Facility: **Oconee** Date of Examination: **12/08/2014**

Examination Level: RO [X] SRO [ ] 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 180ºF** (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)

ES-301 **Administrative Topics Outline** **Form ES-301-1**

ILT46

Facility: **Oconee** Date of Examination: **12/08/2014**

Examination Level: RO ☐ SRO ☒ 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-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 180ºF** (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)

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		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation

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)ank, (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).

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
1	H	2	X				X					N	N/A	N	E	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									N	N/A	N	E	K/A 009EA2.23 1. Q does not meet K/A statement and has most of the same issues as Q1 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

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
3	H	2	X									Y	N/A	N	E	K/A 011EA2.06 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?" Q appears E at this time. Facility licensee made minor changes as requested. Q now ready for administration on the examination. MKM 11/14/2014
4	H	2	X									Y	N/A	B	E	K/A 015/017AK1.04 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…" Q appears E at this time. 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. MKM 11/17/2104

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
5	H	2				X						N	N/A	M	U	K/A 022AK1.01 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. 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? 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. Q appears U at this time due to not meeting the K/A statement and due to multiple non plausible distractors. 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. MKM 11/17/2014
6	F	2										Y	N/A	N	S	K/A 025AK2.02 1. Q=K/A, Q is RO level. 2. Cognitive level: believe this is a fundamental (lower cog) level Q vice comprehension (higher cog). Q appears S at this time. Q appears ready to administer on the examination. MKM 11/17/2014

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
7	F	2							X			N	N/A	N	E	K/A 026AG2.2.42 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. 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. Q appears U at this time due to not meeting K/A statement. 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. 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. MKM 12/02/2014
8	H	2								X		Y	N/A	M	E	K/A 027AA1.01 1. Q=K/A, Q is on RO level. 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 3. Last two bullets, recommend all caps the word “OFF” Q appears E at this time. Facility licensee made slight modifications as requested by NRC. Q appears ready to be administered on the examination. MKM 11/17/2014

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
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

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
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 1KVIA 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 1KVIC?—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 AIA 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.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
16	H	2										Y	N/A	B	S	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										Y	N/A	B	S	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								Y	N/A	N	E	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.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
19	F	2										Y	N/A	N	S	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						Y	N/A	M	U	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.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
21	F	2				X						Y	N/A	N	E	K/A 051AA2.02 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. Q appears E at this time. Facility licensee modified the Q as requested by the NRC. Q as modified is ready to administer on the examination. MKM 11/17/2014.
22	F	2										Y	N/A	N	S	K/A 061AK2.01 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
23	F	2										Y	N/A	N	S	K/A 067AA1.05 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. MKM 11/17/2014.
24	F	2										Y	N/A	B	S	K/A BWA02AK3.2 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

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
25	F	3										Y	N/A	B	S	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										Y	Y	B	U	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

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
27	H	2										N	N/A	M	U	K/A BWE09G2.4.31 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. Q appears U at this time due to not meeting the K/A. 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. MKM 11/17/2014.
28	H	2				X						Y	N/A	N	U	K/A 003A3.04 1. Q=K/A, Q is on RO level. 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. Q appears U at this time due to overlap between Q4 leading to multiple non plausible distractors. 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. MKM 11/17/2014.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
29	F	2	X									Y	N/A	M	E	K/A 003K4.03 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
30	H	1				X	X					Y	N/A	N	U	K/A 004K6.20 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 by 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
31	F	2?										Y	N/A	N	S	K/A 005K2.01 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

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
32	H	2										Y	N/A	B	E	K/A 006K6.02 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?” Q appears E at this time. Facility licensee modified Q as requested by the NRC. Q as modified is ready for administration on the examination. MKM 11/17/2014
33	H	3										Y	N/A	B	E	K/A 006K6.19 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? Q appears E at this time. 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. MKM 11/17/2014.
34	F	2										Y	N/A	N	E	K/A 007A1.01 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. Q appears E at this time. Facility licensee modified the Q as requested by the NRC. Q as modified now appears ready to be administered on the examination. MKM 11/17/2014

