

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only			
1	F	3	X				X								E (S)	<p>All distractors could be correct. Don't all of these items limit flow during seal leak as you discuss in the explanation? Perhaps the stem needs refocus to the purpose of the item in question? reference available to validate? On CE further review and remember with other seal packages intact, only A and C are possible. Utility to review.</p> <p>Second review is rev 4 (after 35 Q substitution for thumb drive issues): After utility review and expanded explanation provided in question, the question is sat.</p>
2	F	2					X								E(S)	<p>remove "is" from stem before word switch. Also, distractor A needs balance with C distractor (remove ...and stops when rcp is started from distractor C). Utility to review.</p> <p>Second review (after 35 Q substitution for thumb drive issues): New question written because this was a bank question in draft submittal and because utility committed to replacing all bank questions due to potential exam security issues. For remaining bank questions this comment will be implied. Now a Sat Question.</p> <p>After BC review (on rev 8): The notes on distractors "B" and "C" do not make sense. The note states.... "Note that the ARRD is not used until zero speed is achieved."</p> <p>According to the reference material provided the ARRD starts when RCP Speed drops below 90% and is secured when zero RCP speed is reached. This NOT a critical error. OK.</p> <p>The utility agreed to modify question 2 distractors and answers to clarify the fact that the ARRD pump and the ARRD are two different items and this is what confused the BC. The word "device" was added after Anti-Reverse Rotation in all three distractors and the correct answer. This was verified complete in rev 10 (the final approved revision) of the exam file. Rev 9 of the file contained minor grammatical edits that the utility performed and was not reviewed by the NRc regional office.</p>

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3	H	4		X											E (S)	<p>Is the stem statement that says "no automatic CVCS actions occur" necessary for the question? How long before this effect would be seen and also need to put this in the stem, ie "describes the LT or ST effect on the PZR level control system?" reference does not support this q. Utility to review. New references added to support question/answer. Also made changes to incorporate ST effects on system by using word initial in stem.</p> <p>Second review (after 35 Q substitution for thumb drive issues): For this review only other change needed is to put letdown temp valve # next to verbal description.</p> <p>After third review (which is rev 5) :Question is Sat.</p>
4	H	4				X	X		X						E(S)	<p>B is not credible because block valves are never throttled. This question is confusing based on reference provided. Reference SD023-760 not provided and dwg is illegible in the combined reference file and doesn't include all components. Utility to review and provide dwg.</p> <p>Second review (after 35 Q substitution for thumb drive issues): Changes above verified and utility will remove "throttle block valve" concept from distractor B, then incorporate these new changes in the explanation section.</p> <p>After third review: Question is Sat.</p>
5	F	3	X												E (S)	<p>Also, make sure that these valves still leak by and are not fixed. If they have been fixed, then B would be correct. Utility to verify valve leakage still exists.</p> <p>Second review (after 35 Q substitution for thumb drive issues): Utility verified leakage still exists, procedure referenced supports this plant condition.</p>
6	F	2													S	<p>Second review (after 35 Q substitution for thumb drive issues): This question was Sat before and was not replaced.</p>
7	F								X						U (S)	<p>This is minutia, embedded deep in the procedure, has no learning objective cited. Operator is not required to memorize this unless it has a specific LO. Utility to review.</p> <p>Second review (after 35 Q substitution for thumb drive issues): Utility provided learning objective for this question.</p>
8	H	3				X									E(S)	<p>Distractor D needs to say something like "lo suction press trip." Utility to change distractor.</p> <p>Second review (after 35 Q substitution for thumb drive issues): Utility changed distractor D.</p>

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9	F	2	X			X								E(S)	<p>Second review (after 35 Q substitution for thumb drive issues): This question was Sat before and was not replaced.</p> <p>After fourth review (rev 7 version of exam): During final review of higher vs fundamental counts, this question is Fundamental. utility to change worksheet classification.</p> <p>After fifth review (rev 8 version of exam): This question was changed to Fundamental on the worksheet classification. Question is Sat.</p>
<p>Instructions [Refer to Section D of ES-401 and Appendix B for additional information regarding each of the following concepts.]</p> <ol style="list-style-type: none"> Enter the level of knowledge (LOK) of each question as either (F)undamental or (H)igher cognitive level. Enter the level of difficulty (LOD) of each question using a 1 - 5 (easy - difficult) rating scale (questions in the 2 - 4 range are acceptable). Check the appropriate box if a psychometric flaw is identified: <ul style="list-style-type: none"> 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. One or more distractors is (are) not credible. One or more distractors is (are) partially correct (e.g., if the applicant can make unstated assumptions that are not contradicted by stem). Check the appropriate box if a job content error is identified: <ul style="list-style-type: none"> The question is not linked to the job requirements (i.e., the question has a valid K/A but, as written, is not operational in content). The question requires the recall of knowledge that is too specific for the closed reference test mode (i.e., it is not required to be known from memory). The question contains data with an unrealistic level of accuracy or inconsistent units (e.g., panel meter in percent with question in gallons). The question requires reverse logic or application compared to the job requirements. Check questions that are sampled for conformance with the approved K/A and those that are designated SRO-only (K/A and license level mismatches are unacceptable). Based on the reviewer's judgment, is the question as written (U)nacceptable (requiring repair or replacement), in need of (E)ditorial enhancement, or (S)atisfactory? At a minimum, explain any "U" ratings (e.g., how the Appendix B psychometric attributes are not being met). 															

