Facility: Clinto	n					I	Exam Date	e: Septer	nber 9-	16, 2019			
Admin UDMa ADMIN Topic and		2 LOD		3 Attributes								5	6
Admin JPMs	K/A	(1-5)	I/C Focus	Cues	Critical Steps	Scope (N/B)	Overlap	Perf. Std.	Key	Minutia	Job Link	U/E/S	Explanation <u>Note:</u> " Free Look" Item – IF Applicable
RA1 : JPM477	Conduct of Operations (2.1.18)	2										S	 NRC: 1) Need to add an overall task completion standard. 2) For JPM step 2, add an examiner note that states, "Recording data to the nearest tenth is satisfactory." 3) For JPM step 2, add an examiner cue that states, "If asked, cue the examinee all points on 1TR-CM018 are operable. Facility Response: Added task standard Added examiner note to JPM step 2. Added examiner cue. Final Resolution: All comments addressed and JPM is acceptable for administration.

FS	-30)1
LU	-00	

Facility: Clinto	n					I	Exam Date	e: Septer	mber 9-	16, 2019			
	1 ADMIN Topic and	2 LOD				3 Attributes				4 Job Co		5	6
Admin JPMs	K/A	(1-5)	I/C Focus	Cues	Critical Steps	Scope (N/B)	Overlap	Perf. Std.	Key	Minutia	Job Link	U/E/S	Explanation <u>Note:</u> " Free Look" Item – IF Applicable
RA2 : JPM484	Conduct of Operations (2.1.4)	3										S	 NRC: Verify that CPS <u>normally</u> has a "mixed shift" schedule. Need to add an overall task completion standard. Revise the JPM to permit satisfactory performance if the examinee only credits the 12 hour watches for 8 hours in length. Facility Response: The version used for the ILT 15-1 exam specified working a mixed shift schedule, but was inadvertently removed from the ILT 18-1 version. Reworded the Initial Conditions as follows: "During the current quarter (2nd quarter of 2019) you worked a mixed shift schedule consisting of the following:" Added task standard Revised JPM step 3 to provide 2 options for successful completion – Option 1 for a mixture of 12 hour and 8 hour shifts, and Option 2 for 8 hour shifts. Also revised Attachment 1 length for watch 1, 2, and 3 to permit recording 8 or 12 in the length cell. Final Resolution: All comments addressed and JPM is acceptable for administration.
RA3 : JPM233	Equipment Control (2.2.41)	3										s	 NRC: 1) Need to add an overall task completion standard. Facility Response: Added task standard Final Resolution: Comment addressed and JPM is acceptable for administration.

EC_201	
L3-301	

Facility: Clinton	n					l	Exam Date	e: Septer	mber 9-	16, 2019			
	1	2				3 Attributes				4 Job Co		5	6
Admin JPMs	ADMIN Topic and K/A	LOD (1-5)	I/C		Critical	Scope		Perf.		300.00		U/E/S	Explanation
			Focus	Cues	Steps	(N/B)	Overlap	Std.	Key	Minutia	Job Link		Note: "Free Look" Item – IF Applicable
RA4 : JPM478	Radiation Control (2.3.7)	2							X			Ε	 NRC: 1) Marked-up keys should be provided with explanations of why and what the "other" numbers mean. 2) Need to add an overall task completion standard. 3) Revise the CUE prior to JPM Step 2 to request Posting "Category" vice "requirements." Consider moving this CUE to the INITIATING CUE. 4) Attachment 4 SHOULD NOT be provided to the examinee until after the examinee determines that the area is an HRA/CA. 5) For the last JPM step would it be more appropriate/operationally valid to have the applicant fill out a trip ticket? Facility Response: Added key as requested Added task standard NISP-RP-004 refers to posting requirements in attachment 1 (not posting categories) – left as is. Also did not move JPM step 2 to the cue because doing so would make the JPM task more difficult for the candidate to discern. Moved the cue for providing Att. 4 to step 3 as requested. Discussed with examiners and determined the trip ticket does not add operational validity. Retained step 3 as is. Survey maps revised to minimize misinterpretation of rad/contamination levels to be encountered by Equipment Operator while in the room. Final Resolution: Comments addressed and JPM is acceptable for administration.

ES-301

Facility: Clinto	n						Exam Date	e: Septer	mber 9-	16, 2019			
	1 ADMIN Topic and	2 LOD		3 Attributes								5	6
Admin JPMs	K/A	(1-5)	I/C Focus	Cues	Critical Steps	Scope (N/B)	Overlap	Perf. Std.	Key	Minutia	Job Link	U/E/S	Explanation <u>Note:</u> "Free Look" Item – IF Applicable
SA1 : JPM483	Conduct of Operations (2.1.5)	2										S	 NRC: 1) It appears that this JPM might be performed in the classroom vs. simulator? 2) Need to add an overall task completion standard. 3) There are two separate line items for items to provide to the examinee. Combine into one item. 4) Remove the words "Locate and" from JPM step 1 standard. Facility Response: 1) The suggested testing environment on page 8 is listed as classroom. Added the Other option in the actual testing environment listing. 2) Added task standard 3) Combined bullets 3 and 4 in the evaluator instructions section into one line item. 4) Removed as requested. JPM step 1 standard now reads, "Reviews LS-AA-119 section 5.1.1 10CFR26 Work Hour Limits." Final Resolution: Comments addressed and JPM is acceptable for administration.

