Form 2.3-3 Operating Test Review Worksheet (JPMs)

Facility: Clinton												Exam Date: 07/17/2023
1	2	3	4	5 JPM Errors							6	7
JPM # or Title	Type (S/P/A)	ALT (Y/N)	LOD (1–5)	LOD	REF	IC	TSK	CUE	CS	TL	U/E/S	Explanation
GENERIC JPM COMMENT (FREE LOOK)	N/A	N/A	N/A								~~E~~ S	NRC: • Include a statement (somewhere in the beginning of the examiner's copy of the Initial Conditions and Initiating Cue) directing the examiner what (marked-up copies of procedures, forms, etc.) to provide the applicant and when (e.g. after they indicate obtaining the correct procedure). o This is especially important for Alternate Path JPMs so alternate path or "contingency" procedures aren't inadvertently provided to the applicants. Response: All JPM packets include a blue "hot sheet" that details what to give the candidate and when.

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Facility: Clinton												Exam Date: 07/17/2023
1 JPM # or Title	2 Type (S/P/A)	3 ALT (Y/N)	4 LOD (1–5)	5 JPM Errors							6 U/E/S	7 Explanation
				LOD	REF	IC	TSK	CUE	CS	TL		
JPM A1 (RO/CO1) Perform Suppression Pool Temperature Log	A	N/A	3								~~E~~ S	NRC: • Include a statement at the end of the Initiating Cue telling the applicant to inform the CRS when they have completed their first round of data gathering and verification per the procedure. • Revise the JPM Task Standard to read as follows: "The examinee submits a completed CPS 9000.05D001 Suppression Pool Temperature Log Attachment 1 Data Sheet with values within Answer Key acceptable values." • Separate the procedure steps with a separate JPM step. o JPM Step 1 = Procedure Step 5.1 (non-critical step). o JPM Step 2 = Procedure Step 5.2 (critical step). o Etc. • Is it possible to change some of the values listed for 1TR-CM017 so that the average of those values is NOT EQUAL TO the average displayed on 1TR-CM018? o Doing so will provide a more effective evaluation of the applicant's ability to successfully perform the task. o If so, this will change the result for procedure step 8.1.4. • Provide an "Acceptable Range" for calculation of the average (procedure step 8.1.4). o One option to develop the range is to make it a "subset of" (within) a max/min error range. o Eg. (1) Assume all values are truncated to whole numbers, calculate the average, consider that a "worst-case" low value. (2) Assume all values are rounded up, calculate the average, consider that a "worst-case" high value. (3) Establish an "Acceptable Range" that is within those two values. Response: Initiating Cue modified as above. Task standard revised to the above. JPM steps changed to reflect the above. Changed data on 1TR-CM017 such that the average of those values is now 91.89ºF. Acceptable ranges were given for Step 8.1.4, calculated as follows: -Low value was obtained using values truncated to whole numbers. -High value was obtained using "normal" rounding to whole numbers. -Average Suppression Pool Temperature range was calculated using low value for bottom of range and high value for top of range.

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Facility: Clinton												Exam Date: 07/17/2023
1 JPM # or Title	2 Type (S/P/A)	3 ALT (Y/N)	4 LOD (1–5)	5 JPM Errors LOD	REF	IC	TSK	CUE	CS	TL	6 U/E/S	7 Explanation
JPM A2 (RO/CO2) Determine Time to Boil and Time to Core Recovery	A	N/A	3								~~E~~ S	NRC: • Provide the referenced curves (Time to Boil and Time to Core Uncovery) the applicants will use to complete the JPM. o This will allow adequate evaluation of the task and the acceptable ranges given. • Revise the JPM Task Standard to read as follows: "The examinee determines the values for time to boil and the time the core would be uncovered that are within the acceptable ranges given in the answer key." • Do attachment 9 and 15 (sheet 1 or 2 C1R17) have places to document the determinations (time to boil/core uncovery)? o If not, provide a spot on the JPM Cue Sheet for consistent presentation of applicant answers. Response: Attachments 9 and 15 have been added to the JPM. Task standard revised to the above. There is no place for data recording on Attachments 9 or 15. Added blanks to fill in for the data requested in the body of the JPM.
JPM A3 (RO/EC) Print Reading (Identify Piping Leak Isolation Points)	A	N/A	3								~~E~~ S	NRC: • Provide a marked up copy of the print showing the leak location and isolation valves that satisfactorily complete the JPM. o This will allow adequate evaluation of the task. • Add "minimum" to the Initiating Cue: "… The CRS directs you to determine the minimum isolation points to stop the fire protection leak…" • Revise the JPM Task Standard to read as follows: "The examinee determines the correct valves to isolate the Fire Protection piping leak (1FP048, 1FP133, and 1FP164), and subsequently moves the boundary to 1FP161 and 1FP163 when informed 1FP164 has a disengaged seat and will not isolate." Response: Marked up copy of the print showing the leak location and isolation valves added to the JPM. Revised initiated cue to "The CRS directs you to determine the minimum isolation points…" Revised Task Standard as above. NRC (Validation Comment): • Make JPM Step 2 Non-Critical. Response: JPM Step 2 made Non-Critical

