Clinton Power Station
ILT Class 15-1
Exam Date 1/30/17
Operating Test 2017-301

Date Received: _12/22/16__

Item #	UnSat/Editorial	Chief Examiner Comment	Facility Action/Response
Operating Test			
RO Admin **JPM407**		1. What's the basis for designating JPM steps 4-6 and 8 as critical steps over any other step? 2. Neither the procedure or the data sheet provides guidance for normal in block 309, or what to enter/not enter if tailpipe temp is not normal. On what bases could the JPM be failed if a value is entered in the block? 3. CPS 3831.01 identifies ITS 5.6.4 as a requirement and reference. ITS 5.6.4 has been deleted from ITS. 4. Initial conditions: how would time of actuation and duration be determined? Provide this information in a format that the candidate could determine the information (alarm display, event recorder, etc.).	1. IAW CPS 3831.01 steps 2.1 – 2.3, the information recorded in blocks 305, 306, and 307 is reported to the NRC, and the INPO CDE, thus making these steps critical. The facility agrees that JPM step 1 should be designated as a critical step. 2. CPS 3101.01 Main Steam (MS) step 2.2.2 provides the definition of a leaking SRV (tailpipe temperature > 220°F). The step is failed if the examinee enters <u>any</u> time value indicating that the tailpipe temperature has returned to normal. Added clarification to the comments section of JPM step 8. 3. **The station will initiate an AR to correct the procedure deficiency after the exam is complete.** 4. The station does not believe this will add value to the JPM. The main objective of the JPM is to test the candidates ability to retrieve and document regulatory data and determine that the SRV is leaking based on evaluation of tailpipe temperature data.

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RO Admin **JPM484**		1. JPM step 1 – standard specifies that candidate sign the attachment. Attachment only requires printed name, not signature. Should this step be a critical step since accurate completion is required to complete the license document? 2. **For** JPM step 3 – in the cue, insert the words "if necessary" before the words "ask him/her". 3. In the initiating cue blocks on pages 6 and 12, bold the 4th sentence concerning working a mixed shift schedule.	1. OP-AA-105-102 Attachment 2 – fifth column in the shift position log requires active license signature, not printed name. The critical objective of the JPM is to test the candidate's ability to evaluate his/her license maintenance requirements, not to fill out the form, so the facility does not believe step 1 is a critical step. 2. Incorporated comment as requested. 3. Incorporated comment as requested.
RO Admin **JPM526**		1. The comments in JPM steps 2 and 4 should be moved and inserted as a note prior to JPM step 2. 2. The JPM steps are not written in the order of "isolation valves first, followed by vent/drain valves last". 3. The last JPM step is mis-numbered (should be 5, listed as 3). 4. JPM step 5 – if 1IA078A is included, should be considered a competency hit.	1. Incorporated comment as requested. 2. Re-ordered steps as requested. 3. Corrected the JPM step number. 4. The station contends that inclusion of 1IA078A would be completely acceptable if included in addition to 1IA083A on a clearance order, thus not a competency hit if included.
RO Admin **JPM532**		1. Is the entire room posted as an HRA, or just in the vicinity of the PRM? If just the PRM area, it alters the RWP requirements. 2. Add a note or comment to step 2 describing the location of the H2 analyzers. 3. Consider providing the examiner with copies of the other survey maps, or the direction of what the examiner should do, if the applicant indicates the H2 analyzers are in another location. 4. On the RWP, change the date, survey index #, and cal due date to current date.	1. The high rad boundary is confined to the PRM cubicle, not the entire room. JPM step 3 cues the examinee to identify the RWP requirements for entering the area with the highest dose rate, which is the PRM – a high rad area. The JPM is correct in listing a specific HRA briefing as required to enter the area. 2. Incorporated comment as requested. 3. Added a comment to JPM step 2 to provide evaluator guidance in the event the examinee indentifies the incorrect survey map. 4. Added current dates to the survey map and the RPW for JPM532.

