

# CLINTON POWER STATION

## Job Performance Measure

Manually Startup RCIC System (Alternate Path)

JPM Number: JPM204 (a)

Revision Number: 02

Date: 06/14/2013

<b>Developed By:</b>	_____	_____
	<b>Instructor</b>	<b>Date</b>
<b>Validated By:</b>	_____	_____
	<b>SME or Instructor</b>	<b>Date</b>
<b>Reviewed By:</b>	_____	_____
	<b>Operations Representative</b>	<b>Date</b>
<b>Approved By:</b>	_____	_____
	<b>Training Department</b>	<b>Date</b>

**Clinton Power Station  
Job Performance Measure (JPM)**

**JOB PERFORMANCE MEASURE VALIDATION CHECKLIST**

**NOTE:** All steps of this checklist should be performed upon initial validation.  
Prior to JPM usage, revalidate JPM using steps 8 and 12 below.

- \_\_\_\_\_ 1. Task description and number, JPM description and number are identified.
- \_\_\_\_\_ 2. Knowledge and Abilities (K/A) references are included.
- \_\_\_\_\_ 3. Performance location specified. (in-plant, control room, simulator, or other)
- \_\_\_\_\_ 4. Initial setup conditions are identified.
- \_\_\_\_\_ 5. Initiating cue (and terminating cue if required) are properly identified.
- \_\_\_\_\_ 6. Task standards identified and verified by SME review.
- \_\_\_\_\_ 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (\*).
- \_\_\_\_\_ 8. Verify the procedure(s) referenced by this JPM reflects the current revision:  
 Procedure \_\_\_\_\_ Rev: \_\_\_\_\_  
 Procedure \_\_\_\_\_ Rev: \_\_\_\_\_  
 Procedure \_\_\_\_\_ Rev: \_\_\_\_\_
- \_\_\_\_\_ 9. Verify cues both verbal and visual are free of conflict.
- \_\_\_\_\_ 10. Verify performance time is accurate
- \_\_\_\_\_ 11. If the JPM cannot be performed as written with proper responses, then revise the JPM.
- \_\_\_\_\_ 12. When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

SME / Instructor	Date
SME / Instructor	Date
SME / Instructor	Date

**Clinton Power Station  
Job Performance Measure (JPM)**

**Revision Record (Summary)**

<b>Revision</b>	<b>Date</b>	<b>Description</b>
00	07/06/2007	Updated numbering convention. Old JPM number: 33100104LSA02.
01	02/18/11	Updated for procedure revision.
02	06/14/13	Updated for new template and for procedure revision.

**Clinton Power Station  
Job Performance Measure (JPM)**

**Simulator Setup Instructions**

1. Initialize to any suitable IC with RCIC in Standby. IC-194 (PW 91448) is saved for the ILT 12-1 NRC Exam.
2. Make sure JPM436 (Equalize Around and Open MSIVs) is NOT in progress. This JPM will trip the Main Turbine. JPM436 requires the Main Turbine to be reset.
3. Place clearance tags on MDRFP and auxiliary oil pump. Ensure clearance covers are removed at the completion of the JPM.
4. Open and execute Simulator Lesson Plan JPM204 which will perform the following:
  - Insert malfunction to disable RCIC Automatic Initiation
  - Insert an Instructor Override (I/O) to maintain the RCIC Manual Initiation Pushbutton NOT DEPRESSED

<p><b><u>NOTE:</u></b> It is permissible to use a similar IC to the IC listed above, provided the IC actually used is verified to be compatible with this and other JPMs that are scheduled to be run concurrently.</p>
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5. Restore Reactor level to approximately -10 inches using High Pressure Core Spray (HPCS) and then shutdown the HPCS system (as necessary).
6. Prepare a (blank) Candidate copy of CPS 3310.01, Section 8.1.4, for place-keeping during performance of this JPM.
7. Make sure the RCIC Initiation / Shutdown Hard Card on 1H13-P601 is free of markings.
8. When the above steps are completed for this and other JPMs to be run concurrently, then validate the concurrently run JPMs if applicable.
9. This completes the setup for this JPM.
10. Save to a different IC if JPM is being used more than once.
11. Freeze Simulator.

**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 Reactor Core Isolation Cooling (RI) System is manually initiated and is injecting into the reactor vessel per CPS No. 3310.01, REACTOR CORE ISOLATION COOLING (RI)

**TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:**

- None

**PROCEDURAL/REFERENCES:**

- CPS No. 3310.01, Rev 29 REACTOR CORE ISOLATION COOLING (RI)

**EVALUATOR INSTRUCTIONS:**

- Amplifying cues are provided within the JPM steps.
- All pre-job briefings are completed.
- Provide the examinee with a copy of the Initial Conditions and Initiating Cue page (back page of the JPM) when providing the initiating cue.
- Provide the examinee with the enclosed copy of CPS 3310.01 Reactor Core Isolation Cooling (RI) **AFTER** the examinee locates the procedure in the MCR procedure rack.

**Clinton Power Station  
Job Performance Measure (JPM)**

**INITIAL CONDITIONS:**

A loss of all Feedwater has occurred followed by an Automatic Scram.

All immediate Operator actions have been completed.

You are the “Extra” Reactor Operator.

**INITIATING CUE:**

**CAUTION**

- All pre-job briefings are completed.

Manually initiate RCIC and inject into the RPV.

Hard Card use is authorized.

Report to the CRS after completing the task.

**START TIME:** \_\_\_\_\_

Note: If the hard card is used the steps will be in a different order.

**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**

**Appendix C: RCIC INITIATION/SHUTDOWN HARD CARD**

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1. As needed, Arm, depress and HOLD depressed the RCIC MANUAL INITIATION push-button until 1E51-F045 begins to open (takes ~ 6 secs).

Standard: Recognizes failure of RCIC to initiate via logic and proceeds to manual startup with logic not available.

Cue: If reported to CRS, acknowledge report, then state, "Continue with RCIC startup".

Comments

- First step may be performed with Hard Card, but manual startup/logic not operable steps found only in procedure.
- When the candidate has referenced CPS 3310.01, Section 8.1.4, provide the attached copy of the procedure for place-keeping.

SAT                   UNSAT                   Comment Number \_\_\_\_\_

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**BEGIN ALTERNATE PATH**

**3310.01 REACTOR CORE ISOLATION COOLING (RI)**

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- 8.1.4.1 Start the Gland Seal Air Compressor.

Standard: Locates hand switch on 1H13-P601-5063 and rotates to START position. Verifies red light ON and green light OFF for the Gland Seal Air Compressor.

Cue:

Comments

SAT                   UNSAT                   Comment Number \_\_\_\_\_

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**Clinton Power Station  
Job Performance Measure (JPM)**

- 8.1.4.2 During RCIC operation, verify as appropriate that 1E51-F019, RCIC Pmp Min Flow Recirc To Suppr Pool:
- Opens whenever RCIC flow is < 120 gpm, and
  - Shuts whenever RCIC flow is > 240 gpm.

Standard: Examinee verifies 1E51-F019 RCIC Pmp Min Flow Recirc valve operation when RCIC has been started.

Cue:

Comments

SAT           UNSAT           Comment Number \_\_\_\_\_

- 8.1.4.3 Trip the main turbine.

Standard: On 1H13-P680-5007, the examinee depresses both Think and Trip pushbuttons simultaneously and then performs the following verifications:

On 1H13-P680-5007 (PPC Display) or at 1H13-P678 Standby Information Panel, the examinee verifies the Main Turbine tripped using at least one of the following methods: 1)Verifying all Main Turbine Stop Valves, Control Valves, Intercept Valves, and Intermediate Stop Valves are closed, or 2)Verifying the two green indicator lights for the Trip Valves indicate “tripped”, or 3) Verifying annunciator 5007-1B Turb Trip EHC Sys is locked in.

Cue:

Comments Procedure step can be considered “Condition Met” (and trip not actually performed) if the above verifications are performed.

SAT           UNSAT           Comment Number \_\_\_\_\_



**Clinton Power Station  
Job Performance Measure (JPM)**

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8.1.4.4 Trip both reactor feed pump turbines.

Standard: On 1H13-P680-5002, the examinee depresses the RFPT 1A and 1B trip pushbuttons and then verifies the TDRFPs tripped using at least one of the following methods:

1) Green lights ON for HP and LP Stop Valves, 2) amber lights on above the RFPT Trip Pushbuttons, 3) annunciators 5002-1C and 1G locked in.

Cue:

Comments Procedure step can be considered “Condition Met” (and trip not actually performed) if verifications are performed.

SAT                       UNSAT                       Comment Number \_\_\_\_\_

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**\*8.1.4.5 OPEN 1E51-F045, RCIC Turb Stm Supp Shutoff Valve.**

Standard: Examinee locates hand switch for 1E51-F045 on 1H13-P601-5063, rotates switch to the OPEN position, and verifies Red light ON and Green light OFF for 1E51-F045.

Cue:

Comments During RCIC operation 1E51-F019, RCIC Pump Min Flow Recirc to Suppr Pool will open be when RCIC flow < 120 gpm.

SAT                       UNSAT                       Comment Number \_\_\_\_\_

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**Clinton Power Station  
Job Performance Measure (JPM)**

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**\*8.1.4.6 OPEN 1E51-F013, RCIC Pump Disch to Rx Outbd Isol Valve.**

Standard: Examinee locates hand switch for 1E51-F013 on 1H13-P601-5063, rotates switch to the OPEN position and verifies Red light ON and Green light OFF for 1E51-F013.

Cue:

Comments During RCIC operation 1E51-F019, RCIC Pump Min Flow Recirc to Suppr Pool will be shut when RCIC flow is > 240 gpm.

SAT           UNSAT           Comment Number \_\_\_\_\_

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8.1.4.7.1 Verify 1E51-F025 RHR & RCIC Stm Supp First Drn Isol Vlv shuts.

Standard: Examinee verifies Green light ON and Red light OFF for 1E51-F025 on 1H13-P601-5063.

Cue:

Comments

SAT           UNSAT           Comment Number \_\_\_\_\_

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8.1.4.7.2 Verify 1E51-F026 RHR & RCIC Stm Supp Second Drn Isol Vlv shuts.

Standard: Examinee verifies Green light ON and Red light OFF for 1E51-F026 on 1H13-P601-5063.

Cue:

Comments

SAT           UNSAT           Comment Number \_\_\_\_\_

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**Clinton Power Station  
Job Performance Measure (JPM)**

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8.1.4.7.3 Verify 1E51-F004 RCIC Turb Exh Drn To RF First Isol Valve shut.

Standard: Examinee verifies Green light ON and Red light OFF for 1E51-F004 on 1H13-P601-5063.

Cue:

Comments

SAT       UNSAT       Comment Number \_\_\_\_\_

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8.1.4.7.4 Verify F005, RCIC Turb Exh Drn To RF Second Isol Valve shut.

Standard: Examinee verifies Green light ON and Red light OFF for 1E51-F005 on 1H13-P601-5063.

Cue:

Comments

SAT       UNSAT       Comment Number \_\_\_\_\_

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8.1.4.8 Verify RCIC Pmp Rm Sply Fan, 1VY04C running.

Standard: Examinee verifies Red light ON and Green light OFF for 1VY04C on 1H13-P801-5050)

Cue:

Comments

SAT       UNSAT       Comment Number \_\_\_\_\_

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**Clinton Power Station  
Job Performance Measure (JPM)**

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8.1.4.9 Monitor RPV level. Adjust RCIC Pump Flow Cont, 1E51-R600 as necessary to maintain desired RPV level.

Standard: Examinee monitors RPV level.  
If RCIC flow is adjusted < 450 gpm, examinee shifts 1E51-R600 to Manual.  
If RCIC Flow Controller is shifted to Manual, the examinee maintains RCIC Turbine speed  $\geq$  1500 rpm.

Cue: If asked, as CRS state, "Maintain the RCIC Flow Controller in AUTO. Your level band is Level 3 to Level 8."

Comments If the examinee exceeds these limits for more than 30 seconds (< 450 gpm in Auto or < 1500 RPM in manual), then the step is unsat and a competency deficiency should be documented.

SAT                   UNSAT                   Comment Number \_\_\_\_\_

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**TERMINATING CUES:**

The RCIC system is injecting water into the reactor vessel IAW CPS No. 3310.01 Reactor Core Isolation Cooling.

**STOP TIME:** \_\_\_\_\_



**Clinton Power Station  
Job Performance Measure (JPM)**

**INITIAL CONDITIONS:**

A loss of all Feedwater has occurred followed by an Automatic Scram.

All immediate Operator actions have been completed.

You are the “Extra” Reactor Operator.

**INITIATING CUE:**

**CAUTION**

- All pre-job briefings are completed.

Manually initiate RCIC and inject into the RPV.

Hard Card use is authorized.

Report to the CRS after completing the task.

# CLINTON POWER STATION

## Job Performance Measure

Turbine On Line Tests

JPM Number: JPM517 (b)

Revision Number: 00

Date: 06/14/2013

<b>Developed By:</b>	_____	_____
	<b>Instructor</b>	<b>Date</b>
<b>Validated By:</b>	_____	_____
	<b>SME or Instructor</b>	<b>Date</b>
<b>Reviewed By:</b>	_____	_____
	<b>Operations Representative</b>	<b>Date</b>
<b>Approved By:</b>	_____	_____
	<b>Training Department</b>	<b>Date</b>

**Clinton Power Station  
Job Performance Measure (JPM)**

**JOB PERFORMANCE MEASURE VALIDATION CHECKLIST**

**NOTE:** All steps of this checklist should be performed upon initial validation.  
Prior to JPM usage, revalidate JPM using steps 8 and 12 below.

- \_\_\_\_\_ 1. Task description and number, JPM description and number are identified.
- \_\_\_\_\_ 2. Knowledge and Abilities (K/A) references are included.
- \_\_\_\_\_ 3. Performance location specified. (in-plant, control room, simulator, or other)
- \_\_\_\_\_ 4. Initial setup conditions are identified.
- \_\_\_\_\_ 5. Initiating cue (and terminating cue if required) are properly identified.
- \_\_\_\_\_ 6. Task standards identified and verified by SME review.
- \_\_\_\_\_ 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (\*).
- \_\_\_\_\_ 8. Verify the procedure(s) referenced by this JPM reflects the current revision:  
Procedure \_\_\_\_\_ Rev: \_\_\_\_\_  
Procedure \_\_\_\_\_ Rev: \_\_\_\_\_  
Procedure \_\_\_\_\_ Rev: \_\_\_\_\_
- \_\_\_\_\_ 9. Verify cues both verbal and visual are free of conflict.
- \_\_\_\_\_ 10. Verify performance time is accurate
- \_\_\_\_\_ 11. If the JPM cannot be performed as written with proper responses, then revise the JPM.
- \_\_\_\_\_ 12. When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

_____	SME / Instructor	_____	Date
_____	SME / Instructor	_____	Date
_____	SME / Instructor	_____	Date



**Clinton Power Station  
Job Performance Measure (JPM)**

**Revision Record (Summary)**

<b>Revision</b>	<b>Date</b>	<b>Description</b>
00	06/14/13	New JPM. This JPM modifies JPM 415 to create an Alternate Path JPM.

**Clinton Power Station  
Job Performance Measure (JPM)**

**Simulator Setup Instructions**

1. Initialize to any high power IC with the Turbine on line. IC-195 (PW 91448) is saved for the 2013 ILT NRC Exam.
2. Open and execute Simulator Lesson Plan JPM517 which will perform the following:
  - Prevent the Main Turbine Electrical Trip Test circuitry from resetting when tested.
3. Prepare a working copy of CPS 3812.01 Rev. 15, Turbine On Line Tests, with Prerequisites signed off (except for step 5.5) and with CRS Authorization to perform the surveillance blank initialed.
4. When the above steps are completed for this and other JPMs to be run concurrently, then validate the concurrently run JPMs if applicable.
5. This completes the setup for this JPM.
6. Save to a different IC if JPM is being used more than once. IC-195 (PW 91448) is saved for the 2013 ILT NRC Exam.
7. Freeze Simulator.

