	JOB PERFORMANCE MEASURE (JPM)
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SITE: MONTICELLO NUCLEAR GENERATING PLANT
JPM TITLE: PLACE CORE SPRAY IN TORUS MIXING MODE
JPM NUMBER: JPM-B.03.01-006 **REV.** 2
RELATED PRA INFORMATION: None
TASK NUMBERS / TASK TITLE(S): CR209.115
 Core Spray "A" Loop Torus Mixing Mode
K/A NUMBERS: 209001 A4.11 **Rating: SRO/RO:** 3.7/3.6
 System flow

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

JPM BRIEFING/TURNOVER

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:

- You are the BOP.
- It is August and upstream river temperature is high.
- RCIC Quarterly Surveillance is scheduled for later in your shift
- It has been determined that Core Spray needs to be placed in service in the Torus Mixing Mode

INITIATING CUES (IF APPLICABLE):

- Place “A” Core Spray Loop in Torus Mixing Mode.

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

JPM PERFORMANCE INFORMATION

Required Materials: None

General References: B.03.01-05.G.4

Task Standards: Place "A" Core Spray Loop in Torus Mixing Mode IAW B.03.01-05

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 and review procedure B.03.01-05 G.4
Critical: N	
Standard:	Locate and review procedure B.03.01-05 G.4
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 2	Procedure Step 1
Critical: N	
	Verify MO-1753, 11 CS INJECTION INBOARD, is CLOSED.
Standard:	Uses light indication to verify MO-1753 CLOSED
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 3 Critical: N	<p>Procedure Step 2</p> <p>Perform the following:</p> <ol style="list-style-type: none"> a. Verify 11 CS Pump Suction Pressure PI-14-36A (Local) indicates ≥ 0 psig. b. Verify Div I CS Pump Pressure PI-14-48A (Panel C-03) indicates ≥ 30 psig. <p style="text-align: center;"><u>CAUTION</u></p> <p>Do not start pump if system is not pressurized, as damage could result from suddenly filling and pressurizing an unfilled pipe.</p>
Standard:	Contacts Rx Bldg NLO to verify PI-14-36A indicates ≥ 0 psig. Verifies PI-14-48A indicates ≥ 30 psig.
Evaluator Cue:	As NLO, report that PI-14-36A indicates approximately 35 psig.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 4 Critical: Y	<p>Procedure Step 3</p> <p>START 11 Core Spray Pump by placing 14A-S5A, 11 Core Spray Pump, control switch in START position.</p>
Standard:	Starts 11 Core Spray Pump by placing 14A-S5A in START position.
	<p>Non-Critical Portion of Standard:</p> <ul style="list-style-type: none"> • Prior to starting Pump, announces over plant PA system that they will be cycling a breaker in the lower 4 KV Room • Acknowledges and reports Annunciator 03-A-41 (AC Interlock).
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

Performance Step: 5	Procedure Step 4
Critical: N	Evaluate Tech Spec 3.5.1 and 3.5.2 and enter applicable Condition for 11 Core Spray INOPERABLE.
Standard:	Notes 11 Core Spray inoperability and verifies entry into 3.5.1 and 3.5.2
Evaluator Cue:	As CRS acknowledge inoperability of 11 Core Spray and state that Tech Specs have been appropriately entered.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 6	Procedure Step 5
Critical: N	Verify 11 CS Pump is running by observing the following indications. a. Pump running light is ON. b. Increase in 11 CS Pump discharge pressure.
Standard:	Verifies Red pump running light is ON for 11 CS Pump Verifies increase in 11 CS Pump discharge pressure (approximately 350 psig).
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 7	Procedure Step 6
Critical: Y	Slowly OPEN MO-1749, 11 Core Spray Test Return to Torus, until system flow is approximately 3000 gpm as indicated on FI-14-50A.
Standard:	Operator monitors flow increase on FI-14-50A while slowly opening MO-1749 to attain approximately 3000 gpm.
	Non-Critical Portion of Standard: Operator should also monitor or state that he would then monitor Torus temperature. When system parameters are stable, operator should report that "A" Core Spray is in Torus Mixing Mode.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Terminating Cues: When operator reports "A" Core Spray is in Torus Mixing Mode then state another operator will secure Torus Mixing and that the **JPM is complete**.

Stop Time: _____

Historical Record:

- Revised for editorial updates for the 2013 ILT NRC Exam
- This JPM revision based on B.03.01-05.G.4 Revision 32.

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

TURNOVER SHEET

INITIAL CONDITIONS:

- You are the BOP.
- It is August and upstream river temperature is high.
- RCIC Quarterly Surveillance is scheduled for later in your shift
- It has been determined that Core Spray needs to be placed in service in the Torus Mixing Mode


INITIATING CUES (IF APPLICABLE):

- Place "A" Core Spray Loop in Torus Mixing Mode.

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

	JOB PERFORMANCE MEASURE (JPM)
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SITE: MONTICELLO NUCLEAR GENERATING PLANT
JPM TITLE: MANUAL INITIATION OF RCIC
JPM NUMBER: JPM-B.02.03-010 **REV.** 1
RELATED PRA INFORMATION: None
TASK NUMBERS / TASK TITLE(S): CR217.107
 Manually Initiate RCIC
K/A NUMBERS: 217000 A4.04 **Rating: SRO/RO:** 3.6 / 3.6

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: Yes

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 BRIEFING/TURNOVER

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:

- A reactor scram has occurred due to a LONOP.
- HPCI is unavailable.

INITIATING CUES (IF APPLICABLE):

- The CRS directs you to restore and maintain RPV Water Level to +9 to +48 inches by manually initiating RCIC IAW the Hard Card.

JPM PERFORMANCE INFORMATION

- Required Materials:** • None
- General References:** • B.02.03-05.D.2
- Task Standards:** • Inject with RCIC into the RPV

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	Procedure Step 1
Critical: N	At any time while performing this procedure, <u>If</u> conditions permit, <u>Then</u> place RHR in torus Cooling for cooling/mixing the Torus water, per Ops Man Section B.03.04-05.
Standard:	Informs CRS of step to place Torus Cooling in service.
Evaluator Cue:	Acknowledge report and state that another operator will be directed to place Torus Cooling in service.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 2	Procedure Step 2
Critical: N	Verify flow controller FIC-13-91 is in AUTO, <u>AND</u> set to 400 gpm.
Standard:	Flow controller FIC-13-91 is in AUTO, <u>AND</u> set to 400 gpm.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