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10	H	2								X					U (S)	<p>GFE level question. Utility to draw a new K/A because this is too hard to write and not be GFE level.</p> <p>Second review (after 35 Q substitution for thumb drive issues): New question written because this was a bank question and because of comments above. Now a Sat question.</p>
11	F	2	X			X							X		E(S)	<p>Distractors don't even sound like something that comes from a CPC. I don't believe this question matches the KA (or stem is not properly focused) because it can be answered with only knowledge of what a CPC does (not RPS). Utility to get better reference.</p> <p>Second review (after 35 Q substitution for thumb drive issues): Utility provided better reference to align CPC with RPS concepts for K/A match. This matches the K/A with better reference tying CPC to RPS.</p>
12	F	3				X									E(S)	<p>Remove specific determiners "only" in distractors A and B. Utility to modify as requested.</p> <p>Second review (after 35 Q substitution for thumb drive issues): Modified question written because this was a bank question before. Utility still has not removed specific determiner "only" in two distractors. Also, utility to change from 2 and 4 to 2/8 and 4/8 coincidence in all four selections to prevent two right answers with word "only" removed from selections. Utility forgot to change "source" from bank to modified.</p> <p>After third review, still need source changed from bank to new since this is a new question now.</p> <p>After fourth review (rev 7 version of exam): Question is now marked new.</p>

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13	H	3											X	U(S)	<p>Second review (after 35 Q substitution for thumb drive issues): Question was Sat before as a bank question, however replacement new question written is TS bases, which is SRO only and therefore this question is now Unsat. Utility to write new question.</p> <p>Third review revealed K/A mismatch. The K/A requires a loss or malfunction of ESFAS and in this case I don't believe that a low SIT tank pressure meets this intent for failure of ESFAS. After discussion with SONGS, the intended loss of ESFAS in this question is the EDG" A" loss and subsequent train "A" Safety injection equipment. SONGS will provide more details in the explanation section to tie the question to the K/A better.</p> <p>After fourth review (rev 7 version of exam): Question is Sat.</p> <p>After BC review (rev 8 of exam):</p> <p>The only question I have is.... are we sure that distractor D is NOT also correct? With the loss of "A" Train EDG and the Delay in "B" Train EDG start with one SIT OOS.... I am not sure that core damage could not be attributed to the loss of "A" EDG.... If we are sure that distractor "D" is NOT also a correct answer, then OK!</p> <p>Utility agreed that D could be correct and therefore they changed distractor D. This was verified complete in rev 10 (the final approved revision) of the exam file. Rev 9 of the file contained minor grammatical edits that the utility performed and was not reviewed by the NRC regional office.</p>
14	F	3												S	<p>Second review (after 35 Q substitution for thumb drive issues): This question was Sat before and was not replaced.</p>
15	H	3				X								E(S)	<p>All distractors and answer need to say "exceeds 100F" to match procedure, otherwise, is challengeable. Distractor A has a typo in that "average" is mentioned twice. training module 2XAL09, which contains the LO's for this topic, was not provided to us for verification. Utility to make changes and incorporate LO's as required.</p> <p>Second review (after 35 Q substitution for thumb drive issues): Utility made changes as requested above and provided LO. Question is Sat now.</p>

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16	F	3				X									E(S)	<p>All of the other choices are non-1E. This makes them much less plausible. Two of the distractors needs to be 1E sources to be more plausible. 2BJ would be a good distractor. Change D 2BX to 2BJ. Remove Motor control center from stem.</p> <p>Second review (after 35 Q substitution for thumb drive issues): Utility made changes as requested and question is now Sat.</p>
17	H	4													S	<p>Second review (after 35 Q substitution for thumb drive issues): This question was Sat as a bank Q before replacement and is Sat after replacement with new question.</p>
18	H	3	X				X						X	S	<p>SRO knowledge. Utility look for LO and more reference materials. Answer C has an extra step "Minimize inventory loss" that is not in provided reference.</p> <p>Second review (after 35 Q substitution for thumb drive issues): Utility provided more references to clarify comments above. Question is now Sat.</p> <p>After fourth review (rev 7 version of exam): During final review of higher vs fundamental counts, this question is Fundamental. utility to change worksheet classification.</p> <p>After fifth review (rev 8 version of exam): This question was changed to Higher order worksheet classification and is Sat.</p>	
19	H	4		X		X									E(S)	<p>Use closer approx for shut-off head (ie 1350). Utility to change to 1350, change bullet 2 to read 19% instead of 21%, reverse order of pumps in stem.</p> <p>Second review (after 35 Q substitution for thumb drive issues): Utility made changes as requested except reversing pump order in stem, but they swapped the SG order in the stem to fix the issue of potential cueing from order. Question is now Sat.</p>
20	H	4							X						E(S)	<p>The reference didn't provide enough information to verify technical accuracy. I needed to know where AFW piping was routed. This is minutia unless there is a learning objective, or some alarm procedure entry conditions that the candidate would need to know. Utility defends use for knowledge of piping layout, but needs a better reference.</p> <p>Second review (after 35 Q substitution for thumb drive issues): Utility provided better reference to support answer and Q is now Sat.</p>

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21	H	4												S	<p>No Learning Objective. Utility to provide.</p> <p>Second review (after 35 Q substitution for thumb drive issues): LO included.</p> <p>After fourth review (rev 7 version of exam): During final review of higher vs fundamental counts, this question is Higher order. utility to change worksheet classification.</p> <p>After fifth review (rev 8 version of exam): This question was changed to Higher order on the worksheet classification. Question is Sat.</p>
22	F	4											X	U(S)	<p>SRO content. No learning objective. rewrite and/or reselect from within 063 system.</p> <p>Second review (after 35 Q substitution for thumb drive issues): New question written at RO level for TS for 063-Question is now Sat and has LO for TS applicability to RO.</p> <p>After third review distractor D has psychometric flaw in that it is an all of the above distractor, which is not allowed. Also, the use of specific determiner "only" in three selections is also a psychometric flaw. Gave SONGS feedback to add Only to "D" distractor and remove Mode 6 so that it is not an all of the above distractor.</p> <p>After fourth review (rev 7 version of exam): Question is Sat.</p>
23	F	3					X							E(S)	<p>C needs to add that ONLY one "set" or "train" continues to function. B needs to add ONLY to one diesel. Instead of "set", why not "train"? I will call NRR about ONLY. I talked to NRR on Monday 5/7/07 and they supported the use of only in the stem but not in the distractors unless all contained the word "only." Set vs train issue, Utility to review that aspect.</p> <p>Second review (after 35 Q substitution for thumb drive issues): The word "only" removed from distractors and a small drawing included in the stem of the question to clarify the stem without having specific determiner "only" in selected distractors. Question is now Sat.</p>