Facility: Clinto	n						Exam Date	e: Septer	nber 9-	16, 2019			
A Luce JDM ADMIN Topic and		2 LOD		3 Attributes							4 Job Content		6
Admin JPMs	K/A	(1-5)	I/C Focus	Cues	Critical Steps	Scope (N/B)	Overlap	Perf. Std.	Key	Minutia	Job Link	U/E/S	Explanation <u>Note:</u> "Free Look" Item – IF Applicable
SA2 : JPM113	Conduct of Operations (2.1.23)	3										E	 NRC: 1) How is ITS 3.5.3, 'RCIC,' related to Step 2, RHR? 2) Need to add an overall task completion standard. 3) Ensure place keeping in mark-ups is complete; several instances where circles are not slashed. Facility Response: Moved 3001.01 C002 3.5.3 to Step 1. Added task standard Place keeping markups verified sat as written. For steps that have initial blanks, slashing the step number is not required. Final Resolution: Comments addressed and JPM is acceptable for administration.

ES-301		

Facility: Clinto	'n		Exam Date: September 9-16, 2019										
	1 ADMIN Topic and	2 LOD				3 Attributes				4 Job Content		5	6
Admin JPMs	K/A	(1-5)	I/C Focus	Cues	Critical Steps	Scope (N/B)	Overlap	Perf. Std.	Кеу	Minutia	Job Link	U/E/S	Explanation <u>Note:</u> "Free Look" Item – IF Applicable
SA3 : JPM114	Equipment Control (2.1.12)	3						x				U	 NRC: 1) K/A was moved to 2.2.40 per the K/A manual, and has different importance ratings – Perhaps it is 2.2.12? 2) No verifiable actions taken in Steps 2 & 3 (i.e. Enters CPS 4007.02, transitions to CPS 2203.01 per step 4.4.1, and?) – Documentation of the results of "Determine" & "Direct" actions? 3) Need to add an overall task completion standard. 4) 2203.01 is the responsibility of the RE. Why is step 3 necessary or "critical.? Facility Response: Corrected KA listing and verified IRs were correct. Edited steps 2 & 3 to include verifiable actions. Added task standard Changed step 3 to non-critical. Final Resolution: Comments addressed and JPM is acceptable for administration.

ES-301	
--------	--

Facility: Clinto	n						Exam Date	e: Septer	mber 9-	16, 2019			
	1 ADMIN Topic and	2 LOD				3 Attributes				4 Job Co		5	6
Admin JPMs	K/A	(1-5)	I/C Focus	Cues	Critical Steps	Scope (N/B)	Overlap	Perf. Std.	Key	Minutia	Job Link	U/E/S	Explanation <u>Note:</u> "Free Look" Item – IF Applicable
SA4 : JPM450	Radiation Control (2.3.4)	3		x								E	 NRC: 1) Step 3 needs an Evaluator Cue for ensuring that the applicant obtains a signature of the volunteer acknowledging the briefing (from the examiner?). 2) Need to add an overall task completion standard. 3) INITIAL CONDITIONS – Add a statement indication that the TSC has not been be activated. 4) INITIATING CUE – Change "Acting Station Emergency Director" to "Shift Manager" or "Shift Emergency Director" 5) JPM Step 4 should NOT be "critical." There is no requirement in EP-AA-113 to obtain RPM review. Additionally, if the TSC or has not assumed command authority, then the RPM is probably not available except by phone. 6) JPM step 1 needs an evaluator cue for responding to SED question regarding previous emergency exposures. Facility Response: 1) Added evaluator cue to sign/date/time as the Emergency Worker when requested by the candidate. 2) Added task standard. 3) Added 4) Changed 5) Changed to non-critical. Added evaluator note that the RPM is not available with the TSC not activated. 6) Added evaluator cue to reply no if the examinee asks if any previous emergency exposures were received. Final Resolution: Comments addressed and JPM is acceptable for administration.

ES-301	
--------	--

Facility: Clinto	n						Exam Date	e: Septer	mber 9-	16, 2019			
	1 ADMIN Topic and	2 LOD				3 Attributes				4 Job Co		5	6
Admin JPMs	K/A	(1-5)	I/C Focus	Cues	Critical Steps	Scope (N/B)	Overlap	Perf. Std.	Key	Minutia	Job Link	U/E/S	Explanation <u>Note:</u> "Free Look" Item – IF Applicable
SA5 : JPM018	Emergency Plan (2.4.30)	2		x					x			E	 NRC: A marked-up key should be provided with applicable explanations. Why would the evaluator provide <u>any</u> values if they are available on PPDS (Ref: page 8)? How is the 13-minute acceptance criteria justified Need to add an overall task completion standard. INITIAL CONDITIONS – Remove the word "just" from the 2nd Bullet; it is unrealistic for the DC bus voltage to drop to 105 VDC immediately after trip of the battery charger. Additionally, provide a reason for the trip that implies battery charger restoration is unlikely with the next 15 minutes; move evaluator cue in JPM step 1 to INITIAL CONDITIONS. Recommend adding a marked-up NARS form as a KEY and removing the block by block description form JPM Step 2; paginate such that all of JPM Step 2 is on same page. Facility Response: Key added as attachment 1. Since this JPM is being administered in a classroom, values are not being input into PPDS and must be provided with a cue from the evaluator. Added task standard. removed the word just and added the cause of the trip of the battery charger. Moved the evaluator cue in JPM step 1 to Initial Conditions statement.

