	10			N	E/S	*Simple graph lookup; LOD=1. REFERENCE PROVIDED/REVISED	
31	F	2								C	14			N	E/S	Change the last sentence in stem to Per Procedure XXX, ..., the reactor operator should...?/REVISED	
32	F	2				X				D	8			N	U/S	*How not LOD=1? Having redundant and independent ECCS flow paths seems to be a basic, fundamental concept. Also, how would running pumps in series or parallel in of itself "minimize blockage?" /REVISED	
33	H	3	X				X			A	7			N	E/S	Eliminate "of 200 degrees F" in stem. Otherwise it's LOD=1. Also need to specify what the MINIMUM amount of time that can elapse before the design limit is	

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	Backward	Q=K/A	SRO Only				
																	exceeded (if it's exceeded at 17 it will be exceeded at 22). Otherwise there are multiple correct answers./REVIS
34	F	2				X				B	7			B	E/S		Distractor A is not credible as no one would believe that only one train of ESF equipment would get an auto start signal on an SI. It also is a "nothing happens" distractor which should not be used. Also, the question is asking "what is the automatic response, if any, of the 'A' CCW Train." Distractor 'C' has 'C' CCW starting. How is this credible when the question concerns 'A' CCW? ON 2005 NRC EXAM/REVISED
35	H	2		X		X				A	8			B	U/S		Question 7 cues the correct answer (all other channels of PZR pressure lower when one channel fails high). Don't see how anyone would go with OT delta T (Distractor A) as the problem is with pressure, not temperature. Distractor B is also not credible as an automatic reactor trip would always occur before an automatic SI, no matter what the parameter. ON 2005 NRC EXAM/REPLACED
36	F	3	X							A	7			N	E/S		Change "will" to "should" in stem (2). Add "per procedure XXX" after RCP in (2)./REVIS
37	H	3		X		X				D	7			N	U/S		Modified bank – need original bank question. Is this too similar to Event 2 in Scenario 1? Distractor D is a "nothing happens" distractor which should not be used. Tref is equal to Tave doesn't appear to be necessary for the question. Could be removed. (On 2010 Diablo Canyon exam)/REPLACED
38	F	3								D	7			N	S		
39	H	2								B	7			B	S		Modified bank – need original bank question. ON 2007 NRC EXAM
40	F	3	X							D	7			N	E/S		In stem (1), add "maintained less than a MAXIMUM of..." In stem (2), change "would" to "should."/REVIS
41	F	2				X				B	7			N	E/S		Distractors C and D: need better explanation as to why anyone would think they could or should line up a CCP to the containment sump./REVIS
42	F	2				X				B	7			N	E/S		Do not think it's credible to not have enough adequate spray coverage with the loss of one bus. Redundancy requirements would preclude this. K/A only requires knowledge of the bus power supply. Maybe delete second part of this question./REVIS
43	H	3								C	1			B	S		Modified bank – need original bank question. Normally, GFE questions are inappropriate for licensed operator exams. Acceptable in this case because of OE on the subject.
44	F	3				X				D	4			M	E/S		Modified bank – need original bank question. No action/response of Distractor 'A' does not seem plausible (another "nothing happens" distractor). Should change this to decrease speed distractor. Modified from 2014 NRC Exam/REVISED

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	Backward	Q=K/A	SRO Only			
45	H	3								D	7			N	S	
46	F	4				X				A	5			B	U/S	Distractors B and C can be eliminated with only the knowledge that water expands when heated. These distractors also appear to exhibit impossible physics. Also for distractors B & D – why would anyone think you would get more heat removal with less feedwater? Leaves distractor A as the only credible distractor. On 2007 Audit Exam./REPLACED
47	H	2				X				B	8			B	E/S	Fundamental LOK. In the beginning of the explanation it states that A MDAFP feeds B and C steam generators but the explanation for distractor D states the A MDAFP feeds B and D steam generator. Doesn't seem like all answers are actually plausible if the TDAFP is out of service for repair. It would make the distractors credible if the TDAFP was available but a fault took out the motive force for some of the injection valves associated with the TDAFP. ON 2005 NRC EXAM/REVISED
48	F	2		X		X				C	7			B	E/S	Last "the" in the stem cues that the bypass transformer is the correct answer to the second half of question, eliminating the plausibility of distractors B & D. Moving this "the" into distractors A & C should make the question sat./REVISED
49	H	2	X							A	6			B	S	ON 2014 NRC EXAM
50	H	3		X		X				D	7			N	E/S	This is a 48 hour action statement – how RO level of knowledge? Subset issue – if 5 hours was correct, then so would 11 (if the condition is not met at 5 it still won't be met at 11). This eliminates distractors A & B as plausible. However, this problem could be fixed with the use of "MAXIMUM" in the stem. Also, cross connecting the fuel oil storage tanks inherently implies that you are spreading the problem rather than containing it, cueing that the correct answer is probably B or D. It might be better to have the inoperable tank fixed, then do the cross connect /REVISED
51	F	3	X							A	11			N	E/S	Before (1) in stem, change to "a MINIMUM of every..." Also, is FIRST necessary since RM-11 is inoperable therefore annunciator 61B won't work? Can simply ask what indicator will alert the operator to a fuel handling incident in the fuel building?/REVISED
52	H	3								A	5			N	S	
53	F	2					X			C	7			B	E/S	As written, distractors A, B, and C are all correct (if a pump starts after 20 seconds than it is also starting after 5 seconds and 15 seconds, etc.). Need to re-write/structure question to ensure you are asking for precise setpoints./REVISED
54	F	3	X							D	10			N	E/S	Stem focus – add procedure name in second sentence. Add "WOOF is the PRIMARY reason..." in stem. /REVISED
55	H	3	X			X	X			D	5			N	U/S	Stem just says immediate action. Should be actions? Can remove no impact from A and B distractors and focus on service water impact on containment coolers.

