CLINTON POWER STATION

Job Performance Measure

Control Rod Scram Time Testing Restoration – Inadvertent Rod Withdrawal

JPM Number: JPM420

Revision Number: 00

Date: 6/5/15

Developed By:	**Tony Jennings**	**6/5/15**
	Instructor	**Date**
Validated By:	**/s Mike Antonelli**	**7/16/15**
	SME or Instructor	**Date**
Reviewed By:		
	Operations Representative	**Date**
Approved By:		
	Training Department	**Date**

Clinton Power Station
Job Performance Measure (JPM)

READ TO THE OPERATOR

I will explain the initial conditions, which step(s) to simulate or discuss, and provide the initiating cues. When you complete the task successfully, the objective of this Job Performance Measure will be satisfied.

TASK STANDARDS:

- Rod 32-37 is re-inserted to position 00 using IN TIMER SKIP IAW CPS 4007.02 Inadvertent Rod Movement.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

- None

PROCEDURAL/REFERENCES:

- CPS No. 9813.01, Rev 41a Control Rod Scram Time Testing
- CPS No. 9813.01C001, Rev. 33 Control Rod Scram Timing Checklist
- CPS No. 9813.01D003, Rev. 31 Scram Time Testing – Containment Data Sheet
- CPS No. 9813.01D004, Rev. 31b Scram Time Testing – MCR Data Sheet
- CPS No. 3304.02, Rev. 22c Rod Control and Information System (RC&IS)
- CPS 4007.02, Rev. 13c Inadvertent Rod Movement
- NF-CL-721-F-1, Rev 001 Control Rod Sequence Review and Approval Sheet
- NF-CL-721-F-5, Rev 000 Special Maneuver Rod Move Sheet
- NF-CL-721-F-6, Rev 000 Control Rod Sequence: General Instructions

EVALUATOR INSTRUCTIONS:

- Amplifying cues are provided within the JPM steps.
- All pre-job briefings are completed.
- When providing the initiating cue, provide the examinee with a copy of each of the following procedures:
    - CPS 9813.01 Control Rod Scram Time Testing
    - CPS No. 9813.01C001, Rev. 33 Control Rod Scram Timing Checklist
    - CPS No. 9813.01D003, Rev. 31 Scram Time Testing – Containment Data Sheet
    - CPS No. 9813.01D004, Rev. 31b Scram Time Testing – MCR Data Sheet
    - CPS 3304.02 Rod Control And Information System (RC&IS)
    - NF-CL-721-F-1 Control Rod Sequence Review and Approval Sheet

Clinton Power Station
Job Performance Measure (JPM)

- NF-CL-721-F-5 Special Maneuver Rod Move Sheet
- NF-CL-721-F-6 Control Rod Sequence: General Instructions
- OD-7 Control Rod Notch Positions

Clinton Power Station
Job Performance Measure (JPM)

INITIAL CONDITIONS:

The plant is in Mode 1, operating at approximately 72% power. CPS 9813.01 Control Rod Scram Time Testing on 10% of the control rods is in progress.

- Rod 32-37 has been scrammed and is at position 00.
- Rod 32-37 is de-selected.
- CPS 9813.01 Control Rod Scram Time Testing is complete up through and including step 8.2.15.

INITIATING CUE:

CAUTION

- All pre-job briefings are completed.

Return control rod 32-37 to its pre-test position (position 48) using single notch withdrawal per step 8.2.16 of CPS 9813.01 Control Rod Scram Time Testing.

Report to the CRS after completing the task.

START TIME: _____

Clinton Power Station
Job Performance Measure (JPM)

PERFORMANCE INFORMATION

Critical steps are denoted with an asterisk (*) to the left of the step number and appear in BOLDED letters. Failure to meet the standards for a critical step constitutes failure of the Job Performance Measure. The sequence of steps is assumed unless denoted in the comments section of the JPM.

PERFORMANCE STEPS

CPS 9813.01 Control Rod Scram Time Testing
CPS 3304.02 Rod Control and Information System (RC&IS)

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
9813.01 8.2.16 3304.02 8.1.3 / 8.1.4	Return control rod 32-37 to pre-test position.	3304.02 8.1.3.1.1 Examinee verifies the INDIVID DRIVE light is energized on the OCM.			
		***3304.02 8.1.3.1.2 & 3** **Examinee selects control rod 32-37 by simultaneously depressing the 32 and 37 pushbuttons on 1H13-P680-5004A panel, and then verifies the yellow LED lit for LPRM 30-39.**			
		***3304.02 8.1.4.1.2 & 3** **Examinee momentarily depresses the WITHDRAW pushbutton <u>twice</u> on 1H13-P680-5004A panel, and then verifies the IN, OUT, and SETTLE lights cycle and that rod 32-37 settles at position 02 and then 04.** ***Cue:** If the examinee reports receiving annunciator 5006-2H Rod Out Block, acknowledge the report.*			
		***3304.02 8.1.3.3** **Examinee depresses the ROD SELECT CLEAR push-button <u>twice</u> on 1H13-P680-5004A.** ***Cue:** If the examinee reports annunciator 5006-2H Rod Out Block is reset, acknowledge the report.*			

Clinton Power Station
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STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
9813.01 8.2.16 3304.02 8.1.3 / 8.1.4 *(cont.)*	Return control rod 32-37 to pre-test position. *(cont.)*	3304.02 8.1.3.1.2 & 3 Examinee selects control rod 32-37 by simultaneously depressing the 32 and 37 pushbuttons on 1H13-P680-5004A panel, and then verifies the yellow LED lit for LPRM 30-39.			
ALTERNATE PATH BEGINS					
9813.01 8.2.16 3304.02 8.1.3 / 8.1.4 4007.02 Inadvertent Rod Movement	Respond to inadvertent rod movement.	3304.02 8.1.4.1.2 & 3 Examinee momentarily depresses the WITHDRAW pushbutton on 1H13-P680-5004A panel, and then verifies that control rod 32-37 fails to settle at position 06 and continues to withdraw. ***Cue:*** *If the examinee reports receiving annunciator 5006-4G Rod Drift and/or that rod 32-37 is inadvertently withdrawing, acknowledge the report.*			
		4007.02 step 3.2 (immediate action) Examinee depresses and holds the IN TIMER SKIP push-button on 1H13-P680-5004A and inserts control rod 32-37 to position 00.** **Evaluator Note:** if examinee has not inserted rod 32-37 before reaching position 20, this critical task is UNSAT. ***Cue: *If the examinee reports that 32-37 has been inserted to position 00, acknowledge the report and state that the JPM is complete.*			

TERMINATING CUES:

Control Rod 32-37 has been inserted to position 00 IAW CPS No. 4007.02 Inadvertent Rod Movement.

