

Duane Arnold Jan-Feb 2005 Exam

Bunker World Jan Feb 2000 Exam																
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	2												S	New.	
2	H	3										U		E	Modified. In distractor a, add the following words at the end of the distractor: "... under the above conditions." <u>RESOLUTION</u> : Comment incorporated.	
3	H	2												S	New.	
4	H	3					X					U		U	New. 1) Page 41 of the "EHC Logic System" reference states that if the Main Generator load is NOT reduced to <b>less</b> than 25% within 3.5 minutes, that the turbine is tripped. The question stem states that at 1455 hours that the Main Generator load is <b>at 25%</b> (i.e., NOT less than 25%), thus it could be argued that a turbine trip is required (distractor B being correct). 2) Does a Main Generator trip always result in a Turbine Trip? If so, then distractors B and D are NOT independent distractors. 3) Change "should" to "would" in the distractors. <u>RESOLUTION</u> : Comments incorporated. Changed 25% to 24%.	

## Instructions

[Refer to Section D of ES-401 and Appendix B for additional information regarding each of the following concepts.]

- Enter the level of knowledge (LOK) of each question as either (F)undamental or (H)igher cognitive level.
  - Enter the level of difficulty (LOD) of each question using a 1 – 5 (easy – difficult) rating scale (questions in the 2 – 4 range are acceptable).
  - Check the appropriate box if a psychometric flaw is identified:
    - The stem lacks sufficient focus to elicit the correct answer (e.g., unclear intent, more information is needed, or too much needless information).
    - The stem or distractors contain cues (i.e., clues, specific determiners, phrasing, length, etc).
    - The answer choices are a collection of unrelated true/false statements.
    - The distractors are not credible; single implausible distractors should be repaired, more than one is unacceptable.
    - One or more distractors is (are) partially correct (e.g., if the applicant can make unstated assumptions that are not contradicted by stem).
  - Check the appropriate box if a job content error is identified:
    - The question is not linked to the job requirements (i.e., the question has a valid K/A but, as written, is not operational in content).
    - The question requires the recall of knowledge that is too specific for the closed reference test mode (i.e., it is not required to be known from memory).
    - The question contains data with an unrealistic level of accuracy or inconsistent units (e.g., panel meter in percent with question in gallons).
    - The question requires reverse logic or application compared to the job requirements.
  - Check questions that are sampled for conformance with the approved K/A and those that are *designated SRO-only* (K/A and license level mismatches are unacceptable).
  - Based on the reviewer's judgment, is the question as written (U)nsatisfactory (requiring repair or replacement), in need of (E)ditorial enhancement, or (S)atisfactory?
  - At a minimum, explain any "U" ratings (e.g., how the Appendix B psychometric attributes are not being met).
- Note: (T) for K/A also indicates technical reviews. First 20 RO and first 10 SRO were the 30 initial review.

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5	F	2	X									U		E	New. Since the Flood-up indicator is calibrated "cold", it could be argued that it is NOT "reliable" and that there are NO correct answers. <u>RESOLUTION</u> : Comment incorporated to clarify stem, level instrument that could be used to monitor and trend RPV level.
6	H	3										U		E	New. Time for C/D IAW T/S is 100 deg/hr would be a simple elimination of two distractors. Change the question stem to delete the determination of the "time" required to be at a certain RPV pressure. <u>NOTE</u> : Question requires a reference. <u>RESOLUTION</u> : Comment incorporated.
7	H	3										U		S	Bank.
8	H	3												S	Modified.
9	F	2												S	New.
10	H	3				X						U		U	New. Distractors a & b not plausible for Rad monitors would most always be required. Change the question stem to ask what compensatory action is required based on the plant condition. Change distractor b to "Secure in-vessel inspections and perform shiftly area radiation surveys." Change distractor c to also include stationing an Operator in the Control Room to monitor the source ranges. <u>RESOLUTION</u> : Comments incorporated. Rewrote question & distractors.
11	H	3												E	Modified. In the question stem, change the word "INOPERATIVE" to "INOPERABLE" so that it is a Tech Spec defined term. <u>RESOLUTION</u> : Comment incorporated.
12	H	3										U		E	New. The RED and BLACK needles at the top of the Figure do NOT appear to match the position of the chart recorder. <u>NOTE</u> : Question requires a reference. <u>RESOLUTION</u> : Comment incorporated. Picture corrected to better indicate the recorder info. Also, rearranged answer choices from shortest to longest.
13	H	3	X									U		E	New. Reword the question stem to: "Which of the following would be appropriate per procedure to raise the rate of heat rejection from the Torus?" <u>RESOLUTION</u> : Comment incorporated.



