Form 2.3-3 Operating Test Review Worksheet (JPMs)

Facility: Millston	ie 3											Exam Date: 9/11/2023
1 JPM # or Title	2 Type	3 ALT	4 LOD			JF	5 PM Erro	ors			6 U/E/S	7 Explanation
JEINI # OF TIME	(S/P/A)	(Y/N)	(1–5)	LOD	REF	IC	TSK	CUE	CS	TL	U/L/3	'
(RO/CO1) ROA.1.1 Calculate Boron Addition	A	N/A	2.5								₽S	Revise JPM Task Standard to eliminate the EOP 3054 procedure reference and provide a condensed statement that clearly defines/describes the Administrative Task. ES-3.2, Section D.1.a, "Define the Task Standard," states: "For the task associated with the JPM, define the task standard. The task standard is the predetermined qualitative or quantitative outcome (or both) against which task performance will be measured. The task standard clearly describes the expected outcome (i.e., end state) for successful completion of the JPM. For alternate path JPMs, the task standard includes the end state reached by way of alternate path actions. When applicable, the task standard includes a tolerance range for acceptable performance (e.g., 4,950–5,050 gallons per minute flow). A properly defined and detailed task standard enables consistency in determining the JPM's critical steps and subsequently evaluating applicant performance." The following example of an Administrative Topic JPM Task Standard (from a print-reading task) is provided in ES-3.2, Section D.1.a: The task is satisfactorily met when the applicant has determined that, with both limit switches 2E51-N060 and 2E51-N061 closed, relay 2E51-K52A will energize, causing the following functions: valve 2E51-F029 closes valve 2E51-F031 closes Tondensate Storage Tank Low Level" annunciator alarms Under Task Standard, say calculating a required boron addition, instead of concentration. Under Required Materials, should say record in Step 2b, instead of 2a. Under Required Materials, states that pages 1-10 of EOP 3504 are marked up. Didn't see this in the material provided. Are pages 1-10 to be marked up as indicated? I calculated 11,652.9 gallons, was within band of 11,335 – 11935. Provide the calculated value in addition to the range. What is the 600 gpm range based on? LICENSEE: ROA.1.1 revised to address comments. See Rev. 1 for changes. For the last 3 bullets, a marked up handout will be provided. The allowable boration amount band is =/- 2.5% and accounts for pos

Form 2.3-3 Operating Test Review Worksheet (JPMs)

Facility: Millston	e 3											Exam Date: 9/11/2023
1 JPM # or Title	2 Type	3 ALT	4 LOD				5 PM Erro				6 U/E/S	7 Explanation
01 101 77 01 11110	(S/P/A)	(Y/N)	(1–5)	LOD	REF	IC	TSK	CUE	CS	TL	0,2,0	'
(RO/CO2) ROA1.2 Determine Proper Response to RCP Seal Alarms	A	N/A	2.5								E S	 NRC: Admin in simulator, like an old "static question. For purposes of this JPM, Steps 7.1.1, 7.1.2, and 7.1.3 should be identified as stand-alone steps in the JPM, with 7.1.1 and 7.1.2 designated as Critical Steps. Can the candidate display RCP status in JPM Step 4 while simulator is in freeze? Examiner Notes prior to Step 1 of the JPM on page 5, should specify MB4B-6A and MB4B-6B. LICENSEE: ROA.1.2 revised to address comments. See Rev. 1 for changes. For the last bullet, corrected annunciator nomenclature: MB4B 2-6A & MB4B 2-6B.
												JPM determined to be Satisfactory based on Chief Examiner evaluation.
(RO/EC) ROA2 Perform a Manual QPTR Surveillance	Α	N/A	3								E S	 NRC: Revise JPM Task Standard to eliminate the SP 31012 procedure reference and include the information that Max QTPR is N43 Lower Detector. Provide a KEY for Attachment 1. Acceptance criteria of +/- 0.002 is good, even if candidate initially leaves ratios at four decimal places. Note on attachment 1 references max QPTR step only (4.2.2.g). JPM Step #6 (procedure Step 4.2.2.c) directs recording data source and date of Attachment 2 in the "Remarks" section. While there is a "Remarks" field, there does not appear to be anywhere to record the information. Clarification required. Good operationally valid JPM. LICENSEE: ROA.2 revised to address comments. See Rev. 1 for changes. For the second to last bullet, there is a spot on Att. 2 to record and the answer key will clarify. Answer key has been created (but can't be scanned as pdf until after the exam – exam security measure). JPM determined to be Satisfactory based on Chief Examiner evaluation.
(RO/RC) N/A	Α	N/A									N/A	N/A

Form 2.3-3 Operating Test Review Worksheet (JPMs)

Facility: Millston	e 3											Exam Date: 9/11/2023
1 JPM # or Title	2 Type	3 ALT	4 LOD				5 PM Erro				6 -U/E/S	7 Explanation
	(S/P/A)	(Y/N)	(1–5)	LOD	REF	IC	TSK	CUE	CS	TL		NRC:
(RO/EP) ROA3 Assess Emergency Dose Limits	A	N/A	2.5			X		Χ	x	of 28	₩ s	 Revise JPM Task Standard to include the numerical determinations in Items 1 and 2. Initially believed JPM Step #5 to be incorrect. Thought time 0931 was with respect to the 30 Rem and application of the EPI-FAP09 procedure. After reading the Initial Conditions and Initiating Cue, misunderstood the question to be asking about the Emergency Dose for gaging the Safety Valve for the purpose of protecting large populations, given that the Extra Operator was dispatched to the Aux Building at 0930. Subsequently realized that the Initiating Cue Table specified time 09:31, which was 4500 mrem – 100 mrem = 4400 mrem, based on the ALERT declaration. Step #7 then asks about time 10:41 as it pertains to Emergency Dose Limits for protecting a large population and whether the expected dose of 30 Rem is allowed to be received and who can authorize it. JPM is confusing as written! Performance Standard for JPM Step 5 states the applicant determines that the proper Emergency Dose Limit is NOT the limit required to protect valuable property or protect large populations. The associated Examiner Cue states:

Form 2.3-3 Operating Test Review Worksheet (JPMs)

Facility: Millstor	ne 3											Exam Date: 9/11/2023
1 JPM # or Title	2 Type	3 ALT	4 LOD	1.00	DEE		5 PM Erro		00		6 - U/E/S	7 Explanation
(SRO/CO1) SRO A.1.1 Respond to Degrading Intake Conditions	(S/P/A)	N/A	3.0	LOD	REF	IC	TSK	CUE	CS	TL	E S	Millstone 3 2021 NRC Exam Previous 2 Exams NRC: Will take longer than 15 minutes. Cover says 15 minutes, validated time says 20 minutes. At least 30 minutes. Are folks going to miss the embedded errors? Cue says disposition completed surveillance. Maybe should say review completed surveillance or review, approve, and take any required actions? Revise JPM Task Standard to eliminate the SP 3665.2-001 procedure reference and add the critical steps associated with the wind speed and calculation errors that resulted in the Environmental Factor Condition of Red. LICENSEE: SROA.1.1 revised to address comments. See Rev. 1 for changes. For first bullet, changed to 20 minutes (previous NRC time). JPM determined to be Satisfactory based on Chief Examiner evaluation.
(SRO/CO2) SRO A1.1.2 Calculate Time to Boil	А	N/A	3.0								E S	 NRC: To avoid any potential confusion in the Initiating Cue, state that the venting is to be completed by 1600 today, April 21st. Do we need to say all RCS loops are unisolated? Would think you can't depressurize and vent with a loop isolated, thinking so thinking the answer is No. The Attachment 8 Step numbers are not provided after Step 8 of the JPM. LICENSEE: SROA.1.2 revised to address comments. See Rev. 1 for changes. For second bullet, it's felt that we don't need to state that the loops are unisolated (sufficient information is cued). JPM determined to be Satisfactory based on Chief Examiner evaluation.

Form 2.3-3 Operating Test Review Worksheet (JPMs)

Facility: Millston	e 3											Exam Date: 9/11/2023
1 JPM # or Title	2 Type	3 ALT	4 LOD			JF	5 PM Erro	ors			6 U/E/S	7 Explanation
JEINI#OI TILLE	(S/P/A)	(Y/N)	(1–5)	LOD	REF	IC	TSK	CUE	CS	TL	U/L/3	Ехріанаціон
(SRO/EC) SRO A.2 Determine Response for Blocking Open a Cable Spreading Room Door	A	N/A	2.5								E S	NRC: Revise the Task Standard to add the specific Tech Spec actions; i.e., "within 1 hr establish,".etc. Split out the different actions in Task Standard. LICENSEE: SROA.2 revised to address comments. See Rev. 1 for changes. JPM determined to be Satisfactory based on Chief Examiner evaluation.
(SRO/RC) SROA.3 Respond to RMS Trouble Alarm	А	N/A	3.0								S	
(SRO/EP) SROA.4 PAR Update	А	N/A	3.0								E S	 NRC: Initiating cue should say a wind shift to 90°, instead of just; the wind shifts 90°. Could be confusing and effect answer. Update the KEY to have the "Wind Shift" Box checked in the Technical Basis Section. Why would this not be designated as a Critical Step? LICENSEE: First bullet: SROA.4 revised to address comments. See Rev. 1 for changes. Second bullet: The referenced boxes on the PAR form may be checked in multiple ways. For instance, wind shift, plant conditions and GE would all be suitable (can check multiple boxes if desire). Guidance on what has to be checked here is not rigid. Furthermore, this information is deemed non-critical as the boxes don't convey any information that would change the response of the state or local authorities (regarding the PAR). The critical information relates to the recommended actions regarding evacuating or sheltering in place. JPM determined to be Satisfactory based on Chief Examiner evaluation.

Form 2.3-3 Operating Test Review Worksheet (JPMs)

Facility: Millston	e 3											Exam Date: 9/11/2023
1 JPM # or Title	2 Type	3 ALT	4 LOD			JF	5 PM Erro	ors			6 U/E/S	7 Explanation
JFWI# OI TILLE	(S/P/A)	(Y/N)	(1–5)	LOD	REF	IC	TSK	CUE	CS	TL	U/L/3	Ехріанацон
Sim A Second Control Rod Drops During Rod Recovery	O	Y	3.0								E	 NRC: Revise JPM Task Standard to eliminate the AOP 3552 procedure reference. Summary of Changes sheet indicates that the JPM is Modified (Bank JPM S228). Form 3.2-2, Control Room/In-Plant Outline, Type Code is D. Resolve this apparent discrepancy and make any necessary changes to Form 3.2-2. General Comment - "Simulator JPMs Summary," similar to the 150-Day submittal, was not provided with the 75-Day submittal. Will an updated Summary be provided? LICENSEE: First bullet: Sim A JPM revised to address comments. See Rev. 1 for changes. Second bullet: No discrepancy. This JPM closely resembles two different simulator JPMs (combines various actions). Therefore, identified as a Type Code "Direct" on Form 3.2-2. Simulator JPM's were only provided for 150 day. The 75 day submittal included the actual JPM's – making summary unnecessary. JPM determined to be Satisfactory based on Chief Examiner evaluation.