JPM-B.02.03-010 (Manual Initiation of RCIC) Rev. 1

Performance Step: 3	Procedure Step 3
Critical: Y	OPEN MO-2096, RCIC Cooling Water Supply Valve.
Standard:	MO-2096, RCIC Cooling Water Supply Valve is open (Red light ON and Green light OFF).
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 4	Procedure Step 4
Critical: Y	Place P-211 (RCIC Barometric Condenser Vacuum Pump) Handswitch, 13A-S15, in the START position.
Standard:	P-211 is started (Red light ON and Green light OFF).
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 5	Procedure Step 5
Critical: Y	OPEN CV-2104, RCIC Pump Minimum flow Valve.
Standard:	CV-2104, RCIC Pump Minimum flow Valve is open (Red light ON and Green light OFF).
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 6	Procedure Step 6
Critical: Y	OPEN the following: <ul style="list-style-type: none"> a. MO-2107, RCIC Pump Disch Inbd valve. b. MO-2106, RCIC Pump Disch Otbd valve.
Standard:	MO-2107 and MO-2106 are open (Red light ON and Green light OFF).
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

JPM-B.02.03-010 (Manual Initiation of RCIC) Rev. 1

Performance Step: 7	Procedure Step 7
Critical: Y	OPEN MO-2078, RCIC Turbine Steam Supply.
Standard:	MO-2078, RCIC Turbine Steam Supply is open (Red light ON and Green light OFF).
<u>EVALUATOR NOTE:</u>	The Exhaust Diaphragm High Pressure annunciator is triggered to be received 5 seconds after MO-2078 is opened. The next four <u>Performance Steps (8-11)</u> of the RCIC startup are verification steps and are NOT critical. They may be marked <u>(N/A)</u> if they are not performed before the annunciator activates.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 8	Procedure Step 8
Critical: N	Verify the following valves are closed: <ul style="list-style-type: none"> a. CV-2848 and CV-2849, RCIC Cond Pump Discharge to CRW b. CV-2082A and CV-2082B RCIC Steam Line Drain to Main Condenser
Standard:	CV-2848, CV-2849, CV-2082A, and CV-2082B are CLOSED.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 9	Procedure Step 9
Critical: N	Verify SI-7321, RCIC Turbine Speed Indicator is increasing, indicating that unit is rolling.
Standard:	RCIC Turbine Speed Indicator is increasing.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

JPM-B.02.03-010 (Manual Initiation of RCIC) Rev. 1

Performance Step: 10	Procedure Step 10
Critical: N	Verify AO-13-22, RCIC Injection Testable Ckv, is open.
Standard:	AO-13-22, RCIC Injection Testable Ckv, is open.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 11	Procedure Step 11
Critical: N	Verify RCIC pump flow is maintained at desired level.
Standard:	RCIC pump flow is maintained at desired level.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 12	ALTERNATE PATH
Critical: N	Respond to annunciator C04-A-10 (RCIC Turbine Exhaust Diaphragm Hi Press).
Standard:	Notifies the CRS of the unexpected alarm and references C.6-04-A-10.
Evaluator Cue:	Role Play CRS as necessary to acknowledge the unexpected alarm.
Evaluator Note:	This begins the Alternate Path portion of the JPM
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 13	ARP 4-A10 Step 1,
Critical: Y	Perform the following: a. Depress 13A-S17 RCIC TURBINE TRIP Pushbutton.
Standard:	RCIC TURBINE TRIP Pushbutton depressed and the trip throttle valve (MO-2080) closes.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

JPM-B.02.03-010 (Manual Initiation of RCIC) Rev. 1

Performance Step: 14	ARP 4-A10 Step 1, Perform the following: b. CLOSE the following Steam Isolation Valves. 1) MO-2075 2) MO-2076
Critical: Y	
Standard:	MO-2075 and MO-2076 CLOSED (red lights off and green lights on).
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Terminating Cues: When the Steam Isolation Valves are CLOSED, state that the JPM is completed.

Stop Time: _____

Historical Record:

- Editorial revision for the 2013 NRC ILT Exam.
- Based on B.02.03-05 Rev. 24 and ARP 4-A-10 Rev. 2

TURNOVER SHEET

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

INITIAL CONDITIONS:

- A reactor scram has occurred due to a LONOP.
- HPCI is unavailable.


INITIATING CUES (IF APPLICABLE):

- The CRS directs you to restore and maintain RPV Water Level to +9 to +48 inches by manually initiating RCIC IAW the Hard Card.

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

	JOB PERFORMANCE MEASURE (JPM)
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SITE: MONTICELLO NUCLEAR GENERATING PLANT

JPM TITLE: SHUTDOWN OF EDG

JPM NUMBER: JPM-B.09.08-005 **REV.** 5

RELATED PRA INFORMATION: None

TASK NUMBERS / TASK TITLE(S): CR264.113
Perform a Remote Shutdown of (11/12) Diesel from Panel C-08 with Emergency Start Signal Present

K/A NUMBERS: 264000 A4.04 Rating: SRO/RO: 3.7 / 3.7

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

JPM BRIEFING/TURNOVER

<i>Provide briefing/turnover in accordance with applicable program description and/or training procedure.</i>

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 LONOP and lockout of Bus 16 has occurred and the cause is not known.
- The plant has been stabilized using C.4-B.09.06.C (Loss of Bus 15 or Bus 16).
- Both EDGs are running unloaded.
- Service water has been lined up to 12 EDG.
- 12 EDG can NOT be shutdown locally.

INITIATING CUES:

- The CRS directs you to shut down 12 EDG from C-08 using the remote shutdown procedure.

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

JPM PERFORMANCE INFORMATION

- Required Materials:**
- Jumper
- General References:**
- B.09.08-05 (Emergency Diesel Generators – System Operation)
 - C.4-B.09.06.C (Loss of Bus 15 or Bus 16)
 - C.6-008-C-26 (No. 12 Diesel Eng. Maintenance Lockout)
- Task Standards:**
- 12 EDG has been given a shutdown signal and is idling in accordance with procedure B.09.08-05, Section H.1

