



## JOB PERFORMANCE MEASURE (JPM)

**SITE:** MONTICELLO NUCLEAR GENERATING PLANT

**JPM TITLE:** VENT THE HCUs

**JPM NUMBER:** JPM-C.5-3101-008 **REV.** 2

**RELATED PRA INFORMATION:** None

**TASK NUMBER(S) / TASK TITLE(S):** CR314.105  
Perform the actions associated with Alternate Rod Insertion

**K/A NUMBERS:** 295015AA1.01 **RATING: SRO/RO:** 3.8/3.9

**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 / Faulted: \_\_\_\_\_

**TASK APPLICABILITY:** SRO: \_\_\_\_\_ SRO/RO: \_\_\_\_\_ SRO/RO/NLO: X

Additional signatures may be added as needed.

<b>Developed by:</b>	Instructor	Date
<b>Validated by:</b>	Validation Instructor (See JPM Validation Checklist, Attachment 1)	Date
<b>Approved by:</b>	Training Supervisor	Date



JPM BRIEFING/TURNOVER
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(See MTCP-03.32, Figure 6.2)
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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:**

The task conditions are as follows:

- A plant transient has occurred, C.5-2007 (FAILURE TO SCRAM) has been entered.
- You are an extra plant operator.

**INITIATING CUES (IF APPLICABLE):**

"[STATE OPERATOR'S NAME] Control Room Supervisor directs you to perform vent the HCU for rod 26-23 to insert this rod"

**JPM PERFORMANCE INFORMATION**

**Required Materials:** OBTAIN KEY 41 FOR PADLOCK FOR TOOLBOX LOCATED ABOVE HCUs ON PLATFORM

**General References:** C.5-3101, PART F, ALTERNATE ROD INSERTION

**Task Standards:** VENTS HYDRAULIC CONTROL UNIT

**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).

**NOTE:** 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.

<b>Performance Step: 1</b>	Obtains procedure C.5-3101 (Alternate Rod Insertion).
<b>Critical: N</b>	Operator verifies the following prerequisites: <ul style="list-style-type: none"> <li>• Reactor Building Accessibility</li> <li>• RPV Pressure is greater &gt;100 psig</li> </ul>
<b>Standard:</b>	Obtained procedure C.5-3101 (Alternate Rod Insertion).
<b>Evaluator Cue:</b>	If asked: <ul style="list-style-type: none"> <li>• State Rx Bldg is accessible.</li> <li>• State RPV pressure is &gt;100 psig.</li> </ul>
<b>Performance:</b>	<b>SATISFACTORY</b> <input type="checkbox"/> <b>UNSATISFACTORY</b> <input type="checkbox"/>
<b>Comments:</b>	_____

<b>Performance Step: 2</b>	Obtains tools from box above HCUs.
<b>Critical: N</b>	
<b>Standard:</b>	Obtained tools and tubing from box above HCUs.
<b>Evaluator Cue:</b>	When operator identifies toolbox, state all tools and tubing have been obtained.
<b>Performance:</b>	<b>SATISFACTORY</b> <input type="checkbox"/> <b>UNSATISFACTORY</b> <input type="checkbox"/>
<b>Comments:</b>	_____

JPM-C.5-3101-008, VENT THE HCUS, Rev. 2

<b>Performance Step: 3</b> <b>Critical: Y</b>	Connect one end of tubing to the hard pipe drain line.  Operator connects one end of tubing to the hard pipe drain line for HCU 26-23 by threading connection to end of pipe drain.
<b>Standard:</b>	Connected one end of tubing to the hard pipe drain line.
<b>Evaluator Cue:</b>	Tubing is connected to hard pipe drain line.
<b>Performance:</b>	<b>SATISFACTORY</b> <input type="checkbox"/> <b>UNSATISFACTORY</b> <input type="checkbox"/>
<b>Comments:</b>	_____