**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. 15, 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. 15, Turbine On Line Tests
- CPS 3105.01 Rev. 39, 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 the Initial Conditions and Initiating Cue page (back page of the JPM) when providing the initiating cue.

**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**

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8.1.1 Verify applicable prerequisites are met.

Standard: Examinee verifies section 5.0 prerequisites are complete.

Cue:

Comments

SAT       UNSAT       Comment Number \_\_\_\_\_

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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)**

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- 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 \_\_\_\_\_

---

**NOTE**

*Holding depressed START TEST push-button too long could cause out of sequence cycling of lights. The expected response per step 8.1.4 and 8.1.5 needs to be pre-briefed.*

*The following Alarms and indications should be expected when the next steps are performed:*

*Annunciator 1H13-P680: 5007-1C Trouble EHC Syst*

*5017-3B Trouble EHC Fluid (may cause high level alarm depending on initial reservoir level.)*

*Status Lights on P680: EHC STATUS - Electrical Malfunction*

*EHC STATUS - System Fault*

*Status Lights on 1PA06J: Electrical Malfunction*

*First Hit Detection*

*Elect Trip Solenoid Trip*

*Hit 1*

*System Fault*

*Turbine Trip Initiated Light (located above Global*

**Clinton Power Station  
Job Performance Measure (JPM)**

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- \*8.1.4 Depress and hold 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**

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**\*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:

- If the examinee reports the malfunction to the CRS, acknowledge the report and ask the examinee for suggested actions to resolve the issue.
- If an Equipment Operator is sent to check status of the trip mechanism, report that the trip linkage is reset.

Comments The only portion of the step that is critical is to release the START TEST push-button.

SAT       UNSAT       Comment Number \_\_\_\_\_

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**Clinton Power Station  
Job Performance Measure (JPM)**

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**\*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

Examinee does NOT continue test unless approved by the CRS.

Cue: When the examinee reports the Electrical Trip Test Circuitry has been reset, acknowledge the report and cue him/her to suspend further testing until troubleshooting can be performed.

Comments

SAT       UNSAT       Comment Number \_\_\_\_\_

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**Clinton Power Station  
Job Performance Measure (JPM)**

**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 (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.

# CLINTON POWER STATION

## Job Performance Measure

Equalize Around and Open MSIVs per CPS 4411.09

JPM Number: JPM436 (c)

Revision Number: 01

Date: 06/14/2013

<b>Developed By:</b>	_____	_____
	<b>Instructor</b>	<b>Date</b>
<b>Validated By:</b>	_____	_____
	<b>SME or Instructor</b>	<b>Date</b>
<b>Reviewed By:</b>	_____	_____
	<b>Operations Representative</b>	<b>Date</b>
<b>Approved By:</b>	_____	_____
	<b>Training Department</b>	<b>Date</b>

**Clinton Power Station  
Job Performance Measure (JPM)**

**JOB PERFORMANCE MEASURE VALIDATION CHECKLIST**

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- \_\_\_\_\_ 4. Initial setup conditions are identified.
- \_\_\_\_\_ 5. Initiating cue (and terminating cue if required) are properly identified.
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Procedure \_\_\_\_\_ Rev: \_\_\_\_\_  
Procedure \_\_\_\_\_ Rev: \_\_\_\_\_  
Procedure \_\_\_\_\_ Rev: \_\_\_\_\_
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_____	SME / Instructor	_____	Date
_____	SME / Instructor	_____	Date
_____	SME / Instructor	_____	Date

**Clinton Power Station  
Job Performance Measure (JPM)**

**Revision Record (Summary)**

<b>Revision</b>	<b>Date</b>	<b>Description</b>
00	07/26/10	Updated procedure revision, new JPM numbering and format (4411.0901)
01	06/14/13	Updated to new template

**Clinton Power Station  
Job Performance Measure (JPM)**

**Simulator Setup Instructions**

1. Initialize to any suitable shutdown IC, at ~300 psig with a vacuum pump, CW in operation and Main Turbine reset. IC-194 (PW 91448) is saved for the ILT 12-1 NRC Exam.
2. Make sure JPM 204 (Manually Startup RCIC System) is NOT in progress. This JPM requires the Main Turbine to be reset. JPM 204 will trip the Main Turbine.
3. Perform/verify the following panel manipulations:
  - Close the Inboard MSIVs.
  - Depressurize equalizing header with BPV jack to ~50 psig.
  - Set pressure set at ~200 psig.
  - Isolate the MSRs, including 1B21-F500A and B.
  - Reset the Main Turbine.
4. Prepare a (blank) working copy of CPS 4411.09, RPV PRESSURE CONTROL SOURCES.
5. When the above steps are completed for this and other JPMs to be run concurrently, then validate the concurrently run JPMs if applicable.
6. This completes the setup for this JPM.
7. Save to a different IC if JPM is being used more than once. IC-194 (PW 91448) is saved for the 2013 ILT NRC Exam.
8. Freeze Simulator.



**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:**

- Inboard Main Steam Isolation Valves opened per CPS No. 4411.09 RPV Pressure Control Sources.

**TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:**

- None

**PROCEDURAL/REFERENCES:**

- CPS No. 4411.09, RPV PRESSURE CONTROL SOURCES, Rev 6
- CPS 3105.04 STEAM BYPASS AND PRESSURE REGULATOR (SB), Rev. 14a

**EVALUATOR INSTRUCTIONS:**

- Amplifying cues are provided within the JPM steps.
- All pre-job briefings are completed.
- Provide the examinee with a copy of the Initial Conditions and Initiating Cue page (back page of the JPM) when providing the initiating cue.
- Do NOT take the simulator out of freeze until the examinee is ready to perform this JPM.

**Clinton Power Station  
Job Performance Measure (JPM)**

**INITIAL CONDITIONS:**

You are the 'B' RO.

The plant was at rated power when a loss of Instrument Air resulted in a scram and closure of the Inboard Main Steam Isolation Valves. EOP-1 was entered and RPV level and pressure were immediately stabilized and then RPV pressure was lowered to ~ 300 psig.

Instrument Air has been recovered.

**INITIATING CUE:**

**CAUTION**

- All pre-job briefings are completed.

To assist in RPV pressure control you are directed to reopen the Inboard Main Steam Isolation Valves per CPS No. 4411.09 RPV Pressure Control Sources.

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**

**4411.09, MAIN STEAM – CONDENSER/BYPASS VALVES/MSL DRAINS, Section 2.2.1**

---

- 2.2.1.1 **IF** This section was entered from EOP-2, EOP-3 or SAG-2,  
**THEN** 1) OK to defeat isolations per CPS 4410.00C007, Defeating RPV Vent Interlocks.  
 2) OK to exceed 100°F/hr cooldown.

Standard: Examinee determines that this step is not applicable due to initial conditions stating EOP-1 was entered.

Cue:

Comments EOP-2, EOP-3 or SAG-2 would not be entered for a normal reactor scram.

SAT  UNSAT  Comment Number \_\_\_\_\_

---

- 2.2.1.2 Reset any cleared GROUP 1 isolations.

Standard: Examinee determines a Group 1 isolation did not occur by verifying the number "1" is not contained in the "ISOLATION COMPLETE" box on the SPDS screen on 1H13-P680, and that there are NO applicable isolation annunciators alarming.

Cue:

Comments

SAT  UNSAT  Comment Number \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

2.2.1.3 Regardless if Circ Water (CW) is available or not:

- 1) Establish vacuum per CPS 3112.01, Condenser Vacuum (CA), or
- 2) If vacuum cannot be established, open 1CA007, Condenser Vacuum Breaker Valve.

Standard: Examinee determines that Condenser vacuum exists by checking Main Condenser vacuum on the Plant Process Computer or the Main Condenser Vacuum paperless recorder on 1H13-P870.

Cue:

Comments

SAT           UNSAT           Comment Number \_\_\_\_\_

**\*2.2.1.4 Verify pressure set at least 15 psig > RPV pressure to prevent inadvertent BPV operation.**

Standard: **Examinee compares Pressure Regulator Setpoint on Main Steam and Pressure Control PPC screen to Reactor Pressure, and then adjusts the pressure regulator setpoint by depressing the Pressure Setpoint Increase pushbutton on 1H13-P680-5006 until pressure setpoint is at least 15 psig > RPV pressure.**

Cue: Adjust the pressure setpoint as needed.

Comments

- The pressure setpoint should be approximately 200 psig for the initial conditions of the JPM.
- The critical step is met if pressure setpoint is adjusted to 15 psig > RPV pressure. If a bypass valve opens later in the JPM due to rising Main Steam Line pressure, the critical step is still considered to be met.

SAT           UNSAT           Comment Number \_\_\_\_\_

**Clinton Power Station  
Job Performance Measure (JPM)**

2.2.1.5 Shut/verify shut:

- 1) 1B21-F022B(D, A, C), Main Steam Line B (D, A, C) Inbd MSIV.
- 2) 1B21-F016, MS Drn & MSIV Byp Inbd Isol Valve.
- 3) 1B21-F019, MS Drn & MSIV Byp Outbd Isol Valve.
- 4) 1B21-F020, MSIV Byp Vlv For MS Line Warm Up.

Standard: Examinee performs the following actions at 1H13-P601-5066 & 5077:

- Verifies 1B21-F022B(D, A, C) shut (Green lights ON & Red lights OFF).
- Shuts 1B21-F016 and F019 by momentarily placing their respective control switches in close and verifying Red lights OFF & Green lights ON.
- Verifies 1B21-F020 shut (Red light OFF & Green light ON).

Cue:

Comments

SAT       UNSAT       Comment Number \_\_\_\_\_

2.2.1.6 Open/verify open:

- 1) 1B21-F098B(D, A, C), Main Steam Shutoff Valves.
- 2) 1B21-F028B(D, A, C), Main Steam Line Outbd MSIVs.

Standard: Examinee verifies 1B21-F098B(D, A, C) and 1B21-F028B(D, A, C) open (Red lights ON & Green lights OFF) at 1H13-P601-5067.

Cue:

Comments

SAT       UNSAT       Comment Number \_\_\_\_\_

**Clinton Power Station  
Job Performance Measure (JPM)**

---

**\*2.2.1.7 Equalize around the Inbd MSIVs (F022s) to establish a  $\Delta P \leq 200$  psid across the MSIVs by opening:**

- 1) 1B21-F016, MS Drn & MSIV Byp Inbd Isol Valve.**
- 2) 1B21-F019, MS Drn & MSIV Byp Outbd Isol Valve.**
- 3) 1B21-F020, MSIV Byp Vlv For MS Line Warm Up.**

Standard:

Examinee:

- Opens 1B21-F016, 1B21-F019 and 1B21-F020 at 1H13-P601-5066 & 5067.
- Monitors equalizing header pressure on the Main Steam and Pressure Control PPC screen on 1H13-P601 (labeled Main Press A and B)

Cue:

Comments

- 1B21-F020 is a throttleable valve. The control switch must be held in the Open position to fully open the valve. The examinee may elect to throttle 1B21-F020 to control the pressurization rate of the Main Steam Lines.
- Opening 1B21-F016 and 19 are only critical tasks if they were closed in step 2.2.1.5.

SAT

UNSAT

Comment Number \_\_\_\_\_

**Clinton Power Station  
Job Performance Measure (JPM)**

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☞ OK to shut following drains to assist in the dP attempt.

- 1B21-F015, MS Low Points Drn Shutoff Valve.
- 1B21-F021, Inbd MSIV Before Seat Warmup Drn Valve.
- 1B21-F033, Inbd MSIV Before Seat Warmup Drn Valve.
- 1B21-F068, Outbd MSIV Before Seat Warmup Drn Vlv.
- 1B21-F069, Outbd MSIV Before Seat Norm Drn Vlv.
- 1B21-F070, MS Low Point Warm Up Drn Vlv.
- 1B21-F071, MS Low Point Normal Drn Vlv.
- 1TD-SV1(3,5,7), Mn Turb Stop Vlv #1(2,3,4) Drn Vlv.

Standard: Examinee shuts the listed drains as needed to achieve an adequate pressurization rate on the Main Steam Lines.

Cue:

Comments The breaker for 1B21-F021 is maintained OFF for MSO. The operator will be unable to operate this valve unless he/she directs an EO to reenergize the valve.

SAT

UNSAT

Comment Number \_\_\_\_\_

**Clinton Power Station  
Job Performance Measure (JPM)**

---

2.2.1.8 Re-verify pressure set at least 15 psig > RPV pressure to prevent inadvertent BPV operation when Inbd F022s open.

Standard: Examinee verifies that pressure setpoint is at least 15 psig > RPV pressure.

Cue: Examinee compares Pressure Regulator Setpoint on Main Steam and Pressure Control PPC screen to Reactor Pressure, and then verifies pressure setpoint is at least 15 psig > RPV pressure.

Comments

- Examinee may have to adjust pressure regulator setpoint by depressing the Pressure Setpoint Increase pushbutton on 1H13-P680-5006 until pressure setpoint is at least 15 psig > RPV pressure.
- Pressure setpoint may be adjusted using CPS 3105.04 section 8.1.6 or performed without reference as a toolbox skill.

SAT

UNSAT

Comment Number \_\_\_\_\_

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**Clinton Power Station  
Job Performance Measure (JPM)**

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**\*2.2.1.9 When < 200 psid dP is achieved, open 1B21-F022B(D, A, C), Main Steam Line B (D, A, C) Inbd MSIVs.**

Standard: Examinee compares any Main Control Room Reactor Pressure against Equalizing Header Pressure (on a PPC screen or Standby Information Panel) to ensure less than 200 psig difference between the two indications.

Examinee then opens the Inboard MSIVs by placing the respective control switch for 1B21-F022B, 1B21-F022D, 1B21-F022A & 1B21-F022C to the AUTO position on 1H13-P601-5066 and verifying the Red light comes ON and the Green light goes OUT.

Cue:

Comments

SAT

UNSAT

Comment Number \_\_\_\_\_

---

**TERMINATING CUES:**

1B21-F022A, B, C, and D Main Steam Line A(B, C, D) Inbd Valves are open.

**STOP TIME:** \_\_\_\_\_



**Clinton Power Station  
Job Performance Measure (JPM)**

**INITIAL CONDITIONS:**

You are the 'B' RO.

The plant was at rated power when a loss of Instrument Air resulted in a scram and closure of the Inboard Main Steam Isolation Valves. EOP-1 was entered and RPV level and pressure were immediately stabilized and then RPV pressure was lowered to ~ 300 psig.

Instrument Air has been recovered.

**INITIATING CUE:**

**CAUTION**

- All pre-job briefings are completed.

To assist in RPV pressure control you are directed to reopen the Inboard Main Steam Isolation Valves per CPS No. 4411.09 RPV Pressure Control Sources.

Report to the CRS after completing the task.

# CLINTON POWER STATION

## Job Performance Measure

Startup CCP in Filtered Mode (d)

JPM Number: JPM518

Revision Number: 00

Date: 06/14/2013

<b>Developed By:</b>	_____	_____
	<b>Instructor</b>	<b>Date</b>
<b>Validated By:</b>	_____	_____
	<b>SME or Instructor</b>	<b>Date</b>
<b>Reviewed By:</b>	_____	_____
	<b>Operations Representative</b>	<b>Date</b>
<b>Approved By:</b>	_____	_____
	<b>Training Department</b>	<b>Date</b>

**Clinton Power Station  
Job Performance Measure (JPM)**

**JOB PERFORMANCE MEASURE VALIDATION CHECKLIST**

**NOTE:** All steps of this checklist should be performed upon initial validation.  
Prior to JPM usage, revalidate JPM using steps 8 and 12 below.

