NRC COMMENTS TO INITIAL EXAMINATION SUBMITTAL

INCLUDING ES-401-9 AND OPERATING TEST COMMENTS

FOR THE DRESDEN INITIAL EXAMINATION - AUGUST 2004

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												S	Modified. Need to see original question to verify Modified. RESOLUTION: NRC reviewed original question, verified new question modified.
2	H	3												E	New. LOK=H, since one needs to review nitrogen accumulator pressures and Reactor pressure to obtain the correct answer. RESOLUTION: Licensee agreed, LOK=H. In addition: 1) Added "fully" to answer/distractors; 2) Bolded work "SAME" in distractor C.
3+	H	3												~~S~~ E	New. Licensee changed "moved" to "inserted" in stem.
4	H	3												S	Bank.
5	H	3												E S	New. Do the SDC pumps auto trip when the SDC system is isolated whether they are aligned for shutdown cooling or mixing? More than one correct answer (ie, "A.")? RESOLUTION: Licensee clarified reference: "Both pumps will trip on low suction pressure when isolated." There is only one correct answer.

Instructions

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

1. Enter the level of knowledge (LOK) of each question as either (F)undamental or (H)igher cognitive level.

2. Enter the level of difficulty (LOD) of each question using a 1 - 5 (easy - difficult) rating scale (questions in the 2 - 4 range are acceptable).

3. Check the appropriate box if a psychometric flaw is identified:
   - The stem lacks sufficient focus to elicit the correct answer (e.g., unclear intent, more information is needed, or too much needless information).
   - The stem or distractors contain cues (i.e., clues, specific determiners, phrasing, length, etc).
   - The answer choices are a collection of unrelated true/false statements.
   - One or more distractors is 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).

4. Check the appropriate box if a job content error is identified:
   - The question is not linked to the job requirements (i.e., the question has a valid K/A but, as written, is not operational in content).
   - The question requires the recall of knowledge that is too specific for the closed reference test mode (i.e., it is not required to be known from memory).
   - The question contains data with an unrealistic level of accuracy or inconsistent units (e.g., panel meter in percent with question in gallons).
   - The question requires reverse logic or application compared to the job requirements.

5. Check questions that are sampled for conformance with the approved K/A and those that are designated SRO-only (K/A and license level mismatches are unacceptable).

6. 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?

7. At a minimum, explain any "U" ratings (e.g., how the Appendix B psychometric attributes are not being met).

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	U/E/S	Explanation
6	H	2												S	New.
7	H	2												E S	New. Question asks for function of HPCI-8 valve, but reference describes HPCI 4&5. RESOLUTION: Licensee clarified reference. The injection valve is the HPCI 8 valve, and the HPCI turbine does not spin until the 4 and 5 valves are open.
8	F	3												S	New.
9	H	3		X										E	New. 1) In the stem it is stated that U2/3 DG jacket water temperature is 205 deg F and increasing. This could only be the case if the U2/3 DG was NOT tripped (and thus provides a Cue that the bus associated with the U2/3 DG is still energized). Delete the phrase "and going up 1 deg F every 5 minutes". 2) Distractor D is NOT plausible, since one would NOT expect both Core Spray pumps to be fed from the same bus. To make distractor D plausible, suggest adding another condition in the stem that the alarm ""Generator Differential Current" is present on the U2 DG, which would imply that the U2 DG is tripped. Then change the correct answer to distractor B. RESOLUTION: Licensee incorporated NRC comments as stated.
10+	H	3	X									X		E	New. 1) The third condition in the stem states: SBLC Pump Discharge Pressure **slightly** ABOVE Reactor Pressure", while on page 13, Section 6.a.b) of the Lesson Plan provided states that when 2 pumps are running, discharge pressure can be up to 235 psi above reactor pressure due to line losses (which is more than **"slightly"** above reactor pressure). If the intent is to show that the SBLC pumps are NOT running deadheaded, then add a condition in the stem to state what reactor pressure is (e.g., 300 psig) and then state in the third condition in the stem what the SBLC discharge pressure is (e.g. some number that is well below the SBLC relief valve setpoint - - 500 psig). 2) On the question worksheet, it gives importance values of 3.8/3.9 and references A1.04 for the K/A. This should be changed to 3.6/3.7 or A1.06(?) to match ES 401 sheet? RESOLUTION: 1) Intent is NOT to show "not running deadheaded" but rather that pressure is high enough to inject. 2) K/A reference changed from A1.04 to A1.06.

