

JPM#	1. Dyn (D/S)	2. LOD (1-5)	3. Attributes					4. Job Content Errors		5. U/E/S	6. Explanation (See below for instructions)
			IC Focus	Cues	Critical Steps	Scope (N/B)	Over-lap	Job-Link	Minutia		

General Comments: All comments have been discussed with Chief Examiner.

1. Review General Comments from Control Room/In-Plant JPMS (listed below) – several are applicable to Admin JPMS.
2. The Performance Standards (Standards) for each JPM step must be detailed, without any subjective words. It must be clear how exactly an examiner is supposed to grade an applicant as Sat or Unsat. [Enhanced Task Standard for each JPM IAW specific comments by Chief Examiner](#)
3. JPMS should clearly distinguish between References used to develop the JPM, Special or Specific Tools and Equipment needed to perform the JPM, Handouts to be provided to the applicant, and Attachments to the JPM. Then keep these categories for all JPMS for consistency. [Revised page 2 for each JPM to include sections for Revision Statement, JPM Information, References, Special Conditions Tools Equipment, Attachments, and Handouts.](#)
4. Recommend formatting page 2 of all JPMS the same – discuss with Chief Examiner before changing any JPM’s format. [Discussed with Chief Examiner and standardized formats as described for comment 3, above.](#)
5. Procedure steps that are N/A – the Standard must include how the applicant determines the step is N/A. Include all procedure steps in the JPM, even if N/A. [In each affected JPM, added JPM steps for procedural steps that are not applicable for the task with standards stating how the applicant determines the step is N/A.](#)
6. Remove the terms “trainee” or “student” or any term that is not “applicant.” Use Find/Replace feature in MS Word. [Replaced “trainee/student/candidate” with “applicant” in each JPM.](#)
7. If there are two different Handouts to the applicant that are handed out at different times, they need to be on different colored paper. Each initial handout is on blue paper and each subsequent handout is on green paper. [If 8.5”X11”, each handout is labelled with the JPM and Handout numbers on the upper right of the first page of the handout.](#)
8. Capture procedure names and revision numbers for all procedures used as a Reference or Handout. [Procedure names and revision number are now listed in the References and Handouts sections on page 2 of each JPM.](#)
9. For General Conditions – consider using term “Initial Conditions” to match NUREG 1021 terminology. Also consider using bullets instead of numbers. [Replaced “General Conditions” with “Initial Conditions” and used bullets instead of numbers for Initial Conditions on each JPM.](#)

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RO (A1)										E	<p>1. Need to walk the Chief Examiner through this JPM. <a href="#">Walk through done during prep week.</a></p> <p>2. Task Standard – need to add “IAW Answer Key” after “... averaged Jet Pump dPs...” Also, need to add that the Rx Engineer must be notified? <a href="#">Added “IAW Answer Key” after “... averaged Jet Pump dPs...” and that the Rx Engineer must be notified to task standard.</a></p> <p>3. Need to add Cycle 30 10 28 Data to General References? <a href="#">Added Jet Pump operability and Recirc Pump Flow Curves to references and handout sections.</a></p> <p>4. Need to clearly identify “what” Jet Pump. Operability Curves are handed out. <a href="#">Listed as Jet Pump Operability and Recirc Pump Flow curves, which is the common name used by Operations for the subject curves.</a></p> <p>5. Procedure 2.1.10, Attach 1, Power-To-Flow map NOT provided as a reference. <a href="#">Listed Procedure 2.1.10, Station Power Changes, Attachment 1, Power-To-Flow Map (Rev 113) as a reference and handout.</a></p> <p>6. JPM step 6 – what is basis for +/- 2 margin? <a href="#">Changed to +/- 1 to account for rounding variations of a calculated average.</a></p> <p>7. Add last step of Attachment 13 to JPM (VERIFY RR pump operating or RHR pump operating in SDC) even though it’s N/A. <a href="#">Added last step of Attachment 13 to JPM (VERIFY RR pump operating or RHR pump operating in SDC).</a></p>
RO (A2)										E	<p>1. Need to add all sources of attachments to General References (there are more provided than procedure 6.LOG.601). There are at least 6 different attachments. <a href="#">Made 6.LOG.601 attachments 9 and 21 separate handouts, as well as TS figure 3.1.7-1, 6.SLC.601 data sheet, and Panel 9-5 SLC indications.</a></p> <p>2. JPM steps 2 and 3 – how does the applicant determine that “ON” should be circled in the Table? <a href="#">Per Operations, circling is the normal means of denoting configuration.</a></p> <p>3. JPM step 3 – “Record SLC Boron Solution Tank Volume” is the Standard, not procedure step. <a href="#">Corrected procedure step and standard, now JPM step 5.</a></p> <p>4. JPM step 5 – “Step is N/A” is the Standard, not Procedure Step. Review all JPMS to ensure Standards are written correctly. <a href="#">In all JPMS, when a step should be N/A’d by the applicant, ensured standard states the applicant determines step is N/A and how determined.</a></p> <p>5. JPM step 10 – acceptable range is too large unless you have a reason. Otherwise, change to + or – 50 gals. This effects acceptable ranges on JPM steps 11 and 12. <a href="#">Changed to 3200-3300 gallons and adjusted subsequent steps accordingly.</a></p>

