

Written Exam Inventory Comments:

1. The revised sample plan does not contain K/A descriptions. Please submit a sample plan that has these descriptions included, not just the K/A numbers. Please use the format in ES 401-1/2 forms.

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Enter the K/A statement numbers, a brief description of each topic, the topics' importance ratings for the license level of the exam (use the RO and SRO ratings for the RO and SRO-only portions, respectively), and the point totals (system, category, group, and tier) on the examination outline. The proposed point totals for each group and tier must match the number specified on Forms ES-401-1 and ES-401-2, as applicable.

ANS: The form submitted is not a revised ES401-1/2. The original ES401-1/2 remains valid with no changes to any K/As.

2. Please include nomenclature for the learning objectives. The objective number alone does not provide enough information for our review.

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A technical reference and a cross-reference to the facility licensee's examination question bank, if applicable, shall be noted for every question. If the facility licensee has a learning objective applicable to the question, it should also be referenced. However, the absence of a learning objective does not invalidate the question, provided that it has an appropriate K/A and technical reference. Refer to ES-201 for additional instructions regarding documenting the source of questions on facility-written examinations.

ANS: Adding learning objectives will take about 10 hours of time. Do not take this time. Instead, I will ask you to provide lesson plan objectives if we challenge the validity of any questions.

3. Please provide copies of any modified questions that you have used in this exam. As an alternative, you may describe the changes that you made to the original bank question for all modified questions.

ES401-5 requires:

Question Source: Bank # _____
Modified Bank # _____ (Note changes or attach parent)
New _____

ANS: This information will be provided in the hard copy submittal.

4. Please provide a history of the last time the question was use on an NRC exam – if applicable.

ES401-5 requires:

Question History: Last NRC Exam _____

ANS: We did not take any questions from the past 2 NRC exams.

5. Please provide the cognitive level of each question or a guide that allows us to determine your cognitive level numbering scheme vs. our cognitive level categories in ES 401-5.

Question Cognitive Level:

Memory or Fundamental Knowledge _____

Comprehension or Analysis _____

ANS: I discovered the key in the electronic files. This is not a problem.

6. You are not required to submit a plausibility analysis – but if you do not, we will have to do it ourselves. This will add time and effort to the review. We will have to establish plausibility for each distracter and document this in our form for those questions which are not obvious.

To facilitate the review process, examination authors should consider providing a brief explanation of why the answer is correct, and each of the distractors is plausible but incorrect. This **optional** practice increases the efficiency of the examination review process and promotes the detection and correction of problem questions before the examinations are administered.

I did not provide this comment to Calvert Cliffs.

7. Please include the K/A nomenclature to the questions to make review easier. You are not required to add K/A nomenclature to the question. But if you do not add this nomenclature, we will have to do add it ourselves. This will add time and effort to the review.

ANS: We will add this information.

