

**APPENDIX E: DC-03-2007-INIT EXAM  
DRAFT OP TEST SCENARIOS COMMENTS**

Scen 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)
1	U	U	U	S	S	U	S	S	U	ES-301-4: symptoms/cues not identified (D-2 forms not adequate detail) Events 3&4 TS actions and details not identified, no time line constructed
2	U	U	U	S	S	U	S	S	U	ES-301-4: symptoms/cues not identified (D-2 forms not adequate detail) TS details not identified, no time line constructed
3	U	U	U	S	S	U	S	S	U	ES-301-4: symptoms/cues not identified (D-2 forms not adequate detail) TS details not identified, no time line constructed
4 (B/U)	U	U	U	S	U	U	S	S	U	ES-301-4: symptoms/cues not identified (D-2 forms not adequate detail) Events 3&5 TS actions and details not identified, no time line constructed Repeat major event and Event 5 (Scenario 3)

Instructions for Completing Matrix

This form is not contained in or required by NUREG-1021. Utilities are neither required nor encouraged to use it. The purpose of this form is to enhance regional consistency in reviewing operating test scenario sets. 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.

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, is the scenario set as written (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

**APPENDIX E: DC-03-2007-INIT EXAM  
DRAFT OP TEST ADMIN JPM COMMENTS**

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		
RO Admin 1		3								E	Clarify– How is the Ctrl Bank C control Rods at 213 steps derived?
											All other Admin JPMs are satisfactory

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- 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 problem in the explanation column. Provide conclusion on whether JPM SET criteria satisfied (i.e., number/distribution of safety functions, A.3 and A.4 integrated with parts B/C, Admin topics per section meet ES).

**APPENDIX E: DC-03-2007-INIT EXAM  
DRAFT OP TEST CONTROL ROOM / IN-PLANT SYSTEMS JPM COMMENTS**

JPM#	1. Task (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)	Overlap	Job-Link	Minutia		
<b>Overall:</b>											
<ol style="list-style-type: none"> <li>JPMs should be numbered consistently between RO/SRO-I/SRO-U outlines (S1, S2 vs a, b)</li> <li>Student Handouts should <u>not</u> have Task Standard that provides any cues as to expected operator actions.</li> <li>Initiating cue should be written as a direction to the applicant – not just a statement of condition.</li> <li>Critical Steps (listed on JPM coversheet) should indicate exact step (eg., 3.4, not just the step that has one or more critical steps (eg., 3)</li> <li>Component nomenclature should match the procedure and be consistently applied throughout the JPM (ex. S7- D/G 1-2 vs diesel generator 12)</li> <li>Steps should indicate expected operator actions for locating correct procedure, reading/reviewing Prerequisites and Precautions/Limitations where applicable</li> <li>JPM Task Standards must clearly identify the predetermined qualitative and/or quantitative outcome against which task performance will be measured.</li> </ol>											
a(S1)	D	3			X					E	Move Critical Step asterisks to the left of step number (** 3.4) for ease of identification.
b(S2)	D	3		X						U	- Initiating Cue identifies the Accumulator that is indicating low pressure – not necessary - Step 5.1 – add “Determines Step 6.3 is applicable” - After Step 5.6, add that operator returns to AR procedure
c(S3)	D	4								U	- Step 4.3 states depressurize using one PORV if needed while procedure states PORV is only used if aux spray and letdown not in service. - (E) Step 3 – CAUTION is singular, not plural - Critical Step 6.1 is missing “Maintain PZR level stable” per Procedure Step 9.c
d(S4)	D	3								U	- Critical Step 2.3 says set TARGET LOAD < 650 MW but procedure states = 650 MW - Critical Step 2.3 says set RAMP RATE > 200 MW/min but procedure states = 225 MW/min - Critical Step 4.2 says to place rods in Auto but procedure states manually insert rods
e(S5)	D	3								U	- Step 5.1 states operator is to adjust seal injection between 8-13 gpm but doesn’t identify how the operator is to accomplish the task. Similar situation for Step 6.1 plus JPM doesn’t identify what RCP trip criteria the operator is suppose to use for tripping the RCPs. - Add 6.2 for verifying seal injection flow after tripping RCPs per Fold Out Page, RCP Trip Criteria
f(S6)	D	3								U	Initial Conditions should state operating for > 12 hrs steady state (TS 3.4.15, B.1.2) Step 3.1: missing check for blown fuses at RM-11 AND check power panel for tripped breaker (52-11A21) Step 3.3: dispatch operator to investigate what? Breaker? Pump? Both? Also, for Cue – Aux Operator should not verify pump INOPERABLE – only report that breaker has tripped Step 4.1: Should step read 3.2.15.b, not c? Is SR 3.4.13.1 approp? If so, then need copy. Is this step appropriate for RO candidates? If not, then need cue for SFM to inform his of decision. Also, how do we know RM-11 and RM-12 are isolated (procedure step 5.5)? Step 5: what is ref procedure step? Review prereqs/precautions/limitations? Step 5.3: how does operator verify proper CFCU operation?

**APPENDIX E: DC-03-2007-INIT EXAM  
DRAFT OP TEST CONTROL ROOM / IN-PLANT SYSTEMS JPM COMMENTS**

JPM#	1. Task (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)	Overlap	Job-Link	Minutia		
g(S7)	D	4			X					U	Step 1: need cue to inform operator that all procedure prereqs have been met Step 2.2: how does operator determine breaker 52-HG-13 is available? Step 3.2: Does operator "place" or "verify" Mode Selector Switch in MANUAL? Step 9.1: move asterisks to left of step number Step 9.3: should read "Observes VARS-OUT present" per procedure Step 9: add step 9.5 that operator determines that Section 6.5 is applicable (per procedure step 6.4.12 that is a decision step) Step 10.1: IC is that load is 500 kW – will this step be performed? Step 11.1: After this step, add step for operator to read CAUTION prior to reducing load Step 11.4: how does operator verify breaker is open? Red light off? Step 12.1: Procedure OP J-6B:V Rev 25 is missing this step. Step 12.2: Add operator determines Section 6.6 is applicable (per procedure step 6.5.6) Step 13: Procedure steps 6.6.1 – 6.6.3 are missing Critical Step 14.2: operator needs to ensure DG 1-2 speed is zero PRIOR to completing this step
h(S8)	D	2	X							U	** marginal discriminatory value ** Initiating Cue should include statement "with the exception of pulling fuses AND tripping bistables" Need copy of STP I-2C1 PR N42 should be written consistently (not PRN42 – 4.1, 5.1; not N42 – 6.1) Step 5.1: Attach 4.1, 2.d says "see ECG37.3" what is this and need copy? Cue after Step 6.2 – does this belong with Step 5?
P1	S	3								E	Step 2 & 3 descriptions are incorrect Step 1.1 and 4.1 – list valves in reverse order to match Step 1.2 and procedure Step 3.1: make bullets for valves like in Step 3.2
P2	S	3			X					U	Initiating Cue should state that steps are to be performed in the order given Step 1.1: Capitalize Notes to NOTES Critical Step 2.3: 5 of 7 loads are incorrect (see Attach 6.4, Step 3.a) Step 3.1: is operator expected to read CAUTION prior to Step 2 of Attach 6.3? Step 3.2 and 3.3: nomenclature doesn't match procedure for breakers
P3	S	3								U	All step descriptions are not consistent with other JPMs Step 2.1: should read Mixed Bed 2-2 Step 3.2: should read CVCS-2-8519 Steps 7.1, 7.3, 8.2: location descriptions are inconsistent with other steps

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