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24 M	F	3				X									U(S) Need comma after "Monitor". Need to clarify valve name with reference, because on page 9 of reference provided it calls the valve that is auto closed by RE-7865 the "waste gas discharge flow control valve", which would be FV-7202, and this question uses HV-7202, the "W.G.D. isolation valve." Possibly no correct answer exists. Utility to look up. Second review (after 35 Q substitution for thumb drive issues): The question was modified with new stem and word "only" removed as specific determiner . Need to review final submittal to ensure that answer subsets don't exist for this question because it appears that way in this submittal. After third review this question has K/A mismatch flaw because loss of power to the radiation monitor is not the same as radiation exceeds setpoint portion of K/A. SONGS to change the question to "RE-7865 has a high radiation signal...." Question is modified now. After fourth review (rev 7 version of exam): Question is Sat.
25	F	4												S	Second review (after 35 Q substitution for thumb drive issues): This question was Sat before and was not replaced.
26	H	3				X	X						X	E(S)	A and C are incorrect if pump start required. Two of those conditions would result in that alarm. High dp, low pump discharge, and low return header pressure would cause low pressure at HX outlet, and starting another pump would solve that. Utility to look up better explanation. Second review (after 35 Q substitution for thumb drive issues): Utility made repairs to distractors A and C as commented above. Question is now Sat.
27	F	3	X			X							X	E(S)	Question is not formatted correctly in that answer A doesn't have its own line. Also, A is cued from stem in that N2 is low and then you want to initiate backup from N2. Remove "Liquid N2 tank at low level" from stem or change distractor A. The stem portion may be needed for accuracy of the plant conditions. Utility to review and verify tech accuracy. Second review (after 35 Q substitution for thumb drive issues): New question written. Answers should follow format of NUREG-1021, therefore need to balance selections for psychometrics (ie only toggle two pieces of information to reduce question and answer confusion). Utility agreed to remove saltwater cooling and then balance selections.
28	F	3	X				X							S	Second review (after 35 Q substitution for thumb drive issues): This question was Sat before and was not replaced.

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29	H	3				X				X					U(S)	<p>Reference on page 59/130 of SD-SO23-820 supports C as answer, not B. Additionally, could not find the "new" standard mentioned in the explanation on the second portion of each distractor and answer regarding NPSH. Which one is correct, and where is reference? Is it something operators are required to know by memory (minutia)? Also, SCM is misspelled in explanation as SMM. No Learning objective. Utility to verify and provide "standard."</p> <p>Second review (after 35 Q substitution for thumb drive issues): Reference still does not support the concept of a "new" standard regarding NPSH and which selection to make (ie worst, RCS, etc). Utility is working on this for better references.</p> <p>After third review, the references provided still do not support the entire answer. The selection of "RCS" or "Head" once the display is chosen was not supported in the references. Utility found the reference and it will be included in the rev 7 version of the references file. Utility will change question to "HEAD" and "CET" as toggle points for answers and add references SO23-3.2-32.</p> <p>After fourth review (rev 7 version of exam): Utility to add final reference about Tcold bypassing head.</p> <p>After fifth review (rev 8 version of exam): Question is Sat.</p>
30	F	2													U (S)	<p>This is a negatively stated stem, which is discouraged in the standards.</p> <p>Second review (after 35 Q substitution for thumb drive issues): This question was a bank Q and was Sat before with comments above. New question written to replace this one is also Sat.</p> <p>After third review this question appears to have a K/A mismatch issue in that the Loss of load bistable may not be a part of the circuit for the NIS system. After phone call with SONGS, they are providing an additional reference drawing from S023-470 that supports this loss of load bistable as an integral part of the NIS. It will be in the updated rev 7 or newer version of the references file.</p> <p>After fourth review (rev 7 version of exam): Question is Sat.</p>
31 M	F	2				X									E(S)	<p>C is an incredible distractor. Also, there is no symmetry in the selections. utility to work on distractor C.</p> <p>Second review (after 35 Q substitution for thumb drive issues): This question was a bank Q before with comments above. The question was modified and now distractor "D" is incredible, need to remove invalid from C and D distractors.</p> <p>After third review this question is Sat.</p>

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32	F	3				X	X							E(S)	<p>Proposed answer and explanation do not match (one has B the other has A as correct). No learning objective. Utility to fix answer and remove MCC from stem.</p> <p>Second review (after 35 Q substitution for thumb drive issues): This question was a bank Q and had edit comments above. New question written based on new K/A to replace this one is Sat.</p>
33	F	3				X	X							U (S)	<p>A and D are correct since D is a subset of A. utility review for technical accuracy and possibility of A, B, and D being correct.</p> <p>Second review (after 35 Q substitution for thumb drive issues): This question uses word "only" in two distractors and if remove it then those two distractors become correct answers. I took action item to call NRR to see if we can leave it in for this question. Called on 6/20/07.</p> <p>After third review of this question, CE sent it in to NRR for review and they called it Sat with "only" left in the two distractors in reply e-mail.</p> <p>After fourth review (rev 7 version of exam): During final review of higher vs fundamental counts, this question is Fundamental. utility to change worksheet classification.</p> <p>After fifth review (rev 8 version of exam): This question was changed to Fundamental on the worksheet classification. Question is Sat.</p>