Form 2.3-3 Operating Test Review Worksheet (JPMs)

Facility: Millstor	ne 3											Exam Date: 9/11/2023
1 JPM # or Title	2 Type	3 ALT	4 LOD				5 PM Erro			T	6 -U/E/S	7 Explanation
	(S/P/A)	(Y/N)	(1–5)	LOD	REF	IC	TSK	CUE	CS	TL		'
Sim B Establish Normal Charging and Letdown Using GA- 13	S	N	2.5						×		E S	 Ensure that this replacement JPM does not overlap with the Audit Exam (Failure of Controlling Pressurizer Channel Low). Performance Standard for Step 10 of the JPM states: "Examinee depresses the close button for 3CHS*MV8106 and observes that the indicating lights shift to green ON, red OFF." Use of the word "shift" is confusing, given that 3CHS*MV8106 was verified to be in the "closed" position (i.e., green light ON) in Step 9 of the JPM." Given that 3CHS*MV8106 is already "closed," it appears that Step 10 of the JPM should not be designated as a Critical Step. Determine if use of the word "shift" is appropriate in this context and whether Step 10 should be designated as Critical. LICENSEE: First bullet: JPM does not overlap with Audit. Mentioned failure didn't result in letdown isolation (was intermediate level failure). Therefore, GA-13 was not performed during the Audit Exam. Second bullet: Sim B JPM revised to address comments. See Rev. 1 for changes. JPM determined to be Satisfactory based on Chief Examiner evaluation.
Sim C Perform RCS Bleed and Feed in FR-H.1	S	Υ	2.5								E S	Revise JPM Task Standard to eliminate the FR-H.1 procedure reference and state the following: "Completes RCS bleed and feed by establishing a bleed flowpath from BOTH: (1) 3RCS*PCV456 'B' PORV, and (2) Head Vent Letdown to the PRT." LICENSEE: Sim C JPM revised to address comments. See Rev. 1 for changes. JPM determined to be Satisfactory based on Chief Examiner evaluation.

Form 2.3-3 Operating Test Review Worksheet (JPMs)

Facility: Millston	e 3											Exam Date: 9/11/2023
1 JPM # or Title	2 Type	3 ALT	4 LOD			JF	5 PM Erro	ors			6 U/E/S	7 Explanation
JI WI # OI TILLE	(S/P/A)	(Y/N)	(1–5)	LOD	REF	IC	TSK	CUE	CS	TL	U/L/3	Ελβιαπαποπ
Sim D Sweep Air from RHR Train "A"	S	Y	3.0						X		E S	Revise JPM Task Standard to eliminate the OP 3310A procedure reference and provide a condensed statement that clearly defines/describes the task of realigning the RHR System (i.e., pump, valves, and flow controller) for starting the pump in recirculation to the RWST; in addition to the existing information that cavitation is identified and the 'A' RHR Pump stopped. ES-3.2, Section D.1.a, "Define the Task Standard," states: "For the task associated with the JPM, define the task standard. The task standard is the predetermined qualitative or quantitative outcome (or both) against which task performance will be measured. The task standard clearly describes the expected outcome (i.e., end state) for successful completion of the JPM. For alternate path JPMs, the task standard includes the end state reached by way of alternate path actions. When applicable, the task standard includes a tolerance range for acceptable performance (e.g., 4,950–5,050 gallons per minute flow). A properly defined and detailed task standard enables consistency in determining the JPM's critical steps and subsequently evaluating applicant performance." The following example of a Control System JPM Task Standard is provided in ES-3.2, Section D.1.a: Control Room System JPM: The task is satisfactorily met when the applicant has reset and opened all main steam isolation valves at <200 pounds per square inch differential and then has isolated a subsequent steamline break by closing valves MS-V123 and MS-V456 before reaching maximum safe temperatures in two areas (approximately 8 minutes after receiving Group 1 System A and B alarms). • Step 17 of the JPM to STATION an operator locally at 3RHS*P1A to monitor for cavitation is designated as a Critical Step. Comment 2, prior to JPM Step 19, states that a field report will not be made and that it is up to the examinee to determine that cavitation is occurring. It would therefore appear that Step 17 of the JPM should not be designated as a Critical Step.

Form 2.3-3 Operating Test Review Worksheet (JPMs)

Facility: Millston	ne 3											Exam Date: 9/11/2023
1 IDM # or Title	1					JF	5 PM Erro	ors			6 U/E/S	7 Explanation
JFWI#OI TILLE	(S/P/A)	(Y/N)	(1–5)	LOD	REF	IC	TSK	CUE	CS	TL	U/L/3	Explanation
Sim E Shift to SG Feedwater Flow Control Valves	S	Z	3.0								E S	Revise JPM Task Standard to eliminate the OP 3203 procedure reference and provide a condensed statement that clearly defines/describes the task of shifting from the Feedwater Bypass Valves to the Feedwater Reg Valves. Reference ES-3.2, Section D.1.a, "Define the Task Standard." LICENSEE: Sim E JPM revised to address comments. See Rev. 1 for changes. JPM determined to be Satisfactory based on Chief Examiner evaluation.