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32	H	2										U		E	New. 1) In distractors a and b, state that SBLC is NOT injecting. 2) In distractor a, state the actual location in the plant where the SBLC pump was started. <u>NOTE</u> : Question requires a reference. <u>RESOLUTION</u> : Comments incorporated.
33	H	2												S	Bank.
34	F	2										U		S	New.
35	F	2												E	Modified. Change electronic trip to auxiliary trip to clarify based on answer justification.
36	F	2										U		S	Modified.
37	H	2										U		S	New.
38	F	2										U		E	Bank. 1) Change LOK to Fundamental instead of Higher Cognitive Level, since the question is basically just asking what plant conditions actuates ADS. 2) Delete the first two sentences in the stem, and preface the third sentence with "After an accident." <u>RESOLUTION</u> : Comments incorporated.
39	H	3												S	New.
40	F	2										U		S	New.
41	F	3										U		E	New. 1) Editorial: In the question stem, change "effect" to "affect". 2) Change LOK to Fundamental instead of Higher Cognitive Level, since the question is basically just asking what equipment affects RPV level. <u>RESOLUTION</u> : Comments incorporated.
42	H	3										U		E	New. In the distractors, specify which valve one is referring to. <u>NOTE</u> : Question requires a reference. <u>RESOLUTION</u> : Comment incorporated. Choices reworded to note valve descriptions.
43	F	3										U		E	New. 1) Change distractor a from "832 VAC" to "800 VAC" to make it more realistic as to what an operator could read on the Main Control Board. 2) Change distractor d to mention an actual voltage number instead of "<65% of rated voltage" (similar to distractor a) (2500 VAC). <u>RESOLUTION</u> : Comments incorporated.

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44	H	3										U		E	New. 1) Do not see any reference to show HPCI/RCIC auto transfer would occur. 2) In the question stem, add the following for clarity: "Which of the following... <b>during the restoration of UPS to the preferred power supply?</b> <u>RESOLUTION:</u> Comments incorporated, "during restoration."
45	F	2										U		E	New. Change LOK to Fundamental instead of Higher Cognitive Level. <u>RESOLUTION:</u> Comment incorporated.
46	H	1				X						U		U	New. Distractors c and d are NOT plausible that the DG would be aligned to a Bus that is locked out. <u>RESOLUTION:</u> Comment incorporated. Choices c & d rewritten to be plausible, and not tied to a dead bus.
47	F	2										U		S	New. <u>NOTE:</u> Question requires a reference.
48	F	2												S	Bank.
49	F	2										U		E	New. In the question stem, change to "The bases <b>for</b> injecting ...". <u>RESOLUTION:</u> Comment incorporated.
50	H	2										U		S	New. <u>NOTE:</u> Question requires a reference.
51	F	2	X									U		E	New. 1) In the question stem, state that a plant cooldown is in progress. 2) In the question stem, change "SRVs" to "SRV(s)". <u>RESOLUTION:</u> Comments incorporated. Added more detail of plant condition in the stem.
52	H	3										U		E	New. Change LOK to Higher Cognitive Level instead of Fundamental. <u>RESOLUTION:</u> Comment incorporated.
53	F	3										U		S	New.
54	H	3												S	Bank.
55	H	3										U		S	Bank. <u>NOTE:</u> Question requires a reference.
56	F	2												S	New.
57	H	2										U		E	New. 1) In the question stem, reword to state that a plant startup is in progress with certain plant conditions. 2) Based on the changes to the question stem, change LOK to Higher Cognitive Level instead of Fundamental, since an evaluation of the required action is necessary based on the stated plant conditions. <u>RESOLUTION:</u> Comments incorporated. More details in stem. Shortened the choices to be more concise.

