



JOB PERFORMANCE MEASURE (JPM)

SITE: MONTICELLO NUCLEAR GENERATING PLANT

JPM TITLE: PRIMARY CONTAINMENT VENTING FROM ASDS

JPM NUMBER: JPM-C.5-3505-002 **REV.** 8

RELATED PRA INFORMATION: PRA-CHR-DET-Y

TASK NUMBERS / TASK TITLE(S): CR314.126 Vent Primary Containment

K/A NUMBERS: 295024 EA1.14 **Rating: SRO/RO:** 3.5/3.4

APPLICABLE METHOD OF TESTING:

Discussion: ☐ Simulate/walkthrough: ☒ Perform: ☐

EVALUATION LOCATION: In-Plant: ☒ Control Room: ☐
 Simulator: ☐ Other: ☐
 Lab: ☐

Time for Completion: 15 Minutes **Time Critical:** No

Alternate Path: No

TASK APPLICABILITY: SRO: ☒ RO: ☒ NLO ☐

Additional site-specific signatures may be added as desired.

Developed by:		
Developer		Date
Validated by:		
Validator (See JPM Validation Checklist, Attachment 1)		Date
Approved by:		
Training Supervisor		Date

JPM-C.5-3505-002 (Primary Containment Venting from ASDS) Rev. 8

I will explain the initial conditions, which step(s) to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this job performance measure will be satisfied.

DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.

INITIAL CONDITIONS:

- A LOCA has occurred and the crew is implementing Emergency Operating Procedures.
- The TSC is not activated
- Drywell pressure is 40 psig and slowly rising.
- DW sprays are unavailable.
- Torus Level is at ~0"
- Train B of Alternate N2 and Y-80 are available

INITIATING CUES (IF APPLICABLE):

- The CRS directs you to vent the containment through the Hard Pipe Vent per C.5-3505, PART A.
- **ALL OPERATOR ACTIONS ARE TO BE SIMULATED UNLESS OTHERWISE DIRECTED**

JPM PERFORMANCE INFORMATION

Start Time: _____

NOTE: When providing “Evaluator Cues” to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee’s actions warrant receiving the information (i.e., the examinee looks or asks for the indication).

IMPORTANT: Critical steps are marked with a “Y” below the performance step number. Failure to meet the standard for any critical step **SHALL** result in failure of this JPM, per FP-T-SAT-73 (Licensed Operator Requalification Program Examinations).

Performance Step: 1	Locate procedure C.5-3505, Venting Primary Containment
Critical: N	
Standard:	Locates appropriate procedure and keys
Evaluator Cue:	Provide the operator with a copy of the procedure and inform them they have the appropriate keys.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 2	Step 1
Critical: Y	OPEN AI-651, N2 SUPPLY TO HARD PIPE VENT (Alternate N2 Supply – Train B)
Standard:	Turns AI-651 CCW to open
Evaluator Cue:	The handle rotates CCW and meets resistance.
Evaluator Note:	AI-651 is located in the TB 931’ by the Alternate N2 valves
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

JPM-C.5-3505-002 (Primary Containment Venting from ASDS) Rev. 8

Performance Step: 3	Step 2.a
Critical: Y	<u>If</u> DW pressure is below 50 psig, <u>Then</u> burst the rupture disc by performing the following: a. OPEN RUPTURE DISC PSD 4543 N2 SUPPLY using HS-4541 (Panel C-292)
Standard:	Places HS-4541 to OPEN
Evaluator Cue:	HS-4541 red light comes on and green light goes out
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 4	Step 2.b
Critical: Y	<u>If</u> DW pressure is below 50 psig, <u>Then</u> burst the rupture disc by performing the following: b. <u>When</u> 5 minutes have elapsed, <u>Or</u> DW pressure increases above 50 psig, <u>Then</u> place HS-4541 in the CLOSE position.
Standard:	Places HS-4541 to CLOSE
Evaluator Cue:	PO-7251B indicates 41 psig and slowly rising Inform the operator that the 5 minutes has elapsed HS-4541 red light goes out and green light comes on
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