STOP TIME: _____

CLINTON POWER STATION

Job Performance Measure

Initiate Low Pressure ECCS System and Maximize Injection
(Alternate Path)

JPM Number: JPM250

Revision Number: 03

Date: 6/5/15

Developed By:	**Tony Jennings**	**6/5/15**
	Instructor	**Date**
Validated By:	**/s Mike Antonelli**	**7/16/15**
	SME or Instructor	**Date**
Reviewed By:		
	Operations Representative	**Date**
Approved By:		
	Training Department	**Date**

Clinton Power Station
Job Performance Measure (JPM)

READ TO THE OPERATOR

I will explain the initial conditions, which step(s) to simulate or discuss, and provide the initiating cues. When you complete the task successfully, the objective of this Job Performance Measure will be satisfied.

TASK STANDARDS:

- RHR Pump 'A' and RHR Pump 'B' running and 1E12-F053A and B fully opened..

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

- None

PROCEDURAL/REFERENCES:

- CPS No. 3312.01, Rev. 45b Residual Heat Removal
- CPS No. 3313.01, Rev. 16d Low Pressure Core Spray
- CPS No. 4411.03, Rev. 10c Injection/Flooding Sources

EVALUATOR INSTRUCTIONS:

- Amplifying cues are provided within the JPM steps.
- All pre-job briefings are completed.
- ADS will automatically initiate at TAF.

Clinton Power Station
Job Performance Measure (JPM)

INITIAL CONDITIONS:

You are the Extra RO. There are NO high pressure injection systems available and RPV level is trending down. ADS will be initiated by the "B" Reactor Operator when RPV level reaches TAF.

INITIATING CUE:

CAUTION

- All pre-job briefings are completed.

Using CPS No. 4411.03, INJECTION/FLOODING SOURCES, start all Low Pressure ECCS Systems. MAXIMIZE injection using ONLY preferred ECCS injection systems to restore RPV level above Level 3. PR038 and PR039 are in service.

Hard Cards are authorized and IMD has defeated all applicable interlocks.

Report to the CRS after completing the task.

START TIME: _____

Clinton Power Station
Job Performance Measure (JPM)

PERFORMANCE INFORMATION

Critical steps are denoted with an asterisk (*) to the left of the step number and appear in BOLDED letters. Failure to meet the standards for a critical step constitutes failure of the Job Performance Measure. The sequence of steps is assumed unless denoted in the comments section of the JPM.

PERFORMANCE STEPS

- **CPS 3313.01 LOW PRESSURE CORE SPRAY, APPENDIX A: LPCS INITIATION / SHUTDOWN HARD CARD**
- **CPS 3312.01 LPCI INITIATION / SHUTDOWN HARD CARD**

Note to Evaluator – Low Pressure ECCS Systems can be initiated and aligned by the examinee in any order.

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
1	Control RPV water level 3 to level 8 by initiating Division 1 ECCS (LPCS and RHR 'A') pumps.	***3213.01 App. A & 3312.01 App. C** **At 1H13-P601-5063, examinee arms and depresses LPCS/LPCI FM RHR A MANUAL INITIATION push-button.**			
		3313.01 App. A Examinee verifies LPCS Pump starts (red indicating light illuminated, green indicating light extinguished, motor current meter pegs high and then returns to the green band). ***Cue:*** *If examinee reports that the Div 1 Low Pressure ECCS Pumps have been initiated, acknowledge the report.*			
		3312.01 App. C Examinee verifies RHR Pump 'A' starts (red indicating light illuminated, green indicating light extinguished, motor current meter pegs high and then returns to the green band). ***Cue:*** *If examinee reports that the Div 1 Low Pressure ECCS Pumps have been initiated, acknowledge the report.*			

Clinton Power Station
Job Performance Measure (JPM)

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
2	Control RPV water level 3 to level 8 by initiating Division 2 ECCS (RHR 'B' and RHR 'C') pumps.	***3312.01 App. C.1** **At 1H13-P601-5065, examinee arms and depresses LPCI FM RHR B & C MANUAL INITIATION push-button.**			
		3312.01 App. C.2 Examinee verifies RHR Pump 'B' starts (red indicating light illuminated, green indicating light extinguished, motor current meter pegs high and then returns to the green band). ***Cue:*** *If examinee reports that RHR Pump 'B' has been initiated, acknowledge the report.*			
		3312.01 App. C.2 Examinee determines that RHR Pump 'C' failed to start. Examinee places control switch for RHR Pump 'C' to start, and observes the amber trip light illuminated and reports failure to the CRS. ***Cue:*** *If examinee reports failure of the RHR Pump 'C' pump to start, acknowledge the report.*			

Clinton Power Station
Job Performance Measure (JPM)

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
3	Verifies the system alignments for RHR 'A' and 'B' subsystems.	3312.01 App. C.3.2 & C.3.3 (RHR Pump 'A') At 1H13-P601-5064, examinee verifies 1E12-F048A RHR A Hx Bypass Valve AND 1E12-F027A RHR A Hx Bypass Valve open (red light ON, green light OFF).			
		3312.01 App. C.3.2 & C.3.3 (RHR Pump 'B') At 1H13-P601-5065, examinee verifies 1E12-F048B RHR B Hx Bypass Valve AND 1E12-F027B RHR B Hx Bypass Valve open (red light ON, green light OFF).			
4	Verifies Low Pressure ECCS Injection Valves open when RPV pressure reaches 472 psig.	3313.01 App. A.3 (LPCS) At 1H13-P601-5063, examinee verifies 1E21-F005 LPCS To CNMT Outbd Isol Valve open (red light ON, green light OFF).			
		3312.01 App. C.4 (RHR Pump 'A') When RPV pressure reaches 472 psig, at 1H13-P601-5064, examinee verifies 1E12-F042A LPCI Fm RHR A Shutoff Valve fails to open (red light OFF, green light ON). Examinee may attempt to manually open 1E12-F042A or recognizes indication of 1E12-F042A breaker being OFF and reports unavailability of 1E12-F042A to the CRS. ***Cue:*** *If examinee reports unavailability of 1E12-F042A, acknowledge the report.*			
		3312.01 App. C.4 (RHR Pump 'B') When RPV pressure reaches 472 psig, at 1H13-P601-5065, examinee verifies 1E12-F042B LPCI Fm RHR B Shutoff Valve fails to open (red light OFF, green light ON). Examinee may attempt to manually open 1E12-F042B or recognizes indication of 1E12-F042B breaker being OFF and reports unavailability of 1E12-F042B to the CRS. ***Cue:*** *If examinee reports unavailability of 1E12-F042B, acknowledge the report.*			
BEGIN ALTERNATE PATH **CPS 4411.03 Injection/Flooding Sources App A: RHR Injection / Flooding Flowpath – Method 1: RHR Through Shutdown Cooling**					
5	Defeats RHR Injection / Flooding Interlocks	1.1 No examinee action required – per the initiating cue, IMD has defeated all applicable interlocks			