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RO (A3)										E	<p>1. For Admin Week, have 1 full sized drawing for Answer Key. <i>Will have markup of 1 full sized drawing for Answer Key</i></p> <p>2. Why is RHR-39 (discharge) not identified as required? <i>This is a drain path to equipment drains and is not required for isolation boundary per Operations.</i></p> <p>3. Will the applicants have access to P&amp;ID's (drawing rack) or do we need to provide them a copy? <i>Applicants will be provided large copies of B&amp;R drawings 2040 sh 1 and 2031 sh 2 to allow markups.</i></p> <p>4. JPM steps 1 and 2 – not required and not verifiable to the examiner. <i>Removed former steps 1 and 2.</i></p> <p>5. JPM step 3 – Procedure Step is “RHR-MO-15A” and Standard is “Applicant reviewed B&amp;R 2040 Sheet 1 for RHR Pump A and determined RHR-MO-15A was required to be highlighted and marked tagged and closed.” Follow this format for remainder of valves. <i>Changed to “Reviewed B&amp;R 2040 Sheet 1 for RHR Pump A and determined RHR-MO-15A, PUMP A SHUTDOWN COOLING SUCTION VALVE, was required to be tagged closed, then highlighted and marked tagged and closed on B&amp;R 2040 Sheet 1” and followed this convention for each applicable step,</i></p>

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RO (A4)										E	<p>1. Need better Survey Map – hard to read. <a href="#">Enhanced labeling on survey map for readability.</a></p> <p>2. What procedure defines what the symbols mean on the survey map?</p> <p>3. Add to General Conditions a 6.d – Transition dose is estimated at 5 mRem, add JPM step and add to totals. <a href="#">Added Transition dose is estimated at 5 mRem, added JPM step, and added to totals.</a></p> <p>4. Task Standard – identify that the applicant must determine Initial Dose, Projected Dose and Projected Total Does for each worker. <a href="#">Determining the projected dose and determining consequence to admin limits, as stated in the task standard, requires determination of initial dose, projected dose, and projected total dose and requires each JPM step to be critical.</a></p> <p>5. JPM step 1 – acceptable range for estimated doses should NEVER be rounded down. Given values of dose and time, range of 3.75-3.8 should work. All acceptable ranges for dose calculations need fixed on all JPM steps. <a href="#">Disagree due to cannot locate a standard for rounding dose that contradicts the accepted convention for rounding used in mathematics and engineering disciplines, which REQUIRE rounding up or down, depending on the value. If rounded down in each of 2 steps, it would only make a difference of 0.55 mrem to the total projected dose, which is still only an estimate and is inconsequential when compared to admin limits.</a></p> <p>6. JPM steps 6 and 7 – identify the worker # (JPM step 6 is Worker 1, step 7 is Worker 2) <a href="#">Identified the workers by number in the standards for the respective steps.</a></p>
SRO (A5)		3			X					E	<p>1. JPM step 2 – it's nearly impossible for examiner to know if the applicant reviews a NOTE in the LCO. Is this step not already captured in JPM step 1? <a href="#">Reviewing note is only method of determining LCO 3.0.4b cannot be used as basis for mode change.</a></p> <p>2. Should JPM step 5 be marked as a Critical Step? Also, the Standard should document WHY LCO 3.0.4b is not applicable and Mode of Applicability applied. <a href="#">JPM steps have been revised per CE comments to show each step related to ruling out LCO 3.0.4 exceptions as CTs.</a></p> <p>3. JPM step 6 – the Standard needs to document WHY a change to Mode 2 is not allowed. <a href="#">JPM steps have been revised per CE comments.</a></p> <p>4. The JPM Task Standard should document WHY the correct answer is correct, otherwise an applicant could guess and pass the JPM. <a href="#">Task Standard revised per CE comments.</a></p>

