Facility: **Braidwood Station Units 1 and 2**   **Exam Date:**   **May 22 – June 9, 2020**

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws Stem Focus	Cues	T/F	Cred. Dist.	Partial	4. Job Content Flaws Job-Link	Minutia	#/ units	Back-ward	5. Other Q= K/A	SRO Only	6. B/M/N	7. U/E/S	8. Explanation
1	F	2										Y		B	S	NRC: None. (power, normally aligned) Response: Added the comma. Question is Sat.
2	H	2										Y		N	S	NRC: None. (C/Ss and NAT?) (Previous Exam Use – one?) Response: Spelled out abbreviated terms, changed "one" to "None". Question is Sat.
3	F	3										Y		B	S	NRC: None. 2009 NRC Exam (Change "Question Type" to Bank vs. RO) Response: Changed question type from RO to Bank. Question is Sat.
4	H	3										Y		B	S	NRC: None. 2006 NRC Exam (Change "Question Type" to Bank vs. RO) Note: Good K/A match. How does the question tie to a procedural requirement for system operation? Response: Changed question type from RO to Bank. The procedure step that could be used for this condition is 1BwOA PRI-8, Step 8.d RNO "Throttle 1CV121 and

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 (easy) to 5 (difficult); questions with a difficulty between 2 and 4 are acceptable.

3. Check the appropriate box if a psychometric flaw is identified:
    - "Stem Focus": The stem lacks sufficient focus to elicit the correct answer (e.g., unclear intent, more information is needed, or too much needless information).
    - "Cues": The stem or distractors contain cues (i.e., clues, specific determiners, phrasing, length).
    - "T/F": The answer choices are a collection of unrelated true/false statements.
    - "Cred. Dist.>": The distractors are not credible; single implausible distractors should be repaired, more than one is unacceptable.
    - "Partial": One or more distractors 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:
    - "Job Link": 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).
    - "Minutia": 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).
    - "#/Units": The question contains data with an unrealistic level of accuracy or inconsistent units (e.g., panel meter in percent with question in gallons).
    - "Backward": 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. Enter question source: (B)ank, (M)odified, or (N)ew. Verify that (M)odified questions meet criteria of ES-401 Section D.2.f.

7. 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?

8. At a minimum, explain any "U" status 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			
																1CV182 to establish desired charging flow". Added procedure reference to answer explanation. Question as written is Sat.
5	H	3										Y		N	S	NRC: None. Need to see the ARP for Annunciator 1-1-A2. Done. Note: Good K/A match. Response: Added BwAR 1-1-A2 Rev. 16 to question technical reference. Question is Sat.
6	H	2										~~N~~ Y		N	~~U~~ S	NRC: How does this question address the K/A tie for "Guidance actions contained in the EOP for Loss of CCW?" (Not initially in the EOPs) The reason for the Rx Trip is to procedurally allow tripping of the RCPs without initiating an automatic RPS actuation. Response: Revised the question to meet the K/A by changing the initial conditions to place the crew in an EOP. Revised the question, changed 2 distractors and the answer explanations. Also revised the training objective and technical references to match the revised question. Question is now Sat.
7	H	2										Y		~~N~~ B	~~E~~ S	NRC: If the applicant is told the condition of the Rx each time following operation of the Rx Trip switches and is then asked to provide RTB position indication, how does that demonstrate an ability to operate and monitor the Rx Trip switches? Good question, wrong K/A (057 AA2.03 might be better). Response: One method to monitor the performance of a switch is to monitor the indications that result of the switch being manipulated. By recognizing the correct indication response, the candidate is in fact monitoring the performance of the switch itself. The alternate K/A suggested by the NRC does also match the question, however the APE 057 category has already been selected for use in group 1 tier 1 questions. Chief examiner randomly selected an alternate K/A for this question, which provides a better Tier 1 question match and question was replaced with a bank question from the 2011 NRC exam. Replaced question is SAT.
8	H	3										Y		M	S	NRC: FREE-LOOK. Modified from 2014 NRC Exam. Modify Distractor 'A' to delete the word "Remained" to match other distractors. Response: Changes made. Question is Sat.
9	F	2										Y		N	S	NRC: None. Question is Sat.
10	F	2										Y		B	S	NRC: None. Question is Sat.