Facility: Clinto	n					l	Exam Date	e: Septer	mber 9-	16, 2019			
Simulator /	1 Safety Function	2 LOD				3 Attributes				4 Job Co		5	6
In-Plant JPMs	and K/A	(1-5)	I/C	Cues	Critical	Scope	Overlap	Perf.	Key	Minutia	Job Link	U/E/S	Explanation <u>Note:</u> "Free Look" Item – IF Applicable
a : JPM561	1 / 201005 A3.04	2	Focus		Steps	(N/B)		Std.				E	 NRC: Need to add an overall task completion standard. Since the INITIATING CUE specifies that SRM Period alarms are to be treated as expected, the ARP should also be provided to the applicant during the reading of the INITIAL CONDITIONS and INITIATING CUE. JPM title should probably be "Respond to RC&IS INOP Alarm." JPM Step 2 should be broken up into 3 steps: 2. Acknowledge alarms and refer to ARPs; 3. Hold power stable and initiate trouble shooting actions; and 4. Lower RD Drive dP. Add 9813.01D004 to the cue before step 1. Facility Response: Task standard added. Added 5005-2K to the list of documents provided to the examinee. Title is appropriate as written. JPM step 2 already contains 3 separate standards, divided as you have requested. 5) Added 9813.01D004 to the cue.
b : JPM250	2 / 295031 EA1.01	3		x								E	 NRC: 1) Need to add an overall task completion standard. 2) Copies of 3312.01H001, 3313.01H001, and applicable pages of 4411.03 should be provided to the evaluator. 3) The only "critical" part(s) of JPM Steps 1 and 2 is arming and depressing the MANUAL INITIATION pushbuttons; pump starts are simply verifications.

Facility: Clinto	n					I	Exam Date	e: Septer	nber 9-	16, 2019			
Simulator /	1 Safety Function	2 LOD				3 Attributes				4 Job Co		5	6
In-Plant JPMs	and K/A	(1-5)	I/C	Cues	Critical	Scope	Overlap	Perf.	Key	Minutia	Job	U/E/S	Explanation
			Focus		Steps	(N/B)		Std.			Link		Note: "Free Look" Item – IF Applicable
													 The first sub-step of JPM Step 3 (4411.03 Appendix A 1.1) should be Examinee requests or directs performance of section 3.1 of CPS 4410.00C009 with a "time compression" cue that the checklist is complete. After LP ECCS fail to inject normally what is there to prevent applicants from opening FW isolation and using CD/CB to inject? Added evaluator note for the RPV level values at Level 1 and TAF. Revise the task standard to state that the examinee will restore RPV water level above TAF. Add manually starting LPCS and RHR Pumps to JPM steps 1 and 2 standard as alternatives to arming and depressing the initiation logic pushbutton. Add an evaluator cue prior to step 1 to cue the examinee that 4410.00C009 has been dispatched if requested by the examinee. Add a floor instructor cue to update the crew when ADS initiates. Revise the terminating cue to read, "When RPV level is above TAF and rising, cue the examinee that the JPM is complete. Facility Response: Added cue to JPM that if asked, to tell the applicant that 4410.00C009 has been performed. BOP power is not available for CD/CB, rendering it unavailable for CD/CB, rendering it unavailable for injection. Added to evaluator notes section before JPM step 1. Revised the task standard as requested. Added nanual start options for LPCS and RHR Pumps as requested. Added floor instructor cue before step 1. Revised the terminating cue as requested.

Operating Test Review Worksheet

Facility: Clinto													
Simulator /	1	2				3 Attributes				4 Job Co	ntont	5	6
In-Plant JPMs	Safety Function and K/A	LOD (1-5)	I/C		Critical	Scope		Perf.		100 C0		U/E/S	Explanation
01 1013			Focus	Cues	Steps	(N/B)	Overlap	Std.	Key	Minutia	Job Link		Note: "Free Look" Item – IF Applicable
c : JPM517	3 / 241000 A4.19	2				Ν						E	 NRC: Need to add an overall task completion standard. Provide a second marked up copy of 3812.01 in the package (for the second performance of section 8.1) Revise to eliminate reference to section 8.2. Provide a second cue following JPM Step 4 that the Electrical Trip Test circuit malfunction has been repaired and to reperform section 8.1. Add an override for annunciator 5007-1C Trouble EHC Sys to the simulator lesson plan. Facility Response: Added task standard. Added second reference as requested. Discussed with CE – determined cueing is adequate as written. Added second cue following JPM step 4 as requested. Revised simulator lesson plan for JPM517 as requested.

