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 section 4.6 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 quide?? 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)	metric Flaws				(**) (**) (**) (**) (**)	4. Job Conten t Flaws				5. Other			6. B/M/N	7. U/E/S	8. Explanation
				Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q=K/A	SRO only	Ref needed			
1	Н	2	х			Χ									N	E	Delete "initially." D implausible - change to two bistables of low pressure.
2	Н	2	X	4/92/05		72757A		2041074	MARIE (1)		170,731,752			094,2009460	N	S	
3	Н	2	X	22.7	27/2/11										N	SA ESS	Provide data for a LBLOCA not an assessment.
4	Н	2				C, D		Х							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	Н	2	х												B(NRC)	Е	Add "immediately" to question to preclude A as possibly correct.
6	Н	3			10.84	10/7/5/5	474174	26642						207/(469)	N	S	
7	F	3	X	27/22/1		27.57				7.43					N	/ E	Capitalize "leak off."
8	Н	2	25270740			893.4sfaf		0.00		175	排放对象	1/4/14/19/4	2,007,027		B(NRC)	S	
9	H	2		224	27,845		MANAGE P		(////SZ/SA	X45574	Mayor				N	S	
10	Н	3	149800		444	3/2/2014//	46.703.5				277774	ZERT/DESEAL			N	S	
11	Н	3	Х												N	Е	Add item to indicate MDAFW pumps are running and TDAF is OOS.
12	F	3				127/16/24 127/16/24					9,47,414		246723 WAS	47442	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	Н	3		17.77											N	S	
14	F	2	X		张松 集	OKARIL						7420741874775			N	Ε	Modify Q to preclude B as partially correct.
15	H	2	X	1242000		32.735		14840				777. 2017.00			В	E//	Add "on RCS temp and why?"
16	Н	2			337 X 12		特別的時					464070567		类数据设置	N	S	
17	F	3	Χ	26/6/2	Markey	SOURCE.	(2.00)	220682					26771/10/27/20	State State	N	E	Replace "unexpected" with "abnormal."
18	Н	3		1390U	90A(3)		19141.000	343.5%	7.2 11.2	(d) (d)			ARTICION,		N	S	
19	F	2	Χ	22,721.71	917.75			2,952047							N	Ε	Add "With regard to the RPI" to the front of the question.
20	H	3	Χ	77.77.6	170112	2010/201	3477.444	77.77.63				7774 F.F.E.E.E.			B(NRC)	E	Provide location in procedure - Rx start up.
21	н	3	х												N	E	Delete "Both the LOSS OF DETECTOR VOLT and the" from all four distractors. Change lights to light.
22	F	4	27/02/2	242	1000	12577.4	(3.447,414)	X	9741747	17/21/72	200	\$223 \$455 FAS	X	A27.428.53.61	B(NRC)	Ū	This is not applicable to RO job function. Reselect K/A.
23	F	4	X												В	E	Modify Q to ask "How do you proceed through AOP 3576?" or something that effect and modify distractors as needed.
24	Н	3	Х												В	E	Modify Q to address note in FR-C.3 instead of solely
25	F	3				7.20.20.20		1327711715		guzneg zite zoz. Egyptegiz (z					N	S	memorizing WOG Background.
26	F	3		777		75 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7				77777					N	S	Add explanation to justify RO vs SRO level Q.
27	F	3		24 (22)		777	100 to 10	74.4.7.70	Carponia di Ali Parponia di			50		11 11 11 11 11 11 12 13 14 14 14 14 14 14 14 14 14 14 14 14 14	N		
28	Н	2	X	-			27.00.217.107		97.47.41.41. 35.47.41.41.			77 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7	1 (0 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)		В	S	0 26 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
29	H	3			900010		23.73.52.23.4 23.74.77.53.6	20222			2012777		2000 (00 00 00 00 00 00 00 00 00 00 00 00		В	E S	Specify what is meant by "initial."