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
35	H	2										Y	N/A	M	S	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										Y	N/A	N	E	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										Y	N/A	N	S	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

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
38	F	2				X						Y	N/A	M	E	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										Y	N/A	N	S	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

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
40	H	2					X					Y	N/A	N	E	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				X						Y	N/A	N	E	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

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
42	H	2				X						Y	N/A	B	E	K/A 026K3.02 1. Q=K/A, Q is RO level. 2. 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? 3. 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. Q appears E at this time. Facility licensee modified the Q as recommended by the NRC. Q as modified appears ready for administration on the examination. MKM 11/18/2014
43	H	2										Y	N/A	B	S	K/A 039A4.01 1. Q=K/A, Q is RO level. Q appears S at this time. Q appears ready for administration on the examination. MKM 11/18/2014
44	H	2										Y	N/A	B	E	K/A 059A2.06 1. Q=K/A, Q is on RO level. 2. 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? 3. 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. Q appears E at this time. 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. MKM 11/18/2014

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
45	H	2										Y	N/A	B	S	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										Y	N/A	N	S	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										Y	N/A	B	S	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										Y	N/A	B	S	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

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
49	H	2	X									Y	N/A	N	E	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										Y	N/A	B	S	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.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
51	H	2				X						Y	N/A	N	E	K/A 076A1.02 1. Q=K/A, Q is on RO level. 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. 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. Q is potentially U or E based on the above discussions. 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. MKM 11/18/2014
52	F	2	X			X						Y	N/A	N	E	K/A 078G2.1.20 1. Q=K/A, Q is on RO level. 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). 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 at it is below the Rx trip/Turbine trip interlock. Q is E based on non plausible distractors, giving benefit of doubt due to ease of correction. 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. MKM 11/18/2014

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
53	H	2	X			X						Y	N/A	N	E	K/A 078K4.01 1. Q=K/A, Q is on RO level. 2. Valve nomenclature—do we need nomenclature for 1FDW-316 and 1MS-94? 3. 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.” 4. 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?” Q appears E at this time. Facility licensee modified Q as requested by NRC. Q now appears ready for administration on the examination. MKM 11/18/2014
54	H	2	X			X						Y	N/A	N	E	K/A 103A2.04 1. Q=K/A, Q is on RO level. 2. 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.” 3. Did not see a unit 1 reference for AP/26 provided. Is it the same as the unit 2 AP/26? 4. Second part Q statement: again asking what procedure “will” be entered, recommend restating as follows: “___(2)___ is the procedure required to be entered FIRST.” Q appears E at this time. Facility licensee modified proposed Q as requested by the NRC. Q now appears ready for administration on the examination.
55	F	2										Y	N/A	B	E	K/A 103A4.01 1. Q=K/A, Q is on RO level. 2. Slight modification to Q statement, recommend add “automatically” before “trip OFF.” Q appears E at this time. Q appears ready for administration on the examination. MKM 11/18/2014

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
56	F	2	X			X	X					Y	N/A	N	U	K/A 001K5.18 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. Q is U as submitted due to no technically correct answer. 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? When operators begin withdrawing _____ . 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" Facility licensee accepted the recommended change with slight modification to distractors B and C. Q as modified appears ready for administration on the examination. MKM 11/18/2014 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. MKM 12/02/2014

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
57	H	2					X					Y	N/A	N	E	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									Y	N/A	N	E	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									Y	N/A	N	E	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

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
60	H	3										N	N/A	B	U	K/A 033A1.01 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. Q appears U at this time due to not meeting the K/A statement. 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. MKM 11/18/2014
61	H	2										Y	N/A	M	E	K/A 041K2.01 1. Q=K/A, Q is on RO level. 2. undo apostrophe on acronym “TBVs” 3. This Q has been modified enough from the bank pedigree to be classified as “modified” vice “bank.” Q appears E at this time. Facility licensee made slight modifications as requested by NRC, Q now appears ready for administration on the examination. MKM 11/18/2014
62	H	2										Y	N/A	M	E	K/A 056G2.4.2 1. Q=K/A, Q is on RO level. 2. Recommend bold or underline or something to emphasize the word “first” in first part Q, want to ensure no one misses it. 3. Discuss timing concerns—better to list final given parameter at 0401:35? Let’s talk about it during review. Q appears E at this time. 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. MKM 11/18/2014