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34	F	2				X								S	Second review (after 35 Q substitution for thumb drive issues): This question was Sat before and was not replaced.
35	F	3	X											E(S)	Second review (after 35 Q substitution for thumb drive issues): This question was bank and was Sat before and was replaced with a new question. Although the new question has the appearance (and my initial review was F 1) of low discriminatory validity, the utility defends the question because it incorporates changes to the digital turbine controls system (installed last outage) in which these set-points have recently changed and distractors reflect that. I changed my review to Sat. The utility agreed to expand the explanation section of the question to validate this item. Third review: question is now Sat.
36	H	3											X	U(S)	SRO knowledge. I will call NRR about writing an RO question on A2 K/A. I talked to NRR on Monday 5/7/07 and they stated that the use of procedures by the RO is allowed, but selection of procedures is SRO knowledge. Second review (after 35 Q substitution for thumb drive issues): No changes were made to this question after the first review. Utility acknowledges they missed the comments/changes. They have agreed to remove part a from the question and focus the question on part b for equipment issues to prevent the question from being SRO-only. Third review: question is now Sat.
37	F	3											X	U(S)	Those radiation elements are process monitors and so this question doesn't match KA. They are process gaseous monitors according to the radiation monitoring systems manual. Utility to reject K/A since no other auto -alignment. Call NRR about CR ventilation being PRM or ARM. I talked to NRR on Monday 5/7/07 and they did not support the use of CR ventilation as an area, but a process. So utility will need to modify or replace the question as a result. Second review (after 35 Q substitution for thumb drive issues): No changes were made to this question after the first review. I sent the question in to NRR for advice and also noted here that the utility made no changes to question from first review. utility has agreed to add information to the explanation section if approved to keep. Third review: After call with NRR, Munro stated it was K/A mismatch, Guenther said that he could interpret it either way, and Usova said it was fine as written. After conferring with the Branch chief we decided to keep the question because he (Gody) believes it meets the spirit of the K/A.

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38	F	2	X												E(S)	<p>Formatting issues. Answer A needs to be an answer choice. You CAN'T say "[approximately] ~86psig" when 83psig will give a different answer. The stem needs to say 86psig indicated. Utility to change.</p> <p>Second review (after 35 Q substitution for thumb drive issues): This question still has a format issue with distractor A. Utility verified it looks correct on their copy of the exam. This question may have some MS word issue. We will need to watch for this (both NRC and utility) on final exam submittal and prior to exam administration.</p> <p>After third review question is now Sat.</p>
39 M	H	4				X	X								E (S)	<p>Distractor B needs to be revised so that the candidate understand that he is leaving inverter in service with battery breaker open. No Learning Objective. utility to reword "B."</p> <p>Second review (after 35 Q substitution for thumb drive issues): This question was bank before and is new now and is Sat.</p> <p>After BC review (rev 8 of exam):</p> <p>The second half of the Answers for "A" and "D" are minimally valid distractors. They are subsets of the second half of Answers "B" and "C," and those include paperwork.... Everyone knows we do nothing in this industry without paperwork... so what knowledge is the second half of these answers really testing? Consider improving the second half of the answer or change the cognitive level to memory or fundamental knowledge. The utility changed the second half of distractor's A and D to reference the "current in use attachment." This was verified complete in rev 10 (the final approved revision) of the exam file. Rev 9 of the file contained minor grammatical edits that the utility performed and was not reviewed by the NRC regional office.</p>
40	H											X			U (S)	<p>KA mismatch. VAPOR space accident, not liquid space. Utility to fix.</p> <p>Second review (after 35 Q substitution for thumb drive issues): This question is new now and is Sat.</p> <p>After third review of final exam for K/A mismatch, this question seems to have too much knowledge in common with Q59. CE retracted comment since assuming knowledge from Q40 can cause the candidate to miss Q59. Also, both questions match K/A's drawn and these are specific (not generic) K/A's for the topics in question (PZR stm space leak and PZR level reference leg break).</p>
41	H	4	X												S	<p>Second review (after 35 Q substitution for thumb drive issues): This question was Sat before and was not replaced.</p>
42	H	2				X									S	<p>Second review (after 35 Q substitution for thumb drive issues): This question was Sat before and was not replaced.</p>

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43	H	3				X									E (S)	<p>Review A vs D for structure format. Reference not provided for basis portion of question. utility to provide basis for answer.</p> <p>Second review (after 35 Q substitution for thumb drive issues): utility provided basis reference document, question is now sat.</p>
44 M	H	2					X								E (S)	<p>B is a partially correct answer. For the given conditions, it is "normal" for letdown to be at minimum. A better statement would be letdown at ___gpm. Same for A, a better statement would be letdown at ___gpm for uniformity and for JOB-LINK.</p> <p>Call NRR to reject system 022. I talked to NRR on Monday 5/7/07 and they stated that the word pump is being removed from this system in the K/A catalog and the interpretation will be to use it as a charging and letdown system starting with supplement 2 of rev 2. utility is correct for this question with edits as mentioned above.</p> <p>Second review (after 35 Q substitution for thumb drive issues): This was a new question before and was modified . Utility had already selected a new K/A based on draft review. Question is now sat.</p>
45	H	1		X		X									U (S)	<p>A, C, and D are not credible based on stem cueing. What procedure specifies cooldown rate? Not mentioned as reference but needed for verifying correct answer. Also, this question is too similar to Question 4. Suggest asking question about tracking cooldown rate: e.g. instantaneous vs. hourly, and what temperature instrument to use..... or change question 4. Utility to review.</p> <p>Second review (after 35 Q substitution for thumb drive issues): Chief Examiner disagrees with reviewer because candidate must know which of two valves corresponds to temp control and other for min flow and either one could be potentially used to balance flow and temp. Question is enough different than Question 4 on the exam that CE is leaving it on exam.</p>
46	F	3		X		X									E (S)	<p>Reference and explanation given do not lock up the only answer as "C." B and D distractors could be correct. Is "ensure that the SWC pump starts" a cue to answer? In explanation section, item D is labeled as "A." Utility to review.</p> <p>Second review (after 35 Q substitution for thumb drive issues): This question was bank before and is new now and is Sat.</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
47	H	3	X			X									E (S)	<p>Candidate knows that distractor C can't be right, because then A would be right too. Therefore, C is an incredible distractor. Suggest new distractors or changing stem. I believe distractors B and D are incredible also. Candidate will know that Channel Y failing high is what caused the heaters to trip, the stem says so. So why would resetting the SIAS ONLY fix it? Therefore, it is an incredible distractor. In explanation section, D is labeled as "A." Utility to change B and C.</p> <p>Second review (after 35 Q substitution for thumb drive issues): utility made some corrections to B and C, however, CE believes the question is SAT. SIAS is credible because given in stem and SIAS does strip heaters.</p>
48	H	2	X				X				X	X			E(S)	<p>K/A mismatch and Q48 rejected due to overuse of RCP trip criteria on exam (Q18, 42, and 48). utility to review outline and selection and resolve.</p> <p>Backwards - ROs need to know what actions to perform, and then why. Shouldn't tell them what happened, and then ask why. Would be operationally based if ask what action is appropriate and why. Distractor C is correct because less running equals less damage. Suggest revising stem to ask what procedure SO23-14-1 gives the reason for stopping two RCPs. Also, this is the second time that RCP trip strategy was asked, and this time, it is not necessary. KA mismatch, this is a SGTR KA, and nothing about the question is SGTR. Because of concept overlap with Q42, write different question. Answer "A" is too easy. This question needs repair in your bank.</p> <p>Second review (after 35 Q substitution for thumb drive issues): This question was bank before and is new now and needs editing. Utility to go to two statements per answer as outlined in 1021.</p> <p>After third review: Question is Sat.</p>

