

Facility:											Exam Date:	
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
RO Admins												
A1.1 Operations Daily Surveillances of Torus and Safety/Relief Valve Instrumentation	A	N/A	2		X		X				E	<p>NRC: (Requires Simulator to Perform)</p> <ol style="list-style-type: none"> Reference provided for QOS 0005-S01 is revision 199. JPM Guide indicates this should be revision 200 on JPM Validation Checklist page and also states revision 199 on JPM Summary page. 200 would appear to be correct revision number. Provide correct reference revision marked-up to candidate and fix JPM Guide. Reference provided QOS 0005-01 only includes odd pages so cannot see steps 30 and 31. Had to use old revision of procedure we had on file to evaluate the JPM. If JPM step 4 is going to be a critical step (reports discrepancies to the Unit Supervisor) then the Task Standard must include a statement that the discrepancies are reported to Unit Supervisor. <p>Licensee:</p> <ol style="list-style-type: none"> Incorporated. Rev. 200 is correct for when freeze occurred. Incorporated. Incorporated, step 4 is not a critical task. <p>NRC:</p> <ol style="list-style-type: none"> JPM is sat as revised.
A1.2 Verify SSMP Post Test Standby Lineup	A	N/A	2		X						E	<p>NRC: (Requires Simulator to Perform)</p> <ol style="list-style-type: none"> In the JPM Guide, on the Simulator Setup Instructions page, the marked-up copy of QCOS 2900-01 has step H.14.b marked as N/A. The attached reference is correctly filled out with step H.14.a N/A'd. Correct JPM Guide to say step H.14.a should be N/A, not step H.14.b.

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				LOD	REF	IC	TSK	CUE	CS	TL		
												2) Step H.22.a to verify FIC ½-2940-7 setpoint at 200 gpm: the standard references FIC 0-2940-7 – appears to be a unit reference typo. 3) On the applicant cue sheet, the initiating cue is indented unlike other JPM cue sheets. Licensee: 1) Incorporated. 2) Note: For this instance, the JPM is correct as the procedure calls out ½- and the controller in plant and SIM call out 00-. We have taken note of the discrepancy and will forward on after exam security is relaxed. Extent of condition many procedures and EPN's have this issue 00- vs ½-. The station is currently undergoing a massive effort to deconflict labeling issues throughout the plant. 3) Incorporate. NRC: 1) Added a picture of the simulator panel to allow for flexibility to perform this JPM in a classroom setting. 2) JPM is sat as revised.
A.2 Take a Control Rod Out-of-Service on the RWM	A	N/A	2				x				U S	NRC: (Requires Simulator to Perform) 1) This is NOT an administrative JPM per NUREG 1021 Rev 12 ES 3.2 Step B.3. Specifically, NUREG 1021 states, " <i>Administrative topic JPMs that take place in the simulator/plant can involve system or component manipulations that <u>do not change the configuration of the plant</u> (e.g., pulling up data on the plant computer, swapping the digital display to take different instrument readings).</i> " This JPM requires the applicant to make multiple system/component manipulations and is a system/simulator JPM. Licensee: 1) NRC agreed to not change JPM, plant configuration is not affected and will look at in

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				LOD	REF	IC	TSK	CUE	CS			TL
												validation week of April 22 week. Validated, good to go. NRC: 1) Evaluated JPM during validation week. JPM does not result in a change in the "configuration of the plant" and maintains the administrative function of removing the rod from service on the RWM, which is an administrative function at QC. JPM is sat as submitted.
A.3 Evaluate a SPING High Range Monitor Release Rate	A	N/A	4	X							U	Free Look NRC: 1) LOD=1. Applicant simply has to pull up the output value for the SPING and see that it's > 5.0 uC/cc. 2) Enhance task standard – what is required to complete the task? (obtaining a reading and evaluating it against the SAE rate doesn't provide any insight whether the task can be completed in accordance with the critical steps). Licensee: 1) New JPM created. 2) New JPM created.
Calculate a Main Chimney Release Rate	A	N/A	1	X						X		NRC: JPM replaced 1) Reference provided for review was QCOP 1700-11 (from the Free Look JPM that was replaced), JPM Guide indicates to give the applicant EP-AA-110-201 Attachment 1 pages 11 and 12. 2) JPM steps 1 and 2 are not critical. These are data points provided to the applicant in the initial conditions statement. Their determination required no action on the part of the applicant. Only JPM step 3 required the applicant to demonstrate a verifiable action. This JPM is UNSAT as it does not include at least 2 critical steps. IF the applicant had to determine these

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				LOD	REF	IC	TSK	CUE	CS	TL		
												<p>values from MCB indications, these steps would then be critical and the JPM would likely be SAT.</p> <p>3) Performing only a simple calculation with all data provided in the initial conditions keeps this as an LOD =1. If the JPM is modified to require the applicant to obtain the info from the boards as mentioned in comment 2, this would be LOD=2.</p> <p>4) Why is page 12 of Attachment 1 provided to the applicant? It has other plants other than Quad Cities on it and is not at all needed to solve the algebraic formula listed on page 11. Perhaps you meant page 14 which includes some extraneous data for Quad Cities.</p> <p>5) On both cue sheets, there's an initial condition that says "this is a drill, not an actual event." Not sure why this exists.</p> <p>Licensee:</p> <ol style="list-style-type: none"> 1) Incorporated, both procedures will be required now, we merged both JPM's to acquire data and calculate. We agreed to combine having RO obtain information from panels and then calculate the release rate together. 2) Incorporated, the candidate must obtain the data from MCB and then calculate. 3) Incorporated, merging the obtaining of data and calculation alleviates the LOD1 concern. 4) Incorporated, removed page numbers and included all of attachment 1. 5) Incorporated. Removed, if there were any potential communications steps we would keep. <p>NRC:</p> <ol style="list-style-type: none"> 1) Modified intiating cue such that applicant would use the hi range channel (clarity and consistency) 2) JPM is sat as revised.

