

**NRC COMMENTS TO THE PROPOSED
WRITTEN EXAMINATION, ES-401-9
FOR THE FERMI INITIAL EXAM - JANUARY 2008**

Fermi January 2008 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	Backward	Q=K/A	SRO Only			
1	H	2											Y		S	New.
2	H	4											Y		U S	New. LOD = 1. This is fundamental information that everyone should know. Probably not Higher skill. <u>RESOLUTION</u> : Agree it is fundamental information, but question addresses the KA and could not identify a better way to ask question that incorporated the elements of the KA. Make LOD=2 and question=S.

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).

A "+" in the "Q#" column indicates that question was reviewed as part of the representative sample of 30 questions.

All questions reviewed for KA conformance and reference verification.

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			
3+	H	2.5				X							Y		U	New. NOTE: [REDACTED] Is there a backup AC power supply to the inverter? If no, and Div 2 is the only power supply, then A and B are not plausible. RESOLUTION: There is no backup power supply to the HPCI inverter. Change stem and distractor wording to require diagnosis of the loss of power from the inverter, and associated operator actions.
4	H	2.5											Y		S	New.
5	F	2											Y		S	New.
6+	H	2.5											Y		S	Bank (2003 NRC).
7	H	2.5											Y		S	Bank. Same question on DAEC exam. RESOLUTION: This question is from the Femi 2 bank EQ-OP-315-0123-000-A017-001.
8	F	2											Y		E	New. NOTE: [REDACTED] RESOLUTION: Final submittal will have correct answer (D.) identified.
9+	H	2											Y		S	Bank.
10	F	2											Y		S	Bank.
11	H	3											Y		S	Bank (2001 NRC). 10 CFR reference should be 41(b)(7) or (5). RESOLUTION: Changed reference to "41(b)7."
12+	H	2					X						Y		E	New. Question answer assumes no leakage and/or does not indicate how long the isolation valves have been closed. Say how long isolation valves have been shut so applicant doesn't assume accumulator has bled down. RESOLUTION: Revised the stem to include a ten minute time to account for accumulator system bleed down.

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
13	F	2					X		X				Y		E	New. 1) Do individual valves indicate GREEN or RED or does the group indicate only when all valves are in the required position? 2) What does "Valves wired in series" on display mean? RESOLUTION: Incorporated statement that clarified "isolation is complete" in the stem. 1) All valves in a group have to close to get the green light. [REDACTED]
14	F	3											Y		S	New.
15+	F H	3											Y		S	New. Steam Tables provided. 1) Feed Flow will increase due to level error to compensate for Feed/Steam Flow mismatch, not because thermal power increases. 2) Is 170 degrees F the normal temperature for a tailpipe? NOTE: [REDACTED] 4) LOD=H. RESOLUTION: 1) Changed "D" to an incorrect, plausible answer to reflect FW "lowering to" vice "at." Plausible because
16	H	3		X			X						Y		U	New. 1) RFP suction flow and pressure bullets in stem provide cues on direction of Min Flow Valve failure. 2) No correct answer; min flow valve is not procedurally REQUIRED to be repositioned unless there is not enough flow through the SULCV to the RPV, which is unlikely at the referenced power level. RESOLUTION: Rewrote question using same KA, to be a loss of air to the SULCV (fails OPEN) with the requirement to select a mitigating action.
17	H	3				X	X						N		U	Bank. New. 1) As written stem could be interpreted to read a single Low Water Level signal which would have no effect. 2) Q#KA, postulates a realignment of SBGT, not a loss or malfunction of the system. 3) If SBGT is not capable of drawing Torus pressure negative enough to open vacuum breakers then distractor D is not plausible. RESOLUTION: Licensee agreed with comments. Could not write creditable question to the selected KA knowledge, K3.06. Reselected to K3.04 and wrote new question.
18+	H	3											Y		S	Bank (2006 NRC).