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SRO (A6)		3								E	<p>1. Consider combining General Conditions 5 and 6 saying RPS and ECCS actuate. The “as-designed” is assumed per 1021 Appendix E so not required (but also not wrong to include) <a href="#">Combined per CE comments</a>.</p> <p>2. Add title of NRC Form 361 to both Task Standard and Initiating Cue. <a href="#">Added title in handouts section but not in cue or standard to keep them concise, more readable.</a></p> <p>3. JPM step 1 – how does applicant know to go to step 4.4? <a href="#">Added appropriate steps beginning at 4.1.1.</a></p> <p>4. JPM is missing steps for procedure steps 4.4.1 thru 4.4.2 and NOTE before 4.4.2. <a href="#">Added appropriate steps and notes beginning at 4.1.1.</a></p> <p>5. JPM step 2 – how does applicant go from procedure step 4.4 (JPM step 1) to NUREG 1022? <a href="#">Added examiner note to JPM step 3.</a></p> <p>6. Should JPM step 3 be marked as Critical Step? (step Standard is filling out the Form 361) <a href="#">Made critical in JPM step 4.</a></p> <p>7. JPM step 5, Standard. Add “(Attachment 1)” to end of sentence (“ ... provided in the Key (Attachment 1)” <a href="#">Attachment 1 now identified as Answer Key on JPM page 2, Attachments section.</a></p> <p>8. JPM step 5 – says procedure step is 3.1.4? <a href="#">JPM steps have been corrected.</a></p> <p>9. Procedure 2.0.5, Attachment 1, Reportability Flowchart, Figure 2 – has the “No” line highlighted for the question “ESF, RPS, or ECCS Actuation” – per the General Conditions, RPS and ECCS have actuated. <a href="#">Corrected.</a></p>
SRO (A7)										E	<p>1. Need to walk the Chief Examiner through this JPM. <a href="#">Discussed with CE.</a></p> <p>2. Task Standard – not possible for examiner to know 100% that applicant reviewed the recorded Jet Pump, RR, core flow parameters, averaged Jet Pump dP’s so just include what if verifiable (Recirc Pump Flow loop flow mismatch and Unsat. <a href="#">Corrected per comment.</a></p> <p>3. Not sure I understand the Standard on JPM step 4 – the only Critical Step in the JPM so needs to be accurate. <a href="#">Revised per CE recommendation, now steps 2 and 3 are critical.</a></p> <p>8. Attach 2, page 4 is missing header that informs it’s Attachment 2, page 4 of 5. <a href="#">Standardized attachment numbers and headers in all JPMs.</a></p>

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SRO (A8)		3								E	<p>1. Task Standard – who are the “affected personnel?” <a href="#">Changed to EMTs</a></p> <p>2. In General Conditions, #4 – is there an associated EAL for the ALERT? Should it be added for clarification? <a href="#">Added EAL AA2.1</a></p> <p>3. Are both General References intended to be Handouts or will applicants be required to locate the procedures on their own? Will the room where Admin JPMS are given have a complete set of procedures or limited computer access to procedures? <a href="#">Large size handouts, such as drawings, will be paper, others will be limited electronic references on stand-alone laptops.</a></p> <p>4. In Initiating Cue, add step name for A/R-1, Rad Release and KI. <a href="#">Added step per comment.</a></p> <p>5. JPM step 1 – In A/R-1, before you get to procedure 5.7.14, the second question asked is IF Release in progress, THEN EPIP 5.7.17. For General Conditions, isn't a release in progress? 60 R/hr and RMA-RA-2 upscale. <a href="#">New JPM steps have been added for all aspects of A/R-1 and Procedure 5.7.14 applicable sections 3 and 4 with standards per CE recommendations.</a></p> <p>6. JPM step 1 – include in the Standard the basis for Table 1 being met - #3. Was #1 Fuel cladding determined to be lost per EPIP 5.7.1 checked so we know it's not applicable if an applicant selects it? <a href="#">See comment for 5.</a></p> <p>7. Add procedure step 4.1 to the JPM. <a href="#">See comment for 5.</a></p> <p>8. 2nd NOTE prior to JPM step 3 – if the applicant authorizes KI to injured personnel on refuel floor, should they not be required to select “Other” on Attachment 1? If so, then update Key to include this as an acceptable answer. And shouldn't this Note be moved to prior to step 4.1.2? <a href="#">Not required for victim</a></p> <p>9. NOTE to Examiner prior to JPM step 4 – the RP is an EMT and therefore would be included in that group for KI distribution. The applicant shouldn't select “Other” for the RP. <a href="#">Left allowance for the individual to be classified as RP, Other.</a></p> <p>10. Shouldn't procedure step 4.1.2 be in BOLD? <a href="#">Yes, identified as critical.</a></p> <p>11. Does procedure step 4.1.3 mean authorization of KI to all plant personnel? <a href="#">No</a></p> <p>12. May consider adding additional task to this JPM – not sure it contains enough. <a href="#">Discussed with CE, no additional steps required.</a></p>

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SRO (A9)		3			X					E	1. Don't need separate Attachments 1 and 2 – can combine into one attachment. <a href="#">Combined per comment.</a> 2. JPM step 1 Standard says refer to Attachment 4 – NOT PROVIDED AS REF. Only 2 pages. Is this the correct Attachment? Also, procedure 5.7.1 Section 2 steps NOT PROVIDED AS REF. <a href="#">New section for Handouts now includes charts and procedure will be electronic version on laptops.</a> 3. Add procedure 5.7.1 steps 2 and 2.1 to JPM. <a href="#">Added steps per comment.</a> 4. JPM step 2 – Standard is “Determined the most severe emergency classification.” Which is? How is this step not a Critical Step? <a href="#">Revised step now critical.</a> 5. How are the Standards for JPM steps 2 and 4 different? How does the applicant “declare” for purposes of grading Step 4 as Sat/Unsat? <a href="#">JPM steps have been revised per CE recommendations, with appropriate critical steps.</a>

Instructions for Completing Matrix

**This form is not contained in or required by NUREG-1021.** Utilities are not required or encouraged to use it. The purpose of this form is to enhance regional consistency in reviewing operating tests. Additional information on these areas may be found in Examination Good Practices Appendix D. Check or mark any item(s) requiring comment and explain the issue in the space provided.