SRO Admins

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				LOD	REF	IC	TSK	CUE	CS			TL
A1.1 Reactivation of SRO License	A	N/A	2								S	
A1.2 Verify Mode Change Requirements	A	N/A	2				X	X			E	<p>NRC:</p> <ol style="list-style-type: none"> 1) Marked-up reference provided is QCGP 1-1 Revision 134, JPM Guide indicates this should be Revision 135. 2) MSIV Closure Monthly lineout does not include an initial next to the lineout as is indicated in the JPM setup instructions. 3) So when we tell them that the real date for ATWS-RPT/ARI was December 15, 2021 and they don't recognize that is within the 25% grace period for surveillances is that just a comment or a failure? Need to make sure task standard and performance standard is written to make this clear. 4) How does the applicant know to ask the PM coordinator? Aren't the dates in Att E pulled from the most recent PM credit date in passport? This cueing is essential information for the applicant, but there appears to be no driver beyond applicant's work control knowledge, which isn't procedurally directed. 5) Evaluator note refers to providing Attachment 1 of the JPM, however, the only attachment is labeled Attachment 2 (appears to be a typo). 6) Attachment 2 of the JPM applies the 25% grace period, which may be cueing the applicant asks for the computer to verify dates but does NOT recognize the allowed grace period. Recommend two separate attachments – 1 without applying the grace period and 1 with the grace period applied. 7) Is the validation time accurate? The procedure step refers to the attachment, so outside of the Attachment, there's minimal time spent to identify 2 relatively easy errors. <p>Licensee:</p>

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				LOD	REF	IC	TSK	CUE	CS	TL		
												1) Incorporated, we updated the JPM and reference to 136 as that was the last active prior to procedure freeze. 2) Incorporated, initialed line out. 3) The date provided by the predefine coordinator is Dec. 15 th , 2022, which is well within the surveillance interval. 4) Incorporated. Cue modified to notify the Predefine Coordinator as Passport/Access Suite will not be available. The Predefine Coordinator would have this validation for the SRO. 5) Incorporated. Due to comment 6 we created 2 attachments. One with and one without the grace period. 6) Incorporated. One with and one without the grace period. 7) Validated at 10-15 minutes with qualified SRO's, added time for initial candidates. We can reassess. NRC: 1) JPM is sat as revised.
A.2 Determine Isolation Points for System Leakage and Technical Specification LCO	A	N/A	2		X		X				E	NRC: 1) Performance standard for determining the leak location indicates the leak location is between pipe 1-1103-1/2"-A and 1-1142-3/4"-A. The correct piping number is 1-1103-1 1/2"-A as it is a 1 and 1/2" diameter pipe. 2) The initial condition of the HAZMAT coord stating there is "no concern" may be misleading to the applicant. Unless there is a necessity for that bullet, recommend adding that "and no chemical has reached a floor drain" (or similar) to the prior bullet regarding the EO containing the leak. 3) Errant space in the 3 rd bullet - "EO just" 4) For providing LCO 3.1.7 & bases as a reference, recommend providing the TS and TRM books in entirety (rather than lead them by providing the specific TS they need).

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				LOD	REF	IC	TSK	CUE	CS	TL		
												5) Enhance TS to identify the leak location – “as specified in the attached key” for example OR simply list the 3 pairs of valves in the TS. Licensee: 1) Incorporated. 2) Incorporated. 3) Incorporated. 4) Incorporated. Changed to “Full set of Technical Specifications, Bases and TRM” Testing environment changed to simulator. 5) Incorporated. Added to task Standard as specified in attachments 1&2 (Keys for evaluators). NRC: 1) JPM is sat as revised.
A.3 Compensatory Actions for Low Range Main Chimney Gas Monitors Inoperable	A	N/A	2		X						E	NRC: 1) Reference provided for EP-AA-121 is Revision 19, JPM Guide indicates it should be Rev 20. 2) Page 2 of QCAN 912-5 F-6 was not provided. Used older version from NRC records to determine QCAN direction to refer to QCOS 1700-03. Make sure entire QCAN is available to the applicant. 3) The key supplied for Attachment A does not have a time listed for H.1.d (“Date/Time”) – should say “7/4/24 / current time” 4) Step H.1.b-c of the JPM lists the “current date” in the standard, but the date given in the IC’s JPM is 6/4/24. 5) Step H.2 of the JPM lists the “current date” in the standard, but the date given in the IC’s JPM is 6/4/24. Licensee: 1) Incorporated. Revision 20 is correct and added to references. 2) Incorporated. References updated. 3) Incorporated. 4) Incorporated. 5) Incorporated.

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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		
												NRC: 1) JPM is sat as revised.
A.4 NRC ENS Notification of Security Threat	A	N/A	2			X				X	E	<p>NRC:</p> <ol style="list-style-type: none"> The initial conditions state, "A credible security threat is occurring," then talk about an approaching aircraft that is 30 minutes out. When the applicant is expected to make the report, a critical step is to say the credible threat is 'imminent' which makes sense for the aircraft 30 minutes out. But what if they said the credible threat was 'in progress' because we used the word occurring in the initial conditions. This would be a JPM failure and would be vulnerable to appeal. Remove the word "occurring" from the initial conditions and say "has been received" OR state "The Security Department has notified the Control Room of a credible threat of an unidentified aircraft..." Recommend modifying the initiating cue to notify the NRC of the security threat per QCOA 0010-20, rather than specifically step D.2 (this would ensure the applicant understands that an open line of communication is "required" per the QCOA). This JPM should be time critical, with a 15 minute time, as the NOTE prior to step D.1 requires that the "expedited NRC notification should be made within 15 minutes of receiving information from Security..." NOTE - QCOA 0010-20 is being withheld from public disclosure due to security threat mitigating actions. <p>Licensee:</p> <ol style="list-style-type: none"> Incorporated. Incorporated. Discuss with REE and OTM, procedurally driven TCA's / response times OP-AA-102-106 and TQ-AA-150-J010. No issues.