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19	F	2					X						Y		E	Bank. No correct answer; damage may occur only if busses are not in phase. Just because the bus is being supplied by the DG does not by itself indicate that the two busses would not be in phase, ie, possibility, busses would be in phase. <u>RESOLUTION:</u> Revised last sentence of stem to LOCAL MANUAL operation of breakers, and used the term "MAY result in..." vice "will cause equipment damage" to negate the concern for a randomly timed, "synchronized by chance" condition that could occur. Also reordered the answer choices shortest first to longest last.
20	F	4 2		X		X							Y		U E	Bank (2003 NRC). LOD=1. No creditable distractors, cue to answer provided by system name, LOW pressure injection system. Used on previous NRC exam; therefore, E vice U. <u>RESOLUTION:</u> Changed reactor pressure in stem from 900 to 400 psig which does not change answer, but makes question more creditable. LOD=2.
21+	H	2		X									Y		E	Modified. Consider a new distractor D (see comment on Q22). Note: If distractor D changed, then both Q21 and 22 would be good questions, otherwise, potential double jeopardy. <u>RESOLUTION:</u> Changed distractor D (old question) to a symptom for a loss of Div 1 ESF Battery (new choice A), re-ordered answer choices shortest to longest.
22	F	2		X		X							Y		U? S	New. 1) Q provides cues for eliminating distractor D in previous Q 21. Distractor 'B' is a correct answer(?) <u>RESOLUTION:</u> Changed Q21 distractor which negated this comment.

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only			
23	H	2					X						Y		U S	Bank. OLook at site procedures for paralleling; whether DG picks up or gives up load is dependant on speed difference. Are C and D correct answers? <u>RESOLUTION:</u> Breaker closure automatically activates a governor mode change from ISOCHRONOUS to SPEED DROOP. The EDG is initially ISOCHRONOUS, or speed regulated, at 60 hz with the synchroscope moving slow in the FAST direction to produce a minimally loaded condition when the breaker is closed. When the breaker is closed, the governor mode change occurs and speed droop lowers governor demand (fuel flow) by an amount based on the increased load. With very little initial load, a further reduction in fuel flow will result in a reverse power condition. Automatic operation of the governor will not result in overload condition (reason for requirement to immediately apply load). C and D are not correct answers.
24+	F	2											Y		S	New.
25	H	3											Y		S	New.
26	F	3											Y		S	Bank (2006 NRC).
27+	H	3		X									Y		E	Bank. The stem states that the rod is de-selected and cues potential elimination of C and D. Delete "de-selected." <u>RESOLUTION:</u> Deleted "is de-selected, and rod" from last line of stem.

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
28	H F	3				X							Y		U E	New. 1) LOK=F. 2) Distractor A is not plausible since the upstream side of the FCV is the pressure source and stem states that pressure is increasing. 3) Neither C or D is plausible since it is unlikely for a safety related system to be designed such that piping failure would occur prior to protective features actuating. RESOLUTION: 1) LOK=F. 2) and 3) RWCU is associated with Lead Detection (LD) which mitigates High Energy Line Break (HLB) accidents. These instruments are designed to function by initiating a system isolation after a piping system failure occurs. RWCU pump and HX temp and delta temp instrumentation, and RWCU differential flow instrumentation actuate isolations in response to postulated RWCU piping failures outside the Primary Containment. With cooling water aligned to an isolated RWCU NRHX, pressure reduction due to liquid contraction makes low upstream pressure plausible, ie, A, C, and D plausible. Deleted "Low" and "High" from A and B; changed stem bullet for RPV water level to "192 inches" to exclude L2 RWCU PCIS Isolation.
29	H	2							X				Y		E	Bank. Delete NOTE in stem, unnecessary information. RESOLUTION: Deleted "NOTE" from stem.
30+	H	2					X						Y		U? S	Bank. References provided don't discredit D as another correct answer(?). RESOLUTION: Provided reference 23.606 which stated "Reactor Water Level 3 or Drywell Pressurization will initiate a Containment Isolation Signal which will cause all the TIP Detectors not in Chamber Shields to be driven in reverse automatically. The question stem states that RPV water level lowers to 160 inches which is below the L3 setpoint of 13.4 inches. The detector will automatically withdraw past the Ball Valve and the Ball Valve will close. The TIP drive does not continue to insert to the Core Top Limit which makes D incorrect. Enhance to exclude fully inserted condition, "TIP Channel A Detector is inserting into the core..."