Clinton Power Station
Job Performance Measure (JPM)

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
6	Starts RHR Pumps 'A' and 'B' for injection through Shutdown Cooling	1.2 Examinee verifies RHR Pump 'A' and 'B' running (red light ON, green light OFF) at 1H13-P601-5064 and 5065.			
7	Aligns RHR injection through the Shutdown Cooling Return Lines.	***1.3** **Examinee fully opens 1E12-F053A and B (red light ON, green light OFF).** Note to examiner – to maximize injection, BOTH 1E12-F053A and B must be fully opened. Examinee verifies RPV Water Level rises after injection is maximized. *Cue: When examinee reports that LPCS, RHR 'A' and RHR 'B' are injecting at maximum flow to the RPV, acknowledge the report and cue the examinee that the JPM is complete.*			

TERMINATING CUES:

RHR Pump 'A' and 'B' are running and injecting through the Shutdown Cooling lines to the RPV via 1E12-F053A and B IAW CPS No. 4411.03 Appendix A: RHR Injection/Flooding Flow Paths.

STOP TIME: _____

CLINTON POWER STATION

Job Performance Measure

Turbine On Line Tests

JPM Number: JPM517

Revision Number: 01

Date: 06/25/2015

Developed By:	**Tony Jennings**	**06/25/15**
	Instructor	**Date**
Validated By:	**/s Mike Antonelli**	**7/16/15**
	SME or Instructor	**Date**
Reviewed By:		
	Operations Representative	**Date**
Approved By:		
	Training Department	**Date**

Clinton Power Station
Job Performance Measure (JPM)

READ TO THE OPERATOR

I will explain the initial conditions, which step(s) to simulate or discuss, and provide the initiating cues. When you complete the task successfully, the objective of this Job Performance Measure will be satisfied.

TASK STANDARDS:

- CPS 3812.01 Rev. 16a, Turbine On Line Tests, Section 8.1 suspended, and the electrical trip circuitry reset.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

- None

PROCEDURAL/REFERENCES:

- CPS 3812.01 Rev. 16a, Turbine On Line Tests
- CPS 3105.01 Rev. 41a, Turbine (TG, EHC, TS)

EVALUATOR INSTRUCTIONS:

- Amplifying cues are provided within the JPM steps.
- All pre-job briefings are completed.
- Provide the examinee with a copy of:
    - Initial Conditions and Initiating Cue page (back page of the JPM) when providing the initiating cue.
    - Marked up copy of CPS 3812.01 Rev. 16a, Turbine On Line Tests.

Clinton Power Station
Job Performance Measure (JPM)

INITIAL CONDITIONS:

You are the B RO.

The plant is in Mode 1 with the Main Turbine synchronized to the grid.

CPS 3812.01, Turbine On Line Tests is scheduled to be performed.

All prerequisites for CPS 3812.01 Turbine On Line Tests Section 8.1 Electrical Trip Test and Section 8.2 BOST Test are complete.

Turbine Trips are **NOT** Disabled (NOT BYPASSED) per CPS 3105.01, Disabling Turbine Trips Using Global Bypass.

Operators are stationed at Main Turbine Front Standard and at the first hit panel 1PA06J to reset annunciators.

INITIATING CUE:

CAUTION

- All pre-job briefings are completed.

Perform CPS 3812.01, Turbine On Line Tests.

Report to the CRS after completing the task.

START TIME: _____

Clinton Power Station
Job Performance Measure (JPM)

PERFORMANCE INFORMATION

Critical steps are denoted with an asterisk (*) to the left of the step number and appear in BOLDED letters. Failure to meet the standards for a critical step constitutes failure of the Job Performance Measure. The sequence of steps is assumed unless denoted in the comments section of the JPM.

PERFORMANCE STEPS

CPS 3812.01, Turbine On Line Tests
Section 8.1, Electrical Trip Test

8.1.1 Verify applicable prerequisites are met.

Standard: Examinee verifies applicable section 5.0 prerequisites are complete.

Cue:

Comments Examinee verifies 5.1-5.4, 5.8 and 5.9 complete.

SAT ☐ UNSAT ☐ Comment Number _____

8.1.2 Verify Turbine Trips are NOT Disabled (NOT BYPASSED) per CPS 3105.01, Disabling Turbine Trips Using Global Bypass.

Standard: No action required; provided in the initiating cue.

Cue:

Comments

SAT ☐ UNSAT ☐ Comment Number _____

Clinton Power Station
Job Performance Measure (JPM)

8.1.3 Observe the following:
1. NORMAL light is ON
2. RESET light is ON
3. Remaining lights in ELECTRICAL TRIP TEST Group are OFF

Standard: Examinee observes the following Electrical Trip Test lights on 1H13-P870-5018:
1. NORMAL light is ON.
2. RESET light is ON.
3. Remaining lights in ELECTRICAL TRIP TEST Group are OFF.

Cue:

Comments

SAT ☐ UNSAT ☐ Comment Number _____

***8.1.4 Depress and <u>hold</u> START TEST push-button**
1. Observe NORMAL light goes OFF.
2. Observe LOCKED OUT light comes ON.

Standard: **Examinee depresses and holds the Electrical Trip Test Start Test Pushbutton on 1H13-P870-5018 and verifies the following:**
- **NORMAL light goes OFF**
- **LOCKED OUT light comes ON**

Cue: All status lights and annunciators were received at P-680 and 1PA06J as expected.

Comments

SAT ☐ UNSAT ☐ Comment Number _____

Clinton Power Station
Job Performance Measure (JPM)

Begin Alternate Path

8.1.5 Release START TEST push-button. Observe the following sequence:

1. RESET light goes OFF, and TRIPPED light comes ON.
2. TRIPPED light goes OFF, and RESET light comes ON.
3. LOCKED OUT light goes OFF and NORMAL light comes ON.

Standard: Examinee releases the Start Test push-button on 1H13-P870-5018 and observes the following:

- RESET light goes OFF, and
- TRIPPED light comes ON
- Test Malfunction Light comes ON

Cue:

- When the examinee reports the malfunction to the CRS, acknowledge the report, inform the examinee that troubleshooting is complete and direct the examinee to take necessary actions to move on to the next section of the test.
- If an Equipment Operator is sent to check status of the trip mechanism, report that the trip linkage is reset.