- Determine whether the task is dynamic (D) or static (S). A dynamic task is one that involves continuous monitoring and response to varying parameters. A static task is basically a system reconfiguration or realignment.
- Determine level of difficulty (LOD) using established 1-5 rating scale. Levels 1 and 5 represent inappropriate (low or high) discriminatory level for the license being tested.
- Check the appropriate box when an attribute weakness is identified:
  - The initiating cue is not sufficiently clear to ensure the operator understands the task and how to begin.
  - The JPM does not contain sufficient cues that are objective (not leading).
  - All critical steps (elements) have not been properly identified.
  - Scope of the task is either too narrow (N) or too broad (B).
  - Excessive overlap with other part of operating test or written examination.
- Check the appropriate box when a job content error is identified:
  - Topics not linked to job content (e.g., disguised task, not required in real job).
  - Task is trivial and without safety significance.
- Based on the reviewer=s judgment, is the JPM as written (U)nacceptable (requiring repair or replacement), in need of (E)ditorial enhancement, or (S)atisfactory?
- Provide a brief description of any U or E rating in the explanation column.
- Save initial review comments as normal black text; indicate how comments were resolved using [blue text](#) so that each JPM used on the exam is reflected by a (S)atisfactory resolution on this form.

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**General Comments:**

1. On ES-301-1, do not need the a, b, c, designators. S1, S2, S3, etc is enough. [Removed a,b,c...](#)
2. For JPM P2, did the facility decide not to put Alt Path in the JPM title, like all others on the form? Is there any reason to not be consistent? [Method of identifying alternate path has been standardized in all JPMs.](#)
3. Consider adding Alternate Path and Time Critical to the “Additional Program Information” section on Page 2 of JPM template. The template in NUREG 1021, Appendix C, includes “Time Critical Task: Yes/No.” [Added check boxes to JPM information section of page 2 in all JPMs.](#)
4. The Standard associated with Critical Steps doesn’t need to be BOLD. [Method of identifying critical steps has been standardized in all JPMs.](#)
5. Consider changing “General Conditions” to “Initial Conditions” to match terminology in NUREG 1021. Also, consider using bullets in General Conditions and simply sentences to just bits of info. [Changed to Initial Conditions in all JPMs.](#)
6. Add Revision number to all References. [Added reference Rev numbers in all JPMs.](#)
7. Task Standards are written in past-tense. Reset, not resets; opened, not opens; etc [Standards in all JPMs are now past tense.](#)
8. Initiating Cues are present tense: You *are* directed..., not You *have been* directed...” Or “The CRS directs you to...” [Cues are now present tense in all JPMs.](#)
9. Discuss with Chief Examiner the format on page 2 of JPM template. [Enhanced and standardized page 2 format per CE recommendations.](#)
10. For all JPMs that use a procedure where a step exists to inform the CRS when completed, then don’t include “Inform the CRS when the task is complete” in the Initiating Cue. For all others, don’t include details of the JPM final condition, just say inform the control room when task is complete – otherwise, it can be cueing as to what’s required to complete the task standard. [JPMs changed per comment.](#)
11. Include JPM steps for all procedure NOTES, CAUTIONS and WARNINGS. Standard is for the applicant to read and place keep them. [Added JPM steps per comment to all affected JPMs.](#)
12. Include JPM steps for procedures steps that are N/A – standard is the applicant determined the step was N/A. [Added JPM steps per comment to all affected JPMs.](#)
13. For procedure steps that have sub-steps, make all JPMs match the format shown in S4, JPM steps 2 and 3. Each sub-step contains the words of the main step. Review all JPMs for this and correct as necessary. [Standardized format per comment in all JPMs.](#)
14. All notes to examiners should be titled the same (Examiner Note) throughout all JPMs for clarity and consistency. [Changed to Examiner Note in all JPMs.](#)