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31	H F	2	X			X							Y		U S	<p>New. 1) The stem does not indicate whether annunciator is due to a high input signal or due to an INOP condition. At the current power a rod block should not occur due to an over power condition. 2) Given the conditions stated in the stem, B and D are not plausible since a Rod Block (RB) would occur regardless of which input tripped the alarm.</p> <p><u>RESOLUTION:</u> Deleted "alarm" from stem, added "and if exceeded" to answer choices," and changed LOK to F. RBM RBs are auto bypassed when reference APRMs are below 27 per cent power (ie, RB condition would not occur). Therefore B and D are plausible.</p> <p>The RBM trip setpoint is not reactor power. The RBM is enabled to generate rod block functions by reference APRM power exceeding 27 percent. The RBM output is LOCAL power if only the LPRMs surrounding the selected control rod are normalized or nulled to 100 percent. As a control rod is withdrawn, local power rises. The setpoint at which the RBM will initiate a RB is determined by the reactor power at the time the control rod was selected and the RBM nulled. When a rod is selected for movement, the RBM will indicate 100 percent. That is an indication that the null process completed successfully. It is agreed that APRM RBs will not occur at 65 percent <u>average</u>, or APRM measured reactor power. The question evaluates the RBM instrument initiating a RB based on <u>local</u> power increase generated by rod withdrawal.</p> <p>The initial reactor power determines the RB setpoint as follows: When reactor power is 27-62 percent, the Low Trip Setpoint is active, RB occurs at 117.0 percent RBM level. When reactor power is 62-82 percent, the Intermediate Trip Setpoint is active, RB occurs at 112.2 percent RBM level. When reactor power is above 82 percent, the High Trip Setpoint is active, RB occurs at 107.2 percent RBM Level.</p>
32	H	3											N		U	<p>New: Bank. Q#KA, postulated event is an equipment failure and not due to operation of controls. KA is oriented towards NORMAL operation of the Fuel Handling Equipment. As written, Q related to a refueling accident (KA 295023).</p> <p><u>RESOLUTION:</u> ROs don't handle fuel; also, no Hi Rad interlock, load cell related to slack cable interlocks; not operationally valid KA. Reselected KA A1.03 to replace A1.02 and replaced question.</p>

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33+	H F H	2					X						N		U	New. Bank. 1) With the keep fill sub-system isolated all four answer choices are true statements. Operation of the keep fill system will minimize the impact of each of the described conditions except possibly B. 2) Q#KA, KA is oriented towards operation of the controls associated with the CRDH System. The reference leg keep fill sub-system is not impacted by normal CRDH control manipulation. Question is an instrument impact question related to Nuclear Boiler Instrumentation (KA 216000) and not related to impact of RPV water level resulting from operation of the CRDH system. 3) LOK=F. <u>RESOLUTION:</u> Replaced question. LOK=H.
34	H	3	X										Y		S	New.
35	H	3											Y		S	New.
36+	H	3					X						Y		U	New. The ARP directs verification of H2 flow rates. This could be misinterpreted such that C would be a correct answer. <u>RESOLUTION:</u> Replaced distractor C to make only one correct answer.
37	F	4		X		X							Y		U? S	New. Are applicants required to memorize all loads on MPUs? LO? <u>RESOLUTION:</u> Operators are required to memorize MPU loads per learning objective, LP-OP-315-0150-A013, "Describe the normal and alternate power supplies to Process Radiation Monitoring System components." Revised answer choices to a conceptual level.
38	F H	3											Y		E	New. LOK=H. <u>RESOLUTION:</u> LOK=H.
39+	F	4											Y		S	New.
40	H	3											Y		S	Bank.
41	H	3	X										Y		E	Bank. It is not clear what "Loss of valve position indications for ALMOST all RCIC Valves" means. The stem should indicate which RCIC valve indications still exist, since there are a small number. <u>RESOLUTION:</u> Revised last two bulleted items in stem.
42+	H	2											Y		S	Bank (2006 NRC).