Q#	test Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				Ref Req	5. Other		6. B/M/N	7. U/E/S	7. Explanation
				Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward		Q=K/A	SRO only			
76	1	F	3										N	Y	Y	M	S	Add IAW OP-7. Do they have to know this from memory? No replace question Replaced question - "A" is not plausible - see suggested enhancement Calvert believes the suggested enhancement may be a second correct answer. They want to use the original distracter "A" because this was the correct answer prior to a recent change to the procedure. Draft a plausibility analysis to establish the case for why A is plausible. - DONE OK
77	2	H	3										N	Y	Y	B	S	This is not an SRO level question - can write an SRO level question of you test tech specs - MADE CHANGES TO ADD TECH SPECS TO DISTRACTERS - OK
78	3	H	3										N	Y	Y	B	S	Why are C and D plausible? C IS OK. REVISED D.
79	4	H	3										Y	Y	Y	N	S	Why provide section 3.0 of tech specs? We normally expect applicants to know this section. OK - REMOVED TS SECTION 3.0 from handout
80	5	H	3										N	Y	Y	N	S	Change to "directed by the CRS" - REVISION OK
81	6	H	2										Y	Y	Y	N	S	Why would EOP-7 be a plausible choice? See suggested changes to address issues. Diagnostic flow chart was not provided with reference package. RECOMMENDED CHANGES TO QUESTION - WILL GET BACK TO ME- Made Changes to distracters C and D as discussed. Add plausibility analysis. ADDED - OK
82	7	H	3										N	Y	Y	B	S	I would consider this question to be written at the higher cognitive level. Why address USFAR 14 conditions in stem? What does this mean? REMOVE REFERENCE TO UFSAR - CHANGE TO "Higher cog level" DONE
83	8	H	3										N	Y	Y	B	S	C and D not plausible - shutdown margin not challenged under these conditions. See proposed revisions to the question. This should be higher level of knowledge. CONSIDER REVISING QUESTION TO MAKE C AND D MORE PLAUSIBLE - Revised C and D to make more plausible.
84	9	F	3										N	Y	Y	N	S	B, C and D are not plausible as written (when isolated from A). A is important - B, C and D are minor additional actions. See suggested changes to improve plausibility using same information. Also note that another question provided a copy of the RAD Waste discharge permit - eliminate this reference or verify that this does not give this away. REVISE QUESTION TO CHANGE - Revisions made as requested. Need to add the word "verify" to distracter B
85	10	H	3										N	Y	Y	N	S	

Q#	test Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				Ref Req	5. Other		6. B/M/N	7. U/E/S	7. Explanation
				Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Backward		Q=K/A	SRO only			
86	11	F	3										N	Y	Y	M	S	Replace this question. A, C and D are not plausible. Question is not at the SRO level. K/A is very broad. REPLACED QUESTION - new question: add A,B,C,D above distracters to correlate matching. Should this be F LOK? Distracters A, B, and D not plausible (A=1 right, B=1 right, C=2 right). See suggested revisions. ACCEPTED REVISIONS - OK
87	12	H	4										N	Y	Y	N	S	SRO level question? Why not test what you have to do about it? Stop the startup - continue etc? REVISED QUESTION - see suggested revisions for A and C for distracter parallelism (B and D say shutdown the reactor).
88	13	H	3										N	Y	Y	M	S	
89	14	H	3										N	Y	Y	N	S	
90	15	H	2										N	Y	Y	N	S	Add reference for V-04 to package - OK - Sam Hansell - please provide a lesson plan objective or a statement that this is appropriate level of knowledge for the SRO to know from memory - i.e. not minuted. STATEMENT PROVIDED - LESSON PLAN OBJECTIVES ADDED BUT NOT DIRECTLY ON POINT. - OK
91	16	H	3										N	Y	Y	N	S	Good question - but the diagnostic flow chart was provided for another SRO question. Does this reference give away this question? Direct lookup? DIAGNOSTIC FLOW CHART WILL NOT BE PROVIDED TO APPLICANTS
92	17	H	3										N	Y	Y	N	S	Why is B palusible? Add names of AOPs to answers. REVISED B, added AOP names
93	18	H	3										N	Y	Y	N	S	
94	19	H	2										N	Y	Y	B	S	
95	20	H	3										N	Y	Y	B	S	Add in controlling procedures to A, B and D MADE REVISIONS AS REQUESTED - OK
96	21	H	4										N	Y	Y	M	S	Very close to a question on the last NRC exam - replace? NO did not use any questions from last NRC exam. Not SRO level. WROTE TO MATCH THE K/A. NO OTHER SRO LEVEL QUESTION CAN BE WRITTEN TO TEST THIS K/A. DO NOT MEET CRITERIA FOR SUPPRESSING THE K/A - ACCEPT AS IS.
97	22	H	3										N	Y	Y	N	S	
98	23	F	4										N	Y	Y	N	S	Can we add in the selection of an AOP in the distracters? Meets K/A but does not test at SRO level. DONE - delete the word "setpoint" in A and C. OK
99	24	H	3										N	Y	Y	N	S	
100	25	H	3										N	Y	Y	M	S	
Total		25	3.0	0	0	0	0	0	0	0	0	0	2	0	0	25	25	Sum UNSAT
F		4	16.0%	FUNDAMENTAL KNOWLEDGE									U	B	Bank =	6	0	Enhancement required
H		21	84.0%	HIGHER LEVEL KNOWLEDGE									E	M	Modified =	5	0	SATISFACTORY
			100.0%										S	N	New =	14	25	