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S1	D									E	<p>1. Task Standard identifies Bus 480S but General Conditions states SDG is powering Bus 4160S – are these the same bus? <b>480S powered via 4160S</b></p> <p>2. Procedure step 14.2 transfers Bus 480S from SDG to 12.5 kV system by de-energizing the bus (open Breaker 480S-(4160S) then re-energizing from 12.5 kV? <b>Yes</b></p> <p>3. Could this JPM be performed at 100% power with no changes to JPM steps? <b>Assumes emergency buses were de-energized, not viable at 100% power</b></p> <p>4. Procedure step 14.3 says “check” – does this authorize switch manipulation? Does CNS use “check-verify” or “verify-ensure” or other? <b>Check does not authorized action. Ensure does.</b></p> <p>5. JPM step 4 includes two procedure steps – both include operator action (open SDG output breaker (Step 14.3) the applicant should verify switch spring returned (step 14.3.1). The Standard for JPM step 4 doesn’t include applicant completing step 14.3.1 (not a Critical Step). Create JPM step for procedure step 14.3.1. <b>Discussed with CE, included actions in JPM step 4 standard.</b></p> <p>6. A simplified electrical drawing would be helpful to review this JPM. <b>Agree</b></p> <p>7. Note prior to JPM step 7 – when does 2 min auto cooldown start? After placing SDG switch to STOP? Will the SDG be stopped at end of JPM? <b>Cooldown starts when switch placed to stop. Ended JPM at step 8 per CE recommendation.</b></p>
S2	D									U S	<p><b>This JPM has been replaced per CE comments during NRC validation.</b></p> <p>1. Use Initiating Cue terminology in the Task Standard (RPS Logic Trip Bypass jumpers instead of PTMs and scram logic instead of scram)</p> <p>2. Initiating Cue – Add “step 5.6” after Section 5.</p> <p>3. Will procedure be place-kept for steps 5.1 – 5.4?</p> <p>4. JPM steps 2-5 are all Independent Verification procedure steps. Add an examiner cue that IV has been completed when the applicant inquires about obtaining an IV.</p>

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S3	D									E	<p>1. Remove from Initiating Cue “Inform the CRS when RFP A is operating between 2400-2600 rpm.” This is in the Task Standard – cueing the applicant is not allowed. <a href="#">Revised cue to control pressure per CE comments.</a></p> <p>2. JPM step 1 should be deleted. No value, and a step to obtain a procedure is not in all JPMs. <a href="#">Deleted step 1.</a></p> <p>3. Need to include procedure step 8 as a JPM step. Both the applicant and examiner need this information. <a href="#">Added JPM steps for all applicable procedure steps, notes, and cautions, even if N/A, per CE recommendations.</a></p> <p>4. Add a JPM step for the applicant to read the NOTE prior to procedure step 8.1. <a href="#">See response to comment 3.</a></p> <p>5. Add a JPM step for the applicant to read the CAUTION prior to procedure step 8.8. <a href="#">See response to comment 3.</a></p> <p>6. Add a JPM step for the applicant to read the CAUTION after step 8.10. <a href="#">See response to comment 3.</a></p> <p>7. Add a JPM step for the applicant to determine that step 8.10.1 is N/A (like procedure steps 8.8 and 8.9) <a href="#">See response to comment 3.</a></p> <p>8. How does an operator know that step 8.9 is N/A since it references future steps? Procedure enhancement opportunity – doesn’t appear well written. The Standard on procedure step 8.9 is not “N/A.” The applicant reads the guidance and reviews the steps to perform should the turning gear not disengage (8.9.1-3) <a href="#">See response to comment 3.</a></p>

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S4	D				X					E	<p>1. Task Standards are written in past-tense. Reset, not resets; opened, not opens; etc. <b>Changed to past tense.</b></p> <p>2. Task Standard doesn't match the Initiating Cue – is the applicant required to raise RPV level to &gt; 10 inches? Also, would the operator be given a maximum level? <b>Revised task standard per CE recommendations.</b></p> <p>3. Where is procedural guidance that directs applicant to start at step 1 of hard card when MO-25A(B) doesn't open? And that the applicant can skip step 1.2 the second time through? This doesn't meet the requirements of an AP JPM and may be a failure trap for the applicants. <b>Ops Rep discussed with CE. Ops position is this is expected operational methodology.</b></p> <p>4. The Standard for JPM step 8 is not "N/A" – rather, "The applicant determined that RHR HX Cooling is not required and N/A'd this step." <b>Revised standard accordingly.</b></p> <p>5. The Standard for JPM step 9 should also include the applicant determining that PCIS Group 6 lights lit on Panel 9-5. Otherwise, wouldn't perform procedure step 1.7.1. <b>Revised standard accordingly.</b></p> <p>6. JPM steps 9 - include an "or" at the end of 1.7.1 REC-MO-711. Add a NOTE to both JPM step 9 and 10 that the applicant can perform JPM step 9 AND/OR step 10. <b>Not needed since action is N/A due to PCIS Group signal in, logic lights are off.</b></p> <p>7. Applicant can raise RPV level to &gt; 10 inches within the validation time of 10 min? <b>Yes</b></p>
S5	D									E	<p>1. Add 3 NOTES prior to procedure step 5.1. <b>Notes added as separate JPM steps.</b></p> <p>2. JPM steps 1 and 9 – where does "Ensured Group 2 selected" in the Standard come from? Similar words in JPM steps 5, 7, 13 and 15. <b>Function of HMI display for testing OPC</b></p> <p>3. What symbols are around "AC" in procedure steps 5.1.6 and 5.2.6? <b>To denote Acceptance Criteria</b></p> <p>4. Is JPM step 11 a critical step? The Standard is bolded but not the procedure step. <b>It is a critical step, and identification of critical steps has now been standardized in all JPMs.</b></p>
S6	D									U S	<p><b>This JPM was replaced per CE comments during NRC validation.</b></p> <p>1. Should ES-301-2 show this as a Low Power or Shutdown JPM? ("L")</p> <p>2. Task Standard needs to be past-tense.</p> <p>3. Add words from procedure steps 10 and 10.1 to before JPM step 1 for benefit of the examiners.</p> <p>4. Should the applicant read and N/A procedure steps 10.1.1.6 and 7 to finish the procedure section? If so, then add to JPM.</p>

