PSEG Nuclear LLC

Job Performance Measure

PERFORM A CONTAINMENT PRESSURE RELIEF

JPM Number: 21-01 NRC Sim-h

Revision Number: 00

Date: 07/26/2022

Developed By:	**R. Chan** **Instructor**	**Date:**	7/26/22
Validated By:	**M. Wilocx / J. DeLisle** **SME or Instructor**	**Date:**	1/9/23
Reviewed By:	**M. Winkelspecht** **Operations Representative**	**Date:**	1/19/23
Approved By:	**M. Wadusky** **Training Department (Print/Sign)**	**Date:**	

REVISION RECORD (Summary)

Revision Number	Date	Reason
00	7/26/22	Converted to new JPM template.

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

NOTE

All steps of this checklist should be performed upon initial validation. Prior to JPM usage, revalidate JPM using steps 8 and 11 below.

EG 1. Task description and number, JPM description and number are identified.

EG 2. Knowledge and Abilities (K/A) references are included.

EG 3. Performance location specified. (in-plant, control room, or simulator)

EG 4. Initial setup conditions are identified.

EG 5. Initiating and terminating cues are properly identified.

EG 6. Task standards identified and verified by SME review.

EG 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (*)

EG 8. Verify the procedure referenced by this JPM matches the most current revision of that procedure:

Procedure(s) S2.OP-SO.CBV-0002 Rev. 18
S2.OP-AB.RAD-0001 Rev. 30
S2.OP-AR.ZZ-0001 Rev. 60

Date Checked: 1/05/23

EG 9. Pilot test the JPM:

a. Verify cues both verbal and visual are free of conflict, and

b. Ensure performance time is accurate.

EG 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.

EG 11. When JPM is revalidated, SME or instructor sign and date JPM cover page

Ed Gallagher	01-09-23
SME/Instructor	Date
SME/Instructor	Date
SME/Instructor	Date

SIMULATOR SETUP INSTUCTIONS

- **RESET simulator to IC-257 and VERIFY the below events on the Instructor Station**.
- Salem Unit 2 is at 100% power.
- No major equipment are out of service and no Tech Specs are active.
- The following malfunctions, overrides, and remotes were required to develop this IC.

MALF ID #	Description	Delay Time	Initial Value	Ramp Time	Trigger	Final Value
01	VL0282 2VC6 fails to position(0-100%)	N/A	N/A	N/A	ET-1	100
02	VL0283 2VC5 fails to position(0-100%)	N/A	N/A	N/A	ET-1	100
03	RM0203C Process Rad mon 2R41A fails anywhere	20 sec	Current	1 minute	ET-3	300
04	VL0284 2CBV36 fails to position(0-100%)	5 sec	N/A	N/A	ET-3	100
05	RC0002 RCS LEAK INTO CONTAINMENT	N/A	N/A	N/A	ET-3	2
06	RM0209C PROCESS RAD MON 2R31 FAILS ANY	N/A	N/A	N/A		1.00E+7

REM	Description	Delay	Init Val	Ramp	Trigger	Final
01	RC07A RCS Activity Factor	N/A	N/A	N/A	N/A	20

OVR	Description	Assigned value
01	AB14 A1 LO	ON

ET #	Description	Assigned malfunction
1	KAB13PNR//2VC6 CNTMNT pressure vacuum reli	VL0282
2	KAB14PNR//2VC5 CNTMNT pressure vacuum reli	VL0283
3	KAB14ANR//CNTMNT pressure relief damper open	RM0203C
4	KAB13TCR//2VC6 CNTMNT pressure vacuum reli Optional command DMF VL0282	DMF VL0282
5	KAB14TCR//2VC5 CNTMNT pressure vacuum reli optional command DMF VL0283	DMF VL0283
6	KAB14DCR//CNTMT pressure relief damp clos	DMF VL0284
7	KAB14DCR//CNTMT pressure relief damp clos	DOR QAB14ARR

SPECIAL INSTRUCTIONS

1. S2.OP-SO.CBV-0002 is MARKED UP in the simulator book with all sections completed up to section 5.2.

INITIAL CONDITIONS

- Salem Unit 2 is at 100% power
- Preparations to perform a containment pressure relief per Section 5.1 of S2.OP-SO.CBV-0002, Containment Pressure – Vacuum Relief System Operation, are complete.

INITIATING CUE

The CRS directs you to perform a containment pressure relief per Section 5.2 of S2.OP-SO.CBV-0002.