JPM-C.5-3505-002 (Primary Containment Venting from ASDS) Rev. 8

Performance Step: 5	Step 3
Critical: Y	OPEN and CLOSE the HPV isolation valves as directed by Shift Supervision to Control Primary Containment pressure (Panel C-292): AO-4540, HPV ISOLATION OUTBOARD AO-4539, HPV ISOLATION INBOARD
Standard:	Opens both AO-4540 and AO-4539 to vent primary containment
Evaluator Cue:	AO-4540 red light comes on and green light goes out, AO-4539 red light comes on and green light goes out If operator contacts the CR inform the operator that the CRS directs them vent primary containment.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 6	Step 4
Critical: N	Monitor the following indicators to verify correct operation PI-7251B, PRIMARY CONTAINMENT WIDE RANGE PRESSURE (C-292) RR-4544, HARD PIPE VENT RADIATION MONITOR RECORDER (Panel C-289B) RM-4544, HARD PIPE VENT RADIDATION MONITOR (Panel C-289B)
Standard:	Monitors for containment pressure lowering and radiation levels rising
Evaluator Cue:	Containment pressure is lowering and radiation levels are rising
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 7	INFORM EVALUATOR THAT THE TASK HAS BEEN COMPLETED.
Critical: N	
Standard:	Operator informs evaluator that the task is completed.
Evaluator Cue:	When lowering DW pressure and rising rad levels are noted, terminate the JPM.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Terminating Cues: When AO-4540 and AO-4539 have been opened and operator has verified them open then state that the task is complete.

Stop Time: _____



JOB PERFORMANCE MEASURE (JPM)

SITE: MONTICELLO NUCLEAR GENERATING PLANT

JPM TITLE: RESETTING SRV LOW LOW SET SYSTEM TRIP UNITS

JPM NUMBER: JPM-B.03.03-004 **REV.** 7

RELATED PRA INFORMATION: None

TASK NUMBERS / TASK TITLE(S): CR218.103
Resetting SRV Low Low Set System Trip Units

K/A NUMBERS: 239002 **Rating: SRO/RO:** 3.9/3.9
A3.09

APPLICABLE METHOD OF TESTING:

Discussion: ☐ Simulate/walkthrough: ☒ Perform: ☐

EVALUATION LOCATION: In-Plant: ☒ Control Room: ☐
 Simulator: ☐ Other: ☐
 Lab: ☐

Time for Completion: 15 Minutes Time Critical: No

Alternate Path: No

TASK APPLICABILITY: SRO: ☒ RO: ☒ NLO ☐

Additional site-specific signatures may be added as desired.

Developed by:		
	Developer	Date
Validated by:		
	Validator (See JPM Validation Checklist, Attachment 1)	Date
Approved by:		
	Training Supervisor	Date

INITIAL CONDITIONS:

- The Reactor is at 100% power.
- I&C personnel have just finished calibrating PSHL-4064A, E SRV Low Low Set Press Intlk.
- The trip unit for PSHL-4064A currently has a sealed in trip.

INITIATING CUES (IF APPLICABLE):

- The Control Room Supervisor directs you to reset the trip unit for PSHL-4064A per B.03.03-05 G.3.
- **ALL OPERATOR ACTIONS ARE TO BE SIMULATED!**
- **INFORM THE EVALUATOR WHEN YOU HAVE COMPLETED THE TASK.**

NOTE: When providing “Evaluator Cues” to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee’s actions warrant receiving the information (i.e., the examinee looks or asks for the indication).

IMPORTANT: Critical steps are marked with a “Y” below the performance step number. Failure to meet the standard for any critical step **SHALL** result in failure of this JPM, per FP-T-SAT-73 (Licensed Operator Requalification Program Examinations).