Comments

SAT ☐ UNSAT ☐ Comment Number _____

Clinton Power Station
Job Performance Measure (JPM)

	***6.1 If a malfunction occurs during performance of the Mechanical Overspeed Trip, the Mechanical Trip Piston or the Electrical Trip, THEN The test sequence stops before completion.** **Depressing the respective STOP - GO – NORMAL push-button will reset the system to normal, except in cases noted in section 8.3 and 8.4, Mechanical Overspeed Trip Test and Mechanical Trip Piston Test.**
Standard:	Examinee depresses the Electrical Trip Test Stop Go Normal pushbutton, and verifies the following: • Test Malfunction light goes OFF • TRIPPED light goes OFF • RESET light comes on • LOCKED OUT light goes OFF • NORMAL light comes on
Cue:	When the examinee reports the Electrical Trip Test Circuitry has been reset, acknowledge the report and cue the examinee that the JPM is complete.
Comments	
	SAT ☐ UNSAT ☐ Comment Number _____

TERMINATING CUES:

Electrical Trip Test Circuitry for the Main Turbine is reset IAW CPS No. 3812.01 Turbine On Line Tests.

STOP TIME: _____

CLINTON POWER STATION

Job Performance Measure

Perform a HPCS Pump Operability Test
(Alternate Path)

JPM Number: JPM288

Revision Number: 01

Date: 8/4/14

Developed By:	**Tony Jennings**	**7/16/15**
	Instructor	**Date**
Validated By:	**/s Mike Antonelli**	**7/16/15**
	SME or Instructor	**Date**
Reviewed By:		
	Operations Representative	**Date**
Approved By:		
	Training Department	**Date**

Clinton Power Station
Job Performance Measure (JPM)

READ TO THE OPERATOR

I will explain the initial conditions, which step(s) to simulate or discuss, and provide the initiating cues. When you complete the task successfully, the objective of this Job Performance Measure will be satisfied.

TASK STANDARDS:

- HPCS Pump has been tripped due to loss of suction source.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

- None

PROCEDURAL/REFERENCES:

- CPS No. 9051.01, Rev 47e HPCS Pump HPCS Water Leg Pump Operability
- CPS No. 9051.01D001, Rev 48 HPCS Pump HPCS Water Leg Pump Operability Data Sheet
- CPS No. 5062.04, Rev 27b Alarm Panel 5062 Annunciators – Row 4

EVALUATOR INSTRUCTIONS:

- Mark up CPS No. 9051.01, HPCS Pump & HPCS Water Leg Pump Operability up to and including step 8.2.7.1.
- Mark up CPS No. 9051.01D001, HPCS Pump & HPCS Water Leg Pump Operability Data Sheet up to and including any data collected up to step 8.2.7.1.
- Amplifying cues are provided within the JPM steps.
- All pre-job briefings are completed.

Clinton Power Station
Job Performance Measure (JPM)

INITIAL CONDITIONS:

You are the Extra RO assuming the shift. CPS 9051.01, HPCS Pump & HPCS Water Leg Pump Operability is in progress. An Equipment Operator is stationed locally at the HPCS Pump and has established communication with the Main Control Room.

INITIATING CUE:

Continue performing CPS 9051.01, HPCS Pump & HPCS Water Leg Pump Operability commencing at section 8.2.7.2.

Inform the CRS when section 8.2 is complete.

START TIME: _____

Clinton Power Station
Job Performance Measure (JPM)

PERFORMANCE INFORMATION

Critical steps are denoted with an asterisk (*) to the left of the step number and appear in BOLDED letters. Failure to meet the standards for a critical step constitutes failure of the Job Performance Measure. The sequence of steps is assumed unless denoted in the comments section of the JPM.

9051.01 HPCS PUMP & HPCS WATER LEG PUMP OPERABILITY

8.2.7.2	Verify HPCS WATER LEG DISCHARGE PRESSURE LOW annunciator 5062-7D is cleared.
Standard:	Observes annunciator 5062-7D is not illuminated.
Cue:	
Comments	

SAT ☐ UNSAT ☐ Comment Number _____

***8.2.7.3**	**Start HPCS Pump, 1E22-C001.**
Standard:	Operator places control switch for 1E22-C001 to the 'START' position. Verifies RED light ON, GREEN light OFF. Observes HPCS motor current.
Cue:	
Comments	

SAT ☐ UNSAT ☐ Comment Number _____

8.2.7.4.1	Observe/perform (Record): Verify 1E22-F012, HPCS Pump Min Flow To Suppr Pool, indicates open.
Standard:	Observes RED light ON, GREEN light OFF for 1E22-F012. Records "SAT" for 1E22-F012 stroking open on the data sheet.
Cue:	
Comments	

SAT ☐ UNSAT ☐ Comment Number _____

***8.2.7.4.2**	**Alternately slowly throttle open both 1E22-F010 and 1E22-F011, HPCS First and Second Test Vlv To Storage Tank, and increase flow to ~ 5050 gpm as read on Comp Pt HP-DA301.**
Standard:	Places both control switches for 1E22-F010 and 1E22-F011 to the throttle open position.
Cue:	If examinee reports receipt of Annunciator 5062-4D, acknowledge report.
Comments	The suction line will start clogging when HPCS flow exceeds approximately 2000 gpm. HPCS Pump amps and flow will rapidly oscillate.

SAT ☐ UNSAT ☐ Comment Number _____

Clinton Power Station
Job Performance Measure (JPM)

BEGINS ALTERNATE PATH

5062-4D, HPCS PUMP SUCTION PRESSURE ABNORMAL

NOTE: Steps 1 and 2 may be performed in any order.

1.	Verify/establish an available HPCS Suction Path (1E22-F001 preferred unless RCIC Tank/Suction Piping is not available) per CPS 3309.01, High Pressure Core Spray (HPCS). Refer to CPS 3309.01 (HPCS) CLOC PRECAUTION criteria.
Standard:	Verifies 1E22-F001 is full open.
Cue:	
Comments	

SAT ☐ UNSAT ☐ Comment Number _____

***2**	**If HPCS pump is running for testing, and normal suction pressure was <u>not</u> restored by the previous step, trip the HPCS pump.**
Standard:	Examinee trips the HPCS Pump using the associated control switch.
Cue:	If an operator is dispatched to investigate, cue the examinee that loud 'surging' noises are coming from the HPCS Pump.
Comments	

SAT ☐ UNSAT ☐ Comment Number _____

	Informs Control Room Supervisor.
Standard:	Informs Control Room Supervisor the HPCS was tripped per Annunciator Response Procedure.
Cue:	Acknowledge the report. State JPM is complete.
Comments	1.
	SAT ☐ UNSAT ☐ Comment Number _____

TERMINATING CUES:

HPCS Pump has been tripped due to loss of suction source.