JPM#	1. Dyn (D/S)	2. LOD (1-5)	3. Attributes					4. Job Content Errors		5. U/E/S	6. Explanation (See below for instructions)
			IC Focus	Cues	Critical Steps	Scope (N/B)	Over-lap	Job-Link	Minutia		
S7	D									E	1. Add dP pressure 290-310 to Task Standard <a href="#">Added per comment</a> 2. Add NOTE prior to step 32.1 and CAUTION prior to step 32.3.5 <a href="#">Added JPM steps for all Notes and Cautions encountered</a> 3. Add procedure step 32.2 to JPM <a href="#">Added 32.2</a> 4. Remove word “Trainee” from JPM <a href="#">Changed trainee/candidate/student to Applicant in all JPMS</a> 5. With only JPM steps 14 and 15 being Critical Steps, consider revising Task Standard to include more Critical Steps – consult with Chief Examiner. <a href="#">Revised standard and made several steps critical per CE recommendations.</a> 6. Consider adding step 32.4.4 for applicant to lower drive water dP to 260-270. Add to Task Standard and mark step as Critical Step. Remove “Inform the CRS when the control rod has been withdrawn to position 02” from the Initiating Cue. The Examiner will inform the applicant when the JPM is completed. <a href="#">Not necessary after changes per comment 5.</a>
S8	D									E	1. Procedure 4.1.4 will need to be a different color than procedure 2.1.22 (we’ll discuss this during validation week). <a href="#">Subsequent handouts are on different color paper than initial handouts.</a> 2. Should ES-301-2 show this as a Low Power or Shutdown JPM? (“L”) <a href="#">Not necessarily</a> 3. Is the procedure provided as ref the procedure 2.1.22, Attachment 1 Hard Card? Nothing on the procedure identifies it as Attach 1 or a Hard Card. <a href="#">Now identified in Handouts section of page 2 as hard card.</a> 4. The Standard for JPM step 2 is blank. What does the applicant need to do in order for them to determine Shutdown Cooling was not in service prior to the event in order to determine the step is N/A? <a href="#">JPM step has been removed since only hard card will be used</a> 5. Add procedure step 5.2.2 to JPM, and NOTE prior to step 5.2.2 to JPM. <a href="#">JPM step not needed since only hard card will be used</a> 6. For JPM step 3 – isn’t finding the TIP BAL VALVES as not closed a critical step? <a href="#">Made step critical</a> 7. Procedure 4.1.4 was not provided as a reference. <a href="#">Acknowledged</a>

JPM#	1. Dyn (D/S)	2. LOD (1-5)	3. Attributes					4. Job Content Errors		5. U/E/S	6. Explanation (See below for instructions)
			IC Focus	Cues	Critical Steps	Scope (N/B)	Over-lap	Job-Link	Minutia		
P1	S										1. Add procedure steps 9 and 9.1 and 9.1.1 to JPM. Add NOTE prior to step 9.1. Standard should be written to include how the applicant decides to move on in the procedure – if they determine the step is N/A, then how? <b>Marked up copy showing these steps complete will be provided as a handout. JPM steps unnecessary.</b> 2. Why doesn't applicant choose procedure step 9.1.1 as means to stop FP? Is the cue to secure it "locally"? <b>Marked up copy showing this step complete will be provided as a handout.</b> 3. JPM step 1 – what other cues are available to indicate fire pump has not stopped – pump shaft still turning? Indicator lights? Speed indicators? Discharge pressure? <b>Added pump shaft still turning to cue.</b>
P2	S									U S  <b>This JPM was replaced per CE comments during NRC validation week.</b> 1. PSA Applicability should be considered for this JPM given its low K/A values (2.5/2.6). At least document somewhere why this system is important enough to test on during an ILE. 2. For Initiating Cue – why would H2 cylinders that are about to be depleted be put in Standby? 3. Good picture for examiner aid. Will there be tags hanging on system components during Admin Week? If so, need to provide examiners a brief of what and where they are. 4. On Figure 2 of Attachment 1, what are red circles? Some look like they've shifted off a valve, cover up valve numbers, and don't match the procedure valve manipulations completely. Also, I don't see H2-118 (step 7.1.1.3) or H2-93 (step 7.1.1.4) on drawing. Will need to validate Section 7 with complete drawing. 5. Add step 8, CAUTION, step 8.1 to JPM with appropriate Standards. 6. JPM step 3 – why doesn't procedure step 8.2.3 contain the gauge ID number (H2-PI-12)? 7. Procedure Section 7 – NOT PROVIDED AS A REF 8. Add procedure steps 7 and 7.1 to JPM. 9. What is procedural guidance if H2-PI-12 pressure was less than 125 psig? 10. Since procedure step 8.2.4 has applicant contact the control room, that portion of the initiating cue needs to be deleted. ("Report completion of the task to the control room.")	