30	н	2	Х														Asking for an action but the response is to verify? Change
31	Н	2	^			D	re viellady). Elyptike (sz	3 6 6 3 7 6 6 7 6 8 3 6 6 7 7 6 8	CAGE AT ALE						N	E ///	distractors to a responsive action associated with CVCS.
32	H	3			2007		1365 6 5 3 4 1373 6 7 7 6 1		Andreiget Opriorise		0.000 J (335) 1977 J (797)				N	E	D does not seem plausible with increasing L/D. Replace.
33	H	3		2000 700	8.06.077 8.18787,57	Α	ACTIVISATION OF	25 20 52 3 57 T							N	S	Add RO LO for cooldown rate limits.
34	H	3	rote A Poliția Rote Paristra	740434	272310 <u>-21.</u> 2722-33	A	77.5	Particular (7 Particular de la compania		1601700757 100776	3/03/03/03/46 40/03/04/46				В	E	Replace distractor A.
35	F	3	√	546947659 20072346					2604 (400)); 2014 (22);;;		949343490 000000000			4-1040-00-00-00-0	N	<u> </u>	H vs F?
36	F		X		1500 / HV			60000000000000000000000000000000000000		5/22/1942 Francisco					/ N	E	Add to the front of the Q "Of the following choices"
	F	2 2			2004000					1/2/2015/			MASA (C) (46) 67		B(NRC)	S	
37 38	H	2		73.524.74 777.732	9774537 0107737	6,65772334 357774344	ggaptiegane Albertalea	200.00			(3.14.27.24) 3.15.20.23		0.4522269	1001 6 TAX (1004)	N.	S	F vs H???
39	F	2	V	12:510:4462 27:75:2232		6403000 (45) 0000 (44)	Maria (No. 1906) Selomora (No. 1908)	Patracias Patracian		57,000,000				834367275778	B(NRC)	S	
40	F.	2	X	755779774		50 / 25 / 25 / 35 / 27 / 21 / 42 / 45 /	1936 (1847) 1836 (1877)	ektinieššii Kilistorijas	Aleminaki Mariatan			PARTON (ALCOHOL) RECEPTION (ALCOHOL)	900 50 044 000 30 30 30 30 30 30 30 30 30 30 30 30 30 3		B(NRC)	E	Add "per AOP" to end of Q.
41	F	1	7-77-7-7-7	V-100 11077		В		0.0514.7645.4							N	S	
42	Н	3	er er egit gargette blekte	22.000.000		D	19915 PROSER 3001 Francis								В	E	Replace distractor B.
43	F	2	たらくないしょだ。 のググプラスで		96277 PR	77/11/14		92/64/2533 1977-79757			6012662666 643666267			9459 49 25 5 E	В	S	
44	H	2	1070-7770-0 839-083171	24.37.27.5 24.37.27.5	() 467 (2000)	1174 (174 174) 127 (174 174 174 174)		151245766E Revenit And	9402401/457 800253475		2000/24/2005 2000/25/2005		6894,67467	1000 (100 (174) 1000 (1700 (1700)	N	S	F vs H???
45	F	3	Χ	143 A/A (1) 97 2 7 3 7 34	2772677	A210431())		146 14 (16 (16 (16 (16 (16 (16 (16 (16 (16 (16			(6.505/677 ²	26000 (27(6)) Veres en 270	940 943 E 14 60 300 7 C 3 E 14 7 C	5744-7 (s)(s)	M	S	
4D	- F	3	^_			(1), 2723.47 777.00		70.00		1/60000/ 	9779676		514 5 (FEE)	2.011174/4	N	E//	Make RO and PEO reports separate bullets.
46	н	4	x												В	E	State that system responds as designed and then ask how the RCS responds to the change in FW temperature.