Facility: Clinton													
Simulator /	1 Safety Function	2 LOD	3 Attributes								4 Job Content		6
In-Plant JPMs	and K/A	(1-5)	I/C		Critical	Scope		Perf.			Job	U/E/S	Explanation
			Focus	Cues	Steps	(N/B)	Overlap	Std.	Key	Minutia	Link		Note: "Free Look" Item – IF Applicable
d : JPM473	5 / 223001 A2.01	2									x	E	 NRC: 1) Would be more meaningful if the entry conditions and appropriate actions were determined by the applicant instead of given. 2) Need to add an overall task completion standard. 3) Why is this time critical? The applicant is not making the decision as to when to place the system in operation; that decision is already made. I do not believe that any applicant will take anywhere near 10 minutes and the acceptable time is 20 minutes. Facility Response: 1) Initial Conditions, Initiating Cue, and JPM step added to allow applicant to determine need to initiate FWLC. 2) Added task standard 3) Placing FWLC in service is defined as a time critical action in OP-CL-102-106-1001 Operator Response Time Master List At CPS. The JPM was revised to test the applicants' ability to determine that placing FWLC in service is required without direct cueing. 20 minutes is the required time listed in OP-CL-102-106-1001. Final Resolution: Comments addressed and JPM is acceptable for administration.

Facility: Clinto	n												
Simulator / In-Plant	1 Safety Function	2 LOD		3 Attributes								5 - U/E/S	6 Explanation
JPMs	and K/A	(1-5)	I/C Focus	Cues	Critical Steps	Scope (N/B)	Overlap	Perf. Std.	Key	Minutia	Job Link	0/2/3	Note: "Free Look" Item – IF Applicable
e : JPM204	4 / 217000 A4.04	3										S	 NRC: Need to add an overall task completion standard. JPM Step 1 standard should specify that the applicant HOLDS the initiation pushbutton for at least 6 seconds (the expected time for F045 to open. Provide specific termination criteria; e.g., RPV level is rising OR Applicant takes action to control level within the specified control band. Facility Response: Added task standard revised JPM step 1 standard as requested Added termination criteria – "When the RPV level trend is steady or rising, cue the examinee that the JPM is complete". Final Resolution: Comments addressed and JPM is acceptable for administration.

Facility: Clinto	n					l	Exam Date	e: Septer	mber 9-	16, 2019			
	1	2	3									5	6
Simulator / In-Plant	Safety Function and K/A	LOD (1-5)	Attributes							Job Co	ontent	U/E/S	Explanation
JPMs		(10)	I/C Focus	Cues	Critical Steps	Scope (N/B)	Overlap	Perf. Std.	Key	Minutia	Job Link		<u>Note:</u> "Free Look" Item – IF Applicable
f: JPM503	6 / 295003 AA1.01	2										S	 NRC: Need to add an overall task completion standard. If the of the INITIAL CONDITIONS is to imply that 3501.01 is being entered from 4200.01, then the c/s for both the Main and Reserve feed breakers would already be in PTL; why wouldn't this be the case? Then there is no need to state that procedure steps 8.1.2.3 and 4 are complete and the performance of these steps would be simple verifications. Specifying that the steps are complete would mean that procedure steps were performed out of sequence. Consider revising the INITIAL CONDITIONS and/or INITIATING CUE to state 3501.01 is being entered from 4200.01. Need to address the NOTE at the beginning of 3501.01 section 8.1.2 concerning the Bus Outage Checklist. Facility Response: Added task standard Removed reference to steps 8.1.2.3 and 4 in the initiating cue. Restored step to verify component control switches were locked out in JPM step 1. Added status of 3514.01C003 to the initial conditions section.

Facility: Clinto	Facility: Clinton Exam Date: September 9-16,											16, 2019				
	1	2	3									5	6			
Simulator / In-Plant	Safety Function and K/A	LOD (1-5)	I/C		Critical	Attributes Scope		Perf.		Job Co	ntent	U/E/S	Explanation			
JPMs		(-)	Focus	Cues	Steps	(N/B)	Overlap	Std.	Key	Minutia	Job Link		<u>Note:</u> "Free Look" Item – IF Applicable			
g : JPM427	8 / 300000 A4.01	3										S	 NRC: 1) Need to add an overall task completion standard. 2) Recommend adding contingency cues for JPM Step 5, acknowledging the need to address ORM and Tech Spec 3) Use of MOV Test Switches is not addressed in the JPM. Facility Response: Added task standard Added contingency cue in JPM step 5 Added an evaluator note before step 1 that discusses the use of MOV Test Switches as optional, but if used, should be restored when valve stroking is completed. Final Resolution: Comments addressed and JPM is acceptable for administration.			
h: JPM560	9 / 288000 A4.01	2										S	 NRC: 1) Need to add an overall task completion standard. 2) The validation is too long. Currently allows 15 minutes. Facility Response: Added task standard Changed Estimated Time To Complete to 10 minutes. Final Resolution: Comments addressed and JPM is acceptable for administration.			