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Facility: Clinton												Exam Date: 07/17/2023
1	2	3	4	5 JPM Errors							6	7
JPM # or Title	Type (S/P/A)	ALT (Y/N)	LOD (1–5)	LOD	REF	IC	TSK	CUE	CS	TL	U/E/S	Explanation
JPM A4 (RO/RC) Reactor Water Clean Up (RT) Pump Shutdown Dose Calculation	A	N/A	3								~~E~~ S	NRC: • Provide the survey maps the applicants will use to complete the JPM. ○ This will allow adequate evaluation of the task. • Add "correct values for" to the JPM Task Standard: "The examinee determines the correct values for total dose and margin to the annual administrative dose limit for each operator." Response: Survey maps are included in the JPM, attachments 1-4. Revised Task Standard as above. NRC (Validation Comment): • Delete "a pre-job brief of" from the Initiating Cue. • Change the validation time to 15 minutes. Response: Deleted "a pre-job brief of" from Initiating Cue. Changed validation time to 15 minutes.

Form 2.3-3 Operating Test Review Worksheet (JPMs)

Facility: Clinton												Exam Date: 07/17/2023
1	2	3	4	5 JPM Errors							6	7
JPM # or Title	Type (S/P/A)	ALT (Y/N)	LOD (1–5)	LOD	REF	IC	TSK	CUE	CS	TL	U/E/S	Explanation
JPM A5 (SRO/CO1) Reportability Determination (FREE LOOK)	A	N/A	2								~~E~~ S	NRC: • For administration of the JPM, does Clinton Power Station have a "Reportability Manual" that contains all "reportability-related" procedures (including LS-AA-1020 and LS-AA-1130) or an "LS-AA" procedure binder (i.e. allowing for assessment of "finding the correct procedure")? o If this JPM is planned to be administered all at once in a classroom, will there be at least 3 copies available for each SRO applicant? • Revise to include an optional route to the same decision: LS-AA-1020, Reportability Tables and Decision Trees. An applicant could also go to that procedure first when directed to "Determine the Reportability requirement(s)" in the initiating cue. o LS-AA-1020 will need to be added as a reference in the JPM. • Make a note to enter a procedure change request for LS-AA-1020: The CFR reference is incorrect – It lists 10CFR26.77(d) but SHOULD BE 26.77(c) – To be initiated/requested AFTER THE EXAM so as not to compromise Exam Security. Response: CPS has a full reportability manual including all procedures above. Currently only one copy exists, but if determine its feasible to give this JPM in a group setting, I will have more printed. JPM revised to include optional path above. Added PCIR for LS-AA-1020 to my post-project to do list. NRC: • Revise the JPM Task Standard to read as follows: "The examinee determines the event is REPORTABLE and that IMMEDIATE telephone and written notifications are required." Response: Revised JPM Task Standard as above.
JPM A6 (SRO/CO2) Verify Conditions for Mode 1 Entry	A	N/A	3								~~E~~ S	NRC: • Simplify the JPM Task Standard: "The examinee determines that two restraints exist for entering MODE 2 ..." • Add a set of "normal" plant parameters for Mode 4 (RPV Level, Pressure, and Temperature). o This should allow remove of the cue in JPM Step 1 about RPV pressure being 0 psig. Response: Revised JPM Task Standard as above. "Current" plant conditions added to Initial Conditions and Step 1 note removed.