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only			
11	F	2										Y		B	S	NRC: FREE-LOOK. None. Question is Sat.
12	F	2										Y		N	S	NRC: Is there a procedural requirement to only monitor CC HX Outlet Temp from the MCR? Is local indication available and if so, why not use it? 　Note: Good K/A match. Response: BwOP RH-6, Placing RH System in Shutdown Cooling, contains a caution that reads "Monitor 0TI-675 (T0622), U-0 CC HX Outlet Temp and/or_TI-674 (T0621), U-_ CC HX Outlet Temp as heat load is raised on the CC system." This indication is available only in the MCR (not locally). Answer justification modified. Question as written is Sat.
13	H	3										Y		N	S	NRC: Use the same nomenclature from the stem information in the stem question. (1SI8808A/B/C/D) Response: Revised question stem using same nomenclature. Question is Sat.
14	F̶ H	3	X̶									Y		B	E̶ S	NRC: 2013 NRC Exam. The applicant must interpret the given indication and determine if any indication require a Rx Trip, therefore question is High Cog? Since this does not involve operator IAs, recommend removing "immediate" from the stem. Response: Changed question cognitive level to high. Removed the word "immediate" from question stem. Question is now Sat.
15	H	3										Y		B	E̶ S	NRC: 2016 NRC Exam. Recommend moving the operator action statement from the distractors to the stem question, since the stem question doesn't ask what to do. Response: Moved operator action statement to stem as suggested. Question is now Sat.
16	H	3										Y		B	S	NRC: 2009 NRC Exam. None. Question is Sat.
17	F	2										Y		B	S	NRC: 2009 NRC Exam. None. Question is Sat.
18	F	3										Y		B	S	NRC: Is this required knowledge for ROs? (Why the action is taken and not just that the action is procedurally required?) Response: The objective tied to this question "APPRAISE each operator-initiated recovery technique in its ability to restore the heat sink criticality function" applies to both ROs and SROs. Generally, the ROs are required to know the reasons for procedural directed MCB actions. Question as written is Sat.

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
19	H	3										Y		B	S	NRC: (Should Distractor 'A' say Insertion Limit "alarm" or "annunciator" to be clear?) Note: Good K/A match. Response: Changed word "alarm" to "annunciator" Question is Sat.
20	F	3										Y		N	E S	NRC: *(Ovation Mod results in different system response to the failed instrument than previous analog systems.)* Note: Good K/A match but may not directly tie to a procedural requirement. Response: 1BwOA INST-2, Attachment C, Pressurizer Level Channel Failure, has the operator check if pressurizer level is maintaining normal level following a level instrument malfunction. If level is not normal, the procedural option still exists to take manual control. Procedure entry added to stem Initial conditions. Question is now Sat.
21	H	3										Y		N	S	NRC: Need to see the ARP for Annunciators 1-10-A1 & 1-10-B1. Done. Note: Good K/A match but may not directly tie to a procedural requirement. Response: 1BwOA INST-1, NI Malfunction, would be the AOP in effect for this event. Question as written is Sat.
22	H	3										Y		B	S	NRC: Does this have a tie to a BwOA for NIs? Response: Yes, 1BwOA INST-1, NI Malfunction, would be the AOP in effect for this event. Question as written is Sat.
23	H	3										Y		B	S	NRC: 2009 NRC Exam. Does this have a tie to a BwOA? Note: Good K/A match. Response: 1BwOA SEC-3, Loss Of Condenser Vacuum would be applicable for this event. Question as written is Sat.
24	F	2										Y		N	S	NRC: **Reference Provided**. Does this have a tie to a procedural requirement? Note: Good K/A match. Response: 1BwOA PRI-5, CONTROL ROOM INACCESSESSIBILITY, would be the AOP in effect for this event. Question as written is Sat.
25	H	3										Y		N	E S	NRC: How does understanding failure mode of instrumentation tie to operating/monitoring the failed equipment? Loose K/A match. Also, Distractor "B" does not appear plausible. Distractor rewritten. Response: Recognizing how an instrument would respond to various changing plant conditions is essential to the "ability to monitor" the instrument.