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				Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward		Q=K/A	SRO only			
											NRC	NRC=	0	25	Total Graded			
												Total	25	0	Number not graded			
													0	0.0%	% UNSAT			

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85	10	H	3										N	Y	Y	N	S	

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89	14	H	3										N	Y	Y	N	S		
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98	23	F	4										N	Y	Y	N	S		
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100	25	H	3										N	Y	Y	M	S		
Total		25	3.0	0	0	0	0	0	0	0	0	0	2	0	0	25	25	Sum	
F		4	16.0%	FUNDAMENTAL KNOWLEDGE										U	B	Bank =	6	0	UNSAT
H		21	84.0%	HIGHER LEVEL KNOWLEDGE										E	M	Modified =	5	0	Enhancement required
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				Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward		Q=K/A	SRO only			
											NRC	NRC=	0	25	Total Graded			
												Total	25	0	Number not graded			
													0	0.0%	% UNSAT			

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				Ref Req Y/N	5. Other		6. B/M/N NRC	7. U/E/S	8. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward		Q=K/A	SRO only				
1	H	2										X	N	N?	N	M	S	Does not test the cause of the alarm or the effect of the alarm? May be OK with K/A match analysis? Not a modified question - cannot see difference between original and modified versions. PROVIDE CORRECT VERSION OF THE ORIGINAL QUESTION.
2	H	3				a, b, c							?	Y	N	N	U	A, B and C are not plausible. Add 2 actions to take to 2 EOP bases to get a 2x2 matrix question. No reference provided.
3	F	2											N	Y	N	B	S	
4	H	2				d							N	N	N	B	U	Does not test the 2nd part of the K/A. Why is D plausible?
5	H	3											N	Y	N	B	E	See recommended enhancement changes to C and D MAKE CHANGES
6	F	3											N	Y	N	B	E	See recommended enhancements to A and B for parallelism of answers. WILL CONSIDER
7	F	3				c							?	Y	N	N	E	C is not plausible see recommended changes WILL CONSIDER MAKING CHANGE TO C
8	F	2											N	Y	N	B	S	
9	F	1				a, b							Y	Y	N	B	U	A and B are direct lookups with reference. Not very plausible. Not a modified question - need to modify the stem and one distracter. - REF ES401 page 7 CHANGE TO BANK - CHANGE B TO 72 HOURS - ASK SAM
10	F	2											N	Y	N	B	S	
11	F	4											N	Y	N	N	S	
12	H	2				a, c							N	Y	N	B	S	
13	H	2											N	Y	N	B	S	
14	H	3				a, b							N	Y	N	B	U	A and B not plausible
15	H	3				a, d							Y	Y	N	B	E	A not plausible - no info provided on radiation levels. D not plausible - can rule out D the same way as B + RLEC-2 not plausible. Is this RO level of knowledge? - YES - DETERMINATION OF SAFETY FUNCTIONS IS RO RESPONSIBILITY. RLEC 2 IS PLAUSIBLE - SEE PLAUSIBILITY ANALYSIS IN EXAM COMMENTS - WILL MAKE RECOMMENDED CHANGES TO ENHANCE THIS QUESTION
16	H	2											N	Y	N	B	S	
17	H	3				d							N	Y	N	N	E	Why is D plausible? REVISE D
18	H	3											N	Y	N	B	S	A and B are not plausible VALIDATION RESULTS SHOW A AND B ARE DISCRIMINATORY
19	F												N			B	S	
20	H	3				a, d							N	Y	N	B	S	Why are A and D plausible? Recommend changes to A and D. - ADDED PLAUSIBILITY ANALYSIS FOR A AND D.
21	H	3				d							N	Y	N	B	S	Why is D plausible? ADDED PLAUSIBILITY ANALYSIS - See suggested changes. OK ON CHANGES
22	H	2				a							Y	Y	N	B	U	A is not plausible - entire question is simplistic. CHANGE A TO 569F