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SRO Admin **JPM425**		1. Provide a copy of the 3D monicore printout in the JPM package. 2. Evaluator instructions – add a copy of CPS 9820.01 to the list of procedures to provide to the applicant (if requested). 3. Seems like JPM step 5 should be a critical step. 4. Sanitize the dates on the 3D case and print on pink.	1. Provided for review during prep week. 2. Added 9820.01 to the list of procedures to provide the student. 3. While JPM step 5 is an expected action, it is not required by CPS 9820.01, thus not a critical step. 4. Updated the 3D case in the JPM folder with sanitized dates.
SRO Admin **JPM483**		1. It is indicated that night shift begins at 1900 on the previous day, it seems appropriate to indicate that all other shifts begin at 0700 (either that or remove the notation for the night shift). 2. I've seen this JPM before, or something similar at another site?	1. The facility believes that annotating the beginning of the night shift is necessary to eliminate any confusion for the examinee being evaluated as to the start time for the night shift. The annotation is not required for the day shift entries and would add unnecessary wording to the JPM, making it more confusing. 2. This is a new JPM for CPS. It was developed and modified from JPM-FP-S-FMP-01-001 from Monticello Nuclear Generating Plant.
SRO Admin **JPM469**		1. Procedural references - ITS 3.5.1 and B3.5.1 should be added. 2. This JPM examines multiple generic KAs (2.2.13, 2.2.40, 2.2.41). JPM should be include all applicable KAs, or rewritten to address the specific KA. 3. Applicants may question correctness of the hang sequence; specifically the CS for the WLP. 4. Essentially the same JPM as the last exam at CPS, with the exception of the component.	1. Added ITS to procedural references as requested. 2. Added KAs 2.2.13 and 2.2.41 to KA table on JPM page 9. 3. The hang sequence is in accordance with the requirements of OP-AA-109-101 section 7.3.1. In addition, JPM469 was developed from an approved clearance. 4. The station agrees that JPM469 is modeled from JPM538 administered on the ILT 14-1 NRC Exam, but the JPM469 does not contain the same types of deficiencies as JPM538, and is therefore correctly designated as a new JPM.

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SRO Admin **JPM536**		No comments	
SRO Admin **JPM482**		1. Title of JPM should be "Classify an emergency event and determine PARs" or tell the applicant a GE has been declared in the initiating cue. 2. I would argue that the standard for JPM step 1 is incorrect. The presence of hydrogen in the drywell and inability to maintain level above TAF is indicative of a loss of FC, and thus a loss of two barriers and a potential loss of the third. 3. PAR is inconsistent with the PAR flowchart. Neither the procedure nor flowchart indicate the need to evacuate the downwind sector. 4. Step 4 cue – change the word "when" to "if".	1. Changed title as requested. 2. The facility disagrees that a loss of FC is indicated. The conditions in the initiating cue do not meet the threshold for a loss of FC (containment radiation levels are < 41.3 r/hr). 3. The facility contends that the PAR recommendation is correct for a PAR being made from the Control Room under the conditions where a Rapidly Progressing Severe Accident is <u>not</u> in progress. 4. Changed as requested

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MCR **JPM448**		1. Step 1 - Unless there has been a change to the circuitry, this is not a critical step. 2. Step 4 – Unless there has been a change to the circuitry, this is not a critical step. 3. Either add 8.1.3.7 & 8.1.3.8 or provide an explanation of why the task is truncated before then. 4. Remove reference to “ReMA” in the inititating cue.	1. The performance of JPM step 1 is required to accomplish the task standard and is also required to be performed by the operating procedure and is therefore critical IAW NUREG 1021 Appendix C (C3). 2. The performance of JPM step 4 is required to accomplish the task standard and is also required to be performed by the operating procedure and is therefore critical IAW NUREG 1021 Appendix C (C3). 3. Adding steps 8.1.3.7 and 8.1.3.8 does not add any evaluator observable actions from the examinee and unnecessarily lengthens the JPM. Added a comment to step 8.1.3.6 to explain why the task is truncated. 4. Removed reference to ReMA in the initiating cue.
MCR **JPM530**		No comments	
MCR **JPM419**		1. Add a note prior to step 1 to state that procedure step 8.1 is a continuous action step with no physical actions required. 2. JPM step 2 – add the word “momentarily” between “and” and “depress”. 3. JPM step 3 – add a note that procedure steps 8.5.1.1 and 8.5.1.2 are continuous action steps with no expected actions required.	1. Added note as requested. 2. Added the word “momentarily” as requested. 3. Added note as requested.
MCR **JPM288**		No comments	