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
																1BwOA PRI-4, HIGH REACTOR COOLANT ACTIVITY, would be the AOP in effect for this event. Replaced Distractor 'B.' Question is now SAT.
26	H	2										Y		N	E̶ S	NRC: Reword Stem question and Distractor 'A' to make 'A' plausible. (i.e. "S/G pressure drops to approximately. . ." and then "the respective valve…; 60#...; 120#." Note: Good K/A match. Response: Made suggested changes. Question is now Sat.
27	H	3										Y		B	S	NRC: Which BwEP ES procedure does this tie to, 0.2 or 0.4? Response: With the given stem information, the crew would currently be in 1BwEP ES-0.4. 1BwEP ES-0.2 was referenced in the answer explanation because it was the procedure the crew transitioned from and contains the step monitoring for and diagnosing a reactor vessel steam void. Question as written is Sat.
28	H	2										Y		N	S	NRC: None. Question is Sat.
29	H	3										Y		N	S	NRC: None. Question is Sat.
30	H	2										Y		N	E̶ S	NRC: Is the stem focused enough to eliminate Distractor 'D' also being a partially correct answer? Response: Added the annunciator alarming in the stem to preclude the candidate from assuming any manual action would have prevented the automatic action from occurring. Also added the word "INITIAL" to the stem to eliminate distractor "D" from possibly being correct over time (i.e. if the VCT heated up and the water level expanded to the setpoint for diverting letdown to the HUT). Question is now Sat.
31	F	2										Y		N	S	NRC: None. Question is Sat.
32	F̶ H	3										Y		B	E̶ S	NRC: **2018 NRC Exam**. Appears to be High Cog based on need to integrate several required items for answering the question; what was the LOK on the 2018 exam? (Check TS 3.5.2 LCOs.) Response: Changed question to High cog. Was High cog on 2018 NRC exam. Question is now Sat.

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| Q# | 1. LOK (F/H) | 2. LOD (1-5) | 3. Psychometric Flaws | | | | | 4. Job Content Flaws | | | | 5. Other | | 6. | 7. | 8. |
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
33	H	2										Y		N	S	NRC: Loose K/A match – Although a solid ECCS system will behave similarly to a solid RCS system, this question focuses on a solid RCS/Pressurizer system. Response: The event was precipitated by an ECCS actuation (SI). The K/A tie is based upon the ECCS effect on the pressurizer for operational validity. Question as written is Sat.
34	F	2										Y		B	S	NRC: 2016 NRC Exam. None. Question is Sat.
35	H	3										Y		~~M~~ B	~~E~~ S	NRC: Modified from LORT Bank. This question does not appear to be significantly modified from the LORT bank question. Although an additional IC is stated in the stem, the correct answer is not changed, even with the addition of the 2-part question component. Response: Changed question type to Bank. Question is now Sat.
36	H	3										Y		N	S	NRC: Please explain how lowering pressure results in the M-PZR-PRESS Controller output 'lowering', which in turn raises heater amps. Response: Enhanced answer explanation per NRC request. Question is Sat.
37	F	3										Y		B	S	NRC: None. Question is Sat.
38	F	3										Y		N	S	NRC: None. Question is Sat.
39	F	3										Y		B	S	NRC: 2013 CERT Exam. None. Question is Sat.
40	H	3										Y		B	S	NRC: 2016 NRC Exam. None. Question is Sat.
41	H	3										Y		B	S	NRC: None. Question is Sat.
42	F	3										Y		B	S	NRC: 2009 NRC Exam. None. Question is Sat.
43	H	3										Y		N	S	NRC: None. Question is Sat.

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only			Explanation
44	H	3										Y		B	S	NRC: 2013 NRC Exam. None. *(Ovation Mod results in a different correct answer without a change in the question Stem.)* Question is Sat.
45	F	3										Y		N	S	NRC: None. *(Good question that focuses on Unit differences.)* Question is Sat.
46	F	3										Y		N	S	NRC: None. Question is Sat.
47	H	3										Y		M	S	NRC: Modified from RS10061-004. None. Question is Sat.
48	F	2										Y		B	S	NRC: 2014 NRC Exam. None. Question is Sat.
49	F	3										Y		N	S	NRC: None. Question is Sat.
50	F	2										Y		B	S	NRC: 2013 NRC Exam. None. Question is Sat.
51	F	2										Y		B	S	NRC: 2013 NRC Exam. None. Question is Sat.
52	H	3										Y		M	S	NRC: Modified from RS20076-N01. None. Question is Sat.
53	H	3										Y		B	S	NRC: **2018 NRC Exam**. None. Question is Sat.
54	H	3										Y		B	S	NRC: 2014 NRC Exam. Are the SACs considered to be part of the IA system? Response: Braidwood does not have separate instrument air compressors. The SACs directly supply instrument air desiccant dryers that in turn supply the instrument air header and plant loads. Although Westinghouse designers gave separate system designators to the station air (SA) and instrument air (IA) supply systems, the common practice by Braidwood training and many plant support groups is to combine the systems and treat them as a single system. For example, operator training materials are combined and designated as a single topic (Station Air and Instrument Air System). Question as written is Sat.