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward		Q=K/A	SRO only			
23	F	3										N	Y	N	N	S	
24	F	3				c, d						N	Y	N	B	E	Need to revise D to be more plausible - what about the condensate pump? You do not address the auto start of the standby condensate pump in c or d. One can assume the standby condensate pump has started. See suggested revisions. REVISE QUESTION TO 80% POWER - LEAVE DISTRACTERS AS IS - ADD PLAUSIBILITY ANALYSIS FOR D.
25	H	4										N			N	S	
26	H	1										N	Y	N	N	U	Too simplistic - does not test operational implications of leak rate decreasing. REVISE OR REPLACE
27	H	2				c, d						N	Y	N	M	E	C and D not plausible - C is plausible - see plausibility analysis - D is not plausible - agreed to revise question to recommended changes if we changed the U to an E. OK
28	F	3				a, b, d						N	Y	N	B	E	Distracters A, B and D seem to be the condition where discharge pressure < some value (125 psig). This is OK for one distracter - but not all 3. If the pump is deadheaded, mini flow protection must be provided. REMOVE STEM ABOUT LOW FLOW RATES - THEN DISTRACTERS ARE OK
29	F	3				a, c, d						N	Y	N	N	E	A, C and D are just not plausible. A and C were plausible. RO/ATC not allowed to do much of anything but See proposed revisions.
30	F	1				a, d						N	Y	N	B	E	simplistic - A, and D are not plausible ADD PLAUSIBILITY ANALYSIS
31	H	2										N	N	N	M	U	Question does not meet criteria for significant modification - stem has not be modified. Does not match K/A - generic radiation control - REPLACE WITH EWP QUESTION
32	H	3										N	Y	N	B	E	A and C are not plausible - A - would not dilute to criticality under any conditions. THIS IS THE CORRECT PROCEDURE FOR PHYSICS TESTING AFTER REFUELING - ONLY COMING OUT OF OUTAGE WITH A FRESH CORE. C - this is an emergency response to a non-emergency situation. REPLACE C WITH PROPOSED DISTRACTER
33	F	3										N	Y	N	B	E	
34	F	4										N	Y	N	N	S	Revise stem to include procedure completion. OK
35	H	3										N	Y	N	B	S	No reference to be provided? CORRECT
36	H	3										N	Y	N	B	S	
37	F	4										N	Y	N	B	S	
38	H	2										N	Y	N	B	S	
39	H	3										N	Y	N	B	S	
40	F	4										N	Y	N	B	S	
41	F	3										N	Y	N	B	S	
42	F	2										N	Y	N	B	S	