JPM#	1. Dyn (D/S)	2. LOD (1-5)	3. Attributes					4. Job Content Errors		5. U/E/S	6. Explanation (See below for instructions)
			IC Focus	Cues	Critical Steps	Scope (N/B)	Over-lap	Job-Link	Minutia		
P3	S									E	1. Add procedure step 3 to JPM. <b>Added all procedure steps, notes, cautions that will be encountered as separate JPM steps.</b> 2. Task Standard – is wording correct? Is it supposed to be "... opened SW-MO-89B locally at MCC-Y Local Auxiliary Shutdown Panel, ..." <b>Revised task standard per CE comments.</b> 3. Change "Note" before JPM step 2 to "Examiner Note" to distinguish from procedure Notes. All notes to examiners should be titled the same throughout all JPMS for clarity and consistency. <b>Changed to Examiner Note.</b> 4. JPM step 7 – procedure step should be 3.5, not 3.4. <b>Revised per comment.</b> 5. JPM step 7 – Standard: for this JPM, what is the "suitable communications method?" Examiners are not familiar with your plant so these types of details are required. <b>Added specific communication devices.</b> 6. JPM step 7 – with SW-MO-89B opened, is the only SWBP that can be started the "B" pump? Is so, shouldn't the procedure specify SWBP B in procedure step 3.5? <b>SWBP B or D can be started.</b>

Instructions for Completing Matrix

**This form is not contained in or required by NUREG-1021.** Utilities are not required or encouraged to use it. The purpose of this form is to enhance regional consistency in reviewing operating tests. Additional information on these areas may be found in Examination Good Practices Appendix D. Check or mark any item(s) requiring comment and explain the issue in the space provided.

- Determine whether the task is dynamic (D) or static (S). A dynamic task is one that involves continuous monitoring and response to varying parameters. A static task is basically a system reconfiguration or realignment.
- Determine level of difficulty (LOD) using established 1-5 rating scale. Levels 1 and 5 represent inappropriate (low or high) discriminatory level for the license being tested.
- Check the appropriate box when an attribute weakness is identified:
  - § The initiating cue is not sufficiently clear to ensure the operator understands the task and how to begin.
  - § The JPM does not contain sufficient cues that are objective (not leading).
  - § All critical steps (elements) have not been properly identified.
  - § Scope of the task is either too narrow (N) or too broad (B).
  - § Excessive overlap with other part of operating test or written examination.
- Check the appropriate box when a job content error is identified:
  - Topics not linked to job content (e.g., disguised task, not required in real job).
  - Task is trivial and without safety significance.
- Based on the reviewer's judgment, is the JPM as written (U)nacceptable (requiring repair or replacement), in need of (E)ditorial enhancement, or (S)atisfactory?
- Provide a brief description of any U or E rating in the explanation column.
- Save initial review comments as normal black text; indicate how comments were resolved using **blue text** so that each JPM used on the exam is reflected by a (S)atisfactory resolution on this form.