- \_\_\_\_\_ 1. Task description and number, JPM description and number are identified.
- \_\_\_\_\_ 2. Knowledge and Abilities (K/A) references are included.
- \_\_\_\_\_ 3. Performance location specified. (in-plant, control room, simulator, or other)
- \_\_\_\_\_ 4. Initial setup conditions are identified.
- \_\_\_\_\_ 5. Initiating cue (and terminating cue if required) are properly identified.
- \_\_\_\_\_ 6. Task standards identified and verified by SME review.
- \_\_\_\_\_ 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (\*).
- \_\_\_\_\_ 8. Verify the procedure(s) referenced by this JPM reflects the current revision:  
     Procedure \_\_\_\_\_ Rev: \_\_\_\_\_  
     Procedure \_\_\_\_\_ Rev: \_\_\_\_\_  
     Procedure \_\_\_\_\_ Rev: \_\_\_\_\_
- \_\_\_\_\_ 9. Verify cues both verbal and visual are free of conflict.
- \_\_\_\_\_ 10. Verify performance time is accurate
- \_\_\_\_\_ 11. If the JPM cannot be performed as written with proper responses, then revise the JPM.
- \_\_\_\_\_ 12. When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

SME / Instructor	Date
SME / Instructor	Date
SME / Instructor	Date

**Clinton Power Station  
Job Performance Measure (JPM)**

**Revision Record (Summary)**

<b>Revision</b>	<b>Date</b>	<b>Description</b>
00	06/14/13	This JPM was developed new for the ILT 12-1 NRC Exam.

**Clinton Power Station  
Job Performance Measure (JPM)**

**Simulator Setup Instructions**

1. Initialize to any suitable IC with the reactor at power or shutdown. IC-195 (PW 91448) is saved for the 2013 ILT NRC Exam.
2. Verify CCP is operating in unfiltered mode.
3. No simulator lesson plan is required to perform this JPM.
4. When the above steps are completed for this and other JPMs to be run concurrently, then validate the concurrently run JPMs if applicable.
5. This completes the setup for this JPM.
6. Save to a different IC if JPM is being used more than once. IC-195 (PW 91448) is saved for the 2013 ILT NRC Exam.
7. Freeze the Simulator.

**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:**

- Continuous Containment Purge (CCP) System has been placed in Filtered Mode IAW CPS 3408.01 Containment Building/Drywell HVAC (VR, VQ) section 8.1.1.2 Startup Continuous Containment Purge Filtered (Auto).

**TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:**

- None

**PROCEDURAL/REFERENCES:**

- CPS 3408.01 Containment Building/Drywell HVAC (VR, VQ) Rev. 18a

**EVALUATOR INSTRUCTIONS:**

- Amplifying cues are provided within the JPM steps.
- All pre-job briefings are completed.
- Provide the examinee with a copy of the Initial Conditions and Initiating Cue page (back page of the JPM) when providing the initiating cue.



**Clinton Power Station  
Job Performance Measure (JPM)**

**INITIAL CONDITIONS:**

You are an extra RO in the MCR.

A Safety Relief Valve has inadvertently opened. Actions are in progress the reclose the valve.

**INITIATING CUE:**

**CAUTION**

- All pre-job briefings are completed.

The CRS has directed you to shift the Continuous Containment Purge (CCP) System from Unfiltered Mode to Filtered Mode per CPS 3408.01 Containment Building/Drywell HVAC (VR, VQ) section 8.1.1.2 Startup Continuous Containment Purge Filtered (Auto).

RP has been notified that the MCR will be shifting the Containment Ventilation alignment.

An EO is stationed at 0PL39JA to monitor primary to secondary containment differential pressure.

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 3408.01 Containment Building/Drywell HVAC (VR, VQ)**

---

8.1.1.2.1 Check that the Containment Building/Drywell HVAC System is stopped per section 8.1.3 or 8.2.2 of this procedure.

Standard: Examinee refers to section 8.1.3 of CPS 3408.01

Cue: If the examinee asks the CRS which section of 3408.01 to perform to secure the Containment Building/Drywell HVAC System, cue him/her to use section 8.1.3.

Comments

SAT

UNSAT

Comment Number \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

---

**\*8.1.3.1.1 Place the CNMT CONTINUOUS PRG MODE switch in NEUTRAL position and observe realignment of the CCP system.**

Standard: **Examinee locates the CCP Mode switch (joystick on 1H13-P800-5043) and places the joystick in the neutral position (centered).**

Examinee observes the following on 1H13-P800-5043:

- CNMT BLDG SPLY OUTBD ISOL VLV, 1VR006A closes.
- CNMT BLDG SPLY INBD ISOL VLV, 1VR006B closes.
- CNMT BLDG EXH/PRG INBD ISOL VLV, 1VR007B closes.
- CNMT BLDG EXH/PRG OUTBD ISOL VLV, 1VR007A closes.
- HVAC STACK INLET VLV, 1VR010 closes.
- CNMT BLDG SPLY FAN 1VR06CA stops.
- Check that CNMT BLDG OUTSIDE AIR SPLY INLT VLV, 1VR005 close
- CNMT BLDG SPLY FAN ISOL VLV, 1VR004A close.
- CNMT BLDG EXH FAN 1VR07CA stops.
- Check that CNMT BLDG EXH FAN ISOL VLV, 1VR009A closes.

Cue:

- If the examinee reports that annunciator 5043-2A is alarming, acknowledge the report.
- If the examinee reports that annunciator 5042-7C High/Low Diff Pressure Containment Bldg is alarming, acknowledge the report.
- If the examinee reports that CCP Unfiltered has been secured, acknowledge the report.

Comments      The only portion of the step that is critical is placing the mode switch in neutral.

SAT               UNSAT               Comment Number \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

---

8.1.3.1.2 Close 1VQ003 DW PRG CNMT EXH INBD ISOL VLV.

Standard: Examinee locates the control switch for 1VQ003 on 1H13-P800-5042 and turns the switch fully counter clockwise and then verifies the Red light is OFF and the Green light is ON.

Cue:

Comments

SAT           UNSAT           Comment Number \_\_\_\_\_

---

**\*8.1.3.1.3 Place control switches for tripped fans in AFTER-STOP to clear auto-trip annunciators.**

Standard: Examinee locates the control switch for 1VR06CA AND 1VR07CA on 1H13-P800-5043 and turns BOTH switches counter clockwise to the AFTER-STOP position and then verifies the amber lights are OFF for 1VR06CA AND 1VR07CA.

Cue: If the examinee reports that annunciator 5043-2A has reset, acknowledge the report.

Comments This step is critical. If not performed, the CCP System will not automatically start when placing the system in the Filtered Mode.

SAT           UNSAT           Comment Number \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

---

8.1.3.1.4 At CCP local control panel 1PL17J turn the CCP Heating Coil 1VR05A OFF, if energized.

Standard: Examinee either requests an Equipment Operator to turn the Heating Coil OFF, or elects NOT to turn the heating coil off per the note under step 8.1.3.4

Cue: If the examinee requests an Equipment Operator to turn the CCP Heating Coil OFF, inform him/her that 1VR05A is OFF.

Comments

SAT       UNSAT       Comment Number \_\_\_\_\_

---

8.1.1.2.2 Verify no isolation signals are present, or reset per section 8.3.1.

Standard: No action required. No isolation signals are present.

Cue: If the examinee asks for the status of isolation signals, cue him/her that plant conditions are as he/she sees them.

Comments

SAT       UNSAT       Comment Number \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

---

8.1.1.2.3 In accordance with CPS ITS SR 3.6.1.3.1, during MODEs 1, 2, and 3, verify the following VR/VQ valves are closed.

Standard: Examinee locates each of the following valves at 1H13-P800-5042 and verifies they are closed (RED light OFF and Green light ON).

- 1VR001A CNMT BLDG SPLY OUT BD ISOL VLV
- 1VR001B CNMT BLDG SPLY IN BD ISOL VLV
- 1VQ004A CNMT BLDG EXH/PRG OUTBD ISOL VLV
- 1VQ004B CNMT BLDG EXH/PRG INBD ISOL VLV
- 1VR002A CNMT BLDG SPLY OUTBD ISOL BYP VLV
- 1VR002B CNMT BLDG SPLY INBD ISOL BYP VLV
- 1VQ006A CNMT BLDG EXH OUTBD ISOL BYP VLV
- 1VQ006B CNMT BLDG EXH INBD ISOL BYP VLV
- 1VQ002 DW PRG INBD ISL VLV
- 1VQ005 DW HD PRG EXH ISOL VLV

Examinee documents verification in the Auto Log.

Cue: Cue the examinee that another operator will make the ESOMs Auto Log entry.

Comments

SAT       UNSAT       Comment Number \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

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- 8.1.1.2.4 Verify/Place C/S In AUTO after close for the following valves on 1H13-P800-5043:
- 1) CNMT BLDG SPLY OUTBD ISOL VLV, 1VR006A.
  - 2) CNMT BLDG SPLY INBD ISOL VLV, 1VR006B.
  - 3) CNMT BLDG EXH/PRG INBD ISOL VLV, 1VR007B.
  - 4) CNMT BLDG EXH/PRG OUTBD ISOL VLV, 1VR007A.

Standard: Examinee locates each of the following valves at 1H13-P800-5043 and verifies that each control switch is in the Auto after close position (switch is centered in the Auto position with each valve Red indicating light OFF and Green indicating light ON).

- 1) CNMT BLDG SPLY OUTBD ISOL VLV, 1VR006A.
- 2) CNMT BLDG SPLY INBD ISOL VLV, 1VR006B.
- 3) CNMT BLDG EXH/PRG INBD ISOL VLV, 1VR007B.
- 4) CNMT BLDG EXH/PRG OUTBD ISOL VLV, 1VR007A.

Cue:

Comments

SAT           UNSAT           Comment Number \_\_\_\_\_

---

- \*8.1.1.2.5 Place the control switch for 1VQ003 DW PRG CNMT EXH INBD ISOL VLV in the OPEN position.**

- 1) Check that 1VQ003 DW PRG CNMT EXH INBD ISOL VLV fully opens**

Standard: On 1H13-P800-5042, the examinee rotates the control switch for 1VQ003 DW PRG CNMT EXH INBD ISOL VLV clockwise to the OPEN position, and then verifies the Red light ON and the Green light OFF for 1VQ003.

Cue:

Comments          This step is critical only if 1VQ003 was closed in step 8.1.3.1.2.

SAT           UNSAT           Comment Number \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

---

**\*8.1.1.2.6 Place one DW PRG EXH FAN, 0VQ02CA or CB control switch in AUTO position.**

Standard: At 1H13-P800-5042, the examinee places the control switch for DW PRG EXH FAN, 0VQ02CA or CB control switch in AUTO and verifies the Green light comes ON.

Cue: If the examinee asks which fan should be used, direct him/her to use the 'A' fan.

Comments

SAT           UNSAT           Comment Number \_\_\_\_\_

---

**\*8.1.1.2.7 Place 1VQ02Y, DW PRG NORM EXH DMPR, to the OPEN position,**

**1) Verify that 1VQ02Y, DW PRG NORM EXH DMPR, opens.**

Standard: At 1H13-P800-5042, the examinee places the control switch for 1VQ02Y, DW PRG NORM EXH DMPR to the OPEN position and verifies the Red light comes ON and the Green light goes OFF.

Cue:

Comments

SAT           UNSAT           Comment Number \_\_\_\_\_

---



**Clinton Power Station  
Job Performance Measure (JPM)**

---

8.1.1.2.8 Place CNMT BLDG SPLY FAN, 1VR06CA/CB Selector switch to 06CA LEAD or 06CB LEAD.

Standard: At 1H13-P800-5043, the examinee either leaves the selector switch in 06CA LEAD or rotates the switch clockwise to the 06CB LEAD position.

Cue: If the examinee asks which supply fan should be used, direct him/her to use the 'A' fan.

Comments

SAT       UNSAT       Comment Number \_\_\_\_\_

---

8.1.1.2.9 Place CNMT BLDG EXH FAN, 1VR07CA/CB Selector switch to 07CA LEAD or 07CB LEAD.

Standard: At 1H13-P800-5043, the examinee either leaves the selector switch in 07CA LEAD or rotates the switch clockwise to the 07CB LEAD position.

Cue: If the examinee asks which fan should be used, direct him/her to use the 'A' fan.

Comments

SAT       UNSAT       Comment Number \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

---

**\*8.1.1.2.10 Place CNMT CONTINUOUS PRG MODE switch in FILT position.**

Standard: At 1H13-P800-5043, the examinee positions the CNMT CONTINUOUS PRG MODE switch (joystick) in FILT position (to the left).

The examinee observes the following on 1H13-P800-5042 and 5043:

- CNMT BLDG SPLY OUTBD ISOL VLV, 1VR006A opens.
- CNMT BLDG SPLY INBD ISOL VLV, 1VR006B opens.
- CNMT BLDG EXH/PRG INBD ISOL VLV, 1VR007B opens.
- CNMT BLDG EXH/PRG OUTBD ISOL VLV, 1VR007A opens.
- DW PRG TRN INLT VLV, 1VQ020 opens.
- CNMT BLDG EXH FAN, 1VR07CA (1VR07CB) starts.
- CNMT BLDG EXH FAN ISOL VLV, 1VR009A (1VR009B) opens.
- CNMT BLDG SPLY FAN, 1VR06CA (1VR06CB) starts.
- CNMT BLDG OUTSIDE AIR SPLY INLT VLV, 1VR005 opens.
- CNMT BLDG SPLY FAN ISOL VLV, 1VR004A (1VR004B) opens.
- DW PRG TRAIN A(B) ELEC BLAST COIL, 0VQ05AA(AB) energizes.
- DW PRG TRN 01SA (01SB) DMPR, 0VQ24YA (0VQ24YB) opens.
- DW PRG EXH FAN 2CA (2CB) ISOL DMPR, 0VQ07YA (0VQ07YB) opens.
- DW PRG EXH FAN, 0VQ02CA or CB is running.

Cue:

Comments

SAT

UNSAT

Comment Number \_\_\_\_\_

**Clinton Power Station  
Job Performance Measure (JPM)**

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8.1.1.2.11 If outside temperature is less than 65°F, turn on/verify on CCP Heating Coil 1VR05A. (Panel 1PL17J)

Standard: Examinee contacts an Equipment Operator to check outside temperature, and if < 65°F, directs the equipment operator to turn the CCP Heating Coil on.

Cue: If the examinee walks toward the AR/PR LAN terminal to observe outside air temperature, cue him/her that outside temperature is 70°F.

Comments

SAT       UNSAT       Comment Number \_\_\_\_\_

---

8.1.1.2.12 At the CCP local control panel, 1PL17J, start/verify running Transfer Fan 1VR12C.

Standard: Examinee directs an Equipment Operator to start/verify running Transfer Fan 1VR12C.

Cue: Cue the examinee that 1VR12C is running.

Comments

SAT       UNSAT       Comment Number \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

---

8.1.1.2.13 (Local – 0PL39JA) Check that Primary Containment to Secondary Containment differential pressure stabilizes between -0.25 and +0.25 psid (Modes 1, 2, 3).

Standard: Examinee directs an Equipment Operator to check that Primary Containment to Secondary Containment differential pressure stabilizes between -0.25 and +0.25 psid

Cue: Cue the examinee that Primary Containment to Secondary Containment differential pressure has stabilized and is reading 0 psid on 0PL39JA.

Comments

SAT           UNSAT           Comment Number \_\_\_\_\_

---

8.1.1.2.14 Check that Drywell to Primary Containment differential pressure stabilizes between -0.2 and +1.0 psid (Modes 1, 2, 3).

Standard: Examinee checks that Drywell to Primary Containment differential pressure stabilizes between -0.2 and +1.0 psid (Modes 1, 2, 3).

Cue: Cue the examinee that the 'B' RO has checked Drywell to Primary Containment differential pressure has stabilized between -0.2 and +1.0 psid.

Comments This action is performed in the NSPS panels in the MCR and is not available in the simulator.