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				Ref Req Y/N	5. Other		6. B/M/N NRC	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward		Q=K/A	SRO only			
43	F	3										N	N	N	B	U	How is emergency backup part of K/A tested? REVISE QUESTION
44	F	2										N	Y	N	B	S	Should be scored a fundamental knowledge? Memorization of 2 signals. CHANGE TO F LoK
45	H	2										N	Y	N	B	S	
46	H	3										N	Y	N	B	S	
47	F	2										N	Y	N	B	S	
48	H	2				c						N	Y	N	B	E	See proposed revision to distracter C WILL MAKE CHANGE
49	F	2										N	Y	N	M	S	
50	H	2										Y	Y	N	B	E	Distracter B is somewhat implausible. See proposed revision. WILL MAKE SUGGESTED CHANGES
51	F	2										N	Y	N	B	S	
52	H	3										N	Y	N	N	S	Why is B plausible - CAC inlet valve is shut? UNDER CERTAIN CIRCUMSTANCES, THERE IS A REQUIREMENT FOR FLOW TO BE THROUGH SOME SYSTEMS FOR CONTAINMENT INTEGRITY - IF IN MODE 5, THEN B IS CORRECT (CONTAINMENT CLOSURE)
53	H	3										Y	Y	N	N	E	See proposed enhancements. No need to provide release form if changes are made. Do we need to give them the circ water pump alignment?
54	F	3										N	Y	N	N	S	
55	H	3										N	Y	N	N	E	Why is B plausible? See proposed revisions
56	F	3										N	Y	N	N	S	
57	H	4										N	Y	N	N	S	
58	H	3				a or b?						N	Y	N	M	E	Distracters A and B involve the same error. Change A to read level lowers at 3 inches per minute. Reorder distracters as indicated. Which one is more plausible. MAKE REVISIONS AS RECOMMENDED
59	H	3				a, b						N	Y	N	M	S	
60	H	3										N	Y	N	N	E	Why are A and B plausible? See plausibility analysis. See recommended changes to improve question
61	F	2										N	Y	N	N	S	Why is D plausible? PZR TEMP IS USED IN ACCIDENTS Should be memory level. CHANGE TO MEMORY LEVEL
62	H	2										N	Y	N	B	S	
63	F	3				b						N	Y	N	N	E	See suggested change - more plausible. Requires applicant to know the answer to the 2nd part of the question. WILL MAKE THIS CHANGE
64	H	3				b						N	Y	N	N	E	Why is "B" plausible? See recommended change to A and B. A is not plausible if D (which is the answer) is listed. This question has not been significantly modified. Only distracter B has changed (was 4 CACs instead of 3 CACs - REVISE A REPLACED QUESTION
65	F	2				a						N	Y	N	M	E	

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward		Y/N	Q=K/A				SRO only
66	H	3											N	Y	N	B	S	Change to fundamental level of knowledge? MORE COMPLICATED THAN FIRST THOUGHT - AIR SUPPLY COMES FROM DOWN STREAM - COMPLEX INTERACTION - THIS IS HIGHER COGNITIVE
67	F	2				c							?	Y	N	N	S	Why is C plausible? C IS PARTIALLY CORRECT - BUT NOT SUFFICIENT
68	H	3				a							N	N	N	N	U	A is not plausible. Does not test part b of K/A - mandatory
69	F	4				a, d							?	Y	N	N	U	A and D not very plausible. See suggested revisions. Alternatively, test if the isolation valve closes automatically.
70	F	3				d							N	Y	N	B	E	D can be argued as true - can also be not plausible - see suggested change MAKE SUGGESTED CHANGE
71	H												N	Y	N	N	S	
72	H	3											N	Y	N	N	S	Change to fundamental level of knowledge? THEY CONVINCED ME THAT THE ONLY WAY TO ANSWER THIS QUESTION IS TO KNOW WHAT SYSTEMS ARE CAPABLE OF FEEDING INTO THE SFP - REQUIRES SYSTEM KNOWLEDGE
73	F					c							N	Y	N	B	E	Why is "C" plausible?
74	H												N	Y	N	B	S	
75	H	3											N	Y	N	B	S	

Total	75	2.7	0	0	0	27	0	0	0	0	0	1	5	4	73	75	75	Sum
F	33	44.0%	40-50%											B	Bank =	43	10	UNSAT
H	42	56.0%	50-60%											M	Modified=	7	23	Enhancement required
	75	100.0%												N	New =	25	42	SATISFACTORY
														NRC	Exams=	0	75	Total graded
																75	13.3%	% UNSAT

