

ILT46

Facility: Oconee		Date of Examination: 12/08/2014
Examination Level: RO <input checked="" type="checkbox"/>	SRO <input type="checkbox"/>	Operating Test Number: 1
Administrative Topic (see Note)	Type Code*	Describe activity to be performed
Conduct of Operations G2.1.43 (4.1/4.3)	M, R	Admin-146, Manually Calculate Shutdown Margin (RO only) (25 min)
Conduct of Operations KA G2.1.25 (3.9/4.2)	D, R	Admin-142, Determine Time for SFP to reach 180°F (BOTH) (15 min)
Equipment Control G2.2.12 (3.7/4.1)	D, R	Admin-249, Perform Manual RCS Leakage Calculation (RO Only) (20 min)
Radiological Control G2.3.4 (3.2/3.7)	D, R	Admin-306, Determine the Maximum Permissible Stay Time Within Emergency Dose Limits (EDLs) (BOTH) (20 min)
Emergency Plan		N/A
NOTE: All items (5 total) are required for SROs. RO applicants require only 4 items unless they are retaking only the administrative topics, when all 5 are required.		
* Type Codes & Criteria: (C)ontrol room, (S)imulator, or Class(R)oom (D)irect from bank (≤ 3 for ROs; ≤ 4 for SROs & RO retakes) (N)ew or (M)odified from bank (≥ 1) (P)revious 2 exams (≤ 1; randomly selected)		

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Facility: Oconee Examination Level: RO <input type="checkbox"/> SRO <input checked="" type="checkbox"/>	Date of Examination: 12/08/2014 Operating Test Number: 1
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Administrative Topic (see Note)	Type Code*	Describe activity to be performed
Conduct of Operations G2.1.43 (4.1/4.3)	M, R	Admin-147, Manually Calculate Shutdown Margin and Determine any Required Actions (SRO only) (30 min)
Conduct of Operations KA G2.1.25 (3.9/4.2)	D, R	Admin-142, Determine Time for SFP to reach 180°F (BOTH) (15 min)
Equipment Control G2.2.40 (3.4/4.7)	N, R	Admin-246, Determine ALL Tech Spec and SLC LCO's that are NOT met (SRO Only) (20 min)
Radiological Control G2.3.4 (3.2/3.7)	D, R	Admin-306, Determine the Maximum Permissible Stay Time Within Emergency Dose Limits (EDLs) (BOTH) (20 min)
Emergency Plan G2.4.38 (2.4/4.4)	M,R	Admin-431, Determine Emergency Classification and Protective Action Recommendations (SRO Only) (25 min)

NOTE: All items (5 total) are required for SROs. RO applicants require only 4 items unless they are retaking only the administrative topics, when all 5 are required.

* Type Codes & Criteria:
 (C)ontrol room, (S)imulator, or Class(R)oom
 (D)irect from bank (≤ 3 for ROs; ≤ 4 for SROs & RO retakes)
 (N)ew or (M)odified from bank (≥ 1)
 (P)revious 2 exams (≤ 1; randomly selected)

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ES-401

Written Examination Review Worksheet

[Form ES-401-9](#)

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws			4. Job Content Flaws			5. Other		7. B/M/N U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia #/units	Backward		

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. Enter question source: (B)lank, (M)odified, or (N)ew. Check that (M)odified questions meet criteria of ES-401 Section D.2.f.
7. 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?
8. At a minimum, explain any "U" ratings (e.g., how the Appendix B psychometric attributes are not being met).

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws			5. Other		6. B/M/N U/E/S	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	X								X				K/A 008AK3.04 1. Q does not meet K/A statement. K/A requires some knowledge of RCP trip requirements as they apply to vapor space accidents. You can delete all of the information in the "given" section and answer the Q solely by fundamental knowledge of Rule 2 without having to even recognize one is in a vapor space accident situation. 2. There may be a relatively easy way to fix the Q—put some of the information in the Q statement in the conditions of the Q as follows to elicit analysis of conditions from the applicants. For example, give two SCM readings in the initial conditions of the Q, then give two SCM readings in the current conditions (the correct SCM would be reading less than zero). Then ask for first part Q whether or not all RCPs have to be secured based on the given conditions. 3. Editorial: no apostrophe needed for RCPs, apostrophe designates possession instead of plurality. 4. Second part distractors A(2) and C(2): let's discuss during review to ensure they are logically false, if we tie the Q into a vapor space accident it's probably o.k. Q appears U as submitted, could be reclassified as E based on hopefully ease of correction. Facility licensee modified Q as requested by the NRC, reclassified as an E rather than a U for quality purposes. Q now appears ready to be administered on the examination. MKM 11/17/2014
2	H	2	X												K/A 009EA2.23 1. Q does not meet K/A statement and has most of the same issues as Q 1 above—specifically, that the given conditions can be deleted and the Q asked as a fundamental knowledge of Rule 2, no analysis of conditions associated with SBLOCAs or RCP operating parameters are required. 2. Like in the above Q, we should be able to fix the Q by placing required information in the Q stem. For example, give SBLOCA conditions and RCP parameters which are operating limits that have been exceeded. But it has been greater than two minutes, so now do you trip the RCP or not? Then we'll probably be good with K/A match issue. Q appears U as submitted, could be reclassified as E based on hopefully easy correction. Facility licensee modified Q as requested by the NRC, Q is reclassified as an E based on ease of correction. Q now appears ready to be administered on the examination. MKM 11/17/2014

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws			5. Other		6. B/M/N U/E/S	7.	8. Explanation		
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia #/units	Backward	Q=K/A				SRO Only	
3	H	2	X									Y	N/A	N	E	<p>K/A 011EA2.06</p> <p>1. Q=K/A, Q is RO level. 2. A few editorial recommendations: (1) add seconds to time under initial conditions for parallelism (Time = 0400:00). (2) add additional bullet under current conditions "operators have not adjusted the 1A RBCU switch alignment." 3. Ensure Q statement is clearly asking about conditions at 0402:30, maybe something like: "Based on the given conditions, which ONE of the following describes the lights that will be ILLUMINATED in the picture below at time=0402:30?"</p> <p>Q appears E at this time.</p> <p>Facility licensee made minor changes as requested. Q now ready for administration on the examination.</p> <p>MKM 11/14/2014</p>
4	H	2	X									Y	N/A	B	E	<p>K/A 015/017AK1.04</p> <p>1. Q=K/A, Q is RO level. 2. Do we need to add statement "1A and 1B FDW Masters are in HAND" to the given conditions? This statement was a part of the original pedigree Q. What was the reason to remove it from the submitted Q? 3. Recommend adding "approximately" to second part Q statement as follows: "... a MFDW flow of approximately (2) ___ 10^6 LB/HR..."</p> <p>Q appears E at this time.</p> <p>Facility licensee stated that feedwater masters in hand was not required information for this Q. Q appears ready to administer on this examination at this time.</p> <p>MKM 11/17/2104</p>