SAT           UNSAT           Comment Number \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

---

- 8.1.1.2.15 Place control switches for running fans in AFTER-START to clear auto-start annunciators.
- 1) CNMT BLDG SPLY FAN 1VR06CA or 1VR06CB.
  - 2) CNMT BLDG EXH FAN 1VR07CA or 1VR07CB.
  - 3) DW PRG EXH FAN, 0VQ02CA or 0VQ02CB.

Standard: At 1H13-P800-5042 and 5043, for each of the following running fans, the examinee places it's respective control switch in AFTER-START (rotates clockwise and then releases) for:

- 1) CNMT BLDG SPLY FAN 1VR06CA or 1VR06CB.
- 2) CNMT BLDG EXH FAN 1VR07CA or 1VR07CB.
- 3) DW PRG EXH FAN, 0VQ02CA or 0VQ02CB.

Cue: If the examinee reports that annunciator 5043-1G is reset, acknowledge the report.

Comments

SAT                   UNSAT                   Comment Number \_\_\_\_\_

---

**TERMINATING CUES:**

Continuous Containment Purge (CCP) System has been placed in Filtered Mode IAW CPS 3408.01 Containment Building/Drywell HVAC (VR, VQ) section 8.1.1.2 Startup Continuous Containment Purge Filtered (Auto).

**STOP TIME:** \_\_\_\_\_



**Clinton Power Station  
Job Performance Measure (JPM)**

**INITIAL CONDITIONS:**

You are an extra RO in the MCR.

A Safety Relief Valve has inadvertently opened. Actions are in progress the reclose the valve.

**INITIATING CUE:**

**CAUTION**

- All pre-job briefings are completed.

The CRS has directed you to shift the Continuous Containment Purge (CCP) System from Unfiltered Mode to Filtered Mode per CPS 3408.01 Containment Building/Drywell HVAC (VR, VQ) section 8.1.1.2 Startup Continuous Containment Purge Filtered (Auto).

RP has been notified that the MCR will be shifting the Containment Ventilation alignment.

An EO is stationed at 0PL39JA to monitor primary to secondary containment differential pressure.

Report to the CRS after completing the task.

# CLINTON POWER STATION

## Job Performance Measure

Transfer 6900V Bus 1A and 1B From Main To Reserve Source  
(Alternate Path)

JPM Number: JPM521

Revision Number: 00

Date: 6/21/13

<b>Developed By:</b>	_____	_____
	<b>Instructor</b>	<b>Date</b>
<b>Validated By:</b>	_____	_____
	<b>SME or Instructor</b>	<b>Date</b>
<b>Reviewed By:</b>	_____	_____
	<b>Operations Representative</b>	<b>Date</b>
<b>Approved By:</b>	_____	_____
	<b>Training Department</b>	<b>Date</b>



**Clinton Power Station  
Job Performance Measure (JPM)**

**JOB PERFORMANCE MEASURE VALIDATION CHECKLIST**

**NOTE:** All steps of this checklist should be performed upon initial validation.  
Prior to JPM usage, revalidate JPM using steps 8 and 12 below.

- \_\_\_\_\_ 1. Task description and number, JPM description and number are identified.
- \_\_\_\_\_ 2. Knowledge and Abilities (K/A) references are included.
- \_\_\_\_\_ 3. Performance location specified. (in-plant, control room, simulator, or other)
- \_\_\_\_\_ 4. Initial setup conditions are identified.
- \_\_\_\_\_ 5. Initiating cue (and terminating cue if required) are properly identified.
- \_\_\_\_\_ 6. Task standards identified and verified by SME review.
- \_\_\_\_\_ 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (\*).
- \_\_\_\_\_ 8. Verify the procedure(s) referenced by this JPM reflects the current revision:  
 Procedure \_\_\_\_\_ Rev: \_\_\_\_\_  
 Procedure \_\_\_\_\_ Rev: \_\_\_\_\_  
 Procedure \_\_\_\_\_ Rev: \_\_\_\_\_
- \_\_\_\_\_ 9. Verify cues both verbal and visual are free of conflict.
- \_\_\_\_\_ 10. Verify performance time is accurate
- \_\_\_\_\_ 11. If the JPM cannot be performed as written with proper responses, then revise the JPM.
- \_\_\_\_\_ 12. When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

SME / Instructor	Date
SME / Instructor	Date
SME / Instructor	Date

**Clinton Power Station  
Job Performance Measure (JPM)**

**Revision Record (Summary)**

<b>Revision</b>	<b>Date</b>	<b>Description</b>
00	6/21/13	Modified from JPM208 for use in the ILT 12-1 NRC Exam.

**Clinton Power Station  
Job Performance Measure (JPM)**

**Simulator Setup Instructions**

1. Initialize to IC-195 (PW 91448) or any suitable at power IC with 6.9 KV Bus 1A and 1B powered from UAT 1A/1B.
2. Open and execute Simulator Lesson Plan JPM521 which will perform the following:
  - Override 6.9 KV Bus 1B synch switch to off (prevents the reserve feed breaker from closing during the transfer operation).
  - Override the Running and Incoming Voltage Meters on 1H13-P870-5010 to simulate normal response of the synch switch.
  - Insert an overcurrent trip on 6.9 KV Bus 1B if the synch switch is not turned off before the 6.9 KV Bus reserve feed breaker control switch is released.
3. When the above steps are completed for this and other JPMs to be run concurrently, then validate the concurrently run JPMs if applicable.
4. Make sure keys are removed from 6.9 KV Bus 1A/1B sync switches.
5. This completes the setup for this JPM.
6. Save to a different IC if JPM is being used more than once. IC-195 (PW 91448) is saved for the 2013 ILT NRC Exam.
7. Freeze Simulator.

**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 examinee will recognize the failure of the 6.9 KV Bus 1B Reserve Feed Breaker to close and will place the sync switch in OFF prior to releasing the reserve feed breaker control switch to Auto After Close position.

**TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:**

- None

**PROCEDURAL/REFERENCES:**

- CPS No. 3501.01, High Voltage Auxiliary Power System Rev 28

**EVALUATOR INSTRUCTIONS:**

- Amplifying cues are provided within the JPM steps.
- All pre-job briefings are completed.

**Clinton Power Station  
Job Performance Measure (JPM)**

**INITIAL CONDITIONS:**

**The plant is in a normal full power lineup. Electrical Maintenance is scheduled to perform routine preventative maintenance on the Main Feed Breakers for 6.9 KV Buses 1A and 1B.**

**INITIATING CUE:**

**CAUTION**

- All pre-job briefings are completed.

The CRS has directed you to transfer 6.9 KV Bus 1A and 1B FROM Main Source TO Reserve Source in accordance with CPS 3501.01 High Voltage Auxiliary Power Section 8.1.8 Transferring a 6900V or 4160V Bus TO or FROM its Reserve {Main} Source.

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 3501.01 High Voltage Auxiliary Power – 6900 V Bus 1A**

---

**\*8.1.8.2 Place the 6.9 KV Bus 1A Res Bkr Sync keylock switch to the ON position.**

Standard: Examinee locates the 6900V Bus 1A Res Bkr Sync keylock switch on 1H13-P870-5011, inserts a key into the switch, and then rotates the key clockwise to the ON position.

Cue:

Comments

- Step 8.1.8.1 is NA.
- If the examinee attempts to transfer 6.9 KV Bus 1B before transferring 6.9 KV Bus 1A, cue him/her to transfer 6.9 KV Bus 1A first.

SAT           UNSAT           Comment Number \_\_\_\_\_

---

**8.1.8.4 Verify the synchroscope is steady at ~ the 12 o'clock position.**

Standard: Examinee locates the synchroscope on 1H13-P870-5010 and verifies the synchroscope needle is steady at ~ the 12 o'clock position.

Cue:

Comments Step 8.1.8.3 is NA.

SAT           UNSAT           Comment Number \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

---

**\*8.1.8.5 Close the Bus Res Bkr, and prior to releasing the switch to the AUTO position, verify:**

- **Closed indication on the SOURCE breaker, and**
- **A load shift is indicated on the bus load meters.**

Standard:

- Examinee locates the 6900V Bus 1A Res Bkr control switch on 1H13-P870-5011, rotates the switch clockwise to the close position, and then verifies:
  - Red light ON and green light OFF above the 6.9 KV Bus 1A reserve feed breaker control switch,
  - Bus 1RT6 FDR to 6900V Bus 1A Current and Watt Meters on the vertical section of 1H13-P870-5011 rise.
  - UAT 1A FDR to 6900V Bus 1A Current and Watt Meters on the vertical section of 1H13-P870-5011 lower.
- Examinee releases the 6900V Bus 1A Res Bkr control switch on 1H13-P870-5011 to the auto position and observes that the 6900V Bus 1A Main Breaker trips (green and amber lights lit).

Cue:

- If the examinee requests status of computer points AP-BA501 thru AP-BA520, AP-BA536, AP-BA541, and AP-BA542, cue him/her that the computer points are consistent with the load meter indications on 1H13-P870.
- If the examinee reports receipt of expected annunciator 5011-1C Auto Trip Breaker, acknowledge the report.

Comments

Ensure the examinee does not hold the control switch for the 6.9 KV Bus 1A Reserve Feed Breaker in close longer than 5 seconds.

SAT

UNSAT

Comment Number \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

---

8.1.8.6 Place Handswitch for the tripped breaker to OPEN, and match the Flag with the indication on the tripped breaker in order to clear the AUTO TRIP Annunciator.

Standard: Examinee locates the 6900V Bus 1A Mn Bkr control switch on 1H13-P870-5011, and rotates the control switch counter-clockwise to the Trip position.

Cue: If the examinee reports annunciator 5011-1C reset, acknowledge the report.

Comments

SAT                   UNSAT                   Comment Number \_\_\_\_\_

---

**\*8.1.8.7 Place the Bus Res Bkr Sync keylock switch to OFF.**

Standard: Examinee locates the 6900V Bus 1A Res Bkr Sync keylock switch on 1H13-P870-5011, and then rotates the key counter-clockwise to the OFF position.

Cue: If the examinee reports that 6900V Bus 1A has been transferred to it's reserve source, acknowledge the report.

Comments Per CPS 3501.01 precaution 4.1, when operating the Auxiliary Power System, the operator must ensure that only one Sync Selector Switch per Synchroscope is placed ON at a time. Failure to do this can result in equipment damage.

SAT                   UNSAT                   Comment Number \_\_\_\_\_

---



**Clinton Power Station  
Job Performance Measure (JPM)**

---

8.1.8.8 Notify CMO Group to perform thermography on Circuit Switcher 4538 (RATs) & B018 (ERAT) if transformer assumed any significant loading.

Standard: Examinee notifies the CRS or CMO Group to perform thermography on Circuit Switcher 4538.

Cue: As the CRS cue the examinee that the CRS will notify the CMO group after bus transfer operations are complete.

Comments

SAT           UNSAT           Comment Number \_\_\_\_\_

---

**CPS 3501.01 High Voltage Auxiliary Power – 6900 V Bus 1B**

---

**\*8.1.8.2 Place the 6.9 KV Bus 1B Res Bkr Sync keylock switch to the ON position.**

Standard: Examinee locates the 6900V Bus 1B Res Bkr Sync keylock switch on 1H13-P870-5011, inserts a key into the switch, and then rotates the key clockwise to the ON position.

Cue:

Comments          • Step 8.1.8.1 is NA.

SAT           UNSAT           Comment Number \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

---

8.1.8.4 Verify the synchroscope is steady at ~ the 12 o'clock position.

Standard: Examinee locates the synchroscope on 1H13-P870-5010 and verifies the synchroscope needle is steady at ~ the 12 o'clock position.

Cue:

Comments Step 8.1.8.3 is NA.

SAT

UNSAT

Comment Number \_\_\_\_\_

---

**Begin Alternate Path**

**Clinton Power Station  
Job Performance Measure (JPM)**

---

- \*8.1.8.5 Close the 6900V Bus Res Bkr, and prior to releasing the switch to the AUTO position, verify:**
- Closed indication on the SOURCE breaker, and
  - A load shift is indicated on the bus load meters.

**IF SOURCE breaker failed to close, OR A bus load shift is not indicated on the bus,**

**THEN Place the sync switch to OFF prior to releasing the switch to the AUTO position (this prevents the auto trip of the load breaker and the resulting loss of the bus).**

Standard:

The examinee:

- locates the 6900V Bus 1B Res Bkr control switch on 1H13-P870-5011, rotates the switch clockwise to the close position, and then recognizes the failure of the breaker to close.
- places the reserve feed breaker sync switch to OFF prior to releasing the reserve feed breaker control switch to Auto.
- releases the 6900V Bus 1B Res Bkr control switch on 1H13-P870-5011 to the Auto position.

Cue:

- If the examinee requests status of computer points AP-BA501 thru AP-BA520, AP-BA536, AP-BA541, and AP-BA542, cue him/her that the computer points are consistent with the load meter indications on 1H13-P870.
- If the examinee reports failure of the 6.9KV Bus 1B reserve feed breaker to close, acknowledge the report.
- If the examinee reports receipt of annunciator 5011-1C, Auto Trip Breaker, acknowledge report.

Comments

If the examinee fails to turn the sync switch to OFF prior to releasing the reserve feed breaker control switch, 6900V Bus 1B will trip on overcurrent.

SAT

UNSAT

Comment Number \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

**TERMINATING CUES:**

6.9 KV Bus 1A has been transferred to its reserve feed source. 6.9 KV Bus 1B is either deenergized or energized from UAT 1B IAW CPS No. 3501.01 High Voltage Auxiliary Power.

**STOP TIME:** \_\_\_\_\_



**Clinton Power Station  
Job Performance Measure (JPM)**

**INITIAL CONDITIONS:**

**The plant is in a normal full power lineup. Electrical Maintenance is scheduled to perform routine preventative maintenance on the Main Feed Breakers for 6.9 KV Buses 1A and 1B.**

**INITIATING CUE:**

**CAUTION**

- All pre-job briefings are completed.

The CRS has directed you to transfer 6.9 KV Bus 1A and 1B FROM Main Source TO Reserve Source in accordance with CPS 3501.01 High Voltage Auxiliary Power Section 8.1.8 Transferring a 6900V or 4160V Bus TO or FROM its Reserve {Main} Source.

Report to the CRS after completing the task.

**Clinton Power Station  
Job Performance Measure (JPM)**

**CLINTON POWER STATION  
Job Performance Measure**

Perform a Manual Scram Functional/SDV Hi Level Bypass Test

JPM Number: JPM519

Revision Number: 00

Date: 06/14/2013

<b>Developed By:</b>	_____	_____
	<b>Instructor</b>	<b>Date</b>
<b>Validated By:</b>	_____	_____
	<b>SME or Instructor</b>	<b>Date</b>
<b>Reviewed By:</b>	_____	_____
	<b>Operations Representative</b>	<b>Date</b>
<b>Approved By:</b>	_____	_____
	<b>Training Department</b>	<b>Date</b>

**Clinton Power Station  
Job Performance Measure (JPM)**

**JOB PERFORMANCE MEASURE VALIDATION CHECKLIST**

**NOTE:** All steps of this checklist should be performed upon initial validation.  
Prior to JPM usage, revalidate JPM using steps 8 and 12 below.