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				LOD	REF	IC	TSK	CUE	CS	TL		
												4) N/A NRC: 1) JPM is sat as revised. JPM remains not time critical – 30 minute duration is bounded by 2x validation time anyway.
Sim JPMs												
A Shutdown of One Reactor Recirculation Pump	S	N	2		X						E	NRC: 1) Reference procedure number of JPM Validation Checklist page of JPM Guide incorrectly listed as QCOP 0202-01. Should be QCOP 0202-21. 2) Add to the cue that the applicant is an extra NSO (since we're providing them a cue during the JPM from the NSO). Licensee: 1) Incorporated. 2) Incorporated. NRC: 1) JPM is sat as revised.
B Place the First Main Feedwater Regulating Valve Online	S	Y	3							X	E	NRC: 1) Performance Standard for critical step F.2.i (1) just before alternate path begins indicates that annunciator "901-5 G-H-8" will sound. The annunciator is 901-5 H-8; remove the G. 2) QCAN 901-5 H-8 not included in the procedure section of Validation Checklist or in the attached references. Licensee: 1) Incorporated. 2) Incorporated. NRC: 1) JPM is sat as revised
C	S	N	2								S	NRC: 1) Removed step (F.4.b.2) to verify the status of the RPS relay for CV#2 as this was not critical

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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		
Isolate Main Turbine Control Valve #2												and requires the applicant to transition to behind the panel. Not essential for the JPM. SAT
D RCIC Manual Initiation with an Inadvertent Isolation	S	Y	3		X						E	<p>NRC:</p> <ol style="list-style-type: none"> 1) HC step 1 (JPM Step 2) is a critical step as the Task Standard states, "Initiate RCIC into the RPV and respond to ...". 2) The Performance Element and Performance Standard for Steps D.8.d.(4), (5), and (7) list the incorrect valve EPN for various RCIC valves. The Guide calls the valves 1-1300-XX. The valves are 1-1301-XX. 3) Add L designator to Form 3.2-2 (low power as the unit has just scrammed). <p>Licensee:</p> <ol style="list-style-type: none"> 1) Incorporated. 2) Incorporated. 3) Incorporated. <p>NRC:</p> <ol style="list-style-type: none"> 1) JPM is sat as revised.
E Shutdown 1/2 B SGBT with a Failure of 1/2-7505B Damper to Close	S	Y	3								E	<p>Free Look</p> <p>NRC:</p> <ol style="list-style-type: none"> 1) Step F.2.e element says "verify open" but the standard says "opens" 2-7503. Isn't this a "verify open" and not require manual operator action? If manual operator action is required, is the step critical? <p>Licensee:</p> <ol style="list-style-type: none"> 1) Incorporated. <p>NRC:</p> <ol style="list-style-type: none"> 1) Comment 1 remains unaddressed. Question still stands, why does Performance standard NOT say verify like the procedure does? If applicant is expected to manually open the damper, the step should be critical.

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				LOD	REF	IC	TSK	CUE	CS	TL		
												2) Reference provided to the applicant should have section F.1 N/A'd as is indicated in Step 4 of the Simulator Setup Page in the JPM Guide. Licensee: 1) Incorporated (task marked as critical). 2) Incorporated. NRC: 1) Removed steps F.2.a & b as these steps are just alarm verifications, which add little value to evaluating the applicant's ability to complete the task. 2) JPM is sat as revised
F Transfer Aux Power from Xfmr 11 to Xfmr 12	S	N	2								E	NRC: 1) Following the HU-AA procedure use and adherence guidance, how is the evaluator note that the applicant can perform steps 6-10 prior to steps 1-5? This doesn't seem to follow the HU-AA guidance and there's no note allowing the performance of the steps out of order. Licensee: 1) Incorporated. Evaluator note removed. NRC: 1) Added restoration verification that synch switch is removed from the MCB to prevent cueing for the next applicant. 2) JPM is sat as revised.
G Manual Scram Functional Test with Channel B Failure	S	Y	2								E	NRC: 1) In the evaluator note below step D.3, change "Critical task" to "critical step". 2) Add EN designator to Form 3.2-2 Licensee: 1) Incorporated. 2) Incorporated. NRC: 1) Removed steps applicable to performing test for RPS channel A for efficiency. JPM limited to channel B now.

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				LOD	REF	IC	TSK	CUE	CS	TL		
												2) JPM sat as revised.
H - (RO ONLY) Reactor Building Vent Rad Monitor Trip Check	S	N	2								E	NRC: 1) Will a floor instructor be resetting the 901-3 alarms as necessary, or will the booth be doing this or is it even necessary to actually reset the 901-3 alarms as when providing the cue prior to step F.9)? Recommend reference step F.8 in that evaluator cue. 2) Why is the evaluator cueing that another NSO will return the key switch? Applicant should simply return the key to the examiner when complete at this step, since step 11 is N/A. Licensee: 1) This is an option: If chosen to not distract other JPMs in progress the alarms are overridden off, meaning they will not flash or alarm and the evaluator will provide appropriate cues. 2) Incorporated. Modified cue, as the unit supervisor "I will return the RX BLDG VENT RAD MON BYP SWITCH key to the WEC per step F.12." NRC: 1) Initial condition added that another NSO will respond to 901-3 panel alarms. 2) JPM is sat as revised.
In-Plant JPMs												
I Start the 1/2A Fire Diesel Pump	P	N	2								E	NRC: 1) Since F.1.b is a MCR verification, this step can be already complete and signed off for the applicant. 2) Enhance cue for step F.1.c.(1) to state that the valve handwheel rotated counterclockwise and has stopped (simply stating "the handwheel will not turn anymore" may cause the applicant to question if the handwheel moved at all).