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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	2				X						N	N/A	M	U	<p>K/A 022AK1.01</p> <p>1. Q does not meet K/A statement. K/A requires applicant to demonstrate knowledge of the consequences of thermal shock, but such knowledge is not elicited from the Q. First part of the Q does not meet K/A, second part statement teaches the applicant that seal injection flow is re-established slowly to prevent thermal shock to a component; applicant then answers the Q by knowing which component.</p> <p>2. Second part Q distractors of "thermal barrier" are non plausible. Q statement specifically asks about restoration of RCP seal injection; it is therefore evident that RCP seal injection impacts RCP seals in a comparison to the thermal barrier. Why would an applicant think that incorrect restoration of RCP seal injection damages the thermal barrier but not RCP seals?</p> <p>3. Q says it is modified, but no basis Q is provided in the Q writeup sections (either Q Source or Development References). Please provide Q source as reference.</p> <p>Q appears U at this time due to not meeting the K/A statement and due to multiple non plausible distractors.</p> <p>Facility licensee proposed new Q to meet this K/A statement. New Q was modified slightly in agreement with both facility licensee and NRC. Newly modified Q appears ready to administer on this examination.</p> <p>MKM 11/17/2014</p>
6	F	2										Y	N/A	N	S	<p>K/A 025AK2.02</p> <p>1. Q=K/A, Q is RO level.</p> <p>2. Cognitive level: believe this is a fundamental (lower cog) level Q vice comprehension (higher cog).</p> <p>Q appears S at this time.</p> <p>Q appears ready to administer on the examination.</p> <p>MKM 11/17/2014</p>

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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
7	F	2									X				<p>K/A 026AG2.2.42</p> <p>1. Q does not meet K/A, which requires some link between entry into TS and a loss of CCW condition. First part Q elicits information concerning letdown temperature setpoint, second part Q elicits information concerning Pzr level.</p> <p>2. Second part Q may be minutia? Are RO applicants required to know/be able to differentiate between the actual TS requirement setpoints and the PT instrument error setpoint bands? May not be an issue because I believe the Q requires other modifications anyway.</p> <p>Q appears U at this time due to not meeting K/A statement.</p> <p>Facility licensee explained during review that at Oconee the CCW system is not a safety-related SSC included in TS/SLCs and that at Oconee the LPSW system was the heat sink system for safety related equipment such as HPI pumps. Chief Examiner allowed extension of the K/A match to loss of LPSW based on the design of the Oconee station. Facility licensee will propose new Q based on these considerations. Initial submitted Q is re-rated as E rather than U based on this discussion with the licensee.</p> <p>Facility licensee submitted new Q to match loss of LPSW and entry-level conditions for TS. Analysis and comments on new Q: Q=K/A, Q is on RO level. Believe this is a higher cognitive Q based on analysis of second part Q. Second part Q statement uses a "(1)" in the fill-in-the blank, should be a "(2)"; otherwise looks o.k. New submitted Q is ready for administration on the examination.</p> <p>MKM 12/02/2014</p>
8	H	2									X				<p>K/A 027AA1.01</p> <p>1. Q=K/A, Q is on RO level.</p> <p>2. Units: we're dealing with saturation temperatures where fractions of a degree matter, recommend changing fourth bullet Pressurizer temperature to be 648.0 °F</p> <p>3. Last two bullets, recommend all caps the word "OFF"</p> <p>Q appears E at this time.</p> <p>Facility licensee made slight modifications as requested by NRC. Q appears ready to be administered on the examination.</p> <p>MKM 11/17/2014</p>

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws			5. Other		6. B/M/N U/E/S	7.	8. Explanation		
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia #/units	Backward	Q=K/A				SRO Only	
9	F	2										Y	N/A	B	S	K/A 029EA1.11 1. Q=K/A, Q is on RO level. Q appears S at this time. Q appears ready to be administered on the examination. MKM 11/17/2014
10	H	2										Y	N/A	N	S	K/A 054AK1.02 1. Q=K/A, Q is on RO level. 2. Delete typo in Q statement extra "s" in "Generators." Q appears S at this time. Q is now ready to administer on the examination. MKM 11/17/2014
11	F	2				X						Y	N/A	B	E	K/A 055EK3.02 1. Q=K/A, Q is on RO level. 2. Q parallelism: correct answer "D" modify to say "...if DC power is lost to the solenoid." This will match language of distractor A 3. Distractor C is non plausible due to the vague nature of statement—what type of cooler damage? Damage to which coolers? Original pedigree Q distractor C is more plausible in my opinion. Q appears E at this time. Facility licensee modified Q as requested by the NRC. Q as modified is now ready to administer on the examination. MKM 11/17/2014
12	F	2										Y	N/A	B	S	K/A 056AG2.4.18 1. Q=K/A, Q is on RO level. Q appears S at this time. Q is ready to administer on the examination. MKM 11/17/2014

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws			5. Other		6. B/M/N U/E/S	7. U/E/S	8. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia #/units	Backward	Q=K/A				SRO Only
13	H	2				X					Y	N/A	B	U	K/A 057AA1.05 1. Q=K/A, Q is on RO level. 2. Distractors C, D non plausible due to train designations. There are no cross-train distractors; therefore, given a failure of 1KV/A and another Train A instrumentation problem (trouble alarm), why would an applicant pick either "C" or "D?" Is there any way to use other buses—maybe 1KV/IC?—to use as a path forward? Q appears U at this time due to multiple non plausible distractors. Facility licensee proposed a completely new Q based on the above comments. The new Q meets the K/A and is on the RO level. New Q appears to be ready to administer on the examination as proposed. MKM 11/17/2014
14	F	2									Y	N/A	B	S	K/A 058AK3.01 1. Q=K/A, Q is on RO level. 2. Q was one of previously submitted/initial Qs. Q appears S at this time. Q is ready for administration on the examination. MKM 11/17/2014
15	H	2	X								Y	N/A	N	E	K/A 065AG2.4.34 1. Q=K/A, Q is on RO level. 2. Phrasing of first part Q ("MINIMUM condition(s)...") is somewhat confusing. Typically it is better to test only the logical differences in the answer choices. If all the answer choices contain a piece of information, then that piece of information must be logically a "true" and you are not testing anything to do with that piece of information. Recommend changing the first part Q to test whether A/A does/does NOT supply backup control air to 1HP-31. (which from a strictly logical perspective is all that is being tested anyway). Q appears E at this time. Facility licensee modified Q as requested by NRC. Q as modified is ready to be administered on the examination. MKM 11/17/2014.

