Millstone 3 75 Day Submittal Comments

Admin JPMs

RO A.2 – Will the same component be tagged out in this exam as during the previous exam? Will choose different piece of equipment.

SRO A.3 – Will this JPM be identical to the JPM on the previous exam? Change the tank being discharged.

Simulator JPMs

How do I confirm that the associated K/A's are greater than 2.5? K/A's will be on 45 day submittal.

SROU's need one Low Power JPM. This is none listed. Add S.1 and delete S.3.

S.7 – How is this not a repeat of every scenario with entry into E-0? Specify E-0 task on 45 day submittal.

Scenarios

Send crew compositions with schedule to make 301-5 form. Will send crew schedule.

01 Event 3 – Is this a TS item? Will add TRM reference in overview.

01 Event 5 – What actions are done by the BOP to respond to the MWFP trip? Roll into MT. Will not count as component failure for BOP.

Make the ATWS and MSL break the major transients. Will do.

Break out AFW start, emergency boration, SI alignment, and auto MSLI failure as separate events. Will do.

02 Event 6 – What actions will be taken by the RO for the RCP seal failure? None. Will not count as RO component failure.

Break out auto SI actuation failure and auto FWI failure as separate events. Will do.

03 Event 4 – Any chance of tripping the reactor by assume rods are OOS? Remove event 4 – not a "failure."

Break out closing block valve and starting TDAFWP as separate events. Will do.

Can "B" EDG re-energize bus 34C? Will change to 34D.

04 Event 1 – What TS is associated with this event? None typo.

No TS events indicated on ES-301-5 for Scenario 4. Will add Event 3 as TS. Will replace Event 2 with TS –related event.

04 Event? – The failure of NI IR-35 is not listed on the D-1 form. Will delete from overview – typo.

Break out Phase isolation failure and ATWS as separate events. Will do.

Written Exam

Same K/A in Tier 1 / Group 2 for RO??? Randomly selected.

All Generics in Tier 1 / group 2 for SRO??? Randomly selected.

Tier 2 / Group 1 (RO) – TS for MFW?? Check with validators for applicability to RO's.

Tier 3 – 2.2.18 for RO (managing S/D activities)? RO's perform risk assessment. Check with validators.

Rejected K/A:

Delete one 2.4.31 and then re-select new K/A.

Millstone 3 Op Test Exam Comments

RO Admin

A.1.1 – Review reasonableness of tolerances. (This could be transformed into an SRO admin JPM by evaluating follow-up actions to reduced SDM.)

A.1.2 – Walk through the procedure with instructors for clarification. Correlation between procedure and attachment is not clear.

A.2 – Why not open both drains, V156 and V960? Both are not needed. Is there a possibility of extending the tagging boundary for double isolation? Just for high energy lines.

A.3 – Step 3: Are we sure that 35 mR/hr is not acceptable? Step 4: What constitutes a work area? JPM to be revised for clarity.

SRO Admin

A.1.1 – Change initiating cue to delete mentioning TS.

A.1.2 – How does one identify the risk color? How do we meaningfully administer JPM steps 5-11 in a classroom setting? Change cue for applicant to implement section4.6 of OP 3215. Last step is morphing the JPM into a system JPM - delete.

A.2 – Change initiating cue to have applicant document conclusions on cue sheet.

A.3 – There is no task standard. JPM step 5 is not critical because no action is needed. Suggest changing initial conditions to make step 5 critical by making the applicant recognize that not enough pumps are running. Changes will be made.

A.4 – No comment.

In-Plant JPMs

P.1 – No comment.

P.2 – No comment.

P.3 – Why not complete Attachment A? How does this end point match with the cue and task standard? Other parts of Attachment A will be completed by another operator.

Simulator JPMs

(NOTE: Below are the comments for the originally submitted simulator JPMs. These JPMs were all replaced just prior to the prep week due to a potential exam compromise. These comments are therefore not applicable to the replacement JPMs. There was no time to make advance comments on the replacement JPMs. The replacement JPMs were reviewed and commented upon by the exam team when validation occurred during prep week.)

S.1 – JPM step 12 is not critical (because if no action was taken the result would be the same). Review JPM steps 14 – 17 regarding critical nature.

S.2 – the JPM initiating cue needs to inform applicants that the JPM is time critical. JPM steps 6, 9, & 11 are questionable actions for alternate paths.
S.3 – No comment.

S.4 – Improve task standard. Have a valve fail to properly align and then have the applicant identify it and report it to the US.????

S.5 – No comment.