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				Ref Req Y/N	5. Other		6. B/M/N NRC	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Backward		Q=K/A	SRO only			
1	H	2									X	N	Y	N	M	S	Does not test the cause of the alarm or the effect of the alarm? May be OK with K/A match analysis? Not a modified question - cannot see difference between original and modified versions. PROVIDED CORRECT VERSION OF THE ORIGINAL QUESTION. Added K/A match analysis. OK
2	H	3										Y	Y	N	N	S	A, B and C are not plausible. Add 2 actions to take to 2 EOP bases to get a 2x2 matrix question. No reference provided. Revised distracters as discussed. OK
3	F	2										N	Y	N	B	S	
4	H	2										N	Y	N	B	S	Does not test the 2nd part of the K/A. Why is D plausible? Discussed question - revised D to make plausible. Added K/A match analysis to show how 2nd part of K/A is tested. - OK
5	H	3										N	Y	N	B	S	See recommended enhancement changes to C and D MADE ENHANCEMENT CHANGES - OK
6	F	3										N	Y	N	B	S	See recommended enhancements to A and B for parallelism of answers. WILL CONSIDER ENHANCEMENTS MADE AS SUGGESTED -OK
7	F	3										N	Y	N	N	S	C is not plausible see recommended changes WILL CONSIDER MAKING CHANGE TO C - MADE SUGGESTED ENHANCEMENT TO C - OK
8	F	2										N	Y	N	B	S	
9	F	1										Y	Y	N	B	S	A and B are direct lookups with reference. Not very plausible. Not a modified question - need to modify the stem and one distracter. - REF ES401 page 7 CHANGE STATUS TO BANK - CHANGE "B" TO 72 HOURS - CHANGES MADE - ASK SAM - 12/2/ discussed with Branch Chief - he is OK with this question. This question tests at the RO level for application of tech specs. OK
10	F	2										N	Y	N	B	S	
11	F	4										N	Y	N	N	S	Does not match K/A well. Added K/A match analysis. "A" is a second correct answer. REVISED "A" to make incorrect - OK
12	H	2										N	Y	N	B	S	
13	H	2										N	Y	N	B	S	
14	H	3										N	Y	N	B	S	A and B not plausible A and B still not plausible - see suggested changes - ACCEPTED PROPOSED CHANGES - OK

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				Ref Req Y/N	5. Other		6. B/M/N NRC	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Backward		Q=K/A	SRO only			
15	H	3										Y	Y	N	B	S	A not plausible - no info provided on radiation levels. D not plausible - can rule out D the same way as B + RLEC-2 not plausible. Is this RO level of knowledge? - YES - DETERMINATION OF SAFETY FUNCTIONS IS RO RESPONSIBILITY. RLEC 2 IS PLAUSIBLE - SEE PLAUSIBILITY ANALYSIS IN EXAM COMMENTS - WILL MAKE RECOMMENDED CHANGES TO ENHANCE THIS QUESTION Changes made to D - added plausibility analysis - OK
16	H	2										N	Y	N	B	S	
17	H	3										N	Y	N	N	S	Why is D plausible? REVISED D - OK
18	H	3										N	Y	N	B	S	A and B are not plausible VALIDATION RESULTS SHOW A AND B ARE DISCRIMINATORY - OK
19	F											N	Y	N	B	S	
20	H	3										N	Y	N	B	S	Why are A and D plausible? Recommend changes to A and D. - ADDED PLAUSIBILITY ANALYSIS FOR A AND D. - OK
21	H	3										N	Y	N	B	S	Why is D plausible? ADDED PLAUSIBILITY ANALYSIS - See suggested changes. OK ON CHANGES
22	H	2										Y	Y	N	B	S	A is not plausible - entire question is simplistic. CHANGE A TO 569F DONE - OK
23	F	3										N	Y	N	N	S	
24	F	3										N	Y	N	B	S	Need to revise D to be more plausible - what about the condensate pump? You do not address the auto start of the standby condensate pump in c or d. One can assume the standby condensate pump has started. See suggested revisions. REVISE QUESTION TO 80% POWER - REVISE D AS SUGGESTED - ADD PLAUSIBILITY ANALYSIS FOR D. DONE - OK
25	H	4										N		N	N	S	
26	H	1										N	Y	N	N	S	Too simplistic - does not test operational implications of leak rate decreasing. REVISE OR REPLACE - REVISED SUBSTANTIALLY TO MAKE DISTRACTERS PLAUSIBLE
27	H	2										N	Y	N	M	S	C and D not plausible - C is plausible - see plausibility analysis - D is not plausible - agreed to revise question to recommended changes if we changed the U to an E. OK REVISED AS SUGGESTED - OK
28	F	3										N	Y	N	B	S	Distracters A, B and D seem to test the condition where discharge pressure < some value (125 psig). This is OK for one distracter - but not all 3. If the pump is deadheaded, mini flow protection must be provided. REMOVE STEM ABOUT LOW FLOW RATES - THEN DISTRACTERS A and B ARE OK - REVISE C - ADDED DISTRACTER ANALYSIS TO JUSTIFY THE PLAUSIBILITY OF "C"