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws			5. Other		6. B/M/N U/E/S	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia #/units	Backward	Q=K/A			
16	H	2												K/A BWE04EK2.2 1. Q=K/A, Q is on RO level. Q appears S at this time. Q is ready to be administered on the examination. MKM 11/17/2014.
17	H	2												K/A BWE05EK2.1 1. Q=K/A, Q is on RO level. Q appears S at this time. Q appears ready to be administered on the examination. MKM 11/17/2014
18	F	2	X											K/A BWE10EA2.2 1. Q=K/A, Q is on RO level. 2. Given information: do we need to add information that all rods are fully inserted to ensure the correct answer is actually fully correct? Q appears E at this time. Facility licensee modified Q as requested, Q is ready for administration on the examination. MKM 11/17/2014. Facility licensee proposed slight editorial modification based on validation, accepted by the NRC. Q is still ready for administration on the examination. MKM 12/02/2014.

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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			
19	F	2												K/A 005AK1.06 1. Q=K/A, Q is on RO level. 2. Cognitive level: believe this Q is fundamental (lower cog) vice higher cog, applicant only needs to know runback limit and basis from memory. 3. Overlap with Q4 seems to be acceptable. Q appears S at this time. Q is ready for administration on the examination. MKM 11/17/2014.
20	F	2				X								K/A 032AK2.01 1. Q=K/A, Q is on RO level. 2. Some of the modifications to the basis Q appear to have lessened the plausibility of the distractors. Discussion is as follows: In the given conditions, we are told that the inverter has lost normal input power—so why would we want to realign to the inverter as specified in distractor “A?” For distractors “C” and “D,” are there any NIs at Oconee that have backup power supplies that automatically transfer based on switch alignments? Finally, distractor D non plausible due to interplay between an automatic transfer and a static switch. 3. These plausibility concerns would seemingly be fixed using the pedigree Q from ILT39. Q appears U at this time due to multiple non plausible distractors. Facility licensee agreed with NRC comments above and replaced the proposed Q with the pedigree Q from ILT 39. This Q meets the K/A and is on the RO level. Q is ready for administration on the NRC examination. MKM 11/17/2014.

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws			5. Other		6. B/M/N U/E/S	7. U/E/S	8. Explanation		
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia #/units	Backward	Q=K/A				SRO Only	
21	F	2				X						Y	N/A	N	E	<p>K/A 051AA2.02</p> <p>1. Q=K/A, Q is on RO level. 2. Plausible distractor: "C" is a vacuum setpoint carried to the one hundredth decimal position. A number used by the operators to make a manual reactor trip decision would not be stated to that precision. Recommend using another vacuum number in the procedure (maybe 24" ?), otherwise distractor "C" is not plausible.</p> <p>Q appears E at this time.</p> <p>Facility licensee modified the Q as requested by the NRC. Q as modified is ready to administer on the examination.</p> <p>MKM 11/17/2014.</p>
22	F	2										Y	N/A	N	S	<p>K/A 061AK2.01</p> <p>1. Q=K/A, Q is on RO level. Q appears S at this time. Q is ready for administration on the examination.</p> <p>MKM 11/17/2014</p>
23	F	2										Y	N/A	N	S	<p>K/A 067AA1.05</p> <p>1. Q=K/A, Q is on the RO level. 2. This Q was on the initial/first ten Q submittal, NRC comments at that time were addressed. Q appears S at this time. Q is ready for administration on the examination.</p> <p>MKM 11/17/2014.</p>
24	F	2										Y	N/A	B	S	<p>K/A BWA02AK3.2</p> <p>1. Q=K/A, Q is on the RO level. Q appears S at this time. Q is ready for administration on the examination.</p> <p>MKM 11/17/2014</p>

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws			5. Other		6. B/M/N U/E/S	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia #/units	Backward	Q=K/A			
25	F	3												K/A BWA07AK1.3 1. Q=K/A, Q is on the RO level. Q appears S at this time. Q is ready for administration on the examination. MKM 11/17/2014
26	H	2												K/A BWE03EA2.1 1. Q=K/A, Second part Q is on RO level; however, the first part Q is at the SRO-only level. First part Q requires the applicant to have detailed EOP transition knowledge (procedure selection) beyond entry conditions. Is it an RO function or an SRO/procedure reader function to determine the EOP tabs and priorities to be entered following Subsequent Actions? For example, on the SRO exam Q95 and Q99 are SRO only based on procedure selection of EOP tabs. Q appears U at this time due to SRO only knowledge required on the RO exam/license level mismatch. Based on facility licensee input, the first transition after Subsequent Actions is RO level knowledge and all subsequent procedural transitions are SRO level knowledge. Q is reclassified as an E based on the facility licensee information. Slightly modified the first part Q statement to ensure RO only knowledge. Q as modified is ready for administration on the examination. MKM 11/17/2014

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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			
27	H	2												<p>K/A BWE09G2.4.31</p> <p>1. Q is RO level; however, Q does not meet the K/A statement. Although a natural circ situation is provided, the Q does not test any knowledge related to annunciator alarms, indications, or alarm response procedures as required by the K/A. The first part Q is knowledge of a Rule 7 setpoint; the second part Q is major action mitigation of the FCD EOP tab when voids are seen to be formed in the Rx vessel head. To meet the K/A we need to test some aspect of annunciator alarms or recognition of plant conditions based on annunciator alarms; or other indications associated with annunciators; or alarm/annunciator response procedures.</p> <p>Q appears U at this time due to not meeting the K/A.</p> <p>Facility licensee proposed a completely new Q to meet the K/A. New Q is a better match for the K/A statement, and appears ready to administer on the examination.</p> <p>MKM 11/17/2014.</p>
28	H	2				X								<p>K/A 003A3.04</p> <p>1. Q=K/A, Q is on RO level.</p> <p>2. There is excessive overlap with this Q and Q4 which makes multiple distractors non plausible. Based on information in Q4, the applicants will know that RCP trip causes a runback to either 74% power or 65% power—in either case, not 55%. That makes distractor A non plausible. The second part of Q4 'teaches' the applicants that D(2) cannot be true; therefore distractor D is non plausible. Further, the structure of Q4 lends a lot of credence to correct answer B.</p> <p>Q appears U at this time due to overlap between Q4 leading to multiple non plausible distractors.</p> <p>Facility licensee proposed new Q based on above NRC comments, New Q meets the K/A and is on the RO level. New Q as written is ready for administration on the examination.</p> <p>MKM 11/17/2014.</p>