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
63	F	2	X									Y	N/A	M	E	K/A 071A3.03 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?" Q appears E at this time. 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. MKM 11/18/2014
64	F	2					X					Y	N/A	B	E	K/A 072A4.03 1. Q=K/A, Q is on RO level. 2. Recommend adding logical "ONLY" modifiers to distractors B and C. Q appears E at this time. Facility modified the Q as requested by NRC, further modifications made to distractor "D" during the in office review with facility licensee.
65	H	2										Y	N/A	B	S	K/A 079K4.01 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? Q appears S at this time. Q appears ready for administration on the examination. MKM 11/18/2014

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
66	F	2					X					Y	N/A	B	U	K/A G2.1.17 1. Q=K/A, Q is on RO level. 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? Q appears U at this time due to multiple non plausible distractors. 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. MKM 11/18/2014.
67	H	2										Y	N/A	B	E	K/A G 2.1.31 1. Q=K/A, Q is on RO level. 2. Second part Q recommend bold or underline "required," as per the pedigree Q. Q appears E at this time. Facility made slight modifications to the Q as requested, Q now appears ready for administration on the examination at this time. MKM 11/18/2014
68	F	2										Y	N/A	B	E	K/A G 2.1.5 1. Q=K/A, Q is on RO level. 2. Second part Q, delete apostrophes for "ROs." Q appears E at this time.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
69	F	2					X					Y	N/A	M	E	K/A G 2.2.1 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. Q appears E at this time. 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)." New modified Q appears ready for administration on the examination. MKM 12/02/2014

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
70	F	2					X					Y	?	B	U	K/A G 2.2.14 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. Q appears U at this time due to SRO-level concerns and multiple correct answers. 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 WOOTF statement as follows: "Which ONE of the following completes the statements above?" Facility licensee made changes as requested above. Third version of the Q, with changes, is ready for administration on the examination. MKM 12/02/2014

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
71	H	2					X					Y	N/A	N	U	K/A G 2.2.44 1. Q=K/A, Q is on RO level. 2. 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. 3. 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? Q appears U at this time due to overlap concerns with Q77 as well as multiple non plausible distractors. 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." Facility licensee made changes as recommended by NRC. Q as modified is now ready for administration on the examination. MKM 12/02/2014.
72	F	2					X					Y	N/A	N	E	K/A G2.3.12 1. Q=K/A, Q is RO level. 2. 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. Q appears E at this time, editorial modifications may be required to ensure only one correct answer. Facility licensee modified Q as requested by NRC. Q now appears ready for administration on the examination. MKM 11/18/2014

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
73	F	2	X									Y	N/A	B	E	K/A G2.3.15 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. Q appears E at this time. 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. MKM 11/18/2014
74	F	2										Y	N/A	N	S	K/A G2.4.12 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. Q as submitted appears U due to multiple correct answers. 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. MKM 11/18/2014
75	H	2		X								Y	N/A	M	E	K/A G2.4.9 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 he LPI pumps," Q is one of determining whether we secure the pumps to prevent pump damage or determine leak source. Q appears E at this time.