Form 2.3-3 Operating Test Review Worksheet (JPMs)

Facility: Millston	e 3											Exam Date: 9/11/2023
1 JPM # or Title	2 Type	3 ALT	4 LOD		ı		5 PM Erro				6 U/E/S	7 Explanation
	(S/P/A)	(Y/N)	(1–5)	LOD	REF	IC	TSK	CUE	CS	TL		·
Sim F Respond to RMS- 41/42 Alarm	Ø	Z	3.0						X		E S	Millstone 3 2019 NRC Exams NRC: Revise JPM Task Standard to eliminate the AOP 3573 procedure reference and provide a condensed statement that clearly defines/describes the task of performing the Alarm Response actions for Rad Monitors RMS-41 and 42. Reference ES-3.2, Section D.1.a, "Define the Task Standard." The second part of Step 3 of the JPM, to go to OP 3313 to shutdown the Containment Purge System, is designated as a Critical Step. This should not be a Critical Step given that there is a cue for the Examiner to direct the applicant to perform OP 3313 if asked. For Steps 7 AND 11 of the JPM, make the following changes: a) Remove the Critical Step designation for Stopping 3HVR-FN4A (Step 7) and 3HVR-FN4B (Step 11, b) Revise the Performance Standard for each of these Steps to read "Observes is stopped," instead of "Stops," and c) Revise the associated Comment for each of these Steps to read "Has already been performed at JPM Step 3." Otherwise, the word "Observes" in the Performance Standard of Steps 6 and 10 of the JPM for the CTMT PURGE SUPPLY HVU'S is technically incorrect. If 3HVR-FN4A and 3HVR-FN4B are not stopped at Step 3 of the JPM (Critical Step), then action would have to be taken to "Stop" the CTMT PURGE SUPPLY HVU'S in Steps 6 and 10. Note that the existing comment in Steps 6 and 10 of the JPM assumes that 3HVR-FN4A and 3HVR-FNAB were "Stopped" in Step 3. LICENSEE: Sim F JPM revised to address comments. See Rev. 1 for changes. JPM determined to be Satisfactory based on Chief Examiner evaluation.

Form 2.3-3 Operating Test Review Worksheet (JPMs)

Facility: Millston	ie 3											Exam Date: 9/11/2023
1 JPM # or Title	2 Type (S/P/A)	3 ALT (Y/N)	4 LOD (1–5)	LOD	REF	JF IC	5 PM Erro	ors	CS	TL	6 U/E/S	7 Explanation
Sim G Implement GA-30, Aligning RPCCW for RCS and SG Sampling	S	¥N	3.0		I NEI		Tok				₽ S	Millstone 3 2021 NRC Exam Previous 2 Exams NRC: Revise JPM Task Standard to eliminate the GA-30 procedure reference and provide a condensed statement that clearly defines/describes the task of aligning the RPCCW for RCS and SG sampling. Reference ES-3.2, Section D.1.a, "Define the Task Standard." JPM, as written, does not meet the intent of Alternate Path. RNO Step implementation does not in and of itself always constitute ALT PATH performance. In this JPM, the RNO for starting the Instrument Air Compressor that failed to start is essentially an IF THEN statement. No impact on the minimum number of ALT PATH JPMS required for the RO, SRO-I, and SRO-U applicants. Update Form 3.2-2 accordingly. LICENSEE: First bullet: Sim G JPM revised to address comments. See Rev. 1 for changes. Second bullet: Removed alt path designation from JPM and updated Forms 3.2-2 (Rev. 2) for all candidates. Minimum alt path met for each candidate. JPM determined to be Satisfactory based on Chief Examiner evaluation.
Sim H Respond to Smoke in the Control Room by Operating the Control Room Emergency Ventilation System	S	N									E S	Revise JPM Task Standard to eliminate the OP 3314F procedure reference and provide a condensed statement that clearly defines/describes the task of placing the Control Room Ventilation System on full filtered recirculation. Reference ES-3.2, Section D.1.a, "Define the Task Standard." LICENSEE: Sim H JPM revised to address comments. See Rev. 1 for changes. JPM determined to be Satisfactory based on Chief Examiner evaluation.

Form 2.3-3 Operating Test Review Worksheet (JPMs)