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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	
29	F	2	X								Y	N/A	M	E	<p>K/A 003K4.03</p> <p>1. Q=K/A, Q is on RO level. 2. First part Q statement: recommend changing to the following: "1) The AC oil lift pump will/will NOT automatically stop after a time delay." The Q as submitted can be logically reduced to this determination. Q appears E at this time. Facility licensee modified the Q as requested by the NRC. Q as modified is ready for administration on the examination. MKM 11/17/2014</p>	
30	H	1				X						Y	N/A	N	U	<p>K/A 004K6.20</p> <p>1. Q=K/A, Q is on RO level. 2. GFES knowledge and the interplay between distractors A and D make them non-plausible. Discussion: the SDM concept is GFE knowledge, if control rods are withdrawing, so that on a Rx trip more negative reactivity would be inserted, how would SDM be decreasing? (distractor D) Similar logic for distractor A: if control rods are inserting, so that on a Rx trip less negative reactivity would be inserted, how would SDM be increasing? Now choices are either B or C, but I don't know the plant operating history over the past six months—did we have a refueling outage? Not enough information to determine/potential for multiple correct answers. Q appears U at this time due to multiple non plausible distractors. Facility licensee proposed new second part Q and modified the initial conditions as requested by the NRC. The newly proposed Q appears ready for administration on the examination. MKM 11/17/2014</p>
31	F	2?									Y	N/A	N	S	<p>K/A 005K2.01</p> <p>1. Q=K/A, Q is on RO level. Q appears S at this time. Q is ready for administration on the examination. MKM 11/17/2014</p>	

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws			5. Other		6. B/M/N U/E/S	7. U/E/S	8. Explanation		
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia #/units	Backward	Q=K/A				SRO Only	
32	H	2										Y	N/A	B	E	<p>K/A 006K6.02</p> <p>1. Q=K/A, Q is on RO level. 2. We can remove double quotes around initial "3A" and "3B." Q statement is only asking for one adverse effect (singular) and its cause. Recommend adding "design basis" to end of Q statement as follows: "...cause that could occur during a design-basis large break LOCA?"</p> <p>Q appears E at this time.</p> <p>Facility licensee modified Q as requested by the NRC. Q as modified is ready for administration on the examination.</p> <p>MKM 11/17/2014</p>
33	H	3										Y	N/A	B	E	<p>K/A 006K6.19</p> <p>1. Q=K/A, Q is on RO level. 2. Nomenclature: believe we need to add title of procedure Encl. 5.12, also noun name/descriptor for valve 1LP-22?</p> <p>Q appears E at this time.</p> <p>Facility licensee states that valve nomenclature is not required as long as the valves are listed as specified in the EOPs/AOPs, Q now appears ready to administer on the examination.</p> <p>MKM 11/17/2014.</p>
34	F	2										Y	N/A	N	E	<p>K/A 007A1.01</p> <p>1. Q=K/A, Q is on RO level. 2. There is a logical subset/separation in the second part Q because as written it is a logical "true" that the Quench Tank Pump will automatically trip. Recommend re-writing the second part Q to test whether or not the Component Drain Pump will/will NOT automatically trip, this is what the second part Q is logically asking anyway.</p> <p>Q appears E at this time.</p> <p>Facility licensee modified the Q as requested by the NRC. Q as modified now appears ready to be administered on the examination.</p> <p>MKM 11/17/2014</p>

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws			5. Other		6. B/M/N U/E/S	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia #/units	Backward	Q=K/A			
35	H	2												K/A 008A2.08 1. Q=K/A, Q is on RO level. 2. This Q source is from one of the previous 2 NRC exams. Q appears S at this time. Q is ready for administration on the examination. MKM 11/17/2014.
36	F	2												K/A 008K1.02 1. Q=K/A, Q is on RO level. 2. By "RCP seal coolers" is it meant the same thing as "thermal barrier" (as in Q5)? If so, do we not need to use the same terminology in both Qs? 3. Q can logically break down into asking "which ONE of the following is NOT cooled by CCW?" Chief Examiner is ok with leaving the Q format as is. 4. There appears to be an extra space before distractor D. Q appears E at this time. Facility licensee modified the Q as requested by the NRC. RCP seal coolers and the thermal barrier coolers are different components. Q appears ready for administration on the examination. MKM 11/17/2014
37	H	2												K/A 010K3.03 1. Q=K/A, Q is on RO level. Q appears S at this time. Q appears ready for administration on the examination. MKM 11/17/2014 Facility licensee proposed slight editorial modifications to the second part Q statement, accepted by the NRC. Q as modified still ready for administration on the examination. MKM 12/02/2014

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws			5. Other		6. B/M/N U/E/S	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward			
38	F	2				X								K/A 012K5.01 1. Q=K/A, Q is on RO level. 2. Do we need to add "Based on the given conditions..." to the Q statement to ensure applicants do not get confused with answer choices and design bases/purposes of the listed Rx trips? 3. Distractor A is non plausible—why would an applicant think that an RCP trip causes a high flux condition (especially when a runback will occur). Is there another RCS parameter trip we can use here? (low pressure?) Facility licensee modified the proposed Q based on NRC recommendations above. Newly modified Q appears ready for administration on the examination. MKM 11/17/2014
39	H	3												K/A 13K4.08 1. Q=K/A, Q is on RO level. Q appears S at this time. Q appears ready for administration on the examination. MKM 11/17/2014

