

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	4					X							B	U E S	I did not have all documents required – missing power/flow map. Call it a sequence of events instead of conditions so that the operator is clear that it happens in order. Distractor D is correct according to reference, 2.4RR Att. 3, step 1.3.1. Pump is at full flow according to what reference? I thought these pumps could go higher than 100% - and are not at 100% when core power is 100%. The reference given is a note in a procedure, not a caution. Licensee needs to show a lesson plan objective for an RO that backs up the correct answer.  Provide the technical references to support the question. The stem should be revised to say the sequence of events instead of “the following conditions exist.”  The question was revised incorporating the comments
2	H	3				X&?						X		N	U E S	The system 295003 is not in the KA catalog. I am not familiar enough with electrical –do synch selector switches ever make up closing logic of a breaker? Distractor B is a “none of the above”, which is unacceptable. Distractor D doesn’t read well, what does that mean? If that means to depower the other bus, that is a bad distractor.  This question is technically OK, but distractor D does need to be rewritten. KA 295003 is located in the APE section of the catalogue.  This question was revised incorporating the comments.
3	H	2				X						X		B	U S	Question does not test KA. Distractor D is a “none of the above”, which is unacceptable. That makes a rod block a choice in all three possible answers. Isn’t

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).

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																one of the design features of divisional separation to prevent a full scram from a single failure? This question needs total overhaul. <a href="#">After discussing with facility, this question is OK as written.</a>
4	H	3												N	S	
5	F	2					X							M	U S	I was unable to determine if the question was substantially modified because I don't have a copy of the old question. Distractor A is BWR 101 – too easy. Maybe a distractor regarding mode switch in refueling or plant computer? Distractor D is partially correct. Stem is not specific enough to state that rods have not had time to settle. Also, RPIS is too generic a term, be specific about what the operator is looking at? RWM? PMIS? <a href="#">This question is OK as written except distractor D may also be correct. CAF. After discussing with facility, this question is OK as written.</a>
6	H	3				X								N	U S	Wouldn't an overfeeding transient shut the MSIVs? I am thinking level 8. (Stem says no group isolations occur – aren't MSIVs group 1?) Also need to specify that overfeeding transient is over after trip, otherwise, NPSH concern goes away. Distractor D says "two phase flow resistance decreases", what is that? That makes it an incredible distractor. <a href="#">This question is OK as written.</a>
7	F	2				X						X		N	U S	Question does not test on <b>why</b> you are disabling control room controls, only that the isolation switches do in fact isolate the controls. Some of the distractors, however, do test the why, and some may be correct. I believe C answer has a good chance of being correct. D is correct. It would take a lot of fire protection research to prove these wrong. B is a good distractor. <a href="#">This question is OK as written.</a>
8	H	3										X		M	U E S	I was unable to verify that this question was acceptably modified. This question does match the KA complete or partial loss of CCW. <a href="#">The wording of this question was changed.</a>
9	H	3	X				X							B	U S	Distractor D is a "none of the above", which is unacceptable. I believe all of the stem is unnecessary. Wouldn't the result be the same from 100% power, but you leave all of the confusing (and LEADING) stuff about nitrogen? MSIVs, both inboard and outboard have receivers, wouldn't that make D correct? Question needs total stem refocus. <a href="#">This question is OK as written.</a>
10	F	2				X	?						X	B	U S	Question requires knowledge of refueling process (12 hours after shutdown – what will plant look like), which is SRO knowledge. Is D not partially correct? If it can be used as a steam load, then it is correct per procedure 2.4SDC Att. 2 step 1.10. C is not a credible distractor. How about give a reactor pressure (0), and ask what can be used under these conditions, and use RCIC, SRVs in conjunction with ____, etc...