Facility: Millston	e 3											Exam Date: 9/11/2023
1 JPM # or Title	2 Type (S/P/A)	3 ALT (Y/N)	4 LOD (1–5)	1.00	pee		5 PM Erro		00		6 U/E/S	7 Explanation
IP-I Reset 3MSS*MSV5, Terry Turbine Trip Throttle Valve	P	N	(1-3)	LOD	REF	IC	TSK	CUE	CS	TL	E S	Millstone 3 2021 NRC Exam Previous 2 Exams NRC: Revise JPM Task Standard to eliminate the GA-31 procedure reference and provide a condensed statement that clearly defines/describes the task of resetting the 3MSS*MSV5 linkage and opening the valve. Reference ES-3.2, Section D.1.a, "Define the Task Standard." LICENSEE: In Plant JPM-I revised to address comments. See Rev. 1 for changes. JPM determined to be Satisfactory based on Chief Examiner evaluation.
IP-J Establish Alternate Charging Pump Cooling Using Fire Water	Р	N									E S	NRC: Revise JPM Task Standard to eliminate the EOP 3501 procedure reference and provide a condensed statement that clearly defines/describes the task of establishing Alternate Charging Pump Cooling Using Fire Water. Reference ES-3.2, Section D.1.a, "Define the Task Standard." LICENSEE: In Plant JPM-J revised to address comments. See Rev. 1 for changes. JPM determined to be Satisfactory based on Chief Examiner evaluation.
IP-K Secondary Side Plant Equipment Operator Actions on a Control Room Evacuation	Р	Y									E S	 NRC: Revise JPM Task Standard to eliminate the EOP 3509.1 procedure reference and provide a condensed statement that clearly defines/describes the task of locally operating the EDG and manually controlling generator voltage following a Loss of Offsite Power, after having evacuated the Control Room due to fire. Reference ES-3.2, Section D.1.a, "Define the Task Standard." LICENSEE: In Plant JPM-K revised to address comments. See Rev. 1 for changes. JPM determined to be Satisfactory based on Chief Examiner evaluation.

Form 2.3-3 Instructions for Completing the JPM Table

- 1. Enter the JPM number and/or title.
- 2. Enter the type of JPM—(S)imulator, (P)lant, or (A)dministrative.
- 3. Enter (Y)es or (N)o for an Alternate Path JPM.
- 4. Rate the level of difficulty (LOD) of each JPM using a scale of 1–5 (easy–difficult). A JPM containing less than two critical steps, a JPM that tests solely for recall or memorization, or a JPM that involves directly looking up a single correct answer is likely LOD = 1 (too easy). Conversely, a JPM with over 30 steps or a JPM that takes more than 45 minutes to complete is likely LOD = 5 (too difficult).
- 5. Check the appropriate block for each JPM error type, using the following criteria:
 - LOD = 1 or 5 is unsatisfactory (U).
 - REF: The JPM lacks required references, tools, or procedures (U).
 - IC: The JPM initial conditions are missing or the JPM lacks an adequate initial cue (U).
 - CUE: The JPM lacks adequate evaluator cues to allow the applicant to complete the task, or the evaluator cues are subjective or leading (U).
 - TSK: The JPM lacks a task standard or lacks completion criteria for a task standard (U).
 - CS: The JPM contains errors in designating critical steps, or the JPM lacks an adequate performance standard for a critical step (U).
 - TL: The JPM validation times are unreasonable, or a time-critical JPM lacks a completion time (U).
- 6. Mark the JPM as unsatisfactory (U), satisfactory (S), or needs enhancements (E). A JPM is (U) if it has one or more (U) errors as determined in step 5. Examples of enhancements include formatting, spelling, or other minor changes.
- 7. Briefly describe any JPM determined to be unsatisfactory (U) or needing enhancement (E). Save initial review comments and detail subsequent comment resolution so that each exam bound JPM is marked by a satisfactory (S) resolution on this form.

Form 2.3-3 Operating Test Review Worksheet (Scenarios)

Facility: Millstone	e 3	Sce	nario: 1 <mark>SPAI</mark>	RE – Not Used		Exam	Date: September 11, 2023
1 Scenario		Scenar	2 io event errors			3	4
Event ID/Name:	Realism/ Credibility	Performance Standards	Verifiable Actions	Critical Task	TS	U/E/S	Explanation
1 Raise Power to 97%						S	
Pressurizer Spray Valve Opens (TS)						S	
3 No. 4 Turbine Control Valve Fails Closed						S	
4 Turbine Driven AFW Pump Inoperable with 'B' ED OOS (TS)						S	
5 Inadvertent 'B' Train Containment Depressurization Actuation (TS)						S	

Form 2.3-3 Operating Test Review Worksheet (Scenarios)

Facility: Millstone	3	Sce	nario: 1 <mark>SPAI</mark>	Exam	Date: September 11, 2023		
1 Scenario		Scenar	2 io event errors			3	4
Event ID/Name:	Realism/ Credibility	Performance Standards	Verifiable Actions	Critical Task	TS	U/E/S	Explanation
6 Turbine Trips with Reactor Failing to Auto Trip (CT1)						E S	CT1 statement on Form 3.3-1 needs to read the same as what's on the CT Sheet; i.e., "Manually trip the Reactor from the Control Room before transition to FR-S.1." Looking for consistency here. CT1 needs to be clearly identified as such on Page 22 so that it stands out. LICENSEE: Scenario 1 revised to address comments. See Rev. 1 for changes. Scenario Event determined to be Satisfactory based on Chief Examiner evaluation.
7 Two SGs Become Faulted on the Transient (CT2)						E S	CT2 statement on both Form 3.3-1 and the CT Sheet needs to be revised to read as follows: "Isolate faulted SG before either of the following two conditions occur: (1) FR-P.1 Orange Path condition is met OR (2) transition out of E-2 is made." Looking for consistency here. The CT statement on Page 28; i.e., "Isolate faulted SG before transition out of E-2," needs to be changed to reflect the revised CT wording. In Note 3 on Page 28, identify the two AFW in-series valves, one of which needs to be isolated to meet the CT. LICENSEE: Scenario 1 revised to address comments. See Rev. 1 for changes. Scenario Event determined to be Satisfactory based on Chief Examiner evaluation.