STOP TIME: _____

CLINTON POWER STATION

Job Performance Measure

Manually Perform a Group 1 Isolation (Alternate Path)

JPM Number: JPM219

Revision Number: 03

Date: 6/29/15

Developed By:	**Tony Jennings**	**6/29/15**
	Instructor	**Date**
Validated By:	**/s Mike Antonelli**	**7/16/15**
	SME or Instructor	**Date**
Reviewed By:		
	Operations Representative	**Date**
Approved By:		
	Training Department	**Date**

Clinton Power Station
Job Performance Measure (JPM)

READ TO THE OPERATOR

I will explain the initial conditions, which step(s) to simulate or discuss, and provide the initiating cues. When you complete the task successfully, the objective of this Job Performance Measure will be satisfied.

TASK STANDARDS:

- Manually isolates Group 1 Primary Containment Isolation Valves (Main Steam Lines and Drains) per 4001.02C001 Automatic Isolation Checklist or CPS 3101.01 Main Steam (MS, IS & ADS).

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

- None

PROCEDURAL/REFERENCES:

- CPS No. 3101.01, Rev 23b MAIN STEAM
- CPS No. 4001.02, Rev 17c AUTOMATIC ISOLATION
- CPS No. 4001.02C001, Rev 16 AUTOMATIC ISOLATION CHECKLIST

EVALUATOR INSTRUCTIONS:

- Amplifying cues are provided within the JPM steps.
- All pre-job briefings are completed.
- Prior to reading Initial Conditions and Initiating Cue, place Simulator in RUN.

Clinton Power Station
Job Performance Measure (JPM)

INITIAL CONDITIONS:

A Group 1 isolation signal has been received due to low condenser vacuum.

INITIATING CUE:

CAUTION

- All pre-job briefings are completed.

The CRS has directed you to verify a complete Group 1 isolation.

START TIME: _____

Clinton Power Station
Job Performance Measure (JPM)

PERFORMANCE INFORMATION

Critical steps are denoted with an asterisk (*) to the left of the step number and appear in BOLDED letters. Failure to meet the standards for a critical step constitutes failure of the Job Performance Measure. The sequence of steps is assumed unless denoted in the comments section of the JPM.

PERFORMANCE STEPS

4001.02 Automatic Isolation, 4001.02C001 Automatic Isolation Checklist, CPS 3101.01 Main Steam (MS, IS & ADS) Appendix A: Group 1 Isolation and MSL Drains Usage Hard Card

NOTE: The following steps may be performed in any order. The examinee may elect to use the Main Steam, Appendix A Hard Card.

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
1	Complete CPS 4001.02C001 Automatic Isolation Checklist for Group 1 Valves or CPS 3101.01 App A: Group 1 Isolation And MSL Drains Usage Hard Card.	***Examinee takes control switch at 1H13-P601 (5066 / 5067) to shut (red light OFF, green light ON) for:** • 1B21-F022B (fails to close) and / or 1B21-F028B (fails to close) Main Steam Line B Inbd / Outbd MSIV • **1B21-F022D and / or 1B21-F028D Main Steam Line D Inbd / Outbd MSIV** • **1B21-F022A and / or 1B21-F028A Main Steam Line A Inbd / Outbd MSIV** • **1B21-F022C and / or 1B21-F028C Main Steam Line C Inbd / Outbd MSIV** Note to evaluator – only one valve in each line must be shut to meet the critical step. *Cue: If the examinee reports that 1B21-F022B and/or 28B have failed to close, acknowledge the report.* *Cue: If the examinee asks for guidance, ask the examinee for a recommendation and direct the examinee to proceed as recommended.*			

Clinton Power Station
Job Performance Measure (JPM)

STEP	ELEMENT	STANDARD	SAT	UNSAT	Comment Number
1 (cont'd)	Complete CPS 4001.02C001 Automatic Isolation Checklist for Group 1 Valves or CPS 3101.01 App A: Group 1 Isolation And MSL Drains Usage Hard Card. (cont'd)	Examinee observes red light OFF and green light ON at 1H13-P601 (5066 / 5067) for each of the following valves: • 1B21-F016 Mn Drn & MSIV Byp Inbd Isol Valve • 1B21-F019 Mn Drn & MSIV Byp Outbd Isol Valve • 1B21-F067B MSL B Outbd MSIV Before Seat Drn Vlv • 1B21-F067D MSL D Outbd MSIV Before Seat Drn Vlv • 1B21-F067A MSL A Outbd MSIV Before Seat Drn Vlv • 1B21-F067C MSL C Outbd MSIV Before Seat Drn Vlv			
Begin Alternate Path					
2	Isolate the 'B' Main Steam Line	***Examinee takes control switch at 1H13-P601-5067 to shut for 1B21-F098B Main Steam Line B Shutoff Valve and verifies red light OFF and green light ON.** Note to evaluator – Examinee may elect to Arm & Depress CRVICS MANUAL INITIATION push-button(s) (Logic A & D push-buttons and/or Logic B & C push-buttons) on 1H13-P680-5006). These actions will fail to isolate the 'B' Main Steam Line. *Cue: If the examinee reports that the 'B' MSL has been isolated, acknowledge the report and state, "The JPM is complete".*			

TERMINATING CUES:

Manually isolates Group 1 Primary Containment Isolation Valves (Main Steam Lines and Drains) per 4001.02C001 Automatic Isolation Checklist or CPS 3101.01 Main Steam (MS, IS & ADS).

STOP TIME: _____

CLINTON POWER STATION

Job Performance Measure

Perform a Manual Scram Functional/SDV Hi Level Bypass Test

JPM Number: JPM519

Revision Number: 01

Date: 06/26/2015

Developed By:	**W. D. Kiser**	**06/26/15**
	Instructor	**Date**
Validated By:	**/s Mike Antonelli**	**7/16/15**
	SME or Instructor	**Date**
Reviewed By:		
	Operations Representative	**Date**
Approved By:		
	Training Department	**Date**

Clinton Power Station
Job Performance Measure (JPM)

READ TO THE OPERATOR

I will explain the initial conditions, which step(s) to simulate or discuss, and provide the initiating cues. When you complete the task successfully, the objective of this Job Performance Measure will be satisfied.

TASK STANDARDS:

- The Manual Scram Functional / SDV Hi Level Bypass Test completed.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

- None

PROCEDURAL/REFERENCES:

- CPS 9031.16, Manual Scram Functional / SDV Hi Level Bypass Test, Rev. 31a

EVALUATOR INSTRUCTIONS:

- Amplifying cues are provided within the JPM steps.
- All pre-job briefings are completed.
- Provide the examinee with the following items:
  - A copy of the Initial Conditions and Initiating Cue page (back page of the JPM) when providing the initiating cue.
  - Copy of the OD-7 printout obtained during simulator setup.