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only			
55	H	2										Y		B	S	NRC: Are the ROs required to know that entry into 3.6.2 Cond 'C' is required and that this will also require entry into 3.6.1 due to not meeting L_a requirements? Is this considered "Immediate" completion time TS action knowledge? Response: ROs are required to know tech spec entry conditions. With the given stem conditions, a loss of containment integrity is indicated without having to analyze a marginal leak rate (exceeding acceptable leak rate should be obvious). The completion time for TS 3.6.1, condition A is 1 hour. However, the question is not asking the RO to apply the completion time, only know the TS entry is required. Exam facility rep. and validation team agreed that it was a reasonable question for an RO. Since the information in the NOTES is RO knowledge, question as written is Sat.
56	H	2										Y		B	S	NRC: None. Question is Sat.
57	F	3										Y		N	S	NRC: None. Question is Sat.
58	H	3										Y		N	S	NRC: None. Question is Sat.
59	H	3										Y		B	E S	NRC: 2016 NRC Exam. The stem question as written is confusing without looking at the format of the distractor choices. (not stand alone) Attempt to reword the question. Response: Revised question stem to clarify. Question is now Sat.
60	H	3										Y		N	S	NRC: It does not appear that Distractor 'D' would be plausible for a novice trainee – to believe that an alarm setpoint would be greater than the TS upper limit. Response: Without giving the TS limit nor the alarm setpoint in the question stem, the distractor remains plausible. The distractor is a natural progression of the previous answers (+ 2 hours). Additionally, there are several other containment pressure alarms that are all above the Tech Spec pressure limit (SI, MSI, CS). Also, an example of another system initial pressure alarm that is outside the Tech Spec limit: 1-12-C1, PZR PRESS CONT DEV LOW is the initial alarm on dropping pressurizer pressure. Setpoint at 2205 psig which is below the Tech Spec DNB limit of 2209 psig. Question as written is Sat.
61	F	3										Y		M	S	NRC: **Reference Provided in stem**. Modified from 2016 NRC Exam RS20033-N02. Although an additional IC was added, the original part 1 of the answer is unchanged. Response: Agree, Part 1 answer remains the same. Question was modified by adding 2nd part of answer (whether SFP level remained above or below Tech Spec limit). Question as written is Sat.

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q= K/A	SRO Only			
62	H	3										Y		B	S	NRC: 2016 NRC Exam. None. Question is Sat.
63	F	3										Y		N	S	NRC: None. Question is Sat.
64	F	2										Y		N	S	NRC: None. Question is Sat.
65	F	2										Y		N	S	NRC: None. Question is Sat.
66	F	2										Y		N	S	NRC: None. Question is Sat.
67	H	3										Y		N	S	NRC: None. Question is Sat.
68	F	3										Y		B	S	NRC: None. Question is Sat.
69	F	2										Y		B	S	NRC: 2006 NRC Exam. None. Question is Sat.
70	H	2										Y	~~X~~	N	~~U~~ S	NRC: Application of generic LCO and SR Technical Specifications (3.0.1 – 3.0.7) is considered SRO only knowledge in accordance with ES-401, Attachment 2, Section II Examples of Additional Knowledge and Abilities as they Pertain to an SRO License… example B. (Page 19 of 52). Response: Agree with NRC this is SRO ONLY based upon NUREG 1021 guidance. Replaced the question with newly written question RG20037-N02. New Question is Sat.
71	F	2										Y		B	S	NRC: 2009 NRC Exam. None. Question is Sat. Response:
72	H	3										Y		B	S	NRC: FREE-LOOK. 2011 NRC Exam. (Need to correct the alpha Contamination level given in the stem to read "25 dpm/100cm^2.") Response: Corrected the alpha contamination level as requested. Question is Sat
73	F	4												N	S	NRC: None. Question is Sat.