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	Backward	Q=K/A	SRO Only				
																	Remove "if any" from the stem. Also, should this be bounded by time and motor bearing temperatures? There is a caution in OTO-SA-00002 that states to trip RCPs if CCW is lost for greater than 10 minutes or if bearing temps reach 195F. If RCP are nearing trip criteria does OTO-MA-00008 become a reasonable answer? For part 2 a better distractor could be built around asking what would be the FIRST action the crew would perform. According to the procedure they would place containment spray pumps in PTL in accordance with step 1 (immediate action). A distractor would be verify ESW isolation from service water since it is step for but logical to verify actuations/isolations and ESW and SW are high risk components and part of the focus in part 1 of the question./REVISED
56	H	3								D	6			B	U/S		*LOD=1. Only required knowledge of this question is that rods stop at 1.0F Tave-Tref differential. After that this becomes simple math problem. /REPLACED
57	H	3	X							A	7			B	E/S		* If the applicant had to determine if this was a Data A or B failure and then apply the range of steps this would be a higher order question. For this question the applicant has to remember one piece of knowledge and then apply simple math. This makes it a fundamental question. Modify stem to say "the MAXIMUM possible range..." /REVISED
58	H	2								B	5			B	S		
59	F	3				X				C	7			B	E/S		Distractors A & B appear to be pretty easily discarded. Please amplify why someone might think that shutdown purge and exhaust fans would be safety related. /REVISED
60	F	2								C	7			B	S		
61	F	2								B	7			B	S		
62	F	3		X						B	7			N	U/S		Will the applicants be cued on SG logic when they respond to Scenario 1, Event 4 (SG press channel fails low)? If so, the question needs to be replaced. /REPLACED
63	H	3								B	7			B	S		
64	H	2					X			B	5			B	U/S		*LOD=1. Also, could it not be argued that some of the other parameters could begin changing very quickly? There is no definitive time as to when all these parameters would change which could lead to two or more answers being potentially correct. (On 2007 Audit Exam).REPLACED
65	H	3				X				A	6			M	E/S		Modified bank – need original bank question. For consistency, distractor B times should both be 0830. /REVISED
66	F	3				X				A	10			N	U/S		Modified bank – need original bank question. No one would believe that requesting job status, stating fire permit status, or stating meeting time status would have communication priority over an immediate potential personal safety hazard. Only correct answer credible. /REPLACED

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	Backward	Q=K/A	SRO Only			
67	F	3				X				B	10			N	U/S	The only distractor that has a limitation (i.e. "secured no longer than one hour") is the correct answer. Why would anyone think it's OK to lose communications indefinitely, or have an unexplained dilution or reactivity excursion? Correct answer appears to be the only credible distractor. /REVISED
68	H	2				X				C	10			M	U/S	Distractors A and C do not appear to be credible. All one has to know to eliminate them is that the SFP is not in containment./REPLACED
69	F	3				X	X			D	10			B	U/S	Doesn't appear to have one correct answer. The note referenced prior to step 4.5.2 states that both C AND D are necessary? What's the difference between D and the second half of C? Also, distractors A and B are extremely weak as it is hard to believe that an individual would think it was OK to completely alter the status of a system just to verify a valve position. Need better explanation as to why someone would think this would be allowed./REPLACED
70	H	3				X	X			C	10			B	U/S	Two potential correct answers. B could be argued as correct using the Note between Steps 4.5.2 and 4.5.3 that positive assurance can be obtained that activities are complete when they are not statused complete on the computer (meaning the 1500 step may not need to be performed). This would make answer B also correct since section 4.5.4 states that a walkdown is performed following the completion of all required work and PMTs. Also, distractor A does not appear credible, as it is difficult to believe that anyone would think you could perform corrective maintenance on a safety related component, then declare it operable without performing a PMT./REPLACED
71	H	3								B	11			N	S	
72	H	3				X				B	12			N	E/S	How is this not a K/A mismatch? - KA asks for hazards that may arise and the question asks for stay times and posting requirements. Also, need reference for the admin limit at Callaway. How is 1000mrem a common misconception for the second part of the answer? Is there a reference to 1000mrem for something else?/REVISED
73	F	3				X				D	10			B	E/S	Need better explanation on why distractor B is credible. E-0 is used so excessively in training that it's pretty obvious it does not dictate abnormal procedure use. /REVISED
74	F	2								B	10			N	E/S	LOD=2? Isn't this general employee training knowledge? ON 2005 NRC EXAM/REVISED
75	F	2					X			C	10			N	U/S	Need to add "after all facilities have assumed their prescribed function" or something to that affect. An applicant could assume the GE was declared before centers were staffed making A correct. Consider adding information that prevents an applicant from assuming the backup EOF is manned. Unsat as written due to having 2 correct answers. /REVISED