																SRO Questions
76	H	2	X	X		X						Y	Y	N	U	K/A 022AG2.1.32 1. Q=K/A, Q=SRO-only. Some benefit-of-the doubt given here; knowledge of system limits and precautions is normally considered RO-level. However, given the need to meet the K/A, and because the limit and precautions relates to an operability determination linked to detailed analysis of plant conditions (an SRO function), the proposed Q is considered to meet the K/A on the SRO level. 2. First part Q statement: please use all caps for "OPERABLE" and "INOPERABLE" throughout the exam for consistency, *e.g.* first part Q statement should read "… make the 1HP-120 Travel Stop INOPERABLE." 3. Second part Q statement is confusing as to what is being asked, specifically the phrasing of "…additional operator actions to mitigate an LTOP event are required…." 4. Second part Q statement distractors of 25 minutes are non plausible. The provided reference for Q86 is TS 3.4.12, which clearly states in LCO 3.4.12.b. that 10 minutes is the correct time. Therefore, the correct answer is provided as a direct look-up and the 25 minute distractors are not plausible. Q is U due to direct look-up of correct answer in the provided references to another Q, which also makes multiple distractors non plausible. Facility licensee modified the second part Q with a new question, along with modifying the first part Q. New Q appears ready to administer at this time. MKM 11/17/2014 Based on final facility licensee validations, facility recommended editorial changes to the first part Q statement to make the Q statement more clear. NRC concurred with the facility recommendations. Q as modified is still ready to administer at this time. MKM 12/02/2014

77	H	2				X						Y	N	N	U	K/A 027AA2.18 1. Q=K/A, Q does not meet the K/A on SRO-only level. The first part Q can be determined via RO-level systems knowledge (whether the spray valve is operating as designed or not). Second part Q is testing knowledge of SL bases that does not relate to the K/A statement of determining operability of the pressurizer pressure control system channel. 2. Second part Q distractors are not plausible. It is RO level knowledge (above-the-line) to know that the RCS Pressure Safety Limit is applicable in MODE 5—whether or not RCPs are running, PZR is solid, etc. If no RCPs are running, it is common knowledge that the spray valve will be ineffective at mitigating an overpressure transient; therefore, it is not plausible that it would be credited in design-space, accident analysis as the basis of safety limits in TS. Q is U due to not meeting the K/A at SRO level, and due to multiple non plausible distractors. Facility licensee proposed a new Q to meet this K/A. New Q meets K/A on SRO level based on seat leakage past PORV considered as the malfunction, and determination of PORV operable or not is consistent with determination of operable PZR pressure control channel. Q as proposed appears ready to administer at this time. MKM 11/17/2014
78	H	2				X						Y	N	N	U	K/A 038EA2.10 1. Q=K/A, Q does not meet the K/A on the SRO-only level. The first part Q, which can be linked to the K/A, is answerable on the RO level based on EOP Enclosure 5.5. The provided SRO justification statement is linked to the second part Q, but the second part Q statement is not linked to the K/A, in that no knowledge of flowpath is required to answer the Q. 2. First part distractors are not plausible. With the reactor at 90% power, it is not plausible that operators would not use all available means to maintain pressurizer level. Q is U due to not meeting the K/A at the SRO level, and due to multiple non plausible distractors. New K/A provided 038EA2.17, facility provided new Q to meet this K/A. NRC requested modifications to this new Q to ensure SRO only criteria of procedure selection met. New Q now appears to meet K/A on SRO level and is ready to administer. MKM 11/17/2014

79	H	3	X			X						Y	Y	B	E	K/A 057AG2.2.36 1. Q=K/A, Q=SRO-only level. 2. For the Q statement under "current conditions," add a slight editorial modification as follows: "1DIC inverter work is completed and it is ready to be aligned to 1KVIC, but no electrical re-alignments have been made." 3. We also need to add a question statement as follows: "Based on the current conditions, which ONE of the following completes the statements above?" 4. Please change all answers/distractors to all caps "OPERABLE"/"INOPERABLE" for consistency throughout the exam. Q appears E at this time. Facility modified Q as requested by NRC. Q appears ready to administer at this time. MKM 11/17/2014
80	H	2	X									Y	Y	N	E	K/A 065AG2.4.8 1. Q=K/A, Q=SRO-only level. 2. Is there anything special about the specific value 1437 psig? Can the operators even differentiate this closely on the installed instrumentation? If needed to ensure an automatic ES actuation, would it be better to just say, for instance "1400 psig?" 3. First part Q statement, we need to test requirements and not what someone (SRO) "will do." Recommend changing "… the Procedure Director <u>will direct</u> that AP/22 be performed in parallel…." to "…the Procedure Director can direct that AP/22 be performed in parallel …." Q appears E at this time. Facility modified Q as requested by NRC. Q appears ready to administer at this time. MKM 11/17/2014