Clinton Power Station
Job Performance Measure (JPM)

INITIAL CONDITIONS:

You are an extra RO in the MCR.

The plant is in Mode 1.

All Prerequisites for CPS 9031.16, Manual Scram Functional / SDV Hi Level Bypass Test have been completed.

'A' and 'B' Scram Solenoid Temperatures on all withdrawn control rods have been verified > ambient temperature locally.

An SRO is available and stationed to provide TT data when requested.

INITIATING CUE:

CAUTION

- All pre-job briefings are completed.

Perform CPS 9031.16, Manual Scram Channel Functional / SDV Hi Level Bypass Test for Division 1, beginning at Step 8.1.3.

Report to the CRS after completing the task.

START TIME: _____

Clinton Power Station
Job Performance Measure (JPM)

PERFORMANCE INFORMATION

Critical steps are denoted with an asterisk (*) to the left of the step number and appear in BOLDED letters. Failure to meet the standards for a critical step constitutes failure of the Job Performance Measure. The sequence of steps is assumed unless denoted in the comments section of the JPM.

PERFORMANCE STEPS

CPS 9031.16, Manual Scram Channel Functional / SDV Hi Level Bypass Test
8.1 Division 1 Manual Scram Functional Test

***8.1.3 Place Div 1 MANUAL SCRAM switch collar in ARM.**

Standard: At 1H13-P680-5004, the examinee rotates the Div 1 MANUAL SCRAM switch collar to the "ARM" position.

Cue: If the examinee reports receipt of expected annunciator 5004-2E, acknowledge the report.

Comments

SAT ☐ UNSAT ☐ Comment Number _____

8.1.4 Verify annunciator DIV 1 OR 4 MAN SCRAM SW ARMED [5004-2E] alarming.

Standard: At 1H13-P680-5004, the examinee verifies annunciator 5004-2E DIV 1 OR 4 MAN SCRAM SW ARMED is alarming.

Cue: If the examinee reports receipt of expected annunciator 5004-2E, acknowledge the report.

Comments

SAT ☐ UNSAT ☐ Comment Number _____

***8.1.5**	**Momentarily depress Div 1 MANUAL SCRAM pushbutton.**
Standard:	At 1H13-P680-5004, the examinee momentarily depresses the Div 1 MANUAL SCRAM pushbutton.
Cue:	If the examinee reports receipt of annunciators 5002-2P, 5004-1A, 5004-1E and/or 5009-5B, acknowledge the report.
Comments	
	SAT ☐ UNSAT ☐ Comment Number _____

8.1.6	Verify following status lights not lit. 1. Div 1 SCRAM SOL ENERGIZED A 2. Div 2 SCRAM SOL ENERGIZED B 3. Div 3 SCRAM SOL ENERGIZED B 4. Div 4 SCRAM SOL ENERGIZED A
Standard:	At 1H13-P680-5004 & 5005, the examinee verifies the listed Scram Solenoid status lights are OFF: 1. Div 1 SCRAM SOL ENERGIZED A 2. Div 2 SCRAM SOL ENERGIZED B 3. Div 3 SCRAM SOL ENERGIZED B 4. Div 4 SCRAM SOL ENERGIZED A
Cue:	
Comments	
	SAT ☐ UNSAT ☐ Comment Number _____

8.1.7	Verify Div 1 RESET PERMISSIVE status light lit (after ~ 10 sec).
Standard:	At 1H13-P680-5004, the examinee verifies the Div 1 RESET PERMISSIVE status light is ON (approximately 10 seconds after the Div 1 Manual Scram pushbutton was released).
Cue:	
Comments	The time component (~ 10 sec) is not meant to be measured. It is only there as a guide for the operator to know that the change in state of the status light will be delayed.
	SAT ☐ UNSAT ☐ Comment Number _____

8.1.8	Verify following annunciators alarming. 1. DIV 1 HALF SCRAM IA, IIB, IIIB, IVA [5004-1A] 2. DIV 1 MANUAL SCRAM TRIP [5004-1E] 3. RX WTR LVL CONT SYS ALARM [5002-2P](FW-MAN-SCRAM-IN1 input)
Standard:	At 1H13-P680-5004, the examinee verifies Annunciators 5004-1A, 5004-1E and 5002-2P in alarm.
Cue:	
Comments	
	SAT ☐ UNSAT ☐ Comment Number _____

8.1.9 Verify following computer points TRIPPED.
1. C71DC013, MAN SCRAM TRIP SYS 1/4
2. C71NC005, MANUAL SCRAM DIV 1 OR 4
3. C71NC029, 1/2 SCRM IA, IIB, IIIB, IVA

Standard: At 1H13-P680-5009, the examinee pulls up computer points C71DC013, C71NC005, and C71NC029 and verifies they indicate tripped.

Cue:

Comments

SAT ☐ UNSAT ☐ Comment Number _____

8.1.10 Verify TT Channel 286 (SCRAMD1) tripped (~ +5 vdc).

Standard: Examinee verifies that TT Channel 286 (SCRAMD1) is reading ~ +5 vdc.

Cue: Cue the examinee that TT Channel 286 is reading +5 vdc.

Comments

SAT ☐ UNSAT ☐ Comment Number _____

***8.1.11 Momentarily depress Div 1 SCRAM RESET pushbutton.**

Standard: At 1H13-P680-5004, the examinee momentarily depresses the Div 1 SCRAM RESET pushbutton.

Cue: If examinee announces that 5002-2P, 5004-1A and 5004-1E are reset, acknowledge the examinee.