<b>Performance Step: 4</b> <b>Critical: Y</b>	Connect the other end of tubing to the capped fitting on the selected HCUS withdraw riser high point vent valve.  Operator removes cap fitting and connects other end of tubing on HCU for rod 26-23 withdraw riser highpoint vent valve.
<b>Standard:</b>	Connected tubing on HCU for rod 26-23.
<b>Evaluator Cue:</b>	Tubing is connected.
<b>Performance:</b>	<b>SATISFACTORY</b> <input type="checkbox"/> <b>UNSATISFACTORY</b> <input type="checkbox"/>
<b>Comments:</b>	_____

<b>Performance Step: 5</b> <b>Critical: Y</b>	Opens CRD-140, WITHDRAW RISER HIGH POINT VENT, to vent overpiston area.  Operator opens CRD-140, WITHDRAW RISER HIGH POINT VENT, to vent overpiston area.
<b>Standard:</b>	Opened CRD-140, WITHDRAW RISER HIGH POINT VENT, to vent overpiston area.
<b>Evaluator Cue:</b>	When operator simulates opening CRD-140, state that the valve wheel is turning, and now it is stopped.
<b>Performance:</b>	<b>SATISFACTORY</b> <input type="checkbox"/> <b>UNSATISFACTORY</b> <input type="checkbox"/>
<b>Comments:</b>	_____

<b>Performance Step: 6</b> <b>Critical: Y</b>	When the control rod no longer moves inward, close CRD-140, WITHDRAW RISER HIGH POINT VENT.  When the operator is informed from the Control Room that the Control Rod no longer moves inward, close CRD-140, WITHDRAW RISER HIGH POINT VENT.
<b>Standard:</b>	Closed CRD-140, WITHDRAW RISER HIGH POINT VENT.
<b>Evaluator Cue:</b>	State as the operator at the controls that rod 26-23 is at position 00 and is no longer moving.  When operator simulates closing valve, state that the valve handwheel is turning, and now it is stopped.
<b>Performance:</b>	<b>SATISFACTORY</b> <input type="checkbox"/> <b>UNSATISFACTORY</b> <input type="checkbox"/>
<b>Comments:</b>	_____

<b>Performance Step: 7</b> <b>Critical: N</b>	Disconnect the tubing from the vent valve.  Operator disconnects the tubing from the vent valve by unthreading connection and removing tubing.
<b>Standard:</b>	Disconnected tubing.
<b>Evaluator Cue:</b>	Tubing is now disconnected.
<b>Performance:</b>	<b>SATISFACTORY</b> <input type="checkbox"/> <b>UNSATISFACTORY</b> <input type="checkbox"/>
<b>Comments:</b>	_____

<b>Performance Step: 8</b> <b>Critical: N</b>	Repeat STEPS 2 through 5 for each control rod not into at least 04.
<b>Standard:</b>	None
<b>Evaluator Cue:</b>	State as Control Room Operator that all rods are now at position 00,
<b>Performance:</b>	<b>SATISFACTORY</b> <input type="checkbox"/> <b>UNSATISFACTORY</b> <input type="checkbox"/>
<b>Comments:</b>	_____

<b>Performance Step: 9</b> <b>Critical: N</b>	<b>INFORM EVALUATOR THAT THE TASK HAS BEEN COMPLETED.</b>
<b>Standard:</b>	Operator informs evaluator that the task is completed.
<b>Evaluator Cue:</b>	Acknowledge Report
<b>Performance:</b>	<b>SATISFACTORY</b> <input type="checkbox"/> <b>UNSATISFACTORY</b> <input type="checkbox"/>
<b>Comments:</b>	_____

**Terminating Cues:** WHEN REPORT IS MADE THAT TASK IS COMPLETE, STATE THE JPM IS COMPLETE.

**Stop Time:** \_\_\_\_\_

**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 signature page filled in correctly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Has the JPM been reviewed and validated by SMEs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can the required conditions for the JPM be appropriately established in the simulator if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Does the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Has the completion time been established based on validation data or incumbent experience?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the K/A appropriate to the task and to the licensee level if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Have all special tools and equipment needed to perform the task been identified and made available to the trainee?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Are all references identified, current, accurate, and available to the trainee?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

\_\_\_\_\_  
Validation Personnel /Date

\_\_\_\_\_  
Validation Personnel/Date

Historical Record: (Optional)