47	Н	2				eletetaka	V1887860014	12/16/25/1		Mariana.	2034,446.4				N	S	
48	Н	2		100 000		4/4/2/24		26/04/6/A	12620667	6979746	2007/06/2			77778434	N	S	
49	F	2	V458745245	8585557	1000	A	(47)46/3	1037/64	MINNE	612.4157 E	2543233	開発が対抗的数		7,176,777	В	∕ E	Choice A - pick another 4160 KV pump.
50	H	2	90,225,172	0412417	7776		445277	54/30/4	2/334		#/X//	//////////////////////////////////////			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)	metric Flaws					4. Job Conten t Flaws	3377			I (J=K/A I	SRO only		6. B/M/N	7. U/E/S	8. Explanation
				Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward			Ref needed			
52	F	3					7.77		14.72.6		Х				В	Ε	Question to be reworded for forward logic.
53	F	2	Χ	84127			175 (35 8)	3571577E					\$3.66 2672V	19.49.454.4	В	700 E 100	Add that SI not actuated.
54	F	3				(7) E 1734).	2000	45.64770		272124	28/1/41	2004/100		ARABOANA	B(NRC)	S	
55	F	3	71/1/2/2	274.30		3207,7791							0.04(0.003)	94477,62475	В	S	
56	Н	3	Х												N	E	Provide normal tailpipe temperature to make A & C more plausible.
57	H	2	2066 F F	200	200277		200				77,073,65	04.04.27.80		77.575	В	S	
8	F	2// 1 // (1	2017 (7.6)	77/2		A,C,D		277/5			MANAGE.		947.H44Y0	MEN 2024	В	U	LOD 1 because A,C, D are not plausible. Reselect K/A.
59	Н	3	1/4/4/19				<i>0,0</i> 04.62				17,77,674	7446 J.A.34		JAN (7.74)	В	S	T
60	F	4		17562.		2656		29.69	2401172				7/7/7/1/7/4/7	30000000	// B	S	

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psycho metric Flaws Stem Focus			Cred. Dist.		4. Job Conten t Flaws				5. Other		Ref needed	6. B/M/N	7. U/E/S	
				Cues	T/F		Partial	Job- Link	Minutia	I#/ linitsi	Back- ward	Q=K/A	SRO only] 0,2,3	8. Explanation
61	Н	3	Х							74/20					В	Ē	Add "IAW FR-I.3" to Q.
62	F	2		46.00		Α			537776		72/18/3	V(107EM/9)		2011/11/11/11	B(NRC)	E	Replace A to make more plausible.
63	F	3		1175.117					24.5764		55347457	20.47.69.67.691	200000000	20,000,000,20	N	S	replace A to make more plausible.
64	F	2								300000		600000000		817.7.E21870	В	S	F vs H???
65	F	2			2.00				11/1/2011	2522,247		16 17 18 177 L		77477487748E	N	S	E va U222
66	H	3					47.57477		17/19/2016	West in	2574677		800 C 100 C	704-1-17-18	B(NRC)	S	H vs F???
67	F.	3	10000	4776					12 mark		11701967				D(N(C)	S	INVS P.C.C.
68	F	3		12.72					11.5745	77 1172	7777777	77.77		70 5 5 70 74 7	N	S	
69	H	2	1 (227)	24.77.72	8724.7	7774 (E.	74 W 164 W	6/4/2/2			9.00	77.00.00		V	N	S	H vs F??
70	F	4	MAZ 834	804890	772,737					17.2	200			1.000 P. (1.00)	N	S	INVS F. (
71	H	3	Х	201017	7,027	3233472	W.612361VA	70.50		2010/7	747 (147) 2	7/17/29/2017		V	В		F 1 1 10 00 D 1 1 1 1 1 1 1 1 1 1 1 1 1 1
72	F	3			12/74	0.000	78.575	57/21677	and the first	700777		700000		**************************************	N	<u> </u>	Fix explanation "B,C&D plausible" vs "A,C,&D plausible."