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	Obtain and review Procedure B.09.08-05, Section H.1 (Remote Shutdown of Diesel from Panel C-08 with Emergency Start Signal Present).
Critical: N	
Standard:	Obtains and reviews correct procedure and section.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 2	Procedure Step 1.
Critical: Y	
	In the back of Panel C-08, jumper terminals 5 and 6 on the Fast Start relay (95-7 for 11 EDG and/or 95-8 for 12 EDG) of the diesel(s) to be shutdown.
Standard:	<ul style="list-style-type: none"> Locates Fast Start Relay 95-8 on left hand side in back of panel C-08 Installs alligator clip jumper from terminal 5 to terminal 6. Wears FR long sleeve shirt/sweatshirt, safety glasses and removes exposed conductive articles (e.g., jewelry, watches, and keys).
Evaluator Cue:	<ul style="list-style-type: none"> PROVIDE jumper to Operator. If Form 3034 (Jumper Bypass Form) is requested, INFORM operator this form will be provided by Shift Supervision as soon as conditions permit.
Evaluator Note:	Operator Aid C-77 can be used to determine location of terminal points.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 3	Procedure Step 2.
Critical: Y	
	Place the control switch of the emergency diesel(s) to be shutdown in the "PULL-TO-LOCK" position.
Standard:	<ul style="list-style-type: none"> On C-08, Rotates 12 EDG Control Switch CCW and up to the PTL position. <p><u>Non-Critical Portion:</u></p> <ul style="list-style-type: none"> Observes indication on 12 EDG Frequency Meter lowers. Acknowledges 8-B-4 (#12 Desl Gen Not Auto) <u>And</u> 8-C-26 (NO. 12 Diesel Eng. Maintenance Lockout) as expected.
Evaluator Cue:	None
Evaluator Note:	The EDG will idle for 11.5 minutes after given a STOP signal. It is not necessary to wait for the EDG to STOP to consider the JPM complete.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

Performance Step: 4	Procedure Step 3.
Critical: N	
	Remove the jumper from terminals 5 and 6 on the Fast Start relay 95-7 for 11 EDG and/or 95-8 for 12 EDG.
Standard:	Removes jumper from Fast Start relay 95-8.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Terminating Cues: Terminate the JPM once the Jumper has been removed from Fast Start relay with 12 EDG idling and/or the examinee states that the task is complete.

Stop Time: _____

Historical Record: Rev. 5

- Editorial updates for 2013 ILT NRC Exam
- Revision based on Revision 37 of B.09.08-05.H.1

TURNOVER SHEET

INITIAL CONDITIONS:

- A lockout of Bus 16 has occurred and the cause is not known.
- The plant has been stabilized using C.4-B.09.06.C (Loss of Bus 15 or Bus 16).
- Both EDGs are running unloaded.
- Service water has been lined up to 12 EDG.
- 12 EDG can NOT be shutdown locally.

INITIATING CUES:

- The CRS directs you to shut down 12 EDG from C-08 using the remote shutdown procedure.

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

	JOB PERFORMANCE MEASURE (JPM)
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SITE: MONTICELLO NUCLEAR GENERATING PLANT

JPM TITLE: MANUALLY INSERT A GROUP 4 ISOLATION

JPM NUMBER: JPM-B.03.02-009 **REV.** 0

RELATED PRA INFORMATION: None

TASK NUMBERS / TASK TITLE(S): CR200.160
Perform the Procedure for Primary Containment Group 4 Isolation

K/A NUMBERS: 223002 A2.06 **Rating: SRO/RO:** 4.0 / 4.1

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: Yes

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

PM Number: JPM-B.03.02-009

JPM Title: Manually Insert a Group 4 Isolation

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.

JPM BRIEFING/TURNOVER

<i>Provide briefing/turnover in accordance with applicable program description and/or training procedure.</i>

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:

- Plant is operating in Mode 1
- HPCI was isolated for maintenance and is in the process of being restored

INITIATING CUES (IF APPLICABLE):

- CRS has directed you to open MO-2034 and MO-2035 in accordance with the B-manual.

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

JPM PERFORMANCE INFORMATION

- Required Materials:** • None
- General References:** • B.03.02-05 (High Pressure Coolant Injection – System Operation)
 • C.4-B.04.01.D (Primary Containment Isolation – Group 4)
 • C.6-003-A-07 (HPCI Steam Line Hi Diff Press)
- Task Standards:** • MO-2034 and MO-2035 will be opened in accordance with B.03.02-05, section G.4 and the Group 4 isolation will be inserted in accordance with C.4-B.04.01.D, step 1.

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	Obtain and review Procedure B.03.02-05, Section G.4 (Opening HPCI Steam Line Isolation Valves MO-2034 and MO-2035).
Critical: N	
Standard:	Obtains and reviews correct procedure and section
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 2	B.03.02-05, G.4, Step 1
Critical: N	Verify Radiation Protection personnel have addressed necessary controls for changing radiological conditions in the HPCI Room.
Standard:	Notifies RP personnel to take the necessary controls for changing radiological conditions in the HPCI room.
Evaluator Cue:	REPORT that RP has been notified and additional radiological control measures are in place.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 3	B.03.02-05, G.4, Step 2
Critical: N	Verify handswitch for valve CV-2043, HPCI Steam Line Drain Trap Bypass, is in AUTO
Standard:	Verifies CV-2043, HPCI Steam Line Drain Trap Bypass, is in AUTO
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 4	B.03.02-05, G.4, Step 3
Critical: N	Verify valves CV-2046A and CV-2046B, Steam Line Drain to Main Condenser, are open
Standard:	Verifies CV-2046A and CV-2046B, Steam Line Drain to Main Condenser are open
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 5	B.03.02-05, G.4, Step 4
Critical: Y	Fully OPEN MO-2035, HPCI Steam Line Isolation Outboard.
Standard:	Rotates control switch for MO-2035 to the OPEN position
	Non-critical Portion: Observes RED light come ON and GREEN light OFF
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 6	B.03.02-05, G.4, Step 5
Critical: Y	Jog OPEN MO-2034, HPCI Steam Line Isolation Inboard, to slowly pressurize HPCI steamline.
Standard:	Momentarily places the handswitch for MO-2034, HPCI Steam Line Isolation Inboard, to OPEN.
Evaluator Cue:	None
Evaluator Note:	Simulator Booth Operator: When examinee places the handswitch for MO-2034, HPCI Steam Line Isolation Inboard, to OPEN, verify TRIGGER 1 INSERTS. Floor Instructor: 5 seconds after the switch for MO-2034 is taken to OPEN, annunciator 3-A-7 (HPCI STEAM LINE HI DIFF PRESS) will alarm. Examinee may not continue to open the valve upon receipt of the alarm.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

