NMC Committed to Nuclear Excellence	JOB PERFORMANCE MEASURE (JPM)

SITE: MONTICELLO NUCLEAR GENERATING PLANT

JPM TITLE: PERFORM SRV OPERABILITY AND POSITION INDICATION CHECK ON SRV-2-71A IN ACCORDANCE WITH TEST NO. 0112

JPM NUMBER: JPM-B.03.03-001 **REV.** 9

RELATED PRA INFORMATION: None

TASK NUMBERS / TASK TITLE(S): CR999.218
Reactor Pressure Relief System

K/A NUMBERS: 239002 A4.01
SRVs **Rating: RO/SRO:** 4.4/4.4

APPLICABLE METHOD OF TESTING:

Discussion: [ ] Simulate/walkthrough: [ ] Perform: [X]

EVALUATION LOCATION: In-Plant: [ ] Control Room: [ ]
Simulator: [X] Other: [ ]
Lab: [ ]

Time for Completion: 15 Minutes Time Critical: No

Alternate Path: No

TASK APPLICABILITY: SRO: [X] RO: [X] 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 Number: JPM-B.03.03-001

JPM Title: Perform SRV Operability And Position Indication Check On Srv-2-71A In Accordance With Test No. 0112

Examinee: _____ **Evaluator:** _____

Job Title: _____ **Date:** _____

Start Time _____ **Finish Time** _____

PERFORMANCE RESULTS: **SAT:** ☐ **UNSAT:** ☐

COMMENTS/FEEDBACK: (Make written comments for any steps graded unsatisfactory).

EVALUATOR'S SIGNATURE: _____

NOTE: Only this page needs to be retained in examinee's record if completed satisfactorily. If unsatisfactory performance is demonstrated, the entire JPM should be retained.

(Modify text in Briefing/Turnover Box as necessary)

JPM BRIEFING/TURNOVER
Add required site specific JPM briefing material here: for example: *This section is read once for the entire package of JPMs. It is not required to review this section for every JPM being performed in the package. The initial conditions and initiating cue(s)/tasks to be performed should be read and then provided to the examinee.* *You may use any approved reference materials normally available including logs. Make all written reports, oral reports, and log entries as if the evolution is actually being performed.* *EOP Immediate Actions are required to be performed from memory. After completing immediate action steps without using the procedure, you may then use any approved reference materials.* *If this JPM is performed on the simulator, the JPM administrator should only give cues that are NOT indicated on the simulator. If simulator indication is sufficient to indicate the completion of a step, the JPM administrator should NOT have to give a cue to the trainee to continue the evolution.*

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:

- Reactor is at power. Reactor pressure approximately 150 psig. One Turbine Bypass valve is 80% open. RHR is in Torus Cooling mode.
- Test No. 0112 on SRV 2-71A is to be performed.
- A brief has been performed for the infrequent test/evolution.
- The Rx Bldg APEO has just completed a Torus walkdown to ensure the area is clear.
- Other operators will assist you as you specifically request.

INITIATING CUES (IF APPLICABLE):

- The Control Room Supervisor directs you to perform Test No. 0112 on SRV 2-71A only.

Evaluator Note: Provide the operator with a marked up copy of Test No. 0112.

JPM PERFORMANCE INFORMATION

Required Materials: **See Simulator Setup**

General References: SRV Operability Check - Test No. 0112, Rev 28

Task Standards: SRV Operability Check

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 **Critical N**	**GENERAL NOTE 1**: **Operators to perform all steps, unless otherwise noted**. **GENERAL NOTE 2**: **Turbine bypass valves should change position by about 10% prior to closing the SRV under test.** **GENERAL NOTE 3:** **Annunciator 3-A-9 (Auto Blowdown Relief Vlv Leaking) may alarm each time an SRV is opened.** (Procedure STEP 1) Place RHR System in Torus Cooling Mode per Ops Man B.03.04-05 (Residual Heat Removal System - System Operation).
Standard:	None
Evaluator Note:	RHR Torus Cooling in service, IAW Initial Conditions.
Performance:	**SATISFACTORY** ☐ **UNSATISFACTORY** ☐
Comments:	