81	H	2	X			X						Y	Y	N	E	K/A 077AA2.03 1. Q=K/A, Q=SRO only with benefit of doubt given and changes recommended below. Discussion is as follows: Knowledge of when manual reactor trip is required is RO-level knowledge. With the recommendations below, SRO only is better met due to procedure selection. The best way to test procedure selection is to write the Q statement such that the answer choices are the procedure designator and title. 2. First part Q distractor: I believe from looking at the generator capability curve in AP/34 that the leading MVAR limit should be 425, not 475—i.e., 475 is not plausible. Benefit of doubt given here because it may have been a typo and due to ease of correction. Need to change C(1) and D(1) to 425. 3. Recommendation is to re-write the second part Q as follows: "If operation in the acceptable region of the Generator Capability Curve cannot be maintained, the NEXT required procedure transition is to Initiate ___(2)___ while continuing with AP/34." Then answer choice A(2) and C(2) becomes "Unit 1 EOP" and B(2) and D(2) becomes "AP/1 (Unit Runback)" 4. Oconee please check to see if these recommendations are acceptable and technically correct. If not we may need to change out the K/A or try another approach to the Q. Q appears E at this time. Facility licensee modified Q as requested by NRC. Q as modified appears ready to administer at this time. MKM 11/17/2014
82	H	3	X			X						Y	Y	B	E	K/A 003AG2.1.7 1. Q=K/A, Q=SRO only. 2. Recommend slight editorial modifications to second part Q statement and second part distractors as follows, for parallelism and to reduce the duplication/reading burden: "2) a consequence of operating the unit under the conditions described above is that _____(2)_____ could be exceeded. A. 2. allowable Thermal Power limits of Tech Spec 3.4.4 (RCS Loops MODES 1 and 2) B. 2. Linear Heat Rate limits C. 2. allowable Thermal Power limits of Tech Spec 3.4.4 (RCS Loops MODES 1 and 2) D. 2. Departure from Nucleate Boiling Ratio (DNBR) limits" Q appears E at this time Facility Licensee proposed new second part Q based on overlap concerns with RO Q19 on this exam. Re-worded second part Q to ensure the values exactly match the COLR information that will be provided as a reference to this Q. Q now appears ready to administer on the exam. MKM 11/17/2014

83	H	2	X			X						Y	Y	B	E	K/A BW14EA2.1 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: "In accordance with the SGTR tab: 1) Based on the conditions at **0500**, operators ___(1)___ required to perform Enclosure 5.22 (SG Blowdown). 2) Based on the conditions at **0530**, operators are required to ___(2)___ steaming the 1A SG. Which ONE of the following completes the statements above? A. (1) are NOT (2) continue B. (1) are NOT (2) stop C. (1) are (2) continue D. (1) are (2) stop" Q is E at this time. Facility licensee modified the Q as requested by the NRC. Q is now ready to administer on the exam. MKM 11/17/2014

84	H	2	X			X	X					Y	Y	N	E

K/A 024AA2.06

1. Q=K/A, Q=SRO only.
2. Cognitive level: this Q requires analysis of plant conditions, use of graphs and other reference materials, and application of TS. Believe this is a higher cog question, not memory-level.
3. Stem focus editorial changes: (1) undo all caps "STABLE" for current conditions Rx power. (2) recommend write Gr 7 control rods in current conditions same as in initial conditions. (3) all caps INOPERABLE
4. Do we need to add RCP status based on COLR graphs? Or, is it impossible to be at 80% power and stable with 3 RCPS running?
5. Unsure about the logic of the Q. If rods are at 40% withdrawn at 0500, then they crossed into the unacceptable region of the curves some time ago, and wouldn't that (unknown to the applicant) time be the start of the clock of when MODE 3 entry is required?
6. Main problem with this Q is that the 2nd part of the Q gives away the 1st part answer, because the reference is given and it is a logical "true" that you are in TS 3.2.1 condition B, which requires boration to be initiated within 15 minutes. Therefore, distractors C(1) and D(1) are not plausible.