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				Ref Req Y/N	5. Other		6. B/M/N NRC	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Backward		Q=K/A	SRO only			
29	F	3										N	Y	N	N	S	A, C and D are just not plausible. A and C were plausible. RO/ATC not allowed to do much of anything but See proposed revisions. Accepted proposed revisions - OK
30	F	1										N	Y	N	B	S	simplistic - A, and D are not plausible ADD PLAUSIBILITY ANALYSIS- ADDED - OK
31	H	2										N	Y	N	B	S	Question does not meet criteria for significant modification - stem has not be modified. Does not match K/A - generic radiation control - REPLACE WITH EWP QUESTION - REPLACED - New question: "D" is not plausible - 50 REM does not correlate to a plausible error. CHANGED "D" - OK
32	H	3										N	Y	N	B	S	A and C are not plausible - A - would not dilute to criticality under any conditions. THIS IS THE CORRECT PROCEDURE FOR PHYSICS TESTING AFTER REFUELING - ONLY COMING OUT OF OUTAGE WITH A FRESH CORE. C -. REPLACE C WITH PROPOSED DISTRACTER OK
33	F	3										N	Y	N	N	S	Revise stem to include procedure completion. DONE - OK
34	F	4										N	Y	N	N	S	No reference to be provided? CORRECT - OK
35	H	3										N	Y	N	B	S	
36	H	3										N	Y	N	B	S	
37	F	4										N	Y	N	B	S	
38	H	2										N	Y	N	B	S	
39	H	3										N	Y	N	B	S	
40	F	4										N	Y	N	B	S	
41	F	3										N	Y	N	B	S	
42	F	2										N	Y	N	B	S	
43	F	3										N	Y	N	B	S	How is the "emergency backup" part of K/A tested? REVISE QUESTION - REVISED - OK
44	F	2										N	Y	N	B	S	Should be scored a fundamental knowledge? Memorization of 2 signals. CHANGE TO F LoK - OK
45	H	2										N	Y	N	B	S	
46	H	3										N	Y	N	B	S	
47	F	2										N	Y	N	B	S	
48	H	2										N	Y	N	B	S	See proposed revision to distracter C WILL MAKE CHANGE - OK
49	F	2										N	Y	N	M	S	
50	H	2										Y	Y	N	B	S	Distracter B is somewhat implausible. See proposed revision. WILL MAKE SUGGESTED CHANGES - DONE - OK
51	F	2										N	Y	N	B	S	