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																	This is an RO question in that it does not test on refueling. The RPV pressure and temperature need to be added to the stem to make answer D incorrect. This question was revised.
11	H	3	X				X							?	N	E S	Delete trends on counts, period gives that information, and the trend of slowly rising on a 100 period is confusing. Distractor A is a "none of the above", which is unacceptable. This is borderline SRO knowledge. This question is OK as written.
12	H	3	X												M	? U S	Again, unable to determine is sufficiently modified. 12:05 says 279 and rising, but 12:10 gives same temperature, need to change numbers. I would suggest getting rid of the times, and putting the temperatures and pressures in the answer, or leave the time in, but putting them in the stem adds an extra step for the candidate. Reference given did not have enough information to determine if question is technically correct. The way the stem is worded it could be argued all four of the distractors are correct. This question will be reworded. This question was revised.
13	H	3										X			N	U S	Question does not match KA. This is supposed to be an actual high reactor pressure, not a deh failure. This question is OK as written.
14	H	3													N	? U S	Reference graph not provided. Technical? Other than that, question looks good. The reference graph is not provided and this may be a direct lookup question. CAF. This question is acceptable.
15	H	3													N	? U S	Again, eliminate extra step, and put some of the stem in the answer choices? Just a preference. Reference not provided for technical aspect of question. If reasoning is correct, question looks good. It could also be argued distractor d is correct. Followup discussion determined this question is OK.
16	H	3		X				X							B	E U S	Need to look at tense of the answers – past vs. present. I.E. C needs to say "... LOCA will no longer be assured". B is partially correct unless you say something about CURRENT conditions in the distractor, but that will be a clue to the answer, because of the trend in the stem. In other words, the lowering trend in the stem is a cue that current conditions are okay, but it is about to require a Rx scram. All four distractors could be argued to be correct. (An ADS actuation is a controlled LOCA.) It was determined the BWR-4 design is different than the BWR-6 in this regard and the question is OK as written.
17	H	3		X			X		?						M	? E S	Can't verify if properly modified. Answer A is a "none of the above". Reference not provided – technical aspect not verified. Rx pressure should not be bolded unless this is the convention throughout the test – that is a cue. Does the candidate need to have memorized the conversion to corrected FZ level? If not, this question is bad.

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																Distractor D bases is incorrect however with level at TAF, there is no steam cooling. The basis for distractor D was corrected.
18	H	4					X	X						N	E S	NBPP? Why couldn't C be correct if this is a hydraulic ATWS? Change the stem to read "could the control rods" vice "are the control rods". This comment was corrected.
19	F	3				X								B	U S	Distractors A and C don't make sense – not credible. D needs to be reworded. I assume the point of the depressurization is to stop the RCS from losing inventory – why not say that? Suggest using reasons for EDs from other procedures as distractors. The four distractors need to be rewritten – the first three are not credible and the correct distractor doesn't make sense. This question will be replaced as it tests the same knowledge as Q26.
20	H	3	X											M	U S	Question needs re-write. Answer can't be none of the above. Can't determine if adequately modified. Besides that, there shouldn't be a lot of confusing information in the stem. The point of the exam is not to confuse the candidates. As written, the only info in the stem should be the last statement. This question would be better if written to directly test on the initiation logic. Also, distractor C may not be credible (CAF). After discussing with facility, this question is OK as written.
21	H	4												M	? U S	This is on the border of a KA mismatch. Can't determine is sufficiently modified. Procedure requires annunciator 9-5-2/C-4 to be clear before scrambling the reactor, that is not in the stem. This question needs to include the status of annunciator 9-5-2/C-4. Also, the question tests on the subsequent operator actions and this is not typically required as "from memory" knowledge. After discussing with facility, this question is OK as written.
22	F	3				X								B	U S	D distractor does not fit with the other distractors, and sounds a whole lot like C! B is not a credible distractor. Please use other thermal limits for the fuel for distractors. (APLHGR – LHGR) – or refueling / SRM question distractor. This question is OK as written.
23	F	2												N	E S	"Close" needs to be "Closes" on A and B. D is a none of the above answer, which is unacceptable. This question is acceptable as written with the exception of the editing noted above. The editing was completed.
24	H	3	X											N	? S	"Several minutes later" doesn't need to be in the question. Pg. 26 of the tech reference states that MO-58 auto closes on "an isolation signal" if MO-17 is open. What isolation signals? How does candidate know that those signals are not present?