Form 2.3-3 Operating Test Review Worksheet (JPMs)

Facility: Clinton												Exam Date: 07/17/2023
1	2	3	4	5 JPM Errors							6	7
JPM # or Title	Type (S/P/A)	ALT (Y/N)	LOD (1–5)	LOD	REF	IC	TSK	CUE	CS	TL	U/E/S	Explanation
JPM A7 (SRO/EC) Determine Post-Maintenance Testing Requirements	A	N/A	4								~~E~~ S	NRC: • Delete the first sentence from the JPM Task Standard. ○ If determining "that NOTE (2) applies" is the only way to get the right answer, then the statement is redundant to the 2nd sentence … if not, then it should not be a critical step. Response: Revised JPM Task Standard as above. NRC (Validation Comment): • Give the print at the beginning of the JPM. Response: Print given at the beginning of the JPM.

Form 2.3-3 Operating Test Review Worksheet (JPMs)

Facility: Clinton												Exam Date: 07/17/2023
1	2	3	4	5 JPM Errors							6	7
JPM # or Title	Type (S/P/A)	ALT (Y/N)	LOD (1–5)	LOD	REF	IC	TSK	CUE	CS	TL	U/E/S	Explanation
JPM A8 (SRO/RC) High Radiation Task Extension	A	N/A	3								~~E~~ S	NRC: • Revise the JPM Task Standard to read as follows: "The examinee determines Robert is the appropriate person for the task and completes an accurate dose extension form." • Provide a copy of RP-AA-203 and Attachment 1. o This will allow adequate evaluation of the task. • Add a note for JPM Step 1 that ONLY Robert's TEDE calculation is Critical. o The math for the other individuals is not critical UNLESS the math error is significant enough to cause the applicant to determine that someone other than Robert should perform the task (which would result in failure of Critical JPM Step 2). • Is the cue before JPM Step 5 ("… that RP has requested that you complete Section 1 of RP-AA-203 Attachment 1") necessary? o Do the steps in RP-AA-203 (and/or Att. 1) not direct the performer to fill out Section 1 to authorize extension of an administrative dose limit? • Add a note for JPM Step 5 that ONLY Lines 1, 2, and 3 are Critical. • Provide an Attachment 1 "answer key" for the examiners. Response: Revised JPM Task Standard as above. RP-AA-203 will be provided to both NRC and examinee. Added note after step 1 as above. Deleted cue above Step 5. Added note below Step 5. Added filled-out "key" Attachment 1 to JPM. NRC (Validation Comment): • Remove the subsequent cue from the "blue sheet" (we expect the applicants to use the Attachment 1 included in the procedure). • Revise the initiating cue to read "The Shift Manager directs you to select the appropriate person and ensure compliance with RP-AA-203, Exposure Control and Authorization." (or something to that effect). Response: Removed the subsequent cue from Hot Sheet. Revised initiating cue to read "The Shift Manager directs you to select the appropriate person and ensure compliance with RP-AA-203, Exposure Control and Authorization."

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Facility: Clinton												Exam Date: 07/17/2023
1	2	3	4	5 JPM Errors							6	7
JPM # or Title	Type (S/P/A)	ALT (Y/N)	LOD (1–5)	LOD	REF	IC	TSK	CUE	CS	TL	U/E/S	Explanation
JPM A9 (SRO/EP) EAL Determination with NARS	A	N/A	3								~~E~~ S	NRC: • Revise the Initiating Cue to read "Assess the plant conditions and, if necessary, classify the event and prepare applicable Notification paperwork." • Revise the JPM Task Standard to read "The examinee declares an Unusual Event within 15 minutes and accurately completes the NARS form within 13 minutes of their declaration time." • Add the following (or something like it) to the end of the "Standard" block for JPM Step 1: o JPM Start Time: _____ o Time Event Classified: _____ • Separate the 2 cues before JPM Step 3: o CUE If meteorological data is requested, provide the following: Wind is 273 degrees and 14 mph. o CUE If a verifier is requested, state: "A verifier is not available." • Add the following (or something like it) to the end of the "Standard" block for JPM Step 3: o Time Event Classified: _____ o Time NARS Form Completed: _____ Response: Revised Initiating Cue as above. Revised Task Standard as above. Added blanks for times in Step 1. Separated CUE blocks above Step 3 as above. Added blanks for times in Step 3. NRC (Validation Comment): • Revise the Initial Conditions to add "… the RPs took an air sample and no detectable radiation was found" (or something to that effect). • Add a NARS form "answer key". Response: Revised the Initial Conditions to add "an air sample was taken and no detectable radiation was found". Added a NARS form "answer key".