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MCR **JPM473**		1. What is the regulatory bases for the JPM being time critical? 2. Separate JPM step with multiple actions into separate JPM steps.	1. The 20 minute requirement is listed in USAR 5.4.7 as part of our design bases. 2. The facility contends that the format of complex JPMs into the step/element/standard format makes the JPM easier to evaluate. Each of the standard items is an individual step.
MCR **JPM503**		1. Separate JPM step with multiple actions into separate JPM steps. 2. Either don't perform step 4.3 or else complete the step as part of the setup. 3. JPM grading summary page lists the JPM as time critical.	1. The facility contends that the format of complex JPMs into the step/element/standard format makes the JPM easier to evaluate. Each of the standard items is an individual step. 2. Step 4.3 was listed as partially complete to make the JPM more efficient to administer. Step 4.3.3.3 is needed to accomplish the task standard and to ensure enough critical steps for the JPM. 3. Changed the JPM grading summary page to non-time critical.
MCR **JPM427**		No comments	
MCR **JPM474**		1. Dave questions the alternate path designation of this JPM. 2. Separate JPM step with multiple actions into separate JPM steps. 3. JPM step 5 – provide procedure only after located in the rack. 4. JPM step 4 – add a note before the step that if the hard card is used, to jump to JPM step 6.	1. JPM474 contains each of the attributes listed in NUREG 1021 App. C for alternate path JPMs, therefore it is the facility's contention that it is an alternate path JPM. 2. The facility contends that the format of complex JPMs into the step/element/standard format makes the JPM easier to evaluate. Each of the standard items is an individual step. 3. Incorporated comment as requested. 4. Incorporated comment as requested.

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In-Plant **JPM247**		For JPM step 4.3, add a cue to the examinee that the RCIC Gland Seal Air Compressor is not running.	Added as requested.
In-Plant **JPM222**		Since both breakers are in series, rotating one breaker handle is critical. Rotating the second handle is a competency hit if missed.	Based on procedural adherence standards and redundancy, the facility contends that turning both handles off is critical in the event of a failure of one of the breakers.
In-Plant **JPM431**		No comments.	

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Scenario 1		1. Events 1 and 2 – combine into one event. 2. The SRO TS call is questionable since the DG is already inop. 3. Does the speed ramp up after the output breaker is opened, or does the diesel just trip? 4. Event 4 – Provide information on how the BOP determines the status of the PR001 sample pump. If all sub-bullets are closed, shouldn't the main bullet be closed. 5. Event 8 and 9 – EOP-1 and critical task statements state that TAF is -162, while the critical task statement states -160. Which one is right? Make this consistent. 6. Termination criteria – should include containment parameters are being controlled per EOP-6. 7. Critical tasks o What is the basis for 17.5 minutes of level reaching TAF? o RPV 1.1 should be revised; EOP-3 entry is not required until level reaches TAF (-162 inches). ADS should have automatically initiated 105 seconds after RPV level reached -145.5 inches. Therefore, it seems that the CT should be either: ▪ automatic initiate, MANUALLY initiates ADS IAW hard card <u>before</u> [whatever the performance criteria is (e.g., RPV level reaches TAF)]; or ▪ WHEN RPV level drops to -162 inches, Enter and Execute EOP-3, Emergency RPV Depressurization, before [whatever the performance criteria is] o RPV 1.2 – Why is starting LPCS critical? 8. Quantitive attributes – critical tasks at 2 is questionable if LPCS isn't critical.	1. Combined events 1 and 2 as requested. 2. The ITS has to be re-entered. The facility contends that the ITS call is valid. 3. The trip is tied to the opening of the DG output breaker (with a 2 second time delay) to simulate the DG speed ramping up before tripping in the simulator lesson plan. DG speed is not directly indicated in the MCR with the output breaker open. 4. Provided BOP indications for sample pump failure in the scenario guide. Changed the main bullet to closed. 5. Inserted that TAF is -160 inches on Wide Range Level Indicators in events 8, 9 and in the critical task statement. 6. Included containment parameter control in the termination criteria statement as requested. 7. Critical Tasks a. The 17.5 minutes is based on OP-CL-102-106-1001 CPS Master List of Operator Response Times as a time sensitive action in the event of a medium LOCA where ADS fails to initiate for any reason. 17.5 minutes was derived from PRA analysis. b. Critical task listing is appropriate as written – discussed with the CE. c. Starting LPCS is critical because the magnitude of the leak is such that RPV level will not recover