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58	H	3												E	New. In the distractors , add the word "Figure" before the letter designation of A, B, C, and D. <u>NOTE</u> : Question requires a reference. <u>RESOLUTION</u> : Comment incorporated.
59	H	3										U		S	New. <u>NOTE</u> : Question requires a reference. Rearranged choices from shortest to longest.
60	F	3	X									U		E	New. 1) Change the question stem from "applicable heatup" to "PREFERRED heatup" to ensure the question is properly understood. 2) In distractors a and c delete the "degF/hour", and in distractor b delete the "degF/15 min" <u>RESOLUTION</u> : Comments incorporated.
61	H	3										U		S	New. <u>NOTE</u> : Question requires a reference.
62	H	3										U		S	New. <u>NOTE</u> : Question requires a reference.
63	H	3				X						U		E	New. Change the question stem to state that thermal power is 25% instead of 37% to make distractor c more implausible. <u>NOTE</u> : Question requires a reference. <u>RESOLUTION</u> : Comment incorporated.
64	H	3										U		E	New. In distractor d, add the word "level" after the word "RPV". <u>RESOLUTION</u> : Comment incorporated.
65	H	3										U		E	New. Need an additional reference on system flow paths to support distractor d as the correct answer. <u>NOTE</u> : Question requires a reference. <u>RESOLUTION</u> : Comment incorporated. Added SD-672 Figure 1.
66	F	2				X						U		E	Bank. In the question stem, change "NSOE" to "ANSOE". <u>RESOLUTION</u> : Comment incorporated.
67	H	3										U		S	Modified.
68	F	3	X									U		E	New. In distractors a and c, delete the phrase "whether or not" and reword as necessary. <u>RESOLUTION</u> : Comment incorporated.
69	H	3				X						U		E	New. To make distractor d more plausible, make it say that all three operators are required to be briefed and sign on the STP. <u>RESOLUTION</u> : Comment incorporated.
70	H	3										U		S	New.

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71	F	2										U		S	Bank.
72	F	3										U		S	New.
73	F	2				X						U		E	Bank. 1) To make distractor c more plausible, change from "EOP 3" to "ALC". 2) Reword the question stem to state in more general terms the bases for EOP 1. <u>RESOLUTION</u> : Comments incorporated. Stem reworded to remove the 1500 deg F info.
74	H	3										U		E	New. In the question stem, change "CRS request permission" to "CRS consulting the OSM". <u>RESOLUTION</u> : Comment incorporated.
75	H	3										U		E	Bank. Editorial: In the question stem, delete the word "is" in the question asked. <u>RESOLUTION</u> : Comment incorporated.
76 SRO (1)	H	2											X	E	New. For symmetry, have two distractors (instead of one) with no forced flow in the RPV. <u>RESOLUTION</u> : Comment incorporated. Changed choice c to note that no forced circulation in the RPV.
77 (2)	H	3											X	S	New. <u>NOTE</u> : Question requires a reference.
78 (3)	H	2										U	X	E	New. 1) The references (i.e., EOP-1 and the ATWS EOP) should NOT be required to be supplied to the applicants, since the applicants should be able to answer the question based on their knowledge of EOP mitigation strategies. 2) Reword the distractors to be more general, such that mention of ATWS Steps 1 and 2 is NOT required. <u>NOTE</u> : Question requires a reference. <u>RESOLUTION</u> : Comments incorporated. Corrected in the stem, Instrument AC to Uninterruptible power.
79 (4)	H	2				X						U	X	U	New. Distractors a and b are NOT plausible that one would read the vertical axis of the Heat Capacity Limit curve to obtain Reactor pressure. Consider that variations in Reactor pressure and Torus water level may occur concurrently." The distractors could be: a. 400 psig, 1.0 feet (correct answer) b. 400 psig, 2.0 feet c. 500 psig, 1.0 feet d. 500 psig, 2.0 feet <u>NOTE</u> : Question requires a reference. <u>RESOLUTION</u> : Comment incorporated.
80 (5)	H	3										U	X	S	Modified.

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81 (6)	H	3											X	E	New. 1) Supply a picture of SPDS that shows that one is just inside the curve (i.e., that would imply that drywell spray is NOT needed). 2) Do NOT supply EOP-1 and EOP-2 as references, since the graphs from these EOPs will already be supplied as references. <u>NOTE:</u> Question requires a reference. <u>RESOLUTION:</u> Comments incorporated.
82 (7)	H	3										U	X	U	New. 1) Answer is a direct lookup. 2) Reword stem so that it does NOT directly state that there is a fire in the Turbine Building, but instead that one has to determine that such is the case. 3) Reword question so that one needs to determine the correct answer concerning damper operation during the fire condition. <u>NOTE:</u> Question requires a reference. <u>RESOLUTION:</u> Comments incorporated. Rewrote the question.
83 (8)	H	2				X						U	X	E	New. 1) The reference (i.e., RPV Flooding) should NOT be required to be supplied to the applicants, since the applicants should be able to answer the question based on their knowledge of EOP mitigation strategies. 2) Distractor a is NOT plausible that the start time for the minimum core flooding interval would be the time of the reactor scram. Add another bullet to the timeline such that at 0815 hours all RPV level indication was lost. <u>RESOLUTION:</u> Comments incorporated. Also, changed choice 'a' to 0900 hours to be more plausible.
84 (9)	H	3										U	X	E	New. In the question stem, delete the phrase "assume that". <u>RESOLUTION:</u> Comment incorporated.
85 (10)	H	3										U	X	E	New. In the question stem, change the torus water temperature from "exceeded 95 degF" to a value just under 95 degF(93). 2) In distractor b, delete the words "as appropriate". 3) In distractor c, delete the words "after administratively exiting EOP 2". <u>NOTE:</u> Question requires a reference. <u>RESOLUTION:</u> Comments incorporated.
86 (11)	H	3										U	X	E	New. Reword the question stem so that it is NOT asking for a Yes/No answer. <u>NOTE:</u> Question requires a reference. <u>RESOLUTION:</u> Comments incorporated. Changed stem into a two part fill in the blanks.
87 (12)	H	2										U	X	E	New. In the question stem, change the second bullet to say: "Level is being restored at 0.1 ft every 15 minutes <b>and is presently at 7.5 ft.</b> " <u>NOTE:</u> Question requires a reference. <u>RESOLUTION:</u> Comment incorporated. Changed presently to currently.