## JOB PERFORMANCE MEASURE (JPM)

**SITE:** MONTICELLO NUCLEAR GENERATING PLANT

**JPM TITLE:** RESET RCIC OVERSPEED TRIP

**JPM NUMBER:** JPM-B.02.03-006 **REV.** 0

**RELATED PRA INFORMATION:** None

**TASK NUMBER(S) / TASK TITLE(S):** NL217.104

**K/A NUMBERS:** 217000 A4.02 **Rating: SRO/RO:** 3.9/3.9

**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 / Faulted:  NO

**TASK APPLICABILITY:** SRO: \_\_\_\_\_ SRO/RO: \_\_\_\_\_ SRO/RO/NLO:  X

Additional signatures may be added as needed.

<b>Developed by:</b>	Instructor	Date
<b>Validated by:</b>	Validation Instructor (See JPM Validation Checklist, Attachment 1)	Date
<b>Approved by:</b>	Training Supervisor	Date



JPM BRIEFING/TURNOVER
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(See MTCP-03.32, Figure 6.2)
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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:**

- EOP-1100 has been entered due to lowering RPV water level.
- Feedwater and HPCI are **NOT** available.
- RCIC tripped when it auto initiated AND MO-2080 cannot be reset from the control room.

**INITIATING CUES (IF APPLICABLE):**

- State [candidates name] the Control Room Supv directs you to manually reset MO-2080 locally.
- **DIRECT OPERATOR TO SIMULATE ALL ACTIONS.**

**JPM PERFORMANCE INFORMATION**

**Required Materials:** None

**General References:** B.02.03-05.G.3, Rev. 13

**Task Standards:** Reset the RCIC overspeed trip.

**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).

**NOTE:** 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.

<b>Performance Step: 1</b>	Locate procedure B.2.3-05.G.3. (Resetting MO-2080, Trip And Throttle Valve).
<b>Critical: N</b>	
<b>Standard:</b>	Locates appropriate procedure.
<b>Evaluator Cue:</b>	Provide Operator with a copy of procedure.
<b>Performance:</b>	<b>SATISFACTORY</b> _____ <b>UNSATISFACTORY</b> _____
<b>Comments:</b>	PART A of the procedure is N/A to this JPM.

<b>Performance Step: 2</b>	(Procedure STEP 6)
<b>Critical: Y</b>	
	<u>PART B - MECHANICALLY RESETTING MO-2080 TRIP AND THROTTLE VALVE</u>
	<b>GENERAL NOTE 1:</b> Figures 1 and 2 in B.2.3-06 contain information needed to complete the following steps.
	<b>GENERAL NOTE 2:</b> Drawing B-12555 from RCIC Technical Manual NX-7822-38 provides reference for performing PART B of this procedure.
	Depress the declutch lever (48) and engage the handwheel, then rotate handwheel clockwise until sliding nut (33) and latch can be engaged by the trip hook (36).
<b>Standard:</b>	Holds down declutch lever, while rotating handwheel clockwise until sliding nut can be engaged by trip hook.
<b>Evaluator Cue:</b>	Sliding nut and trip hook is in proper position.
<b>Performance:</b>	<b>SATISFACTORY</b> _____ <b>UNSATISFACTORY</b> _____
<b>Comments:</b>	

<b>Performance Step: 3</b>	(Procedure STEP 7)
<b>Critical: Y</b>	Push the connecting linkage between MO-2080 and the overspeed trip mechanism to the left, <u>UNTIL</u> the manual trip lever on the overspeed unit is reset, and holds linkage in reset position.
<b>Standard:</b>	Pushes MO-2080 valve connecting linkage to the left.
<b>Evaluator Cue:</b>	MO-2080 valve connecting linkage moves to the left and the manual trip lever resets.
<b>Performance:</b>	<b>SATISFACTORY</b> <b>UNSATISFACTORY</b> _____
<b>Comments:</b>	