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				LOD	REF	IC	TSK	CUE	CS			TL
												3) JPM step which throttles 1-4199-6 to establish 140-145 psig should be listed as JPM step *F.1.d.(4)(a) not *F.1.d.(4)(b). Licensee: 1) Incorporated. Deleted step and cue, updated reference material and initial conditions. 2) Incorporated. 3) Incorporated. NRC: 1) Added pictures of the Diesel Fire pump start switch (concern with opening the cabinet combined with an EST partially blocking the view through the cabinet glass). 2) JPM is sat as revised.
J Locally Start-Up a Diesel Generator with a Failure of the EDG CWP to Start	P	Y	2								E	NRC: 1) Update Outline 3.2-2 to represent the change made from the outline comments – this JPM is a local EDG start with a failure of the cooling water pump. 2) Update the correct K/A for this JPM - should be 264000 A3.06 Cooling water system operation (3.6). This goes along with comment 1. 3) It appears unnecessary to state in the initial conditions that the EO is standing at bus 13-1 to perform specific tasks. Stating an EO is standing by bus 13-1 should be sufficient is typical of initial conditions normally provided. 4) A LOOP has occurred, so an undervoltage auto start signal should have been generated but was not successful at starting the EDG. Because the DGCWP failed to auto start, would the engine trip at 200F without cooling water as per the QCAN? Are the non-emergency trips bypassed in this local start? Suppose an applicant does not immediately refer to QCAN 2212-45 C-3 and the engine is allowed to run for some time without cooling. How long would it take to reach 200F? How should the examiner display temperature? If we believe the engine would trip under these

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				LOD	REF	IC	TSK	CUE	CS	TL		
												<p>conditions, then we should be establishing critical step failure criteria as, if engine runs for X minutes without cooling, it trips and this would be a critical step and JPM failure. This should be spelled out in the performance standard and in the Task Standard. Examiner notes for timing and indication to display should be included as well.</p> <p>Licensee:</p> <ol style="list-style-type: none"> 1) Incorporated. 2) Incorporated. 3) Incorporated. 4) The engine would trip at 200°F since the auto start relay is NOT what started the diesel. In the event of the diesel tripping when coolant temp reaches 200°F, QCOA 6600-14 step D.4.c provides guidance to continue attempts to start the EDG Cooling water pump and then restart the diesel. Therefore, there should be NO critical time associated with starting the EDGCWP or task failure criteria. Resolved. <p>NRC:</p> <ol style="list-style-type: none"> 1) JPM is not time critical and procedure actions to restart the cooling water pump and the EDG exist, as discussed. 2) Pictures of DG ½ Aux Control Panel 2212-50 provided. 3) JPM is sat as revised.
K Inject Water into the RPV using the Condensate System Crosstie	P	N	2							X	E	<p>NRC:</p> <ol style="list-style-type: none"> 1) Enhance cues for steps F.2.a.(2), F.2.c, and F.2.h to state that the valve handwheel rotated clockwise and has stopped (simply stating "the valve handwheel will not rotate any further" may cause the applicant to question if the handwheel moved at all). 2) Does the applicant need a specific key (or a generic key available to all operators) to unlock 2-5599-68?

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				LOD	REF	IC	TSK	CUE	CS			TL
												3) Critical Step F.2.h performance element and standard should say to ' <i>slowly</i> ' open 2-5599-68 in accordance with QCOP 3300-12. Licensee: 1) Incorporated. 2) The S-key in the initial conditions is what is required to unlock the valve. 3) Incorporated. NRC: 1)

Form 2.3-3 Operating Test Review Worksheet (JPMs)

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.

Facility: Quad Cities		Scenario: 1 (Free Look)				Exam Date: 05/28/2024 – 06/05/2024	
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 bus duct coolers						E	BOP – N NRC: 1) SRO should get N credit – update Form 3.3-1 (Form 3.4-1 is correct) Licensee: 1) Incorporated. NRC: 1) Event is sat.
2 Lower reactor power with control rods and recirc pumps		X				E	ATC – R NRC: 1) Form 3.3-1 says “95%” in the turnover box, however, the narrative summary, applicant turnover, and event 2 (page 2/2) says 90% for the target value. Licensee: 1) Incorporated. NRC: 1) Free look comment 1 resolved 2) SRO should get R credit – update Form 3.3-1 (Form 3.4-1 is correct) Licensee: 1) N/A 2) Incorporated. NRC: Validation week updates: 1) Added booth cue to lower load 2) Changed 4 th control rod to 3 rd rod 3) Event is sat.
3						E	ATC – C

RBM 7 fails downscale						<p>SRO – C/TS NRC: 1) It appears this is an auto trigger on rod H-06 selection on the matrix. Is this correct? Event 3 Sim Op Note says at the discretion of the lead examiner, fail the RBM when H-06 is selected.</p> <p>Licensee: 1) Incorporated.</p> <p>NRC: 1) Free look comment 1 resolved. 2) ATC and not SRO is listed for a TS bean. Form 3.4-1 is correct, update Form 3.3-1 3) SRO should get C credit – update Form 3.3-1 (Form 3.4-1 is correct)</p> <p>Licensee: 1) N/A 2) Incorporated. 3) Incorporated.</p> <p>NRC: 1) Event is sat</p>
<p style="text-align: center;">4</p> <p>1A CRD pump reduced capacity</p>					E	<p>ATC – C NRC: 1) TS for charging header pressure?</p> <p>Licensee: 1) See below.</p> <p>NRC: 1) Free look comment 1 not addressed 2) SRO should get C credit – update Form 3.3-1 (Form 3.4-1 is correct)</p> <p>Licensee: 1) We do not have a TS for charging header pressure. Accumulators when they go dry would be the tech spec entry and they will start the other CRD pump before then. 2) Incorporated.</p> <p>NRC: 1) Event is sat.</p>