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			above TAF if LPCS is not manually initiated. 8. Starting LPCS is critical as explained in 7.c above.
Scenario 2		1. Event 6 – ATWS a. MSL Leak is described as Unisolable, however it appears that it is. If it is Unisolable, there should be a report from the BOP/ATC stating such. 2. Event 8 description should be MSL isolation on high temperature, not low vacuum. 3. ATC failure to scram – add a bullet to determine if shutdown criteria is met before initiating ARI. 4. ATC scram choreography – open bullet to report EOP entries. 5. Based on changes to EOP-1, should ADS be inhibited before ensuring the Manual SCRAM Pushbuttons and ARI don't work to insert control rods; AND IF so, then shouldn't ADS be returned to its normal configuration (i.e., UN-Inhibited) when EOP-1A is exited to return to EOP-1? 6. Should be actions to enter and execute EOP-6 (pool temperature following blowdown). 7. Critical tasks – RPV 5.1/6.1 – revise to specify insertion of control rods (ARI). Revise SC 1.2 to state: Enters and Executes EOP-3 Emergency RPV Depressurization when …. SRO directs, does not perform, the blowdown. 8. Quantitive attributes – EOP contingencies requiring substantive – ATWS actions may not be substantive.	1. The MSL Leak is unisolable due to seat leakage past 1B21-F022D and 28D MSIVs and a rupture of the MSL 'D' piping in the Aux Building Steam Tunnel. Added reports from the BOP/ATC as requested. 2. Corrected the Event 8 description. 3. This is not in accordance with OP-CL-101-111-1001-F-02 Start of Scram Choreography (ATWS). Once the RMS is placed in shutdown and shutdown criteria is not met, manual scram and ARI are initiated before reporting status of shutdown criteria to the SRO. 4. Reporting of EOP entries is required by the scram choreography and should be a closed bullet. 5. Per the immediate actions of CPS 4100.01 Reactor Scram, that manual scram and ARI will be immediately manually initiated before entering EOP-1 and transitioning to EOP-1A. Therefore ADS will not be inhibited if ARI is successful in inserting control rods and achieving shutdown criteria. 6. EOP-6 would be entered and executed well after the blowdown is performed and the terminus criteria is met. 7. Revised RPV 5.1/6.1 as requested. Added critical task to place RMS in S/D

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			with no RR Pumps operating and the RMS in Run. 8. The facility contends that the EOP-1A actions in S2 (manually initiating RPS and ARI logic circuits) meets the definition of “substantive” contained in ES-301 D.5.f.

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Scenario 3		1. Event 4 – unless ATC makes the CRD drive water header pressure adjustment, would not count this as an ATC component failure. 2. When does the drive pressure have to be returned to normal (after the rod is at the target position, when the rod is successfully withdrawn)? 3. Event 5 – table on page 15 of 17 - N683B and N690B cannot be tripped at the same time. Since there is not an actual leak, what requires the penetration to be isolated immediately when ITS allows time to isolate the penetration? 4. Declaring RCIC inoperable is not required until RCIC steam supply is isolated. 5. Event 7 – need to watch this one closely since this malfunction starts at low power. If level is lowered, there will probably not be a need to inject boron. Determine why tripping RR Pumps is not required by the EOP? **6. CT 1 (RPV-6.1) needs a performance criteria. CT 2 (RPV-6.2) – Scenario Guide states that CT is conditional. No conditions are specified in EOP; simply states to Inhibit ADS. RPV 6.3 - Whether or not RPV is lowered will be dependent upon sequence of orders and whether or not power is above 5% when step is implemented.** 7. Quantitive attributes – no issues noted.	1. Changed event 4 to require ATC to adjust drive water pressure. 2. CPS 3304.01 section 8.3.4.4 directs returning Drive Water Diff Press to normal when the control rod is successfully withdrawn, but does not provide a specific position. For this scenario, it is expected that drive water differential pressure will be restored after the rod is withdrawn one notch. 3. The ATM trip status has been technically verified correct by the validation team, facility author, and the facility rep. Per OP-AA-103-102-1001 Strategies For Successful Transient Mitigation, section 4.1.2.2 Manual Action in lieu of Automatic Action, when an automatic action fails to occur as designed, operators are expected to place the system or component in the desired state, report completion of the manual action to the Control Room Supervisor, and follow-up with available procedural guidance to ensure the actions taken were correct and adequate. 4. Added the words “after the RCIC steam supply line is isolated” to the ITS 3.5.3 action line. 5. Manual tripping of the RR Pumps is not directed by EOP-1A. EOP-1A requires verification that the RR Pumps downshift when level reaches Level 3 and trip when RPV level reaches Level 2.

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			6. Critical task listing was revised as follows: o CT1 (RPV 6.1) was revised to include performance criteria (SLC initiated within 120 seconds of RPV level reaching Level 2. o CT2 (RPV 6.2) was revised to add performance criteria (Inhibit ADS within 105 seconds of RPV level reaching Level 1). o CT3 (RPV 6.3 to terminate and prevent injection to lower level) was eliminated. o CT4 (RPV 6.3 to terminate and prevent injection from HPCS) – added performance criteria to perform critical task before RPV level reaches Level 2 (the HPCS initiation setpoint).
Scenario 4 - Spare		Review comments made during prep week.	Spare not needed