Q as submitted is U due to multiple non plausible distractors.
Consider the following recommendation, Oconee please check if it is technically valid:
"Given the following Unit 1 conditions:
Initial conditions:
-Time = 0400
-Reactor Power = 80% stable
-Control Rods Group 7 = 83% withdrawn
-Group 7 Rod 3 will not move and is declared INOPERABLE

Current conditions:
-Time = 0500
-Reactor Power = 80% stable
-Control Rods Group 7 = 61% withdrawn

In accordance with Tech Spec 3.2.1 (Regulating Rod Position Limits), if the above conditions do not change the reactor is required to be in MODE 3 not later than _____.

Which ONE of the following completes the statement above?

REFERENCE PROVIDED

A. 1600
B. 1700
C. 1800
D. 1900"

Facility licensee provided input to the NRC that alleviated the concern over providing the information with the reference. Facility licensee also accepted proposed modifications as given on this page. Q is now evaluated as an "E" or enhancement instead of a U. Q now appears ready to administer on the exam.

MKM 11/17/2014.

85	H	3										Y	Y	N	S	K/A BWA05G2.4.46 1. Q=K/A, Q=SRO only. 2. This was submitted as one of the initial/preliminary Qs. Q appears S at this time. Q appears ready to administer on the exam. MKM 11/17/2014
86	H	2	X	X		X						Y	Y	M	E	K/A 005A2.02 1. Q=K/A, Q=SRO only. 2. This Q has been heavily modified from its 'pedigree' of Q86 on the March 2008 exam and should be credited as a "modified" question instead of a "bank" question. 3. The provided reference gives away too many clues to the correct answer to make the distractor of LCO 3.0.3 plausible—for example, the SR statements for SR 3.4.12.3 and SR 3.4.12.6 essentially tell the applicant that pressurizer level is one of the administrative controls; therefore, entry into LCO 3.4.12 Condition F is an obvious determination. 4. I believe other information is required in the stem to give applicants a better picture of plant conditions—for example, whether or not vent paths are open, CFT status, etc. 5. The "original" Q86 on the March 2008 exam looks like a sat Q to me. Q as submitted is U due to multiple non plausible distractors based on the provided reference material. Facility licensee modified Q by using the bank Q from the 2008 exam as recommended by the NRC. The new old Q from the bank is ready to be administered on the exam. Based on ease of correction by using the bank Q this Q is now considered to be an E or Enhancement instead of a U for exam quality purposes. MKM 11/17/2014

87	H	2		X		X						Y	Y	N	U

K/A 012A2.05

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.

Q as submitted is U due to multiple non plausible distractors.

Consider the following recommendation, give the exact same information above the Q statement:

"Based on the given conditions at 0830, the plant operators are _____ .

Which ONE of the following completes the statement above?

REFERENCE PROVIDED

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.

B. required to enter/have entered CONDITION A of LCO 3.3.1 ONLY.

C. required to enter/have entered CONDITIONs B and C of LCO 3.3.1 ONLY.

D. required to enter/have entered CONDITIONs A, B, and C of LCO 3.3.1."

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.