<p style="text-align: center;">5</p> <p>½ EDG starting air system leak</p>			<p>X</p>		<p>E</p>	<p>BOP – C/TS NRC:</p> <ol style="list-style-type: none"> 1) BOP and not SRO is listed for a TS bean. Form 3.4-1 is correct, update Form 3.3-1 2) Does not appear that there are any verifiable actions for the BOP to take – not a C bean. Outline review identified this. Taking the EDG c/s to stop does not mitigate the transient, only prevents it from attempting to starting (and failing) due to the starting air leak. If the crew fails to take the c/s to stop, the ½ EDG will attempt to start and simply fail to start on the LOOP. BOTH Forms 3.3-1 and 3.4-1 need updated to reflect this. 3) Add LCO 3.8.3 Cond D to event 5 in narrative summary. No completion time listed in scenario guide. 4) Is the BOP expected to perform the 1 hour action surveillance or can this be directed to the U2 NSO? <p>Licensee:</p> <ol style="list-style-type: none"> 1) Incorporated. 2) I thought this was discussed and agreed upon that it is a verifiable action. Not mitigating action in control room. Looking at event description it states verifiable action. It also states that it requires significant system response (check), operator action to correct (it does in the field), and must have a verifiable action (it does). If the standard is that only actions in the control room count as combating issues for components then that argument would apply to a lot of things I do not necessarily agree with: Loss of annunciators, Major relay failures, Loss of ESS, and Instrument busses, etc. The operators can do nothing
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							<p>about it except call people and react to loss of indications, isolations, issue orders, etc. This is the same except the loss is a Diesel and it counts later in scenario. We don't need the bean I just am scared of precedent set.</p> <p>3) Completion time 24 hours for repairs in SEG now.</p> <p>4) Surveillance directed to "another NSO".</p> <p>NRC:</p> <p>1) Free look comment 1 not addressed</p> <p>2) Free look comment 2 not addressed</p> <p>3) Free look comment 3 resolved - Draft submittal changed starting air pressure to >175#, thus changing LCO applicability from 3.8.3 Cond D to Cond C.</p> <p>4) Free look comment 4 not addressed</p> <p>Licensee:</p> <p>1) Incorporated.</p> <p>2) See above.</p> <p>3) N/A</p> <p>4) See above.</p> <p>NRC:</p> <p>1) Observed during validation the event includes a verifiable action by the applicants and is necessary to prevent the EDG from attempting to start and continue an incomplete start sequence later in the scenario. Event is sat.</p>
6						E	<p>BOP – C</p> <p>NRC:</p> <p>1) BOP should also get MC credit for manually starting a component with a failed autostart function. Outline review identified this. Form 3.4-1 is correct, Form 3.3-1 needs updated</p> <p>2) SRO should get C credit</p> <p>3) Page 21 under Automatic Actions – Standby pump auto-starts. Actions</p>
1A EHC pump degrades and standby pump fails to autostart							

							<p>and description mention the standby pump FAILS to auto-start. Recommend removing auto-start from automatic actions.</p> <p>Licensee: 1) See below. 2) See below. 3) See below.</p> <p>NRC: 1) Free look comment 1 not addressed 2) Free look comment 2 not addressed 3) Free look comment 3 resolved</p> <p>Licensee: 1) Incorporated. 2) Incorporated. 3) N/A</p> <p>NRC: 1) Event is sat.</p>
7				X		E	<p>CREW – M</p> <p>NRC: 1) Two periods after “tripped” on BOP actions (page 23) 2) CT#1 – How long does it take to reach 105VDC?</p> <p>Licensee: 1) Incorporated. 2) 4 hours. We can ramp it up if they don’t address it. But that is realistic.</p> <p>NRC: 1) Free look comment 1 resolved. 2) Free look comment 2 unaddressed. 3) Consider tying the Xfmr 12 trip / LOOP to an automatic trigger or timer, for consistency among the crews.</p> <p>Licensee: 1) N/A 2) See above. 3) Incorporated.</p> <p>NRC: Validation week updates</p>

							<ul style="list-style-type: none"> 1) Changed transformer 12 trip from 3 minutes to 1 minute 2) Determined free look comment 2 for 4 hour time restoration is unsat bounding criteria for this scenario. Added Event 10 for MSL break inside containment in order to make power restoration critical (must have power to start RHR pump in order to spray the DW). 3) This event is sat.
8	U1 EDG Autostart failure / restore AC power					E	<p>BOP – C</p> <p>NRC:</p> <ul style="list-style-type: none"> 1) BOP should also get MC credit for manually starting a component with a failed autostart function. Outline review identified this. Form 3.4-1 is correct; update Form 3.3-1 <p>Licensee:</p> <ul style="list-style-type: none"> 1) See below. <p>NRC:</p> <ul style="list-style-type: none"> 1) Free look comment 1 unaddressed. <p>Licensee:</p> <ul style="list-style-type: none"> 1) Incorporated. <p>NRC:</p> <ul style="list-style-type: none"> 1) Event is sat.
9	QGA 100 actions / Failure of RCIC/HPCI to Autostart			X		E	<p>CREW – M</p> <p>NRC:</p> <ul style="list-style-type: none"> 1) Are there QGA 200 actions? If so, please add QGA to the potential references on page 10. 2) CT#2 – If there is no LOCA in progress, other than RWL contraction, why would RWL <- 142"? Bounding criteria seems implausible. <p>Licensee:</p> <ul style="list-style-type: none"> 1) See below. 2) See below. <p>NRC:</p> <ul style="list-style-type: none"> 1) Free look comment 1 unaddressed.

							<p>2) Free look comment 2 unaddressed.</p> <p>Licensee:</p> <ol style="list-style-type: none"> 1) Incorporated. Added QGA 200 actions, these are contingent on torus temp reaching 95°F. 2) Validated under these conditions with a cooldown, RWL will drop to -142" within 30 minutes. (Staying in cooldown rates.) See evaluator note on page 6. Resolved. <p>NRC:</p> <ol style="list-style-type: none"> 1) Validated that RWL will lower to <-142" during cooldown. With the added Event 10, this significant cooldown adds to the RWL drop and starting injection systems to restore level is required much quicker. 2) Event is sat.
10						S	<p>NRC:</p> <ol style="list-style-type: none"> 1) During validation week, it was confirmed that the power restoration associated with CT1 was not valid (4 hours). A MSL break inside cnmt was added in order to make power restoration essential (restore power, start RHR pump, spray the DW). Event sat.
							<p>General comments:</p> <ol style="list-style-type: none"> 1) No manual control beans listed on the Form 3.3-1, despite identifying this on the outline submittal. MC credit given to BOP for events 6 & 8 on Form 3.4-1, which is accurate. 2) Most free look comments not addressed, which invalidates the purpose of the free look.