Performance Step: 1	Locate Procedure B.03.03-05.G.3. (Resetting SRV Low Low Set System Trip Units)
Critical: N	
Standard:	Locates appropriate procedure.
Evaluator Cue:	Provide operator with copy of procedure. Upon request provide a copy of B.03.03-06 Figure 12.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 2	(Procedure STEP 1)
Critical: N	
	1. Enter 72 hour LCO per Tech Spec Table 3.3.6.3 for Division 1 Low Low Set Logic System train.
Standard:	Requests Control Supervisor enter LCO per Tech Spec Table 3.3.6.3.
Evaluator Cue:	LCO has been entered.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 3 Critical: N	(Procedure STEP 2)
	NOTE: Numbers contained in parentheses within procedure steps are associated with components shown on Figure 12 of Ops Man Section B.03.03-06 (Reactor Pressure Relief - Figures).
	2. Identify tripped PSHL trip units on Panel C-253A by noting which units have their red trip lights (1) on (see Ops Man Section B.03.03-06, Figure 12).
Standard:	Checks trip units on Panel C-253A for red trip lights lit.
Evaluator Cue:	The trip unit for PSHL-4064A is the only trip unit with a trip light lit. Upon request provide a copy of Figure 12.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 4 Critical: N	(Procedure STEP 3)
	3. Locate calibration unit at right end of card file containing tripped PSHL trip units.
Standard:	Locates calibration unit at right end of the card file.
Evaluator Cue:	None (Note: This is the upper card file on panel C-253A.)
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 5 Critical: Y	(Procedure STEP 4)
	4. Rotate stable current adjustment knob (2) CCW until it stops.
Standard:	Rotates stable current adjustment knob (2) CCW until it stops.
Evaluator Cue:	Knob rotates and then stops.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 6	(Procedure STEP 5)
Critical: Y	5. Verify the following switches are pulled out on calibration unit: <ol style="list-style-type: none"> Calibration select and command, small inner knob (5). Transient current adjustment knob (3).
Standard:	Verifies: <ol style="list-style-type: none"> Calibration select and command, small inner knob is pulled out. Transient current adjustment knob is pulled out
Evaluator Cue:	Knob will <u>NOT</u> pull out farther. Knob will <u>NOT</u> pull out farther.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 7	(Procedure STEP 6)
Critical: Y	<u>GENERAL NOTE:</u> Knob (4) and Knob (5) switch positions have detents. Therefore, expect a “click” between switch settings. 6. Verify calibration select and command, large outer knob (4), is rotated to OFF.
Standard:	Verifies calibration select and command, large outer knob is rotated to OFF.
Evaluator Cue:	White line on knob points to “OFF”.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 8	(Procedure STEP 7)
Critical: Y	7. Rotate calibration select and command, small inner knob (5), so white dot on knob aligns with “1”.
Standard:	Rotates calibration select and command, small inner knob, so white dot on knob aligns with “1”.
Evaluator Cue:	Knob rotates and dot is now aligned with “1”.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 9	(Procedure STEP 8)
Critical: Y	
	8. PLACE power switch (7) to ON.
Standard:	Places power switch to ON.
Evaluator Cue:	Switch moves up and is on.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 10	(Procedure STEP 9)
Critical: Y	
	9. Push in calibration select and command, small inner knob (5).
Standard:	Pushes in calibration select and command, small inner knob.
Evaluator Cue:	Knob moves in.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 11

(Procedure STEP 10)

Critical: N

10. Verify the following:

- a. Cal status light (9) on calibration unit is on.
- b. PSHL master trip unit meter (10) indicates downscale (approximately zero).
- c. Red trip lights (1) on PSHL trip units are off.

NOTE: Red gross failure lights (6) on PSHL slave trip units may be on also.

- d. Red gross failure light (6) on PSHL master trip unit is on.
- e. Verify annunciator 5-A-55 (Analog Trip Cab Trouble - CSR) is in alarm.

Standard:

Verifies:

- 1. Cal status light on calibration unit is on.
- 2. PSHL master trip unit meter indicates downscale (approximately zero).
- 3. Red trip lights on PSHL trip units are off.
- 4. Red gross failure light on PSHL master trip unit is on.
- 5. Annunciator 5-A-55 is in alarm.