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																	This question is acceptable as written.
25	H	3				X							?	N	?		A is "none of the above", which is still unacceptable. Is this a SRO-only question due to the refueling nature + TS? Change distractor a. After discussing with facility, this question is OK as written.
26	F	3				X		X						M	U S		This is the same question as #19! Throw out KA? D is an incredible distractor. What primary system is going to leak into secondary containment at 100% power? Can't check modified. The question needs replaced. Q19 is being replaced so this question is ok as written.
27	F	2						X						N	U S		C is "none of the above". More hydrogen is worse than less hydrogen – no matter where it is. A is therefore not credible. By the way, where is the oxygen coming from? That doesn't make technical sense- this was the whole reason for inerting. The correct answer does not agree with the justification. This will be corrected.
28	F	2				X								N	U S		A is "none of the above". C and D are the same answer. If they mean that A won't start on manual demand, then that is also incredible. A RCS level instrument isn't going to prevent a pump start – in any ECCS system. Change distractor A. After discussing with facility, this question is OK as written.
29	F	2	X					X						N	E S		This question is poorly written. There are several overlaps. The way that the question is written, b is correct. The stem only asks about spurious high pressure iso, whereas the 50 psi is for a different reason. Why not just ask what pressure range the procedure requires? I.E. : The correct maximum and minimum pressures; that is less confusing. Rewrite the question to be clearer. This question was revised.
30	H	4												N	E S		Stem needs to be more specific about what signal is lost. Instrument? Controller? Also, just a warning, the LOs given do not support the question. I believe this question will need to be backed up with more technical references than the lesson plan. This is a complicated scenario. This question is OK as written if there is a technical justification for the HPCI turbine not tripping on overspeed. Otherwise, there are two correct answers (b and c). Upon further discussion, this question is ok.
31	H	3	X											N	E S		Need to be more specific than "shutdown and depressurized". What pressure, temperature? What is cooling the core? What was the accident? With an "accident" being a LOCA, the RCS will communicate with the torus, and torus level may stay the same! Need to specify in stem question "indicated torus level from instrument PC-LR-1A". Is the difference between indicated and actual level while on minimum flow enough to justify this question? It looks to be very minimal to me. The concept is good for a question though. This question is OK as written.

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32	H	3												B	? S	Does the meter in the control room have a fast enough response time to see these fluctuations? I don't buy it. If this can be shown, question is good. <a href="#">This question is OK as written.</a>
33	H	4				X							X	B	U S	"A" distractor is "none of the above" – which is unacceptable. Loss of MCC-K is redundant to not starting SLC pump A. So if candidate knows either that the valve is powered by MCC-K or that SLC pump B doesn't shut the valve, they will get the answer right. Loss of MCC-K needs to come out of the question to match the KA. Otherwise, you are potentially testing the candidates electrical knowledge only. <a href="#">Change distractor a.</a> <a href="#">This question is ok as written.</a>
34	F	3												N	S? U S	Are ROs required to have this memorized? <a href="#">The stem does not the source of the requirement. Answers a and c are both correct in that the sequence of the scram resets are irrelevant. I would not expect an operator to have the sequence of the resets to be memorized.</a> <a href="#">In followup discussion, it was determined that the sequence is important.</a>
35	F	3	X			X								B	U? U S	D is a "none of the above" type distractor – which is unacceptable. Stem asks what ultimate affect, but that is not reflected in the answer choices – this part needs to come out of the stem. The ultimate effect would be the IRM would go inop. I could not verify technical accuracy of question with given reference. I am not sure if counts would go up or down, because IRMs are a count detector, not a straight voltage detector, and high voltage only provides a bias. Need technical basis. <a href="#">This could be argued as no correct answer as eventually it would go INOP. Replace distractor d.</a> <a href="#">This question was revised.</a>
36	H	2						X						B	E? U S	Provided reference does not show procedural requirement. B distractor is another way to scram reactor. <a href="#">Could find no technical basis for the correct answer in the references provided. A and b could both be argued to be correct. There is probably a technical justification in the startup procedure to argue c is also correct. Distractor b will be revised.</a> <a href="#">Distractor b was revised – otherwise it was determined the question is ok.</a>
37	H	4		X										N	E S	What position are shorting links? If they are open, this will produce a full scram. Information that is bolded and underlined is an unnecessary cue to the candidate. <a href="#">This question is OK as written.</a>
38	H	4												N	S	
39	H	3												N	U S	This is the second question related to steam cooling –see #17. The answer is also the same as #17. Suggest different question. <a href="#">It could be argued answer b is also correct. This question is testing on the same</a>