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Form ES-401-9

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
49	F	4				X									U (S)	<p>C and D are not credible distractors. Utility to fix.</p> <p>Second review (after 35 Q substitution for thumb drive issues): This question is new and now both B and D are correct. Utility to change distractors to fix this issue.</p> <p>Third review: No change in question.</p> <p>After fourth review (rev 7 version of exam): Question is Sat.</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		
50	H	4				X							X		U (S) K/A mismatch. This system topic is for Loss of Offsite power, not SBO. No SIAS mentioned in the stem so A is not credible. Utility replaced due to security issue. Second review (after 35 Q substitution for thumb drive issues): This question was bank before and is new now and is Sat.
51	H	3												S	Reference was difficult to align with answer. Possible procedure issue? Second review (after 35 Q substitution for thumb drive issues): This question was sat before but reference explanation was given to explain the correct answer and so question is Sat.
52	H	2					X							E(S)	Which answer is correct? Justification says C, proposed is B. Also, no justification for correct answer, C. utility to fix. Second review (after 35 Q substitution for thumb drive issues): Need additional reference listed for question. Question lists reference on page 21, while additional reference needed is SO23-6-15, page 107. After third review: Question is Sat.
53 M	F	1		X		X								U (S)	The stem states "maintaining the CCW loop pressurized". That is an obvious clue that the answer has something to do with pressure (leak). Stem must be rewritten to prevent cueing, such as ..."maintaining the CCW pump running". C is not a credible distractor. Pump seal cooling is not needed if the pump is not running. Distractor A is not credible for two reasons. 1. If you shut off the pump, then CCW wouldn't leak into SWC, so maintaining it running so that you can monitor it in case it leaks doesn't make sense for a reason to keep it running. 2. the rad monitor (7819) is only installed on one loop. Also, reference did not back up answer to question. Utility to review the Q. Second review (after 35 Q substitution for thumb drive issues): references did not support correct answer. Utility to add reference L and S 1.4 to complete answer support. Also, stem was re-written and distractors were explained better, After third review utility added another reference to support the answer. Once updated references file sent, CE to verify. AO-13-7 to be included in reference list. After fourth review (rev 7 version of exam): Question is Sat.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
54	H	2	X			X									U(S) <p>All three distractors have weaknesses and may not be credible. A and C might not be credible because the charging pumps are PDPs. Distractors A and D may not be credible because their connections are roughly in the same place. Utility defends question and distractors because of recent OE experience # 24470 and generic weaknesses. Chief examiner believes distractors and question is good as is provided the right references are provided. It appears the references were for the wrong question with rev 4 of the references file.</p> <p>Second review (after 35 Q substitution for thumb drive issues): references did not support correct answer. It appeared that a mistake was made as to the question these references supported. utility agreed and will provide correct references in next submittal's reference file.</p> <p>After third review: Question is Sat.</p>
55	H	3				X									U(S) <p>Question was thrown out for potential exam security reasons.</p> <p>D is not credible because TS cooldown rates don't apply during a cooldown accident. Distractor B is at least a partially correct answer. It might help if stem question said "reason for stabilizing... PRIOR to dry out."</p> <p>Second review (after 35 Q substitution for thumb drive issues): Stem wording is not very clear. Recommend modifying stem to more clearly indicate strategy and reason.</p> <p>After third review the stem wording is still awkward. Can you write the stem any better? the stem wording seems awkward still. Suggest maybe "Based on the caution step for resetting MSIS, what actions should be taken and why?" Utility to change stem as commented.</p> <p>After fourth review (rev 7 version of exam): Question is Sat.</p>
56	H	4						X							E(S) <p>Need Learning Objective to show that this is required to be memorized. Utility to provide LO to support memory of fact head <1230# then flow >400gpm.</p> <p>Second review (after 35 Q substitution for thumb drive issues): because Utility could not provide LO for this item they suggested writing a new question on same K/A.</p> <p>After third review: Question is Sat.</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
57	H	3	X			X									U (S) Poor Stem wording and A and Bare not credible as written. Candidate will know that A can't possibly be a choice because C has the same actions plus two buttons. Utility to make change to A, B, C, and D to eliminate subset conditions, modify stem balance against the New EO's recently released to training. Second review (after 35 Q substitution for thumb drive issues): A distractor is still not credible after modifications from first review. After third review: Question is Sat.
58	H	4	X											S	
59	H													U(S)	Sat after second review. I didn't notice the overlap to Q40 until third review for K/A mismatch. Second review (after 35 Q substitution for thumb drive issues): This question is no longer a bank question (it is now a new Q) and source needs to be modified accordingly. After third review of final exam for K/A mismatch, this question seems to have too much knowledge in common with Q40. CE retracted comment since assuming knowledge from Q40 can cause the candidate to miss Q59. Also, both questions match K/A's drawn and these are specific (not generic) K/A's for the topics in question (PZR stm space leak and PZR level reference leg break).
60	F	1					X						X	U(S)	Ask NRR about this one. I talked to NRR on Monday 5/7/07 and they stated that while the K/A supports questions of this type as long as LO support it, in this question's case it is not discriminatory (ie too easy) and should be rejected. The fact that it was a previous bank from VC Summer has no bearing on this issue, either. Second review (after 35 Q substitution for thumb drive issues): Still SRO only question and still too easy. Utility to sample new K/A and write new question since never found LO and K/A was too difficult to write at RO level. After third review: New question based on new K/A is now Sat.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only			