Form 2.3-3 Operating Test Review Worksheet (Scenarios)

Facility: Millstone	3	nario: 1 <mark>SPAI</mark>	RE – Not Used	_	Exam	Date: September 11, 2023	
1 Scenario		2 Scenario event errors					4
Event ID/Name:	Realism/ Credibility	Performance Standards	Verifiable Actions	Critical Task	TS	U/E/S	Explanation
8 FWI Components Fail to Isolate Automatically (CT2)						E S	NRC: CT2 for completing the FWI needs to be clearly identified as such on Page 24 so that it stands out. LICENSEE: Scenario 1 revised to address comments. See Rev. 1 for changes. Scenario Event determined to be Satisfactory based on Chief Examiner evaluation.

Form 2.3-3 Operating Test Review Worksheet (Scenarios)

Facility: Millston	Facility: Millstone 3 Sco				Scenario: 2			Exam Date: September 11, 2023		
1 Scenario Event ID/Name:	Realism/ Credibility	Perform Standa	ance	2 io event errors Verifiable Actions	Critical Task	TS	3 U/E/S	4 Explanation		
1 'B' PORV Fails Open (TS)							S			
2 First Point Feedwater Heater Develops a Tube Leak							E S	Clearly identify somewhere on Page 12, above the Bar Line for AOP 3575 Rapid Downpower, that the BOP credited actions for responding to the FWH Tube Leak (Event 2) will be performed following the power reduction to 87% (Event 3) and are scripted on Pages 17 and 18. LICENSEE: Scenario 2 revised to address comments. See Rev. 1 for changes. Scenario Event determined to be Satisfactory based on Chief Examiner evaluation.		
3 Rapid Downpower to 87%							E S	NRC: Question: approximately how long is the power reduction from 100% to 87% expected to take? LICENSEE: With a ramp rate of 3% / min, power reduced to 87% within 5 minutes (once the downpower is commenced). Scenario Event determined to be Satisfactory based on Chief Examiner evaluation.		

Form 2.3-3 Operating Test Review Worksheet (Scenarios)

Facility: Millston	e 3	S	Scenario: 2				Exam Date: September 11, 2023		
1 Scenario		1	2 nario event errors	8	1	3	4		
Event ID/Name:	Realism/ Credibility	Performand Standards		Critical Task	TS	U/E/S	Explanation		
-4- Diesel Driven Fire Pump Inoperable (TS)						E S	Event 4 not required. Remove the TS Only Event for the Diesel Driven Fire Pump Inoperable, and script the second required TS into the "Isolable RCS Leak Inside Containment" Event below (i.e., applicable TS would be TS 3.4.6.2 for Operational Leakage). Renumber the Events accordingly. LICENSEE: Scenario 2 revised to address comments.		
5-4 Isolable RCS Leak Inside Containment (TS)						E S	Script Operational Leakage TS 3.4.6.2 in this Event (see comment in Event 4 above). Exam Overview Summary on Page 4 states that an isolable leak develops on the Charging System line inside Containment. Revise this information to more clearly state that the leak is from the Normal Letdown Line. LICENSEE: Scenario 2 revised to address comments. Scenario Event determined to be Satisfactory based on Chief Examiner evaluation.		

Form 2.3-3 Operating Test Review Worksheet (Scenarios)

Facility: Millston	e 3 Scenario: 2 E							Exam Date: September 11, 2023		
1 Scenario Event ID/Name:	Realism/	Perform	ance	2 io event errors Verifiable	Critical Task	TS	3 U/E/S	4 Explanation		
6-5 Loss of All AC Power / 'A' EDG Trips / Bus Differential on 'B' Train 4KV Bus / Recovery with SBO Diesel (CT2)	Credibility	Standa	ilus	Actions			E S	NRC: CT2 for Isolating RCP Seal Injection before Starting a Charging Pump needs to be clearly identified as such on Pages 28, 36, and 39 so that it stands out. Appears that the restoration of AC Power in Scenario 2, Event 6 (i.e., repowering Bus 34C from the SBO Diesel), should be a stand-alone CT given the SBO condition. Need to discuss this further. LICENSEE: Scenario 2 revised to address comments. See Rev. 1 for changes. Scenario Event determined to be Satisfactory based on Chief Examiner evaluation.		
7-6 Turbine Driven Aux Feed Pump Fails to Start (CT1)							E S	CT1 statement on both Form 3.3-1 and the CT Sheet needs to be revised to read as follows: "Establish AFW flow during SBO before the levels in three SGs lower below 21% Wide Range level indication (approach of SG Dry Out conditions)." Looking for consistency here. CT1 for establishing AFW flow with the TDAFW Pump needs to be clearly identified as such on Page 27 so that it stands out. LICENSEE: Scenario 2 revised to address comments. See Rev. 1 for changes. Scenario Event determined to be Satisfactory based on Chief Examiner evaluation.		

• Include the following statement at the bottom of Form 3.3-1:

NUREG 1021, ES-2.3, Form 2.3-2, Target Quantitative Attributes per Scenario Section, specifies a Target Range of "1-2" for Table item #4, "EOPs

entered/requiring substantive actions." A detailed review of Scenario #2 confirms that the scenario is built to directly transition from E-0 to ECA-0.0, "Loss of All AC Power," and that no Westinghouse Primary EOP (E-1, E-2, or E-3) will be entered/used. Consequently, a value of "0" will be assigned for Table Attribute Item 4 on Form 2.3-2, which is outside of the specified Target Range.