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			
76	H	4		X						D	1			N	U/S	*LOD=1. Direct lookup from the given handout. Also handout provides too much information that might compromise the rest of the exam. In addition, this ability is already being evaluated as an Admin JPM (Replace)./REPLACED
77	H	3								B	5			N	S	
78	H	3								C	5			N	S	
79	H	3								A	1		X	B	U/S	The part of the question that parallels with the K/A is written at a RO level. The reporting criteria is SRO knowledge but isn't required by the K/A. This K/A may need to be removed and another selected./REPLACED
80	H	3								D	5			M	S	
81	H	3				X				C	5		X	N	U/S	This question appears to be similar to an example on page 32 of 50 in ES-401 of NUREG 1021 rev 10. If the question can be answered solely with system knowledge than it is an RO question. It appears A and B can be eliminated using knowledge of the foldout page and cautions in the procedure (which would be RO knowledge). Additionally, distractor D does not appear to be credible as RCS pressure is already low. Also, the only distractor that has one remain in a functional recovery procedure is the correct answer, immediately making it the most plausible choice./REPLACED
82	H	3								B	2	X	X	N	E/S	K/A mismatch – procedural step information is not needed to answer the question. Given the chart, only the above the line section is needed to answer the first part of the question. (RO Knowledge) The second part of the question is TS basis which does not meet the K/A. Additionally, the discussion for K/A match in the question references the wrong procedure. Procedure OTO-SF-00001, Step 5 discusses placing Rod Control in manual. Procedure OSP-SE-00002, Step 3.3, states that AFD shall be considered outside the limit when two or more OPERABLE excore channels indicate AFD to be outside limits. This is the same statement in the note in LCO 3.2.3. REFERENCE PROVIDED./REVISED
83	H	3								A	5			B	E/S	Would there be a yellow path for A and a red path for B? Needs more explanation as to why this question is different than question 27 (which is an RO question), which seems to test the same level of knowledge. (2007 WC NRC Exam)/REVISED
84	H	3		X		X				A	2			N	E/S	Direct lookup as the answer (i.e. the limit values) is directly in the reference without the application of any knowledge. This question has no discriminating value. This question was deemed unsatisfactory during the 10 question pre-review and no discernable change was made./REVISED
85	H	4								B	5			M	S	MODIFIED FROM 2014 NRC RETAKE 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	Backward	Q=K/A	SRO Only			
86	H	3		X		X				D	5	X		N	U/S	This is the 3 rd EAL call in the SRO section of the Exam. This ability is already being evaluated as an Admin JPM. The K/A has nothing to do with the evaluation of the emergency plan, anyway. The stem cues the time to boil answer since a time to restore and heat up rate is given. This also renders distractors B and D as not credible, since neither has anything to do with time to boil (replace). /REPLACED
87	H	3				X				A	5		X	N	U/S	PRT venting to the aux building is not credible. It's only used for maintenance. According to the procedure given lowering level is an effective way of lowering pressure in the PRT. Add a level component to use section 5.1 as a distractor. You could have suction pressure for the RCDT pumps at 2 psig which is below the minimum suction pressure which could cause cavitation as indicated by the note on page 7 of OTN-BB-00004. That would be an SRO level. Also, the time used in the question is RO knowledge and can be used to eliminate half the distractors. In addition, one could argue that there is no correct answer, as the range for the disk to rupture is from 86 psig to 100 psig. It appears that it would be very likely for the disk to rupture prior to 45 minutes. Try changing the question to only focus on the selection of the procedures. Section 5.2, 5.4, 5.6 and 5.8 appear like good distractors./REVISED
88	H	3		X						B	2		X	N	U/S	The K/A portion of this question can be answered with just RO knowledge. Additionally the stem cues the minor revision due to an engineering evaluation was performed instead of just an administrative change./REPLACED
89	H	2				X				A	5		X	N	E/S	This questions appears to ask what is the RCP trip criteria and what procedure is used once you reach RCP trip criteria. Both of those questions are RO knowledge. Also, A and B seem to be the same. OTG-ZZ-00006 refers to OTN-BB-00003 to shutdown the RCP. There doesn't seem to be a difference between the answers. For distractor D, the attachment doesn't appear to give procedure direction on how to trip the RCP. It appears to give guidance on monitoring. Since there is no guidance in the attachment this is not a credible distractor./REVISED
90	H	3								B	5			N	S	
91	H	3				X				B	5			B	E/S	Why would an applicant believe an SI signal would be generated in this case? More explanation is needed to determine why A is a creditable distractor. (On 2013 Byron Exam)/REVISED
92	F	3				X				C	1			N	E/S	Answer B – do they need to be told that this is an Action level 1? Answer C – This does not exceed an LCO like Answer D, to select this the applicant would have to think that they report any entry into a tech spec that will exceed 50% of the allowed outage? Better if we made it system specific and said "Scheduled maintenance on an emergency diesel generator that exceeds 50% of its allowed outage time."