- \_\_\_\_\_ 1. Task description and number, JPM description and number are identified.
- \_\_\_\_\_ 2. Knowledge and Abilities (K/A) references are included.
- \_\_\_\_\_ 3. Performance location specified. (in-plant, control room, simulator, or other)
- \_\_\_\_\_ 4. Initial setup conditions are identified.
- \_\_\_\_\_ 5. Initiating cue (and terminating cue if required) are properly identified.
- \_\_\_\_\_ 6. Task standards identified and verified by SME review.
- \_\_\_\_\_ 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (\*).
- \_\_\_\_\_ 8. Verify the procedure(s) referenced by this JPM reflects the current revision:  
 Procedure \_\_\_\_\_ Rev: \_\_\_\_\_  
 Procedure \_\_\_\_\_ Rev: \_\_\_\_\_  
 Procedure \_\_\_\_\_ Rev: \_\_\_\_\_
- \_\_\_\_\_ 9. Verify cues both verbal and visual are free of conflict.
- \_\_\_\_\_ 10. Verify performance time is accurate
- \_\_\_\_\_ 11. If the JPM cannot be performed as written with proper responses, then revise the JPM.
- \_\_\_\_\_ 12. When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

SME / Instructor	Date
SME / Instructor	Date
SME / Instructor	Date



**Clinton Power Station  
Job Performance Measure (JPM)**

**Revision Record (Summary)**

Revision	Date	Description
00	06/14/13	This JPM was developed new for the ILT 12-1 NRC Exam.

**Clinton Power Station  
Job Performance Measure (JPM)**

**Simulator Setup Instructions**

1. Initialize to any suitable IC at power.
2. Print an Initial OD-7 Rod Positions report to provide to the examinee during step 8.1.21.
3. Prepare a working copy of CPS 9031.16 marked up as follows:
  - Page 3, initial as SMngt
  - Page 4:
    - Step 5.2, initial that no other testing is in progress on RPS
    - Step 5.3, Date/Time and sign as SMgnt (Permission to perform test).
    - Step 5.4, Obtain an OD-7 and initial this step
    - Step 5.5, Remove Transient Test Scram Channels 286-289 from Sentinel Trip/Alarm per CPS 3512.02 and initial this step
    - Step 5.6, Verify 8 Scram Solenoids status lights are lit, then initial as performed and verified.
    - Initial steps 8.1.1, 8.1.2, and 8.1.3 as completed.
4. When the above steps are completed for this and other JPMs to be run concurrently, then validate the concurrently run JPMs if applicable.
5. This completes the setup for this JPM.
6. Save to a different IC if JPM is being used more than once. IC-195 is saved for the 2013 ILT NRC Exam (password is 91448)
7. Freeze Simulator.

**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:**

- CPS 9031.16, Manual Scram Functional / SDV Hi Level Bypass Test

**PROCEDURAL/REFERENCES:**

- CPS 9031.16, Manual Scram Functional / SDV Hi Level Bypass Test, Rev. 30

**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.

The HWC Scram Bypass Switch, 1P73S001, has been placed in BYPASS on 1H13-P640.

The ‘B’ RO has responsibility for restoring the HWC Scram Bypass switch if necessary.

**INITIATING CUE:**

**CAUTION**

- All pre-job briefings are completed.

Perform CPS 9031.16, Manual Scram Functional / SDV Hi Level Bypass Test for Division 1, beginning at Step 8.1.4.

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 Functional / SDV Hi Level Bypass Test  
Division 1 Manual Scram Functional Test**

---

**\*8.1.4 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 \_\_\_\_\_

---

**8.1.5 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 \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

---

**\*8.1.6 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 expected annunciators 5004-1A and 1E, acknowledge the report.

Comments

SAT                   UNSAT                   Comment Number \_\_\_\_\_

---

- 8.1.7 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 \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

---

8.1.8 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 (10 seconds after the Div 1 Manual Scram pushbutton was released).

Cue:

Comments

SAT                   UNSAT                   Comment Number \_\_\_\_\_

---

---

8.1.9 Verify following annunciators alarming.  
1. DIV 1 HALF SCRAM IA, IIB, IIIB, IVA [5004-1A]  
2. DIV 1 MANUAL SCRAM TRIP [5004-1E]

Standard: At 1H13-P680-5004, the examinee verifies Annunciators 5004-1A and 5004-1E in alarm.

Cue:

Comments

SAT                   UNSAT                   Comment Number \_\_\_\_\_

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**Clinton Power Station  
Job Performance Measure (JPM)**

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- 8.1.10 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 \_\_\_\_\_

---

- 8.1.11 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 \_\_\_\_\_

---

**\*8.1.12 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 5004-1A and 1E are reset, acknowledge the examinee.

Comments

SAT                   UNSAT                   Comment Number \_\_\_\_\_

---



**Clinton Power Station  
Job Performance Measure (JPM)**

---

8.1.13 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 \_\_\_\_\_

---

8.1.14 Verify following annunciators reset.  
1. DIV 1 HALF SCRAM IA, IIB, IIIB, IVA [5004-1A]  
2. DIV 1 MANUAL SCRAM TRIP [5004-1E]

Standard: At 1H13-P680-5004, the examinee verifies annunciators 5004-1A and 5004-1E are reset.

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

Comments

SAT       UNSAT       Comment Number \_\_\_\_\_

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**Clinton Power Station  
Job Performance Measure (JPM)**

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- 8.1.15 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 \_\_\_\_\_

---

- 8.1.16 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 \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

---

8.1.17 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 \_\_\_\_\_

---

8.1.18 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 \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

---

8.1.19 Place HWC Scram Bypass Switch, 1P73S001, in NORMAL (MCR – H13-P640)

Standard: Examinee contacts ‘B’ RO to place the HWC Scram Bypass Switch, 1P73S001, in NORMAL.

Cue: Cue the examinee that the HWC Scram Bypass Switch, 1P73S001, has been placed in NORMAL.

Comments

SAT           UNSAT           Comment Number \_\_\_\_\_

---

8.1.20 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 \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

8.1.21 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 \_\_\_\_\_

8.1.22 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 \_\_\_\_\_

**Clinton Power Station  
Job Performance Measure (JPM)**

**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 (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.

The HWC Scram Bypass Switch, 1P73S001, has been placed in BYPASS on 1H13-P640.

The 'B' RO has responsibility for restoring the HWC Scram Bypass switch if necessary.

**INITIATING CUE:**

**CAUTION**

- All pre-job briefings are completed.

Perform CPS 9031.16, Manual Scram Functional / SDV Hi Level Bypass Test for Division 1, beginning at Step 8.1.4.

Report to the CRS after completing the task.



# CLINTON POWER STATION

## Job Performance Measure

Restore ADS Air Supply To Normal Source (Alternate Path)

JPM Number: JPM427

Revision Number: 01

Date: 06/14/2013

<b>Developed By:</b>	_____	_____
	<b>Instructor</b>	<b>Date</b>
<b>Validated By:</b>	_____	_____
	<b>SME or Instructor</b>	<b>Date</b>
<b>Reviewed By:</b>	_____	_____
	<b>Operations Representative</b>	<b>Date</b>
<b>Approved By:</b>	_____	_____
	<b>Training Department</b>	<b>Date</b>

**Clinton Power Station  
Job Performance Measure (JPM)**

**JOB PERFORMANCE MEASURE VALIDATION CHECKLIST**

**NOTE:** All steps of this checklist should be performed upon initial validation.  
Prior to JPM usage, revalidate JPM using steps 8 and 12 below.

- \_\_\_\_\_ 1. Task description and number, JPM description and number are identified.
- \_\_\_\_\_ 2. Knowledge and Abilities (K/A) references are included.
- \_\_\_\_\_ 3. Performance location specified. (in-plant, control room, simulator, or other)
- \_\_\_\_\_ 4. Initial setup conditions are identified.
- \_\_\_\_\_ 5. Initiating cue (and terminating cue if required) are properly identified.
- \_\_\_\_\_ 6. Task standards identified and verified by SME review.
- \_\_\_\_\_ 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (\*).
- \_\_\_\_\_ 8. Verify the procedure(s) referenced by this JPM reflects the current revision:  
Procedure \_\_\_\_\_ Rev: \_\_\_\_\_  
Procedure \_\_\_\_\_ Rev: \_\_\_\_\_  
Procedure \_\_\_\_\_ Rev: \_\_\_\_\_
- \_\_\_\_\_ 9. Verify cues both verbal and visual are free of conflict.
- \_\_\_\_\_ 10. Verify performance time is accurate
- \_\_\_\_\_ 11. If the JPM cannot be performed as written with proper responses, then revise the JPM.
- \_\_\_\_\_ 12. When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

_____	SME / Instructor	_____	Date
_____	SME / Instructor	_____	Date
_____	SME / Instructor	_____	Date

**Clinton Power Station  
Job Performance Measure (JPM)**

**Revision Record (Summary)**

<b>Revision</b>	<b>Date</b>	<b>Description</b>
00	07/28/10	Update Procedure Revs, KAs and JPM number (31010107LSN02)
01	06/14/13	Updated to new template

**Clinton Power Station  
Job Performance Measure (JPM)**

**Simulator Setup Instructions**

1. Initialize to any suitable shutdown IC: IC-195 (PW 91448) was saved for ILT 12-1 NRC Exam.
2. Place ADS Backup Air Bottles in service with 1IA012A & 13A open, and 1IA012B & 13B shut IAW 3101.01 Steps 8.2.4.1 through 8.2.4.3.
3. Open and execute Simulator Lesson Plan JPM427 which will insert the following instructor overrides and malfunctions:
  - Fail 1PI-IA079 to 125 psig (0.5) on a 2 minute ramp when 1IA013A is shut.
  - Fail 1PI-IA078 to 125 psig (0.5) on a 2 minute ramp when 1IA012A is shut.
  - Delete the 1PI-IA079 (P601) instructor override when 1IA013A is reopened.
  - Delete the 1PI-IA078 (P601) instructor override when 1IA012A is reopened.
  - Bring in Annunciator 5040-6F when either 1PI-IA079 or 1PI-IA078 less than 150 psig (0.6).
  - Clear Annunciator 5040-6F when both 1IA013A and 1IA012A open.
4. Prepare a (blank) administration copy of CPS 3101.01 MAIN STEAM (MS, IS & ADS) for candidate place-keeping.
5. When the above steps are completed for this and other JPMs to be run concurrently, then validate the concurrently run JPMs if applicable.
6. This completes the setup for this JPM.
7. Save to a different IC if JPM is being used more than once. IC-195 (PW 91448) is saved for the 2013 ILT NRC Exam.
8. Freeze Simulator.

**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:**

- ADS Backup Air Bottles are on service IAW CPS No. 3101.01 MAIN STEAM (MS, IS & ADS)

**TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:**

- None

**PROCEDURAL/REFERENCES:**

- CPS No. 3101.01, Rev 22, MAIN STEAM (MS, IS & ADS)

**EVALUATOR INSTRUCTIONS:**

- Amplifying cues are provided within the JPM steps.
- All pre-job briefings are completed.
- Provide the examinee with a copy of the Initial Conditions and Initiating Cue page (back page of the JPM) when providing the initiating cue.

**Clinton Power Station  
Job Performance Measure (JPM)**

**INITIAL CONDITIONS:**

You are the 'B' RO.

Due to a loss of IA, the ADS backup air bottles were placed in service.

**INITIATING CUE:**

**CAUTION**

- All pre-job briefings are completed.

Instrument Air has been restored.

Return ADS to the normal air supply per 3101.01 Main Steam (MS, IS & ADS) step 8.2.4.5.

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 No. 3101.01 MAIN STEAM (MS, IS & ADS)**

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**\*8.2.4.5.1 Place Control Switches for 1IA012A AND 1IA013A, ADS IA CNMT Outbd Isol Vlv to CLOSE.**

Standard:

At 1H13-P800-5041, examinee:

- locates the control switch for 1IA012A and rotates the switch counter clockwise to the CLOSE position and then verifies the Green light comes ON and the Red light goes OFF.
- locates the control switch for 1IA013A and rotates the switch counter clockwise to the CLOSE position and then verifies the Green light comes ON and the Red light goes OFF.

Cue:

Comments

SAT

UNSAT

Comment Number \_\_\_\_\_

**Clinton Power Station  
Job Performance Measure (JPM)**

---

**\*8.2.4.5.2 Place Control Switches for 1IA012B AND 1IA013B, ADS IA CNMT Inbd Isol Vlv to OPEN.**

Standard:

At 1H13-P800-5041, examinee:

- locates the control switch for 1IA012B and rotates the switch clockwise to the OPEN position and then verifies the Red light comes ON and the Green light goes OFF.
- locates the control switch for 1IA013B and rotates the switch clockwise to the OPEN position and then verifies the Red light comes ON and the Green light goes OFF.

Cue:

Comments

SAT

UNSAT

Comment Number \_\_\_\_\_

---

**8.2.4.5.3 Return Control Switches for 1IA012A AND 1IA013A to AUTO.**

Standard:

At 1H13-P800-5041, examinee:

- Locates the control switch for 1IA012A and rotates the switch clockwise to the AUTO position.
- Locates the control switch for 1IA013A and rotates the switch clockwise to the AUTO position.

Cue:

Comments

No valve movement will occur when the 1IA012A and 13A control switches are restored to AUTO.

SAT

UNSAT

Comment Number \_\_\_\_\_

---



**Clinton Power Station  
Job Performance Measure (JPM)**

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8.2.4.5.4 Verify ADS Air Hdr Pressure on 1H13-P601 (1PI-IA078 / 79) is 160 – 170 psig.

Standard: Locates 1PI-IA078 / 79 on 1H13-P601-5067 and determines air pressure is less than 160 psig.

Cue:

Comments

SAT           UNSAT           Comment Number \_\_\_\_\_

---

**ALTERNATE PATH BEGINS HERE**

**Annunciator 5040-6F High/Low Press ADS IA Supply Div 1 or 2.**

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Alternate Path    Responds to Annunciator 5040-6F High/Low Press ADS IA Supply Div 1 or 2.  
Step 1

OPERATOR ACTIONS

4. As appropriate, shift to ‘ADS Backup Air Bottles’ or ‘Normal IA’

Standard:          Examinee refers to Annunciator Response Procedure 5040-6F and determines that Operator Action 4 applies.

Cue:

- If the examinee reports receipt of annunciator 5040-6F, acknowledge the report.
- Once the examinee recommends shifting back to the ADS Backup Air Bottles, cue him/her to shift back to the ADS Backup Air Bottles.
- If the examinee requests an Equipment Operator to check the operation of the ADS Air Amplifiers, cue him/her, “Outlet pressure is at 125 psig and no further regulator adjustments can be made.”

Comments

SAT           UNSAT           Comment Number \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

**CPS No. 3101.01 MAIN STEAM (MS, IS & ADS)**

---

**\* Alternate Path Step 2**    **Shut 1IA012B, ADS IA CNMT Inbd Isol Vlv. Verify 1IA012A, ADS IA CNMT Outbd Isol Vlv opens.**  
**\*8.2.4.1**

- Standard:
- **Examinee locates the control switch for 1IA012B ADS IA CNMT Inbd Isol Vlv on 1H13-P800-5041, rotates the switch counter clockwise and then verifies the Green light comes ON and the Red light goes OFF.**
  - Examinee locates the control switch for 1IA012A and verifies the Red light comes ON and the Green light goes OFF.

Cue:

Comments            Closing 1IA012B is the only portion of the step that is critical.

SAT               UNSAT               Comment Number \_\_\_\_\_

---

**\* Alternate Path Step 3**    **Shut 1IA013B, ADS IA CNMT Inbd Isol Vlv. Verify 1IA013A, ADS IA CNMT Outbd Isol Vlv opens.**  
**8.2.4.2**

- Standard:
- **Examinee locates the control switch for 1IA013B ADS IA CNMT Inbd Isol Vlv on 1H13-P800-5041, rotates the switch counter clockwise and then verifies the Green light comes ON and the Red light goes OFF.**
  - Examinee locates the control switch for 1IA013A and verifies the Red light comes ON and the Green light goes OFF.

Cue:

Comments            Closing 1IA013B is the only portion of the step that is critical.

SAT               UNSAT               Comment Number \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

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JPM Step 8    Verify (1H13-P601, 5067):

- 8.2.4.3        ○ ADS Instrument Air Hdr Pressure, 1PI-IA078/79 > 147.5 psig.  
                  ○ ADS Backup Air Hdr Pressure, 1PI-IA080/81 > 2300 psig.