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	U/E/S	Explanation
11	~~F~~	3												E	?New, Modified, Bank, or NRC question? 1) There was NO question reference / worksheet provided with the question indicating the K/A (?K/A 212000 A2.14?); question source, LOK, original question, etc. 2) Is the Hi Level Scram setpoint above the Hi Level alarm setpoint? If so, then just because the alarm is in does NOT mean that a manual reactor scram is required. The alarm response only places the mode switch in SHUTDOWN if a reactor scram occurs. RESOLUTION: 1) Added question reference sheet, NRC verified question was modified; F; K/A 212000 A2.14. 2) A-14 alarm is the scram setpoint.
12+	H	2											X	~~E~~ S	New. 1) This question is at the SRO level, since an RO would NOT be expected to know from memory Tech Specs requirements that require actions at greater than one hour (10 CFR 55.43.b (2)). 2) Is there a Tech Spec associated with Control Rod Position indication while at power that could be applicable instead of TS 3.1.3? RESOLUTION: 1) Question asking TS entry condition. ROs are required to recognize TS applicability. Added explanation that TS 3.1.3 is applicable to Modes 1 and 2, removed last two sentences from reference on LCO information. 2) No.
13+	H	3												~~E~~ U	New. To make the wording between distractors B and D consistent, change the word "halt" in distractor B to "stop". RESOLUTION: Upon further review by the licensee, they identified a procedure compliance issue that resulted in no correct answer. Licensee revised the question.
14	H	3												E	New. Change the wording of the last condition in the stem to "APRM Channel 3 is failed downscale and is NOT bypassed." RESOLUTION: Licensee incorporated comment.
15	H	3												S	New.
16	F	2												~~S~~ E	New. Licensee replaced distractor "Toggle switch above the recorder" with "enter Program 22 on Process Computer to select SRM 21."

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	U/E/S	Explanation
17	F	2				X								~~E~~ S	Bank. To make distractor C more plausible, change "decreased" to "increased" regarding the High Voltage power supply. RESOLUTION: Licensee identified that the requested change would result in two correct answers per the reference. Change not incorporated.
18	H	3												S	New.
19	H	3												~~E~~ S	Bank. 1) Add the following to the timeline in the stem of the question(ie, make two Div II items in stem): - 17:15:15, Division II, 2 psig High Drywell Pressure; - 17:17:15, Division II, ECCS > 100 psig Discharge Permissive 2) Change the times for the following: -17:17:45, Division I, ECCS > 100 psig Discharge Permissive. With the above changes to the time line, the correct answer becomes distractor B. RESOLUTION: Licensee justified testing applicant knowledge of concepts associated with each of the question distractors and answer. Proposed changes would narrow the focus and test fewer concepts. NRC will leave as written.
20+	H	3												S	Modified. Need to see original question to verify Modified. RESOLUTION: NRC reviewed original question, verified new question modified.
21	H	3				X								U	Bank. Distractors B and C are NOT plausible (to have a switch associated with the CCSW pumps to be associated with initiation of drywell sprays). Suggest taking the condition of "316 in MANUAL" out of the question stem and having rewording distractors to be associated with various positions/conditions associated with the 316 and 317 switches. RESOLUTION: Licensee agreed, and incorporated comment.
22	F	2												S	Bank.
23	F	2												S	New.
24	H	3												S	New.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	U/E/S	Explanation
25	H	2												E	New. 1) Distractor A is NOT plausible (that a bus would be de-energized following a normal Main Turbine trip). 2) The information provided with the question does NOT show that distractor B is the correct answer. RESOLUTION: 1) Licensee agreed, revised question to incorporate comment. 2) Provided additional reference to support correct answer. 3) Licensee clarified location of voltage indication in MCR. Also added "1 to 2 seconds" to distractors C and D.
26	H	2												S	Bank.
27+	H	2												~~S~~ E	New. Licensee changed stem: replaced "...a small leak..." with "...partial loss of DW cooling..." Changed correct answer to C and revised distractor A to be incorrect.
28+	H	3												S	New.
29	F	3												S	New.
30	H	2												~~S~~ E	New. Licensee identified that parallel procedures allowed both original actions. Revised second part of distractors A and C accordingly.
31	H	3												S	Bank.
32	H	3										X		E	Modified. 1) Need to see original question to verify Modified. 2) K/A referenced by question sheet should be 271000? RESOLUTION: 1) NRC reviewed original question, verified new question modified. 2) Licensee corrected question K/A reference. 3) Changed one distractor alarm because "Injection Flow Lo" may also come in due to instrument tolerances. 4) Changed unit power level to 912 MWe from 750. 5) Changed answer to "Off Gas Chimney Flow" increasing.
33	F	2												S	Bank.
34	F	2												S	Modified.
35	H	3												S	New.
36	F	2												~~S~~ E	New. Licensee changed distractor "923-5 panel" to "902(3)-6 panel."