Performance Step: 2 **Critical N**	(Procedure STEP 2) Walkdown Torus area to ensure no one is working in the area.
Standard:	None
Evaluator Cue:	No one working in area.
Evaluator Note:	Given in initiating cues.
Performance:	**SATISFACTORY** ☐ **UNSATISFACTORY** ☐
Comments:	

Performance Step: 3 **Critical N**	(Procedure STEP 3) Announce over plant page that SRV testing is about to commence.
Standard:	Makes announcement.
Evaluator Cue:	None
Performance:	**SATISFACTORY** ☐ **UNSATISFACTORY** ☐
Comments:	

Performance Step: 4 **Critical N**	(Procedure STEP 4) Perform the following to minimize level and power swings due to subsequent SRV cycling: a. PLACE Vessel Level (Feedwater) Low Flow Valve Control, 6-85, on Panel C-05 to manual. b. Instruct operator to stay at Panel C-05 for duration of test to monitor and manually control Reactor level using Low Flow Valve.
Standard:	Verifies low flow valve control, 6-85 is in manual and operator stationed to respond.
Evaluator Cue:	Feedwater Low Flow Valve control is in manual and operator is stationed to respond as necessary.
Evaluator Note:	Use simulator operator, if available.
Performance:	**SATISFACTORY** ☐ **UNSATISFACTORY** ☐
Comments:	

Performance Step: 5 **Critical N**	(Procedure STEP 5) Initiate Procedure 0444-B to record Suppression Pool temperature as required by Tech Spec SR 3.6.2.1.1
Standard:	Informs CRS that 0444-B needs to be initiated.
Evaluator Cue:	Inform Candidate that another operator will initiate procedure 0444-B.
Performance:	**SATISFACTORY** ☐ **UNSATISFACTORY** ☐
Comments:	

Performance Step: 6 **Critical Y**	(Procedure STEP 6) **SRV A** At Panel C-03, PLACE handswitch 2E-S1A, RV2-71A Relief Valve A, to OPEN.
Standard:	Opens RV2-71A using handswitch 2E-S1A.
Evaluator Cue:	None
Performance:	**SATISFACTORY** ☐ **UNSATISFACTORY** ☐
Comments:	

Performance Step: 7 **Critical N**	(Procedure STEP 7) Check the following: a. Red light is ON. b. Amber light is ON c. Turbine bypass valves respond by starting to close (normally checked by a third operator) **NOTE: A change of about 10% or more in bypass valve position indicates unrestricted SRV flow.** d. SRV discharge flow is unrestricted e. Annunciator 5-A-46 (SRV OPEN) is in ALARM (normally verified by OATC)
Standard:	Verifies red and amber lights are ON. Verifies bypass valves respond correctly and SRV flow is unrestricted. Verifies 5-A-46 is in ALARM.
Evaluator Cue:	Inform candidate that bypass valves closed 10% and that 5-A-46 is in ALARM.
Performance:	**SATISFACTORY** ☐ **UNSATISFACTORY** ☐
Comments:	

Performance Step: 8 **Critical Y**	(Procedure STEP 8) At Panel C-03, PLACE handswitch 2E-S1A to AUTO.
Standard:	Places handswitch 2E-S1A to AUTO.
Evaluator Cue:	None
Performance:	**SATISFACTORY** ☐ **UNSATISFACTORY** ☐
Comments:	

Performance Step: 9 **Critical N**	(Procedure STEP 9) Check the following: a. Green indicating light ON. b. Red light is off. c. Amber light is off. d. Annunciator 5-A-46 is RESET. e. Turbine bypass valves return to original position
Standard:	Verifies the green indicating light is on, red light is off, amber light is off, 5-A-46 is reset, TBV return to original position.
Evaluator Cue:	Inform candidate that bypass valves return to original position and that 5-A-46 is RESET.
Performance:	**SATISFACTORY** ☐ **UNSATISFACTORY** ☐
Comments:	

