

Facility: Hope Creek		Exam Date: August 12, 2019												
Admin JPMs	1 ADMIN Topic and K/A	2 LOD (1-5)	3 Attributes							4 Job Content		5 U/E/S	6 Explanation	
			I/C Focus	Cues	Critical Steps	Scope (N/B)	Overlap	Perf. Std.	Key	Minutia	Job Link			
SRO ADMIN A1 - Ensure The Operating Shift Is Adequately Manned	Conduct of Operations 2.1.5	2											E	1. Added that J. Smith is not qualified for another position to Initial Conditions. 2. Added location for completed time to Initial Conditions.
SRO ADMIN A2 - Review All Operations Logs In Use During A Shift Including Computer Logs	Conduct of Operations 2.1.25	3											E	1. Corrected typographical errors in the Initial Conditions. 2. Added Note any discrepancies (if any) to Initiating Cue. 3. Modified Standard for Step 4.1 per NRC's recommendation.
SRO ADMIN A3 - Complete an Action Statement Log Sheet	Equipment Control 2.2.23	2											E	1. Added Loop A to describe unsatisfactory test.
SRO ADMIN A4 - Verify Compliance with Gaseous Release Permit	Radiation Control 2.3.6	3											E	1. Added procedure and Form to provided procedures. 2. Added to note any changes if any to Initiating Cue. 3. Changed one step to not critical.
SRO ADMIN A5 - Utilize The ECG To Determine The Emergency Classification And/Or Reportability Of An Event And/Or Plant Condition	Emergency Plan 2.4.38	3											E	1. Corrected difference between Examiner and Operator's Initial Conditions. 2. Added reference procedures provided to Operator at the beginning of the JPM.
RO ADMIN A1 - Complete The Daily Surveillance Logs	Conduct of Operations 2.1.19	2											E	Added Noun Name to CRIDS point.
RO ADMIN A2 - Perform A Shift Turnover As On-Coming/Off-Going NCO	Conduct of Operations 2.1.18	3											S	
RO ADMIN A3 - Perform Actions to Achieve Criticality and Raise Power to the Point of Adding Heat	Equipment Control 2.2.2	3											E	1. Revised/added the following to the Initial Conditions: • Another operator is responsible for making entries into the Control Room Narrative Log. • Stated that step 4.2.1 has just been completed.

													<ul style="list-style-type: none"> <li>All conditions are satisfactory for completing step 4.2.2.</li> <li>Inserted Reactor Engineering Guidance for rod selection and movement.</li> <li>2. Modified Standards to reflect removal of 4.2.1 and insertion of RE Guidance.</li> <li>3. Corrected typographical error 4.2.6.2.</li> </ul>
RO ADMIN A4 - Purge The Containment	Radiation Control 2.3.11	3										E	<ul style="list-style-type: none"> <li>1. Removed not-applicable dates and times.</li> <li>2. Recalculated time.</li> </ul>
Simulator/In-Plant JPMs	1 Safety Function and K/A												
SIM JPM A - Synchronize and Load the Main Generator/Respond To A Turbine Generator Malfunction	6 - Electrical 262001 A4.04	3										S	
SIM JPM B - Reduce Torus Level Using RCIC System	4 - Heat Removal from the Core 295029 EA1.04	3										E	1. Modified Standard for 5.1.7.
SIM JPM C - Transfer TACS To The Standby SACs Loop	8 - Plant Service Systems 400000 A4.01	4										S	
SIM JPM D - Manually Start the Core Spray System	2 - Reactor Water Inventory Control 209001 A4.01	3										S	
SIM JPM E - Exercise A Control Rod	1 - Reactivity Control 201003 A2.06	3										E	<ul style="list-style-type: none"> <li>1. Change 5.12.1 to not critical.</li> <li>2. Modified Standard for 5.6.</li> </ul>

[illegible]

**Instructions for Completing This Table:**

Check or mark any item(s) requiring a comment and explain the issue in the space provided using the guide below.