ES-301

Facility: Clinton	n				Exam Date: September 9-16, 2019								
Simulator /	1 Safety Function	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$										5	6
In-Plant JPMs			U/E/S	Explanation <u>Note:</u> "Free Look" Item – IF Applicable									
i: JPM026	6 / 262002 2.1.30	2		×								Ε	 NRC: 1) The JPM Summary states that this In-Plant JPM should be administered in the "Classroom/Other." 2) What is the appropriate PPE? 3) Need to add an overall task completion standard. 4) JPM Step 1 is identified as "critical." This is simply a verify step with no required action; should NOT be "critical." 5) Explain why JPM Step 5 is not "critical;" wouldn't action be necessary to clear alarms/reset alarm logic? 6) K/A System on the JPM SUMMARY page should be 262002 to match ES 301-2 AND suggest changing/adding A4.01 as the K/A number Facility Response: 1) Testing environment corrected on Summary page. 2) Note addressing PPE added prior to Step 1. 3) Added task standard 4) Changed to non-critical 5) Changed to critical 6) Added 262002 to the KA listing. Left 2.1.30 as-is

Facility: Clinto	n			Exam Date: September 9-16, 2019									
Simulator / In-Plant	1 Safety Function	2 LOD		3 4 Attributes Job Content								5 U/E/S	6 Explanation
JPMs	and K/A	(1-5)	I/C Focus	Cues	Critical Steps	Scope (N/B)	Overlap	Perf. Std.	Key	Minutia	Job Link		<u>Note:</u> "Free Look" Item – IF Applicable
j: JPM228	2 / 295031 EA1.04	2		x								E	 NRC: 1) The JPM Summary states that this In-Plant JPM should be administered in the "Classroom/Other." 2) What is the appropriate PPE? 3) Need to add an overall task completion standard. 4) Adding on to the above comment, Actual Testing Environment on the JPM SUMMARY page should be marked as "In-plant" Facility Response: 1) Testing environment corrected on Summary page. 2) Note addressing PPE added prior to Step 1. 3) Added task standard 4) Corrected testing environment entries.

ES-301	
--------	--

Facility: Clinton			l	Exam Date	Date: September 9-16, 2019								
Simulator /	1 Safety Function	2 LOD				3 Attributes				4 Job Co		5	6
In-Plant JPMs	and K/A	(1-5)	I/C Focus	Cues	Critical Steps	Scope (N/B)	Overlap	Perf. Std.	Key	Minutia	Job Link	U/E/S	Explanation <u>Note:</u> "Free Look" Item – IF Applicable
k : JPM272	7 / 295016 AA1.08	2		x								E	 NRC: 1) What is the appropriate PPE? 2) Need to add an overall task completion standard. 3) Add an "Evaluator Note" prior to JPM Step1 stating that either Step 1 or Step 2 is "critical" depending on which Division SRV controls are manipulated to control pressure. 4) The fact that this In-Plant JPM should be administered from the Simulator RSDP needs to be addressed in the guide. This RSDP location could be completed by physically locating the RSDP while performing the other In-plant JPMs OR by a verbal statement accurately describing the physical location. 5) Add 4003.01F003 to the reference section and to cue before JPM step 2. Facility Response: 1) Notes addressing PPE added prior to Steps 1 and 2. 2) Added task standard 3) Added evaluator note as requested 4) Added JPM step 1 to physically locate the panel in the plant. 5) Add as requested. Final Resolution: Comments addressed and JPM is acceptable for administration.

19

Instruc	ctions 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.									
0.										

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.

20

Facility: Clinton		So	cenario: 1	(Low	Power	r)			Exam Date: September 9-16, 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 <u>Notes:</u> "Free Look" Item – IF Applicable; NEW – Not used in the last two (2) NRC exams.
1. Raise Power with Rods to enter Mode 1							x	E	 NRC: Spell out acronyms LPAP & HPAP for clarity. Change the CPS 3002.01 markup to indicate steps 8.7.7 and 8.7.8 are complete. Facility Response: Revised as requested Revised 3002.01 as requested.
2. (NEW) Control Rod Reed Switch Stuck Open								E	 NRC Add line item for ATC/BOP to refer to the ARP. Key Parameter response should list 'blank' instead of FF Facility Response: added Changed 'FF' to 'Blank"
3. (NEW) Stuck IRM F Detector								S	
4. (NEW) Perform CPS 9068.01 Hydrogen Mixing System Operability Test (Div 1)					*			S	 NOTE: TS are entered and exited during test due to expected inoperability. NRC: The timing for performing this surveillance in the middle of the Startup seems unusual. May need to provide clarification for why this test needs to be performed prior to TG synchronization. Change the BOP action to direct EO to verify 1VR08C starts to an open bullet item. Facility Response: No clarification required. Changed action to open bullet item.

