

Facility: Waterford		Exam Date: February 21, 2022												
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
	A1												S	
	A2												S	
	A3												S	1/M plot did not validate well so Licensee suggested change to Time to boil JPM. JPM is Sat after validation week.
	A4												S	
	A5 (SRO)												S	
	A6 (SRO)												S	
	A7 (SRO)												S	1/M plot did not validate well so Licensee suggested change to Time to boil JPM. JPM is Sat after validation week.
	A8 (SRO)												S	
	A9 (SRO)												S	
Simulator/In-Plant JPMs		1 Safety Function and K/A	2 LOD (1-5)	3a I/C	3b Cues	3c Critical	3d Scope	3e Overlap	3f Perf.	3h Key	4a Minutia	4b Job Link	5 U/E/S	6 Explanation

General comments for all JPMS														
S1												S	During val week needed more concrete direction for putting ASI back in band. Licensee created new snap with ASI low out of band to start JPM and it is now SAT.	
S2												S	Needed wider band at start of this JPM to prevent EFW actuation during the JPM. Licensee created new snap with SG levels around 60-61% WR to try and prevent this unless applicant takes too long to complete JPM. JPM is now Sat.	
S3												S	Needed a better band for task standard and for direction from SRO. During validation made acceptable changes. JPM is now Sat.	
S4												S		
S5												S	Shortened JPM slightly where only one adjustment is made after 5kw leveling is done. JPM is now Sat.	
S6												S	Concern during validation with exciter failure that they may just wait for someone to come and check the machine since it wasn't going anywhere (load not going up or down on machine). NRC modified JPM to be the direct from bank JPM on 2017 Exam where the EDG kw runs away once in parallel requiring a trip of machine. It is now Sat. NRC used only two direct from bank JPMs so there was room to use a bank JPM. JPM is now Sat.	
S7												S		
S8												S	Had to make this JPM a normal path JPM since we had 7 drafted up for licensee bank (exceeds 4-6 range for exam) so NRC made this modified by making it a normal path JPM. JPM is now Sat.	
P1												S		
P2												S		
P3												S	Need updated pictures on this JPM. Updated pics provided and JPM is now Sat.	

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: Waterford		General comments on scenarios							Exam Date: February 21, 2022	
1	2	3	4	5	6	7	8	9	10	
Event	Realism/Cred.	Required Actions	Verifiable actions	LOD	TS	CTs	Scen. Overlap	U/E/S	Explanation	
									<p>General Comments for all scenarios</p> <ol style="list-style-type: none"> For parameters to record for grading purposes, we will need to work thru the required parameters to capture for scenarios for grading during validation week. 	

Facility: Waterford		Scenario: 1						Exam Date: Feb 21, 2022	
1	2	3	4	5	6	7	8	9	10
Event	Realism/Cred.	Required Actions	Verifiable actions	LOD	TS	CTs	Scen. Overlap	U/E/S	Explanation
1				2				S	
2				3	✓			S	Need TS 3.7.3 action 2 on D-1 for this event. Licensee made requested changes after validation week.
3				2	✓			S	Need action statement for TS in event 3 of D-2. For example, enter TS 3.7.3 action is to "restore at least two trains to operable status within 72 hrs or be in HSB within 6 hrs..." Licensee made requested changes after validation week.
4				3				S	Delete TS in D-1 for this event-there is no TS applied for this event. Licensee made requested changes after validation week.
5				3		✓		S	Need more explicit boundary criteria for all CTs (in D-1 CT table and if not done within the D-2 as well). For example, the CT table for this scenario has some good bounding criteria for CT1 but CT2 does not. Here is a good statement for CT2 "Establish RCS injection with B LPSI pump when SIAS and /or CS occurs (at 17.1 psia or 1684 psia) and before reaching orange or yellow on core cooling or containment SFs." It states <u>when</u> to do it but not before what happens. Applies for CT3 as well. Licensee made requested changes after validation week.
6				3				S	
7				3		✓		S	
8				3				S	No actions in D-2 for this event. Also need it in D-1 narrative (what actions done to reposition (open or close or ?). This is an ATC event I believe, correct? D-1 has it as BOP bean. Licensee made requested changes after validation week.

Facility: Waterford		Scenario: 2					Exam Date: Feb 21, 2022			
1	2	3	4	5	6	7	8	9	10	
Event	Realism/Cred.	Required Actions	Verifiable actions	LOD	TS	CTs	Scen. Overlap	U/E/S	Explanation	
1				3	✓			S		
2				3	✓			S		
3				3				S		
4				3				S		
5				3		✓		S		
6				3		✓		S		
7				3				S		
8				3				S		

Facility: Waterford		Scenario: 3						Exam Date: Feb 21, 2022	
1	2	3	4	5	6	7	8	9	10
Event	Realism/Cred.	Required Actions	Verifiable actions	LOD	TS	CTs	Scen. Overlap	U/E/S	Explanation
1				2	✓			S	
2				2	✓			S	Event 2 changed during val week due to similarity to event on another scenario. Scenario is now Sat.
3				3				S	
4				3				S	
5				3				S	
6				3				S	
7				3		✓		S	
8				3		✓		S	

Facility: Waterford		Scenario: 4				Exam Date: Feb 21, 2022			
1	2	3	4	5	6	7	8	9	10
Event	Realism/Cred.	Required Actions	Verifiable actions	LOD	TS	CTs	Scen. Overlap	U/E/S	Explanation
1				3	✓			S	
2				3				S	
3				3	✓			S	
4				3				S	
5				3				S	
6				3		✓		S	
7				3				S	
8				3		✓		S	
9				3				S	

Facility: Waterford								Exam Date: Feb 21, 2022		
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								S	NRC written op test	
2								S		
3								S		
4								S		
								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:

- a. 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.
- b. 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)

- c. 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 \leq 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: Waterford		Exam Date: Feb 21, 2022				
OPERATING TEST TOTALS						
	Total	Total Unsat.	Total Edits	Total Sat.	% Unsat.	Explanation
Admin. JPMs	9	0	0	9		
Sim./In-Plant JPMs	11	0	0	11		
Scenarios	4	0	0	4		
Op. Test Totals:	24	0	0	24	N/A	NRC authored exam

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.

1. 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.
2. 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.
3. Enter totals for (E)nhancements needed and (S)atisfactory JPMs and scenarios from the previous tables. This task is for tracking only.
4. Total each column and enter the amounts in the "Op. Test Totals" row.
5. Calculate the percentage of the operating test that is (U)nsatisfactory (Op. Test Total Unsat.)/(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 $> 20\%$
6. 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).