Performance Step: 10 **Critical N**	**<u>NOTE</u>: There may be a short time delay from when an alarm is received/reset until it prints on printer.** (Procedure STEP 9 con't.) f. Printout of Sequence of Events (SOE) Printer lists opening and closing times of SRV "A" (computer point APR000).
Standard:	Checks opening and closing times are present on SOE printer
Evaluator Cue:	None
Performance:	**SATISFACTORY** ☐ **UNSATISFACTORY** ☐
Comments:	

Performance Step: 11 **Critical N**	**<u>NOTE</u>: A decrease in SRV discharge line temperature following closure of the SRV may <u>NOT</u> be seen until adequate time has passed for heat decay. Therefore, this step need <u>NOT</u> be completed before testing is started on another SRV.** (Procedure STEP 9 con't.) g. Temperature recorder TR-2-166, Safety Relief Valve Tailpipe Temperature (Panel C-21), printout shows that SRV 'A' discharge line temperature increased when valve was opened then deceased after it was closed.
Standard:	Verifies temperature increased and then decreased.
Evaluator Note:	The candidate will have to push the LOG Button to force a new printout.
Performance:	**SATISFACTORY** ☐ **UNSATISFACTORY** ☐
Comments:	

Performance Step: 12 **Critical N**	Part K (Procedure STEPS 37 & 38) These steps are for verifying switch lineups at panels C-292 and C-253D if switches were manipulated at these panels. For testing SRV 'A' these will be N/A.
Standard:	Recognizes these steps are N/A
Evaluator Cue:	Once the candidate realizes Part K is N/A, inform them that RPV level control will be restored by another operator and that the JPM IS COMPLETE.
Performance:	**SATISFACTORY** ☐ **UNSATISFACTORY** ☐
Comments:	

Terminating Cues: See Evaluator Cue in Performance step 12 above.

Stop Time: _____

Historical Record: MNGP JPM Bank
Editorial changes for 2009 NRC Exam

TURNOVER SHEET

INITIAL CONDITIONS:

- Reactor is at power. Reactor pressure approximately 150 psig. One Turbine Bypass valve is 80% open. RHR is in Torus Cooling mode.
- Test No. 0112 on SRV 2-71A is to be performed.
- A brief has been performed for the infrequent test/evolution.
- The Rx Bldg APEO has just completed a Torus walkdown to ensure the area is clear.
- Other operators will assist you as you specifically request.

INITIATING CUES (IF APPLICABLE):

- The Control Room Supervisor directs you to perform Test No. 0112 on SRV 2-71A only.

SIMULATOR SET UP: (*Modify table as necessary)*

Simulator Setup Instructions:

- Initialize to any IC with the Reactor critical at 150 psig and one Turbine Bypass valve 80% open. RHR is in Torus Cooling mode.
- IC-289 for 2009 NRC Exam
- Fill in Test 0112 as follows:
  - Sign Control Room Supervisor approval on cover sheet.
  - Reason for Performing is # 2.
  - Initial prerequisites.
  - N/A the following STEPS: 10 through 36

	EVENT NUMBER	EVENT FILE NAME	EVENT WORD DESCRITPTION
1.			
2.			

SIMULATOR - MALFUNCTIONS:

	MALF ID	MALFUNCTION TITLE	DELAY	RAMP	EVENT	VALUE	FINAL
1.							
2.							
3.							
4.							

SIMULATOR - OVERRIDES:

	OVERRIDE ID.	OVERRIDE DESCRIPTION	DELAY	RAMP	EVENT	VALUE	FINAL
1.							
2.							
3.							
4.							

SIMULATOR - REMOTE FUNCTIONS:

	REMOTE FUNC. No.	REMOTE FUNCTION TITLE	DELAY	RAMP	EVENT	VALUE	FINAL
1.							
2.							
* Set for current weather condition							

ATTACHMENT 1

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

ALL STEPS IN THIS CHECKLIST ARE TO BE PERFORMED UPON INITIAL VALIDATION AND PRIOR TO USE.