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																knowledge as Q17. This question is OK as it is testing on a different concept than #17.
40	F	2	X			X								N	U S	Distractor A is a "none of the above". Stem will need refocus. Pg. 20 of the provided reference states that the trip and throttle valve should close on a suction trip. Therefore, the given answer is incorrect. I could not find any information on the governor valve being open or closed on a trip. Replace distractor a. After discussing with facility, this question is OK as written.
41	H	4												N	S	
42	H	4										X		B	U S	Question #41 and #42 have similar attributes. Chief Examiner should review to make sure he is comfortable with overlap. I believe this is a KA mismatch. Otherwise, this question is okay. This question tests on the same knowledge and needs replaced. This question was replaced.
43	H	3	X			X								N	E S	Distractor D is a "none of the above". Most of the information in the stem is not necessary – it needs to be cleaned up. Replace distractor a. After discussing with facility, this question is OK as written.
44	F	3												B	S U S	There are a lot of power loss questions on this test. Too many? This is a KA mismatch in that it does not test on the automatic actions. This question was revised.
45	H	3					X							N	U S	Bolding and underlining is weird and confusing. All distractors are correct because damage can cause SRV malfunctions, and higher cyclic stress can be caused by these failures. This question is OK as written.
46	H	4					X	X						N	U? U S	According to 2.4RXLVL immediate operator actions, choice c appear correct. Maybe the stem should ask what immediate operator actions are required by 2.4RXLVL? Is the operator required to know how much level signal that a steam flow transmitter contributes? Also, is a failure to 100% as opposed to upscale realistic? According the reference material, if RPV level cannot be maintained below 50" (i.e. 53") a scram is required. Therefore it could be argued there is no correct answer. This question was revised.
47	H	3												N	? S	The given reference did not support the technical aspect of the question. I have never heard of moisture causing a fire in SGT. I thought that moisture limits the ability of the charcoal to absorb the bad stuff (iodine). That would make none of the answers correct. Going to need to see system lesson plan for this one. Provide a technical justification and LO for this question.
48	F	3												B	S	

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49	H	4		X		X								B	U S	The Stem cues that C is incorrect. A is a "none of the above" answer – which is unacceptable. This question is OK as written.
50	F	3				X								B	E S	D is a "none of the above" answer – which is unacceptable. It also doesn't make sense with the stem. This question is OK as written.
51	F	2				X								B	E S	Answer A does not match the rest of the distractors – it is a "none of the above". How about ask the question about what effect the loss of DC will have on the diesel specifically instead of whether or not it will start. Auto start but... for two potential answers, and not auto start because for two potential answers. This question is OK as written.
52	H	3				X								N	E U S	Distractor D needs to be Compressors A and B trip to be credible. Reference provided did not have correct information. I could not vouch for technical accuracy. It would seem on a loss of TEC, all the compressors would eventually trip. After discussing with facility, this question is OK as written.
53	H	4												N	U S	I don't understand how this is testing the candidates knowledge of electrical supplies. Critical Loops should be supplied before and after a loss of a bus because all REC valves are MOVs. All the group 6 isolation does is isolate the non-critical loops. So how is this testing knowledge? After discussing with facility, this question is OK as written.
54	H	2		X		X								N	U S	The distractors don't make sense. The stem cues that it is a drive water filter dp problem. Withdrawal will be excessively fast with all parameters lowering? This is a poorly written question. At what pressure and flow is rod movement no longer present? The word prevented implies an interlock or something that directly prevents rod movement. What about rod insertion? Etc. This question was revised.
55	F	2												B	S	
56	F	3												N	S	
57	H	3												N	S	
58	F	3										U		N	U S	This is a KA mismatch because it does not apply to KA 226001. This question will be revised. This question was replaced.
59	F	2												B	S	
60	H	3												B	S	
61	H	3												B	S	



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62	H	3												B	S	
63	F	2												B	S	
64	H	3												N	? S	The reference provided does not support the correct answer. CAF The reference was provided.
65	H	3												M	E S	The distractors will be revised so they read correctly.
66	F	2												B	S	
67	H	4										U		B	U S	The way this question is written, it is testing on the expected alarms for the surveillance. It does not test on the conduct of ops. After discussing with facility, this question is OK as written.
68	F	3												B	S	
69	H	3												B	S	
70	H	2												B	S	
71	F	3												M	S	
72	F	3												M	S	
73	F	2												B	S	
74	F	3												B	S	
75	F	3												B	E S	The reference provided does not contain a basis for the answer.
76	H	4	X				X						X	N	U S	Stem needs to specify which procedure to enter <u>AT THIS TIME</u> since stem contains a timeline. Do names of procedures need to be included? Also, question needs to add the WHY to entering the procedure – the assessment part from Part 55. I don't understand why distractor A is credible – the cause of this is not a 480V bus. The references provided do not include 2.4RXLVL. This is needed since it seems logical this scenario would include an initial condition for entering that AOP. After further discussion, this question is ok.
77	H	3												N	? S	This question is also missing the assessment portion. Not just which procedure to enter, but why? No references were given, I can't evaluate whether question is technically accurate. This question is OK as written.
78	H	1?								X			X	N	U	No references given. What is procedure 2.1.5? Radiation needs to be rem/hour. Rate of rise needs to say slow or fast, but steady is not descriptive. C is a bad