- Standard:
- Examinee locates 1PI-IA078 / 79 on 1H13-P601-5067 and determines Instrument Air Header Pressure is > 147.5 psig.
  - Examinee locates 1PI-IA080 / 81 on 1H13-P601-5067 and determines Backup Air Header Pressure is > 2300 psig.

Cue:            If the examinee reports that the ADS Backup Air Bottles have been placed on service, acknowledge the report.

Comments

SAT               UNSAT               Comment Number \_\_\_\_\_

---

**TERMINATING CUES:**

ADS Backup Air Bottles have been placed in service IAW CPS No. 3101.01 Main Steam (MS, IS, & ADS) section 8.2.4 Placing ADS Backup Air Bottles On Service.

**STOP TIME:** \_\_\_\_\_

Clinton Power Station
Job Performance Measure (JPM)

Operator's Name: \_\_\_\_\_

Job Title: [ ] EO [ ] RO [ ] SRO [ ] STA [ ] SRO Cert

JPM Title: Restore ADS Air Supply To Normal Source

JPM Number: JPM427 Revision Number: 01

Task Number and Title: 310101.08 Complete control room actions to perform placing ADS backup air bottles in service.

Table with 4 columns: K/A System, K/A Number, Importance (RO/SRO). Row 1: 300000, A4.01, 2.6, 2.7. Below table: Ability to manually operate and/or monitor in the control room: Pressure gauges

Suggested Testing Environment: Simulator

Actual Testing Environment: [x] Simulator [ ] Plant [ ] Control Room

Testing Method: [ ] Simulate [x] Perform Alternate Path: [x] Yes [ ] No SRO Only: [ ] Yes [x] No

Time Critical: [ ] Yes [x] No

Estimated Time to Complete: 15 minutes Actual Time Used: \_\_\_\_\_ minutes

References: CPS No. 3101.01, Rev 22 MAIN STEAM (MS, IS & ADS) Annunciator HIGH/LOW PRESS ADS IA SUPPLY DIV 1 OR 2, Rev. 28b

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? [ ] Yes [ ] No

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

Comments: \_\_\_\_\_

Evaluator's Name: \_\_\_\_\_ (Print)

Evaluator's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Clinton Power Station  
Job Performance Measure (JPM)**

**INITIAL CONDITIONS:**

You are the 'B' RO.

Due to a loss of IA, the ADS backup air bottles were placed in service.

**INITIATING CUE:**

**CAUTION**

- All pre-job briefings are completed.

Instrument Air has been restored.

Return ADS to the normal air supply per 3101.01 Main Steam (MS, IS & ADS) step 8.2.4.5.

Report to the CRS after completing the task.

# CLINTON POWER STATION

## Job Performance Measure

Verify Group 15 Automatic Isolation (Alternate Path)

JPM Number: JPM520 (h)

Revision Number: 00

Date: 06/14/2013

<b>Developed By:</b>	_____	_____
	<b>Instructor</b>	<b>Date</b>
<b>Validated By:</b>	_____	_____
	<b>SME or Instructor</b>	<b>Date</b>
<b>Reviewed By:</b>	_____	_____
	<b>Operations Representative</b>	<b>Date</b>
<b>Approved By:</b>	_____	_____
	<b>Training Department</b>	<b>Date</b>

**Clinton Power Station  
Job Performance Measure (JPM)**

**JOB PERFORMANCE MEASURE VALIDATION CHECKLIST**

**NOTE:** All steps of this checklist should be performed upon initial validation.  
Prior to JPM usage, revalidate JPM using steps 8 and 12 below.

- \_\_\_\_\_ 1. Task description and number, JPM description and number are identified.
- \_\_\_\_\_ 2. Knowledge and Abilities (K/A) references are included.
- \_\_\_\_\_ 3. Performance location specified. (in-plant, control room, simulator, or other)
- \_\_\_\_\_ 4. Initial setup conditions are identified.
- \_\_\_\_\_ 5. Initiating cue (and terminating cue if required) are properly identified.
- \_\_\_\_\_ 6. Task standards identified and verified by SME review.
- \_\_\_\_\_ 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (\*).
- \_\_\_\_\_ 8. Verify the procedure(s) referenced by this JPM reflects the current revision:  
Procedure \_\_\_\_\_ Rev: \_\_\_\_\_  
Procedure \_\_\_\_\_ Rev: \_\_\_\_\_  
Procedure \_\_\_\_\_ Rev: \_\_\_\_\_
- \_\_\_\_\_ 9. Verify cues both verbal and visual are free of conflict.
- \_\_\_\_\_ 10. Verify performance time is accurate
- \_\_\_\_\_ 11. If the JPM cannot be performed as written with proper responses, then revise the JPM.
- \_\_\_\_\_ 12. When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

_____	SME / Instructor	_____	Date
_____	SME / Instructor	_____	Date
_____	SME / Instructor	_____	Date

**Clinton Power Station  
Job Performance Measure (JPM)**

**Revision Record (Summary)**

<b>Revision</b>	<b>Date</b>	<b>Description</b>
00	06/14/13	This JPM was developed new for the ILT 12-1 NRC Exam.



**Clinton Power Station  
Job Performance Measure (JPM)**

**Simulator Setup Instructions**

1. Initialize to IC-194 (PW 91448) or any suitable IC with the reactor shutdown.
2. Open and execute simulator lesson plan JPM520 which will cause the following to occur:
  - 1CC057, 1RE020, and 1RF020 to indicate open.
  - 1CC057, 1RE020, and 1RF020 to go close when their associated handswitch is taken to the close position.
3. Verify the below listed valves in the listed positions with their respective control switches in Auto/Open.
  - a. 1CC057 CCW Sply To NRHX Inbd Isol Vlv – open
  - b. 1CC128 CCW Rtrn From NRHX Inbd Isol Vlv – shut
  - c. 1FP078 FP Drywell Outbd Isol Vlv – shut and deenergized
  - d. 1FP079 FP Drywell Inbd Isol Vlv – shut and deenergized
  - e. 0RA029 DW RA Inbd Isol – shut
  - f. 0RA028 DW RA Outbd Isol – shut
  - g. 1SA031 DW SA Outbd Isol Vlv – shut
  - h. 1SA032 DW SA Inbd Isol Vlv – shut
  - i. 1RE020 DW Eq Drain Sump Disch Outbd Vlv – open
  - j. 1RE019 DW Eq Drain Sump Disch Inbd Vlv – shut
  - k. 1RF020 DW Flr Drain Sump Disch Outbd Vlv – open
  - l. 1RF019 DW Flr Drain Sump Disch Inbd Vlv – shut
  - m. 1CY020 CY DW Outbd Isol Vlv – shut and deenergized
  - n. 1CY021 CY DW Inbd Isol Vlv – shut and deenergized
4. When the above steps are completed for this and other JPMs to be run concurrently, then validate the concurrently run JPMs if applicable.
5. This completes the setup for this JPM.
6. Save to a different IC if JPM is being used more than once. IC-194 (PW91448) is saved for the 2013 ILT NRC Exam.
7. Freeze Simulator.

**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:**

- A Group 15 isolation has been completed in accordance with CPS 4001.02C001 Automatic Isolation Checklist.

**TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:**

- None

**PROCEDURAL/REFERENCES:**

- CPS 4001.02 Automatic Isolation
- CPS 4001.02C001 Automatic Isolation Checklist

**EVALUATOR INSTRUCTIONS:**

- Amplifying cues are provided within the JPM steps.
- All pre-job briefings are completed.
- Provide the examinee with a copy of the Initial Conditions and Initiating Cue page (back page of the JPM) when providing the initiating cue.

**Clinton Power Station  
Job Performance Measure (JPM)**

**INITIAL CONDITIONS:**

You are the 'B' RO.

A LOCA has occurred in the Drywell.

**INITIATING CUE:**

**CAUTION**

- All pre-job briefings are completed.

The CRS has directed you to verify that the MCR portion of the Group 15 Isolation has been accomplished.

Another operator is performing verification of the Group 15 Isolation for the valves located outside the MCR.

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**

**Begin Alternate Path**

**4001.02, Automatic Isolation**

**NOTE: The following steps may be performed in any order.**

---

**\*JPM Step 1 At 1H13-P800 (Section 5040), verify the following valves shut:**

- **1CC057 CCW Sply To NRHX Inbd Isol Vlv**
- **1CC128 CCW Rtrn From NRHX Inbd Isol Vlv**
- **1FP078 FP Drywell Outbd Isol Vlv**
- **1FP079 FP Drywell Inbd Isol Vlv**

Standard: On MCR Panel 1H13-P800-5040, the examinee locates valves 1CC057, 1CC128, 1FP078, and 1FP079.

The examinee will verify 1CC128 closed (Green light ON and Red Light OFF).

The examinee will verify the open and closed indicating lights for 1FP078 and 1FP079 are OFF.

**The examinee will observe that 1CC057 is open (Green light OFF and Red Light ON), and will close 1CC057 by placing the valve control switch in the closed position, and then verifying the Green light is ON and the Red Light is OFF.**

Cue:

- If the examinee reports that 1CC057 failed to isolate, acknowledge the report and tell the examinee to complete the Group 15 Isolation Checklist.
- If the examinee requests administrative verification of the positions of 1FP078 and 1FP079, cue him/her that 1FP078 and 1FP079 have been administratively verified shut.

**Clinton Power Station  
Job Performance Measure (JPM)**

Comments            The critical portion of the step is for the examinee to manually close 1CC057.

1FP078 and 1FP079 are normally maintained locked shut and deenergized.  
Administrative verification of valve positions is acceptable.

SAT                       UNSAT                       Comment Number \_\_\_\_\_

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JPM Step 2    At 1H13-P800 (Section 5041), verify the following valves shut:

- 0RA029 DW RA Inbd Isol
- 0RA028 DW RA Outbd Isol
- 1SA031 DW SA Outbd Isol Vlv
- 1SA032 DW SA Inbd Isol Vlv

Standard:            On MCR Panel 1H13-P800-5041, the examinee locates valves 0RA029, 0RA028, 1SA031, 1SA032.

The examinee will verify 0RA029, 0RA028, 1SA031 and 1SA032 closed (Green light ON and Red Light OFF).

Cue:

Comments

SAT                       UNSAT                       Comment Number \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

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- \*JPM Step 3** At 1H13-P601 (Section 5068), verify the following valves shut:
- 1RE020 DW Eq Drain Sump Disch Outbd Vlv
  - 1RE019 DW Eq Drain Sump Disch Inbd Vlv
  - 1RF020 DW Flr Drain Sump Disch Outbd Vlv
  - 1RF019 DW Flr Drain Sump Disch Inbd Vlv

Standard: On MCR Panel 1H13-P601-5068, the examinee locates valves 1RE020, 1RE019, 1RF020 and 1RF019.

The examinee will verify 1RE019 and 1RF019 closed (Green light ON and Red Light OFF).

**The examinee will observe that 1RE020 and 1RF020 are open (Green light OFF and Red Light ON), and will close 1RE020 and 1RF020 by placing their respective control switches in the closed position, and then verifying the Green light is ON and the Red Light is OFF for 1RE020 and 1RF020.**

Cue: If the examinee reports that 1RE020 and 1RF020 failed to isolate, acknowledge the report and tell the examinee to complete the Group 15 Isolation Checklist.

Comments The critical portion of the step is for the examinee to manually close 1RE020 and 1RF020.

SAT                   UNSAT                   Comment Number \_\_\_\_\_

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**Clinton Power Station  
Job Performance Measure (JPM)**

---

JPM Step 4 At 1H13-P870 (Section 5014), verify the following valves shut:

- 1CY020 CY DW Outbd Isol Vlv
- 1CY021 CY DW Inbd Isol Vlv

Standard: On MCR Panel 1H13-P870-5014, the examinee locates valves 1CY020 and 1CY021.

The examinee will verify that the open and closed indicating lights for 1CY020 and 1CY021 are OFF.

Cue: If the examinee requests administrative verification of the positions of 1CY020 and 1CY021, cue him/her that 1CY020 and 1CY021 have been administratively verified shut.

Comments 1CY020 and 21 are normally maintained locked shut and deenergized. Administrative verification of valve positions is acceptable.

SAT                   UNSAT                   Comment Number \_\_\_\_\_

---

**TERMINATING CUES:**

A Group 15 isolation has been completed in accordance with CPS 4001.02C001 Automatic Isolation Checklist.

**STOP TIME:** \_\_\_\_\_

Clinton Power Station
Job Performance Measure (JPM)

Operator's Name: \_\_\_\_\_

Job Title: [ ] EO [ ] RO [ ] SRO [ ] STA [ ] SRO Cert

JPM Title: Verify Group 15 Automatic Isolation

JPM Number: JPM520 Revision Number: 00

Task Number and Title: Task 400102.99 Monitor plant systems for automatic isolations in all modes during normal and off-normal conditions.

Table with 4 columns: K/A System, K/A Number, Importance (RO/SRO). Row 1: 223002, A4.06, 3.6, 3.7. Below table: Ability to manually operate and/or monitor in the control room: Confirm initiation to completion.

Suggested Testing Environment: Simulator
Actual Testing Environment: [x] Simulator [ ] Plant [ ] Control Room
Testing Method: [ ] Simulate [x] Perform Alternate Path: [x] Yes [ ] No SRO Only: [ ] Yes [x] No
Time Critical: [ ] Yes [x] No

Estimated Time to Complete: 10 minutes Actual Time Used: \_\_\_\_\_ minutes

References: CPS 4001.02 Automatic Isolation Rev. 17a, and CPS 4001.02C001 Automatic Isolation Checklist, Rev.15d

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? [ ] Yes [ ] No

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

Comments: \_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_

Evaluator's Name: \_\_\_\_\_ (Print)

Evaluator's Signature: \_\_\_\_\_ Date: \_\_\_\_\_



**Clinton Power Station  
Job Performance Measure (JPM)**

**INITIAL CONDITIONS:**

You are the 'B' RO.

A LOCA has occurred in the Drywell.

**INITIATING CUE:**

**CAUTION**

- All pre-job briefings are completed.

The CRS has directed you to verify that the MCR portion of the Group 15 Isolation has been accomplished.

Another operator is performing verification of the Group 15 Isolation for the valves located outside the MCR.

Report to the CRS after completing the task.

# CLINTON POWER STATION

## Job Performance Measure

Defeat ATWS Interlocks

JPM Number: JPM283

Revision Number: 01

Date: 06/14/2013

**Developed By:** \_\_\_\_\_  
**Instructor** **Date**

**Validated By:** \_\_\_\_\_  
**SME or Instructor** **Date**

**Reviewed By:** \_\_\_\_\_  
**Operations Representative** **Date**

**Approved By:** \_\_\_\_\_  
**Training Department** **Date**

Clinton Power Station  
Job Performance Measure (JPM)

**JOB PERFORMANCE MEASURE VALIDATION CHECKLIST**

**NOTE:** All steps of this checklist should be performed upon initial validation.  
Prior to JPM usage, revalidate JPM using steps 8 and 12 below.

- \_\_\_\_\_ 1. Task description and number, JPM description and number are identified.
- \_\_\_\_\_ 2. Knowledge and Abilities (K/A) references are included.
- \_\_\_\_\_ 3. Performance location specified. (in-plant, control room, simulator, or other)
- \_\_\_\_\_ 4. Initial setup conditions are identified.
- \_\_\_\_\_ 5. Initiating cue (and terminating cue if required) are properly identified.
- \_\_\_\_\_ 6. Task standards identified and verified by SME review.
- \_\_\_\_\_ 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (\*).
- \_\_\_\_\_ 8. Verify the procedure(s) referenced by this JPM reflects the current revision:  
 Procedure \_\_\_\_\_ Rev: \_\_\_\_\_  
 Procedure \_\_\_\_\_ Rev: \_\_\_\_\_  
 Procedure \_\_\_\_\_ Rev: \_\_\_\_\_
- \_\_\_\_\_ 9. Verify cues both verbal and visual are free of conflict.
- \_\_\_\_\_ 10. Verify performance time is accurate
- \_\_\_\_\_ 11. If the JPM cannot be performed as written with proper responses, then revise the JPM.
- \_\_\_\_\_ 12. When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

SME / Instructor	Date
SME / Instructor	Date
SME / Instructor	Date

**Clinton Power Station  
Job Performance Measure (JPM)**

**Revision Record (Summary)**

<b>Revision</b>	<b>Date</b>	<b>Description</b>
00	07/15/09	Updated numbering convention and technically corrected. Old JPM number: 44110801LSN01.
01	6/14/13	Updated to new template

**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.

No equipment or controls will be manipulated during this evaluation, only **Simulated** Actions will occur.