<b>Performance Step: 4</b>	(Procedure STEP 8)
<b>Critical: Y</b>	Verify that the flat on the Emergency Tappet nut is aligned and in contact with the flat on the Emergency Head Lever.
<b>Standard:</b>	Verifies that flat on Emergency Tappet nut is aligned with and in contact with flat on the Emergency Head Lever.
<b>Evaluator Cue:</b>	Emergency Tappet nut is aligned and in contact with flat on the Emergency Head Lever.
<b>Performance:</b>	<b>SATISFACTORY</b> <b>UNSATISFACTORY</b> _____
<b>Comments:</b>	

<b>Performance Step: 5</b>	(Procedure STEP 9)
<b>Critical: Y</b>	Engage the trip hook on MO-2080 valve with latch lever.
<b>Standard:</b>	Engages trip hook on MO-2080 valve with latch lever.
<b>Evaluator Cue:</b>	Trip hook is engaged with the latch lever.
<b>Performance:</b>	<b>SATISFACTORY</b> _____ <b>UNSATISFACTORY</b> _____
<b>Comments:</b>	

<b>Performance Step: 6</b>	(Procedure STEP 10)
<b>Critical: Y</b>	<b>NOTE:</b> Opening MO-2080 with a RCIC initiation signal present will result in turbine restart. The turbine will be held at minimum speed until MO-2080 reaches approximately 50-60% open. At approximately 50-60% open, the turbine control system ramp will be initiated and turbine speed will increase.
	Slowly rotate handwheel counter-clockwise until the spindle coupling (29) contacts the bottom of the sliding nut, indicating valve is wide OPEN.
<b>Standard:</b>	Slowly rotates the handwheel counter-clockwise until the spindle coupling (20) contacts the bottom of the sliding nut.
<b>Evaluator Cue:</b>	Valve handwheel is rotated CCW until resistance is encountered. RCIC Turbine begins to spin and trip throttle valve begins to open.
<b>Performance:</b>	<b>SATISFACTORY</b> _____ <b>UNSATISFACTORY</b> _____
<b>Comments:</b>	

<b>Performance Step: 7</b>	(Procedure STEP 11)
<b>Critical: N</b>	Turn the handwheel 1/4 turn clockwise to allow clearance for thermal expansion.
<b>Standard:</b>	Turns handwheel 1/4 turn CW.
<b>Evaluator Cue:</b>	Handwheel is 1/4 turn in the CW direction.
<b>Performance:</b>	<b>SATISFACTORY</b> _____ <b>UNSATISFACTORY</b> _____
<b>Comments:</b>	

<b>Performance Step: 8</b>	<b>INFORM CONTROL ROOM THAT THE RCIC TRIP AND THROTTLE VALVE HAS BEEN RESET.</b>
<b>Critical: N</b>	
<b>Standard:</b>	Operator informs Control Room that the task is completed.
<b>Performance:</b>	<b>SATISFACTORY</b> _____ <b>UNSATISFACTORY</b> _____
<b>Comments:</b>	

**Terminating Cues:** When the operator informs the Control Room that the trip and throttle valve is reset, state that the JPM is complete.

**Stop Time:** \_\_\_\_\_

## TURNOVER SHEET

### INITIAL CONDITIONS:

- EOP-1100 has been entered due to lowering RPV water level.
- Feedwater and HPCI are **NOT** available.
- RCIC tripped when it auto initiated AND MO-2080 cannot be reset from the control room.

**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 signature page filled in correctly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Has the JPM been reviewed and validated by SMEs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can the required conditions for the JPM be appropriately established in the simulator if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Does the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Has the completion time been established based on validation data or incumbent experience?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the K/A appropriate to the task and to the licensee level if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Have all special tools and equipment needed to perform the task been identified and made available to the trainee?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Are all references identified, current, accurate, and available to the trainee?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

\_\_\_\_\_  
Validation Personnel /Date

\_\_\_\_\_  
Validation Personnel/Date

Historical Record: (Optional)



## JOB PERFORMANCE MEASURE (JPM)

**SITE:** MONTICELLO NUCLEAR GENERATING PLANT

**JPM TITLE:** TAKE LOCAL MANUAL CONTROL OF FEEDWATER REG VALVE

**JPM NUMBER:** JPM-B.05.07-002 **REV.** 9

**RELATED PRA INFORMATION:** None

**TASK NUMBER(S) / TASK TITLE(S):** NL259.101

**K/A NUMBERS:** 259001 A2.07 **Rating: SRO/RO:** 3.7/3.8

**APPLICABLE METHOD OF TESTING:**

Discussion:  Simulate/walkthrough:  Perform:

**EVALUATION LOCATION:** In-Plant:  Control Room:   
 Simulator:  Other:   
 Lab:

Time for Completion: 5 Minutes Time Critical: No

Alternate Path / Faulted: No

**TASK APPLICABILITY:** SRO: \_\_\_\_\_ SRO/RO: \_\_\_\_\_ SRO/RO/NLO: X

Additional signatures may be added as needed.

<b>Developed by:</b>	Instructor	Date
<b>Validated by:</b>	Validation Instructor (See JPM Validation Checklist, Attachment 1)	Date
<b>Approved by:</b>	Training Supervisor	Date

**JPM Number:** JPM-B.05.07-002

**JPM Title:** Take Local Manual Control of Feedwater Reg Valve

**Examinee:** \_\_\_\_\_

**Evaluator:** \_\_\_\_\_

**Job Title:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Start Time** \_\_\_\_\_

**Finish Time** \_\_\_\_\_

**PERFORMANCE RESULTS:**

**SAT:**

**UNSAT:**

<b>COMMENTS/FEEDBACK: (Comments shall be made for any steps graded unsatisfactory).</b>

**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.*

JPM BRIEFING/TURNOVER
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(See MTCP-03.32, Figure 6.2)
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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:**

The task conditions are as follows:

- The Plant is operating at 50% power with the Main Feedwater Regulating valves in service. Local manual control of the "A" FWCV, CV-6-12A is required.
- You are the Turbine Building Operator.

**INITIATING CUES (IF APPLICABLE):**

"[STATE OPERATOR'S NAME] The Control Room Supervisor directs you to take local manual control of "A" Main Feed Reg valve CV-6-12A.

**ALL OPERATOR ACTIONS ARE TO BE SIMULATED.**

**JPM PERFORMANCE INFORMATION**

**Required Materials:** NONE

**General References:** B.05.07-05

**Task Standards:** TAKES LOCAL MANUAL CONTROL OF FEED REG VALVE CV-6-12

**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).

**NOTE:** 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.

<b>Performance Step: 1</b>	Locate procedure B.05.07-05.G.1 (LOCAL MANUAL CONTROL OF FEEDWATER VALVES).
<b>Critical: N</b>	
<b>Standard:</b>	Located appropriate procedure.
<b>Evaluator Cue:</b>	Provide operator with a copy of the procedure.
<b>Performance:</b>	<b>SATISFACTORY</b> <input type="checkbox"/> <b>UNSATISFACTORY</b> <input type="checkbox"/>
<b>Comments:</b>	_____

<b>Performance Step: 2</b>	<u>IF</u> necessary to engage the handwheel,
<b>Critical: Y</b>	<u>THEN</u> perform the following:
	Turn (clockwise) the large handwheel until it is snug at its limit of travel.
	Operator turns (clockwise) the large handwheel until it is snug at its limit of travel
<b>Standard:</b>	Turned large handwheel on CV-6-12A CW until snug.
<b>Evaluator Cue:</b>	Large handwheel is turning. Large handwheel is snug.
<b>Performance:</b>	<b>SATISFACTORY</b> <input type="checkbox"/> <b>UNSATISFACTORY</b> <input type="checkbox"/>
<b>Comments:</b>	_____

<b>Performance Step: 3</b> <b>Critical: Y</b>	Turn (counterclockwise) the small handwheel until it is tight.  Turns small handwheel on CV-6-12A CCW until it is tight.  Operator turns small handwheel on CV-6-12A CCW until it is tight.
<b>Standard:</b>	Turned small handwheel on CV-6-12A CCW until it is tight.
<b>Evaluator Cue:</b>	Small handwheel is turning. Small handwheel is tight.
<b>Performance:</b>	<b>SATISFACTORY</b> <input type="checkbox"/> <b>UNSATISFACTORY</b> <input type="checkbox"/>
<b>Comments:</b>	_____