Performance Step: 7	ALTERNATE PATH:
Critical <u>N</u>	Recognizes HPCI STEAM LINE HI DIFF PRESS annunciator 3-A-7
Standard:	Reports HPCI STEAM LINE HI DIFF PRESS annunciator 3-A-7
Evaluator Cue:	When alarm 3-A-7 is received and reported, ACKNOWLEDGE the report
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 8	C.6-003-A-07, Step 1
Critical: N	Verify AUTOMATIC ACTIONS
Standard:	Recognizes and reports that MO-2034 and MO-2035 did not auto-close upon receipt of alarm 3-A-7.
Evaluator Cue:	ACKNOWLEDGE the report
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 9	C.6-003-A-07, Step 2.a
Critical: N	Perform the following: Enter C.04.01.D (Primary Containment Group 4 Isolation)
Standard:	Recognizes and reports entry into the AOP for a Group 4 isolation.
Evaluator Cue:	ACKNOWLEDGE the report
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 10	ALTERNATE PATH
Critical: Y	C.4-B.04.01.D, Subsequent Operator Action Step 1 Verify the following HPCI valves CLOSED: a. MO-2034, HPCI Steam Line Isolation Inboard (C-03) b. MO-2035, HPCI Steam Line Isolation Outboard (C-03)
Standard:	<ul style="list-style-type: none"> • Rotates control switch for MO-2034 to CLOSE OR • Rotates control switch for MO-2035 to CLOSE <u>Non-critical Portion:</u> <ul style="list-style-type: none"> • Observes RED light goes OFF and GREEN light is ON • Observes RED light goes OFF and GREEN light comes ON
Evaluator Cue:	None
Evaluator Note:	MO-2034 RED light may or may not be ON initially, depending on how far OPEN the valve was in PERFORMANCE STEP 6. End result is that the RED light should be OFF and the GREEN light should be ON.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Terminating Cues: Terminate the JPM once MO-2034 and/or MO-2035 are CLOSED and the examinee has initiated an investigation. Inform examinee another operator will complete the procedure.

Stop Time: _____

Historical Record:

Page #	Changes

TURNOVER SHEET

INITIAL CONDITIONS:

- Plant is operating in Mode 1
- HPCI was isolated for maintenance and is in the process of being restored


INITIATING CUES (IF APPLICABLE):

- CRS has directed you to open MO-2034 and MO-2035 in accordance with the B-manual.

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

	JOB PERFORMANCE MEASURE (JPM)
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SITE: MONTICELLO NUCLEAR GENERATING PLANT

JPM TITLE: SWAPPING STATOR COOLING PUMPS

JPM NUMBER: JPM-B.06.02.04-001 **REV.** 1

RELATED PRA INFORMATION: None

TASK NUMBERS / TASK TITLE(S): CR200.171
Perform the procedure for a stator cooling water failure

K/A NUMBERS: 241000 A2.10 Rating: SRO/RO: 3.2 / 3.1

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: Yes

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 BRIEFING/TURNOVER

<i>Provide briefing/turnover in accordance with applicable program description and/or training procedure.</i>

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:

- 11 Stator Liquid Cooling pump P-72A is in service.
- 12 Stator Liquid Cooling pump P-72B is in standby.
- Vibration Engineer needs to collect vibration data on 12 Stator Liquid Cooling pump.

INITIATING CUES:

- CRS has directed you to place 12 Stator Liquid Cooling pump P-72B in service and place 11 Stator Liquid Cooling pump P-72A in standby.

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

JPM PERFORMANCE INFORMATION

- Required Materials:** • None
- General References:** • B.06.02.04-05 (Generator-Stator Cooling – System Operation)
 • C.4-B.06.02.04.A (Stator Cooling Water Failure)
 • C.6-008-A-17 (No. 1 Generator Cooling Wtr Failure)
- Task Standards:** • 12 Stator Liquid Cooling pump P-72B placed into service in accordance with Procedure B.06.02.04-05, Section E.1 with 11 Stator Liquid Cooling pump P-72A returned to service in accordance with Procedure C.4-B.06.02.04.A following trip of 12 Stator Liquid Cooling 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).

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	Obtain and review Procedure B.06.02.04-05, Section E.1 (Swapping Stator Cooling Pumps).
Critical N	
Standard:	<ul style="list-style-type: none"> Obtains and reviews correct procedure and section. Determines PART B (PLACING STATOR COOLING PUMP P-72B INTO SERVICE AND REMOVING STATOR COOLING PUMP P-72A FROM SERVICE) will be performed.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 2	Procedure Step 8.
Critical N	Note pump discharge pressure on gauge PI-7121 (Panel C-83A).
Standard:	Contacts Turbine Building Operator and requests Stator Cooling pump discharge pressure from gauge PI-7121.
Evaluator Cue:	When examinee attempts to contact the Turbine Building Operator, REPORT that pump discharge pressure is 125 psig and steady.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 3	Procedure Step 9.
Critical Y	Place HS-2125, 12 STATOR LIQUID PUMP P-72B to START (Panel C-08).
Standard:	<ul style="list-style-type: none"> • Momentarily rotates control switch HS-2125 CW to the START position. <p><u>Non-Critical Portion:</u></p> <ul style="list-style-type: none"> • Observes RED light comes ON and GREEN light goes OFF.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 4	Procedure Step 10.
Critical N	Verify pump discharge pressure rise on PI-7121 (Panel C-83A).
Standard:	Contacts Turbine Building Operator and requests Stator Cooling pump discharge pressure from gauge PI-7121.
Evaluator Cue:	When examinee attempts to contact the Turbine Building Operator, REPORT that pump discharge pressure has risen to 130 psig and steady.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 5	Procedure Step 11.
Critical N	Place HS-3125, 11 STATOR LIQUID PUMP P-72A to STOP (Panel C-08).
Standard:	<ul style="list-style-type: none"> • Momentarily rotates control switch HS-3125 CCW to the STOP position. • Observes RED light goes OFF and GREEN light comes ON. • Reports trip of 12 Stator Cooling pump and may refer to ARP 8-A-17.
Evaluator Note:	<ul style="list-style-type: none"> • If the operator fails to secure the 11 Stator Cooling pump, DIRECT the Simulator Operator to manually INSERT Trigger 1. • Performance Steps 6 – 9 may be marked N/A once operator reports trip of 12 Stator Cooling pump and enters C.4-B.06.02.04.A.
Evaluator Cue:	<p>Floor Instructor: When Operator reports trip of 12 Stator Cooling pump, ACKNOWLEDGE report.</p> <p>Simulator Booth Operator: When operator takes 11 Stator Liquid pump control switch to the OFF position, VERIFY Trigger 1 automatically activates. This causes a trip of 12 pump after a 10 second time delay. This also inserts a trip of 11 pump to prevent it from automatically starting when the 12 pump trips.</p>
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 6	Procedure Step 12 (Optional).
Critical N	Verify pump discharge pressure is 115 - 135 psig on gauge PI-7121 (Panel C-83A).
Standard:	Contacts Turbine Building Operator and requests Stator Cooling pump discharge pressure from gauge PI-7121.
Evaluator Note:	Depending on operator timing, if the 12 Stator Cooling pump has tripped, this performance step may not be done and can be marked as N/A.
Evaluator Cue:	If examinee attempts to contact the Turbine Building Operator, REPORT pump discharge pressure is 125 psig and steady. When the 12 Stator Cooling pump trips, REPORT discharge pressure has dropped to 0 psig.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