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43	H	2										Y		S	New.
44	F	4 2		X			X					Y		U E	Bank (2003 NRC). 1) The procedure title "...Shutdown..." within the stem gives cue to correct answer C. 2) Also, stem does not say why control room is un-inhabitable, so B could be a possible correct answer. RESOLUTION: Deleted "un-inhabitable" in stem, edited "shutdown and cooldown" to "continue to remove decay heat." Re-ordered answer choices shortest to longest.
45+	F H	2				X						Y		E	Bank. LOK=H.
46	H	2				X		X				Y		E	Bank. 1) Given <u>Station</u> Air low alarm and low <u>Station</u> Air pressure indication, B and D are not plausible (ie, to first start <u>Control</u> vice <u>Station</u> Air compressors). 2) Are subsequent steps required to be done in order? If so, replace "Div 1 or Div 2 Control Air Compressors" with "Close P5000-F401." 3) ROs not required to memorize subsequent procedure steps (required by LO? Asking conceptual vice specific steps?). RESOLUTION: Deleted "FIRST" in stem. Edited distractors B and D to "CLOSE P5000F401 to prevent..." instead of "START Div 1 and Div 2 Control Air Compressors."
47	H	3	X			X			X			Y		E	New. 1) The question stem asks two separate questions and is confusing (need to rephrase the question stem and align the corresponding answers to clarify what is being asked). 2) As written, the three bullets and following sentence in stem are "fluff" (not required to answer the question). 3) Last stem sentence references Abnormal procedure 20.205.01, "Loss of Shutdown Cooling" which implies RHR A and B are lost which eliminates A and B (ie, not plausible). RESOLUTION: Rewrote stem and distractors to incorporate comments and make them more conceptual and to the point.
48+	F	2				X						Y		U	New. Why is 26.5 feet believable (ie, C and D plausible)? RESOLUTION: Changed C and D from 26.5 to 22.0 feet, minimum level above spent fuel seated in racks, not referenced to the RPV flange.

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49	H	5 4					X						N Y		U? S U	New. 1) LOD=5 (too difficult). NRC doesn't examine beyond Design Basis. 2) Q#KA, answer D is a low pressure system (vacuum breakers), does not directly address the high DW pressure. RESOLUTION: Not asking question beyond design basis (ie, SAGs), asking about exceeding a design limit. Reference is UFSAR and EPGs, not SAG. Question not focused on the low pressure system (vacuum breakers), they are the affected system. Replaced "would be MOST LIKELY to cause the Primary Containment to exceed a Design Limit?" with "would threaten Primary Containment Integrity?" Added "...located in the Drywell" to distractor A. POST EXAM: Second correct answer.
50	H	3											Y		S	New.
51+	H	2											Y		S	Bank.
52	H	2	X										N		U	New. Q#KA, KA is focused on RWL, choices focus on pressure permissive. Rewrite choices as indicated. RESOLUTION: Accept comment. Rewrote stem and choices as indicated.
53	H	2											Y		S	New. DWSIL CURVE provided.
54+	H	2											Y		S	Bank.
55	F	2						X					Y		S	New.
56	F	2					X						Y		U	New. 1) A is also a correct answer. Statement is true, question not asking for a basis. 2) B is "...inside the Secondary Containment." Not plausible unless change "inside." RESOLUTION: 1) Rewrote distractor A to make it incorrect, ie, Control Room radiation concern. Deleted "...outside Secondary Containment" from stem, which makes B a plausible distractor. Note: Safety related equipment is located inside the Secondary Containment. The Secondary Containment EOP contains a step for restarting RB HVAC to preserve access to Safety Related Equipment which provides the basis for a potential misconception.
57+	H	2											Y		S	New.