JPM S1 Control Rod Scram Time Testing Restoration **(ALT PATH)**	S	Y	3								~~E~~ S	NRC: • Revise the JPM Task Standard to read "The examinee uses continuous withdraw to move control rod 32-37 to position 48, recognizes the Rod Control and Information System (RC&IS) failure, lowers control rod drive differential pressure to <75 psid, and continues moving control rod 32-37 toward position 48." • Move "if requested" to the beginning of the sentence of the CUE directly before JPM Step 4 – "If requested, provide …" • Add a Critical JPM Step 5 to restore control rod 32-37 to position 48. o Include a NOTE that movement in the correct direction satisfies the critical nature of the step. • Revise the final CUE to read "When the examinee has control rod 32-37 moving toward position 48 (or after the rod is at position 48), inform the examinee that the JPM is complete". Response: Revised Task Standard to as above. Revised cue as above. Added Critical JPM Step 5 as above, including NOTE after. Revised final CUE as above. NRC (Validation Comment): • Procedure 3304.02 should be pre-place kept through step 8.1.3.2. • Re-work the cue(s) and flow before JPM Step 04 (the RPIS lockout rod block must be reset in order for them to move rods). • Add appropriate step(s) to make the reset happen. • Add appropriate step(s) to restore CRD drive water D/P. • JPM Step 5 should be marked critical. • There are 2 options available to successfully complete JPM Step 5. • There may be a simulator issue: Withdrew the rod, RCIS Locked Up, Lowered Drive D/P, Reset the RCIS Lockup Rod Block – and the rod "moved out" 1 more notch on its own. Response: Procedure 3304.02 is pre-place kept through steps 8.1.3 and 8.1.4 as appropriate – submitting the procedure as part of the post-OSV package. Re-worked the cue(s) and flow surrounding JPM Step 04 to reset the rod block. Added step(s) to make the reset happen. Added appropriate step(s) to restore CRD drive water D/P. JPM Step 5 is marked critical. Regarding the rod "moving out" 1 more notch on its own following RCIS reset: this happens regardless of which rod is selected and which notch it is withdrawn to. We attempted to lock RCIS at 28, 29, 31, and 32 seconds – this phenomenon occurs each time, to varying degrees. Per the Facility Rep, this would also happen in the actual plant due to a small amount of rod "coasting" following the system lockup and then re-syncing upon reset. Added a cue to the JPM to inform the examinee this is normal.

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1 JPM # or Title	2 Type (S/P/A)	3 ALT (Y/N)	4 LOD (1–5)	5 JPM Errors							6 U/E/S	7 Explanation
				LOD	REF	IC	TSK	CUE	CS	TL		
JPM S2 Initiate Low Pressure ECCS and Maximize Injection **(ALT PATH)** ***NEW*** **JPM S2** RCIC Start With Initiation Signal Present **(ALT PATH)**	S	Y	2								~~E~~ S	NRC: • Revise the JPM Task Standard to read "The examinee initiates Low Pressure ECCS Systems, recognizes equipment failures, and establishes RPV level above Level 3 using RHR through Shutdown Cooling." o Is realignment of RHR through Shutdown Cooling the only success path? • Is Level 3 = TAF? If so, then keep the terminology consistent … e.g. "Level 3 (TAF)" within the Initiating Cue and Task Standard. Response: Revised Task Standard as above. Realignment of RHR through Shutdown Cooling is the only success path given the initial conditions. Level 3 is not TAF. TAF is below Level 1. The operator must restore level to above Level 3 from TAF to complete the JPM. NRC (Validation Comment): • The JPM doesn't work as intended and there is too much to change. Therefore, replace the JPM with another one appropriate for the safety function. • No comments on the new replacement JPM. Response: Submitting replacement JPM as part of OSV package for record keeping purposes. NRC: • New JPM evaluated as satisfactory.
JPM S3 Main Turbine Control Valve Testing	S	N	2								~~E~~ S	NRC: • Revise the JPM Task Standard to read "The examinee successfully completes on-line testing of Main Turbine Control Valves (CVs) #1 and #2." Response: Revised Task Standard as above. NRC (Validation Comment): • Change Initial Conditions to comply with the procedure requirement to be less than 83% (revise JPM sheets accordingly). • Change the validation time to 10 minutes. Response: Changed Initial Conditions to comply with the procedure requirement to be less than 83% and revised JPM sheets to reflect that. Changed validation time to 10 minutes.