MKM 11/17/2014

88	H	2				X	X					Y	Y	N	E	K/A 013G2.2.22 1. Q=K/A, Q=SRO only. 2. There is some overlap between Q87 and this Q based on both Q dealing with RB high pressure channels and their associated TS. 3. Based on the four answer choices, it is a logical "true" that entry into CONDITION A is required; therefore it is not needed. Recommend the following slight modification to the second part Q statement: "2) Based on the given conditions, operators ___(2)___ required to enter Tech Spec 3.3.5 (ESPS Input Instrumentation) CONDITION B. Then answer choices become are/are NOT. Q appears E at this time. Facility licensee modified the Q as requested by the NRC. Q now appears ready to administer on the examination. MKM 11/17/2014
89	H	3						X	X			Y	Y	N	E	K/A 026A2.04 1. Q=K/A, Q=SRO only. 2. Believe reference is required for this Q—otherwise are requiring the applicant to know whether or not the TS has unlimited action statements from memory? Don't believe this would be operationally valid. Reference should be TS 3.6.5. However, this recommendation makes the first part Q something like a direct look-up. Let's discuss during review to determine the best path forward. Another point of discussion should be whether or not we should put the Q in Unit 2 instead of Unit 1 based on the NOTE in the LCO. 3. Delete the phrase "When Tech Spec 3.6.5 LCO is NOT met" from second part Q and simply ask whether or not MODE 2 entry is allowed given the plant conditions. Q appears E at this time but may need further substantial modification based upon discussion with facility licensee. Facility licensee modified the Q to change it from Unit 2 to Unit 1 based on NRC recommendation. There is a NOTE above the line in TS 3.6.5 that states that LCO 3.0.4 does not apply for Unit 2, and the facility confirmed that this knowledge was operationally valid without a reference for SROs. Q now appears ready to administer on the examination. MKM 11/17/2014

90	H	4										Y	Y	N	S	K/A 103G2.4.50 1. Q=K/A, Q=SRO only. 2. This was submitted as one of the initial/preliminary Qs. Q appears S at this time. Q is ready to administer on the examination. MKM 11/17/2014
91	H	2		X				X				Y	Y	N	E	K/A 015A2.01 1. Q=K/A, Q=SRO only. 2. First part Q is only asking RPS channel for 1NI-3—recommend slight mod to Q statement so that this is only thing being asked (otherwise teaching in stem with no real reason for it). 3. There is some overlap with this Q and Q89. Also, let's evaluate during review to ensure we do not need a reference with this Q; it may be o.k. due to the language in the 1-hour TS action statements that are required to be committed to memory. Q appears E at this time. Facility licensee verified that the Q is operationally valid for SRO applicants to know from memory the modes of applicability. The facility and the NRC agreed that the overlap issue was not a concern based upon different reasons for changing MODEs—LCO 3.0.4 vs. exiting the conditions of applicability. Q as modified appears ready to administer on the examination. MKM 11/17/2014
92	H	3										Y	Y	M	S	K/A 034K6.01 1. Q=K/A, Q=SRO only. 2. This Q has undergone some significant modifications from the pedigree Q, I would classify it as Modified instead of Bank. Q appears S at this time. Q appears ready to administer on the examination. MKM 11/17/2014

93	H	2				X	X					Y	N	N	U	K/A 056G2.1.23 1. Q=K/A, Q does not meet SRO only because first part Q is RO level knowledge and second part Q does not involve procedure selection. 2. Logical subset issue—all second part distractors are logically correct. Q is U due to multiple correct answers/non plausible. Facility licensee proposed entirely new Q. New Q meets the K/A on the SRO level and appears ready to administer on the examination. MKM 11/17/2014
94	F	3	X									Y	Y	N	E	K/A G2.1.29 1. Q=K/A, Q=SRO only. 2. Recommend that we need to spell out the acronym “WOTA” for clarity. Q appears E at this time. Facility licensee modified Q based on NRC recommendation, Q now appears ready to administer on the examination. MKM 11/17/2014
95	H	4							X			Y	N	N	E	K/A G2.1.43 1. Q=K/A, Q=SRO only. 2. Second part Q statement: use of phrase “lowest RCS temperature allowed prior to performing..” was confusing. Why not just ask “what is cooldown plateau?” which is per the SGTR tab nomenclature. 3. Operational validity/minutia: differentiation between 240 and 450 degrees is buried deep in the SGTR procedure in a table, will need a verification statement from Operations representative that this is required knowledge of a SRO at Oconee and not minutia, otherwise I am not sure if we are not testing a setpoint at a higher level of difficulty than is allowed. Q may be o.k. if Ops certifies that this is required SRO knowledge. Is there a learning objective for this? Q appears E at this time. Facility licensee verified that cooldown plateau temperatures were operationally valid information to ask SRO applicants without a reference, and mentioned that there was a learning objective for this topic. Facility licensee modified Q as requested above, Q now appears ready to administer on the examination. MKM 11/17/2014