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		2													S	distractor. ED without scram is a gimme. Again, question should ask which procedure should be used to scram reactor and why? This question might be too easy as written – with the why added it would not be. <a href="#">This question is OK as written.</a>
79	H	2				X								N	U S	A is a none of the above type answer, which is unacceptable. If the why was added to each answer, it would fix this. Answer C is not a credible distractor because it is obvious that the situation is not going well. For distractor A and C – these would be directed from 5.2AIR, so that needs to be addressed to make these credible distractors. D is not a credible distractor – believe indications. Again, the situation is not going well, and you aren't going to wait for a local indication. Evacuate reactor building is not in the provided reference. A more appropriate answer would have something to do with resetting SACs and securing inerting. <a href="#">This question tests on subsequent actions contained in an AOP attachment. A learning objective was not submitted that states this is a required memory item. After discussing with facility, this question is OK as written.</a>
80	H	3												N	S?	No references given. This is a good SRO level question if the technical side is okay. If there are any Ros taking the SRO exam by itself, they are going to need the FZ level correction chart – it is required for this question, but shouldn't be memorized. <a href="#">Provide the technical references to support the question.</a>
81	H	2	X											N	E? S	No references given. Stem needs to specify that plant is required to be in Mode 4 IF temperature in torus doesn't cool down. I can't verify technical accuracy of the question. <a href="#">Provide the technical references to support the question.</a>
82	H	3												N	? E S	No references given. I couldn't review this question at all. <a href="#">Provide the technical references to support the question.</a>
83	H	2				X								N	U S	No references given. A is a "none of the above" answer, which is unacceptable. Should distractor D say 13 hours to be credible? I am confused by this question, if the MSIVs should have isolated, they would have been manually isolated by the operators. We shouldn't be asking questions assuming that operators have failed to do their job. I could not review the TS or other technical aspects of this question because the references were not provided. <a href="#">Provide the technical references to support the question.</a>
84	H	3											X	B	U S	What is expected plant response is in the stem, but no in the choices. This would be a more RO related knowledge anyway. The question should be asking WHY they are entering those procedures. No references were given, so I couldn't review technical aspects, but it seems okay. <a href="#">Provide the technical references to support the question. None of the distractors fully answer the question in the stem. Therefore there is no correct answer. This question</a>

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only				
																	will be revised.
85	F	2											X	N	U S		I don't see how this is SRO knowledge. It is direct lookup. I could do this question with no training. This is a direct lookup. This question was revised.
86	H	3				X							X	N	U S		No reference given. A is a "none of the above" which is NOT SRO knowledge. Need to specify which room cooler was lost. This is not a SRO-level question – ROs should be required to know whether room cooler is required or not. The stem and distractors are providing a lot of "fluff" to this question to make it seem like it has something to do with TS, when it is really just a system question. This question is OK as written.
87	H	2												N	? U S		No reference given! The second part of the question is confusing – double negative. Other than that, I was unable to review question. Provide the technical references to support the question. The question needs to be reworded. The correct distractor states one of two LCOs should be entered. This is incorrect in that if both apply then both should be entered. (The referenced TS was not available to reference.) After reviewing the references, the question is ok.
88	F	3	X										X	N	U S		The difference between answers b and d are RO knowledge. Same with A and C. Why would the SRV leakage annunciator light up when the ADS timers come on? Is the stem trying to say that the SRVs come open? If so, more needs to be added to the stem. If not, then please take out that confusing annunciator – or give indication that Rx pressure is stable. The why to entering the procedures needs to be added instead of testing what is the immediate actions. Right now, this is a fundamental question. Concur this is a poor question. Not sure looking at the distractors what is being tested at the SRO level. It appears the question is testing whether the action is immediate or subsequent. Also, there are actions with regard to the open SRV that are not address opening a potential argument that there is no correct answer. This question was rewritten.
89	H	4				X							X	N	U S		Reference not provided. This stem is VERY confusing. What is going on in the plant? Is this ADS a malfunction? A is a very incredible distractor, and a "none of the above", which is bad. Why not test and see if the candidates know if EOP 1A needs to be entered first? The why to entering the procedures that would make it SRO knowledge is missing. Provide the technical references to support the question. This is a 2 part KA and only one part is addressed. Distractor A is not credible. This question was revised.
90	H	4										X		N	U S		Ops policy that states not to enter SBO while DG starts is not provided. I don't think this matches the KA because the transformers are not loads, they provide power to the loads. Otherwise, this looks like a good SRO question. This is a 2 part KA and only one part is addressed by the question. Provide the