S.6 – Specify task standard. Do all PTL's have to be performed to successfully complete the critical task? JPM step 15 title for breaker does not match procedure (RSSA*34C-2 vs 34C*1T-2).

S.7 – No comment.

S.8 – No comment.

(NOTE: Below are the comments for the originally submitted simulator scenarios. These scenarios were all significantly modified just prior to the prep week due to a potential exam compromise. These comments are therefore not applicable to the replacement scenarios. There was no time to make advance comments on the replacement scenarios. The replacement scenarios were reviewed and commented upon by the exam team when validation occurred during prep week.)

Scenario 1

Form 305-1 does not seem to match D-1 (i.e., Events 8-11).
Event 1 – Does temperature transmitter fail high (D-1) or low (overview)?
Event 2 – Specify on D-1 that SGNR channels fails low.
Event 3 – What the consequence of the RO taking no action?
Event 5 – Cannot count as component failure for BOP. (Form 301-5 is OK.)
Event 6 – Same/similar to JPM S.3. Cannot count as component failure for BOP.
Event 7 – Break out failures separately for BOP & RO.
Can count auto MSI actuation failure (Event 10) as a component failure for BOP/RO.
What is Event 11? SI valves fail to correctly align??? Not in exam guide.
SI actuation during ATWS was designated as a critical task. CT designation not in exam guide?? and FRS1 does not seem to direct an SI. Explain.
Run time: 76 vs 90 minutes?
Quantitative attributes don't seem to match scenario (SI valves, major transients, run time)

Scenario 2

Event 1 – Perhaps too risky for first event????
Event 6 – Any meaningful manipulations with RCP seal failure? Component failure for SRO?
Should closing EDG breakers and restarting ECCS equipment be a CT????

Scenario 3

Major Transient for RO1 & 2 at ATC position is 6 vs 5.

Should depressurizing the SGs after the blackout be a CT???

Scenario 4

Event 4 – What are the actions for the RO and BOP?
Events 5 & 6 are similar to Scenario 1.
Estimated duration 150 minutes – too long.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psycho metric Flaws					4. Job Content Flaws				5. Other			6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q=K/A	SRO only	Ref needed			
1	H	2	X			X									N	E	Delete "initially." D implausible - change to two bistables of low pressure.
2	H	2	X												N	S	
3	H	2	X												N	E	Provide data for a LBLOCA not an assessment.
4	H	2				C, D		X							N	U	C & D don't seem to be plausible as they are to far removed from the core. Licensee to reselect K/A.
5	H	2	X												B(NRC)	E	Add "immediately" to question to preclude A as possibly correct.
6	H	3													N	S	
7	F	3	X												N	E	Capitalize "leak off."
8	H	2													B(NRC)	S	
9	H	2													N	S	
10	H	3													N	S	
11	H	3	X												N	E	Add item to indicate MDAFW pumps are running and TDAFW is OOS.
12	F	3													N	S	

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psycho metric Flaws					4. Job Conten t Flaws				5. Other			6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q=K/A	SRO only	Ref needed			
13	H	3													N	S	
14	F	2	X												N	E	Modify Q to preclude B as partially correct.
15	H	2	X												B	E	Add "on RCS temp and why?"
16	H	2													N	S	
17	F	3	X												N	E	Replace "unexpected" with "abnormal."
18	H	3													N	S	
19	F	2	X												N	E	Add "With regard to the RPI" to the front of the question.
20	H	3	X												B(NRC)	E	Provide location in procedure - Rx start up.
21	H	3	X												N	E	Delete "Both the LOSS OF DETECTOR VOLT and the" from all four distractors. Change lights to light.
22	F	4						X					X		B(NRC)	U	This is not applicable to RO job function. Reselect K/A.
23	F	4	X												B	E	Modify Q to ask "How do you proceed through AOP 3576?" or something that effect and modify distractors as needed.
24	H	3	X												B	E	Modify Q to address note in FR-C.3 instead of solely memorizing WOG Background.
25	F	3													N	S	Add explanation to justify RO vs SRO level Q.
26	F	3													N	S	
27	F	3													N	S	
28	H	2	X												B	E	Specify what is meant by "initial."
29	H	3													B	S	
30	H	2	X												N	E	Asking for an action but the response is to verify? Change distractors to a responsive action associated with CVCS.
31	H	2				D									N	E	D does not seem plausible with increasing L/D. Replace.
32	H	3													N	S	Add RO LO for cooldown rate limits.
33	H	3				A									B	E	Replace distractor A.
34	H	3													N	S	H vs F?
35	F	3	X												N	E	Add to the front of the Q "Of the following choices"
36	F	2													B(NRC)	S	
37	F	2													N	S	F vs H???
38	H	2													B(NRC)	S	
39	F	2	X												B(NRC)	E	Add "per AOP" to end of Q.
40	F	2													N	S	
41	F	1				B									B	E	Replace distractor B.
42	H	3													B	S	
43	F	2													N	S	F vs H???
44	H	2													M	S	
45	F	3	X												N	E	Make RO and PEO reports separate bullets.
46	H	4	X												B	E	State that system responds as designed and then ask how the RCS responds to the change in FW temperature.
47	H	2													N	S	
48	H	2													N	S	
49	F	2				A									B	E	Choice A - pick another 4160 KV pump.
50	H	2													B(NRC)	S	
51	F	3	X												B(NRC)	E	F vs H??? Add initial power and cause of trip to stem. Add "or will" to stem to make B & D more plausible.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psycho metric Flaws					4. Job Conten t Flaws				5. Other			6. B/M/N	7. U/E/S	8. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q=K/A	SRO only	Ref needed			
52	F	3									X				B	E	Question to be reworded for forward logic.
53	F	2	X												B	E	Add that SI not actuated.
54	F	3													B(NRC)	S	
55	F	3													B	S	
56	H	3	X												N	E	Provide normal tailpipe temperature to make A & C more plausible.
57	H	2													B	S	
58	F	1				A,C,D									B	U	LOD 1 because A,C, D are not plausible. Reselect K/A.
59	H	3													B	S	
60	F	4													B	S	