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	U/E/S	Explanation
37+	H	3												S	New.
38+	F	2												E	~~Modified.~~ Bank. Question not modified sufficiently, stem was only reworded. RESOLUTION: Licensee agreed.
39+	F	3												S	New.
40	F	3												S	New.
41	F	2												S	Bank.
42+	~~H~~ F	2												E	New. LOK=F. RESOLUTION: Licensee agreed, LOK=F. Also, added "G-4" as the proper alarm designation.
43	F	2												S	New.
44	H	2												S	New.
45+	F	2												~~S~~ E	New. Licensee added: 1) "Per DAN 902-4 D-18..." to stem; 2) Changed "...2B ERV leaking by." instead of "...opening." to stem.
46	F	2												S	New.
47	H	4												S	New.
48	F	2												S	Modified.
49+	H	2												S	New.
50	H	3												S	New.
51	H	3												S	New.
52	F	2												S	New.
53	F	2												S	2001 NRC exam.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	U/E/S	Explanation
54	F	2												S	Bank.
55+	F	2												S	New.
56	F	2										X		~~E~~ U	New. Question sheet references K/A K3.06, but ES 401 references A1.05? RESOLUTION: Licensee identified that K/A question was written for was incorrect. Question was replaced with one that meets randomly selected K/A on ES 401.
57	F	2												S	New.
58	H	3					X							~~E~~ S	Modified. SRO only? RESOLUTION: 1) Not SRO Only, also RO due to EOP basis question. 2) Licensee clarified question to eliminate possibility of two potential correct answers.
59	H	2												S	New.
60	F	2												S	New.
61	F	2												S	Modified.
62	H	3												S	New.
63	F	2												~~S~~ E	2001 NRC exam. Licensee added DOA 10-2 clarification to stem.
64	F	3												S	New.
65	H	2												~~S~~ E	New. Licensee added breaker names.
66	H	3												S	New.
67	H	2												S	New.
68	F	2												S	Bank.
69	F	2												S	Bank.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	U/E/S	Explanation
70	H	2												S	New.
71	F	2												S	Bank.
72	H	2												S	New.
73	H	2												S	Modified.
74	F	2												S	Bank.
75+	F	2												S	New.
76+	F	2											X	S	New.
77	H	3											X	S	New.
78+	H	3											X	S	New.
79	F	3												~~U~~ S	New. Not SRO only. RESOLUTION: Only SROs are responsible for refueling tasks.
80+	H	4											X	S	Modified. Need to see original question to verify Modified. RESOLUTION: NRC reviewed original question, verified new question modified.
81	H	3											X	S	New.
82+	H	2		X		X							X	U	Bank. "C." and "D." implausible (ie, RRP trip) because stem identifies that indicated total core flow increases. RESOLUTION: Licensee agreed, removed cue from stem.
83	H	2											X	S	New.
84+	H	3											X	S	New.
85	H	3											X	S	New.
86+	F	2											X	~~S~~ E	New. Licensee modified answer.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	U/E/S	Explanation
87+	H	2											X	S	2002 NRC exam
88+	H	3										X	X	E	New. Question references K/A 295013 AA2.01, but ES 401 references 295026 A1.03? RESOLUTION: 1) Licensee replaced incorrect question reference K/A with correct ES 401 K/A. 2) Licensee replaced "inoperable" with "operable."
89	H	3											X	S	New.
90	H	2											X	S	New.
91	H	3											X	S	New.
92+	H	2											X	E	New. 1) Spelling error, "stabile" should be "stable." 2) Reference supports "B." vice answer "A." on the question sheet. RESOLUTION: 1) Fixed spelling. 2) Clarified explanation in reference to support answer.
93+	H	3											X	~~S~~ E	New. Licensee added clarifications to stem, changed "...deluge piping..." to "...fire suppression piping...".
94+	H	2											X	S	Modified.
95	H	2											X	S	New.
96+	F	2											X	S	New.
97+	H	3											X	~~S~~ E	New. Licensee changed typo from "17-43" to "17-44."
98	F	2											X	S	Bank.
99+	F	2											X	U	~~New~~ Bank. Not SRO only. RESOLUTION: Licensee agreed. Replaced with Bank question.
100	H	2											X	S	2002 NRC exam.