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws			5. Other		6. B/M/N U/E/S	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia #/units	Backward	Q=K/A			
40	H	2												K/A 022A3.01 1. Q=K/A, Q is on RO level. 2. Logical separation of distractors: first part Q resolves into whether or not C LPSW pump received a start signal. Second part Q resolves into whether or not 1LPSW-16 received an open signal. We can just test these concepts and therefore avoid teaching in the Q. 3. Nomenclature: do we need to add the noun name for 1LPSW-16? Q appears E at this time. Facility licensee stated that valve nomenclature was not required for 1LPSW-16, made other modifications as requested by NRC. Q appears ready for administration on the examination. MKM 11/17/2014 Based on final validations, facility licensee proposed adding diagrams of C LPSW pump switch and 1LPSW-16 valve switch for nomenclature concerns, these editorial modifications were accepted by the NRC. Modified Q is still ready for administration on the examination. MKM 12/02/2014
41	F	2												K/A 026K1.01 1. Q=K/A, Q is on RO level. 2. First part Q distractors: unsure what is meant by "normally," we should more specifically define the term. Q appears E at this time. Facility licensee modified the Q as requested by NRC, further slight modification made to the second part Q statement and distractors. Q as modified appears ready for administration on the examination. MKM 11/17/2014

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws			5. Other		6. B/M/N U/E/S	7. U/E/S	8. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia #/units	Backward	Q=K/A				SRO Only
42	H	2				X					Y	N/A	B	E	<p>K/A 026K3.02</p> <ol style="list-style-type: none"> Q=K/A, Q is RO level. Recommend modifying first part Q statement to ask "one of its purposes" instead of "its purpose"—isn't the main purpose to lower RB pressure? C(1) and D(1) are close to non plausible – Zirc water reaction takes place at such high temperatures that we would potentially be in SAMG space, why would it be a design purpose of the system to limit H2 production just for this reaction? Recommend deleting the phrase "due to Zirc water reaction." Granting some benefit of the doubt here. <p>Q appears E at this time.</p> <p>Facility licensee modified the Q as recommended by the NRC. Q as modified appears ready for administration on the examination.</p> <p>MKM 11/18/2014</p>
43	H	2									Y	N/A	B	S	<p>K/A 039A4.01</p> <ol style="list-style-type: none"> Q=K/A, Q is RO level. <p>Q appears S at this time.</p> <p>Q appears ready for administration on the examination.</p> <p>MKM 11/18/2014</p>
44	H	2									Y	N/A	B	E	<p>K/A 059A2.06</p> <ol style="list-style-type: none"> Q=K/A, Q is on RO level. First part Q—what is the timing we are asking here (initial response or steady-state)? Does it matter/do we need to more precisely state what we are asking? Second part Q—think we need to ask the <u>first</u> procedure to reopen 1HPE-6, otherwise we may have more than one answer. <p>Q appears E at this time.</p> <p>Facility licensee modified Q as requested by NRC. Further slight modifications were made to the second part Q dealing with OP procedure selection. Facility licensee stated that this knowledge was required of RO operators and was not SRO only.</p> <p>MKM 11/18/2014</p>

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws			5. Other		6. B/M/N U/E/S	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia #/units	Backward	Q=K/A			
45	H	2												K/A 061A3.03 1. Q=K/A, Q is on RO level. Q appears S at this time. Q appears ready for administration on the examination. MKM 11/18/2014
46	F	2												K/A 061K2.02 1. Q=K/A, Q is on RO level. Q appears S at this time. Q appears ready for administration on the examination. MKM 11/18/2014
47	H	3												K/A 062K1.04 1. Q=K/A, Q is on RO level. Q appears S at this time. Q appears ready for administration on the examination. MKM 11/18/2014
48	F	2												K/A 063G2.2.39 1. Q=K/A, Q is on RO level. Q appears S at this time. Q appears ready for administration on the examination. MKM 11/18/2014

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws			5. Other		6. B/M/N U/E/S	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia #/units	Backward	Q=K/A			
49	H	2	X											K/A 064K3.02 1. Q=K/A, Q is on RO level. 2. Recommend slightly more detail for third bullet under 1200—maybe large LOCA occurs coincident with a total loss of offsite power? Also for Q statement, recommend we add some kind of “no operator actions occur” statement. Q appears E at this time. Facility licensee modified the Q as requested by the NRC. Q now appears ready for administration on the examination. MKM 11/18/2014
50	F	2												K/A 073A4.02 1. Q=K/A, Q is on RO level. Q appears S at this time. During exam review with the facility licensee, noticed slight disparity with the first part answer choices—RIA-45 is a digital radiation monitor and would therefore not read “offscale high.” Q was fixed by changing the first part Q statement to read whether or not the RIA-45 will/will NOT read zero after reaching the switchover acceptance criteria. Q as modified now appears ready for administration on the examination. MKM 11/18/2014.

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws			4. Job Content Flaws			5. Other		6. B/M/N U/E/S	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia #/units	Backward			
51	H	2											<p>K/A 076A1.02</p> <p>1. Q=K/A, Q is on RO level.</p> <p>2. Q is potentially U due to overlap between this Q and the simulator JPM 'a' which also requires a Rx trip due to high CRDM temperature. Discussion is as follows: Applicants will have just seen the simulator JPM and just had to trip at 180 degrees, therefore the 140 degree distractors are non plausible. Either the JPM or this Q will need to be changed.</p> <p>3. Second part Q is somewhat confusing—which RCW system temperatures are we asking about, and when (timing concern— e.g., before or after the Rx trip, does it matter?). If we want to keep this Q as is, we will need to be more specific with what we are asking with the second part Q.</p> <p>Q is potentially U or E based on the above discussions.</p> <p>Facility licensee changed the simulator JPM so that it is no longer an alternate path JPM and therefore resolved any concerns over excessive overlap. Facility licensee modified the Q per number 3 above as requested by the NRC. Q is rated as E for quality purposes. Q now appears ready for administration on the examination.</p> <p>MKM 11/18/2014</p>
52	F	2	X										<p>K/A 078G2.1.20</p> <p>1. Q=K/A, Q is on RO level.</p> <p>2. Slight teaching in the Q statement; we're just asking what the procedure requires, can delete "IMAs of the EOP will be performed. ." Discuss during review that Q statement is clear enough that it is clear we are asking exactly what the procedure states, not what is going to happen (logical differentiation between distractors).</p> <p>3. It is common knowledge that the turbine trips on a Rx trip from 100% power. What specific impact would instrument air have on the Main Turbine that AP/22 would specifically direct operators to manually trip both the Rx and the Turbine? Distractors B and D are non plausible. Giving benefit of the doubt here based on presumed ease of correction: just put the power level in the 10-15% range as long as it is below the Rx trip/Turbine trip interlock.</p> <p>Q is E based on non plausible distractors, giving benefit of doubt due to ease of correction.</p> <p>Facility licensee modified Q as requested by NRC. Facility licensee agreed that Q was a strong tie to procedural guidance vice other actuations. Q as modified appears ready for administration on the examination.</p> <p>MKM 11/18/2014</p>