REVIEW STATEMENTS	YES	NO	N/A
1. Are all items on the cover page filled in correctly?	☐	☐	
2. Has the JPM been reviewed and validated by SMEs?	☐	☐	☐
3. Can the required conditions for the JPM be appropriately established in the simulator if required?	☐	☐	☐
4. Do the performance steps accurately reflect trainee's actions in accordance with plant procedures?	☐	☐	
5. Is the standard for each performance item specific as to what controls, indications and ranges are required to evaluate if the trainee properly performed the step?	☐	☐	
6. If the task is NOT time critical, has the completion time been established based on validation data or incumbent experience?	☐	☐	☐
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?	☐	☐	☐
8. Is the Licensee level appropriate for the task being evaluated if required? NOT applicable to Non-Licensed Operators	☐	☐	☐
9. Is the K/A appropriate to the task and to the licensee level if required? NOT applicable to Non-Licensed Operators	☐	☐	☐
10. Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	☐	☐	
11. Have all special tools and equipment needed to perform the task been identified?	☐	☐	
12. Are all references identified, current, and accurate?	☐	☐	
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	☐	☐	

All applicable questions must be answered "YES" or the JPM is NOT valid for use. If all applicable questions are answered "YES" then the JPM is considered valid and can be performed as written. The individual(s) performing the validation sign and date this form.

Validation Personnel /Date	Validation Personnel/Date
Validation Personnel /Date	Validation Personnel/Date
Validation Personnel /Date	Validation Personnel/Date
Validation Personnel /Date	Validation Personnel/Date

Retention: Life of Plant
Retain in: Training Record
Form retained in accordance with record retention schedule identified in FP-G-RM-01.

To be able to use the macros, after opening Word go to: Tools/Macro/Security and set the security level at either Low or Medium, close completely out of Word and reopen Word to activate Macros. If you are concerned with macro viruses, check with your site to be assured of active virus scanning.

Buttons	Results from pressing toolbar buttons
	Update JPM Information - Runs the macro for inputting information into the cover sheet. [Note: - The JPM Title and Number is automatically added to the top of the second page by the use of Cross Reference fields.]
	Add JPM Step - Adds a Performance Step table at the end of that section, prior to the 'Terminating Cues:'.
	Insert JPM Step - Inserts a Performance Step table in front of an existing Performance Step table. [NOTE: - You must have your cursor inside a Performance Step table, otherwise; you will get an error message if your cursor is anywhere else.]
	Critical Step - Toggles the Performance Step to 'Critical'. Removes **all** of the text to the right of the words '**Critical**' and replaces them with the text string ' **Y (SEQ-)**'. The cursor is placed between the '**-**' and the '**)**', to allow you to insert the sequence number for the performance step. [NOTE - You must have your cursor inside the Performance Step table you want to make into a critical step otherwise you get an error message.]
	Non-Critical Step - Toggles the Performance Step to 'Non-Critical'. Removes **all** of the text to the right of the words '**Critical**' and replaces them with the text string ' **N (SEQ-)**'. The cursor is placed between the '**-**' and the '**)**', to allow you to insert the sequence number for the performance step. [NOTE - You must have your cursor inside the Performance Step table you want to make into a non-critical step otherwise you get an error message.]
	Evaluator Note - Adds a row to the Performance Step table under the '**Standard:**' line, to allow you to enter any notes for the Evaluator.
	Remove Evaluator Note - Removes the '**Evaluator Note:**' line if it was added to the Performance Step table. [NOTE - You must have your cursor inside the Performance Step you want to remove the Evaluator Note from otherwise it removes two lines from the table above the cursor.]
	Evaluator Cue - Adds a row to the Performance Step table above the '**Performance:**' line, to allow you to enter any cues for the Evaluator.
	Remove Evaluator Cue - Removes the '**Evaluator Cue:**' line if it was added to the Performance Step table. [NOTE - You must have your cursor inside the Performance Step you want to remove the Evaluator Cue from otherwise it removes two lines from the table above the cursor.]
	Simulator Setup Page - Adds a Simulator Setup page near the end.
	Remove Simulator Setup Page - Removes the inserted Simulator Setup page.
	Update Turnover Sheet - Takes the turnover information from page 3 (JPM Briefing / Turnover page) and updates the Trainee's version of the turnover page, located prior to Attachment 1 (the last page of the JPM).
	Not For Exam Use - Places a shaded Word Art text box diagonally across the first page. To remove the text, place your cursor near the top right side of the coversheet and select the Word Art text and delete.

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