Form 2.3-3 Operating Test Review Worksheet (Scenarios)

Facility: Quad Cities		Scenario: 2 (Startup / Low Power)				Exam Date: 05/28/2024 – 06/05/2024	
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 Realign RCIC suction to the CCSTs						E	BOP – N NRC: 1) SRO credit for N – update Form 3.3-1 (Form 3.4-1 is correct). Licensee: 1) Incorporated. NRC: 1) Event is sat.
2 Load increase w/control rods						E	ATC – R NRC: 1) SRO credit for R – update Form 3.3-1 (Form 3.4-1 is correct). Licensee: 1) Incorporated. NRC: 1) Event is sat.
3 Stuck control rod					X	E	ATC – C/TS NRC: 1) ATC and not SRO listed for a TS bean – update Form 3.3-1 (Form 3.4-1 is correct) 2) SRO credit for C – update Form 3.3-1 (Form 3.4-1 is correct). 3) Which rod in the sequence is N-7? The 3.2-2 seems to indicate that it would be the next CR in the sequence at the lead evaluator's discretion. 4) Add the actions and times for LCO 3.1.3.

							<p>5) No lead evaluator termination cue for this event</p> <p>Licensee:</p> <ol style="list-style-type: none"> 1) Incorporated. 2) Incorporated. 3) Incorporated. Added "3rd control rod in the sequence step" to guide. 4) Incorporated. Added 2 hours to disarm the CRD. 5) Incorporated. <p>NRC:</p> <ol style="list-style-type: none"> 1) Event is sat.
4						E	<p>BOP – C</p> <p>NRC:</p> <ol style="list-style-type: none"> 1) QCAN 901-4 F-23 not provided with references. 2) SRO credit for C – update Form 3.3-1 (Form 3.4-1 is correct). 3) No lead evaluator termination cue for this event <p>Licensee:</p> <ol style="list-style-type: none"> 1) N/A 2) Discuss. 3) Incorporated, but discuss. <p>NRC:</p> <ol style="list-style-type: none"> 1) Event is sat.
5			X		X	E	<p>BOP – C/TS</p> <p>NRC:</p> <ol style="list-style-type: none"> 1) BOP and not SRO listed for a TS bean – update Form 3.3-1 (Form 3.4-1 is correct) 2) SRO credit for C – update Form 3.3-1 (Form 3.4-1 is correct). 3) For TS 3.7.4, what is the condition for declaring CREVs inoperable (what makes this conditional and why?)? <p>Licensee:</p> <ol style="list-style-type: none"> 1) Incorporated. 2) Incorporated.

							<p>3) Discuss, this was brought up in validation, will work with Fac. Rep. Resolved.</p> <p>NRC:</p> <ol style="list-style-type: none"> 1) Removed reference to "conditional" LCO 3.7.4. 2) Event is sat.
6						E	<p>ATC – C</p> <p>NRC:</p> <ol style="list-style-type: none"> 1) SRO credit for C – update Form 3.3-1 (Form 3.4-1 is correct). 2) MC credit should be given to ATC – update BOTH Forms 3.3-1 & 3.4-1 3) No termination cue for this event <p>Licensee:</p> <ol style="list-style-type: none"> 1) Incorporated. 2) Incorporated. 3) Incorporated. <p>NRC:</p> <ol style="list-style-type: none"> 1) Event is sat.
7						E	<p>BOP - C</p> <p>NRC:</p> <ol style="list-style-type: none"> 1) SRO credit for C – update BOTH Forms 3.3-1 & 3.4-1 <p>Licensee:</p> <ol style="list-style-type: none"> 1) Incorporated, second half applicable to table 3.4-2 <p>NRC:</p> <ol style="list-style-type: none"> 1) Event is sat.
8						E	<p>CREW - M</p> <p>NRC:</p> <ol style="list-style-type: none"> 1) Form 3.4-1 has this event being credited as a M and a MC. This is either a major OR a component/instrument (and then, if an I/C event, potentially a MC). This should be simply a M, with no other credit. 2) CT #2 – Would a high DWP condition ever be met at an initial power of 17% if the operators take

							<p>no action (other than lack of cooling to the DW)?</p> <p>3) CT #4 – Put the specific bounding criteria in the CT (listed on page 7) on Form 3.3-1.</p> <p>Licensee:</p> <ol style="list-style-type: none"> 1) Incorporated. 2) Discuss, ADS can be -59" for 8.5 min or DW 2.5#, this is in the clarification under CT2 on page 7. The "or" applies here. 3) Discuss, resolved. <p>NRC:</p> <ol style="list-style-type: none"> 1) Removed CT1 due to inadequate bounding criteria of injecting hot shutdown weight boron by SBLC tank level prior to reaching 110 deg torus temp. Torus temperature was not challenged in this scenario. 2) Event is sat.
9	SBLC control switch failure					E	<p>ATC – C</p> <p>NRC:</p> <ol style="list-style-type: none"> 1) SRO credit for C – update BOTH Forms 3.3-1 & 3.4-1 2) ATC credit for C – update BOTH Forms 3.3-1 & 3.4-1 3) ATC credit for MC – update Form 3.3-1 (Form 3.4-1 is correct) <p>Licensee:</p> <ol style="list-style-type: none"> 1) Incorporated. 2) Incorporated. 3) Incorporated. <p>NRC:</p> <ol style="list-style-type: none"> 1) Event is sat.
							<p>General comments:</p> <ol style="list-style-type: none"> 1) No manual control beans listed on the Form 3.3-1, despite identifying this on the outline submittal. MC credit given to BOP for event 5 and ATC for events 8 & 9 on Form 3.4-1. This is OK for events 5 & 9, but see

							comment 1 on Event 8. ATC should receive MC credit for event 6.
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Facility: Quad Cities		Scenario: 3 (100% Power, No OOS)				Exam Date: 05/28/2024 – 06/05/2024	
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 TB Vent Exhaust Fans (U1)		X				E	BOP – N NRC: 1) SRO credit for N – update Form 3.3-1 (Form 3.4-1 is correct). 2) No termination cue for this event Licensee: 1) Incorporated. 2) Incorporated. NRC: 1) Event is sat.
2 Control Rod Drifts Out						E	ATC – C/TS NRC: 1) ATC and not SRO listed for a TS bean – update Form 3.3-1 (Form 3.4-1 is correct) 2) SRO credit for C – update Form 3.3-1 (Form 3.4-1 is correct). 3) BOP can also receive C credit for scram test switch operation, necessary to mitigate the transient (will need to update BOTH Form 3.3-1 and Form 3.4-1). 4) No termination cue for this event Licensee: 1) Incorporated. 2) Incorporated. 3) Discuss, ATC and BOP can not receive credit for rod drift event. Resolved. 4) Incorporated. NRC:

							<p>Validation week updates</p> <ol style="list-style-type: none"> 1) Added a load reduction for rod sequence adjustment (new event 3) and removed old event 6 (FW heater string isol. requiring power reduction). Added booth cue for QNE to request load reduction 2) ATC/SRO receive R credit for new event 3. 3) Event is sat.
3	1A TBCCW Pump Degraded					E	<p>BOP – C</p> <p>NRC:</p> <ol style="list-style-type: none"> 1) SRO should get C credit - update Form 3.3-1 (Form 3.4-1 is correct). 2) No termination cue for this event <p>Licensee:</p> <ol style="list-style-type: none"> 1) Incorporated. 2) Incorporated. <p>NRC:</p> <ol style="list-style-type: none"> 1) Event is sat.
4	Recirc Speed Controller Fails Low					E	<p>ATC – C</p> <p>NRC:</p> <ol style="list-style-type: none"> 1) ATC should get MC credit, update Form 3.3-1 (Form 3.4-1 is correct). 2) SRO should get C credit, update Form 3.3-1 (Form 3.4-1 is correct). 3) No termination cue for this event <p>Licensee:</p> <ol style="list-style-type: none"> 1) Incorporated. 2) Incorporated. 3) Incorporated. <p>NRC:</p> <ol style="list-style-type: none"> 1) Event is sat.
5	"D" ADS Valve Setpt Drifts Low				X	E	<p>BOP – C/TS</p> <p>NRC:</p> <ol style="list-style-type: none"> 1) BOP receives MC credit, update Form 3.3-1 (Form 3.4-1 is correct) 2) BOP and not SRO listed for a TS bean; update Form 3.3-1 (Form 3.4-1 is correct) 3) SRO receives MC credit, update BOTH Forms 3.3-1 & 3.4-1

							<p>4) SRO credit for C, update Form 3.3-1 (Form 3.4-1 is correct).</p> <p>5) Need the action put in for the TS (14 days to restore to operable)</p> <p>6) Note for LCO 3.3.6.3 no call can be deleted.</p> <p>7) No termination cue for this event</p> <p>8) What is the cooldown rate the applicants would see by taking no action? If the applicants take no action, we would need to allow the 100deg drop (over 1 hour) in order to fail the CT – how long does this take? Tie the safety significance of this CT to vessel integrity to help justify the CT (see Scenario 3, general comment #2)</p> <p>Licensee:</p> <p>1) Incorporated.</p> <p>2) Incorporated.</p> <p>3) Discuss, Resolved.</p> <p>4) Incorporated.</p> <p>5) Incorporated.</p> <p>6) Incorporated. This was a validation comment.</p> <p>7) Incorporated. This one ensures TS has been made prior to moving on. Added next event note.</p> <p>8) Incorporated. "prior to reaching a Torus temperature of 95°F"</p> <p>NRC:</p> <p>1) Event is sat.</p>
6						E	<p>ATC – R</p> <p>NRC:</p> <p>1) SRO receives R credit, update Form 3.3-1 (Form 3.4-1 is correct).</p> <p>Licensee:</p> <p>1) Incorporated.</p> <p>NRC:</p> <p>4) Event removed due to incorporated reactivity move in Event 2.</p>
7						E	CREW - M

Torus Leak / SCRAM						<p>NRC: 1) Extra “)” bottom of page 22 under the Sim Op Role Play</p> <p>Licensee: 1) Incorporated.</p> <p>NRC: 1) Event is sat.</p>
<p>8</p> <p>Emer Depress / ADS Valve Fails to Open</p>					E	<p>CREW - C</p> <p>NRC: 1) Scenario guide shows the BOP performing the action to open blowdown, so the BOP and the SRO should be receiving the credit, not the “crew”. Update BOTH Forms 3.3-1 & 3.4-1 for BOP and SRO receiving C credit.</p> <p>Licensee: 1) Incorporated partially, need to discuss.</p> <p>NRC: Validation week updates 1) BOP is performing action for depressurizing via alternate depress. Systems as a response to the B ADS valve failing to open. BOP updated to receive credit on both forms. 2) Determined CT3 for alternate depressurization was valid and added. 3) Event is sat.</p>
						<p>General comments: 1) No manual control beans listed on the Form 3.3-1, despite identifying this on the outline submittal. MC credit given to BOP for event 5 and ATC for event 4 on Form 3.4-1.</p>

Facility: Quad Cities		Scenario: 4 SPARE (100% Power, No OOS)				Exam Date: 05/28/2024 – 06/05/2024	
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 Shutdown 1A RHRSW Pump						E	BOP – N NRC: 1) SRO credit for N – update Form 3.3-1 (Form 3.4-1 is correct). 2) No termination cue for this event Licensee: 1) Incorporated. 2) Incorporated. NRC: 1) Event is sat.
2 1/2B Inst. Air Compressor Trip						E	BOP – C NRC: 1) SRO credit for C – update Form 3.3-1 (Form 3.4-1 is correct). 2) No termination cue for this event Licensee: 1) Incorporated. 2) Incorporated. NRC: 1) Event is sat.
3 RCIC Steam Leak / Failure to auto-isolate				X	X	E	BOP – C/TS NRC: 1) BOP and not SRO listed for a TS bean; update Form 3.3-1 (Form 3.4-1 is correct) 2) SRO credit for C, update Form 3.3-1 (Form 3.4-1 is correct). 3) BOP credit for MC, update Form 3.3-1 (Form 3.4-1 is correct).