<b>Performance Step: 4</b> <b>Critical: Y</b>	Turn the Bailey positioner bypass valve from CLOSED-AUTO to OPEN-HAND to equalize the pressure across the valve actuator.  Operator turns positioner bypass valve to the OPEN-HAND position.
<b>Standard:</b>	Turned positioner bypass valve to the OPEN-HAND position.
<b>Evaluator Cue:</b>	Positioner bypass valve is pointing to the OPEN-HAND position.
<b>Performance:</b>	<b>SATISFACTORY</b> <input type="checkbox"/> <b>UNSATISFACTORY</b> <input type="checkbox"/>
<b>Comments:</b>	_____

<b>Performance Step: 5</b> <b>Critical: Y</b>	Open the actuator-equalizing valve at the top of the Fw Reg Valve actuator to equalize pressure during valve lock-up.  Operator turns actuator-equalizing valve CCW until it is tight.
<b>Standard:</b>	Turned actuator-equalizing valve CCW until it is tight.
<b>Evaluator Cue:</b>	State actuator equalizing valve is turning. Actuator equalizing valve is full CCW and tight.
<b>Performance:</b>	<b>SATISFACTORY</b> <input type="checkbox"/> <b>UNSATISFACTORY</b> <input type="checkbox"/>
<b>Comments:</b>	_____

<b>Performance Step: 6</b>	Turn the Bailey positioner air supply valve from AUTO-OPEN to HAND-CLOSED to remove supply air from the operator.
<b>Critical: Y</b>	
	Operator turns positioner air supply valve to the HAND-CLOSED position.
<b>Standard:</b>	Turned positioner air supply valve to the HAND-CLOSED position.
<b>Evaluator Cue:</b>	Positioner air supply valve is pointing to HAND-CLOSED position.
<b>Performance:</b>	<b>SATISFACTORY</b> <input type="checkbox"/> <b>UNSATISFACTORY</b> <input type="checkbox"/>
<b>Comments:</b>	_____

<b>Performance Step: 7</b>	Adjust valve position locally by operation of the large handwheel.
<b>Critical: Y</b>	
	Operator turns large handwheel clockwise to CLOSE.
<b>Standard:</b>	Turned large handwheel clockwise to CLOSE.
<b>Evaluator Cue:</b>	<ol style="list-style-type: none"> <li>1. Inform examinee that the Control Room Operator requests them to slowly close the valve.</li> <li>2. CV-6-12A changes position as handwheel is turned.</li> <li>3. If asked, inform them CV-6-12B is opening slowly to control RPV level.</li> <li>4. Control Room Operator requests no further manual adjustment on CV-6-12A.</li> </ol>
<b>Performance:</b>	<b>SATISFACTORY</b> <input type="checkbox"/> <b>UNSATISFACTORY</b> <input type="checkbox"/>
<b>Comments:</b>	_____

<b>Performance Step: 8</b>	<b>INFORM EVALUATOR THAT THE TASK HAS BEEN COMPLETED.</b>
<b>Critical: N</b>	
<b>Standard:</b>	Operator informs evaluator that the task is completed.
<b>Evaluator Cue:</b>	None
<b>Performance:</b>	<b>SATISFACTORY</b> <input type="checkbox"/> <b>UNSATISFACTORY</b> <input type="checkbox"/>
<b>Comments:</b>	_____

**Terminating Cues:**

**Stop Time:** \_\_\_\_\_

**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 signature page filled in correctly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Has the JPM been reviewed and validated by SMEs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Can the required conditions for the JPM be appropriately established in the simulator if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Does the performance steps accurately reflect trainee's actions in accordance with plant procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Has the completion time been established based on validation data or incumbent experience?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. If the task is time critical, is the time critical portion based upon actual task performance requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is the Licensee level appropriate for the task being evaluated if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the K/A appropriate to the task and to the licensee level if required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Have the performance steps been identified and typed (Critical / Sequence / Time Critical) appropriately?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Have all special tools and equipment needed to perform the task been identified and made available to the trainee?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Are all references identified, current, accurate, and available to the trainee?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Have all required cues (as anticipated) been identified for the evaluator to assist task completion?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