21

Facility: Clinton		So	cenario: 1	(Low F	Power	·)			Exam Date: September 9-16, 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 <u>Notes:</u> "Free Look" Item – IF Applicable; NEW – Not used in the last two (2) NRC exams.
5. (NEW) 1HG02CA Compressor Motor Failure (Shaft Break)					x			E	 NRC: 1) Break down the TS Event to include: Applicable LCO (TS LCO 3.6.3.3) Applicable CONDITION (A) REQUIRED ACTION and COMPLETION TIME (A.1 and 30 days) Facility Response: 1) Revised TS event as requested.
6. (NEW) E22N654C RCIC Storage Tank Level Instrument Failure					x			E	 NRC: Since 1E22-F001 does not auto-close, BOP should be expected to CLOSE it (versus VERIFY it is closed). Break down the TS Event to include: Applicable LCO (TS LCO 3.3.5.1) Applicable CONDITION (A and D) REQUIRED ACTION and COMPLETION TIME (A.1 Immediately, D.2 within 24 hours) Event 6 role play – Replace "Normal" in the table for 1E22-N654G with a value. Facility Response: 1) 1E22-F001 does not auto close as a result of the instrument failure, but will automatically close when F015 is opened due to the functional position interlock with F015. Left as is. Revised TS event as requested Replace the work Normal in column 2 of the table with "22 inches".
7. CCW Pump 1A trip							x	E	NRC: 1) Add line item for ATC to refer to the ARP. <u>Facility Response:</u> 1) Added line item

22

Facility: Clinton		Sc	enario: 1	Exam Date: September 9-16, 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 <u>Notes:</u> " Free Look " Item – IF Applicable; NEW – Not used in the last two (2) NRC exams.
8. (NEW) RT Leak in CNMT/ATWS (ARI Successful)						x		E	 NRC: Manual Scram and ARI pushbuttons item should be closed bullet. This action satisfies CT-1 why list a separate item? Why would EOP-1A be entered since the S/D Criteria would be met when EOP-1 is entered and implemented? Add action to terminate LPCS/LPCI injection before RPV pressure drops to 472 psig. Facility Response: Changed action to closed bullet and combined with CT-1 action. EOP-1A must be entered if shutdown criteria isn't met when the mode switch is taken to shutdown. Added actions to BOP & SRO sections to T&P LPCS/LPCI injection
9. Div 1 RHR Pump Fails to Auto Start						x	x	E	 NRC: Guide for BOP states "Reports issue to SRO" – specify the issue to be reported (CT-2 related). This event is identified as a Component Failure for the BOP. If this event is being credited to the BOP then the bulleted line item should be closed for the BOP and removed from the ATC. If the event is not being credited for a specific operator, then changed the D1 to C-ATC/BOP. Facility Response: Removed generic line item for reporting issues to the SRO because the BOP actions already contain line items for the specific items requiring reporting. Changed the D1. Component malfunctions after the major event are not credited for the BOP or ATC.
9 Events (TOTALS)					2	2	3	E	Final Resolution: Comments addressed and Scenario is acceptable for administration.

Fa	cility: Clinton		Sc	enario: 2					Exam Date: September 9-16, 2019			
	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 <u>Notes:</u> " Free Look " Item – IF Applicable; NEW – Not used in the last two (2) NRC exams.		
1.	(NEW) Shift Main EHC Pumps								E	 NRC: 1) Add role play item to report EHC Reservoir level is at +2 inches. Facility Response: 1) Added line item. 		
2.	Raise Power With Rods to 30%							x	E	 NRC: 1) Add line item for ATC/BOP to refer to the ARP 2) Add line item for SRO to enter and execute CPS 4100.02 Core Stability Control off-normal if annunciator 5006-3D OPRM Enabled annunciator is received. Facility Response: 1) Added line items. 2) Added open bullet item to enter 4100.02 if 5006-3D received. 		
3.	Inadvertent opening of a SRV					•	x	x	E	 NOTE: TS are entered IF FW temperature drops below 50F FFWTR curve of CPS 4005.01 (ITS 3.2.1, 3.2.2 and 3.2.3). NRC: Add line item for ATC/BOP to refer to the ARP. Verification that TS LCO 3.4.4 is still met should be a closed bullet. Even though TS LCOS 3.2.1, 3.2.1, and 3.2.3 are not expected to be entered include the following for each assuming that the 50°F temperature drop:		

24

Fa	cility: Clinton		Sc	enario: 2						Exam Date: September 9-16, 2019
	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 <u>Notes:</u> " Free Look " Item – IF Applicable; NEW – Not used in the last two (2) NRC exams.
4.	(NEW) RR 'A' High Stator Temperature / Emergency Loop Shutdown					x			E	 NRC: 1) Include the following for Single Loop TS Applicable LCO Applicable CONDITION REQUIRED ACTION and COMPLETION TIME 2) Consider making entry into 4008.01 optional, since there is not a direct entry condition since pump is shutdown due to high temperature prior to any automatic trip. 3) Revise ATC actions to include the option to trip RR Pump 'A' immediately without lowering RPV water level setpoint based on actions specified in the ARP. Facility Response: Reformatted as requested Entry into 4008.01 is required – left entry closed bullet Added as requested.
5.	(NEW) 'B' FC Pump trip								E	 NRC: 1) Section 8.1.2 of 3317.01 would not be the applicable section since no pumps are running and flow to the CT is isolated. 2) There does not appear to be any applicable actions in 4006.02. Consider making entry an open bullet. Facility Response: Removed reference to section 8.1.2. 4006.02 provides actions for restoring heat removal capability to the spent fuel pool. Left entry closed bullet.
6.	(NEW) RT Pump Shaft Shear/Failure to Trip on Low Flow								E	 NRC: 1) Add item(s) to initiate isolation and venting of the tripped pump (3303.01 Section 8.1.4) 2) Add a cue for casing temperature. Facility Response: 1) ATC entry already exists to refer to 3303.01 for shutdown directions. Isolation and venting is contained within that section. Left as is. 2) Added 280-300°F to E6 cues.