Evaluator Cue:

- 1. Cal status light is on.
- 2. Meter indicates 0 psig.
- 3. No red trip lights are on.
- 4. Gross failure light is on.
- 5. Control room reports that 5-A-55 is in alarm.
- 6. If asked, no other gross failure light is on besides the one listed above.

Performance:**SATISFACTORY** ☐ **UNSATISFACTORY** ☐**Comments:****Performance Step: 12**

(Procedure STEP 11)

Critical: Y

11. Pull out calibration select and command, small inner knob (5),
And verify cal status light (9) goes off.

Standard:

- 1. Pulls out calibration select and command, small inner knob
- 2. Verifies cal status light goes off.

Evaluator Cue:

- 1. Knob pulls out then stops.
- 2. Cal status light is NOT lit.

Performance:**SATISFACTORY** ☐ **UNSATISFACTORY** ☐**Comments:**

Performance Step: 13 Critical: Y	(Procedure STEP 12) 12. PLACE power switch (7) to OFF. Standard: Places power switch to OFF. Evaluator Cue: Switch moves down and is OFF. Performance: SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/> Comments: _____
---	---

Performance Step: 14 Critical: Y	(Procedure STEP 13) 13. Rotate calibration select and command, small inner knob (5), to OFF. Standard: Rotates calibration select and command, small inner knob, to OFF. Evaluator Cue: Knob rotates and white dot aligns with OFF. Performance: SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/> Comments: _____
---	---

Performance Step: 15 Critical: Y	(Procedure STEP 14) 14. Reset any PSHL trip unit with its red gross failure light (6) on by pressing its gross failure reset button (8). Standard: Presses gross failure reset button on any PSHL trip unit with its red gross failure light lit. Evaluator Cue: 1. If the operator inquires, the only unit with a gross failure light lit is for PSHL-4064A. 2. Button is pressed. 3. No gross failure lights are lit. Performance: SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/> Comments: _____
---	--

Performance Step: 16 Critical: N	(Procedure STEP 15) 15. Verify the following: a. Red gross failure light (6) is off on each PSHL. b. PSHL master trip unit meter (10) indicates upscale (approximately 1000 psig). c. Verify annunciator 5-A-55 is reset.
Standard:	Verifies: 1. Red gross failure light is off on each PSHL. 2. PSHL master trip unit meter indicates upscale (approximately 1000 psig). 3. Verify annunciator 5-A-55 is reset.
Evaluator Cue:	1. No gross failure lights are lit. 2. Meter indicates 1020 psig (or as indicated). 3. Control room reports that annunciator 5-A-55 is reset.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____


Performance Step: 17 Critical: N	(Procedure STEP 16) 16. Repeat Steps 2 through 15 for second card file on Panel C-253A, if required.
Standard:	This step should be N/Ad as no other trip units are tripped.
Evaluator Cue:	None.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 18 Critical: N	(Procedure STEP 17) 17. Exit LCO entered in Step 1.
Standard:	Request Control Room Supervisor to exit LCO entered in step 1.
Evaluator Cue:	LCO has been exited.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 19	INFORM EVALUATOR THAT THE TASK HAS BEEN COMPLETED.
Critical:	
Standard:	Operator informs evaluator that the task is completed.
Evaluator Cue:	Acknowledge that the task has been completed.
Evaluator Note:	DO NOT PROMPT.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Terminating Cues: The candidate informs the evaluator that the task has been completed

Stop Time: _____

	JOB PERFORMANCE MEASURE (JPM)
---	-------------------------------

SITE: MONTICELLO NUCLEAR GENERATING PLANT

JPM TITLE: USE OF ALTERNATE INJECTION SYSTEMS FOR RPV MAKEUP

JPM NUMBER: JPM-C.5-3203-003 **REV.** 8

RELATED PRA INFORMATION: FSWXTIEXXY

TASK NUMBERS / TASK TITLE(S): NL314.106
Use Alternate Injection Systems For RPV Makeup
CR314.110
Use Alternate Injection Systems For RPV Makeup