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only			Explanation
74	F	2												N	S	NRC: None. Question is Sat.
75	F	2												N	S	NRC: None. Question is Sat.
76	F	2										Y	Y	N	S	NRC: FREE-LOOK. None. Question is Sat.
77	H	3										Y	Y	B	E S	NRC: 2009 NRC Exam. Why would a PZR cooldown rate limit be plausible in this situation? Would <100°F in any 1 hour be more plausible? Response: Distractor can be changed to "up to 100°F in any 1 hour period". Question is now Sat. 43(b)(5)
78	H	3										Y	Y	N	S	NRC: None. Question is Sat. 43(b)(2)
79	H	2										Y	Y	B	S	NRC: 2013 NRC Exam. None. Question is Sat. 43(b)(5)
80	H	2											Y	N	S	NRC: Why need 2nd part of 2 x 2? "How does that tie to the K/A for verification that substitute power sources have come online?" Response: The indications available to the MCR that the DC bus crosstie is complete is the annunciators 1/2-21-D7, DC BUS _11 TIE BRKR TO BUS _11 CLOSE/TRIP. To verify the field procedure steps are complete (and meet the K/A), the candidate must recognize that both units cross tie breakers are closed. Question as written is Sat. 43(b)(5)
81	H	3										Y	Y	B	S	NRC: None. Question is Sat. 43(b)(5)
82	H	2										Y	Y	N	S	NRC: How is this SRO-Only and why is this High Cog? For the specific question asked in the stem, the question should be able to be answered using only system knowledge of CIS to assess Containment isolation. Response: The question is SRO ONLY because it requires detailed emergency procedure knowledge (1BwEP-0, step 8 RNO action to locally close valves that are outside containment) which is beyond the overall mitigation strategy. If the NRC interprets the stem statement "The SRO then directs the RO to perform and/or dispatch EOs to perform the step 8 RNO actions" as a cue, then the statement can be revised to read "The SRO then directs the step 8 RNO actions to be performed". This would eliminate the possible cue that field actions are required in the RNO action.

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			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only			Explanation
																The question is high cog because it requires analysis skills in integrating the information bits to predict an outcome (See NUREG 1021, Appendix B, section C.1.d "Level 3"). To correctly answer the question the candidate must know 1) the 1BwEP-0, step 8 RNO actions, 2) which of the given containment isolation valves are outside of containment (and thereby able to be manipulated), 3) how the local manipulation of the valves affects the valve status lights in the MCR. Separately, each of the required knowledge pieces are low cognitive, but analyzing the result of the actions in the question stem is high cog. Question as written is Sat. Sat.43(b)(5)?
83	H	3										Y	Y	B	S	NRC: 2009 NRC Exam. None. Question is Sat. 43(b)(5)
84	F	2										Y	Y	B	S	NRC: 2009 NRC Exam. None. Question is Sat. 43(b)(5)
85	H	3										Y	Y	M	S	NRC: FREE-LOOK. None. Question is Sat. 43(b)(5)
86	H	3										Y	Y	M	S	NRC: Modified from SS10003-001. This question does not appear to be significantly modified from the bank question. Although an IC in the stem has been modified for the current step in the procedure in effect, it is immaterial. The original part 1 of the answer is unchanged, though the addition of a 2-part question component eliminates a distractor. Response: Part 2 of question was added to meet the K/A (a) statement "predict the impacts of the following malfunctions or operations on the RCPS". Agree that part 1 of the question did not significantly change from bank question. Question as written is Sat. 43(b)(5)
87	H	3										Y	Y	M	S	NRC: **Reference Provided in stem. 1BwOA PRI-8 Table A.** Modified from 2009 NRC Exam SE10062-N01. None. Question is Sat. 43(b)(2)
88	H	3										Y	Y	N	S	NRC: None. Question is Sat. 43(b)(5)
89	F	2										Y	Y	N	S	NRC: None. Question is Sat. 43(b)(5)
90	F	3										Y	Y	N	S	NRC: Aren't the Operators required to know where to find alarm setpoint values and general actions contained in the BwARs? (Not actually a procedure selection, but a procedure direction for the BwAR.) Response: Agree that the first part of the question (knowing where to find alarm setpoint values) is required for all operators. However, the second part of the