Scenario Set	1. ES	2. TS	3. Crit	4. IC	5. Pred	6. TL	7. L/C	8. Eff	9. U/E/S	10. Explanation (See below for instructions)
<p><b>General Comments:</b></p> <ol style="list-style-type: none"> <li>For all Critical Tasks – need more to bases documentation that just BWR Owner’s Group Appendix. USAR, Design Criteria Documents or other licensing bases documents need to be identified. <a href="#">BWROG EPGs are bases for EOP actions for EOP based CTs, since scenarios go beyond design basis response due to equipment failures. The only CT not EOP based is operator action to insert manual scram when auto scram failed, and time limit, 2 minutes, is based on Operations Management expectation.</a></li> <li>For all Critical Tasks – Operations Department must concur on all CT’s, and agree that failure of any task identified is failure of CT and concur with grading as a CT. <a href="#">Operations Management reviewed and approved CNS CT list.</a></li> <li>For all scenarios – all TS LCO’s in affect at the beginning of the scenario must be identified to the applicant crew in the turnover document. <a href="#">LCOs in effect are documented on turnover handout.</a></li> <li>The only scenario that requires a response to loss of electrical power is Scenario 5 (low power). At least one, preferably two of Scenarios 1-4 should include a response to loss of electrical power (loss of bus, LOOP, SBO) <a href="#">Scenario 1 include loss of power to RPS bus A, which requires significant response by both ROs.</a></li> <li>All 5 scenarios had a validation time of 75 min? <a href="#">Yes</a></li> <li>Create a table for all CT’s that shows which of the CT’s are repeated and in what scenario. When the Admin Week schedule is developed, we don’t want the same applicants being evaluated with scenarios that contain the same (or similar) CT’s. <a href="#">Table created and supplied to CE.</a></li> <li>Use of EOP decision blocks from drawings is excellent. <a href="#">Acknowledged</a></li> </ol>										
1									E	<ol style="list-style-type: none"> <li>On D-1, under Inoperable Equipment, include TS LCO’s when applicable. <a href="#">CNS response-Added LCO’s as requested.</a></li> <li>For CT-1: what is basis for fulling inserting 5 control rods? Is the CT satisfied in the crew just injects SLC? Inserting 5 control rods completely is only applicable if no SLC pump is started? <a href="#">CNS response-The intent of this scenario is to insert control rods. Inserting at least 5 provides evidence the applicant can perform this task. More than 5 is redundant.</a></li> <li>In Qualitative Attributes table, Loss of REC pump A and B are identified as separate Instrument/Component failures, but they are identified as one Event. If failure of one REC pump is just a precursor for actions taken on second pump failure, then this is one I/C Failure for credit in the Attributes table. <a href="#">CNS response-The first REC pump trip is intended for the applicant to respond to the component failure and start another REC pump. The second REC pump is intended to transition into scrambling the reactor which leads to the major (ATWS).</a></li> <li>In Qualitative Attributes table – Event 3 (Rx Bldg to Torus Vacuum bkr) is missing. <a href="#">CNS response-Added Rx Bldg to Torus Vacuum breaker to I/C Failures and Total malfunctions Attributes as requested. Changed total numbers accordingly.</a></li> <li>Verify Event 8 not overlapped with CR/In-Plant JPM. <a href="#">CNS response-There is no overlap in that Event * deals with Suppression Pool Cooling and the SIM JPM deals with LPCI injection and RPV level recovery.</a></li> </ol>

CNS – 2017 – 03		Rev 2		PROPOSED OPERATING TEST COMMENTS					SCENARIOS	
2									E	<p>1. CT-1: does the 2 minute requirement have any technical basis? Was Operations Department involved in its development? Do the Operations and Plant Manager agree with the time and would they defend the number if an applicant appeals? <a href="#">CNS response-Operations department has agreed with the 2 minute requirement.</a></p> <p>2. CT-2: First sentence in Justification for he chosen performance limit is not complete. <a href="#">CNS response-Completed the sentence as requested.</a></p> <p>3. On D-1, under Inoperable Equipment, include TS LCO's when applicable. <a href="#">CNS response-Included TS LCOs as required.</a></p> <p>4. Qual Attributes table – Reactivity Manips – Description says none but Actual is 1? <a href="#">CNS response-Changed Reactivity Manips to 1 as requested.</a></p>
3									E	<p>1. D-1, Event 7 says only 2 SRVs open on ED and Qual Attributes table says all but 2 SRVs fail to open (Malfunctions after EOP Entry) and 6 SRVs fail to open on ED (I/C Failures and Total Malfunctions). Pick one <a href="#">CNS response-Changed all to SRV fails open for consistency.</a></p> <p>2. D-1, Event 4 says SRV fails open but Qual Attributes table says SRV sticks open for I/C Failures and Total Failures, and fails open in Abnormal Events. <a href="#">CNS response-Changed all to fails open.</a></p>
4									E	<p>1. Event 4 is RR Pump A Seal #1 leak and RR pump A trip. Then Event 5 is Seal #2 leak on RR pump A that tripped in Event 4 – is this correct? <a href="#">CNS response-The seal failure on RR Pump A is correct. It is the tripped pump.</a></p>
5									S	No comments.



Instructions for Completing Matrix

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1. ES: ES-301 checklists 4, 5, & 6 satisfied.
2. TS: Set includes SRO TS actions for each SRO, with required actions explicitly detailed.
3. Crit: Each manipulation or evolution has explicit success criteria documented in Form ES-D-2.
4. IC: Out of service equipment and other initial conditions reasonably consistent between scenarios and not predictive of scenario events and actions.
5. Pred: Scenario sequence and other factors avoid predictability issues.
6. TL: Time line constructed, including event and process triggered conditions, such that scenario can run without routine examiner cuing.
7. L/C: Length and complexity for each scenario in the set is reasonable for the crew mix being examined, such that all applicants have reasonably similar exposure and events are needed for evaluation purposes.
8. Eff: Sequence of events is reasonably efficient for examination purposes, especially with respect to long delays or interactions.
9. Based on the reviewer=s judgment, rate the scenario set as (U)nacceptable (requiring repair or replacement), in need of (E)ditorial enhancement, or (S)atisfactory.
10. Provide a brief description of problem in the explanation column.
11. Save initial review comments as normal black text; indicate how comments were resolved using **blue text** so that each JPM used on the exam is reflected by a (S)atisfactory resolution on this form.