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58	H	2											Y		S	New. CAPABILITY CURVE provided.
59	F	2											Y		S	Bank (2003 NRC).
60+	H	2				X							Y		E	New. 1) Fans shifting from slow to fast speed and causing DW temperature to decrease defies laws of physics (ie, D is implausible distractor). Suggest: "LOWER slightly due to ALL Drywell Cooling Fans remaining unaffected." 2) Why is second bullet in stem? (assume it is ATWS to provide heat input?) <u>RESOLUTION:</u> 1) DW Cooling Fans have integral cooling tubes with cooling water. With a constant heat load, increased fan speed will lower the DW temperature. D is a plausible distractor. 2) Second stem bullet identifies an ATWS that provides the heat input medium. Note: Rewrote distractors A and B to make them more plausible.
61	H	2											Y		S	Bank (2003 NRC).
62	F	2											Y		S	New.
63+	F	2					X						Y	?	E	Bank. 1) SRO Only? Is there a more general reference, appropriate to ROs, containing this information? Is the Lesson Plan referenced applicable to ROs? Though this information seems RO appropriate, TS bases are generally applicable to SRO-only type questions. 2) Change "basis" to "reason" in stem. <u>RESOLUTION:</u> Licensee produced reference ST-OP-315-0048 which is applicable to ROs. Changed "basis" to "reason" in stem.
64	H	2											Y		E	Bank (2003 NRC). KA requires "...prioritization and interpretation..." Q stem and choices employ a backward logic, ie, indication given, then applicant asked to use a process of elimination to identify the probable cause of the alarms, vice doing something like prioritizing actions, or procedures, to address the alarms. <u>RESOLUTION:</u> Alarm 16D6 has total of seven ARM inputs. Listed all seven with two requiring prioritization to better meet the KA intent.
65	F	2											Y		S	Bank (2001 NRC).
66+	H	3											Y		S	New.

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67	F	2											Y		S	New.
68	F	2											Y		S	Bank (2003 NRC).
69+	F	2											Y		S	Bank (2003 NRC).
70	F	2		X		X							Y		U	New. The applicants are cued to the correct answer because ROs are only required to know 1 hour TS actions. The only plausible distractor is the correct answer (ie, no plausible distractors). RESOLUTION: Changed times to be within 1 hour plus a plausible 1.25 overrun.
71	F	2						X					Y		E	New. As written, this is a Subsequent Action of 20.710.01, operators not required to know subsequent actions from memory (required by LO? Asking conceptual vice specific steps?). RESOLUTION: Made choices more conceptual. Reworded stem by deleting "FIRST." Bolded AREA to distinguish from Fuel Pool Exhaust Duct Radiation Monitors.
72+	F	2.5											Y		S	Bank.
73	H	2.5					X						Y		U	New. D is a second correct answer (go from EOP 1 to 1A). RESOLUTION: Revised stem to include no actuations and no control rod motion. Revised distractor B to make it incorrect. Revised correct answer and other two distractors to make D correct answer.
74	F	2.5											Y		S	Bank.
75+	F	2.5				X		X					Y		U	New. 1) A and C not plausible. Not plausible that Fermi 2 notifications to Canada (foreign country) and the NRC (federal government agency) would be affected by the SEOC (state and local government) being functional. 2) Are ROs "communicators" (ie, job responsibility)? This is SRO level of detail (Emergency Director). RESOLUTION: ROs are communicators. Revised question to be a selection of communication techniques.
76	F	2.5											Y	Y	S	New.