Performance Step: 7	Procedure Step 13 (Optional).
Critical N	Verify PI-7122, Stator Cooling Water Inlet Pressure ≤ 56 psig (Panel C3A).
Standard:	Contacts Turbine Building Operator and requests Stator Cooling inlet pressure from gauge PI-7122.
Evaluator Note:	Depending on operator timing, if the 12 Stator Cooling pump has tripped, this performance step may not be done and can be marked as N/A.
Evaluator Cue:	If examinee attempts to contact the Turbine Building Operator, REPORT Stator Cooling inlet pressure is 50 psig and steady. When the 12 Stator Cooling pump trips, REPORT inlet pressure has dropped to 0 psig.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 8	Procedure Step 14 (Optional).
Critical N	Verify flow through FIS-7183, Cooling Water Flow to Gen Winding, is 285 gpm to 315 gpm (Panel C-83A).
Standard:	Contacts Turbine Building Operator and requests Stator Cooling flow from gauge FIS-7183.
Evaluator Note:	Depending on operator timing, if the 12 Stator Cooling pump has tripped, this performance step may not be done and can be marked as N/A.
Evaluator Cue:	If examinee attempts to contact the Turbine Building Operator, REPORT Stator Cooling flow is 300 gpm and steady. When the 12 Stator Cooling pump trips, REPORT flow has dropped to 0 gpm.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 9	ALTERNATE PATH
Critical Y	(C.4-B.06.02.04.A) Immediate Operator Action Step 1.
	Verify a Stator Cooling water pump is running.
Standard:	<ul style="list-style-type: none"> • Momentarily rotates control switch HS-3125 CW to the START position.
	Non-Critical Portion:
	<ul style="list-style-type: none"> • Informs CRS of the intention to start 11 Stator Cooling pump. • Observes RED light comes ON and GREEN light goes OFF. • Observes ARP 8-A-17 has cleared.
Evaluator Note:	This is an Immediate Operator Action and should be performed from memory.
Evaluator Cue:	Simulator Operator: When operator takes 11 Stator Liquid pump control switch to the START position, VERIFY Trigger 2 automatically activates. This will delete the trip of 11 Stator Cooling pump and allow it to be re-started.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 10	(C.4-B.06.02.04.A) Immediate Operator Action Step 2.
Critical N	
	If a total loss of Stator Cooling has occurred, <u>And</u> cooling can <u>NOT</u> be immediately restored, <u>Then</u> initiate a Reactor Scram.
Standard:	<ul style="list-style-type: none"> • Marks step as N/A.
Evaluator Cue:	When operator obtains and reviews procedure C.4-B.06.02.04.A, INFORM him another operator will complete the procedure.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Terminating Cues: Terminate the JPM once 11 Stator Cooling pump is running and examinee has been informed that another operator will complete the procedure.

Stop Time: _____

Historical Record: Revision 1

- Editorial updates for 2013 ILT NRC Exam
- JPM based on Revision 18 B.06.02.04-05.E.1 Part B

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

TURNOVER SHEET

INITIAL CONDITIONS:

- 11 Stator Liquid Cooling pump P-72A is in service.
- 12 Stator Liquid Cooling pump P-72B is in standby.
- Vibration Engineer needs to collect vibration data on 12 Stator Liquid Cooling pump.

INITIATING CUES:

- CRS has directed you to place 12 Stator Liquid Cooling pump P-72B in service and place 11 Stator Liquid Cooling pump P-72A in standby.

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

	JOB PERFORMANCE MEASURE (JPM)
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SITE: MONTICELLO NUCLEAR GENERATING PLANT

JPM TITLE: CONTROL ROD DRIVE EXERCISE

JPM NUMBER: JPM-0074-001 **REV.** 1

RELATED PRA INFORMATION: None

TASK NUMBERS / TASK TITLE(S): CR201.101, Perform Weekly Control Rod Drive Exercise

K/A NUMBERS: 201003 **Rating: SRO/RO:** 3.5/3.5

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: Yes

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-0074-001 (Control Rod Drive Exercise) Rev. 1

JPM BRIEFING/TURNOVER

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:

- The plant is at 95% power for the performance of Test 0074 (Control Rod Drive Exercise).
- All briefs are complete and all required paperwork has been reviewed and verified as correct.
- All prerequisites have been met and the Test has been started with Steps 1 and 2 complete.

INITIATING CUES (IF APPLICABLE):

- The CRS directs you to continue Test 0074 (Control Rod Drive Exercise) at **Step 3** IAW 0074 Table 1 (Withdrawn Control Rod Exercise Data Sheet)

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

JPM PERFORMANCE INFORMATION

- Required Materials:** Procedure 0074 filled out as follows:
- Fill in the Cover Page as follows:
 - Fill in “TRNG” for the WO #
 - Check “RECORD COPY”
 - Initial “CRS” and Date “Today” for “Verified Current”
 - Sign “Shift Supervision” approval to commence using “TODAY/NOW” for the date and time
 - Reason to Perform – Check #1, Monthly Surveillance for all withdrawn rods.
 - Fill in prerequisites as follows:
 - Initial prerequisites 1 & 2 as complete
 - Initial prerequisite 3.a-e and 4 as N/A
 - Fill in the procedure steps as follows:
 - Initial Step 1.a-e as completed
 - Initial Step 2 and N/A

General References: Test 0074, Control Rod Drive Exercise
 ARP C.6-005-A-11, Rod Overtravel
 B.01.03-05.H.3

Task Standards: Complete the Control Rod Drive Exercise
 Insert Control Rod IAW ARP and B Manual guidance

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 Qualification Program Examinations.

Performance Step: 1	Reviews the Precautions, Reason For Performing, Prerequisites, and Steps 1 & 2 of Test 0074.
Critical: N	
Standard:	Reviews the applicable portions of the Test.
Evaluator Cue:	If the Gardel rod position printout is requested state that the printout matches the indications on the Gardel Rod position display.
Evaluator Note:	Provide operator with a copy of the procedure.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 2	Procedure Step 3:
Critical: Y	Select a withdrawn control rod by depressing the appropriate rod select pushbutton. <ul style="list-style-type: none"> a. Verify that the selected rod select pushbutton is illuminated. b. Verify the selected rod indicates selection on the full-core display.
Standard:	Selects Rod 02-31 by depressing the select matrix rod select pushbutton. <p>(Non-Critical portion of Standard)</p> <ul style="list-style-type: none"> a. Verifies the matrix select pushbutton white backlight illuminates. b. Verifies white select light on the full core display illuminates.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step:	Procedure Step 4:
Critical: N	<u>CONTINUOUS AWARENESS STEP</u> <u>If</u> an abnormal condition is identified as a result of exercising a rod, <u>Then</u> notify Control Room Supervisor, <u>And</u> refer to Operations Manual B.01.03-05, CRD Hydraulic System – System Operation, <u>And</u> record the abnormality on Table 2, Control Rod Exercise Abnormalities.
Standard:	Reads and acknowledges step by initialing.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 3	Procedure Step 5:
Critical: Y	Insert the selected rod one notch by momentarily placing switch 3A-S2 (Rod Movement Control) in ROD IN position. <ul style="list-style-type: none"> a. Verify the rod position indication for the selected control rod in the single rod. b. Verify the four rod group display changes to the next lower latched position.
Standard:	Inserts rod 02-31 one notch by placing the Rod Movement Control switch to "Rod In" and releasing. <p><u>(Non-Critical portion of Standard)</u></p> <ul style="list-style-type: none"> a. Verifies rod position indication for selected control rod in the single rod. b. Verifies four rod group display changes to next lower latched position.
Evaluator Cue:	If the rod double notches state "It is allowable to withdraw the rod back to its normal position."
Evaluator Note:	Some candidates may get the rod to double notch if the Rod Movement Control switch is held to long in the "Rod In" position. This should be noted on Table 2.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