TASK STANDARD:

The task is satisfactorily met when the applicant has placed containment pressure relief in service per step 5.2.3.B of S2.OP-SO.CBV-0002, and upon a high radiation alarm, manually closes 2VC5 and 2VC6 valves to isolate the radiological release from containment per step 5.2.5 of S2.OP-SO.CBV-0002 OR per Attachment 1 of S2.OP-AB.RAD-0001.

****

Information for Evaluators Use:

UNSAT requires written comments on the respective step.

(*) **Denotes critical steps**

If Time Critical, estimated time is the Time Critical time.

The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The time clock starts when the candidate acknowledges the initiating cue.

RECORD JPM Start Time:_____

STEP	CRITICAL	ELEMENT	STANDARD	GRADE (S/U)
N/A		**RECORD** the JPM Start Time when the operator acknowledges READY TO START JPM.		N/A
Cue: MARKED UP copy of S2.OP-SO.CBV-0002 using the controlled copy in the simulator. Examiners Note: None. Comments: N/A				
5.2.2		**RECORD** the following Release Data on Attachment 2, Section 1.0: ♦ Pressure Relief Start ♦ Initial Containment Pressure ♦ Initial reading on available radiation monitors 2R41D (preferred) and 2R12A	Operator records the required data.	
Cue: None. Examiners Note: None Comments:				
5.2.3.A		**INITIATE** Containment Relief as follows: **MONITOR** available radiation monitors 2R41D (preferred) and 2R12A.	Operator can setup a trend using the Plant Computer OR monitor the Radiation Monitors on 2RP1.	
Cue: None. **Examiners Note**: 2R12A and 2R41D are located on 2RP1 Panel. Comments:				

STEP	CRITICAL	ELEMENT	STANDARD	GRADE (S/U)
5.2.3.B	*	IF Containment pressure is <0.5 psig, THEN: 1. **OPEN** 2VC6, ISOL VLV 2. **OPEN** 2VC5, ISOL VLV 3. **OPEN** PRESSURE RELIEF DAMPER	Operator confirms containment pressure is less than 0.5 psig by reading the containment pressure indicators on 2CC1. Operator depresses the OPEN bezels for 2VC6, 2VC5, and the PRESSURE RELIEF DAMPER on 2CC1 and verifies the Red OPEN bezels are LIT.	
Cue: None Examiners Note: None Comments:				
5.2.3.C		Step is N/A	Pressure is <0.5	
Cue: None. Examiners Note: None Comments:				
5.2.4		**RECORD** time 2VC5 and 2VC6 are OPENED in Control Room Narrative Log IAW OP-SA-470-1001, CYCLIC Data Monitoring Program.		
Cue: The extra NCO will record the open time for 2VC5 and 2VC6. Examiners Note: None Comments:				

STEP	CRITICAL	ELEMENT	STANDARD	GRADE (S/U)
ALTERNATE PATH STARTS HERE				
Cue: SIMULATOR OPERATOR ensure ET-3 is true and MALF 03 RM0203C is ramping in. This will cause the 2R41D Rad Monitor channel to go into Alarm, actuate OHA A-6 RMS HI RAD OR TRBL, previous malfunctions have been enabled to prevent the automatic closures of the pressure relief dampers, 2VC5 and 2VC6 valves on a high radiation alarm. **Examiners Note**: The candidate may take the action per step 5.2.5 of S2.OP-SO.CBV-0002, **OR** refer to the OHA A-6 and then take the actions per S2.OP-AB.RAD-0001, Abnormal Radiation, to manually close the dampers per Attachment 1 step 10, both paths are acceptable. Comments:				
ACTIONS PER S2.OP-SO.CBV-0002				
5.2.5	*	When Containment pressure decreases to required value: A. **CLOSE** PRESSURE RELIEF DAMPER B. **CLOSE** 2VC6, ISOL VLV C. **CLOSE** 2VC5, ISOL VLV	Operator depresses the CLOSE bezel pushbuttons for PRESSURE RELIEF DAMPER, 2VC6, and 2VC5 and verifies the Green bezel is LIT.	
Cue: None **Examiners Note**: The candidate is required to close 2VC5 and 2VC6 to satisfy the Task Standard. Comments:				
ACTIONS PER S2.OP-AB.RAD-0001				
3.1		**DETERMINE** affected Radiation monitor.	Operator determines 2R41D is the affected monitor	
Cue: None Examiners Note: None Comments:				