K/A NUMBERS: 295031 **Rating: SRO/RO:** 3.9/3.8
EA1.08

APPLICABLE METHOD OF TESTING:

Discussion: ☐ Simulate/walkthrough: ☒ Perform: ☐

EVALUATION LOCATION: In-Plant: ☒ Control Room: ☐
Simulator: ☐ Other: ☐
Lab: ☐

Time for Completion: 10 Minutes Time Critical: No

Alternate Path: No

TASK APPLICABILITY: SRO: ☒ RO: ☒ NLO ☒

Additional site-specific signatures may be added as desired.

Developed by:		
	Developer	Date
Validated by:		
	Validator (See JPM Validation Checklist, Attachment 1)	Date
Approved by:		
	Training Supervisor	Date

INITIAL CONDITIONS:

- The plant is in an emergency condition requiring the use of Alternate Injection Systems for RPV Makeup. No. 11 and No. 13 Service Water pumps are in service, and both Condensate pumps are in service.

INITIATING CUES:

- The Control Room Supervisor orders the in-plant steps of C.5-3203, PART C, to be completed.
- **ALL OPERATOR ACTIONS ARE TO BE SIMULATED UNLESS OTHERWISE DIRECTED**

JPM PERFORMANCE INFORMATION

Start Time: _____

NOTE: When providing “Evaluator Cues” to the examinee, care must be exercised to avoid prompting the examinee. Typically cues are only provided when the examinee’s actions warrant receiving the information (i.e., the examinee looks or asks for the indication).

IMPORTANT: Critical steps are marked with a “Y” below the performance step number. Failure to meet the standard for any critical step **SHALL** result in failure of this JPM, per FP-T-SAT-73 (Licensed Operator Requalification Program Examinations).

Performance Step: 1	Locate Procedure C.5-3203 (Use Of Alternate Injection Systems For RPV Makeup).
Critical: N	
Standard:	Operator locates appropriate procedure. Reviews precautions, limitations and prerequisites.
Evaluator Cue:	When operator locates procedure, or describes location, provide operator with a copy of the procedure.
Evaluator Note:	Inform operator not to open EOP file drawer.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	

Performance Step: 2	(Procedure C.5-3203, Step 1)
Critical: N	
	CLOSE SW-146, HOTWELL EMER TELL TALE FILL.
Standard:	Closes SW-146 by turning handwheel CW.
Evaluator Cue:	Valve stem moves in, resistance is felt and valve is tight.
Evaluator Note:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	

Performance Step: 3	(Procedure C.5-3203, Step 2)
Critical: Y	
	OPEN SW-145, SW HOTWELL EMERGENCY FILL.
Standard:	Opens SW-145 by turning handwheel CCW.
Evaluator Cue:	Valve stem moves out, resistance is felt and valve is tight.
Evaluator Note:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	

Performance Step: 4	(Procedure C.5-3203, Step 3)
Critical: Y	
	THROTTLE OPEN SW-147, SW HOTWELL EMERGENCY FILL, to control hotwell level as directed by Shift Supervision.
Standard:	1. Throttles open SW-147 by turning the handwheel CCW. (Non-Critical Portion of Standard) 2. Requests direction from the Control Room on the final position of SW-147. 3. Opens SW-147 approximately 4 turns.
Evaluator Cue:	1. If requested, inform operator that Control Room Supervisor directs you to open the valve 4 turns. 2. Valve position indicator moves from CLOSED to OPEN. 3. Inform operator hotwell level is slowly rising and another operator will be sent to secure the lineup.
Evaluator Note:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	

Performance Step: 5	INFORM EVALUATOR THAT THE TASK HAS BEEN COMPLETED.
Critical: N	
Standard:	Operator informs evaluator that the task is completed.
Evaluator Cue:	Acknowledge that the task has been completed.
Evaluator Note:	DO NOT PROMPT.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	

Terminating Cues: When task is complete, state JPM complete.

Stop Time: _____