"+" indicates question was reviewed as part of the representative sample of 30 questions.
All question references and KAs verified.

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ADMIN JPMS	Comment:	Licensee Action:
a. ANa: Authorization of Overtime IAW GL 82-12	1) Clarify date for JPM data. 2) Revise cue.	1) Added note at bottom of JPM stating "The date listed is today." 2) Change cue from "Authorize Barney Gumbel to work the overtime in accordance with GL 82-12 overtime guidelines and forward the paperwork, if any, to the Shift Manager." to "Authorize Barney Gumbel to work the overtime in accordance with the applicable procedure and forward the paperwork, if any, to the Shift Manager."
b. ANb: Initiate a Firewatch	1) Change "WR" to "WO" in IC. 2) Clarify several XL3 devices are inop. 3) Devices listed will place plant in LCO condition. 4) IC does not adequately describe desired task.	1) Incorporated errata change. 2) Add following to JPM cue: "The following XL3 devices are inoperable: Zone 34, device numbers 4, 5, and 29; Zone 33, device 23; Zone 43, device 30; Zone 23, device 29; Zone 13, device 11. 3) Add cue that states: "If asked, another SRO is looking at the LCO requirements." 4) Change IC to read: "Authorize, and initiate as necessary, a fire watch IAW applicable procedure."

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c. ANc: Verify U3 EDG Surveillance	1) Two occurrences of "2/3 EDG"; should be "Unit 3 EDG"? 2) Identify DOS 6600-01, Step I.19.e.(4), as N/A vice initials.	1) Change "2/3 EDG" to "Unit 3 EDG" in IC and JPM Step 4. 2) Discussion with SOS indicated that he would accept either "initials or N/A", but would question DOS performer as to reason for their initials. Issue Report #00246109 generated to add further procedure clarification as to when to initial or N/A step.
d. ANd: CCSW Activity Calculation Verification	IC does not adequately describe the desired task.	Change IC to read: "Verify the 'A' CCSW activity calculation and provide the NSO results of the US review of the surveillance."
e. ANe: Complete a NARS Form and Make Required Notifications	1) JPM step 12 references EP-AA-111 Attachment 7, should read Attachment 4. 2) Examinee cue sheet errata. 3) JPM Step 6 not critical. 4) Revise note.	1) Change incorporated. 2) Added "from PPDS" to end of IC 6 and 7. 3) Deleted critical symbol from Step 6. 4) Change note after Step 19 to "STOP TIME FOR 15 MINUTE TIME CRITICAL PORTION OF JPM."
SYSTEM JPMs	**Comment:**	**Licensee Action:**

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a. SNa: Startup of 2nd RRP w/ Failure of Discharge Valve to Open.	1) Add sim setup instruction note about placing DW pressure controllers to "MAN" and closing the valves. 2) Errata, fix grammar in cue: "DOP 0202-01 has been..." 3) Licensee requested JPM critical step time change from 2 to 5 minutes for securing RRP when the discharge valve fails to open. DOP 0202-01 directs the operator to trip the RRP within two minutes of starting if the associated RRP discharge valve fails to open after starting. Based on discussions with manufacturer and verification on the simulator that running the RRP deadheaded for 10 minutes showed no rise in bearing temperatures, the SOS stated that he would consider the step performed unsatisfactorily if the RRP was not secured within 5 minutes.	1) Done. 2) Done. 3) The licensee's comment was not incorporated because there was no intent to change the procedural guidance. The expectation to trip the RRP within two minutes of the discharge valve failing to open is still valid, and remains a critical JPM step.
b. SNb: RWCU-Reject Primary Water via RWCU Following a Gp 3 Isolation.	1) JPM Step 13 states, "Adjust RMC 2-1290-13 controller.." ; whereas Step 12 of DOP 1200-02, states "..adjust RMC 2-1290-14..." 2) Incorrectly identified as Alternate Path. 3) JPM Step 5 not critical.	1) Change Step 13 to state "...adjust RMC 2-1209-14 controller..." 2) Removed mark for Alternate Path on JPM attribute page. 3) Leaving the PIC controller in Balance has no effect on JPM outcome as setup.