\_\_\_\_\_  
 Validation Personnel /Date

\_\_\_\_\_  
 Validation Personnel/Date

Historical Record: (Optional)



## JOB PERFORMANCE MEASURE (JPM)

**SITE:** MONTICELLO NUCLEAR GENERATING PLANT

**JPM TITLE:** RESPOND TO A FAILURE OF DIESEL FIRE PUMP TO MANUALLY START

**JPM NUMBER:** JPM-B.08.05-004 **REV.** 4

**RELATED PRA INFORMATION:** None

**TASK NUMBER(S) / TASK TITLE(S):** NL286.122  
MANUALLY START DIESEL FIRE PUMP

**K/A NUMBERS:** 286000 A4.06 **Rating: SRO/RO:** 3.4/3.4

**APPLICABLE METHOD OF TESTING:**

Discussion:  Simulate/walkthrough:  Perform:

**EVALUATION LOCATION:** In-Plant:  Control Room:   
 Simulator:  Other:   
 Lab:

Time for Completion: 7 Minutes Time Critical: No

Alternate Path / Faulted: Yes

**TASK APPLICABILITY:** SRO: \_\_\_\_\_ SRO/RO: \_\_\_\_\_ SRO/RO/NLO: X

Additional signatures may be added as needed.

<b>Developed by:</b>	Instructor	Date
<b>Validated by:</b>	Validation Instructor (See JPM Validation Checklist, Attachment 1)	Date
<b>Approved by:</b>	Training Supervisor	Date

**JPM Number:** JPM-B.08.05-004

**JPM Title:** Respond to a Failure of Diesel Fire Pump to Manually Start

**Examinee:** \_\_\_\_\_

**Evaluator:** \_\_\_\_\_

**Job Title:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Start Time** \_\_\_\_\_

**Finish Time** \_\_\_\_\_

**PERFORMANCE RESULTS:**

**SAT:**

**UNSAT:**

<b>COMMENTS/FEEDBACK: (Comments shall be made for any steps graded unsatisfactory).</b>

**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.*

JPM BRIEFING/TURNOVER
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(See MTCP-03.32, Figure 6.2)
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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:**

The task conditions are as follows:

- The plant is operating at 100% power.
- There is a fire in the plant.
- The Fire Header is pressurized, but pressure is less than the Diesel Fire Pump automatic initiation pressure.
- The Fire Jockey Pump is running.
- You are the Outplant Operator.

**INITIATING CUES (IF APPLICABLE):**

“[STATE OPERATOR’S NAME] the Shift Supervisor directs you to perform a manual startup of the Diesel Fire Pump.”

**ALL OPERATOR ACTIONS ARE TO BE SIMULATED.**

**JPM PERFORMANCE INFORMATION**

**Required Materials:** NONE

**General References:** B.08.05-05.D.1, B.08.05-05.H.2

**Task Standards:** MANUALLY START THE DIESEL FIRE PUMP

**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).

**NOTE:** 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.

<b>Performance Step: 1</b>	Locate Procedure B.08.05-05.D.2 (Manual Start OF FIRE PUMPS).
<b>Critical: N</b>	
	Operator Locates appropriate procedure. Reviews precautions, limitations and prerequisites.
<b>Standard:</b>	Located appropriate procedure.
<b>Evaluator Cue:</b>	Provide operator with a copy of the procedure and state that due to a fire condition, no fire impairments are required at this time.
<b>Performance:</b>	<b>SATISFACTORY</b> <input type="checkbox"/> <b>UNSATISFACTORY</b> <input type="checkbox"/>
<b>Comments:</b>	_____

<b>Performance Step: 2</b>	To start the Diesel Fire Pump, place Control Switch located inside local panel C-104 to Manual A or Manual B.
<b>Critical: N</b>	
	Operator places Diesel Fire Pump Control Switch to either Manual A or Manual B.
<b>Standard:</b>	Placed Control Switch to Manual A or Manual B.
<b>Evaluator Cue:</b>	Control Switch has been placed in Manual A or Manual B depending on which one the operator selects.
<b>Performance:</b>	<b>SATISFACTORY</b> <input type="checkbox"/> <b>UNSATISFACTORY</b> <input type="checkbox"/>
<b>Comments:</b>	_____