NUREG-1021, ES-3.3, Section B.2.g, "EOP Operating Procedures Used," states "Moreover, the primary scram response procedure that serves as the entry point for the EOPs is not counted." A value of "0" for Table Attribute Item 4 on Form 2.3-2 was determined to be acceptable by the Chief Examiner on the basis that: (a) Scenario #2 is a complex scenario that exercises two Contingency EOP Procedures; ECA-0.0 for the "Loss of All AC Power," and ECA-0.3 for the "Loss of All AC Power - Recovery With the SBO Diesel," (b) ECA-0.0 requires the use of alternate decision paths and prioritization of actions within the EOPs to mitigate the Loss of All AC Power prior to the Loss of Secondary Heat Sink conditions, and (c) ECA-0.0 and ECA-0.3 both have measurable actions that must be taken by the crew.

Form 2.3-3 Operating Test Review Worksheet (Scenarios)

Facility: Millstone	3		Sce	Scenario: 3				Exam Date: September 11, 2023		
1 Scenario		(Scenar	2 io event errors	3		3	4		
Event ID/Name:	Realism/ Credibility	Perform Standa		Verifiable Actions	Critical Task	TS	U/E/S	Explanation		
1 Shift SG Blowdown Tank Vent Path from Atmosphere to the Fourth Point Feedwater Heaters							S			
2 'B' SG Feed Isolation Valve Has Low Accumulator Pressure (TS)							S			
3 RCS Temperature Channel 1 Fails High Causing Control Rods to Auto Insert (TS)							E S	Exam Overview Summary on Page 4 for this event does not identify the malfunction, only the consequences and the crew's response. Enhance the description by providing this information. CICENSEE: Scenario 3 revised to address comments. See Rev. 1 for changes. Scenario Event determined to be Satisfactory based on Chief Examiner evaluation.		
4 'B' Heater Drain Pump Trips, Rapid Down Power Required							S			

Form 2.3-3 Operating Test Review Worksheet (Scenarios)

Facility: Millstone	illstone 3 Scenario: 3 E						Date: September 11, 2023
1 Scenario		Scena	2 ario event errors	3		3	4
Event ID/Name:	Realism/ Credibility	Performance Standards	Verifiable Actions	Critical Task	TS	U/E/S	Explanation
5 Loss of Offsite Power Resulting in Reactor Trip / Failure of 'A' EDG Output Breaker to Auto Close (CT1)						E S	 Exam Overview Summary on Page 4 states "On the reactor trip, there is a station blackout caused from the failure of the 'A' EDG Output Breaker to auto close and a catastrophic failure of the 'B' EDG (time delay of 40 seconds)." Revise this information to more correctly state that there is the potential for an SBO depending on the timeliness of the crew to close the 'A' EDG Output Breaker due to the 40 second time delay for the 'B' EDG failure. CT1 for energizing at least one AC Emergency Bus before placing safeguards equipment switches in the pull-to-lock position, needs to be clearly identified as such on Page 24 so that it stands out. LICENSEE: Scenario 3 revised to address comments. See Rev. 1 for changes. Scenario Event determined to be Satisfactory based on Chief Examiner evaluation.

Form 2.3-3 Operating Test Review Worksheet (Scenarios)

Facility: Millstone	e 3	Sco	enario: 3			Exam	Date: September 11, 2023
1 Scenario		Scena	2 rio event errors	S		3	4
Event ID/Name:	Realism/ Credibility	Performance Standards	Verifiable Actions	Critical Task	TS	U/E/S	Explanation
6 SBLOCA Develops in ES-0.1 Requiring Manual SI / Failure of 'A' Charging Pump to Auto Start						E S	 NRC: Designate the SBLOCA as a Major Event (Event 6). Assign 'M' for all positions (RO, BOP, SRO). Failure of the 'A' Charging Pump to Auto Start is a Post-EOP Entry Malfunction, and as such is a standalone event. Make the 'A' Charging Pump Malfunction Event 7 and renumber Event 7 as Event 8. Ensure Form 3.4-1 is appropriately updated to reflect this change. LICENSEE: Scenario 3 revised to address comments. See Rev. 1 for changes. Last bullet, Forms 3.4-1 revised accordingly. Scenario Event 6 split into Events 6 and 7 as described above. Events 6 and 7 determined to be Satisfactory based on Chief Examiner evaluation.

Form 2.3-3 Operating Test Review Worksheet (Scenarios)

Facility: Millstone	3	Sce	nario: 3			Exam	Date: September 11, 2023
1 Scenario Event ID/Name:	Realism/	Scenar Performance Standards	2 io event errors Verifiable	Critical Task	TS	3 U/E/S	4 Explanation
7 LBLOCA / Establish CTMT Spray Using an Alternate Alignment in FR-Z.1 (RSS Pump) (CT2)	Credibility	Standards	Actions			E S	 NRC: Relabel as Event 8; see Event 6 comment above. Ensure Form 3.4-1 is appropriately updated to reflect this change. CT2 statement on both Form 3.3-1 and the CT Sheet needs to be revised to read as follows: "Manually actuate Containment Spray before either of the following two conditions occur: (1) FR-Z.1 Red Path condition is met OR (2) transition out of FR-Z.1 is made." Looking for consistency here. CT2 for actuating Containment Spray needs to be clearly identified as such on Page 35 so that it stands out. LICENSEE: Scenario 3 revised to address comments. See Rev. 1 for changes. Second bullet, Forms 3.4-1 revised accordingly. Scenario Event relabeled as Event 8. Event 8 determined to be Satisfactory based on Chief Examiner evaluation.