Form 2.3-3 Operating Test Review Worksheet (JPMs)

Facility: Clinton												Exam Date: 07/17/2023
1 JPM # or Title	2 Type (S/P/A)	3 ALT (Y/N)	4 LOD (1–5)	5 JPM Errors							6 U/E/S	7 Explanation
				LOD	REF	IC	TSK	CUE	CS	TL		
JPM S4 Turning Gear Oil Pump Online Testing	S	N	3								~~E~~ S	NRC: • Revise the JPM Task Standard to read "The examinee successfully completes on-line testing of the Turning Gear Oil Pump (1TO04P)." Response: Revised Task Standard as above. NRC (Validation Comment): • Change the Initial Conditions to include a statement about all precautions and limitations being completed … starting at the applicable step. • Ensure that the applicant copy of the procedure has the precautions and limitations appropriately marked up as being completed. • Have the 2 alarms pre-flagged as expected alarms. Response: Changed Initial Conditions to include a statement about all precautions and limitations being completed. Applicant copy of the procedure has precautions and limitations appropriately marked up. Pre-flagged 2 expected alarms in setup.
JPM S5 Place RHR in Suppression Pool Cooling **(ALT PATH)**	S	Y	3								~~E~~ S	NRC: • Revise the Initial Conditions and Initiating Cue to indicate that Suppression Pool Cooling must be placed in service to support "critical path" RCIC Post Maintenance Testing. ○ That the work is "critical path" to restore RCIC before the Tech. Spec. Action time expires after an unplanned extended system outage – The intent is to create a reasonable "sense of urgency" (making applicants more likely to proactively, without cueing, suggest using RHR Loop 'B'). ○ The Initiating Cue should direct Suppression Pool Cooling and that RHR Loop 'A' is "preferred" (instead of the more restrictive direction to "Place RHR Loop 'A' in Suppression Pool Cooling" … again, making applicants more likely to proactively, without cueing, suggest using RHR Loop 'B'). ○ Based on the above, the 2nd sentence in the CUE after JPM Step 4 should be deleted. • Revise the JPM Task Standard to read "The examinee attempts to initiate Suppression Pool Cooling with RHR Loop 'A', determines that 1E12-F024A will not operate, then successfully initiates Suppression Pool Cooling with RHR Loop 'B'." • Should JPM Steps 11 & 12 be designated as Critical Steps? ○ Do those steps establish cooling? Response: Revised Initial Conditions and Initiating Cue as above. Deleted second sentence in CUE following Step 4. Revised Task Standard as above. These steps establish cooling; designated as Critical.

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Facility: Clinton												Exam Date: 07/17/2023
1 JPM # or Title	2 Type (S/P/A)	3 ALT (Y/N)	4 LOD (1–5)	5 JPM Errors							6 U/E/S	7 Explanation
				LOD	REF	IC	TSK	CUE	CS	TL		
JPM S6 Transfer 4160V Bus 1B1 from Main to Reserve Source **(ALT PATH)**	S	Y	2								~~E~~ S	NRC: • Revise the JPM Task Standard to read "The examinee attempts to transfer 4160V Bus 1B1 from the RAT to the ERAT, recognizes the failure of Bus 1B1 Res Bkr to close, and properly returns the 4160V system to the initial state WITHOUT deenergizing Bus 1B1." • Separate the 2nd part (…turns the sync switch to OFF before releasing …) of JPM Step 5 out (into a new Critical JPM Step 6). Response: Revised Task Standard as above. Changed Step 5 into 2 separate Critical steps.
JPM S7 Reset Reactor Scram	S	N	3								~~E~~ S	NRC: • Revise the JPM Task Standard to read "The examinee resets the scram and verifies all control rods settle at position 00." • JPM Step 2 should be designated as non-critical. • End the JPM after Step 7 with a CUE that another operator will complete the rest of the procedure. Response: Revised Task Standard as above. Step 2 designated non-critical. JPM ended after Step 7 with appropriate cue. NRC (Validation Comment): • Change the Initial Conditions to have set point set down reset and reactor level in the 30" to 39" band. Response: Changed the Initial Conditions to have set point set down reset and reactor level in the 30" to 39" band.
JPM S8 Startup Continuous Containment Purge in Filtered Mode **(RO Only)**	S	N	3								~~E~~ S	NRC: • Revise the JPM Task Standard to read "The examinee properly shifts the Continuous Containment Purge (CCP) System from Unfiltered Mode to Filtered Mode." • End the JPM after Step 13 with a CUE that another operator will complete the rest of the procedure. Response: Revised Task Standard as above. JPM ended after Step 13 with appropriate cue.