25

Facility: Clinton		Sc	enario: 2	Exam Date: September 9-16, 2019					
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 <u>Notes:</u> " Free Look " Item – IF Applicable; NEW – Not used in the last two (2) NRC exams.
7. (NEW) 1RIX-PR006A Fuel Building Exhaust PRM fails high					x			E	 NRC: 1) Include the following for Rad Monitoring TS Applicable LCO Applicable CONDITION REQUIRED ACTION and COMPLETION TIME Facility Response: Modified entry as requested.
8. (NEW) RPV Instrument Line Leak						x		E	 NRC: 1) Why isn't ED(or anticipating ED if that prevents exceeding 2 MAX SAFE temperatures) a CRITICAL TASK? 2) Add an SRO action to direct reducing RPV pressure to 500-600 psig to lower the driving head of the leak. Facility Response: 1) Added as CT-3 to the scenario guide. 2) Added SRO action (open bullet) to direct reducing RPV pressure to 500 to 600 psig to reduce driving head of leak
9. (NEW) Radiation Monitor fails to isolate VF/Startup VG								s	
9 Events (TOTALS)					2	3	2	E	Final Resolution: Comments addressed and Scenario is acceptable for administration.

Facility: Clinton		Sc	enario: 3						Exam Date: September 9-16, 2019
1	2	3	4	5	6	7	8	9	10
Event	Realism/ Cred.	Required Actions	Verifiable actions	LOD	тs	CTs	Scen. Overlap	U/E/S	Explanation <u>Notes:</u> " Free Look " Item – IF Applicable; NEW – Not used in the last two (2) NRC exams.
1. (NEW) Shutdown VG Train Restart VF Train A	Α/				x			E	 NRC: 1)TS are entered and exited during tests due to expected inoperability. This was <u>not</u> considered a TS evaluation in Scenario #1, why is it now? Does the SRO independently determine the TS entries needed from non-specific turnover information, or are they procedurally directed? 2) Explain why PR006A-D rad monitors are INOPERABLE cue to performing this surveillance; there is nothing in the impact statement to indicate that this is the case. Facility Response: and 2) No actions required – E1 was replaced with a non-TS related event.
2. (NEW) Hotwell M/U Contro Failure	ler							S	 NRC: 1) Recommend removing reference to Section 8.6.1 of 3104.01, unless a high level alarm is expected. 2) Potential for applicants to direct isolation of LCV per ARP Facility Response: Discussed with NRC - no changes needed.
3. (NEW) VF Exhaust and Supply Fans Trip					x			S	 NRC: See earlier comment from event 1. Add optional SRO actions to exit 3.6.4.1 and EOP-8 when secondary containment dP has been restored. Facility Response: Entry into 3.3.6.2 is required and 3.6.4.1 is optional (based on the note in SR 3.6.4.1.1. 3.3.6.2 is entered anytime there is no flow past 1RIX-PR006A-D because SGTS cannot receive a start signal from those monitors. Revised LCO entry statements. Added optional SRO actions to exit 3.6.4.1 and EOP-8.

27

Facility: Clinton		Sc	enario: 3		-	-		-	Exam Date: September 9-16, 2019
1	2	3	4	5	6	7	8	9	10
Event	Realism/ Cred.	Required Actions	Verifiable actions	LOD	тs	CTs	Scen. Overlap	U/E/S	Explanation <u>Notes:</u> "Free Look" Item – IF Applicable; NEW – Not used in the last two (2) NRC exams.
4. (NEW) RWL Inoperable					x			S	 NRC: 1) Include the following for Control Rod Block Instrumentation TS Applicable LCO Applicable CONDITION REQUIRED ACTION and COMPLETION TIME 2) Verify 3.3.2.1 B.1 (One or more rod pattern controller channels inoperable is not applicable to this scenario. Facility Response: Modified entry as requested. The rod pattern controller is only required to be operable with thermal power ≤ 16.7% power. Since S-3 is at rated thermal power, 3.3.2.1 B.1 is not applicable.
5. (NEW) Trip of Operating GC Pump (1GC01PB) / Failure of Standby GC Pump to Auto Start						x		E	 NRC: 1) How severe of a turbine runback occur that requires a SCRAM? How long does the BOP have to address this before the bypass valves open, the runback occurs, etc.? 2) Shouldn't CT boundary be before a Turbine Trip? Facility Response: Per procedure, a runback that results in opening a turbine bypass valve requires the reactor to be scrammed. For this scenario, the first bypass valve will open ~ 58 seconds after the GC Pump is tripped. CT is okay as written
6. (NEW) 'A' RT Filter Demin Trip								S	
 (NEW) Loss of Main Generator H₂ requiring power reduction 								s	NRC: 1) Event 7 BOP actions lists 1SOH19; should be 1SOH20 Facility Response: 1) Corrected typo