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	Backward	Q=K/A	SRO Only			
																Answer D – change to simply “No In-core thermocouples are operable in quadrant 1 for 7 days.”/REVISIED
93	F	3					X			C	2			N	E/S	B and C are both correct answers. If SDM is being maintained less than or equal to 0.95, then by definition it is being maintained below 0.99 as well/Revised
94	F	2					X			C	1			B	E/S	Answer A could be enhanced by stating that the RO may not leave until another qualified RO arrives on site. As written it does not state that another RO is required to come in. Which could be considered the same as answer D. ON 2007 NRC EXAM/REVISIED
95	F	3				X				A	3			N	E/S	This is a “NOT” question which should be avoided per NUREG 1021 Appendix B. Correct answer obvious. Please explain why anyone would think that A, B, or C would not need to be covered on an infrequently performed task/Replaced ON 2013 NRC EXAM
96	F	2				X	X			C	3			N	U/S	Answer C could be considered correct also due to the Senior Director Nuclear Operations has the final approval or rejection of engineering changes prior to implementation. Both answers A and B do not contain any personnel related to engineering. So stating design change in the stem would cue that either C or D is correct./REPLACED
97	F	3								D	4			B	S	
98	H	3	X							B	7			B	E/S	Capitalize MAXIMUM in stem/Replaced
99	H	3								C	5			N	U/S	This ability is already being evaluated as an Admin JPM (replace)/REPLACED
100	F	2	X							A	1			N	E/S	Stem states weekday shift which determines whether the STA or FPIP Coordinator initiates the FPIP. If you keep this in the stem you could state STA or FPIP coordinator as the first part of the answer. Or else it is extra information that is not needed. Control room could be considered incorrect due to the Note in APA-ZZ-00701 since it only identifies SM/CRS/STA/SE as Control Room. /REVISIED

	B = 35	F = 36	E = 41	<u>Additional Notes:</u>
RO TOTALS:	M = 04	H = 39	U = 18 (1 prior exam)	
	N = 36		S = 16	

	B = 06	F = 07	E = 11	<u>Additional Notes:</u>
SRO TOTALS:	M = 02	H = 18	U = 08 (0 prior exam)	
	N = 17		S = 06	
GENERAL COMMENTS				
1. Bank questions are indicated by B ; Modified are indicated by M ; New questions are indicated by N				
2. Chief Examiner comments are indicated in <i>blue</i> .				
3. Average difficulty is <u> 3 </u> on the RO exam and <u> 3 </u> on the SRO exam.				
4. The 10CFR55.41/43 distribution is: RO / SRO				
41.1 =	1	43.1 =	5	
41.2 =	0	43.2 =	4	
41.3 =	1	43.3 =	2	
41.4 =	2	43.4 =	1	
41.5 =	9	43.5 =	12	
41.6 =	3	43.6 =	0	
41.7 =	28	43.7 =	1	
41.8 =	3			
41.9 =	0			
41.10 =	23			
41.11 =	3			
41.12 =	1			
41.13 =	0			
41.14 =	1			
5. The answer distribution is: RO / SRO				
A = 18 (24%)	/	7 (28%)		
B = 19 (25.3%)	/	7 (28%)		
C = 19 (25.3%)	/	7 (28%)		
D = 19 (25.3%)	/	4 (16%)		

6. There are __2__ RO questions with handouts provided and __1__ SRO questions with handouts provided.