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1 JPM # or Title	2 Type (S/P/A)	3 ALT (Y/N)	4 LOD (1–5)	5 JPM Errors							6 U/E/S	7 Explanation
				LOD	REF	IC	TSK	CUE	CS	TL		
JPM P1 Energize ERAT MSC 1 (Manual Operation) (FREE LOOK)	P	N	2								~~E~~ S	NRC: • Should the cue before JPM Step 5 d say "ERAT Mechanically Switched Capacitor Breaker 1 indicates closed" instead of "is closed"? • JPM Step 5 (procedure step 8.3.1.5) states "VERIFY ERAT MSC 1 is ENERGIZED." How will the applicant perform this step? ○ Should the verification that ERAT MSC 1 is energized and the reporting of the condition to the CRS be separate steps? Response: Changed cue, and changed standard for procedure step 8.3.1.5 to "Operator locates and verifies red light on breaker hand switch is lit, and 0AP190E-VM, Voltage Meter (P3VM1) and determines voltage is rising." Made the final cues into separate steps. NRC: • Revise the JPM Task Standard to read as follows: "The examinee simulates manually energizing ERAT MSC 1." Response: Revised Task Standard as above. NRC (Validation Comment): • Work with the validation operator to ensure the task direction is clear about initial conditions. Response: Updated initial conditions.
JPM P2 Operate SRV From the Remote Shutdown Panel	P	N	3								~~E~~ S	NRC: • Revise the JPM Task Standard to read as follows: "The examinee lowers reactor pressure to < 700 psig using Safety/Relief Valves from the Remote Shutdown Panel, controls pressure within 500-700 psig, and does not exceed a 100 °F/hr cooldown rate." • Include the following note (or something like it) directly BEFORE "The critical task requirements are met by performing JPM steps 2 and 4 (Div 1 SRV Controls) or 3 and 4 (Div 2 SRV Controls) below." ○ While JPM Steps 2 and 3 are both designated Critical Steps, only one of the two steps needs to be completed correctly AND combined with Step 4 to satisfy the Task Standard. Response: Revised Task Standard as above. Note revised as above.

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1	2	3	4	5 JPM Errors							6	7
JPM # or Title	Type (S/P/A)	ALT (Y/N)	LOD (1–5)	LOD	REF	IC	TSK	CUE	CS	TL	U/E/S	Explanation
JPM P3 Manual and Redundant Initiation of the DG Rooms CO_2 System **(ALT PATH)**	P	Y	3								~~E~~ S	NRC: • Revise the JPM Task Standard to read as follows: "The examinee simulates manually initiating the DG1A Room CO2 System by opening the Master and Selector Pilot Valves." • Revise the DG Operator note in the cue to read "The DG operator reported the fire and confirmed that the DG1A Room has been evacuated." • Change JPM Step 5 to NOT CRITICAL. ○ The task standard is accomplished in JPM Step 4. Failing to return the Master and/or Selector Pilot Valve(s) to the closed position warrants a comment but not JPM failure. Response: Revised Task Standard as above. Revised Initial Conditions as above. Changed Step 5 to not critical.

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: Clinton			Scenario: 1			Exam Date: 07/17/2023	
1 Scenario Event ID/Name:	2 Scenario event errors					3 U/E/S	4 Explanation
	Realism/ Credibility	Performance Standards	Verifiable Actions	Critical Task	TS		
1 Shift Generator Stator Cooling (GC) Pumps						S	
2 EHC Temperature Controller Failure						S	
3 Raise Power with Rods to 62%						S	NRC (Validation Comment): • Add a list of rods that are expected to be moved. Response: Added.
4 Rod Drifts Outward						S	
5 Plant Service Water (WS) Pump A Trip, WS Pump C Fails to Auto Start						S	NRC (Validation Comment): • Fix the failure mechanism for the 1C WS pump (to ensure it starts when attempted). Response: Malfunction fixed and validated.
6 Hotwell Overflow Controller Failure						S	
7 Feedwater (FW) Pump B Trip, Recirc FCV A Fails to Move						S	
8 Inadvertent Group 1 Isolation / Partial ATWS / RCIS Lockup						S	NRC (Validation Comment): • On page 12 of 20 (2 of 3 for event #8), phrase the comment about RCIC to allow for the case in which the operators trip RCIC before the low reactor level start signal (and therefore they never see that it would have tripped). Response: RCIC response updated.
9 Reactor Water Cleanup System Fails to Isolate on SLC Pump Start						S	NRC: • On the event summary table (page 2), delete “SRO” from the Event Type column (to be consistent in not showing that the SRO gets credit for the other I/C events also … it is assumed … only TS events need to be specifically called out for the SRO). Response: Deleted SRO.