<p>Performance Step: 4 Critical: Y_</p>	<p>Procedure Step 6: NOTE: Steps 6 & 7 can be performed together using continuous notch withdrawal for fully withdrawn control rods.</p> <p>Withdraw the selected rod one notch.</p> <ol style="list-style-type: none"> a. Verify the rod position indication for the selected control rod in the single rod. b. Verify the four rod group display changes to the next higher latched position.
<p>Standard:</p>	<p>Withdraws rod 02-31 one notch by placing the Rod Movement Control switch to "Rod Out Notch" and releasing.</p> <p>(Non-Critical portion of Standard)</p> <ol style="list-style-type: none"> a. Verifies rod position indication for selected control rod in the single rod. b. Verifies four rod group display changes to next higher latched position. c. <u>If</u> Step 7 is performed with this step, <u>Then</u>, Notices position indication for rod 02-31 goes blank and beyond position 48.
<p>Evaluator Note:</p>	<p>The examinee may perform Step 7 by giving the control rod a continuous withdrawal signal from position 46 and performing the coupling check.</p>
<p>Evaluator Cue:</p>	<p>None</p>
<p>Performance:</p>	<p>SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/></p>
<p>Comments:</p>	<p>_____</p>

Performance Step: 5	Procedure Step 7: If the control rod is fully withdrawn, <u>Then</u> Perform a coupling check by attempting to withdraw Control Rod past position 48.
Critical: Y	
Standard:	Gives rod 02-31 a withdraw signal from position 48 by placing the Rod Movement Control switch to "Rod Out Notch" and releasing. (Non-Critical portion of Standard) Notifies position indication for rod 02-31 goes blank and beyond position 48.
Evaluator Note:	This JPM Step is not critical if performed with Performance Step 4
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 6	ALTERNATE PATH: ARP 05-A-11
Critical: N	
	NOTE: The control blade for an uncoupled rod could be at any elevation in the core, making a Control Rod Drop Accident possible.
	Procedure Step 1: Notify Shift Supervision
Standard:	<ul style="list-style-type: none"> ○ Acknowledges and reports receipt of alarm 5-A-11 (Rod Overtravel) by verifying the rod position on the 4 rod and full core displays go blank. ○ Refers to alarm 5-A-11 ARP for additional guidance.
Evaluator Cues:	Acknowledge the report to the Shift Supervision.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 7	ARP 05-A-11
Critical: N	Procedure Step: 2 EVALUATE LCO 3.1.3 for uncoupled Control Rod; SR 3.1.3.4 <u>NOT</u> met.
Standard:	Notifies CRS to evaluate LCO 3.1.3
Evaluator Cues:	As the CRS inform examinee LCO 3.1.3 has been evaluated.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 8	ARP 05-A-11
Critical: N	Procedure Step: 3: <u>If</u> Reactor power is below Low Power Setpoint, <u>Then</u> ENTER Step 6.
Standard:	Marks this step as N/A as power is above the Low Power Setpoint (20%)
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

<p>Performance Step: 9 Critical: Y</p>	<p>ARP 05-A-11 Procedure Step: 4: If Reactor power is above Low Power Setpoint, <u>Then</u> attempt to re-couple Control Rod by performing the following:</p> <ol style="list-style-type: none"> a. Continuously INSERT associated Control Rod until position 46 is observed. b. VERIFY annunciator 5-A-11 (Rod Overtravel) resets. c. Reset Control Rod Drift Alarm d. Continuously WITHDRAWAL associated Control Rod to Position 48, AND perform coupling check.
<p>Standard:</p>	<ul style="list-style-type: none"> • Inserts Control Rod 02-31 to position 46 • Withdrawals Control Rod 02-31 to position 48, performs coupling check and verifies the Control Rod is re-coupled. <p><u>Non-Critical portion of Standard)</u></p> <ul style="list-style-type: none"> • Resets Control Rod Drift Alarm by momentarily placing Switch 3A-S7 to the RESET position.
<p>Evaluator Cue:</p>	<p>None</p>
<p>Performance:</p>	<p>SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/></p>
<p>Comments:</p>	<p>_____</p>

Terminating Cues: When Control Rod 02-31 is re-coupled at position 48, inform the candidate that the task is completed.

Stop Time: _____

Historical Record: Revision 1

- Revised for procedure updates for the 2013 ILT NRC Exam
- Based on 0074 Revision 57, ARP 05-A-11 Revision 3.

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

TURNOVER SHEET

INITIAL CONDITIONS:

- The plant is at 95% power for the performance of Test 0074 (Control Rod Drive Exercise).
- All briefs are complete and all required paperwork has been reviewed and verified as correct.
- All prerequisites have been met and the Test has been started with Steps 1 and 2 complete.


INITIATING CUES (IF APPLICABLE):

- The CRS directs you to continue Test 0074 (Control Rod Drive Exercise) at **Step 3** IAW 0074 Table 1 (Withdrawn Control Rod Exercise Data Sheet)

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

	JOB PERFORMANCE MEASURE (JPM)
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SITE: MONTICELLO NUCLEAR GENERATING PLANT

JPM TITLE: APRM GAIN ADJUSTMENT WITHOUT THE PLANT COMPUTER

JPM NUMBER: JPM-C.2-05.B.04-001 **REV.** 2

RELATED PRA INFORMATION: None

TASK NUMBERS / TASK TITLE(S): CR200.130
APRM Gain Adjustment Factor Monitoring

K/A NUMBERS: 215005 A1.07 Rating: SRO/RO: 3.4 / 3.0

APPLICABLE METHOD OF TESTING:
 Discussion: Simulate/walkthrough: Perform:

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

Time for Completion: 20 Minutes Time Critical: _____
 Alternate Path: _____

TASK APPLICABILITY: SRO: RO: NLO

Additional site-specific signatures may be added as desired.