1. Check each JPM for appropriate administrative topic requirements (COO, EC, Rad, and EP) or safety function requirements and corresponding K/A. Mark in column 1. (ES-301, D.3 and D.4)
2. Determine the level of difficulty (LOD) using an established 1–5 rating scale. Levels 1 and 5 represent an inappropriate (low or high) discriminatory level for the license that is being tested. Mark in column 2 (Appendix D, C.1.f)
3. In column 3, "Attributes," check the appropriate box when an attribute is **not met**:
  - ☐ The initial conditions and/or initiating cue is clear to ensure the operator understands the task and how to begin. (Appendix C, B.4)
  - ☐ The JPM contains appropriate cues that clearly indicate when they should be provided to the examinee. Cues are objective and not leading. (Appendix C, D.1)
  - ☐ All critical steps (elements) are properly identified.
  - ☐ The scope of the task is not too narrow (N) or too broad (B).
  - ☐ Excessive overlap does not occur with other parts of the operating test or written examination. (ES-301, D.1.a, and ES-301, D.2.a)
  - ☐ The task performance standard clearly describes the expected outcome (i.e., end state). Each performance step identifies a standard for successful completion of the step.
  - ☐ A valid marked up key was provided (e.g., graph interpretation, initialed steps for handouts).
4. For column 4, "Job Content," check the appropriate box if the job content flaw **does not meet** the following elements:
  - ☐ Topics are linked to the job content (e.g., not a disguised task, task required in real job).
  - ☐ The JPM has meaningful performance requirements that will provide a legitimate basis for evaluating the applicant's understanding and ability to safely operate the plant. (ES-301, D.2.c)
5. Based on the reviewer's judgment, is the JPM as written (U)nacceptable (requiring repair or replacement), in need of (E)nhancement, or (S)atisfactory? Mark the answer in column 5.
6. In column 6, provide a brief description of any (U)nacceptable or (E)nhancement rating from column 5.

Save initial review comments and detail subsequent comment resolution so that each exam-bound JPM is marked by a (S)atisfactory resolution on this form.

Facility: Hope Creek		Scenario: 1		Exam Date: 8/12/2019					
1 Event	2 Realism/Cred.	3 Required Actions	4 Verifiable actions	5 LOD	6 TS	7 CTs	8 Scen. Overlap	9 U/E/S	10 Explanation
1								S	
2								S	
3					X			S	
4								S	
5					X			S	
6								S	
7						X		S	
8						X		S	
8					2	2	5	E	

[illegible]



**Instructions for Completing This Table:**

Use this table for each scenario for evaluation.

- 2 Check this box if the events are not related (e.g., seismic event followed by a pipe rupture) **OR** if the events do not obey the laws of physics and thermodynamics.
- 3, 4 In columns 3 and 4, check the box if there is **no** verifiable or required action, as applicable. Examples of required actions are as follows: (ES-301, D.5f)
- opening, closing, and throttling valves
  - starting and stopping equipment
  - raising and lowering level, flow, and pressure
  - making decisions and giving directions
  - acknowledging or verifying key alarms and automatic actions (Uncomplicated events that require no operator action beyond this should **not** be included on the operating test unless they are necessary to set the stage for subsequent events. (Appendix D, B.3).)
- 5 Check this box if the level of difficulty is **not** appropriate.
- 6 Check this box if the event has a TS.
- 7 Check this box if the event has a critical task (CT). If the same CT covers more than one event, check the event where the CT started **only**.
- 8 Check this box if the event overlaps with another event on any of the last two NRC examinations. (Appendix D, C.1.f)
- 9 Based on the reviewer's judgment, is the event as written (U)nacceptable (requiring repair or replacement), in need of (E)nhancement, or (S)atisfactory? Mark the answer in column 9.
- 10 Record any explanations of the events here.

In the shaded boxes, sum the number of check marks in each column.

- In column 1, sum the number of events.
- In columns 2–4, record the total number of check marks for each column.
- In column 5, based on the reviewer's judgement, place a checkmark only if the scenario's LOD is not appropriate.
- In column 6, TS are required to be  $\geq 2$  for each scenario. (ES-301, D.5.d)
- In column 7, preidentified CTs should be  $\geq 2$  for each scenario. (Appendix D; ES-301, D.5.d; ES-301-4)
- In column 8, record the number of events not used on the two previous NRC initial licensing exams. A scenario is considered unsatisfactory if there is  $< 2$  new events. (ES-301, D.5.b; Appendix D, C.1.f)
- In column 9, record whether the scenario as written (U)nacceptable, in need of (E)nhancement, or (S)atisfactory from column 11 of the simulator scenario table.