Comments

SAT ☐ UNSAT ☐ Comment Number _____

8.1.12	Verify DIV 1 RESET PERMISSIVE status light not lit.
Standard:	At 1H13-P680-5004, the examinee verifies the DIV 1 RESET PERMISSIVE status light is OFF.
Cue:	
Comments	

SAT ☐ UNSAT ☐ Comment Number _____

8.1.13	Verify following annunciators reset. 1. DIV 1 HALF SCRAM IA, IIB, IIIB, IVA [5004-1A] 2. DIV 1 MANUAL SCRAM TRIP [5004-1E] 3. RX WTR LVL CONT SYS ALARM [5002-2P](FW-MAN-SCRAM-IN1 input)
Standard:	At 1H13-P680-5004, the examinee verifies annunciators 5004-1A, 5004-1E and 5002-2P are reset.
Cue:	If examinee announces that 5002-2P, 5004-1A and 5004-1E are reset, acknowledge the examinee.
Comments	

SAT ☐ UNSAT ☐ Comment Number _____

8.1.14	Verify following computer points RESET. 1. C71DC013, MAN SCRAM TRIP SYS 1/4 2. C71NC005, MANUAL SCRAM DIV 1 OR 4 3. C71NC029, 1/2 SCRM IA, IIB, IIIB, IVA
Standard:	At 1H13-P680-5009, the examinee pulls up computer points C71DC013, C71NC005, and C71NC029 and verifies they indicate RESET.
Cue:	
Comments	

SAT ☐ UNSAT ☐ Comment Number _____

8.1.15	Verify TT Channel 286 (SCRAMD1) reset (~ -5 vdc).
Standard:	Examinee verifies that TT Channel 286 (SCRAMD1) is reading ~ -5 vdc.
Cue:	Cue the examinee that TT Channel 286 is reading -5 vdc.
Comments	

SAT ☐ UNSAT ☐ Comment Number _____

***8.1.16**	**Place Div 1 MANUAL SCRAM switch collar in D-ARM.**
Standard:	At 1H13-P680-5004, the examinee places Div 1 MANUAL SCRAM switch collar in D-ARM.
Cue:	If examinee reports that annunciator 5004-2E has reset, acknowledge the report. Cue the examinee that Independent Verification (IV) of step 8.1.17 has been completed.
Comments	

SAT ☐ UNSAT ☐ Comment Number _____

8.1.17	Verify annunciator DIV 1 OR 4 MAN SCRAM SW ARMED [5004-2E] reset.
Standard:	At 1H13-P680-5004, the examinee verifies annunciator DIV 1 OR 4 MAN SCRAM SW ARMED [5004-2E] is reset.
Cue:	If examinee reports that annunciator 5004-2E has reset, acknowledge the report.
Comments	

SAT ☐ UNSAT ☐ Comment Number _____

8.1.18 For all 145 HCUs, verify Scram Inlet/Scram Outlet valves in closed position (green LED not lit) as indicated by RC&IS.

Standard: On 1H13-P680-5004A, the examinee depresses the SCRAM VALVES pushbutton on the Display Selection Section of the Operator Control Module (OCM) and verifies that the Green LEDs are OFF for all 145 Scram Inlet/Scram Outlet Valves on the Full Core Map.

Cue:

Comments

SAT ☐ UNSAT ☐ Comment Number _____

8.1.19 Verify with new OD-7 or 3D monicore (printout or on CRT) that current rod positions are identical to rod positions obtained prior to start of test. If any rod position different, immediately notify SMngt.

Standard: Examinee obtains current OD-7 and verifies rod positions are identical to those on the initial OD-7 provided at the beginning of the JPM.

Cue:

Comments

SAT ☐ UNSAT ☐ Comment Number _____

8.1.20	Verify following status lights lit. 1. Div 1 SCRAM SOL ENERGIZED A 2. Div 1 SCRAM SOL ENERGIZED B 3. Div 2 SCRAM SOL ENERGIZED A 4. Div 2 SCRAM SOL ENERGIZED B 5. Div 3 SCRAM SOL ENERGIZED A 6. Div 3 SCRAM SOL ENERGIZED B 7. Div 4 SCRAM SOL ENERGIZED A 8. Div 4 SCRAM SOL ENERGIZED B
Standard:	At 1H13-P680-5004 & 5005, the examinee verifies the above listed Scram Solenoid status lights are ON.
Cue:	Cue the examinee that Independent Verification (IV) has also been completed for step 8.1.22. When the examinee has completed step 8.1.22, inform him/her that the JPM is complete.
Comments	
	SAT ☐ UNSAT ☐ Comment Number _____

TERMINATING CUES:

The Division 1 Manual Scram Functional Test is complete IAW CPS No. 9031.16 Manual Scram Channel Functional/SDV Hi Level Bypass Test.

STOP TIME: _____

CLINTON POWER STATION

Job Performance Measure

Startup the Control Room Ventilation System (VC) in the High Radiation Mode

JPM Number: JPM504

Revision Number: 01

Date: 06/26/2015

Developed By:	**W. D. Kiser**	**06/26/15**
	Instructor	**Date**
Validated By:	**/s Mike Antonelli**	**7/16/15**
	SME or Instructor	**Date**
Reviewed By:		
	Operations Representative	**Date**
Approved By:		
	Training Department	**Date**

Clinton Power Station
Job Performance Measure (JPM)

READ TO THE OPERATOR

I will explain the initial conditions, which step(s) to simulate or discuss, and provide the initiating cues. When you complete the task successfully, the objective of this Job Performance Measure will be satisfied.

TASK STANDARDS:

- The "A" VC System is running in the High Radiation Mode with Minimum Outside Air Damper 0VC01YA OPEN.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

- None

PROCEDURAL/REFERENCES:

- CPS No. 3402.01 Rev. 29, CONTROL ROOM HVAC (VC)
- CPS No. 5050.07 Rev. 33, ALARM PANEL 5050 ANNUNCIATORS - ROW 7
- CPS No. 5052.07 Rev. 33e, ALARM PANEL 5052 ANNUNCIATORS - ROW 7
- CPS No. 5050.02 Rev. 34, ALARM PANEL 5050 ANNUNCIATORS - ROW 2
- CPS No. 5050.08 Rev. 31b, ALARM PANEL 5050 ANNUNCIATORS - ROW 8

EVALUATOR INSTRUCTIONS:

- Amplifying cues are provided within the JPM steps.
- All pre-job briefings are completed.
- Ensure a blank copy of CPS 3402.01 Control Room HVAC (VC) is available to provide to the examinee during performance of the JPM.
- THIS IS A TIME CRITICAL JPM. VC train A must be placed in high rad mode within 20 minutes of receipt of annunciators 5050-7M and 5052-7M. After the examinee has acknowledged the task, mark the start time.
- When the examinee has completed step 8.3.3.8, mark the stop time. Ensure the lapsed time does not exceed 20 minutes. If this time limit is exceeded, the JPM is unsatisfactory.

Clinton Power Station
Job Performance Measure (JPM)

INITIAL CONDITIONS:

You are the B RO. The plant is operating at power.

INITIATING CUE:

CAUTION

- All pre-job briefings are completed.

THIS JPM IS TIME CRITICAL.

You have just received annunciators 5050-7M HI RADIATION CONT RM HVAC SYS DIVISION 1 and 5052-7M HI RADIATION CONT RM HVAC SYS DIVISION 2. Respond to annunciators as appropriate.

Evaluator Note:
After the examinee has acknowledged the task, mark the start time.