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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			
53	H	2	X				X							<p>K/A 078K4.01</p> <ol style="list-style-type: none"> Q=K/A, Q is on RO level. Valve nomenclature—do we need nomenclature for 1FDW-316 and 1MS-94? Distractor D is non plausible because it does not include 1A SG. Recommend reformat of distractor D to more closely parallel distractor C as follows: "Use 1A SG AND feed 1B SG with TDEFWP using 1MS-94 spindle to throttle TDEFWP speed." Q statement is somewhat vague in asking "how" RCS temperature will be controlled, recommend following modification: "Which ONE of the following is the NEXT method specified in Enclosure 5.27 to control RCS temperature?" <p>Q appears E at this time.</p> <p>Facility licensee modified Q as requested by NRC. Q now appears ready for administration on the examination.</p> <p>MKM 11/18/2014</p>
54	H	2	X				X							<p>K/A 103A2.04</p> <ol style="list-style-type: none"> Q=K/A, Q is on RO level. Need to provide a consistent format for "inches" or quotation marks used for inches in every Q on the test. Recommend using the word "inches" for consistency. Then for third bullet under time=1200 let's state "Pressurizer level = 340 inches stable." For first bullet under time=1205 let's state "Pressurizer level = 322 inches decreasing." Did not see a unit 1 reference for AP/26 provided. Is it the same as the unit 2 AP/26? Second part Q statement: again asking what procedure "will" be entered, recommend restating as follows: "____(2)____ is the procedure required to be entered FIRST." <p>Q appears E at this time.</p> <p>Facility licensee modified proposed Q as requested by the NRC. Q now appears ready for administration on the examination.</p> <p>K/A 103A4.01</p> <ol style="list-style-type: none"> Q=K/A, Q is on RO level. Slight modification to Q statement, recommend add "automatically" before "trip OFF." <p>Q appears E at this time.</p> <p>Q appears ready for administration on the examination.</p> <p>MKM 11/18/2014</p>
55	F	2												

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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			
56	F	2	X											<p>K/A 001K5.18</p> <p>1. Q=K/A, Q is on RO level. 2. As submitted, distractor D is completely non plausible. Do not believe there is a technically correct answer to the Q as submitted, AD-OP-ALL-0203 states "operators shall expect criticality at all times during reactivity additions," therefore the EARLIEST time operators should expect criticality is when first withdrawing any rod group. This is not a provided answer choice.</p> <p>Q is U as submitted due to no technically correct answer.</p> <p>Here's a recommendation for this Q: delete all the "given" information and just ask: "In accordance with AD-OP-ALL-0203 (Reactivity Management), which ONE of the following is the EARLIEST condition during a reactor startup when criticality should be expected?"</p> <p>When operators begin withdrawing _____.</p> <p>A. CRD Safety Groups B. CRD Regulating Groups C. rods after Group 5 rods are off IN LIMIT D. rods after the -1% delta K/K ECP position is reached"</p> <p>Facility licensee accepted the recommended change with slight modification to distractors B and C. Q as modified appears ready for administration on the examination.</p> <p>MKM 11/18/2014</p> <p>Based on facility validations, facility proposed further slight editorial modifications to "given" question statement that were acceptable to NRC. Q as modified still ready for administration on the examination.</p> <p>MKM 12/02/2014</p>

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws			5. Other		6. B/M/N U/E/S	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia #/units	Back-ward	Q=K/A			
57	H	2												K/A 002A2.04 1. Q=K/A, Q is on RO level. 2. First part Q: what is the timeframe after RX trip? 5 min? 15 min? 3 hours? Could affect the Q, we need to be specific. 3. Second part Q: need to ask specifically what is the NEXT method required by the procedure, otherwise we would potentially have multiple correct answers. Q appears E at this time. Facility licensee accepted the recommended changes and set the time post Rx trip at five minutes. Q as modified appears ready for administration on the examination. MKM 11/18/2014
58	H	2	X											K/A 015K3.01 1. Q=K/A, Q is on RO level. 2. Second part Q—again we need to get away from what “will” happen and ask what is required. Recommend “is/is NOT required to be placed in Manual Bypass....” Q appears E at this time. Facility licensee modified the Q as requested by the NRC. Q now appears ready for administration on the examination. MKM 11/18/2014
59	H	2	X											K/A 016K1.12 1. Q=K/A, Q is on RO level. 2. First part Q—do we need to add “initial response?” to ensure we are clear as to what we are asking. Maybe state “The initial response to the above failure is that Steam Generator levels __ (1) __ increase.” Q appears E at this time. Facility licensee made the slight modifications as requested by the NRC. Q now appears ready for administration on the examination. MKM 11/18/2014

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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	
60	H	3										N	N/A	B	U	<p>K/A 033A1.01</p> <p>1. Q is on RO level. Q does not meet K/A. K/A requires some knowledge of how SFP cooling system affects SFP water level. Q as submitted does not elicit any knowledge of the SFP cooling system or SFP water level; instead it reflects transfer canal level following a RB purge malfunction.</p> <p>Q appears U at this time due to not meeting the K/A statement.</p> <p>Facility licensee proposed new Q based upon NRC comments above. New proposed Q meets K/A on the RO level. As proposed the new Q appears ready for administration on the examination.</p> <p>MKM 11/18/2014</p>
61	H	2										Y	N/A	M	E	<p>K/A 041K2.01</p> <p>1. Q=K/A, Q is on RO level.</p> <p>2. undo apostrophe on acronym "TBVs"</p> <p>3. This Q has been modified enough from the bank pedigree to be classified as "modified" vice "bank."</p> <p>Q appears E at this time.</p> <p>Facility licensee made slight modifications as requested by NRC, Q now appears ready for administration on the examination.</p> <p>MKM 11/18/2014</p>
62	H	2										Y	N/A	M	E	<p>K/A 056G2.4.2</p> <p>1. Q=K/A, Q is on RO level.</p> <p>2. Recommend bold or underline or something to emphasize the word "first" in first part Q, want to ensure no one misses it.</p> <p>3. Discuss timing concerns—better to list final given parameter at 0401:35? Let's talk about it during review.</p> <p>Q appears E at this time.</p> <p>Facility licensee made changes as requested. Changing last parameter to 0401:35 was not required based on facility licensee feedback regarding the Q construction. Q as modified now appears ready for administration on the examination.</p> <p>MKM 11/18/2014</p>