STEP	CRITICAL	ELEMENT	STANDARD	GRADE (S/U)
3.2		Is the alarm, warning, or rising indication valid? (**EVALUATE** the following): ♦ Chemistry Sampling ♦ Rising activity on related Radiation Monitors ♦ Maintenance activities in vicinity of radiation detector ♦ Transfer of radioactive resins or other materials in affected area ♦ No indication of failure or fault on affected Radiation Monitor ♦ Radioactive release from Salem or Hope Creek	Operator determines the alarm is VALID.	
Cue: IF operator questions if alarm is VALID or Not, THEN state: CRS directs continuing with procedure since Rad Monitor does not appear to be failed. Examiners Note: None <u>Comments:</u>				
3.3		**ANNOUNCE** the following on Plant PA system: ♦ Affected Radiation Monitor number and name ♦ Location of Radiation Monitor area with elevated indication	Operator makes page announcement	
Cue: None Examiners Note: None <u>Comments:</u>				

STEP	CRITICAL	ELEMENT	STANDARD	GRADE (S/U)
3.4		IF a release to the environment is in progress, THEN **DIRECT** Shift Radiation Protection Technician to complete and provide Page 2 of the Station Status Checklist (SSCL) for release rate determination.	Operator notifies Rad Pro of actions.	
Cue: CRS will direct Radiation Protection to perform Station Status Checklist. Examiners Note: None Comments:				
3.5		**NOTIFY** SM/CRS to REFER TO Event Classification Guide, ODCM and Technical Specifications.	Notifies CRS of required actions.	
Cue: CRS will refer to ECG, Tech Specs, and ODCM. Examiners Note: None Comments:				
3.6		**INITIATE** the applicable attachment for affected Radiation Monitor:	Operator initiates Attachment 1 Step 10 based on 2R41D in alarm.	
Cue: None. Examiners Note: None Comments:				
10.0		IF 2R41D, Plant Vent Release Rate is the affected monitor, THEN:		
Cue: None Examiners Note: None Comments:				

STEP	CRITICAL	ELEMENT	STANDARD	GRADE (S/U)
10.1	*	**ENSURE** 2VC1, 2VC4, 2VC5 AND 2VC6 are CLOSED.	Operator depresses the CLOSE bezel pushbuttons for 2VC5 and 2VC6 and verifies Green bezel is LIT.	
Cue: None **Examiners Note**: Only 2VC5 and 2VC6 are required to be CLOSED to satisfy the Task Standard. Comments:				
Terminating Cue		**JPM COMPLETE**		

RECORD JPM Stop Time: _____

Operator's Name: _____ **Job Title:** RO _____ SRO _____

Facility: Salem **JPM No.:** 21-01 NRC Sim-h **Revision No.:** 00

Task Title: Perform a Containment Pressure Relief

Task No.: N0220080101 **Source:**

System: 029 Containment Purge System (SF8) Bank _____ New X Mod _____

K/A Number / Description: A2.02 Ability to (a) predict the impacts of the following on the Containment Purge System and (b) based on those predictions,, use procedures to correct, control, or mitigate the consequences of those abnormal operations: Adverse environmental conditions affecting radioactive release

K/A Rating RO 3.0 SRO 3.0

Task Applicability: SRO Only _____ RO/SRO X AO/RO/SRO _____ Other _____

Time-Critical: Yes _____ No X **Alternate Path:** Yes X No _____

Estimated Time to Complete: **10** Minutes **Actual Time Used:** Minutes

Method of Testing: Simulated Performance _____ Actual Performance X

Location: Classroom _____ Simulator X In-Plant _____ RCA _____

Required Materials: S2.OP-SO.CBV-0002

Reference(s): S2.OP-SO.CBV-0002 S2.OP-AB.RAD-0001 S2.OP-AR.ZZ-0001

EVALUATION SUMMARY:

Were all the Critical Elements (steps) performed satisfactorily? Yes ____ No ____

The operator's performance was evaluated against the standards contained in this JPM, and has been determined to be: Satisfactory _____ Unsatisfactory _____

Comments:

Evaluator's Name: _____

Evaluator's Signature: _____ **Date:** _____

STUDENT HANDOUT

INITIAL CONDITIONS

- Salem Unit 2 is at 100% power
- Preparations to perform a containment pressure relief per Section 5.1 of S2.OP-SO.CBV-0002, Containment Pressure – Vacuum Relief System Operation, are complete.

INITIATING CUE

- The CRS directs you to perform a containment pressure relief per Section 5.2 of S2.OP-SO.CBV-0002.