START TIME: _____

Clinton Power Station
Job Performance Measure (JPM)

PERFORMANCE INFORMATION

Critical steps are denoted with an asterisk (*) to the left of the step number and appear in BOLDED letters. Failure to meet the standards for a critical step constitutes failure of the Job Performance Measure. The sequence of steps is assumed unless denoted in the comments section of the JPM.

PERFORMANCE STEPS

CPS 5050.07/5052.07 ALARM PANEL 5050/5052 ANNUNCIATORS - ROW 7

1. Initiate/verify initiated VC High Radiation MODE on the operating VC Train per CPS 3402.01, Control Room HVAC (VC).

Standard: Examinee proceeds to CPS 3402.01, Control Room HVAC (VC).

Cue:

Comments: When candidate locates CPS 3402.01, provide him/her with a blank exam copy.

SAT ☐ UNSAT ☐ Comment Number _____

CPS 3402.01 Control Room HVAC (VC)

8.3.3.1 IF Manual Initiation of a High Radiation Isolation is required,
THEN Depress both Cont Rm Mu Trn Hi Rad initiation push-buttons.

Standard: On P801-5050 and 5052, either depresses both Cont Rm Mu Trn Hi Rad initiation push-buttons or verifies red light above pushbutton is lit.

Cue:

Comments: The operating VC train will not shift to High Rad Mode.

SAT ☐ UNSAT ☐ Comment Number _____

8.3.3.2 Verify Supply Air Trn A un-isolates as follows:
1) 0VC09YA, Sply Air Trn A Filt Inlet Dmpr opens.
2) 0VC10YA, Sply Air Trn A Filt Byp Dmpr closes.
3) 0VC11YA, Sply Air Trn A Filt Outlet Dmpr opens.

Standard: Determines the Supply Air Trn A is still isolated

Cue:

Comments

SAT ☐ UNSAT ☐ Comment Number _____

***8.3.3.2 IF Supply Air Trn A did not unisolate,**
THEN Place Sply Air Fltr Dmprs 0VC09YA/10YA/11YA control switch in the FILTER position and repeat 8.3.3.1 and 2.

Standard: Examinee verifies damper lights for 0VC09YA and 0VC11YA indicate OPEN (red light ON, green light OFF) and damper light for 0VC10YA indicates CLOSED (red light OFF, green light ON).

Cue:

Comments

SAT ☐ UNSAT ☐ Comment Number _____

Clinton Power Station
Job Performance Measure (JPM)

8.3.3.1 IF Manual Initiation of a High Radiation Isolation is required,
THEN Depress both Cont Rm Mu Trn Hi Rad initiation push-buttons.

Standard: On P801-5050 and 5052, either depresses both Cont Rm Mu Trn Hi Rad initiation push-buttons or verifies red light above pushbutton is lit.

Cue:

Comments No plant response expected.

SAT ☐ UNSAT ☐ Comment Number _____

8.3.3.2 Verify Supply Air Trn A un-isolates as follows:
1) 0VC09YA, Sply Air Trn A Filt Inlet Dmpr opens.
2) 0VC10YA, Sply Air Trn A Filt Byp Dmpr closes.
4) 0VC11YA, Sply Air Trn A Filt Outlet Dmpr opens.

Standard: Examinee verifies damper lights for 0VC09YA and 0VC11YA indicate OPEN (red light ON, green light OFF) and damper light for 0VC10YA indicates CLOSED (red light OFF, green light ON).

Cue:

Comments

SAT ☐ UNSAT ☐ Comment Number _____

8.3.3.3	Verify running/start 0VC05CA, Cont Rm HVAC A MU Air Fan.
Standard:	Examinee verifies 0VC05CA, Cont Rm HVAC A MU Air Fan is running (red light ON, green light OFF).
Cue:	
Comments	

SAT ☐ UNSAT ☐ Comment Number _____

8.3.3.4	Verify the following dampers open: 1) 0VC02YA, Cont Rm Trn A MU Air Dmpr. 2) 0VC06YA, Cont Rm MU Trn A Outlet Dmpr. 3) Verify 0VC114YA, Cont Rm MU Trn A Flow Cont Dmpr modulates.
Standard:	Examinee verifies damper lights for 0VC02YA and 0VC06YA indicate OPEN (red light ON, green light OFF) and damper lights for 0VC114YA indicates modulating (red light ON, green light ON).
Cue:	
Comments	

SAT ☐ UNSAT ☐ Comment Number _____

8.3.3.6 Verify the following dampers close:

1) 0VC03YA, Cont Rm Trn A Min OS Dmpr.
2) 0VC05YA, MCR Max Intake & Purge Dmpr.
3) 0VC48YA, MCR Max Intake & Purge Dmpr.
4) 0VC49YA, MCR Max Intake & Purge Dmpr.
5) 0VC81YA, MCR Max Intake & Purge Dmpr.
6) 0VC115YA, Cont Rm Trn A Min OS Dmpr.
7) 0VC69Y, MCR Locker Rm Exhaust Dmpr.
8) 0VC70Y, MCR Locker Rm Exhaust Dmpr.
9) 0VC11C, MCR Locker Rm Exhaust Fan is <u>not</u> running

Standard: Examinee verifies damper lights for 0VC03YA, 0VC05YA, 0VC48YA, 0VC49YA, 0VC81YA, 0VC115YA, 0VC69Y,and 0VC70Y indicate CLOSED (red light OFF, green light ON).
Examinee verifies 0VC11C, MCR Locker Rm Exhaust Fan is <u>not</u> running (red light OFF, green light ON).

Cue:

Comments

SAT ☐ UNSAT ☐ Comment Number _____

8.3.3.7 0VC01YA(B), Cont Rm Trn A(B) Min Air Dmpr is located on the east (west) side of the plant.
Use the following table to quickly locate monitors and indicators to aid in completion of the remaining steps in section 8.3.3.

Standard: Examinee determines that higher radiation condition exists on the WEST side.

Cue:

Comments

SAT ☐ UNSAT ☐ Comment Number _____

***8.3.3.8**	**IF A high radiation condition exists as indicated by OS Air Inlet Rad Mon on P801-66B and 67B,** **THEN** **1. Open/verify open the minimum air damper with the lowest radiation level (0VC01YA).** **2. Shut/verify shut the other minimum air damper (0VC01YB).**
Standard:	Examinee verifies 0VC01YA is OPEN (red light ON, green light OFF) and closes 0VC01YB (red light OFF, green light ON).
Cue:	
Comments	
	SAT ☐ UNSAT ☐ Comment Number _____

TERMINATING CUES:

The VC System is running in the High Radiation Mode with Minimum Outside Air Damper 0VC01YA OPEN and 0VC01YB SHUT.

STOP TIME: _____