Facility: Hope Creek				Exam Date: August 12, 2019						
Scenario	1 Event Totals	2 Events Unsat.	3 TS Total	4 TS Unsat.	5 CT Total	6 CT Unsat.	7 % Unsat. Scenario Elements	8 U/E/S	11  Explanation	
1	8	0	2	0	2	0	0	S	D-1s do not list any TS events, and do not list which operator is credited for the action.	
2	8	0	2	0	2	0	0	S		
3	8	0	2	0	2	0	0	S		

**Instructions for Completing This Table:**

Check or mark any item(s) requiring comment and explain the issue in the space provided.

1, 3, 5 For each simulator scenario, enter the **total** number of events (column 1), TS entries/actions (column 3), and CTs (column 5).

This number should match the respective scenario from the event-based scenario tables (the sum from columns 1, 6, and 7, respectively).

2, 4, 6 For each simulator scenario, evaluate each event, TS, and CT as (S)atisfactory, (E)nhance, or (U)nsatisfactory based on the following criteria:

- Events.** Each event is described on a Form ES-D-2, including all switch manipulations, pertinent alarms, and verifiable actions. Event actions are balanced between at-the-controls and balance-of-plant applicants during the scenario. All event-related attributes on Form ES-301-4 are met. Enter the total number of unsatisfactory events in column 2.
- TS.** A scenario includes at least two TS entries/actions across at least two different events. TS entries and actions are detailed on Form ES-D-2. Enter the total number of unsatisfactory TS entries/actions in column 4. (ES-301, D.5d)
- CT.** Check that a scenario includes at least two preidentified CTs. This criterion is a target quantitative attribute, not an absolute minimum requirement. Check that each CT is explicitly bounded on Form ES-D-2 with measurable performance standards (see Appendix D). Enter the total number of unsatisfactory CTs in column 6.

7 In column 7, calculate the percentage of unsatisfactory scenario elements:  $\left(\frac{2 + 4 + 6}{1 + 3 + 5}\right) 100\%$

8 If the value in column 7 is > 20%, mark the scenario as (U)nsatisfactory in column 8. If column 7 is ≤ 20%, annotate with (E)nhancement or (S)atisfactory.

9 In column 9, explain each unsatisfactory event, TS, and CT. Editorial comments can also be added here.

Save initial review comments and detail subsequent comment resolution so that each exam-bound scenario is marked by a (S)atisfactory resolution on this form.

Site name:

Exam Date:

**OPERATING TEST TOTALS**

	Total	Total Unsat.	Total Edits	Total Sat.	% Unsat.	Explanation
Admin. JPMs	9	0	8	9		Edits were editorial in nature
Sim./In-Plant JPMs	11	0	3	11		Edits were editorial in nature
Scenarios	4	0	4	4		Edits were editorial in nature
<b>Op. Test Totals:</b>	24	0	14	24	0	

**Instructions for Completing This Table:**

Update data for this table from quality reviews and totals in the previous tables and then calculate the percentage of total items that are unsatisfactory and give an explanation in the space provided.

- Enter the total number of items submitted for the operating test in the "Total" column. For example, if nine administrative JPMs were submitted, enter "9" in the "Total" items column for administrative JPMs. For scenarios, enter the total number of simulator scenarios.
- Enter the total number of (U)nsatisfactory JPMs and scenarios from the two JPMs column 5 and simulator scenarios column 8 in the previous tables. Provide an explanation in the space provided.
- Enter totals for (E)nhancements needed and (S)atisfactory JPMs and scenarios from the previous tables. This task is for tracking only.
- Total each column and enter the amounts in the "Op. Test Totals" row.
- Calculate the percentage of the operating test that is (U)nsatisfactory ( $\text{Op. Test Total Unsat.} / \text{Op. Test Total}$ ) and place this value in the bolded "% Unsat." cell.  
  
Refer to ES-501, E.3.a, to rate the overall operating test as follows:
  - satisfactory, if the "Op. Test Total" "% Unsat." is  $\leq 20\%$
  - unsatisfactory, if "Op. Test Total" "% Unsat." is  $> 20\%$
- Update this table and the tables above with post-exam changes if the "as-administered" operating test required content changes, including the following:
  - The JPM performance standards were incorrect.
  - The administrative JPM tasks/keys were incorrect.
  - CTs were incorrect in the scenarios (not including postscenario critical tasks defined in Appendix D).
  - The EOP strategy was incorrect in a scenario(s).
  - TS entries/actions were determined to be incorrect in a scenario(s).