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6.	7.	8.
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q= K/A	SRO Only	B/M/N	U/E/S	Explanation
																question is the SRO ONLY component. The BwAR subsequent operator action to "CONSULT RETS 2.1-1a" is an administrative action that would be performed by the SRO. Administrative Action Requirements (AAR) are initiated and completed by SROs. It would not be expected that a RO would have knowledge of AAR content. The BwAR does not give any specific information as to why the AAR is consulted nor does the BwAR reference any information regarding bypassing the rad monitor interlock function. All that information is contained within the AAR only. In this context, the selection of a procedure to mitigate effects of the event (the SRO justification) is comparable to a procedure transition step from an AOP or EOP during any other plant event. Question as written is Sat. 43(b)(4)?
91	H	3										Y	~~N~~ Y	B	~~E~~ S	NRC: Change the stem statement to "The Unit Supervisor will direct the crew to INITIALLY feed . . ." Otherwise the actual knowledge of required S/G feed rates, based on plant conditions, is RO knowledge. Response: Changed the stem statement as suggested. Question is now Sat. 43(b)(5)?
92	H	3										Y	Y	B	S	NRC: None. Question is Sat. 43(b)(5)
93	F	3										Y	Y	N	S	NRC: None. Question is Sat. 43(b)(1)
94	F	3										Y	Y	B	S	NRC: 2009 NRC Exam. None. Question is Sat. 43(b)(5)
95	F	2										Y	Y	B	S	NRC: FREE-LOOK. None. Question is Sat. 43(b)(7)
96	F	2										Y	Y	N	S	NRC: None. Question is Sat. 43(b)(5)
97	F	3										Y	Y	N	S	NRC: None. Question is Sat. 43(b)(5)
98	F	2										Y	Y	B	S	NRC: 2011 NRC Exam. None. Question is Sat. 43(b)(6)
99	H	3										Y	Y	B	S	NRC: Aren't the Operators required to know what the critical safety function concerns are and the priority for addressing concurrent CSF red paths? Response: Yes, all operators are required to know CSF priorities and red path entry procedures. However, the question requires detailed procedure knowledge (beyond the overall mitigation strategy) of 1BwFR-H-1. If the candidate evaluates the stem

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| Q# | 1. LOK (F/H) | 2. LOD (1-5) | 3. Psychometric Flaws | | | | | 4. Job Content Flaws | | | | 5. Other | | 6. B/M/N | 7. U/E/S | 8. |
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only			Explanation
																status tree information and assumes the highest priority red path (Heat Sink) is the next action that will be taken, it will lead to an incorrect answer. Step 1 in BwFR-H.1 evaluates whether a heat sink is required for current plant conditions. If not, the RNO returns the crew to previous procedure and step in effect with no actions taken. This step is not contained in the OAS nor the CAS and is therefore SRO ONLY required knowledge. Question as written is Sat. 43(b)(5)?
100	F	2										Y	Y	B	E̶ S	NRC: "Emergency Classifications" are declared; EAL (thresholds) are exceeded or not. Stem ICs should be clarified/reworded. Response: Reworded stem as suggested. Question is now Sat. 43(b)(7)

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RO TOTALS:	B= 37	F= 34	E= 10	
	M= 4	H= 41	U= 2	Additional Notes: only 3 2x2
	N= 34			
SRO TOTALS:	B= 12	F= 11	E= 3	
	M= 3	H= 14	U= 0	Additional Notes: only 4 2x2
	N= 10			

GENERAL COMMENTS:

1. Question numbers highlighted as <mark>xx</mark> are sample test items the facility submitted for pre-review.

2. Bank questions are indicated by B; Modified are indicated by M; New questions are indicated by N

3. Questions from the previous 2 NRC Exams: __2__ (RO)/ __0__ (SRO)

4. Average difficulty is __2.6__ on the RO exam and __2.6__ on the SRO exam.

5. The 10CFR55.41/43 distribution is: RO / SRO
41.1 = 1 / 0	41.8 = 1 / 0	43.1 = 0 / 0
41.2 = 0 / 0	41.9 = 0 / 0	43.2 = 5 / 2
41.3 = 0 / 0	41.10 = 13 / 12	43.3 = 0 / 0
41.4 = 8 / 0	41.11 = 1 / 0	43.4 = 0 / 0
41.5 = 2 / 0	41.12 = 2 / 0	43.5 = 0 / 8
41.6 = 0 / 0	41.13 = 1 / 1	43.6 = 0 / 0
41.7 = 40 / 1	41.14 = 0 / 0	43.7 = 1 / 1

6. The answer distribution is:
	RO	/	SRO
A =	18 (24%)	/	5 (20%)
B =	21 (28%)	/	6 (24%)
C =	20 (27%)	/	5 (20%)
D =	16 (21%)	/	9 (36%)

7. There are __2__ (RO)/ __1__ (SRO) questions with references/attachments provided.