Form 2.3-3 Operating Test Review Worksheet (Scenarios)

Facility: Clinton			Scenario: 2 (Free Look)			Exam Date: 07/17/2023	
1 Scenario Event ID/Name:	2 Scenario event errors					3 U/E/S	4 Explanation
	Realism/ Credibility	Performance Standards	Verifiable Actions	Critical Task	TS		
1 H_2 Mixing System Surveillance						S	NRC (Validation Comment): • Make D/W pressure be 0.8# for the initial set up. Response: D/W pressure set to 0.8# on initial set up.
2 1HG02CA Compressor Motor Failure (Shaft Break)						S	
3 VF Exhaust and Supply Fans Trip						S	NRC: • Is SBGT expected to automatically start (if not, this can't be counted as a Manual Control event for the BOP)? Response: SBGT is not expected to start automatically; however, VF should have. The direction given upon a failure of both VF trains is to start SBGT. This is taking a manual control of an automatic function. NRC (Validation Comment): • Delete references to EOP-8 entry (N/A now). • Verify proper LCO 3.3.6.2 required actions. • Delete the (Note 1) bullets in the SRO applicant's action block about declaring Secondary Containment inoperable. Response: Deleted references to EOP-8 entry. Verified proper LCO 3.3.6.2 required actions. Deleted Note 1 bullets in the SRO applicant's action block about declaring Secondary Containment inoperable.
4 Lower Reactor Power with Rods and Flow						S	NRC (Validation Comment): • Add a list of rods that are expected to be moved. Response: Added.
5 MDRFP Spurious Start						S	NRC (Validation Comment): • Have the simulator technician verify proper operation of the "stop lock" function for the MDRFP. • Add a step to account for the operator closing the min flow valve. Response: Simulator technician verified proper operation of the "stop lock" function for the MDRFP. Added step to account for the operator closing the min flow valve.
6 CRD High Temperature						S	
7 MC Pump B Coupling Failure						S	

Form 2.3-3 Operating Test Review Worksheet (Scenarios)

Facility: Clinton			Scenario: 2 (Free Look)			Exam Date: 07/17/2023	
1 Scenario Event ID/Name:	2 Scenario event errors					3 U/E/S	4 Explanation
	Realism/ Credibility	Performance Standards	Verifiable Actions	Critical Task	TS		
8 RAT B Feed to 1C1 Trip						S	NRC: • Is the crew not expected to attempt to energize Bus 1C1 via the ERAT feed and shutdown the 1C DG? Response: Not in the short term. This is an action that would eventually occur, but not before troubleshooting, briefs, informing site executives, and so on. Not expected to happen on the same shift. NRC (Validation Comment): • Delete this event (not necessary). Response: Deleted.
9 MSOP Trip / ESOP Fails to Auto Start						S	
10 Trip of CRD Pump 1B / Complete Loss of CRD / Scram						~~E~~ S	NRC: • For the detailed operator action sections of Events 10 & 11, split the actions into separate tables (one showing Event 10 actions and one showing the Event 11 description and actions). ○ ATC actions at "Recognizes failure of main turbine to trip" and beyond should move to Event 11. ○ BOP actions at "Dispatches an Equipment Operator to investigate SB & PC trouble)" and beyond should move to Event 11. ○ SRO actions at CT-2 "Directs trip the main turbine or close MSIVs to prevent an RCS cooldown in excess of 100°F in any one-hour period" and beyond should move to Event 11. Response: Done. NRC: • Change the CT-1 time note on page 16 match that of page 14 … both should say "MARK SECOND ACCUMULATOR ANNUNCIATOR TIME _____". Response: Corrected. NRC (Validation Comment): • Make the turnover say that 'A' CRD pump will be out for 2 days at least. • Make the operator report that the 'B' CRD pump failed catastrophically. Response: Updated turnover to state that 'A' CRD pump will be out for 3 days. Updated role play for the operator to report that the 'B' CRD pump failed catastrophically.