						<p>4) Remove the word "optional" from the evaluator note regarding TS 3.3.6.1 – replace with "conservative"</p> <p>5) TS 3.5.3, needs action specified (14 days to restore to operable) AND Include action to immediately verify HPCI operability per LCO 3.5.3 Cond A</p> <p>6) Tie the safety significance of this CT to the impact to secondary containment to help justify the CT (see Scenario 4, general comment #2)</p> <p>7) No termination cue for this event</p> <p>Licensee:</p> <p>1) Incorporated.</p> <p>2) Incorporated.</p> <p>3) Incorporated.</p> <p>4) Incorporated.</p> <p>5) Incorporated.</p> <p>6) Need to discuss. What additional information beyond Max safe temperature and Rad levels. Resolved.</p> <p>7) Incorporated.</p> <p>NRC:</p> <p>1) The large severity of the steam break allowed approx. 10 seconds until max safe temperature was reached, leading to a CT failure. This break size was modified during validation week to allow adequate time for applicants to respond to the event without failing the CT (approximately 4.5 minutes) due to the severity of the break.</p> <p>2) Validated LCO 3.6.1.3 Cond A & B are met and removed this TS. Validated LCO 3.3.6.1 Cond A & B are not met and maintained these LCOs.</p> <p>3) Event is sat.</p>
4					E	ATC – R/TS

<p>Main Turbine CV fails closed / Emer. Pwr. Reduction</p>						<p>NRC: 1) ATC and not SRO listed for a TS bean; update Form 3.3-1 (Form 3.4-1 is correct) 2) SRO credit for R, update Form 3.3-1 (Form 3.4-1 is correct). 3) ATC is taking two separate actions in response to the CV#1 failing closed – inserting CRAM rods (“R” credit) and manually lowering recirc pump speeds due to the runback p/b failure (“C” credit in event 5). This is SAT.</p> <p>Licensee: 1) Incorporated. 2) Incorporated. 3) N/A</p> <p>NRC: 1) Event is sat.</p>
<p>5 Runback fails / manual lower recircs</p>					<p>E</p>	<p>ATC – C NRC: 1) SRO credit for C, update Form 3.3-1 (Form 3.4-1 is correct). 2) No termination cue for this event</p> <p>Licensee: 1) Incorporated. 2) Not needed as events 4/5 & 6 occur simultaneously.</p> <p>NRC: 1) Event is sat.</p>
<p>6 APRM 2 does not respond to power reduction</p>					<p>E</p>	<p>ATC – I NRC: 1) SRO credit for I, update Form 3.3-1 (Form 3.4-1 is correct). 2) Recommend adding to page 20 a note about the MSL break ramping over a 10 minute time period.</p> <p>Licensee: 1) Incorporated. 2) Incorporated.</p> <p>NRC: 1) Event is sat.</p>

<p style="text-align: center;">7</p> <p>1D MSL Break inside Cont./ SCRAM</p>					<p style="text-align: center;">E</p>	<p>CREW - M NRC: 1) Sim Op note at top of page 21 states "C" MSL break as well as the event description on pages 21-24. This should be "D" MSL.</p> <p>Licensee: 1) Incorporated.</p> <p>NRC: 1) Event is sat.</p>
<p style="text-align: center;">8</p> <p>Both Loops of DW Sprays Fail to Operate</p>			<p>X</p>		<p style="text-align: center;">U</p>	<p>CREW - C NRC: 1) Is this counted as a malf. After EOP entry (it doesn't change the strategy)? See Scenario 4 General Comment #3. 2) Event 8 and 9 appear to have the same mitigative action and should be ONE event – direct EOs to open RHR 26A valve and establish DW spray. 3) Per the scenario guide, only the BOP is taking action, so the ATC should not be receiving credit i.e. "CREW" is incorrect. Change to BOP & SRO. No credit given for Event 8 on Form 3.4-1. 4) Does the S17B switch failure prevent B train of DW sprays in its entirety? 5) What verifiable action is the applicant taking to mitigate the transient of the failed RHR 26A valve besides directing field operations? Can we simply change this to one train of DW sprays won't work, such as failing 1001-26A closed, sheared A RHR pump shaft, etc. so they go to the B train? This would prevent the possibility that the crew ED's and potentially fails the CT. 6) Recommend adding hard card QCOP 1000-30 to the end of the</p>

							<p>scenario (a copy is fine, so the examiner can follow along).</p> <p>Licensee:</p> <ol style="list-style-type: none"> 1) Corrected. 2) Discuss (8 is separated from 9 to clarify, fine if desired to change) Resolved. 3) Incorporating, determine 8,9 separate events or merge. 4) Incorporated, removed override, this was moved to the valve control switches. 5) Incorporated. All control room actions now. 6) Incorporated, copies will be put into the binders. <p>NRC:</p> <ol style="list-style-type: none"> 1) Applicant now has success spraying the DW via the opposite train from which they first attempt, rather than directing a local action for success. 2) Event is sat.
9			X	X		E	<p>CREW - C</p> <p>NRC:</p> <ol style="list-style-type: none"> 1) Event 8 and 9 should be one event – see Event 8 comment 2. 2) If the applicant fails to establish DW sprays and goes to blowdown, is that a CT failure? It's possible that the crew isn't quick to dispatch manual operation of RHR 26A and determines they can't maintain below PSP and blows down. How long until PSP is reached? <p>Licensee:</p> <ol style="list-style-type: none"> 1) Discuss. Resolved. 2) Incorporated, modified spray issues, the crew will have enough time to monitor and react. The initial leak size gives them <p>NRC:</p> <ol style="list-style-type: none"> 1) Incorporated into event 8. SAT.

							<p>General comments:</p> <ol style="list-style-type: none">1) No manual control beans listed on the Form 3.3-1, despite identifying this on the outline submittal. MC credit given to BOP for event 3 and ATC for event 5 on Form 3.4-1.2) Table 3.4-1 on page 4 states that Event 2 is a malfunction after EOP entry, which is not valid. The only malfunction after the EOP entry is the DW spray failing to operate, but the corrective action is for the BOP to direct the EO to open the RHR 26A valve, which is not a verifiable action. Need to discuss further.
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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.