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws			5. Other		6. B/M/N U/E/S	7. U/E/S	8. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia #/units	Backward	Q=K/A				SRO Only
63	F	2	X								Y	N/A	M	E	<p>K/A 071A3.03</p> <p>1. Q=K/A, Q is on RO level. 2. Second part Q gives a logical "true" that OP/018 is required. Recommend only test whether or not AP/18 is required, given the conditions: "2) AP/18 (Abnormal Release of Radioactivity) is/is NOT required to be performed prior to re-initiating the release?"</p> <p>Q appears E at this time.</p> <p>Facility licensee made changes as requested by NRC. During in-office review, NRC requested further editorial modifications to more precisely define the use of the term "ONLY." Q as modified now appears ready for administration on the examination.</p> <p>MKM 11/18/2014</p>
64	F	2				X					Y	N/A	B	E	<p>K/A 072A4.03</p> <p>1. Q=K/A, Q is on RO level. 2. Recommend adding logical "ONLY" modifiers to distractors B and C.</p> <p>Q appears E at this time.</p> <p>Facility modified the Q as requested by NRC, further modifications made to distractor "D" during the in office review with facility licensee.</p>
65	H	2									Y	N/A	B	S	<p>K/A 079K4.01</p> <p>1. Q=K/A, Q is on RO level. 2. Q was also on the 2011B RO exam Q65. Was it used on any other exams?</p> <p>Q appears S at this time.</p> <p>Q appears ready for administration on the examination.</p> <p>MKM 11/18/2014</p>

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws			5. Other		6. B/M/N U/E/S	7.	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia #/units	Backward	Q=K/A			
66	F	2												<p>K/A G2.1.17</p> <p>1. Q=K/A, Q is on RO level.</p> <p>2. Multiple distractors are non plausible. First, there are two types of briefs (crew brief and focus brief) as specified in the procedures/standards, so "brief" without specifying which one is automatically weak. Furthermore, when have BOPs ever led briefs of any sort during training? When during training did operators have to 3-way briefs? 3-way communications are normally between two individuals—why would an operator think it would be required to 3-way between an entire team during a brief?</p> <p>Q appears U at this time due to multiple non plausible distractors.</p> <p>Facility licensee proposed new Q to meet this K/A based on NRC comments above. During in office review further modifications were made based on NRC recommendations. Q as modified appears ready for administration on the examination.</p> <p>MKM 11/18/2014.</p>
67	H	2												<p>K/A G 2.1.31</p> <p>1. Q=K/A, Q is on RO level.</p> <p>2. Second part Q recommend bold or underline "required," as per the pedigree Q.</p> <p>Q appears E at this time.</p> <p>Facility made slight modifications to the Q as requested, Q now appears ready for administration on the examination at this time.</p> <p>MKM 11/18/2014</p>
68	F	2												<p>K/A G 2.1.5</p> <p>1. Q=K/A, Q is on RO level.</p> <p>2. Second part Q, delete apostrophes for "ROs."</p> <p>Q appears E at this time.</p>

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws			5. Other		6. B/M/N U/E/S	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia #/units	Back-ward	Q=K/A			
69	F	2												<p>K/A G 2.2.1</p> <p>1. Q=K/A, Q is on RO level. 2. Not stopping control rod withdrawal is weakly plausible, would there be any adverse consequences if rod withdrawal is stopped? To enhance plausibility recommend specifying withdrawal of safety rods vice control rods. Per the distractor analysis, we need to specify that extra operators are available in the control room. Recommend modifying the first bullet to state: "Reactor startup in progress with extra licensed operators available in the control room." Recommend modifying the third bullet to state: "Operators are withdrawing CRD Safety Rods, when 1SA-03/E-7 (TO Bearing Header Pressure Low) actuates unexpectedly." Then delete "control" from "control rod" in the first part Q. I believe plausibility will be enhanced with these changes. Oconee please evaluate/discuss.</p> <p>Q appears E at this time.</p> <p>Facility licensee proposed new modified Q. Analysis as follows: Q=K/A, Q is on RO level. Few editorial recommendations to ensure we don't confuse safety rods with control rods (also extra capitalizations): -third bullet can delete "manipulating Control Rods" so the statement reads "The OATC Reactor Operator is training an individual on OJT From License Class" -first part Q statement can underline Safety Rods and delete Control so the statement reads "__(1)___ withdrawal(s) of Safety Rods is/are required to be announced to the Reactivity Manager PRIOR to rod withdrawal(s)."</p> <p>New modified Q appears ready for administration on the examination.</p> <p>MKM 12/02/2014</p>

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws			4. Job Content Flaws			5. Other		6. B/M/N U/E/S	7. U	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia #/units	Backward			
70	F	2											<p>K/A G 2.2.14</p> <ol style="list-style-type: none"> 1. Q=K/A. Q may be on SRO level. Normally Qs involving "what is min level of authorization required" are allowed as SRO-only. 2. Multiple correct answers? In an 878 mr/hr dose field, it would only take 57 seconds to receive 14 mr dose, it could be argued that it would take that time to perform IV of a valve. Also, OMP 1-02 states that "Supervision" can waive the IV requirements, but the procedure does not completely define the term "Supervision." Could it mean "any SRO" and not just the CRS? Chance for multiple correct answers or no correct answers. 3. Believe there is enough information in OMP 1-02 that could lead to a different approach to this Q and still meet K/A—knowledge of radiological conditions is not required by the K/A. <p>Q appears U at this time due to SRO-level concerns and multiple correct answers.</p> <p>Facility licensee initially proposed a new Q that was deemed unsatisfactory based upon the first part Q construction. Facility licensee then proposed another version of the first part Q along with the second part Q from the second attempt. Analysis of this Q: Q=K/A, Q is on RO level. Editorial recommendations: -for parallelism with Q69, change colon to ... for the "in accordance with" statement -change second part question mark to a period, add WOOLF statement as follows: "Which ONE of the following completes the statements above?"</p> <p>Facility licensee made changes as requested above. Third version of the Q, with changes, is ready for administration on the examination.</p> <p style="text-align: right;">MKM 12/02/2014</p>