**TASK STANDARDS:**

- The ARI trips and IA Isolations are defeated IAW 4410.00C012 DEFEATING ATWS INTERLOCKS.

**TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:**

- H1 Room Key
- ARI/RPT Test Switch Keys (2).
- EOP Tool Bag

**PROCEDURAL/REFERENCES:**

- 4410.00C012 Rev 4. DEFEATING ATWS INTERLOCKS
- SA-AA-129 Rev. 7 ELECTRICAL SAFETY

**EVALUATOR INSTRUCTIONS:**

- Amplifying cues are provided within the JPM steps.
- Student will demonstrate knowledge of EOP tools, procedures and equipment location. Direct the examinee to the bottom drawer for training tools and equipment. Provide examinee the procedure.
- Do NOT allow examinee to shine any type light into a panel.
- All pre-job briefings are completed.
- Need a H1 key to enter the ATWS room.
- Provide the examinee with a copy of the Initial Conditions and Initiating Cue page (back page of the JPM) when providing the initiating cue. Provide the Initiating Cue in the former TSC room.
- 4410.00C012 Sections 3.1 and 3.4 can be performed in any order; JPM steps for section 3.4 begin on page 7; JPM steps for section 3.1 begin on page 6.

**Clinton Power Station  
Job Performance Measure (JPM)**

**INITIAL CONDITIONS:**

A high power ATWS is in progress.

Both Reactor Recirculation Pumps are tripped.

**INITIATING CUE:**

**CAUTION**

- All pre-job briefings are completed.
- No equipment or controls will be manipulated during this evaluation, only **Simulated** Actions will occur.
- Do NOT shine any type light into a panel.

The CRS has directed you to defeat ATWS interlocks per CPS 4410.00C012, DEFEATING ATWS INTERLOCKS:

- Section 3.1 Defeating IA Isolations, AND
- Section 3.4 Defeating ARI Logic Trips.

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**

**NOTE**

Controlled procedures, tools, & equipment which support Section 3.0 are located in the EOP Supply Cabinet (MCR).

**4410.00C012, Defeating ATWS Interlocks**

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2.1 EOP Tool Bag

Standard: Examinee locates the procedure and tools in the EOP Supply Cabinet.

- Cue:
1. Tell examinee NOT to break the seal or use
  2. Provide the examinee a copy of the CPS 4410.00C012
  3. Direct the examinee to take the training tool bag from the bottom drawer of the EOP Supply Cabinet.

Comments The examinee may obtain electrical safety gear in the lockers in the walkway just outside the MCR horseshoe.

SAT

UNSAT

Comment Number \_\_\_\_\_

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**Clinton Power Station  
Job Performance Measure (JPM)**

---

**\*3.1.1 At panel 1H13-P861, Bay B, remove steel jumper between terminals PPP65 and PPP66.**

Standard:

- Examinee locates 1H13-P861 in the MCR backpanel area.
- Examinee locates the correct jumper in 1H13-P861 (left side, fourth terminal block from front, insulated with yellow tape) and verbalizes removing the jumper.
- Examinee wears the following Class 1 clothing (as a minimum):
  - Insulating gloves (surgeons gloves are acceptable).
  - Insulated hand tools
  - Safety glasses
  - Any natural fiber clothing (long sleeve 100% natural fiber shirt and long pants. A blue smock may be worn if the examinee is wearing a short sleeve shirt).
  - All metal items removed (rings, loose chains, wrist watches, earrings, exposed keys or key rings). Security badges, TLDs and digital dosimeters must be secured in a manner to prevent contact with energized electrical components.

Cue:

The component is in the position you've described.

Comments

- Do NOT allow examinee to shine any type light into this panel.
- Do NOT allow examinee to break the back panel plane.
- Examinee states that he would loosen the two screws, removed jumper with insulated pliers/gloves and then retighten the screws. Note: The steel jumper is insulated and large enough to grab with two fingers.

SAT

UNSAT

Comment Number \_\_\_\_\_

---



**Clinton Power Station  
Job Performance Measure (JPM)**

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**\*3.1.2 At panel 1H13-P851, Bay D, remove steel jumper between terminals AAA1 and AAA2.**

Standard:

- Examinee locates 1H13-P851 in the MCR backpanel area.
- Examinee locates the correct jumper in 1H13-P851 (left side, second terminal block from front, insulated with blue tape) and verbalizes removing the jumper.
- Examinee wears the following Class 1 clothing (as a minimum):
  - Insulating gloves (surgeons gloves are acceptable).
  - Insulated hand tools
  - Safety glasses
  - Any natural fiber clothing (long sleeve 100% natural fiber shirt and long pants. A blue smock may be worn if the examinee is wearing a short sleeve shirt).
  - All metal items removed (rings, loose chains, wrist watches, earrings, exposed keys or key rings). Security badges, TLDs and digital dosimeters must be secured in a manner to prevent contact with energized electrical components.

Cue:

The component is in the position you've described.

Comments

- Do NOT allow examinee to shine any type light into this panel.
- Do NOT allow examinee to break the back panel plane.
- Examinee states that he would loosen the two screws, removed jumper with insulated pliers/gloves and then retighten the screws. Note: The steel jumper is insulated and large enough to grab with two fingers.

SAT

UNSAT

Comment Number \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

3.4.1 Trip both Reactor Recirculation Pumps

Standard: No action required; RR Pump status was provided in the Initiating Cue.

Cue:

Comments

SAT           UNSAT           Comment Number \_\_\_\_\_

**\*3.4.2 (ARI Room – Unit 2 MCR Area) At ATWS ARI/RPT panel, 1RR04JA, place ARI/RPT SYSTEM 1 TEST keylock switch in TEST.**

Standard: Examinee locates 1RR04JA in the ARI room in the Unit 2 MCR Area (requires an H1 key to unlock the door).

Examinee simulates inserting a key into the ARI/RPTS SYSTEM 1 TEST keylock switch and simulates placing it in test.

Cue: The component is in the position you've described.

Comments Do NOT allow examinee to shine any type light into this panel

SAT           UNSAT           Comment Number \_\_\_\_\_

3.4.3 Verify "ARI/RPT SYSTEM 1 IN TEST" light ON.

Standard: Examinee locates the "ARI/RPT SYSTEM 1 IN TEST" light on 1RR04JA and verifies it is illuminated.

Cue: Component is indicating as you've described.

Comments Do NOT allow examinee to shine any type light into this panel

SAT           UNSAT           Comment Number \_\_\_\_\_

**Clinton Power Station  
Job Performance Measure (JPM)**

---

**\*3.4.4 (ARI Room – Unit 2 MCR Area) At ATWS ARI/RPT panel, 1RR04JB, place ARI/RPT SYSTEM 2 TEST keylock switch in TEST.**

Standard: Examinee locates 1RR04JB in the ARI room in the Unit 2 MCR Area (requires an H1 key to unlock the door).

Examinee simulates inserting a key into the ARI/RPTS SYSTEM 2 TEST keylock switch and simulates placing it in test.

Cue: The component is in the position you've described.

Comments Do NOT allow examinee to shine any type light into this panel

SAT                   UNSAT                   Comment Number \_\_\_\_\_

---

**3.4.5 Verify "ARI/RPT SYSTEM 2 IN TEST" light ON.**

Standard: Examinee locates the "ARI/RPT SYSTEM 2 IN TEST" light on 1RR04JB and verifies it is illuminated.

Cue: Component is indicating as you've described.

Comments Do NOT allow examinee to shine any type light into this panel

SAT                   UNSAT                   Comment Number \_\_\_\_\_

---

Informs Control Room Supervisor that sections 3.1 and 3.4 of CPS 4410.00C012 Defeating ATWS Interlocks is complete.

Standard: Examinee informs Control Room Supervisor that sections 3.1 and 3.4 of CPS 4410.00C012 Defeating ATWS Interlocks are complete.

Cue: Acknowledge the report. State JPM is complete.

Comments

SAT                   UNSAT                   Comment Number \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

**TERMINATING CUES:**

ATWS Interlocks are defeated IAW CPS No. 4410.00C012 sections 3.1 and 3.4.

**STOP TIME:** \_\_\_\_\_



**Clinton Power Station  
Job Performance Measure (JPM)**

**INITIAL CONDITIONS:**

A high power ATWS is in progress .

Both Reactor Recirculation Pumps are tripped.

**INITIATING CUE:**

**CAUTION**

- All pre-job briefings are completed.
- No equipment or controls will be manipulated during this evaluation, only **Simulated** Actions will occur.
- Do NOT shine any type light into a panel.

The CRS has directed you to defeat ATWS interlocks per CPS 4410.00C012, DEFEATING ATWS INTERLOCKS:

- Section 3.1 Defeating IA Isolations, AND
- Section 3.4 Defeating ARI Logic Trips.

Report to the CRS after completing the task.

# CLINTON POWER STATION

## Job Performance Measure

High Containment Pool Level Protective Actions

JPM Number: JPM222

Revision Number: 02

Date: 06/14/2013

<b>Developed By:</b>	_____	_____
	<b>Instructor</b>	<b>Date</b>
<b>Validated By:</b>	_____	_____
	<b>SME or Instructor</b>	<b>Date</b>
<b>Reviewed By:</b>	_____	_____
	<b>Operations Representative</b>	<b>Date</b>
<b>Approved By:</b>	_____	_____
	<b>Training Department</b>	<b>Date</b>

**Clinton Power Station  
Job Performance Measure (JPM)**

**JOB PERFORMANCE MEASURE VALIDATION CHECKLIST**

**NOTE:** All steps of this checklist should be performed upon initial validation.  
Prior to JPM usage, revalidate JPM using steps 8 and 12 below.

- \_\_\_\_\_ 1. Task description and number, JPM description and number are identified.
- \_\_\_\_\_ 2. Knowledge and Abilities (K/A) references are included.
- \_\_\_\_\_ 3. Performance location specified. (in-plant, control room, simulator, or other)
- \_\_\_\_\_ 4. Initial setup conditions are identified.
- \_\_\_\_\_ 5. Initiating cue (and terminating cue if required) are properly identified.
- \_\_\_\_\_ 6. Task standards identified and verified by SME review.
- \_\_\_\_\_ 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (\*).
- \_\_\_\_\_ 8. Verify the procedure(s) referenced by this JPM reflects the current revision:  
Procedure \_\_\_\_\_ Rev: \_\_\_\_\_  
Procedure \_\_\_\_\_ Rev: \_\_\_\_\_  
Procedure \_\_\_\_\_ Rev: \_\_\_\_\_
- \_\_\_\_\_ 9. Verify cues both verbal and visual are free of conflict.
- \_\_\_\_\_ 10. Verify performance time is accurate
- \_\_\_\_\_ 11. If the JPM cannot be performed as written with proper responses, then revise the JPM.
- \_\_\_\_\_ 12. When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

_____	SME / Instructor	_____	Date
_____	SME / Instructor	_____	Date
_____	SME / Instructor	_____	Date



**Clinton Power Station  
Job Performance Measure (JPM)**

**Revision Record (Summary)**

<b>Revision</b>	<b>Date</b>	<b>Description</b>
00	07/11/2007	Updated numbering convention. Old JPM number: 44110502NSN01.
01	08/02/2010	Updated format and task number
02	06/14/13	Updated to new template

**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.

No equipment or controls will be manipulated during this evaluation, only **Simulated** Actions will occur.

**TASK STANDARDS:**

- Complete the Outside MCR portion of CPS No. 4411.05 High Containment Pool Level Protective Actions, Table 1,

**TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:**

- None.

**PROCEDURAL/REFERENCES:**

- CPS No. 4411.05 Rev 4b, High Containment Pool Level Protective Actions.

**EVALUATOR INSTRUCTIONS:**

- Amplifying cues are provided within the JPM steps.
- Fill in the following information on evaluation copy of CPS No. 4411.05 High Containment Pool Level Protective Actions.
  - Page 2, TABLE 1 STARTED: <10 minutes prior to current time>
  - Page 4, STARTED: <today's date>/<10 minutes prior to current time>
  - Fill in initials for MCR actions of Table 1.
- Provide the Initiating Cue in the R&S Line in the Radwaste Building.
- Provide the examinee with a copy of the Initial Conditions and Initiating Cue page (back page of the JPM) when providing the initiating cue.
- Once the initiating cue has been acknowledged by the examinee, provide him/her with a copy of CPS 4411.05 High Containment Pool Level Protective Actions.

**Clinton Power Station  
Job Performance Measure (JPM)**

**INITIAL CONDITIONS:**

The decision has been made to flood the Primary Containment. Current level in the Primary Containment is 22' 5".

**INITIATING CUE:**

**CAUTION**

- All pre-job briefings are completed.
- No equipment or controls will be manipulated during this evaluation, only **Simulated** actions will occur.
- Do NOT shine any type light into a panel.

You are directed to deenergize electrical loads per CPS No. 4411.05 High Containment Pool Level Protective Actions, Table 1, Section 2, OUTSIDE MCR.

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 No. 4411.05 High Containment Pool Level Protective Actions**

**Deenergizes electrical equipment per Table 1, Section 2 Outside MCR.**

At AB 781' East

- \* **At AB MCC 1A1, Cubicle 1D place both breakers to the OFF position for Drywell Cooling Fan 1A.**

Standard:

- One or Both Breakers in the OFF position
- Examinee wears the following Class 1 clothing (as a minimum):
  - Insulating gloves
  - Safety glasses
  - Hard Hat
  - Any natural fiber clothing (long sleeve 100% natural fiber shirt and long pants. A blue smock may be worn if the examinee is wearing a short sleeve shirt).
  - All metal items removed (rings, loose chains, wrist watches, earrings, exposed keys or key rings). Security badges, TLDs and digital dosimeters must be secured in a manner to prevent contact with energized electrical components.

Cue: The component(s) is (are) in the position(s) described.

Comments It is the expectation that BOTH breakers will be simulated placed in OFF. Examinee failing to simulate BOTH breakers shall be noted in the competency grading.

SAT           UNSAT           Comment Number \_\_\_\_\_

**Clinton Power Station  
Job Performance Measure (JPM)**

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At AB 762' East

- \* **At AB MCC 1F, Cubicle 3D place both breakers to the OFF position for Drywell Equip Drain Sump Pump 1A.**

Standard:

- One or Both Breakers in the OFF position
- Examinee wears the following Class 1 clothing (as a minimum):
  - Insulating gloves
  - Safety glasses
  - Hard Hat
  - Any natural fiber clothing (long sleeve 100% natural fiber shirt and long pants. A blue smock may be worn if the examinee is wearing a short sleeve shirt).
  - All metal items removed (rings, loose chains, wrist watches, earrings, exposed keys or key rings). Security badges, TLDs and digital dosimeters must be secured in a manner to prevent contact with energized electrical components.

Cue: The component(s) is (are) in the position(s) described.

Comments It is the expectation that BOTH breakers will be simulated placed in OFF. Examinee failing to simulate BOTH breakers shall be noted in the competency grading.

SAT

UNSAT

Comment Number \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

---

At AB 762' East

- \* **At AB MCC 1F, Cubicle 5B place both breakers to the OFF position for Drywell Floor Drain Sump Pump 1A.**

Standard:

- One or Both Breakers in the OFF position
- Examinee wears the following Class 1 clothing (as a minimum):
  - Insulating gloves
  - Safety glasses
  - Hard Hat
  - Any natural fiber clothing (long sleeve 100% natural fiber shirt and long pants. A blue smock may be worn if the examinee is wearing a short sleeve shirt).
  - All metal items removed (rings, loose chains, wrist watches, earrings, exposed keys or key rings). Security badges, TLDs and digital dosimeters must be secured in a manner to prevent contact with energized electrical components.