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c. SNc: HPCI-Manually Start HPCI for Pressure Control	1) JPM Step 6 of JPM not performed by DOA 2300-02 procedural steps; however, it is performed by Step 6 of hard card attachment. 2) Sim setup does not address opening the HPCI 4 valve. 3) JPM Step 5 not critical.	1) Site procedure change will be issued after exam. JPM Step 6 not critical to JPM performance. 2) Place statement in sim setup to open the HPCI 4 valve. 3) Per JPM cues, applicant not required to make any flow changes.
d. SNd: LPCI-Perform LPCI System Operability Test with Torus Available, Pump Trips	1) JPM steps 8 & 9 not critical. 2) Insert JPM Step 10 on same page as Note. 3) JPM errata change.	1) Agree. Remove critical designation. 2) Done. 3) Change "2-1540-45B" to "2-1540-15B."
e. SNe: Perform DG Surveillance Testing	Modify JPM page 6 examiner note to read: "When load is reduced to below 1500 KW, give the cue."	Done.
f. SNf: Bypass an LPRM.	1) JPM IC typos: (LPRMs, Unit Supervisors). 2) Add APRM numbers to sim setup instructions. 3) IC, change "action request" to "Issue Report". 4) Add note to make LPRM 32-25A downscale in sim setup.	1) Done. 2) Done. 3) Done. 4) Done.
g. SNg: SBGT Post Maintenance Testing with receipt of an Auto Initiation Signal.	1) Remove signature from Step I.3.b(3) of DOS 7500-02. 2) Add actions to place DW and Torus purge fans in PTL in sim setup.	1) Done. 2) Done.

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j. IPNj: Restore Unit 2 125 Vdc Battery System to Operable Following a Failure of One or More Battery Buses	JPM Step 6, not 7 is critical.	Incorporated.
k. IPNk: Supply U3 RPS Bus B From RPS MG 3A with MG Failure to Start Initially	Add "MCR pre-requisites verified" to IC.	Statement added.
SCENARIOS	**Comment:**	**Licensee Action:**
ILT-N-1; U2 Turnover	1) Add statement that team is 1 hour into 4 hour allowed time period for dP to equalize. 2) Remove note from all turnovers re: CRD suction filter elevated dP.	Done.
ILT-N-1; Summary	State that 2 rods will remain withdrawn.	Done.
ILT-N-1; C-SRO; Event 1-vacuum breaker stuck 20% open.		
ILT-N-1; C-SRO, -NSO; Event 2-drifting rod H-01		
ILT-N-1; C-SRO, -NSO; Event 3-swap 2A CRD Pp.	Make starting second CRD pump part of the component failure evaluation.	Done.
ILT-N-1; I-SRO, -NSO; Event 4-APRM upscale failure.		
ILT-N-1; M-SRO, -NSO; Event 5,6,7-DW small leak, second CRD Pp trip, CRDs stick, increasing DW leak.	Change actions to state that team will scram on second accumulator alarm.	Done.

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	Page 23 of 29 lists 3 critical tasks, but quantitative list on page 25, and ES-301-4 only lists 2. How many, and what are the critical tasks?	Only took credit for 2 of 3 critical tasks because depending on the path the team takes, may not get to 3rd critical task.
ILT-N-2; Pg. 6 of 27, pre-scenario activities, 1.d:		Changed G.60 to G.62 to comply with current revision of procedure.
ILT-N-2; R-SRO; NSO; Event 1-raise power with rods.		
ILT-N-2; C-SRO; Event 2-CR double notch.	Add to QNE role play to page 11, "Core operating parameters are normal. Recommend continuing reactor startup."	Done.
ILT-N-2; S-SRO; Event 3-CS low pressure.	What does "S" indicate in outline?	Change "S" to "C."
ILT-N-2; C-SRO; Event 4-accumulator low pressure.	Add to NLO role play that must depressurize accumulator due to N2 bottle pressure at 800 psig (US required to make TS call on accumulator).	Done.
ILT-N-2; I-SRO; NSO; Event 5-FWLC setpoint drifts high.		
ILT-N-2; M-SRO; NSO; Event 6,7-RRP seal failure; RRP suction valve fails to close; ATWS.		