Developed by:	Ronald C. Newberry	
	Developer	Date
Validated by:	Validator	Date
	(See JPM Validation Checklist, Attachment 1)	
Approved by:	Michael Slack	
	Training Supervisor	Date

JPM BRIEFING/TURNOVER

<i>Provide briefing/turnover in accordance with applicable program description and/or training procedure.</i>

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:

- APRM 3 is bypassed due to maintenance.
- The plant computer is NOT in service due to a recent failure.
- IT expects plant computer system to be returned to service within approximately 30 minutes.
- Reactor power is stable with no immediate reduction required.
- APRM #3 is ready to be returned to service.
- The plant is operating at 100% power.
- All required formal briefs have been completed.

INITIATING CUES:

- The CRS directs you to adjust the gain on APRM #3 without the plant computer and return the APRM to service.
- Core thermal power from the Control Room Core Power Nomogram is 100% as determined and peer checked by the other Control Room operators.
- **INFORM THE EVALUATOR WHEN YOU HAVE COMPLETED THE TASK.**

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

JPM PERFORMANCE INFORMATION

- Required Materials:**
- Information Tag for APRM joystick with verbiage stating #3 APRM bypassed for maintenance.
- General References:**
- C.2-05 (Power Operation - System Operation), Rev. 46
- Task Standards:**
- Gain adjustment factor for APRM channel 3 has been adjusted such that APRM channel 3 output reads 100% (±2%) and returned to service in accordance with procedure C.2-05, section B.4 Part D.

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	Obtain and review procedure C.2-05, section B.4 (APRM Gain Adjustment Factor Monitoring/Adjustment) <u>PART D</u> (APRM Gain Adjustment Procedure Without Plant Computer).
Standard:	Obtains and reviews correct procedure, section and part.
Evaluator Cue:	If operator attempts to take actions specified in PART B, INFORM operator that PART B has been completed.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 2	Procedure Step 33.
Critical N	
	Bypass APRM to be adjusted by placing switch 7B-S3 (APRM BYPASS) in the associated APRM number and verify associated white Bypassed lamp is ON or associated APRM ODA display header display indicates BYP in inverse video.
Standard:	<ul style="list-style-type: none"> • Verifies APRM #3 is bypassed by observing APRM Bypass joystick located on Panel C-05 is in the #3 position. • Observes #3 APRM Bypass lamp (A2) is ON and/or BYP is displayed in inverse video on ODA for APRM #3 (Panel C-05).
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 3	Procedure Step 34.a.
Critical Y	
	At Panel C-37, on APRM, perform the following without delay:
	<ul style="list-style-type: none"> • NAVIGATE to and press <u>ENTER SET MODE</u> softkey.
Standard:	<ul style="list-style-type: none"> • Presses ENTER SET MODE softkey. <p><u>Non-Critical Portion:</u></p> <ul style="list-style-type: none"> • Presses ETC softkey as necessary on APRM-3 (AR21) to display ENTER SET MODE.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

Performance Step: 4	Procedure Step 34.b.
Critical Y	ENTER password <u>4221</u> .
Standard:	Enters password 4221 with numeric keypad.
Evaluator Note:	Operator must enter correct password within 10 seconds or display will revert to main display. Multiple attempts to successfully perform this step are acceptable as specified in Performance Step 6.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 5	Procedure Step 34.c.
Critical Y	PRESS <u>ENT</u> on keypad.
Standard:	Presses ENT key on keypad.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 6	Procedure Step 34.d.
Critical Y	<u>If</u> display reverted to main display, <u>Then</u> repeat Step 34.
Standard:	<ul style="list-style-type: none"> Repeats Procedure Step 34 as necessary until successful. <p><u>Non-Critical Portion:</u></p> <ul style="list-style-type: none"> If first attempt was successful, marks this step as N/A.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

Performance Step: 7	Procedure Step 35.
Critical Y	Using UP/DOWN cursor keys, highlight APRM GAIN.
Standard:	Highlights APRM GAIN.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 8	Procedure Step 36.
Critical Y	Press SET PARAMETERS softkey.
Standard:	Presses SET PARAMETERS softkey.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 9	Procedure Step 37.
Critical Y	Adjust APRM gains per the following: <ul style="list-style-type: none"> a. Use LEFT/RIGHT cursor keys to highlight TENTHS, HUNDREDTHS, or THOUSANDTHS digit. b. Use UP/DOWN cursor keys to change the highlighted digit such that the PROJECTED flux values are equal to desired power as determined by Control Room Core Power Nomogram at 1000 psig. (C.2-06) c. Repeat Steps 37.a. and 37.b. for other digit(s) changes.
Standard:	Adjusts desired APRM gain such that projected flux is within 2% of 100% power.
Evaluator Cue:	If requested or operator takes steps to obtain figure 2, INFORM operator that core thermal power from the Control Room Core Power Nomogram is 100% as determined and peer checked by the other Control Room operators.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

Performance Step: 10	Procedure Step 38.
Critical Y	Press ACCEPT softkey to change the APRM gain.
Standard:	Presses ACCEPT softkey.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 11	Procedure Step 39.
Critical N	Press EXIT softkey.
Standard:	Presses EXIT softkey.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 12	Procedure Step 40.
Critical N	Press EXIT SET MODE softkey.
Standard:	Presses EXIT SET MODE softkey.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

Performance Step: 13	Procedure Step 41.
Critical N	Press YES softkey.
Standard:	Presses YES softkey.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 14	Procedure Step 42.
Critical Y	Place switch 7B-S3 (APRM BYPASS) in the neutral position and verify associated white Bypassed lamp is OFF or associated APRM ODA display header does <u>NOT</u> indicate BYP in inverse video.
Standard:	<ul style="list-style-type: none"> Moves APRM joystick located on Panel C-05 to the center position. <p><u>Non-Critical Portion:</u></p> <ul style="list-style-type: none"> Observes #3 APRM Bypass WHITE lamp is OFF and/or inverse video BYP is no longer displayed on ODA for APRM #3 (Panel C-05).
Evaluator Cue:	If formal brief is requested, INFORM Operator that a formal brief has been completed.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 15		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: APRM #3 is unbypassed and indicates 100% (±2%).