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			
																technical references to support the question. After discussing with facility, this question is OK as written.
91	H	3												B	? S	No reference provided. I was unable to review question. Provide the technical references to support the question.
92	H	3	X				?							N	E U S	Stem needs to say what procedure do you enter. Why Off-Gas as a distracter if offgas is not mentioned? Off-gas should be mentioned. Which procedure has higher priority? This question tests on subsequent actions which typically are not memory items. This is a KA mismatch in that it does not predict the impact on main and reheat steam. After discussing with facility, this question is OK as written.
93	H	3											X	N	U S	This is RO knowledge – KA should be thrown out. This question tests on immediate actions and AOP entry conditions; both of which are RO knowledge items. This question will be revised. This question was rewritten.
94	F	3											X	B	E S	Stem needs to ask which procedure to enter. The why for each procedure is missing – otherwise it is RO knowledge and a fundamental knowledge question. This question is OK as written.
95	F	2	X				X							N	E U	The stem needs to be more specific, otherwise, A and B are partially correct. Not sure what “prior NRC approval has been initiated” means. Arguments could be made that A, B, and D are all correct. The question does not test the process of determining if the change increases the probability of occurrence as required by the KA. This question will be revised.
96	H	2		X			X							N	U S	A is “none of the above”, which is unacceptable. B is also a “none of the above”! As written, the NOT full up portion is a cue that there is a problem. Can the test give some measurement for mast height– like 105”, or some %? Distractor C doesn’t make any sense, what is “this procedure” that is not controlling? This is a KA mismatch as it does not test on the refueling administrative requirements. The correct distractor states to stop refueling floor activities. There provided reference does not state this. There are many potential refueling floor activities other than the bridge activities. Are all the activities required to be stopped as stated? If not then there is no correct answer. This question will be revised.
97	H	3												N	? U S	Does Cooper use “Primary Containment” or drywell and torus? Reference was not given from EOP 3A that would drive this – I could not review question. Provide the technical references to support the question. This is a KA mismatch in that the question does not test on the process for a “planned gaseous release”. This question will be revised. This question was rewritten.

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only			
98	H	3	X				X							M	U S	I could not review whether it was modified. The stem asks who SHOULD be selected. It needs to ask who is the ONLY choice allowed by procedure. This question is a good idea, but it needs to be asked in a different way. Apparently, Cooper doesn't use "Planned Special Exposure" – they call it "Emergency Exposure". That means that choice D is incorrect also. If choice D had no PSE, then choices B and C have no difference between them, and B and C are the same answer choice, and therefore can be eliminated.  It is not clear from the reference provided if this question is basic radworker knowledge or SRO knowledge. It appears to be basic radworker knowledge.  This question is ok as written.
99	H	3					X							N	E U S	A is an incredible distractor – HPCI is isolated. It should be "Site AREA Emergency". Otherwise, this looks okay.  All the distractors could be argued as being correct depending on how a "significant change in the status of the emergency" is interpreted. This question was revised.
100	H	3												B	S	

<b>RO TOTALS:</b>	B= 41	F= 29 (61%)	E= 13	Additional Notes: Because the original questions were not provided, the modified questions were counted as bank questions.
	M= 0	H= 46 (49%)	U= 29	
	N= 34			

<b>SRO TOTALS:</b>	B= 6	F= 4 (16%)	E= 2	Additional Notes: Because the original questions were not provided, the modified questions were counted as bank questions.  84% of the questions are higher cognitive which is well outside the recommended 60% limit.
	M=	H= 21 (84%)	U= 16	
	N= 19			

- GENERAL COMMENTS:**
- Bank questions are indicated by B; Modified are indicated by M; New questions are indicated by N.
  - Chief Examiner comments are indicated in *blue*.
  - Average difficulty is 2.93 on the RO exam and 2.80 on the SRO exam.
  - There are many grammatical and some spelling errors in the questions that were not included on the review comments. The entire exam must be reviewed to correct these errors prior to the final exam submittal.
  - Many of the questions did not have the technical references needed to support the correct and incorrect distractors.
  - The modified questions did not include the original bank questions for evaluation.

7. The number of higher cognitive question on the SRO exam needs to be reduced to below 72%.