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88 (13)	F	2										U	X	S	New.
89 (14)	F	3										U	X	E	New. In the question stem state that it is a “venting process”. <u>NOTE</u> : Question requires a reference. <u>RESOLUTION</u> : Comment incorporated. Reworded stem for more diagnostic type question and procedure transition.
90 (15)	H	3										U	X	U	New. Delete the reference provided, since otherwise the answer to the question is a direct lookup. <u>RESOLUTION</u> : Comment incorporated. Rewrote stem of question.
91 (16)	H	3										U	X	U	New. 1) Reword question to focus on the K/A (i.e., actions necessary to predict and mitigate). 2) In the question rewrite, delete the requirement to have the Tech Spec reference provided. <u>RESOLUTION</u> : Comments incorporated. Rewrote question and choices.
92 (17)	H	3										U	X	E	New. In distractors b and d, reword to state that the rod has NOT been withdrawn far enough to be a mispositioned rod, instead of being specific about “more than one notch withdrawn”. <u>RESOLUTION</u> : Comment incorporated.
93 (18)	H	2										U	X	U	New. Distractor c is NOT correct (and thus there is NO correct answer), since Tech Spec LCO 3.6.3.2 does NOT even apply until 24 hours after THERMAL POWER is > 15% RTP (which starts at 1800 hours <b>of the next day</b> ). Thus, the correct answer is that there are 40 hours (instead of 16 hours) remaining to reduce Oxygen to < 4%. <u>NOTE</u> : Question requires a reference. <u>RESOLUTION</u> : Comment incorporated. Rewrote the question.
94 (19)	H	3				X						U	X	E	Bank. There is NO reason to include the reference for the alarm response procedures for “LUBE OIL MAKE UP TANK LEVEL LOW-LOW” and for “LUBE OIL MAKE UP TANK LEVEL LOW”, since the question stem already includes all the required information that the applicant would need from the ARPs. <u>NOTE</u> : Question requires a reference. <u>RESOLUTION</u> : Comment incorporated. Clarified the distractors.
95 (20)	H	2										U	X	S	New. <u>NOTE</u> : Question requires a reference.

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96 (21)	H	4										U	X	E	New. The definitions in procedure RFP 403 for Easy Right, Hard Right, Easy Left, and Hard Left refer to mast rotations of 90 degF or 180 degF counter clockwise direction (or clockwise direction). However, the distractors refer to these rotations as either 45 degF or 135 degF? <u>NOTE:</u> Question requires a reference. <u>RESOLUTION:</u> Comment incorporated.
97 (22)	F	2					X					U	X	U	New. 1) Distractor a could also be considered correct, since procedure MD-024 only states that the Work Orders <b>may</b> be closed out by including the test in the startup package (it does NOT preclude one from holding the Work Orders open until the testing is complete). 2) Editorial: In distractor a make "Package" plural (i.e., "Packages"), and in distractor c make "Orders" plural (i.e., "Orders"). <u>RESOLUTION:</u> Question was replaced with a Modified question from a previous exam.
98 (23)	F	3				X						U	X	E	New. 1) Distractor c is NOT plausible that isolating the engine coolant valve would prevent making the DG inoperable. 2) Change distractor d to state that one must immediately declare the SBDG inoperable. <u>RESOLUTION:</u> Comments incorporated.
99 (24)	F	3										U	X	E	New. Editorial: In the question stem, in the second paragraph delete the comma (,) before the period (.) at the end of the first sentence. <u>RESOLUTION:</u> Comment incorporated.
100 (25)	H	3										U	X	U	New. Q ...SRO only level. <u>RESOLUTION:</u> Question was replaced with a New question.