Stop Time: _____

Historical Record: Rev. 2

- Updated to latest standards, JPM template and procedural revisions.
- Corrected K/A Rating. SRO & RO were swapped when compared to NUREG 1123.
- Changed Time for Completion to 20 minutes vice 15 minutes based on validation results.
- Removed reference to 2010 ILT NRC SIM 4 in the JPM Title on Page 2.
- Changed the Initial Conditions to reflect the Plant Computer System is expected to be returned to service within approximately 30 minutes. This avoids the requirement to perform a Reactor power reduction.
- Added statement to Initial Conditions that all required formal briefs have been completed.
- Added statement to Initiating Cue that power from the nomogram has been determined to be 100%.
- Removed procedural reference from the Initiating Cue. Operator should be able to determine correct procedure as part of JPM.
- Added APRM Information Tag to Required Materials.
- Revised Task Standard to include specific requirement vice simply stating procedure section.
- Added Performance Step to require operator to obtain correct procedure and section. Included an Evaluator Cue that states that PART B is completed if operator attempts to implement this section.
- Re-designated Performance Step 8 as CRITICAL. APRM GAIN must be highlighted when selecting SET PARAMETERS in order to successfully adjust the gain.
- Added statement to the Simulator Setup section to ensure APRM NUMAC on Panel C-37 is selected to the APRM Bargraph display and GARDEL computer is turned OFF.

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

TURNOVER SHEET

INITIAL CONDITIONS:

- APRM 3 is bypassed due to maintenance.
- The plant computer is NOT in service due to a recent failure.
- IT expects plant computer system to be returned to service within approximately 30 minutes.
- Reactor power is stable with no immediate reduction required.
- APRM #3 is ready to be returned to service.
- The plant is operating at 100% power.
- All required formal briefs have been completed.


INITIATING CUES:

- The CRS directs you to adjust the gain on APRM #3 without the plant computer and return the APRM to service.
- Core thermal power from the Control Room Core Power Nomogram is 100% as determined and peer checked by the other Control Room operators.
- **INFORM THE EVALUATOR WHEN YOU HAVE COMPLETED THE TASK.**

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

	JOB PERFORMANCE MEASURE (JPM)
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SITE: MONTICELLO NUCLEAR GENERATING PLANT

JPM TITLE: REMOVING STACK WRGM FROM SERVICE

JPM NUMBER: JPM-B.05.11-002 **REV.** 0

RELATED PRA INFORMATION: None

TASK NUMBERS / TASK TITLE(S): CR273.107
Removing Stack or RBV WRGM From Service

K/A NUMBERS: 271000 / A1.12 **Rating: SRO/RO:** 3.5/3.1

APPLICABLE METHOD OF TESTING:
 Discussion: Simulate/walkthrough: Perform:

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

Time for Completion: 10 Minutes Time Critical: N

Alternate Path: N

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 BRIEFING/TURNOVER

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:

- The plant is at rated conditions
- The “A” Off-gas Stack WRGM is required to be removed from service for calibration

INITIATING CUES (IF APPLICABLE):

- Remove the “A” Off-gas Stack WRGM from service for maintenance IAW the B.05.11-05.

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.

JPM PERFORMANCE INFORMATION

Required Materials: Simulator
Key 56

General References: B.05.11-05

Task Standards: Removes the “A” Off-gas Stack WRGM from service

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	Locates procedure B.05.11-05.F.1 (Removing Stack or RBV WRGM From Service)
Critical: N	
Standard:	Locates procedure B.05.11-05.F.1 (Removing Stack or RBV WRGM From Service), reviews PURPOSE and PRECAUTIONS AND LIMITATIONS
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 2	PREREQUISITE 1:
Critical: N	Chemistry notified to assure DAS for WRGM being taken out of service is disabled.
Standard:	Notifies Chemistry.
Evaluator Cue:	Chemistry has been notified
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 3	PREREQUISITE 2:
Critical:	TRM 3.3.3.1 has been evaluated for removal of WRGM from service.
Standard:	Verifies with the CRS that TRM 3.3.3.1 has been evaluated.
Evaluator Cue:	Inform the examinee that the CRS has evaluated TRM 3.3.3.1.
Evaluator Note:	If asked, preplanned alternate method of monitoring appropriate parameters is in progress to satisfy TRM 3.3.3.1 Condition E.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 4	PREREQUISITE 3:
Critical: N	ODCM-03.01 has been evaluated for removal of WRGM from service.
Standard:	Verifies that ODCM-03.01 has been evaluated.
Evaluator Cue:	Inform the examinee that the CRS has evaluated ODCM-03.01.
Evaluator Note:	If asked, releases may be continued for 30 days provided grab samples are performed at least once every 8 hours.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 5	Procedure Step 1:
Critical: Y	Insert Key #64 into the keylock switch on the Control Room Assembly and turn to the SUPV position.
Standard:	Inserts Key #64 into the keylock switch and turns to the SUPV position.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 6 Critical: Y	<p>Procedure Step 2:</p> <p>NOTE: Alarm of 259-A-9 (Stack Effluent Monitor INOP) or 252-A-10 (RBV Effluent Monitor INOP) is expected.</p> <p>Momentarily depress the PUMP ON/OFF pushbutton on the WRGM Control Room Assembly</p>
Standard:	<p>Locates the PUMP ON/OFF pushbutton for the appropriate WRGM (Channel A Stack WRGM) and depresses the ON/OFF pushbutton.</p> <p>Non-Critical: Acknowledging NOTE for alarm receipt</p>
Evaluator Cue:	None
Evaluator Note:	BOOTH OPERATOR: Verify alarm 252-A-9 (Stack Effluent Monitor INOP) alarms when the PUMP ON/OFF pushbutton is depressed.
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 7 Critical: N	<p>Procedure Step 3:</p> <p>Check the following occurs after a few seconds:</p> <ol style="list-style-type: none"> a. PUMP ON/OFF pushbutton lamp OFF b. Green LOW RANGE Oper LED is OFF c. The corresponding INOP alarm is received
Standard:	<p>Examinee verifies:</p> <ul style="list-style-type: none"> • PUMP ON/OF pushbutton lamp is OFF • Green LOW RANGE Oper LED is OFF • Alarm 252-A-9 is received
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Performance Step: 8	Step 4:
Critical: N	Return the keylock switch to the NORM position and remove key.
Standard:	Returns the keylock switch to the NORM position and removes the key.
Evaluator Cue:	None
Performance:	SATISFACTORY <input type="checkbox"/> UNSATISFACTORY <input type="checkbox"/>
Comments:	_____

Terminating Cues: When examinee completes step 4 of the procedure, the JPM is complete.

Stop Time: _____

Historical Record: New Create for 2013 ILT NRC Exam

TURNOVER SHEET

INITIAL CONDITIONS:

- The plant is at rated conditions
- The "A" Off-gas Stack WRGM is required to be removed from service for calibration

INITIATING CUES (IF APPLICABLE):

- Remove the "A" Off-gas Stack WRGM from service for maintenance IAW the B.05.11-05.

Retention: Life of Plant

Retain in: Training Record

Form retained in accordance with record retention schedule identified in FP-G-RM-01.