61	H												X		U(S)	<p>K/A mismatch, not a reason for "feed and bleed" use. Reference doesn't support answer, either. utility to review basis document for comparison. CE doesn't use term feed and bleed. reason is included in each answer.</p> <p>Second review (after 35 Q substitution for thumb drive issues): Question does not tie to K/A for tube leak, but is for a tube rupture.</p> <p>After third review: There needs to be a better tie to the K/A for tube leak in the stem of the question, such as something like..."The crew was in AOI xxx for tube leak when several tubes failed and the crew transitioned to 12-4, The crew is preparing to place shutdown cooling in service. Etc." Comments taken and changes will be made to stem.</p> <p>After fourth review (rev 7 version of exam): Question is Sat.</p>
62	H	3				X									E(S)	<p>It is an incredible distractor that the Radwaste Discharge Line Monitor will indicate a leak external to the Line, making distractor's A and C not credible. Could pick an area monitor as a distractor. Utility to change stem and answers based on these comments and validation input.</p> <p>Second review (after 35 Q substitution for thumb drive issues): Question modified per comments and is now Sat.</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
66 M	H	4	X											E(S)	<p>Table in reference needs to be listed as given on exam. Stem needs to ask "fluid volume according to the given table?" Also, A is not credible since no value of 6 psi was given in the stem. recommend using A as 298,783 and B as 335,378. utility to review and include comments from validation operators for the numbers.</p> <p>Second review (after 35 Q substitution for thumb drive issues): New question was written (was a bank Q before thumb drive issue) and stem needs the word "is" removed.</p> <p>After third review question is Sat.</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
67	F	2											X		U(S)	<p>K/A mismatch: Question doesn't ask purpose, KA asks for purpose AND function. Utility to add purpose of rcs protection boundary to two and DNBR for two incorrect distractors.</p> <p>Second review (after 35 Q substitution for thumb drive issues): New question written, however 4/4 is not credible selection. Place No EFAS in stem and 2/4 for it in the stem and use 2/4 NR and 2/4 WR for selection toggle points.</p> <p>After third review, question is Sat.</p>
68 M	F												X	X	U(S)	<p>K/A mismatch: Question doesn't relate to ENTRY-LEVEL CONDITIONS for TS. Instead, it has to do with shutdown time calculations. This is SRO only, too. Utility to replace question. I owe explanation from Tony's comments to utility to not allow 1-hr TS questions on RO portion of exam. I provided this to them on may 2, 2007 conf call, that is okay to have 1 hr TS calls on RO exam, specifically in this case where they have RO LO for 1 hr TS calls.</p> <p>Second review (after 35 Q substitution for thumb drive issues): New question written, however question is correct as written for 31.5" and answer was based on TS minimum of 30". Utility commented that the latest TS reference was not sent and the updated TS reference will support the question as written.</p> <p>After third review, question is Sat. Utility provided updated TS reference and it supports the 31.5" value for the minimum.</p>
69	F	3					X							X	U(S)	<p>I believe that this is SRO only, but need a learning objective to confirm it is not and is suitable for RO exam. reference does not completely support answer. Also need bank history on this question. D is more correct than C. utility to review for technical merit of C and D both correct, locate LO, bank location.</p> <p>Second review (after 35 Q substitution for thumb drive issues): New question written, however question has two correct answers, C and D. D is still correct, utility to provide complete reference set that validates "D" distractor as incorrect.</p> <p>After third review, References do not support the answer as written for rev 5 of the references file. They will for rev 7 of the references file.</p> <p>After fourth review (rev 7 version of exam): reference still does not support question and answer as written.</p> <p>After fifth review (rev 8 version of exam): Question was modified to incorporate conduct of ops information to solidify the answer's supporting reference materials.</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
70 M	F														S	
71 M	H	4													S	
72 M	F	2													S	
73 M	F	3	X		X	X									U(S)	<p>A and C are a series of T/F statements, so unsat. Also, Stem focus is not on a team member and unless RO performs as Incident commander, how is it operationally based? D is a "none of the above" type option, which is not allowed. Utility to write question on OE from turbine fire.</p> <p>Second review (after 35 Q substitution for thumb drive issues): New question written and question is now sat.</p> <p>After fourth review (rev 7 version of exam): K/A is incorrect on worksheet ast 2.4.45 and it should be 2.4.25.</p> <p>After fifth review (rev 8 version of exam): Question is Sat.</p>
74 M	F	2					X								E(S)	<p>Reference doesn't support the idea of "lower" or "higher" end of P/T limits. Reference also supports the goal of RCS pressure control, but not items to maintain during cooldown. Utility to add second reference to validate answer, EOI SO23-12-4, page 11, step 12a.</p> <p>Second review (after 35 Q substitution for thumb drive issues): utility added references to support correct answer and is Sat.</p>
75 M	F	2													S	
76 M	H	1	X												U (S)	<p>Answers A and B are RO knowledge - don't quit SPTA until finished. Choice between C and D are easy. Also, is "complete" SPTA the correct term? Steps 11 on are not required in this situation. Modified from 2006 NRC exam. utility to replace A and B and repair C distractor.</p> <p>Also need to place "and" or "while" before C and D to complete grammar.</p> <p>Second review (after 35 Q substitution for thumb drive issues): Utility made corrections as suggested and question is Sat.</p>
77 M	H	2	X				X						X	U(S)	<p>Also, this question is technically incorrect. The flow through non-running pump will reverse with 3 pumps running, even if flow indication shows half. Look at pg. 29 of Lesson Plan 2XAR02 RCS LP.+ No procedure for closing the CBO valve during this event??? Utility to work on this question.</p> <p>Second review (after 35 Q substitution for thumb drive issues): Utility clarified answer and distractors for flow thru the S/G to prohibit confusion of reverse flow thru the RCP. Question is Sat.</p>	