Form 2.3-3 Operating Test Review Worksheet (Scenarios)

Facility: Millstone	3	Sce	nario: 4			Exam l	Date: September 11, 2023
1 Scenario		Scenar	2 io event errors)		3	4
Event ID/Name:	Realism/ Credibility	Performance Standards	Verifiable Actions	Critical Task	TS	U/E/S	Explanation
1 Restore Rod Control and Steam Dumps Systems IAW OP 3203, "Plant Startup" / Raise Reactor Power to 30%						Ø	
2 Letdown Heat Exchanger Outlet Temperature Instrument Fails Low						S	
3 SI Pump 'A' Cooling Pump Inoperable (TS)						Ø	
4 'D' SG Level Instrument Drifts Low & Fails As-Is (TS)						S	
5 'A' SG Develops a 30 GPM Tube Leak						S	

Form 2.3-3 Operating Test Review Worksheet (Scenarios)

Facility: Millstone	3	Sce	nario: 4	Exam	Date: September 11, 2023		
1			. 2				
Scenario		Scenar	io event errors	<u> </u>		3	4
Event ID/Name:	Realism/ Credibility	Performance Standards	Verifiable Actions	Critical Task	TS	U/E/S	Explanation
							NRC:
							CT1 statement on both Form 3.3-1 <u>and</u> the CT Sheet needs to be revised to read as follows:
							"Isolate feedwater flow into and steam flow from the ruptured SG before transition to ECA-3.1."
							For CT1, include the DP value (250 psi) in the Scenario Guide for which a Loss of Differential Pressure between the Ruptured and Intact SGs would require transition to ECA-3.1.
							CT1 steps for isolating the feedwater flow into and the steam flow from the ruptured SG need to be clearly identified as such on Pages 30 and 31 so that they stand out.
6 'A' SG Tube Leak Becomes a 300 GPM Rupture						E	Scenario Guide is somewhat confusing in this regard. For example, the Expected Response column information for E-3, Step 3, (Page 31) that is associated with Event 8 states "Once this is done, this completes the step to isolate (steam / feed) the ruptured SG." This is inaccurate, as subsequent steps in the Scenario Guide address Isolating Feedwater Flow. Enhance the Scenario Guide such that these CT1 items are clearly addressed.
(CT1) (CT2)						S	Are there any PEO actions associated with SG isolation that have to be completed in the field as Part of Attachment A that require the Control Room to call, and then receive confirmation (from the Booth) of valve closure? [Step 3i RNO i.3; Scenario Guide Page 31]
							CT2 statement on both Form 3.3-1 <u>and</u> the CT Sheet needs to be revised to read as follows:
							"Control initial RCS cooldown to prevent either of the following: (1) transition to FR-P.1 on Orange Path condition OR (2) transition to ECA-3.1."
							Looking for consistency here.
							CT2 steps for controlling RCS cooldown need to be clearly identified as such on Pages 33 and 34 so that they stand out.
							LICENSEE: Scenario 4 revised to address comments. See Rev. 1 for changes.
			F	age 26 of 28			Scenario Event determined to be Satisfactory based on Chief Examiner evaluation.

Form 2.3-3 Operating Test Review Worksheet (Scenarios)

Facility: Millstone 3			Scenario: 4			Exam Date: September 11, 2023	
1 Scenario Event ID/Name:	2 Scenario event errors					3	4
	Realism/ Credibility	Performance Standards	Verifiable Actions	Critical Task	TS	U/E/S	Explanation
7 'B' SI Pump Fails to Auto Start							NRC: • Should be a Manual Control Event (C, MC) for the RO. LICENSEE: • Scenario 4 revised to address comments. See Rev. 1 for changes. • Forms 3.4-1 revised accordingly. Scenario Event determined to be Satisfactory based on Chief Examiner evaluation.
8 'A' MSIV Stuck Open Requiring Alternate Isolation of 'A' SG (CT1)						S	

Form 2.3-3 Instructions for Completing the Scenario Table

- 1. For each scenario, enter the scenario event names and descriptions.
- 2. Review the individual events contained in each scenario, and identify and mark event errors:
 - The scenario guide event description is not realistic/credible—unsatisfactory (U).
 - The scenario guide event description lacks adequate crew/operator performance standards—needs enhancement (E).
 - The scenario guide event description lacks verifiable actions for a credited normal event, reactivity event instrument/component malfunction, or technical specification (TS) event (or a combination of these) (U).
 - The scenario guide event description incorrectly designates an event as a critical task (i.e., a noncritical task labeled as critical or a critical task labeled as noncritical). This includes critical tasks that do not meet the critical task criteria (i.e., the critical task does not have a measurable performance standard) (U).
 - The scenario guide event description incorrectly designates entry into TS actions when not required or does not designate entry into TS actions when required (U).
- 3. Based on the outcome in step 2, mark the scenario event as unsatisfactory (U), satisfactory (S), or needs enhancements (E). An event is (U) if it has one or more (U) errors as determined in step 2. Examples of enhancements include formatting, spelling, or other minor changes.
- 4. Briefly describe any scenario event determined to be unsatisfactory (U) or needing enhancement (E). Save initial review comments and detail subsequent comment resolution so that each exam bound scenario event is marked by a satisfactory (S) resolution on this form.