Cue: The component(s) is (are) in the position(s) described.

Comments It is the expectation that BOTH breakers will be simulated placed in OFF. Examinee failing to simulate BOTH breakers shall be noted in the competency grading.

SAT

UNSAT

Comment Number \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

---

At AB 762' West

- \* **At AB MCC 1G, Cubicle 4A place both breakers to the OFF position for Drywell Equip Drain Sump Pump 1B.**

Standard:

- One or Both Breakers in the OFF position
- Examinee wears the following Class 1 clothing (as a minimum):
  - Insulating gloves
  - Safety glasses
  - Hard Hat
  - Any natural fiber clothing (long sleeve 100% natural fiber shirt and long pants. A blue smock may be worn if the examinee is wearing a short sleeve shirt).
  - All metal items removed (rings, loose chains, wrist watches, earrings, exposed keys or key rings). Security badges, TLDs and digital dosimeters must be secured in a manner to prevent contact with energized electrical components.

Cue: The component(s) is (are) in the position(s) described

Comments It is the expectation that BOTH breakers will be simulated placed in OFF. Examinee failing to simulate BOTH breakers shall be noted in the competency grading.

SAT                   UNSAT                   Comment Number \_\_\_\_\_

---

**Clinton Power Station  
Job Performance Measure (JPM)**

---

At AB 762' West

- \* **At AB MCC 1G, Cubicle 4C place both breakers to the OFF position for Drywell Floor Drain Sump Pump 1B.**

Standard:

- One or Both Breakers in the OFF position
- Examinee wears the following Class 1 clothing (as a minimum):
  - Insulating gloves
  - Safety glasses
  - Hard Hat
  - Any natural fiber clothing (long sleeve 100% natural fiber shirt and long pants. A blue smock may be worn if the examinee is wearing a short sleeve shirt).
  - All metal items removed (rings, loose chains, wrist watches, earrings, exposed keys or key rings). Security badges, TLDs and digital dosimeters must be secured in a manner to prevent contact with energized electrical components.

Cue: The component(s) is (are) in the position(s) described.

Comments It is the expectation that BOTH breakers will be simulated placed in OFF. Examinee failing to simulate BOTH breakers shall be noted in the competency grading.

SAT

UNSAT

Comment Number \_\_\_\_\_

---



**Clinton Power Station  
Job Performance Measure (JPM)**

---

At AB 781' West

- \* **At AB MCC 1B1, Cubicle 2C place both breakers to the OFF position for Drywell Cooling Fan 1B.**

Standard:

- One or Both Breakers in the OFF position
- Examinee wears the following Class 1 clothing (as a minimum):
  - Insulating gloves
  - Safety glasses
  - Hard Hat
  - Any natural fiber clothing (long sleeve 100% natural fiber shirt and long pants. A blue smock may be worn if the examinee is wearing a short sleeve shirt).
  - All metal items removed (rings, loose chains, wrist watches, earrings, exposed keys or key rings). Security badges, TLDs and digital dosimeters must be secured in a manner to prevent contact with energized electrical components.

Cue: The component(s) is (are) in the position(s) described.

Comments It is the expectation that BOTH breakers will be simulated placed in OFF. Examinee failing to simulate BOTH breakers shall be noted in the competency grading.

SAT

UNSAT

Comment Number \_\_\_\_\_

---

**TERMINATING CUES:**

All breakers simulated being placed in the OFF position per CPS No. 4411.05 High Containment Pool Level Protective Actions, Table 1, Section 2, Outside MCR.

**STOP TIME:** \_\_\_\_\_

Clinton Power Station
Job Performance Measure (JPM)

Operator's Name: \_\_\_\_\_

Job Title: [ ] EO [ ] RO [ ] SRO [ ] STA [ ] SRO Cert

JPM Title: High Containment Pool Level Protective Actions

JPM Number: JPM222 Revision Number: 02

Task Number and Title: 441105.01 High Containment Pool Level Protective Actions

Table with 4 columns: K/A System, K/A Number, Importance (RO/SRO). Row 1: 295029, 2.4.35, 3.8, 4.0. Below table: Knowledge of local auxiliary operator tasks during an emergency and the resultant operational effects.

Suggested Testing Environment: Plant

Actual Testing Environment: [ ] Simulator [x] Plant [ ] Control Room

Testing Method: [x] Simulate [ ] Perform Alternate Path: [ ] Yes [x] No SRO Only: [ ] Yes [x] No

Time Critical: [ ] Yes [x] No

Estimated Time to Complete: 18 minutes Actual Time Used: \_\_\_\_\_ minutes

\*The JPM task would normally be assigned in the OSC, therefore 3 minutes were added on to the JPM Estimated Time to account for the transient time between the OSC and the R&S Line location

References: CPS No. 4411.05 Rev 4b, High Containment Pool Level Protective Actions.

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? [ ] Yes [ ] No

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

Comments: \_\_\_\_\_

Evaluator's Name: \_\_\_\_\_ (Print)

Evaluator's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Clinton Power Station  
Job Performance Measure (JPM)**

**INITIAL CONDITIONS:**

The decision has been made to flood the Primary Containment. Current level in the Primary Containment is 22' 5".

**INITIATING CUE:**

**CAUTION**

- All pre-job briefings are completed.
- No equipment or controls will be manipulated during this evaluation, only **Simulated** actions will occur.
- Do NOT shine any type light into a panel.

You are directed to deenergize electrical loads per CPS No. 4411.05 High Containment Pool Level Protective Actions, Table 1, Section 2, OUTSIDE MCR.

Report to the CRS after completing the task.

# **CLINTON POWER STATION**

## **Job Performance Measure**

Cross Connect DC Distribution Panels 1E and 1F

JPM Number: JPM065

Revision Number: 03

Date: 06/14/2013

<b>Developed By:</b>	<u>G. Thullen</u>	<u>06/14/13</u>
	<b>Instructor</b>	<b>Date</b>
<b>Validated By:</b>	_____	_____
	<b>SME or Instructor</b>	<b>Date</b>
<b>Reviewed By:</b>	_____	_____
	<b>Operations Representative</b>	<b>Date</b>
<b>Approved By:</b>	_____	_____
	<b>Training Department</b>	<b>Date</b>

Clinton Power Station  
Job Performance Measure (JPM)

**JOB PERFORMANCE MEASURE VALIDATION CHECKLIST**

**NOTE:** All steps of this checklist should be performed upon initial validation.  
Prior to JPM usage, revalidate JPM using steps 8 and 12 below.

- \_\_\_\_\_ 1. Task description and number, JPM description and number are identified.
- \_\_\_\_\_ 2. Knowledge and Abilities (K/A) references are included.
- \_\_\_\_\_ 3. Performance location specified. (in-plant, control room, simulator, or other)
- \_\_\_\_\_ 4. Initial setup conditions are identified.
- \_\_\_\_\_ 5. Initiating cue (and terminating cue if required) are properly identified.
- \_\_\_\_\_ 6. Task standards identified and verified by SME review.
- \_\_\_\_\_ 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (\*).
- \_\_\_\_\_ 8. Verify the procedure(s) referenced by this JPM reflects the current revision:  
 Procedure \_\_\_\_\_ Rev: \_\_\_\_\_  
 Procedure \_\_\_\_\_ Rev: \_\_\_\_\_  
 Procedure \_\_\_\_\_ Rev: \_\_\_\_\_
- \_\_\_\_\_ 9. Verify cues both verbal and visual are free of conflict.
- \_\_\_\_\_ 10. Verify performance time is accurate
- \_\_\_\_\_ 11. If the JPM cannot be performed as written with proper responses, then revise the JPM.
- \_\_\_\_\_ 12. When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

SME / Instructor	Date
SME / Instructor	Date
SME / Instructor	Date

**Clinton Power Station  
Job Performance Measure (JPM)**

**Revision Record (Summary)**

<b>Revision</b>	<b>Date</b>	<b>Description</b>
01	08/20/08	Updated numbering convention and technically corrected. Old JPM number: 35030117NSF01.
02	04/01/10	Incorporated comments from validation.
03	06/14/13	Updated to new template, eliminated "faulted" steps, and added Section 8.2.3 Steps 7 & 8.

**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.

No equipment or controls will be manipulated during this evaluation, only **Simulated** Actions will occur.

**TASK STANDARDS:**

- Operator cross-connects 125 VDC Distribution Panels 1E and 1F per CPS 3503.01, BATTERY AND DC DISTRIBUTION (DC) Section 8.2.3.

**TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:**

- None.

**PROCEDURAL/REFERENCES:**

- CPS No. 3503.01, Rev. 18a, BATTERY AND DC DISTRIBUTION (DC) Section 8.2.3

**EVALUATOR INSTRUCTIONS:**

- Amplifying cues are provided within the JPM steps.
- All pre-job briefings are completed.
- Do NOT allow examinee to shine any type of light into any panel.
- Provide the examinee with a copy of the Initial Conditions and Initiating Cue page (back page of the JPM) when providing the initiating cue.
- When the examinee has acknowledged the initiating cue, provide him/her with a copy of CPS 3503.01 Battery and DC Distribution (DC).

**Clinton Power Station  
Job Performance Measure (JPM)**

**INITIAL CONDITIONS:**

You are an extra operator.

**INITIATING CUE:**

**CAUTION**

- All pre-job briefings are completed.
- No equipment or controls will be manipulated during this evaluation, only Simulated Actions will occur.
- Do NOT shine any type of light into any panel.

Cross-connect DC Distribution Panels 1E and 1F with 1F supplying power in accordance with CPS No. 3503.01, BATTERY AND DC DISTRIBUTION (DC) section 8.2.3.

Observers have been stationed at the 1E and 1F chargers to verify expected responses from the chargers during load shifting.

A risk assessment has been performed for this operation.

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 No. 3503.01, BATTERY AND DC DISTRIBUTION (DC)**

**8.2.3 Cross-Connecting 125 VDC Dist Panel 1E (1DC16E) with 125 VDC BOP MCC 1F (1DC17E) Supplying**

8.2.3.1 Verify DC MCC 1E Battery Charger (1DC25E) float/equalize toggle switch is in FLOAT.

Standard: The Examinee locates and verifies that DC MCC 1E (1DC25E) float/equalize toggle switch is in FLOAT.

Cue: The component is in the position as described.

Comments

SAT       UNSAT       Comment Number \_\_\_\_\_

8.2.3.2 Verify DC MCC 1F charger Battery Charger (1DC26E) float/equalize toggle switch is in FLOAT.

Standard: The Examinee locates and verifies that DC MCC 1F (1DC26E) float/equalize toggle switch is in FLOAT.

Cue: The component is in the position as described.

Comments

SAT       UNSAT       Comment Number \_\_\_\_\_

**Clinton Power Station  
Job Performance Measure (JPM)**

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8.2.3.3 Verify voltage meter indications on DC MCC 1E-2A (1DC16E) and DC MCC 1F-2A (1DC17E) are ~ equal.

Standard: The Examinee locates and reads the voltage indicated on 125 VDC Distribution Panels 1E and 1F.

Cue: Component is indicating as described.

Comments

SAT                   UNSAT                   Comment Number \_\_\_\_\_

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**\*8.2.3.4 Place DC MCC 1E 125 VDC Dist Pnl 1F Tie Breaker (1DC16E6B), to ON.**

- Standard:
- The Examinee positions the breaker control handle in the UP position at DC MCC 1E (1DC16E6B).
  - Examinee wears the following Class 1 clothing (as a minimum):
    - Insulating gloves
    - Safety glasses
    - Hard Hat
    - Any natural fiber clothing (long sleeve 100% natural fiber shirt and long pants. A blue smock may be worn if the examinee is wearing a short sleeve shirt).
    - All metal items removed (rings, loose chains, wrist watches, earrings, exposed keys or key rings). Security badges, TLDs and digital dosimeters must be secured in a manner to prevent contact with energized electrical components.

Cue: Component is in the position as described.

Comments

SAT                   UNSAT                   Comment Number \_\_\_\_\_

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**Clinton Power Station  
Job Performance Measure (JPM)**

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**\*8.2.3.5 Place DCC MCC 1F 125 VDC Dist Pnl 1E Tie Breaker (1DC17E7A), to ON.**

- Standard:
- The Examinee positions the breaker control handle in the UP position at DC MCC 1F (1DC17E7A).
  - Examinee wears the following Class 1 clothing (as a minimum):
    - Insulating gloves
    - Safety glasses
    - Hard Hat
    - Any natural fiber clothing (long sleeve 100% natural fiber shirt and long pants. A blue smock may be worn if the examinee is wearing a short sleeve shirt).
    - All metal items removed (rings, loose chains, wrist watches, earrings, exposed keys or key rings). Security badges, TLDs and digital dosimeters must be secured in a manner to prevent contact with energized electrical components.

Cue: Component is in the position as described.

Comments

SAT       UNSAT       Comment Number \_\_\_\_\_

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**8.2.3.6 Verify DC MCC 1E 125VDC Dist Pnl 1F Tie Breaker (1DC16E6B), did not trip.**

Standard: 1F Tie Breaker (1DC16E6B) verified closed

Cue: Dist Pnl 1F Tie Breaker (1DC16E6B) is closed

Comments

SAT       UNSAT       Comment Number \_\_\_\_\_

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**Clinton Power Station  
Job Performance Measure (JPM)**

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8.2.3.7 Verify DC MCC 1F 125VDC Dist Pnl 1E Tie Breaker (1DC17E-7A) did not trip.

Standard: 1E Tie Breaker (1DC17E-7A) verified closed

Cue: Dist Pnl 1E Tie Breaker (1DC17E-7A) is closed

Comments

SAT           UNSAT           Comment Number \_\_\_\_\_

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**\*8.2.3.8 Place DC MCC 1E 125VDC Dist Pnl 1E Supply Breaker (1DC16E-4A) in OFF.**

- Standard:
- The Examinee positions the breaker control handle in the DOWN position at 1E 125VDC Dist Pnl 1E Supply Breaker (1DC16E-4A)
  - Examinee wears the following Class 1 clothing (as a minimum):
    - Insulating gloves
    - Safety glasses
    - Hard Hat
    - Any natural fiber clothing (long sleeve 100% natural fiber shirt and long pants. A blue smock may be worn if the examinee is wearing a short sleeve shirt).
    - All metal items removed (rings, loose chains, wrist watches, earrings, exposed keys or key rings). Security badges, TLDs and digital dosimeters must be secured in a manner to prevent contact with energized electrical components.

Cue: Component is indicating as described.

Comments **NOTE**: Supply bkr located **INSIDE** panel on DC MCC 1E-4A.

SAT           UNSAT           Comment Number \_\_\_\_\_

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**TERMINATING CUES:**

DC Distribution Panels 1E and 1F have been cross-connected with 1F supplying power in accordance with CPS No. 3503.01, BATTERY AND DC DISTRIBUTION (DC)

**STOP TIME:** \_\_\_\_\_



**Clinton Power Station  
Job Performance Measure (JPM)**

**INITIAL CONDITIONS:**

You are an extra operator.

**INITIATING CUE:**

**CAUTION**

- All pre-job briefings are completed.
- No equipment or controls will be manipulated during this evaluation, only Simulated Actions will occur.
- Do NOT shine any type of light into any panel.

Cross-connect DC Distribution Panels 1E and 1F with 1F supplying power in accordance with CPS No. 3503.01, BATTERY AND DC DISTRIBUTION (DC) section 8.2.3.

Observers have been stationed at the 1E and 1F chargers to verify expected responses from the chargers during load shifting.

A risk assessment has been performed for this operation.

Report to the CRS after completing the task.