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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			
71	H	2												<p>K/A G 2.2.44</p> <ol style="list-style-type: none"> Q=K/A, Q is on RO level. This Q provides an answer to Q77 on the SRO exam; either answer provided with this Q are below the 2215 psig provided in that Q; therefore it is obvious in Q77 that 1RC-1 is not functioning as designed. Also RCS pressure changing first is non plausible—why would an operator not think that energizing pressurizer –heaters- does not cause Pzr temperatures to increase? <p>Q appears U at this time due to overlap concerns with Q77 as well as multiple non plausible distractors.</p> <p>Facility licensee proposed new version of this Q. Analysis of this new Q is as follows: Q=K/A, Q is on RO level. As an editorial recommendation to the second part Q, I would recommend adding a “based on the given conditions” statement to ensure the applicants clearly relate this Q to a plant alignment with RCPs operating. Maybe something like “2) Based on the given conditions, if Pressurizer level is above the low level cutoff setpoint and all Pressurizer heaters are Manually energized, an RPS trip on high RCS pressure ___(2)___ occur.”</p> <p>Facility licensee made changes as recommended by NRC. Q as modified is now ready for administration on the examination.</p> <p>MKM 12/02/2014.</p>
72	F	2												<p>K/A G2.3.12</p> <ol style="list-style-type: none"> Q=K/A, Q is RO level. Check to ensure we have a clearly correct answer to this Q. If I am reading AP/18 correctly, section H directs the operators to verify the containment evacuation alarm, and only in the RNO column of that step directs the evacuation of non-essential personnel from the RB. Do we need to state that the evacuation alarm did not sound? And do we need to specify which “personnel” we mean in the second part Q? Let’s discuss during review, if we need to we should be able to make some modifications for this Q to work. <p>Q appears E at this time, editorial modifications may be required to ensure only one correct answer.</p> <p>Facility licensee modified Q as requested by NRC. Q now appears ready for administration on the examination.</p> <p>MKM 11/18/2014</p>

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws			5. Other		6. B/M/N U/E/S	7. U/E/S	8. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia #/units	Backward	Q=K/A				SRO Only
73	F	2	X								Y	N/A	B	E	<p>K/A G2.3.15</p> <p>1. Q=K/A, Q is RO level. 2. We gave radiation monitor name on last Q for RIA-47, we should give the same on this Q for RIA-45.</p> <p>Q appears E at this time.</p> <p>Facility licensee modified Q as requested by NRC, further modified the second part Q to ensure unit 3 was the RIA-45 unit. Q as modified appears ready for administration on the examination.</p> <p>MKM 11/18/2014</p>
74	F	2									Y	N/A	N	S	<p>K/A G2.4.12</p> <p>1. Q=K/A, Q is RO level. 2. Second bullet states "...an event in progress..." but what event? Distractor analysis states that during a LOHT all but one RCP would be tripped; assuming there are other "events" where all RCPs are tripped. If the "event" was a security event, would none of the RCPs be tripped? Since we do not specify "event" there are either multiple correct answers, or potentially no correct answer.</p> <p>Q as submitted appears U due to multiple correct answers.</p> <p>Based on facility licensee feedback, event in progress that requires SSF ASW activation is specific under all circumstances that all RCPs would be secured upon entry into AP/25. This alleviates NRC concerns with the vagueness of the questions stem, no further changes to the Q are necessary. Q appears ready to be administered on the examination.</p> <p>MKM 11/18/2014</p>
75	H	2	X								Y	N/A	M	E	<p>K/A G2.4.9</p> <p>1. Q=K/A, Q is on RO level. 2. Second part distractors contain extraneous information. In A(2) and B(2) can delete "due to loss of suction." In C(2) and D(2) we can delete "is on the discharge of the LPI pumps." Q is one of determining whether we secure the pumps to prevent pump damage or determine leak source.</p> <p>Q appears E at this time.</p>

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83	H	2	X	X	Y	Y	B	E	<p>K/A BW14EA2.1</p> <p>1. Q=K/A, Q=SRO only. 2. I think we need to add another data point under time=0530 to give SG levels in the 1B SG, because the SGTR tab (for instance at step 228) requires the non-affected SG to be capable of steaming. Recommend simply stating something like: "1B SG level = 60 inches XSUR stable." Oconee please verify this is technically valid and substitute better value if needed. 3. First part Q statement "... to reduce 1A SG level" is slight teaching in stem. Recommend editorial changes to Q statements and distractors as follows:</p> <p>"In accordance with the SGTR tab:</p> <p>1) Based on the conditions at 0500, operators ___(1)___ required to perform Enclosure 5.22 (SG Blowdown).</p> <p>2) Based on the conditions at 0530, operators are required to ___(2)___ steaming the 1A SG.</p> <p>Which ONE of the following completes the statements above?</p> <p>A. (1) are NOT (2) continue</p> <p>B. (1) are NOT (2) stop</p> <p>C. (1) are (2) continue</p> <p>D. (1) are (2) stop"</p> <p>Q is E at this time.</p> <p>Facility licensee modified the Q as requested by the NRC. Q is now ready to administer on the exam.</p> <p>MKM 11/17/2014</p>
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87	H	2	X	X	Y	Y	N	U	<p>K/A 012A2.05</p> <p>1. Q=K/A, Q=SRO only. 2. The second part Q gives away the answer to the first part Q in the following manner: it is stated as a logical truth that TS 3.3.1 requires CRD trip breakers to be open at some point of time in the 'future'. Therefore, logically it is impossible that an automatic Rx trip has occurred because TS 3.3.1 would not apply in the 'future.' This makes A(1) and B(1) non plausible. 3. The provided reference of Table 3.3.1-1 gives away far too much information. Although not the most desirable option, if we want to continue to use a question related to this specification we will need to redact nearly every bit of information on the Table except line 6 and the Notes (a), (b), and (c) at the end of the Table. If this is unacceptable due to operational validity concerns, we may need to discuss another option to meet this K/A topic. Let's discuss during review.</p> <p>Q as submitted is U due to multiple non plausible distractors.</p> <p>Consider the following recommendation, give the exact same information above the Q statement:</p> <p>"Based on the given conditions at 0830, the plant operators are _____.</p> <p>Which ONE of the following completes the statement above?</p> <p>REFERENCE PROVIDED</p> <p>A. NOT required to enter any CONDITION statement of LCO 3.3.1; the reactor has automatically tripped and LCO 3.3.1 no longer applies.</p> <p>B. required to enter/have entered CONDITION A of LCO 3.3.1 ONLY.</p> <p>C. required to enter/have entered CONDITIONS B and C of LCO 3.3.1 ONLY.</p> <p>D. required to enter/have entered CONDITIONS A, B, and C of LCO 3.3.1."</p> <p>Facility licensee modified the Q as recommended above by the NRC and will provide a redacted version of the table in the TS in order to not give away extraneous information to other questions on the exam. As modified the Q now appears ready to administer on the exam.</p> <p style="text-align: right;">MKM 11/17/2014</p>
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