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77	H	2											Y	E	Modified. Wording of Q referenced KA 2.1.30 (listed on outline) does not match word description provided in Q77 (wording matches KA 2.4.4) Write new question to match KA outline. Stem asks applicant to select the "most effective" mitigating procedure which indicates that there is more than one correct answer. Either confirm there is only one correct answer and rewrite stem, or replace question. Is this asking for Subsequent Action steps from 20.000.18? <u>RESOLUTION:</u> KA was replaced and noted on ES-401-4, but not updated on the question pedigree. KA verbage on pedigree was subsequently corrected. Edited question stem to remove "MOST LIKELY" and "... effects of..." There is only one correct answer. Question is conceptual, not asking for specific procedure steps.
78+	H	2										Y	Y	U/S	Bank. PCPL curve provided. Are applicants only getting the curve (ie, not the EOP flowchart or the associated curves for the distractors)? Are applicants expected to memorize the EOP action for these conditions? <u>RESOLUTION:</u> Applicants are only getting the PCPL curve. Edited the choices so they are only a single strategy, eliminated second "venting" choice. Based on curve location, SROs are required to know the expected strategy (not specific procedure steps).
79	H	2										Y	Y	S	Bank.
80	H	3										Y	Y	S	New.
81+	H	2					X					Y	Y	S	Bank (2001 NRC).
82	H	2										Y	Y	E	New. A and D are not plausible. Is there an ALERT based on fire in the Protected Area for 15 minutes, or UE based on fire involving SSE? <u>RESOLUTION:</u> Removed the time associated with distractors A and D to make them plausible. Distractors are all based on actual EALs in EP-101. A=EAL HU2, which is exceeded; B=EAL SU1, but requires SST 64 and 65 de-energized; C=EAL SA1, which is only applicable in Mode 4 and 5 (excluded by power in stem).
83	H	2						X				Y	N	U	New. Not SRO Only, required operator knowledge of FWLC system operation and immediate actions of 23.107 required to be taken by operators without direction from SRO. <u>RESOLUTION:</u> Replaced question with SRO only.

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			
84+	F H	1 3											Y	N	U	Bank. New. 1) LOD=1, knowledge of DW air temperature LCO of 145 degrees F. 2) Not SRO Only. ROs have to recognize TS conditions (not responsible for identifying LCO actions). RESOLUTION: Revised choices to incorporate LCO actions, SRO only. LOK=H; LOD=3.
85	F	2					X						Y	Y	E	New. If EOPs given, then LOD=1. RESOLUTION: EOP not given as a reference to SROs on this question. Changed D to resemble wording of other distractors, replaced "...is CONFIRMED BY..." with "...exceeds..."
86	H	2											Y	Y	S	New. Wording of Q referenced KA 2.1.23 (listed on outline) does not match word description provided. Provided wording matches KA 2.2.36. Write question to match KA listed on outline. RESOLUTION: KA was changed and noted on ES-41-4, but not updated in question pedigree on exam. Pedigree was updated.
87+	H	2											Y	Y	E	New. Clarify question(s) being asked: 1) response of ADS without operator action; 2) required operator actions directed by SRO. RESOLUTION: Stem and choices reformatted to clarify question and required answer.
88	H	2					X	X					Y	N	U	Bank. New. 1) Not SRO Only, immediate actions of ARP required to be taken by operators without direction from SRO. No correct answer because reference says first action is to insert rods. RESOLUTION: Modified choices to focus on TS LCO for minimum IRMs operable, ie, bypass the failed channel and continue startup.
89	H	2	X				X	X					Y	N	U	New. 1) Not SRO Only, required operator knowledge of reactor and plant thermal/hydraulic response and immediate operator actions required to be taken by operators without direction from SRO. 2) D is not correct. The reason for placing RMS in S/D is not to avoid MSIV isolation. Purpose is to shutdown reactor before the MT (subsequent actions are trip MT and close BPVs). RESOLUTION: Replaced question to make SRO only and focus on inoperable APRM/LPRM channels.
90+	H	2											Y	Y	S	New.
91	H	2											Y	Y	S	New.

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		
92	H	2										Y	Y	S	Bank.
93+	H	2										Y	Y	S	New.
94	F	2										Y	Y	S	New.
95	F	2										Y	Y	S	Bank.
96	F	2										Y	Y	S	New.
97	H F	2										Y	Y	S	New. Form EP-547 Attachment 1 and Enclosure B provided. LOK=F.
98	F	2										Y	Y	S	Bank (2003 NRC).
99	H	2										Y	Y	S	New.
100	H	2										Y	Y	S	New.