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				Ref Req Y/N	5. Other		6. B/M/N NRC	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward		Q=K/A	SRO only			
52	H	3										N	Y	N	N	S	Why is B plausible - CAC inlet valve is shut? UNDER CERTAIN CIRCUMSTANCES, THERE IS A REQUIREMENT FOR FLOW TO BE THROUGH SOME SYSTEMS FOR CONTAINMENT INTEGRITY - IF IN MODE 5, THEN B IS CORRECT (CONTAINMENT CLOSURE) - OK
53	H	3										Y	Y	N	N	S	See proposed enhancements. No need to provide release form if changes are made. Do we need to give them the circ water pump alignment? - made suggested changes - circ water pump alignment is not required - OK
54	F	3										N	Y	N	N	S	
55	H	3										N	Y	N	N	S	Why is B plausible? See proposed revisions - ACCEPTED REVISIONS - OK
56	F	3										N	Y	N	N	S	
57	H	4										N	Y	N	N	S	
58	H	3										N	Y	N	M	S	Distracters A and B involve the same error. Change A to read level lowers at 3 inches per minute. Reorder distracters as indicated. Which one is more plausible. MAKE REVISIONS AS RECOMMENDED - DONE - OK
59	H	3										N	Y	N	M	S	Why are A and B plausible? See plausibility analysis. OK
60	H	3										N	Y	N	N	S	See recommended changes to improve question - MADE CHANGES TO B AND C - UNABLE TO READ SUMP LEVEL SO D STANDS AS IS - OK
61	F	2										N	Y	N	N	S	Why is D plausible? PZR TEMP IS USED IN ACCIDENTS Should be memory level. CHANGE TO MEMORY LEVEL OK
62	H	2										N	Y	N	B	S	
63	F	3										N	Y	N	N	S	See suggested change - more plausible. Requires applicant to know the answer to the 2nd part of the question. WILL MAKE THIS CHANGE DONE - OK
64	H	3										N	Y	N	N	S	Why is "B" plausible? See recommended change to A and B. CHANGES MADE - OK
65	F	2										N	Y	N	B	S	A is not plausible if D (which is the answer) is listed. This question has not been significantly modified. Only distracter B has changed (was 4 CACs instead of 3 CACs - REVISE A REPLACED QUESTION - New Question: state the title of AOP-9A - DONE - OK
66	H	3										N	Y	N	B	S	Change to fundamental level of knowledge? MORE COMPLICATED THAN FIRST THOUGHT - AIR SUPPLY COMES FROM DOWN STREAM - COMPLEX INTERACTION - THIS IS HIGHER COGNITIVE - OK
67	F	2										N	Y	N	N	S	Why is C plausible? C IS PARTIALLY CORRECT - BUT NOT SUFFICIENT - ADD IN Plausibility analysis for C - DON E - OK
68	H	3										N	Y	N	N	S	A is not plausible. Does not test part b of K/A - mandatory - modified A - changed each answer to test part B of K/A - OK

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward		Q=K/A	SRO only			
69	F	4										?	Y	N	N	S	A and D not very plausible. See suggested revisions. Alternatively, test if the isolation valve closes automatically. A was changed but D was not changed. Either change D or draft plausibility analysis. ADDED PLAUSIBILITY ANALYSIS - OK
70	F	3										N	Y	N	B	S	D can be argued as true - can also be not plausible - see suggested change MAKE SUGGESTED CHANGE DONE - OK
71	H											N	Y	N	N	S	
72	H	3										N	Y	N	N	S	Change to fundamental level of knowledge? THEY CONVINCED ME THAT THE ONLY WAY TO ANSWER THIS QUESTION IS TO KNOW WHAT SYSTEMS ARE CAPABLE OF FEEDING INTO THE SFP - REQUIRES SYSTEM KNOWLEDGE
73	F											N	Y	N	B	S	Why is "C" plausible? Revised C - OK
74	H											N	Y	N	B	S	
75	H	3										N	Y	N	B	S	

Total	75	2.7	0	0	0	0	0	0	0	0	0	1	6	0	75	75	75	Sum
F	33	44.0%	40-50% FUNDAMENTAL KNOWLEDGE									U			B Bank =	45	0	UNSAT
H	42	56.0%	50-60% HIGHER LEVEL KNOWLEDGE									E			M Modified=	5	0	Enhancement required
	75	100.0%										S			N New =	25	75	SATISFACTORY
															NRC Exams=	0	75	Total graded
																75	0.0%	% UNSAT