<b>Performance Step: 3</b>	<b><u>CAUTION</u></b>
<b>Critical: N</b>	<b>Be sure to hold the pushbutton in for several seconds after the Diesel starts cranking.</b>
	<b>Do not release until engine is started.</b>
	Depress the manual start pushbutton.
	Operator depresses the manual start pushbutton for several seconds.
<b>Standard:</b>	Depressed manual start pushbutton.
<b>Evaluator Cue:</b>	Manual start pushbutton is depressed. No engine noises are heard.
<b>Performance:</b>	<b>SATISFACTORY</b> <input type="checkbox"/> <b>UNSATISFACTORY</b> <input type="checkbox"/>
<b>Comments:</b>	_____

<b>Performance Step: 4</b>	<u>IF</u> Diesel Fire Pump did not start,
<b>Critical: N</b>	<u>THEN</u> refer to abnormal procedure 2 (FAILURE OF DIESEL FIRE PUMP TO MANUALLY START).
	Operator observes Diesel Fire Pump failure to start and refers to procedure B.08.05-05.H.2 (FAILURE OF DIESEL FIRE PUMP TO MANUALLY START).
<b>Standard:</b>	Referred to failure to start procedure.
<b>Evaluator Cue:</b>	Provided operator with procedure B.08.05-05.H.2 (FAILURE OF DIESEL FIRE PUMP TO MANUALLY START).
<b>Performance:</b>	<b>SATISFACTORY</b> <input type="checkbox"/> <b>UNSATISFACTORY</b> <input type="checkbox"/>
<b>Comments:</b>	_____

<b>Performance Step: 5</b>	Open the fuel solenoid by turning the manual knob on the fuel solenoid clockwise.
<b>Critical: Y</b>	Operator Locates and turnS the fuel solenoid by turning the manual knob on the fuel solenoid clockwise.
<b>Standard:</b>	Opened fuel solenoid.
<b>Evaluator Cue:</b>	The knob is turning clockwise.
<b>Performance:</b>	<b>SATISFACTORY</b> <input type="checkbox"/> <b>UNSATISFACTORY</b> <input type="checkbox"/>
<b>Comments:</b>	_____

<b>Performance Step: 6</b>	Engage the starter by raising the lever on either of the two starting solenoids.
<b>Critical: Y</b>	Operator Locates and raises the lever on one of the two starting solenoids.
<b>Standard:</b>	Engaged the starter.
<b>Evaluator Cue:</b>	Indicate that the lever for the selected solenoid is raised, and states that engine cranking noise can be heard and the engine is running.
<b>Performance:</b>	<b>SATISFACTORY</b> <input type="checkbox"/> <b>UNSATISFACTORY</b> <input type="checkbox"/>
<b>Comments:</b>	_____

<b>Performance Step: 7</b>	Release the lever as soon as the engine is running.
<b>Critical: Y</b>	Operator releases the lever when he realizes engine is running.
<b>Standard:</b>	Released the lever.
<b>Evaluator Cue:</b>	State that lever is released.
<b>Performance:</b>	<b>SATISFACTORY</b> <input type="checkbox"/> <b>UNSATISFACTORY</b> <input type="checkbox"/>
<b>Comments:</b>	_____

<b>Performance Step: 8</b>	<b>NOTIFIES CONTROL ROOM THAT THE DIESEL FIRE PUMP IS RUNNING.</b>
<b>Critical: N</b>	
<b>Standard:</b>	Informed Control Room
<b>Evaluator Cue:</b>	Acknowledged as Control Room Operator the Diesel Fire Pump is running. State JPM is complete.
<b>Performance:</b>	<b>SATISFACTORY</b> <input type="checkbox"/> <b>UNSATISFACTORY</b> <input type="checkbox"/>
<b>Comments:</b>	_____

**Terminating Cues:**

**Stop Time:** \_\_\_\_\_

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 Validation Personnel /Date

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 Validation Personnel/Date

Historical Record: (Optional)