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. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q=K/A	SRO only	Ref needed			
61	H	3	X												B	E	Add "IAW FR-I.3 ..." to Q.
62	F	2				A									B(NRC)	E	Replace A to make more plausible.
63	F	3													N	S	
64	F	2													B	S	F vs H???
65	F	2													N	S	F vs H???
66	H	3													B(NRC)	S	H vs F???
67	F	3													N	S	
68	F	3													N	S	
69	H	2													N	S	
70	F	4												Y	N	S	H vs F??
71	H	3	X												N	S	
72	F	3												Y	B	S	Fix explanation "B,C&D plausible" vs "A,C,&D plausible."
73	H	3													N	S	
74	F	2													B(NRC)	S	
75	H	2	X	X											N	S	
															B(NRC)	E	Just provide annunciators as distractors.

Total		2.6
F	F	30.0%
H	H	40.0%
H%		**53.3%**

N	40	U=4.0%
B	34	
M	1	

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	7. Explanation
				Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q=K/A	SRO only			
1	76	H	2											N	N	U	System knowledge level Q. Modify Q to ask what action to take to meet 43.b.5.
2	77	H	3	X											N	E	Modify Q to ask if TS applies. Add note to explanation to justify SRO level Q.
3	78	H	3												N	S	
4	79	H	3												N	S	
5	80	H	3	X											N	E	Instead of "at what time" use "under what conditions"
6	81	H	3												B	S	
7	82	F	3	X											B	E	Add info that all other rad waste monitoring instrumentation is operable.
8	83	F	3												B(NRC)	S	Add plausibility explanation for purge system operation.
9	84	H	2	X											N	E	Adjust times so that there is only one correct answer to avoid confusion over different notification requirements.
10	85	H	3	X											B	E	Add "IAW procedure" to Q.
11	86	H	3	X											B(NRC)	E	Provide CNMT pressure value. Ask what procedural direction is to be provided by the US.
12	87	H	3		X										N	E	Delete first bullet. Add explanation to justify SRO level Q.
13	88	H	3	X											N	E	Increase 4 minute average to 102.1% to make A the correct answer. In B, change RE to OMOC.
14	89	H	3	X										N	N	U	Delete two bullets from item 3 and delete item 4. Provide options for AOP or ARP entry.
15	90	H	3											N	N	U	Modify Q to make SRO only. Ask for what action is to be taken.
16	91	H	2												B	S	Note: Q modified to avoid being identical to revised op test material.
17	92	H	2												N	S	
18	93	H	3	X										N	B	U	Modify Q to make SRO only. Ask for what procedural direction is to be provided to the crew. Modify C to include OP 3350 .
19	94	F	2												N	S	
20	95	H	2												B	S	
21	96	H	3	X											N	E	Make 5th bullet read 1.5 hours vs 1 hour.
22	97	F	3												B	S	
23	98	F	2												B(NRC)	S	
24	99	F	2												N	S	
25	100	H		X											M	E	Replace C to say Runback turbine due to overheating per AOP 3575.
Total			2.7												N=14	U=16%	
F															M=1		
H															B=10		