Form 2.3-3 Operating Test Review Worksheet (Scenarios)

Facility: Clinton			Scenario: 2 (Free Look)			Exam Date: 07/17/2023	
1 Scenario Event ID/Name:	2 Scenario event errors					3 U/E/S	4 Explanation
	Realism/ Credibility	Performance Standards	Verifiable Actions	Critical Task	TS		
11 Main Turbine Fails to Trip / A MSL MSIVs Fail to Close / TCV #2 Stuck at 25%						~~E~~ S	NRC: • In addition to items identified above for Event 10, the designation for the "Trip the main turbine …" for the ATC has a typo … It should say CT-2. ○ Is this definitely an ATC action at Clinton? Response: Done. Due to the layout of the panels, this is always an ATC action. NRC (Validation Comment): • During validation, the BOP tripped the main turbine (thereby taking the ATC's expected manual control action). Make sure that this does not adversely impact the required minimum malfunction credit for the applicants (the "bean count"). Response: Although the ATC should take this action, it is not credited in the Form 3.4-1 as a manual control action for the ATC.
N/A						~~E~~ S	NRC: • Item 9 of the Turnover sheet directs maintaining Reactor power at RTP … It should state that power is to be reduced to support surveillance testing (to align with the planned power reduction and reactivity manipulation in the scenario). Response: Agreed and corrected. NRC (Validation Comment): • On page 23 of 24, for CT-2, the note and bullet "e" do not match … "446 °F (390 psig)" vs. "449 °F (403 psig)". What is the correct bounding temperature/pressure? Response: 446 °F (390 psig) is correct. Scenario guide is corrected.

Form 2.3-3 Operating Test Review Worksheet (Scenarios)

Facility: Clinton			Scenario: 3			Exam Date: 07/17/2023	
1 Scenario Event ID/Name:	2 Scenario event errors					3 U/E/S	4 Explanation
	Realism/ Credibility	Performance Standards	Verifiable Actions	Critical Task	TS		
1 Swap Suppression Pool Cleanup / Transfer (SF) Pumps						S	NRC (Validation Comment): • Re-work the initial conditions to ensure proper set-up with respect to the FW-04C valve (needs to be open). Response: Initial conditions updated.
2 Raise Reactor Power with Rods						S	NRC (Validation Comment): • Add a list of rods that are expected to be moved. Response: Added.
3 Hotwell M/U Controller Failure						S	
4 RCIC Inadvertent Overspeed Trip						S	NRC (Validation Comment): • LCO 3.5.3 Required Action A.2 should say 14 days. Response: Corrected.
5 1C CCW Pump Trip						S	
6 RR 'A' High Stator Temperature / Emergency Loop Shutdown						S	
7 #1 SA Compressor Trip, Standby Fails to Auto Start				U		~~U~~ S	NRC: • Critical Task CT-1 (starting the standby SA compressor before the Rod Drift alarm is received) does not meet the criteria/intent of ES-3.3 C.1. ○ Starting the standby SA compressor to prevent rods from drifting in and a Scram is not restoring a safety function (it is preventing the initiation of the safety function – inserting negative reactivity to shutdown the reactor) … It is a plant transient that is part of the design basis. ○ Starting a standby, non-safety-related SA compressor (that failed to auto-start) is definitely not an "EOP-directed action" that is "essential to an event's overall mitigative strategy". ○ While the 3rd bullet of ES-3.3 C.1 does state that the "examples are not all-inclusive", starting a standby, non-safety-related SA compressor (that failed to auto-start) is hardly on the same level as "preventing … the initiation of emergency depressurization". Response: Agree and removed this CT, replaced with a new CT.

Form 2.3-3 Operating Test Review Worksheet (Scenarios)

Facility: Clinton			Scenario: 3			Exam Date: 07/17/2023	
1 Scenario Event ID/Name:	2 Scenario event errors					3 U/E/S	4 Explanation
	Realism/ Credibility	Performance Standards	Verifiable Actions	Critical Task	TS		
8 Steam Leak with Drywell Leak to Containment (Auto Containment Spray Defeated)						S	
9 HPCS Pump Fails to Auto Start / HPCS Injection Valve Fails to Auto Open						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.