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		
78	H	1	X			X							X	U (S)	<p>Stem needs to be revised under a.), it needs to read "Limit that may". Question is very easy - I answered correctly without knowing their procedures. Knowledge of trip requirements is RO knowledge. Safety Limits are RO knowledge. A and B distractors not credible-suggest modifying stem to more accurately reflect SRO only knowledge. Ask Tony about this one-my fault, let this question through and believe it is RO only. Utility to wait for management reply to me before change question. Kelly call NRR about this question. I talked to NRR on Monday 5/7/07 and they thought the question could be answered with RO only knowledge. utility must modify question and distractors as necessary to fix the issues.</p> <p>Second review (after 35 Q substitution for thumb drive issues): Question is still too easy. Also, recommend evaluating a procedure selection or TS call. After discussing this question with utility, they agreed to change the correct answer to "B" by changing PT-Y to 2285 and remove HSB from each answer.</p> <p>After third review, question is Sat.</p>
79	H	3	X				X							U(S)	<p>too much overlap regarding AFW pumps and cross-connect valves between Q 19, 56, 63. Utility to review, agreed to throw out Q79.</p> <p>Second review (after 35 Q substitution for thumb drive issues): Question does not appear to be SRO only question now after new question written. Also, questions needs work on Th 530 issue, add bases to reference list and expand the explanation of the correct answer.</p> <p>After third review, question is Sat.</p>
80	H	3					X							E(S)	<p>There is nothing to preclude B from being correct other than not enough information. Answer D word "compromised" should be replaced with degraded. Utility Modify D answer to state degraded vs compromise, and also rewrite B distractor..</p> <p>Second review (after 35 Q substitution for thumb drive issues): Question does not appear to be SRO only question now after changes. Also, B distractor was not modified as commented.</p> <p>After third review, changes made as suggested and Q is Sat.</p>

Q#	1. L K (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
81	H	3				X									S	<p>utility to provide further justification of distractors B and D and why they are plausible but not correct.</p> <p>Second review (after 35 Q substitution for thumb drive issues): New question now (vs Bank) and is now Sat.</p> <p>After third review, There was a concern with SRO memorizing step numbers. I talked to Rob Hampton from utility about this on the phone Friday June 22, and after he explained that this was put in the question as an aid, similar to adding a valve name to the valve number in a question, this was intent here as well. The SRO is not being asked to provide the step number, he is being given the description of the step with its associated step number for more clarity. Therefore this question is Sat.</p>
82	H	3					X	X					X		E(S)	<p>utility to change minimum in all answers to greater than for all flows.</p> <p>Second review (after 35 Q substitution for thumb drive issues): Question is now Sat.</p>
83	F	3													U (S)	<p>Utility throwing out question due to TS error (AR mentioned in ER captures the TS content issue).</p> <p>Second review (after 35 Q substitution for thumb drive issues): Toggling of 3 pieces of information in distractors is psychometric issue for balance and basis is weak for distractors. utility agreed to add more information for distractor basis and also removed column three from all selections so that only two pieces of info are toggled.</p> <p>After third review, changes made as suggested and Q is Sat.</p>
84	F	3		X											E(S)	<p>utility to provide reference for answer. Specific determiner "only" in distractor "A" must be removed to be credible.</p> <p>Second review (after 35 Q substitution for thumb drive issues): Marked as bank but is now a modified question.</p> <p>After third review, utility marked source field on worksheet for this question as bank and Q is new.</p> <p>After fourth review (rev 7 version of exam): Question is Sat.</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
85	H	3	X								X	X		U (S)	<p>focus of stem is not on K/A.</p> <p>Second review (after 35 Q substitution for thumb drive issues): Discussed with utility and system limit for nat circ is contained in the question and answer in that the SRO has to eval what is more important limit, P/T limits or voids in the head during a cooldown on nat circ. Utility agreed to add this information into the explanation section for the answer.</p> <p>After third review, utility forgot to include the information in explanation section, but will include on final submittal.</p> <p>After fourth review (rev 7 version of exam): Question is Sat.</p>
86	H	3	X											S	<p>Additional info needed on CCP's was in SO23-13-14, step 2e RNO.</p> <p>Second review (after 35 Q substitution for thumb drive issues): Question is sat, information provided as requested.</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
87 M	H	3													U (S)	<p>K/A mismatch and Oversample of SDC valves. utility to write question on degraded grid conditions for SRO to balance exam using system 062 AC electrical.</p> <p>Second review (after 35 Q substitution for thumb drive issues): Utility could not write question to SRO level on this topic and because exam was weak for system 034 topics for 55.43 balance of items, so CE allowed a reselect to this system.</p> <p>After third review, question is sat.</p>
88 M	H	2		X		X							X		U(S)	<p>Either this question or Q89 must be thrown-out because of sample issue. The outline sampled ECCS system 06 twice for SRO in Tier 2 Group 1.</p> <p>All answers don't include procedure selection. Throttle criteria is RO knowledge. Answer B and D can be thrown out with RO knowledge, stop criteria not met. In addition, answer C contains a que in that C also includes answers B and D. E.G. if D or B is correct, then so is C, so candidate would know to pick C. Utility to work on words in stem to prevent cueing, add procedures to C and D.</p> <p>Second review (after 35 Q substitution for thumb drive issues): This was a bank question and was modified due to this issue and comments above. Evaluation of plant conditions and determine procedure to use (ie exit from FS-7) is SRO only knowledge.</p>
89 M	F	2						X					X	X	U(S)	<p>Either this question or Q89 must be thrown-out because of sample issue. The outline sampled ECCS system 06 twice for SRO in Tier 2 Group 1.</p> <p>This question can be answered without knowing the bases reason because each bases is lined up with its correct "condition". In other words, if you know which parameter is out of spec, then you can answer the question correctly. This both doesn't match the KA and is Ro knowledge. utility to work on question.</p> <p>Second review (after 35 Q substitution for thumb drive issues): Used system 063 to replace 006 and question is now too easy. Utility to modify "A" by changing to Y03 in distractor.</p> <p>After third review, question is sat.</p>