96	F	2	X									Y	Y	M	E	K/A G2.2.2 1. Q=K/A, Q=SRO only. 2. This Q has been modified from the bank question that was provided on the 2010A SRO exam, believe that some information provided in that Q is needed for plausibility (such as Rx power level). There is also some overlap between this Q and Q84, although I believe there is enough differentiation for it to be o.k. 3. Recommend modifications to the Q stem and Q statements as follows: "Unit 1 plant conditions: - Reactor Power = 80% - SRO determines that rods are positioned in the Unacceptable region of the rod curves in the COLR Tech Spec 3.2.1 (Regulating Rod Position Limits) bases states that boration is required to be initiated from the ___(1)___; and also states that a consequence of continued operation under these conditions is that ___(2)___ ." Answer choices as submitted. Q appears E at this time.
97	H	2				X						Y	Y	B	E	K/A G2.3.12 1. Q=K/A, Q=SRO only. 2. Only one minor change required, just all caps "OPERABLE" in distractor "D" for continuity throughout exam. Q appears E at this time. Facility made minor modification as requested. Q appears ready to be administered on the examination. MKM 11/17/2014

98	F	2	X									Y	Y	B	E	K/A G2.3.6 1. Q=K/A, Q=SRO only. 2. Overall logics of the Q are o.k., recommend defining the "GWD" acronym before the first time we use it in the first bullet, then we can use GWD throughout the rest of the Q, also recommend cutting down on the reading burden for the second part Q as follows: "2) The SLC bases for limiting the Curie content of the GWD tanks limits the whole body exposure of an individual at the nearest exclusion boundary to ≤ _____(2)_____ ." then for your answer choices toggle between the remaining text. Q appears E at this time. Modified the proposed changes to ensure parallelism with the statements in the bases documents. Q as modified appears ready to administer on the examination. MKM 11/17/2014
99	H	3										Y	Y	N	U/E?	K/A G 2.4.35 1. Q=K/A, Q=SRO only. 2. There is a lot of overlap between this Q and Q83; both Qs deal with knowledge of SGTR tab procedure requirements given the conditions of a SGTR in the 1A SG with overfill concerns. Other Qs that deal with procedure requirements of the SGTR tab include Q78, Q95, and Q100 is also an E-plan call based in part on a SGTR. Out of 25 questions this would potentially make SGTR 25% of the SRO exam. I know it is important to correctly mitigate SGTRs as a licensed SRO but this seems excessive. We will likely need to replace either this Q or Q83, I would recommend replacing this Q because it is a Tier 3 Generic K/A – there is no reason why we need to specifically use SGTR casualty as a Q basis. 3. Q would be rated an E on its own merit, but I think we should replace this Q per the discussion above. Q appears to be E, but will need to replace the Q due to overlap concerns with Q83 and others already on the SRO exam. Tier 3 Generic K/As can be tied to any topic and do not necessarily need to be related to SGTR. Facility licensee proposed completely new Q based on the above considerations. New Q meets K/A, was modified due to NRC input to change second part distractors for plausibility concerns. Final Q as modified appears ready to administer on the examination. MKM 11/17/2014

100	H	2	X									Y	Y	B	E	K/A G2.4.41 1. Q=K/A, Q=SRO only. 2. Minor editorial comment—we can remove the double quotes for 1A SG in the first bullet under time = 1200 and in the third bullet under time = 1207 for consistency throughout the exam. Q appears E at this time. Facility licensee made minor change as requested. Q now appears ready to administer on the examination. MKM 11/17/2014