28

Facility: Clinton Scenario: 3								Exam Date: September 9-16, 2019					
1	2	3	4	5	6	7	8	9	10				
Event	Realism/ Cred.	Required Actions	Verifiable actions	LOD	тs	CTs	Scen. Overlap	U/E/S	Explanation <u>Notes:</u> " Free Look " Item – IF Applicable; NEW – Not used in the last two (2) NRC exams.				
8. (NEW) Trip CRD Drive Water Pump 1B / Complete Loss of CRD / Scram					*	x		Е	 NRC: 1) The 38 minute time limit for completing the critical task seems excessive at this point in the scenario -how long does it take before the accumulator becomes inoperable? Can it be expedited without affecting the previous events? When is the earliest a SCRAM should be inserted? 2) * TS may be entered due to accumulator inoperability prior to the SCRAM. 2) What makes this a major transient? Facility Response: During OSV, the CE and evaluation team agreed that the event is satisfactory as written. With NRC agreement, event 8 does constitute a major transient. 				
9. (NEW) Low SB Hydraulic Pressure due to reservoir leak								S					
9 Events (TOTALS)					3	2	0	Е					

Facility: Clinton		S	Scenario:	SPARE	E (to b	e revie	ewed @ C	DV)	Exam Date: September 9-16, 2019
1	2	3	4	5	6	7	8	9	10
Event	Realism/ Cred.	Required Actions	Verifiable actions	LOD	тs	CTs	Scen. Overlap	U/E/S	Explanation <u>Notes:</u> " Free Look " Item – IF Applicable; NEW – Not used in the last two (2) NRC exams.
1. (NEW) Perform CPS 9051.01 HPCS Pump Operability									NRC: Facility Response:
2. (NEW) Failure of HPCS Pump Discharge valve (1E22-F301)					x				NRC: Should E2 be credited as a TS event for the SRO?Facility Response: No. HPCS is already inop at the beginning of the scenario.
3. (NEW) RPS Logic Card Failure / Half Scram									 NRC: The order of Events 3 and 4 should be swapped. The BOP should be credited with a component malfunction since he/she has to bypass sensor logic to clear the trip signal. Include the following for ITS entered when Div 1 is placed in sensor bypass: a. Applicable LCO b. Applicable CONDITION c. REQUIRED ACTION and COMPLETION TIME Facility Response: Swapped the order of Events 3 and 4 as requested. Changed the D-1 to list event as a BOP malfunction. Revised ITS listing as requested.
4. Raise Power with rods to 65%							x		NRC: Facility Response:
5. (NEW) CB Pump 'A' Breaker Trip									NRC: Facility Response:
6. (NEW) Loss of Control Power to Suppression Pool Dump Valve (1SM001A)					x				NRC: 1) Include the following for ITS entered: a. Applicable LCO b. Applicable CONDITION c. REQUIRED ACTION and COMPLETION TIME Facility Response:
7. (NEW) EHC Temperature Controller Failure									1) Revised ITS listing as requested NRC: Facility Response:

ES-301 30 Form ES-301-7

Facility: Clinton		9	Scenario:	SPARE	Exam Date: September 9-16, 2019				
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 <u>Notes:</u> " Free Look " Item – IF Applicable; NEW – Not used in the last two (2) NRC exams.
8. (NEW) Isolable MSL 'D' Leak in the ABST									NRC: Facility Response:
9. MSIVs fail to close on Group 1 isolation signal							x		NRC: Facility Response:
9 Events (TOTALS)					2		2		

	Use this table for each scenario for evaluation.
	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.
, 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).) Check this box if the event has a TS. Check this box if the event has a TS. Check this box if the event has a TS. Check this box if the event has a TS. Check this box if the event overlaps with another event on any of the last two NRC examinations. (Appendix D, C.1.f) 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. 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 ≥ 2 for each scenario. (ES-301, D.5.d)
	 In column 7, preidentified CTs should be ≥ 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: Clint	on								Exam Date: September 9-16, 2019			
	1	2	3	4	5	6	7	8	9			
Scenario	Event Totals	Events Unsat.	TS Total	TS Unsat.	CT Total	CT Unsat.	% Unsat. Scenario Elements	U/E/S	Explanation			
1	1 9 0 2 0 2 0 E											
2	9	0	2	0	2	0	0	S				
3	9	0	3	0	2	0	0	Е				
Spare	Spare 9 - 2 - - - The spare is to be reviewed at the OV – not in submittal.											
Check or mark a 1, 3, 5 For ea This nu 2, 4, 6 For ea a. b.	nstructions for Completing This Table: Check or mark any item(s) requiring comment and explain the issue in the space provided. , 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).											
	(1+3+5)											
Save initial revie	w comme	ents and def	tail subse	quent co	mment	resolutio	n so that eac	ch exam-b	ound scenario is marked by a (S)atisfactory resolution on this form.			

Facility: Clinton						Exam Date: September 9-16, 2019
OPERATING TEST TOTALS						
	Total	Total Unsat.	Total Edits	Total Sat.	% Unsat.	Explanation
Admin. JPMs	9	1	4	4		
Sim./In-Plant JPMs	11	0	7	4		
Scenarios	3	0	2	1		
Op. Test Totals:	23	1	13	9	4.3	Pre-OV Estimate
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 ≤ 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 tools (keys users in a must be administrative standard)					
	 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).					