Q#	1. LOK (F/H)	2. LO D (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
90	H	4	X			X	X						X	U(S)	<p>Answer A is correct, suggest change stem to make A incorrect. Answer B is a direct quote from procedure, this makes the question Fundamental and probably RO knowledge. Answer B needs to include the intended actions in the procedure, like C has, to be SRO level. utility to make changes to B and C. More plausibility to A.</p> <p>Second review (after 35 Q substitution for thumb drive issues): Question is sat.</p>
91	H													U (S)	<p>Distractors A and B are incredible. 6 hours doesn't seem plausible. It would be more plausible to make it 1730 on 6/21 or ... Licensee throwing out question because of TS problem documented in question #83.</p> <p>Second review (after 35 Q substitution for thumb drive issues): was a bank Q, is now new. remove jumper from distractors and toggle 311/7808 in distractors/answer since used 3 pieces of information in the answer/distractors and need to toggle two to avoid psychometric flaws.</p> <p>After third review, question is sat.</p>
92	H	3	X	X										U(S)	<p>No discriminating value at SRO level. ANY Ro would know that at 100% power a bypass opens would cause a rx trip. This K/A is associated with RO knowledge. Also RO K/A. utility to resample or modify question for SRO level.</p> <p>"Quickest" can be interpreted differently. This may lead to a challenged question. Stem would read better, what does procedure SO23-3-2.18 recommend or require or just ask which one will retain single failure design.</p> <p>Second review (after 35 Q substitution for thumb drive issues): was a bank Q, is now new with new K/A and question is Sat.</p>
93	H	3	X				X							U (S)	<p>K/A was incorrect in the outline for this question. The proper K/A was generic K/A G2.1.23. CE approved the outline change since this was a clerical mistake. However, still need to remove from all answers "stop CCW pump to ..." Distractors A and C state "preserve condensate inventory". This is a partially correct answer because the "overboarding" starves the condensate pumps, and is dumping condensate inventory to the outfall (I had to get this from reference, not provided) Stopping the drawoff valve preserves condensate inventory further. It would unclutter the answers to take out stopping the circulating water pump since all of the choices are the same. Put that in the stem.</p> <p>Second review (after 35 Q substitution for thumb drive issues): Question is Sat.</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
RO B 0 M 10	H 39/75 F 36/75														RO TOTALS
SRO B 0 M 5	H 17/25 F 8/25														SRO TOTALS

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

GENERAL COMMENTS:

- There are two many questions (27,37, and 99) on instrument air. [CE threw out Q99.](#)
- I don't understand how many of these bank questions have not been challenged before, recommend that we determine whether these questions have been used on NRC exam, and whether post-exam comments were submitted. [CE reply-most of what they are calling bank is their internal bank, not NRC. The exceptions were marked appropriately for correction in the banks as comments reflect.](#)
- A lot of generic KAs were from the bank. There are too many in my opinion. Only a few new questions from generic KAs. See K/A suppression topic in NUREG-1021, R9. [CE-response-The contractor that wrote this exam suppresses IAW the attachment for K/A suppression in t NUREG-1021, Rev 9. In Rev 9, Supplement 1, this small list of generics will be expanded to reduce this issue.](#)
- KAs are not fully written out with systems and APE/EPE designations. [Utility to make changes as requested.](#)
- Learning Objectives are both lacking from many questions, and not written out on any questions. [Utility to complete LO's before final exam submittal.](#)
- On first review, too many higher order questions on RO exam. I didn't evaluate questions that were going to be possibly thrown off. [CE will review on final counts to ensure the count is within spec.](#)
- There are three questions dealing with memorization of power supplies (bus) to valves, question 6,16,and 25. Suggest throwing out KAs for one of these questions to better sample candidates knowledge. In addition, question 32 deals with a power supply to a fan. [CE reply-this is part of the random sampling process and the items are not related or share common information, so no changes based on this comment were done.](#)
- SRO Question 76 was on the 2006 NRC exam and the 4/2005 exam. It was significantly modified on this exam in that the answer was different because the stem was changed. It was NOT noted that this modified question came from a previous NRC exam. SRO Question 97 is modified from the 2006 exam. The modification is "significant" according to 1021 because the correct answer has changed. This was NOT noted in the question. SRO Question 99 was modified from 2005 NRC exam and it WAS noted. Licensee should note when question is modified from previous NRC exam. [CE reply-comments provided to utility.](#)
- There are three questions dealing with RCP trip strategy: 18, 42, and 48. None of these are specific KAs where the question is required to be about this subject. Recommend choosing different topic for some of these questions. [CE threw out Q48.](#)
- AFW cross-connect or questions regarding which pump feeds which generator are oversampled. Questions 19, 56, 63, and 79 all deal with this subject, and at least questions 56 and 79 have KAs which are definitely not limited to this subject. [CE threw out Q79.](#)
- There are two many questions on SDC valves, [CE threw out Q87.](#)

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
																NOTE: Bank questions are indicated by B; Modified are indicated by M; comment resolution is indicated in <i>parenthesis and blue</i> ;