73	H	3		2.000				77				1/2/10/20		rang pangang Maray Kangang	B(NRC)	S	
74	F	2	100		7.67		2077							990 (1270 777) 1990 (1270 777)	N N	S	
75	Н	2	X	X			700778	1000	5/45/5/5/							S	Innt-a-all-a-assessed
otal F H H%	F H	2.6 30.0% 40.0% 53.3%												N B M	40 34 1	E U=4.0%	Just provide annunciators as distractors.

Page 4

Q#		1. LOK (F/H)	2. LOD (1-5)		3. Psyc	home	tric Flaw	S	4	. Job Co	ntent Fla	iws	5. C	Other	6.	7.	7. Explanation
		(1711)	(1-3)	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	
1	76	Н	2											N	N	U	System knowledge level Q. Modify Q to ask what action to take to meet 43.b.5.
2	77	Н	3	X											N	E	Modify Q to ask if TS applies. Add note to explanation to justi SRO level Q.
3	78	Н	3		11/4/2				1,721,77			68) BAA	774	5841731727	N	S	
4	79	Н	3	250748		2000							e Prajyhi		N	S	
5	80	Н	3	X		7/5//		1417.741	44.000	117777	200	01/05	147/ak////		N	E	Instead of "at what time" use "under what conditions"
6	81	Н	3				7. 7. 7. 7.	1247202	15777	经被规则		27/2/27		933 AY 240	В	S	
7	82	F	3	X											В	E	Add info that all other rad waste monitoring instrumentation is operable.
8	83	F	3		174676	20.577	200		Alexander		1947年	\$14.05.75	84272577738	3/4/8/3/3/2	B(NRC)	S	Add plausibility explanation for purge system operation.
9	84	н	2	×											N .	E	Adjust times so that there is only one correct answer to avoid confusion over different notification requirements.
10	85	H	3	Χ	77.57	7.00	KONT.		ARORDY	NET IN	300000	2007.57		11/19/2015	В	E	Add "IAW procedure" to Q.
11	86	Н	3	Х											B(NRC)	E	Provide CNMT pressure value. Ask what procedural direction is to be provided by the US.
12	87	Η (3		X		Alesta iline							384422334	N	E	Delete first bullet. Add explanation to justify SRO level Q.
13	88	Н	3	Х											N	E	Increase 4 minute average to 102.1% to make A the correct answer. In B, change RE to OMOC.
14	89	Н	3	Х										N	N	U	Delete two bullets from item 3 and delete item 4. Provide options for AOP or ARP entry.
15	90	Н	3											N	N	U	Modify Q to make SRO only. Ask for what action is to be taken.
														76.44 A.A.		(0.487) 478	Note: Q modified to avoid being identical to revised op test
16	91	Н	2	216221161	2011年	1470						2000年		36.65	В	S	material.
17	92	H	2	277.58	122476	377.17	370000	779 H. Z.F	23/23/K		(//ea/.)			4986677	N	S	
18	93	Н	3	X										N	В	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	46/3/07/20			8 (18 A 79 F	27/2007/02/	2022/7/		MALMA	0447400000			N	S	
20	95	Н	2		101933	7/4/4	1,4197.2		046446	(40)	24.74.74.5	40,434		\$450,435X4	В	S	
21	96	Н	3	X		7,214	97773		46.67.77	14.6% A.E.	(4)				N.	E	Make 5th bullet read 1.5 hours vs 1 hour.
22	97	F	3	377.00	262.69/	31/2/2		9,010,77	K(212)X		100,000	77.77			В	S	
23	98	F	2								1100.77		MODELLE ST		B(NRC)	S	
24	99	F	2	an zapado sign	40014484	5,100		2710302814	2014/19/5/17		100000	7,711,79,746			N	S	
	100	н		х											M	E	Replace C to say Runback turbine due to overheating per AOP 3575.
otal F H			2.7												N=14 M=1 B=10	U=16%	

SRO ES 401-9